BUREAU DE SANTÉ DE MIDDLESEX-LONDON HEALTH UNIT
www.healthunit.com

AGENDA
MIDDLESEX-LONDON BOARD OF HEALTH

Thursday, December 12, 2019, 5:30 p.m.
399 Ridout Street North, London, Ontario
Side Entrance, (recessed door)
MLHU Boardroom

MISSION - MIDDLESEX-LONDON HEALTH UNIT

The mission of the Middlesex-London Health Unit is to promote and protect the health of our community.

MEMBERS OF THE BOARD OF HEALTH

Ms. Trish Fulton (Chair)
Ms. Maureen Cassidy (Vice-Chair)
Mr. John Brennan
Mr. Michael Clarke
Ms. Aina DeViet
Ms. Kelly Elliott
Ms. Tino Kasi
Ms. Arielle Kayabaga
Mr. Ian Peer
Mr. Matt Reid

SECRETARY-TREASURER

Dr. Christopher Mackie

DISCLOSURE OF CONFLICTS OF INTEREST

APPROVAL OF AGENDA

MINUTES

Approve: November 21, 2019 – Board of Health meeting
December 5, 2019 – Special Meeting of the Board of Health

Receive: December 5, 2019 – Finance & Facilities Committee meeting minutes
December 5, 2019 – Relocation Advisory Committee meeting minutes

Item #	Delegation	Recommendation	Information	Report Name and Number	Link to Additional Information	Overview and Lead
Reports and Agenda Items						
1	**x**	**x**	**x**	December 5, 2019 Finance & Facilities Committee Meeting Update (Report No. 074-19)	December 5, 2019 – Agenda Minutes	To provide an update on reports reviewed at the December 5, 2019 Finance & Facilities Committee meeting. Lead: Mr. Matt Reid, Chair, Finance & Facilities Committee
2	**x**	**x**	**x**	December 5, 2019 Relocation Advisory Committee Meeting Update (Verbal Update)	December 5, 2019 – Agenda Minutes	To provide an update on reports reviewed at the December 5, 2019 Relocation Advisory Committee meeting. Lead: Mr. Ian Peer, Chair, Relocation Advisory Committee
3		**x**	**x**	Public Health Services in Middlesex County – Update (Report No. 075-19)	Appendix A Appendix B Appendix C	To provide an update on the status of recommendations and outcomes from the Review of Health Unit Services in Middlesex County. Lead: Ms. Laura Di Cesare, Director, Healthy Organization.
4		**x**	**x**	Public Health Modernization Update – Consultation and Response (Report No. 076-19)	Appendix A Appendix B Appendix C	To provide an update on the discussion paper and framework/process for public health modernization. Lead: Dr. Alex Summers, Associate Medical Officer of Health
5			**x**	Summary Information Report for December 2019 (Report No. 077-19)	Appendix A Appendix B	To provide an update on Health Unit programs and services for December. Lead: Mr. Stephen Turner, Director, Environmental Health & Infectious Disease and Ms. Heather Lokko, Director, Healthy Start
6			**x**	Medical Officer of Health/ CEO Activity Report for December (Report No. 078-19)		To provide an update on the activities of the MOH/CEO for December. Lead: Dr. Chris Mackie, Medical Officer of Health/CEO

Correspondence						
7			**x**	December 2019 Correspondence		To receive correspondence items a) though l)

OTHER BUSINESS

- Approve Revised 2020 Board of Health and Standing Committee meeting dates

- Save the Date: Association of Local Public Health Agencies 2020 Winter Symposium February 20 and 21, 2020 in Toronto. Board of Health meeting in February will be reschedule to February 27 to accommodate this conference.

- Next Finance and Facilities Committee Meeting: February 6, 2020 @ 9:00 a.m.
- Next Governance Committee Meeting: February 27, 2020 @ 6:00 p.m.
- Next Board of Health Meeting: January 23, 2020 @ 7:00 p.m.

CONFIDENTIAL

The Board of Health will move in-camera to consider matters regarding a trade secret or scientific, technical, commercial, financial or labour relations information, supplied in confidence to the local board, which, if disclosed, could reasonably be expected to prejudice significantly the competitive position or interfere significantly with the contractual or other negotiations of a person, group of persons, or organization; a trade secret or scientific, technical, commercial or financial information that belongs to the local board and has monetary value or potential monetary value.

ADJOURNMENT

PUBLIC SESSION – MINUTES
MIDDLESEX-LONDON BOARD OF HEALTH

Thursday, November 21, 2019, 7:00 p.m.
399 Ridout Street North, London, Ontario
Side Entrance (recessed door)
MLHU Boardroom

MEMBERS PRESENT:	Ms. Trish Fulton (Chair) Ms. Maureen Cassidy (Vice-Chair) Ms. Aina DeViet Mr. Ian Peer Mr. Matt Reid Mr. John Brennan Ms. Tino Kasi Mr. Michael Clarke
REGRETS:	Ms. Kelly Elliott
MEDIA:	Mr. Robert Lothian, 106.9 The X, Fanshawe Mr. Marek Sutherland, CTV News London
OTHERS PRESENT:	Dr. Christopher Mackie, Secretary-Treasurer Ms. Elizabeth Milne, Executive Assistant to the Board of Health and Communications Coordinator (Recorder) Ms. Menna Abdou, Dietetic Practicum Student Mr. Joe Antone, Manager, Health Equity and Indigenous Reconciliation Mr. Joe Belancic, Manager, Procurement and Operations Ms. Cynthia Bos, Manager, Human Resources Ms. Emma Belanger, Nutritious Food Basket Volunteer Ms. Laura Di Cesare, Director, Healthy Organization Ms. Melanie Elms, Public Health Nurse Ms. Nicole Gauthier, Manager, Privacy, Risk and Governance Mr. Brian Glasspoole, Manager, Finance Ms. Donna Kosmack, Manager, South West Tobacco Control Area Network Ms. Heather Lokko, Director, Healthy Start Ms. Kim Loupos, Registered Dietitian Ms. Mai Pham, Epidemiologist Ms. Kendra Ramer, Manager, Strategic Projects Ms. Maureen Rowlands, Director, Healthy Living Dr. Alex Summers, Associate Medical Officer of Health Ms. Linda Stobo, Manager, Chronic Disease Prevention and Tobacco Control Mr. Stephen Turner, Director, Environment Health & Infectious Diseases Mr. Alex Tyml, Online Communications Coordinator Sister Kathleen Lichti, Sisters of St. Joseph Ms. Tracey Whiteye

At the request of Chair Fulton, Vice-Chair Cassidy agreed to chair the meeting.

Vice-Chair Cassidy called the meeting to order at 7:01 p.m.

Vice-Chair Cassidy noted two additions to the agenda for the evening: walk-on item 1a) a delegation from Sister Kathleen Lichti and Tracey Whiteye on Indigenous reconciliation; and walk-on correspondence item y) an update on the Ministry's consultation process on public health modernization.

WALK-ON ITEM 1a)

Delegation from Sister Kathleen Lichti and Tracey Whiteye on Indigenous Reconciliation

Dr. Mackie introduced Sister Kathleen, Ms. Whiteye, and Mr. Joe Antone, Manager, Health Equity and Indigenous Reconciliation, and provided background, including a summary of the Health Unit's work toward reconciliation and the blanket exercise that staff recently participated in.

Sister Kathleen and Ms. Whiteye described their work toward truth and reconciliation, and the Kairos blanket exercise that Sister Kathleen leads through the Sisters of St. Joseph.

Mr. Antone provided context for the presentation, summarizing the Health Unit's role and work toward reconciliation, including how MLHU has begun to formulate the recommendations in its Reconciliation Plan through activities such as community engagement and consensus building.

Dr. Mackie added that one of the Health Unit's underlying principles in its work toward reconciliation is, whenever possible, to devolve decision making to Indigenous community leaders and partners. The Board acknowledged the value of MLHU staff carrying out this kind of dialogue with Indigenous leaders in order to support reconciliation in the broader community.

It was moved by Mr. Reid, seconded by Ms. Fulton, *that the Board of Health:*

1) *Receive the delegation from Sister Kathleen Lichti and Ms. Tracey Whiteye on Indigenous Reconciliation; and*
2) *Continue to work with community partners on reconciliation.*

Carried

DISCLOSURE OF CONFLICT OF INTEREST

Vice-Chair Cassidy inquired if there were any disclosures of conflicts of interest. None were declared.

APPROVAL OF AGENDA

It was moved by Mr. Peer, seconded by Ms. DeViet, *that the **AGENDA** for the November 21, 2019 Board of Health meeting be approved as amended.*

Carried

MINUTES

It was moved by Mr. Brennan, seconded by Mr. Clarke, *that the **MINUTES** of the October 17, 2019 Board of Health meeting be approved.*

Carried

It was moved by Mr. Brennan, seconded by Mr. Peer, *that the Board of Health receive the October 17, 2019 Relocation Advisory Committee meeting minutes.*

Carried

It was moved by Mr. Reid, seconded by Ms. DeViet, *that the Board of Health receive the October 31, 2019 Finance & Facilities Committee meeting minutes.*

Carried

DELEGATIONS AND REPORTS

October 31, 2019 Finance & Facilities Committee Meeting (Report No. 068-19)

Q3 Financial Update and Factual Certificate (Report No. 032-19FFC)

It was moved by Mr. Reid, seconded by Ms. Fulton, *that the Board of Health receive Report No. 032-19FFC re: "Q3 Financial Update and Factual Certificate" for information.*

Carried

2020 Budget – Program Budgeting and Marginal Analysis (PBMA) Disinvestment Proposals (Report No. 033-19FFC)

Mr. Reid summarized the report and noted that the Finance & Facilities Committee received this report for information.

Proposal to Draw Down Reserve Funds (Report No. 034-19FFC)

It was moved by Mr. Reid, seconded by Ms. Fulton, *that the Board of Health approve:*

1) *Using up to $818,258 from the Funding Stabilization Reserve to fund, in part, the cost of leasehold improvements in connection with the Health Unit's relocation of premises to Citi Plaza;*
2) *Using up to $123,771 from the Dental Treatment Reserve to fund, in part, the cost of leasehold improvements related to dental treatment facilities in the new location;*
3) *Using up to $29,462 from the Accumulated Sick Leave Reserve to defray OMERS costs for 2019;*
4) *Returning $6,044 from the Environmental – Septic Tank Reserve to the Ministry of the Environment if that Ministry accepts the funds, and, if not accepted, then applying these funds to leasehold improvements related to Environmental Health in the new location; and*
5) *Closing the Dental Treatment Reserve, the Accumulated Sick Leave Reserve, and the Environmental – Septic Tank Reserve.*

Carried

Policy Review (Report No. 035-19FFC and Walk-On Report No. 036-19FFC)

Mr. Reid noted that the policies outlined in this report were reviewed by the Finance & Facilities Committee and referred to the Governance Committee for final approval.

Procurement Guideline Policy Update (Report No. 036-19FFC)

It was moved by Mr. Reid, seconded by Mr. Peer, *that the Board of Health:*

1) *Receive Report No. 036-19FFC for information;*
2) *Approve the updated Appendix outlined within this report, which relates to the financial operations of the Middlesex-London Health Unit, to go to Governance Committee for final review; and*
3) *Approve staff to immediately begin using the reduced bid period if issuing bids electronically.*

Carried

November 21, 2019 Governance Committee Meeting (Verbal Update)

Ms. DeViet provided an update on the November 21, 2019 Governance Committee meeting and reviewed the following reports for the Board's consideration:

Q3 2019 Activity Report (Report No. 015-19GC)

Ms. DeViet noted that the Governance Committee received this report for information.

Governance Policy Review and Development (Report No. 016-19GC)

Ms. DeViet reviewed the policies considered at the Governance Committee meeting.

It was moved by Ms. DeViet, seconded by Mr. Reid, *that the Board of Health:*
1) *Receive Report No. 016-19GC re: "Governance Policy Review and Development" for information; and*
2) *Approve the governance policies as appended to this report.*

Carried

Ms. DeViet noted that the next Governance Committee meeting will be held in February 2020.

Launch of the Updated Community Health Status Resource (Report No. 069-19)

Dr. Summers introduced the report and advised that today, November 21, 2019, marks the official launch the Community Health Status Resource. Epidemiologist Ms. Mai Pham described how to access the tool online and reviewed the kinds of data that are available on the resource website.

Discussion ensued on the following items:
- Health outcomes for minorities and vulnerable groups.
- Next steps, including examining more robust means of generating data.
- That such evidence is extremely helpful for informing policy.
- Data automation and sharing of data between systems.
- The challenges of securing reliable data and information on vulnerable communities and minorities: what these challenges are and how such disparities are being addressed within our jurisdiction and at the Health Unit as part of this project.

It was moved by Mr. Clarke, seconded by Ms. Kasi, *that the Board of Health receive Report No. 069-19 re: "Launch of Updated Community Health Status Resource" for information.*

Carried

Monitoring Food Affordability and Implications for Government Public Policy Action (Report No. 070-19)

Dr. Mackie introduced the report and provided context. He then introduced Ms. Linda Stobo, Manager, Chronic Disease Prevention and Tobacco Control, and Ms. Kim Loupos, Registered Dietitian, who answered questions.

Discussion ensued on the following items:
- Whether the calculation for food costing is a standard formula used across Ontario.
- Affordability of the recommendations contained in the new *Canada's Food Guide*.
- The definition of "disability" under the Ontario Disability Support Program.
- How this model might look if a basic income guarantee were built into it.

It was moved by Ms. Fulton, seconded by Ms. DeViet, *that the Board of Health:*

1) *Request that the Minister of Children, Community and Social Services continue to include episodic and short-term disabilities within the definition of disability for the Ontario Disability Support Program.*
2) *Request that Bill 60,* An Act to amend the Ministry of Community and Social Services Act to establish the Social Assistance Research Commission*, proceed to the Standing Committee on the Legislative Assembly to set evidence-based social assistance rates premised on local living costs.*
3) *Request that Health Canada update the food list in the National Nutritious Food Basket to reflect the recommendations in the 2019* Canada's Food Guide*, and develop a national food-costing protocol to facilitate consistent and effective monitoring of food affordability.*
4) *Forward Report No. 070-19 re: "Monitoring Food Affordability and Implications for Government Public Policy and Action" to Ontario boards of health, the City of London, Middlesex County, and appropriate community agencies.*

Carried

Summary Information Report for November (Report No. 071-19)

Dr. Mackie provided context for the report. Discussion ensued on the collective kitchen program and the need for a rating system that addresses depictions of smoking and vaping use in movies.

Ms. Stobo described the collective kitchen program in detail. Ms. Donna Kosmack, Manager, South West Tobacco Control Area Network, answered questions about the ratings system for depictions of smoking in movies. She also compared the current ratings systems for movies depicting smoking and vaping in Canada and the United States.

Ms. Lokko arrived at 8:21 p.m.

It was moved by Ms. Kasi, seconded by Mr. Clarke, *that the Board of Health receive Report No. 071-19 re: "Summary Information Report for November 2019" for information.*

Carried

Medical Officer of Health/CEO Activity Report for November (Report No. 072-19)

Dr. Mackie provided context for the report and updated the Board on developments since the report was issued, specifically those related to the recent *Canadian Medical Association Journal* (CMAJ) report on a case study of a youth who suffered from lung illness related to vaping. The CMAJ report had prompted the Chief Medical Officer of Health to issue a statement earlier today validating the vaping-related lung illness case in the Health Unit's report from September 2019.

Discussion ensued on the following items:

- The case study in the CMAJ article.
- The availability of e-juices and vape products for purchase online, with little regulation.
- Marketing of vape products and flavoured e-juice liquids to youth.
- The lack of rated and regulated substances for vaping.
- The need for education for adults who are considering vaping as a smoking cessation aid.

It was moved by Mr. Brennan, seconded by Ms. Kasi, *that the Board of Health receive Report No. 072-19 re: "Medical Officer of Health/CEO Activity Report for November" for information.*

Carried

CORRESPONDENCE

Ms. DeViet provided an update, from the County perspective, on correspondence item w), highlighting some of the County's concerns over the proposed amalgamations and how the Health Unit might maintain access to services for County residents should a larger regional entity be formed.

Ms. Fulton noted that a report will be coming forward to the Board next month on the status of action items resulting from the review of MLHU services in the County.

It was moved by Mr. Brennan, seconded by Ms. Fulton, *that the Board of Health receive correspondence items a) through v) and x), and refer item w) to staff.*

Carried

Dr. Mackie introduced item y) and provided context.

It was moved by Mr. Peer, seconded by Ms. DeViet, *that the Board of Health refer item y) to staff for a report at the December Board of Health meeting.*

Carried

OTHER BUSINESS

- Next Finance & Facilities Committee meeting: December 5, 2019 @ 9:00 a.m.
- Next Governance Committee meeting: February 2020 (exact date TBA).
- Next Board of Health meeting: Thursday, December 12, 2019 @ 5:30 p.m.

CONFIDENTIAL

At 8:42 p.m., it was moved by Mr. Reid, seconded by Mr. Clarke, *that the Board of Health move in-camera to consider matters regarding identifiable individuals, the security of the property of the Board of Health, financial information that belongs to the local board and has monetary or potential monetary value, and to approve confidential minutes from its October 17, 2019 Relocation Advisory Committee and Board of Health meetings.*

Carried

At 9:45 p.m., it was moved by Mr. Reid, seconded by Ms. DeViet, *that the Board of Health rise and return to public session.*

Carried

At 9:46 p.m., the Board of Health returned to public session.

ADJOURNMENT

At 9:46 p.m., it was moved by Mr. Clarke, seconded by Ms. DeViet, *that the meeting be adjourned.*

Carried

MAUREEN CASSIDY
Vice-Chair

CHRISTOPHER MACKIE
Secretary-Treasurer

PUBLIC SESSION – MINUTES
MIDDLESEX-LONDON BOARD OF HEALTH
Special Meeting
Thursday, December 5, 2019, 10:00 a.m
50 King Street, London, Ontario
3rd Floor, Room 3A

MEMBERS PRESENT:	Ms. Trish Fulton (Chair) Ms. Maureen Cassidy (Vice-Chair) Mr. Michael Clarke Ms. Arielle Kayabaga Mr. Ian Peer Mr. Matt Reid Mr. John Brennan
REGRETS:	Ms. Kelly Elliott Ms. Tino Kasi Ms. Aina DeViet
OTHERS PRESENT:	Dr. Christopher Mackie, Secretary-Treasurer Ms. Lynn Guy, Executive Assistant to the Medical Officer of Health (Recorder) Ms. Laura Di Cesare, Director, Healthy Organization Mr. Joe Belancic, Manager, Procurement and Operations Mr. Brian Glasspoole, Manager, Finance Ms. Kendra Ramer, Manager, Strategic Projects Ms. Maureen Rowlands, Director, Healthy Living

Chair Fulton called the meeting to order at 9:32 a.m.

Chair Fulton welcomed everyone and introduced the newest Board of Health Member, Arielle Kayabaga, City of London Councillor.

DISCLOSURE OF CONFLICT OF INTEREST

Chair Fulton inquired if there were any disclosures of conflicts of interest. None were declared.

CONFIDENTIAL

At 9:32 a.m., it was moved by Mr. Peer, seconded by Mr. Clarke, *that the Board of Health move in camera to matters regarding a trade secret or scientific, technical, commercial, financial or labour relations information, supplied in confidence to the local board, which, if disclosed, could reasonably be expected to prejudice significantly the competitive position or interfere significantly with the contractual or other negotiations of a person, group of persons, or organization; a trade secret or scientific, technical, commercial or financial information that belongs to the local board and has monetary value or potential monetary value.*

Carried

At 10:49 a.m., it was moved by Mr. Reid, seconded by Mr. Clarke, *that the Board of Health rise and return to public session.*

Carried

At 10:49 a.m., the Board of Health returned to public session.

ADJOURNMENT

At 10:49 a.m., it was moved by Mr. Reid, seconded by Ms. Kayabaga, *that the meeting be adjourned.*

Carried

TRISH FULTON
Chair

CHRISTOPHER MACKIE
Secretary-Treasurer

PUBLIC SESSION – MINUTES
MIDDLESEX-LONDON BOARD OF HEALTH
GOVERNANCE COMMITTEE

Thursday, November 21, 2019, 6:00 p.m.
399 Ridout Street North, London, Ontario
Side Entrance (recessed door)
MLHU Boardroom

MEMBERS PRESENT: **Ms. Aina DeViet (Chair)**
Ms. Trish Fulton
Mr. Ian Peer
Ms. Maureen Cassidy

OTHERS PRESENT: Ms. Elizabeth Milne, Executive Assistant to the Board of Health & Communications Coordinator (Recorder)
Dr. Alex Summers, Associate Medical Officer of Health
Mr. Joe Belancic, Manager, Procurement and Operations
Ms. Laura Di Cesare, Director, Healthy Organization
Mr. Brian Glasspoole, Manager, Finance
Ms. Nicole Gauthier, Manager, Privacy, Risk and Governance
Ms. Kendra Ramer, Manager, Strategic Projects
Ms. Cynthia Bos, Manager, Human Resources

Chair DeViet called the meeting to order at 6:01 p.m.

DISCLOSURE OF CONFLICTS OF INTEREST

Chair DeViet inquired if there were any disclosures of conflicts of interest to be declared. None were declared.

APPROVAL OF AGENDA

It was moved by Mr. Peer, seconded by Ms. Cassidy *that the **AGENDA** for the November 21, 2019 Governance Committee meeting be approved.*

Carried

APPROVAL OF MINUTES

It was moved by Mr. Peer, seconded by Ms. Fulton, *that the **MINUTES** of the September 19, 2019 Governance Committee meeting be approved.*

Carried

NEW BUSINESS

Q3 Activity Report – Strategic Projects (Report No. 015-19GC)

Ms. Kendra Ramer introduced this report and outlined the activities and projects that have taken place in the third quarter, the projects that remain on track, those that remain slightly behind schedule and those that have closed out in Q3. Ms. Ramer also noted projects that have been placed on hold due to the recent amalgamation announcement and discussions.

Discussion ensued about the Diversity Assessment and staff recommendations to put this project on hold pending results of the amalgamation discussions.

It was moved by Ms. Fulton, seconded by Ms. Cassidy, *that the that the Governance Committee receive Report No. 015-19GC re: "Q3 2019 Activity Report – Strategic Projects" for information.*

Carried

Governance Policy Review and Development (Report No. 016-19GC)

Ms. Gauthier introduced this report and highlighted the six Governance policies for review this evening (Appendix B):

- G-050 MOH/CEO Performance Appraisal
- G-080 Occupational Health and Safety
- G-200 Approval and Signing Authority
- G-220 Contractual Services
- G-230 Procurement
- G-250 Reserve and Reserve Funds
- G-395 Local Health Integration Network Relationships

Ms. Gauthier drew the committee's attention to the policy that is recommended to be decommissioned (G-395, Local Health Integration Network Relationships) and advised the Board on the new Policy Manager software launching for the Board to access in the coming weeks.

It was moved by Mr. Peer, seconded by Ms. Cassidy, *that the Governance Committee:*
1) *Receive Report No. 016-19GC re: "Governance Policy Review and Development" for information; and*
2) *Approve the governance policies as appended to this report.*

Carried

OTHER BUSINESS

The next Governance Committee meeting will be at 6:00 p.m. on Thursday, February 20, 2020.

CONFIDENTIAL

At 6:11 p.m., it was moved by Ms. Cassidy, seconded by Mr. Peer *that the Governance Committee move in-camera to consider matters regarding identifiable individuals and the security of the property of the Board of Health.*

Carried

At 6:20 p.m., it was moved by Ms Cassidy, seconded by Mr. Peer, *that the Board of Health rise and return to public session.*

Carried

At 6:20 p.m., the Governance Committee returned to public session.

ADJOURNMENT

At 6:20 p.m., it was moved by Ms. Fulton, seconded by Ms. Cassidy, *that the meeting be adjourned.*

Carried

_____ _____

AINA DEVIET **TRISH FULTON**
Committee Chair **Board Chair**

PUBLIC MINUTES
FINANCE & FACILITIES COMMITTEE
50 King Street, London
Middlesex-London Health Unit
Thursday, December 5, 2019 9:00 a.m.

MEMBERS PRESENT: Mr. Matt Reid (Chair)
Ms. Maureen Cassidy
Ms. Trish Fulton

Regrets: Ms. Tino Kasi
Ms. Kelly Elliott

OTHERS PRESENT: Mr. Michael Clarke, Board of Health
Mr. Ian Peer, Board of Health
Mr. John Brennan, Board of Health
Dr. Christopher Mackie, Secretary-Treasurer
Ms. Lynn Guy, Executive Assistant to the Medical Officer of Health (Recorder)
Ms. Laura Di Cesare, Director, Corporate Services
Mr. Brian Glasspoole, Manager Finance
Ms. Maureen Rowlands, Director Healthy Living
Ms. Donna Kosmack, Manager, South West Tobacco Control Area Network and Acting Manager Dental Services
Mr. Joe Belancic, Manager Procurement & Operations
Ms. Kendra Ramer, Manager Strategic Projects
Mr. John Cameron, Medical Student
Ms. Maureen Rowlands, Director Healthy Living

At 9:03 a.m., Chair Reid called the meeting to order.

DISCLOSURES OF CONFLICT(S) OF INTEREST

Chair Reid inquired if there were any disclosures of conflicts of interest. None were declared.

APPROVAL OF AGENDA

It was moved by Ms. Cassidy, seconded by Ms. Fulton, *that the **AGENDA** for the December 5, 2019 Finance and Facilities Committee meeting be approved.*

Carried

APPROVAL OF MINUTES

It was moved by Ms. Fulton, seconded by Ms. Cassidy, *that the **MINUTES** of the November 7, 2019 Finance and Facilities Committee meeting be approved.*

Carried

NEW BUSINESS

4.1 Update – Transfer of Services to Thames Valley Children's Centre (Report No. 036-19FFC)

Mr. Glasspoole provided the context for this report. He noted that any remaining funds will be transferred to the Thames Valley Children's Centre, and with a request that funds that flowed directly from the City of St. Thomas be used for services provided in St. Thomas.

It was moved by Ms. Fulton, seconded by Ms. Cassidy *that the Finance and Facilities recommend that the Board of Health receive Report No. 036-19FFC re: Update – Transfer of Services to Thames Valley Children's Centre for information."*

Carried

4.2 Update – Great-West Life Benefits Renewal (Report No. 037-19FFC)

Mr. Glasspoole provided a bit of history for this report, noting that last year Corporate Services were planning to go to market last year for a benefits provider. Great West Life provided favourable rates prior to that plan and the Health Unit choose to accept. Mr. Glasspoole provided a summary of the report. There was a brief discussion regarding long-term disability claims and how they could affect the insurance rates if there are more than two claims.

It was moved by Ms. Cassidy, seconded by Ms. Fulton *that the Finance and Facilities Committee review and make recommendation to the Board of Health to approve the extension of the current renewal period of the group insurance rates administered by Great-West Life as described in Report No. 037-18FFC re: "Great-West Life Benefits – Renewal Update".*

Carried

4.3 2020-23 Board of Health Budget Submission (Report No. 038-19FFC)

Dr. Mackie introduced this report. He noted that the initial submission to the City needed some clarifying revisions and he asked the Committee to approve this revised submission before re-submitting to the City of London. There was discussion in regard to any health unit amalgamations and the uncertainty to budgets should they occur. Also discussed was the 60/40 funding that the Province could upload to Health Units and the impact that it would have on municipalities.

It was moved by Ms. Fulton, seconded by Ms. Cassidy *that the Finance and Facilities Committee:*

1. *Approve the renewal of the Health Unit's insurance as outlined in Report No. 038-19FFC re: "2020-23 Board of Health Budget Submission."*
2. *Direct Health Unit staff to work with the City of London to determine appropriateness of applying for Assessment Growth Funding in future years.*

Carried

OTHER BUSINESS

Next meeting: February 6, 2020

ADJOURNMENT

At 9:21 a.m., it was moved by Ms. Fulton, seconded by Ms. Cassidy, *that the meeting be adjourned.*

Carried

At 9:21 a.m., Chair Reid *adjourned the meeting*.

MATTHEW REID
Chair

CHRISTOPHER MACKIE
Secretary-Treasurer

PUBLIC SESSION – MINUTES
MIDDLESEX-LONDON BOARD OF HEALTH
RELOCATION ADVISORY COMMITTEE
50 King St. Room 3A
Thursday, December 5, 2019, 10:00 a.m.

Committee Members Present:	Mr. Ian Peer**,** (Chair) Mr. Michael Clarke Ms. Trish Fulton Mr. Matt Reid Mr. John Brennan
Others Present:	Ms. Arielle Kayabaga, Board of Health Mr. John Brennan, Board of Health Ms. Maureen Cassidy, Board of Health Dr. Christopher Mackie, Secretary-Treasurer Ms. Lynn Guy, Executive Assistant to the Medical Officer of Health (Recorder) Ms. Laura Di Cesare, Director, Corporate Services Mr. Brian Glasspoole, Manager Finance Ms. Maureen Rowlands, Director Healthy Living Ms. Donna Kosmack, Manager, South West Tobacco Control Area Network and Acting Manager Dental Services Mr. Joe Belancic, Manager Procurement & Operations Ms. Kendra Ramer, Manager Strategic Projects Mr. John Cameron, Medical Student Ms. Maureen Rowlands, Director Healthy Living

At 9:22 p.m., the Chair called the meeting to order.

DISCLOSURE OF CONFLICT(S) OF INTEREST

Chair Peer inquired if there were any disclosures of conflicts of interest to be declared. None were declared.

APPROVAL OF AGENDA

It was moved by Mr. Brennan, seconded by Ms. Fulton, *that the **AGENDA** for the December 5, 2019 Relocation Advisory Committee meeting be approved.*

Carried

APPROVAL OF MINUTES – October 17, 2019

It was moved by Ms. Fulton, seconded by Mr. Reid, *that the minutes for the October 17, 2019 Relocation Advisory Committee meeting be approved.*

Carried

CONFIDENTIAL

At 9:23 a.m., it was moved by Mr. Reid, seconded by Ms. Fulton, *that the Relocation Advisory Committee move in-camera to consider matters regarding a proposed or pending acquisition or disposition of land by the local board; a trade secret or scientific, technical, commercial, financial or labour relations information, supplied in confidence to the local board, which, if disclosed, could reasonably be expected to prejudice significantly the competitive position or interfere significantly with the contractual or other negotiations of a person, group of persons, or organization; a trade secret or scientific, technical, commercial or financial information that belongs*

to the local board and has monetary value or potential monetary value and approve confidential minutes from its October 17, 2019 meeting.

Carried

Ms. Kayabaga arrived at 9:23 a.m.

At 9:31a.m. the Relocation Advisory Committee returned to public session

ADJOURNMENT

At 9:31 a.m., it was moved by Mr. Clarke, seconded by Mr. Reid, *that the meeting be adjourned.*

Carried

_____ _____

IAN PEER
Committee Chair

CHRISTOPHER MACKIE
Secretary-Treasurer

MIDDLESEX-LONDON HEALTH UNIT

REPORT NO. 074-19

TO: Chair and Members of the Board of Health

FROM: Christopher Mackie, Medical Officer of Health / CEO

DATE: 2019 December 12

FINANCE & FACILITIES COMMITTEE MEETING – December 5, 2019

The Finance & Facilities Committee (FFC) met at 9:00 a.m. on December 5, 2019. A summary of the discussion can be found in the draft minutes.

Reports	Recommendations for Information and the Board of Health's Consideration
Update – Transfer of Services to Thames Valley Children's Centre **(Report No. 036-19FFC)**	*That the Finance & Facilities Committee recommend that the Board of Health receive Report No. 036-19FFC re: Update – Transfer of Services to Thames Valley Children's Centre for information.*
Update – Great-West Life Benefits Renewal **(Report No. 037-19FFC)**	*That the Finance & Facilities Committee review and make recommendation to the Board of Health to approve the extension of the current renewal period of the group insurance rates administered by Great-West Life as described in Report No. 037-18FFC re: "Great-West Life Benefits – Renewal Update".*
2020-23 Board of Health Budget Submission **(Report No. 038-19FFC)**	*That the Finance & Facilities Committee recommend that the Board of Health:* *1) Receive Report No. 038-19FFC re: 2020-23 Board of Health Budget Submission for information; and;* *2) Direct Health Unit staff to work with the City of London to determine appropriateness of applying for Assessment Growth Funding in future years.*

The FFC's next meeting will be on Thursday, February 6, 2019, at 9:00 a.m., at the Middlesex-London Health Unit, 50 King Street, Room 3A.

This report was prepared by the Office of the Medical Officer of Health.

Christopher Mackie, MD, MHSc, CCFP, FRCPC
Medical Officer of Health / CEO

MIDDLESEX-LONDON HEALTH UNIT

REPORT NO. 075-19

TO: Chair and Members of the Board of Health

FROM: Christopher Mackie, Medical Officer of Health / CEO

DATE: 2019 December 12

PUBLIC HEALTH SERVICES IN MIDDLESEX COUNTY - UPDATE

Recommendation

It is recommended that the Board of Health:

1) Receive Report No. 075-19, re: "Public Health Services in Middlesex County – Update" for information; and

2) Direct staff to forward the update to Middlesex County Council.

Key Points

- The Middlesex-London Health Unit (MLHU) provides services in every community throughout Middlesex County, including inspecting every restaurant, visiting many homes, and larviciding mosquitos in thousands of catch basins.
- MLHU reviewed services in the County to ensure the public health needs of County residents are met.
- MLHU conducted a multi-component service review that identified stakeholder priorities, current service delivery practices, best practices and action items.
- In summary, in 2019, eight (8) action items are in implementation phase and remain on track, two (2) are ahead of schedule, one (1) fell behind schedule and five (5) action items are ongoing. One (1) action continues to be on hold in anticipation of regional amalgamation, and three (3) action items are scheduled for implementation in 2020 and beyond.

Background

The Middlesex County Public Health Services Review (MCPHSR) examined the programs and services delivered within the mandate outlined in the *Health Protection and Promotion Act* and the *Ontario Public Health Standards: Requirements for Programs, Services, and Accountability*. The review process was conducted throughout the spring and summer of 2018, and recommendations in the form of action items were approved by the Board of Health ("BOH") at their meeting in September 2018.

The information gathered in the review was analyzed to describe an overview of MLHU programs and services, key stakeholder priorities, current population health status, best practices identified from research and other Ontario public health units, and consideration for future MLHU practice. Overall, the health status of Middlesex County compares favorably to the rest of Ontario across a wide range of health indicators.

The MCPHSR, as previously presented in Report No. 055-18, is attached as Appendix A. The data sources reviewed in that report are attached as Appendix B.

2019 Activity

Based on the findings of the Review of Public Health Services in Middlesex County, eight (8) broad recommendations were developed with twenty (20) specific action items identified. As of this date, eight (8) action items are in implementation phase and remain on track, two (2) are ahead of schedule, one (1) fell behind schedule and five (5) action items are ongoing. One (1) action continues to be on hold in anticipation of regional amalgamation, and three (3) action items are scheduled for implementation in 2020 and beyond.

Eight (8) actions items that were identified for implementation in 2019 and two (2) items that were scheduled for completion in 2020 have progressed. These include:

- Board of Health updates sent as correspondence following Board meetings;
- Enhancing programming to meet community health needs;
- Identifying programs that could enhance service delivery through the use of comprehensive libraries;
- Including a rural/County lens in the MLHU program planning and evaluation framework;
- Cataloguing existing data sharing agreements and establishing a process for developing new ones;
- Identifying organizations with whom data sharing would enhance MLHU planning;
- Developing a community partner inventory to assist programs with identifying stakeholders for community engagement;
- Identifying an MLHU lead to liaise with Middlesex County Library.
- Ensuring the Intake Line project provides dedicated staff in MLHU's Strathroy office to provide in-person and over the phone service; and
- Implementation of Client Experience Surveys.

For detailed information regarding each action listed above, refer to Appendix C.

The one (1) item identified for completion in 2019 which is behind schedule is:

- Development of an administrative policy for community engagement.

Five (5) action items that are embedded into regular MLHU program work and are ongoing include:

- Disaggregation of data to allow for identification of different needs for different areas of the County;
- Seeking input from Middlesex County Residents on programming decisions;
- Engaging with organizations to establish data sharing agreements;
- Using disaggregated County- and municipal-level data in ongoing MLHU planning; and
- Identifying additional service offerings to be provided online and over the phone.

One (1) action item placed on hold following the provincial budget announcement in April 2019 while MLHU awaits further direction from the Ministry is:

- Developing a BOH Governance Policy for Relationships with Other Health Service Providers and Key Stakeholders.

The remaining three (3) items are due for implementation in 2020 or beyond includes:

- Scheduling and conducting regular delegations to all municipal councils;
- Identifying current leases and other spaces that are utilized across Middlesex County; and
- Providing informational packages about public health to candidates running for municipal council.

Next Steps

MLHU staff will continue to implement the remaining actions as well as ensure those that have been initiated continue to be embedded into practice.

This report was prepared by the Healthy Organization Division.

Christopher Mackie, MD, MHSc, CCFP, FRCPC
Medical Officer of Health / CEO

Appendix A to Report No. 075-19

Review of Public Health Services in Middlesex County

September 2018

For information, please contact:

Jordan Banninga

Manager, Program Planning & Evaluation
Middlesex-London Health Unit
e-mail: jordan.banninga@mlhu.on.ca

Middlesex-London Health Unit
50 King Street
London, Ontario
N6A 5L7

Cite reference as: Middlesex-London Health Unit (2018). *Review of Public Health Services in Middlesex County*. London, Ontario.

Editor:

Jordan Banninga
Manager, Program Planning & Evaluation

Table of Contents

Executive Summary

The Middlesex-London Health Unit (MLHU) is the largest autonomous health unit in Canada and has served the residents of both Middlesex County and the City of London since the merger of the Middlesex County Health Unit and London Public Health Department in 1971. During this time, MLHU has responded to many public health emergencies including the recent the opioid crisis (2017 – present), the H1N1 influenza pandemic (2009) and the SARS outbreak (2003). Additionally, MLHU has continuously provided high quality public health programs and services that impact the daily lives of our residents. There programs and services range from inspections in all food premises, the promotion of healthy active living, oversight of the vaccine supply, larviciding catch basins, to advocacy for safe roads. Our goal is to work upstream in our health system, preventing illness and disease before it happens.

The Review of Public Health Services in Middlesex County (RPHSMC) examines the programs and services delivered within the mandate outlined in the *Health Protection and Promotion Act* and the *Ontario Public Health Standards: Requirements for Programs, Services, and Accountability*.

This review comes after a comprehensive community engagement process that sought the input of Middlesex-London residents on the potential consolidation of MLHU's London offices that began in 2015. Significant work was done to gather input from the residents of Middlesex County and the City of London through online and telephone surveys and additional consultation with Middlesex County through a partner consultation process.

Throughout these consultations the Board of Health reiterated its intention of maintaining an office in Strathroy, and the commitment to not reduce services to County of Middlesex residents.

In addition to gathering input from all areas of Middlesex and London to guide their decision making, the Board of Health also made a specific commitment to ensure that services in Middlesex County are reviewed and strengthened if needed.

Throughout the Spring and Summer of 2018, a service review process was conducted by staff at MLHU which included the completion of:

- Presentations to all lower and upper tier municipalities;
- A community health status report;
- A literature review;
- A survey of municipal council members;
- Key informant interviews;
- An environmental scan of Ontario public health units; and
- A description of county service delivery for each MLHU program.

The information gathered in the service review was analyzed and collated to describe an overview of MLHU programs and services, key stakeholder priorities, the current population health status, best practices identified from research and other Ontario public health units and consideration for future MLHU practice. The findings are organized as follows:

- Population Characteristics;
- Mortality;
- Social Determinants of Health;
- Organizational Practices;
- Accessibility;
- Community Engagement;
- Foundational Standards;

- Chronic Disease Prevention and Well-Being;
- Food Safety;
- Healthy Environments;
- Healthy Growth and Development;
- Immunization;
- Infectious and Communicable Diseases Prevention and Control;
- Safe Water;
- School Health; and
- Substance Misuse and Injury Prevention.

Overall, the health status of Middlesex County compares favorably to the rest of Ontario across a wide range of health indicators corresponding to the standards listed above. Nevertheless, there are always improvements to be made.

Important issues identified during the Middlesex County Public Health Service Review include the need to:

1. Establish regular communication channels (delegations, newsletters / correspondence) to all municipal councils (upper and lower tier);
2. Enhance staff and programming presence at the Strathroy office;
3. Explore a partnership with Middlesex County to utilize comprehensive libraries for program and service delivery;
4. Ensure MLHU's planning processes takes into consideration the public health needs of Middlesex residents and that staff seek input from Middlesex residents;
5. Develop data sharing agreements with local organizations;
6. Develop a community engagement strategy that includes stakeholders identified during asset mapping;
7. Increase opportunities to deliver services and connect with Middlesex County residents online, over the phone and through other non-physical means; and
8. Develop mechanisms for the public to provide feedback on how to improve service delivery.

The considerations identified in this service review and feedback from the Board of Health and Middlesex County Council will be used to develop formal recommendations for Board of Health endorsement and implementation by MLHU.

Mandate of the Middlesex-London Health Unit

The Middlesex-London Health Unit derives its mandate from the *Health Protection and Promotion Act* (HPPA). The Act is a provincial statute that gives the Board of Health its legal mandate to deliver public health programs and services, to prevent the spread of disease and to promote and protect the health of the residents of Middlesex-London.

The HPPA defines the structure, governance and functions of the board of health as well as the activities and authority of medical officers of health.

To operationalize the HPPA, the Ministry of Health and Long-Term Care publishes the *Ontario Public Health Standards (*OPHS*).* The OPHS sets out the requirements for programs, services and accountabilities to which boards of health are held.

The scope of the OPHS lays out specific requirements but these are not intended to limit the potential scope of a board of health's programming. This allows for boards of health to respond to community health needs with activities that can promote and protect the health of the population and reduce health inequities. The specific standards with requirements that the board of health must meet include:

The Foundational Standards:

- Population Health Assessment;
- Health Equity;
- Effective public health practice; and
- Emergency Management

And the Program Standards:

- Chronic Disease Prevention and Well-being;
- Food safety;
- Healthy Environments;
- Healthy Growth and Development;
- Immunization;
- Infectious and Communicable Disease Prevention and Control;
- Safe Water;
- School Health; and
- Substance Use and Injury Prevention

A board of health may deliver additional services beyond these requirements should there be a demonstrated health need and population health interventions can be delivered to address those needs.

Additionally, the OPHS outlines organizational requirements under the Public Health Accountability Framework. This framework is composed of four Domains:

- Delivery of Programs and Services;
- Fiduciary Requirements;
- Good Governance and Management Practices; and
- Public Health Practices

Data Sources and Methods

The RPHSMC utilized qualitative and quantitative data. These methods were used to inform the considerations articulated in this report. Triangulation is the term used to broadly describe the use of multiple data sources to cross-validate key themes, findings and concepts. The blending and integration of a variety of data sources and methods is seen to lead to more valid results.

The methods of the review and data sources used for triangulation included:

- Presentations to municipal councils;
- A community health status report;
- A literature scan;
- A survey of municipal council members;
- Key informant interviews;
- An environmental scan;
- A description of county service delivery for each MLHU program; and
- Asset mapping.

Presentations to Municipal Councils

To facilitate data gathering and to keep municipal representatives informed about the RPHSMC, visits were conducted to each of the lower-tier municipalities in Middlesex County throughout June and July 2018. MLHU staff provided an overview of the Health Unit's mandate, the services provided throughout the County and the methodology of the review. At each meeting, a municipal councillor survey was distributed in pre-addressed and stamped envelopes and mayors and deputy mayors were encouraged to volunteer for the key informant interview. Additionally, councillors had the opportunity to ask questions regarding the review or other public health issues.

Community Health Status Report

A Community Health Status report (CHSR) contains health status information on a range of topics relevant to public health and draws on the information to fully understand the health status of the population. The CHSR included in this service review was conducted by MLHU Population Health Assessment and Surveillance Team. This CHSR provides information regarding population characteristics, social determinants of health, deaths, illness and injuries, behavioral risk factors, reproductive health and child health specifically for Middlesex County.

The fulsome CHSR can be found in Appendix A.

Literature Scan

A literature scan was undertaken to determine effective service delivery models for public health services in rural settings. The scan was limited to service delivery frameworks, models, or plans by provincial, state, or federal public health agencies, both in Canada and abroad, as well as the websites of the health agencies in the same Statistics Canada health peer group (Group A) as Middlesex-London Health Unit.

The scan did not look at program specific strategies to improve service delivery to rural areas. This process of identifying program specific strategies is integrated into MLHU's ongoing program planning, implementation and evaluation process.

The findings of the literature scan can be found in Appendix B.

Survey of Municipal Council Members

To understand the community needs and identify strategies to enhance access to public health services, the MLHU commissioned an online survey of municipal councillors to assess their areas of public health priority, how the Health Unit can increase accessibility, and gather feedback on ways to improve services. The survey was conducted by Middlesex-London Health Unit staff during the period of June 4th, 2018 to August 31st, 2018. The overall completion rate was 26.9%, with a total of 14 surveys completed. Average completion time of the survey was 11 minutes and 20 seconds. Only completed surveys were included for analysis.

The findings of the survey can be found in Appendix C.

Key Informant Interviews

Following the survey of municipal council members, MLHU reached out to mayors and deputy mayors of municipalities in Middlesex County to understand their perspectives on public health services being provided to their residents and opportunities for improvement. The key informant interviews were conducted by Middlesex-London Health Unit staff during the period of July 19th, 2018 to September 6th, 2018. A total of three telephone interviews were completed. Average completion time of the survey was 30 minutes.

The findings of the key informant interviews can be found in Appendix D.

Environmental Scan

MLHU reached out to Ontario Public Health Units with similar demographics to understand their strategies for servicing rural populations. Specifically, in order to ensure that the Health Unit is considering all possible strategies and best practices, this environmental scan sought to identify potential service improvements for Middlesex County residents. The environmental scan was conducted by Middlesex-London Health Unit staff during the period of July 19th, 2018 to August 31st, 2018. The overall completion rate was 35.7%, with a total of 5 surveys completed. Average completion time of the survey was 7 minutes and 28 seconds. Only completed surveys were included for analysis.

The findings of the environmental scan can be found in Appendix E.

Description of County Service Delivery for each MLHU Program

An essential component of the RPHSMC was a summary of the services delivered in the county on a program-by-program basis. The community health status report identifies public health needs in the community and MLHU endeavors to ensure that the programs and services are planned and implemented in such a way so as to address those concerns.

The data was collected from each program manager at MLHU and is summarized in the sections in this report relevant to their programming.

Asset Mapping

Asset mapping is an exercise that provides information about the strengths and resources available in a community that can help address public health issues. While not included in this report, an inventory of over 850 assets has been compiled using data available from Middlesex County and other sources. This data will be used to inform future improvement strategies.

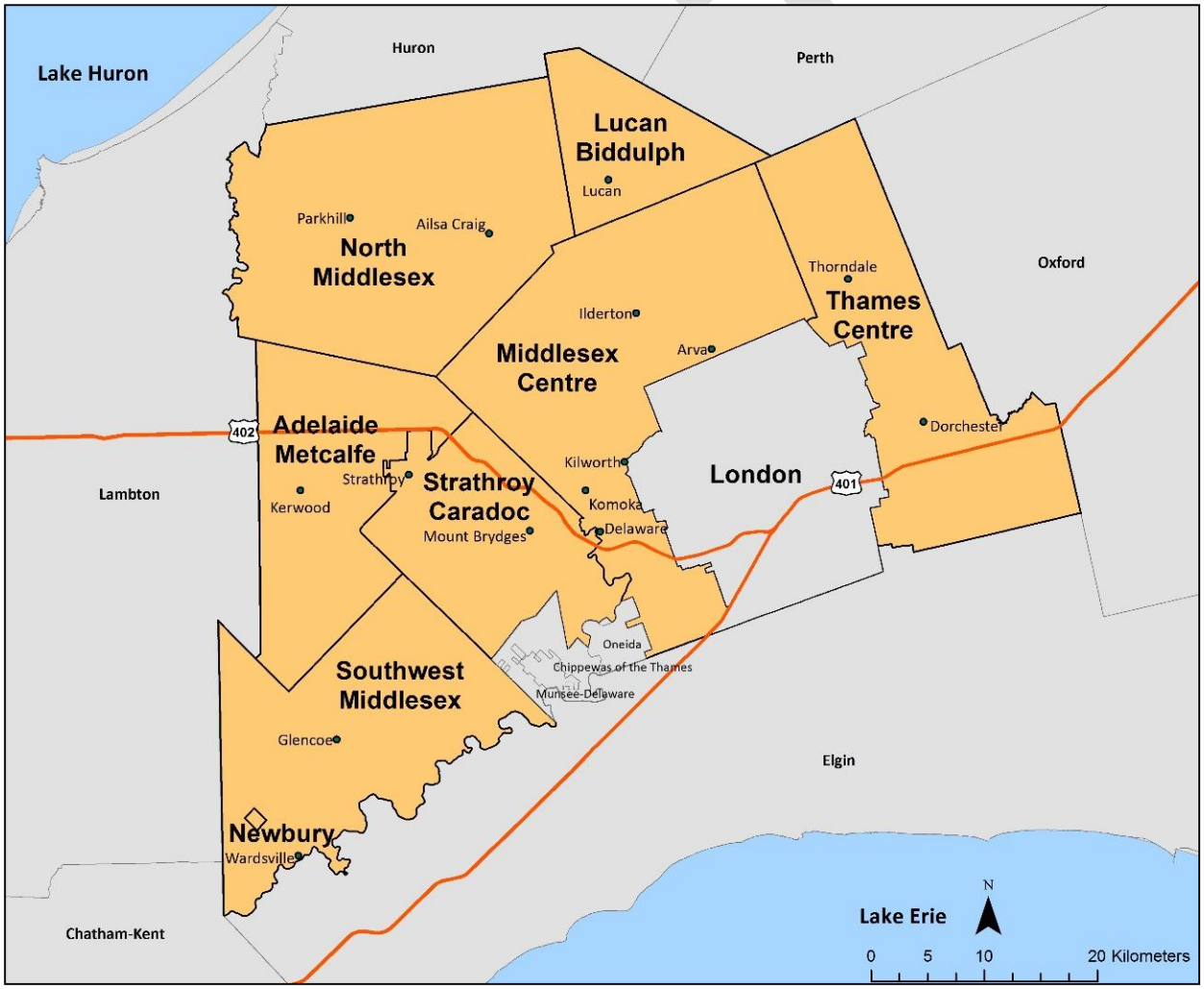
Findings

Population Characteristics

Middlesex County's population was 71,551 people according to the 2016 Census. The population of Middlesex County is concentrated in the three municipalities of: Strathroy-Caradoc, Middlesex Centre, and Thames Centre. These three municipalities account for nearly three quarters of Middlesex County's population and one in five of the residents of Middlesex County live in the town of Strathroy itself.

Middlesex County covers an area of 2,821 square kilometres in Southwestern Ontario and includes eight municipalities in order of geographic size (largest to smallest): North Middlesex, Middlesex Centre, Thames Centre, Southwest Middlesex, Adelaide Metcalfe, Strathroy-Caradoc, Lucan Biddulph and the Village of Newbury (Figure 1).

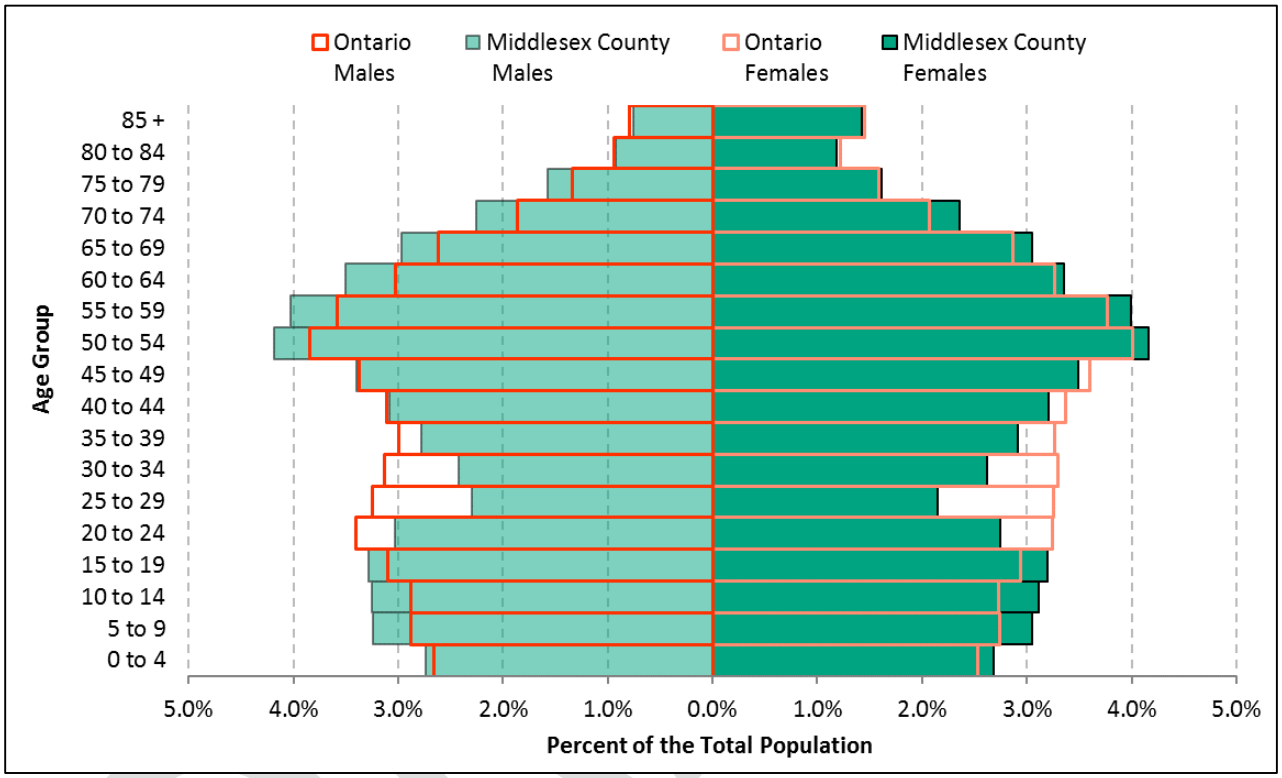
Figure 1. Middlesex County, municipalities and neighbouring areas, 2018.



Overall, there were similar numbers of males and females in Middlesex County in 2016. However, there were greater numbers of females than males in the oldest age group, 85 years and older (females 1025: males 545) which is consistent with the longer life expectancy for women in Middlesex County and may indicate that

public health could continue to work to close this gap by reducing risk factors for males. Generally, the age pyramid of Middlesex County was constricted in the young adult category (ages 20-39). This may be consistent with a general pattern seen in Ontario where youth and young adults migrate to more urban areas in search of education and employment opportunities (R.A. Malatest & Associates Ltd., 2002). Compared to the population of Ontario, the population of Middlesex County lacks younger adults aged 20-39 years and has a higher proportion of older children and older adults particularly older adult males.

Figure 2. Population Pyramid, percent of the population, by sex, by age group, Middlesex County and Ontario, 2016.



Data source: Statistics Canada. 2016 Census of Population (Unadjusted)

Middlesex County has had few immigrants in the past five years, with approximately 165 in total in 2016. They made up a much lower percent of the population (0.2%) than in Ontario overall (3.5%) Recent immigrants were concentrated in the three largest municipalities that surround the City of London. In general, the health of immigrants tends to be better than that of the overall population. This is largely due to the fact that immigrants must generally be healthy to immigrate and often have better diets and health behaviours initially than the Ontario population. However, resettlement may create vulnerabilities and require tailored public health services to reduce the health risks and promote well-being to stay healthy.

About 97% of the population of Middlesex County spoke English most often at home in 2016. Middlesex County had approximately 90 people who spoke French most often at home in 2016. The Middlesex-London Health Unit is a designated French language service area, and therefore endeavors to provide services in both official languages. However, 2.4% of the Middlesex County population spoke neither English nor French at home on a regular basis and may require public health services that meet their specific language needs. This proportion is much lower compared to the 14.4% in Ontario that do not regularly speak an official language at home.

For further details regarding population characteristics, refer to Appendix A.

Mortality

Death rates, also referred to as mortality rates, are frequently used as indicators of the overall health of a population. Trends in mortality can illustrate the health problems in our community that have the biggest impact on the population. Changes in mortality rates over time may be due to several different factors taking place in the community such as changes in the standard of living, the environment or other social determinants of health. Changes may also be due to access to quality health care, improved diagnosis and treatment of illness or the emergence of new health issues not seen before. Health protection and promotion efforts, such as those related to smoking prevention and cessation, may also have an important impact on mortality rates in populations.

The top eight leading causes of death between 2010 and 2012 in Middlesex County were chronic diseases (Table 1): ischemic heart disease, dementia and Alzheimer's disease, lung cancer, cerebrovascular diseases, lower respiratory diseases, colorectal cancer, diabetes and lymph and blood cancer. These accounted for 58.4% of all deaths. The ninth and tenth leading causes of death were influenza and pneumonia, and falls, respectively.

The top ten leading causes of death were the same for Middlesex County and Ontario, with the top eight causes following the same ranking order.

Ischemic heart disease, the leading cause of death in Middlesex County, accounted for 80% more deaths than lung cancer, the second leading cause of death.

Table 1. Number, percent and rank of the leading causes of death, Middlesex County and Ontario, 2010 to 2012 annual average.

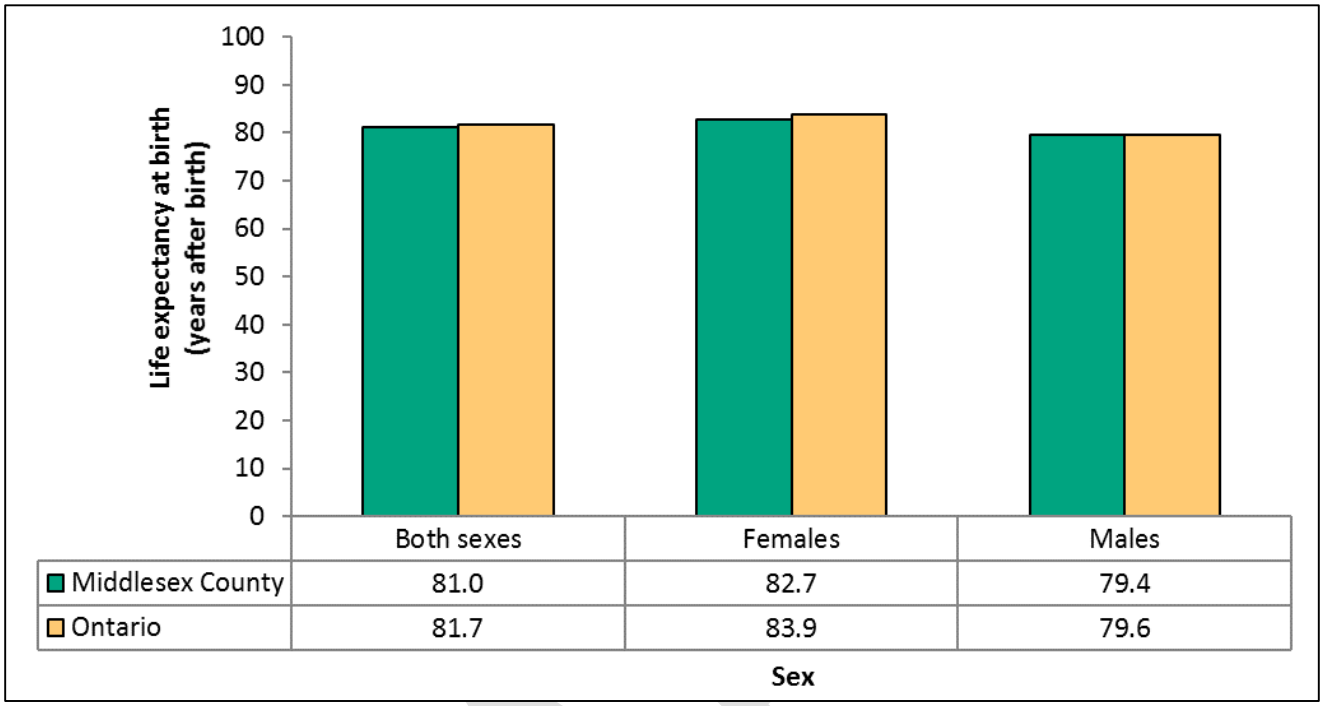
Leading Causes of Death	Average Annual Number of Deaths Middlesex County	Percent of All Deaths Middlesex County (%)	Ontario Rank
Ischemic Heart Disease	92	18.2	1
Dementia and Alzheimer's Disease	51	10.1	2
Lung Cancer	38	7.5	3
Cerebrovascular Diseases, incl. Stroke	31	6.2	4
Lower Respiratory Diseases	26	5.2	5
Colorectal Cancer	21	4.2	6
Diabetes	20	4.0	7
Lymph and Blood Cancer	14	2.9	8
Influenza and Pneumonia	14	2.7	10
Falls	13	2.7	9

Data source: Ontario Mortality Data, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: June 21, 2018.

Life expectancy is the average length of time that an individual will live if subjected to the mortality experience for the specified population and time period. Using data from 2010 to 2012, Middlesex County residents can expect to live on average 81.0 years at birth and 19.7 more years at age 65. The life expectancy for males was lower than females and the mortality rate for males was higher than for females.

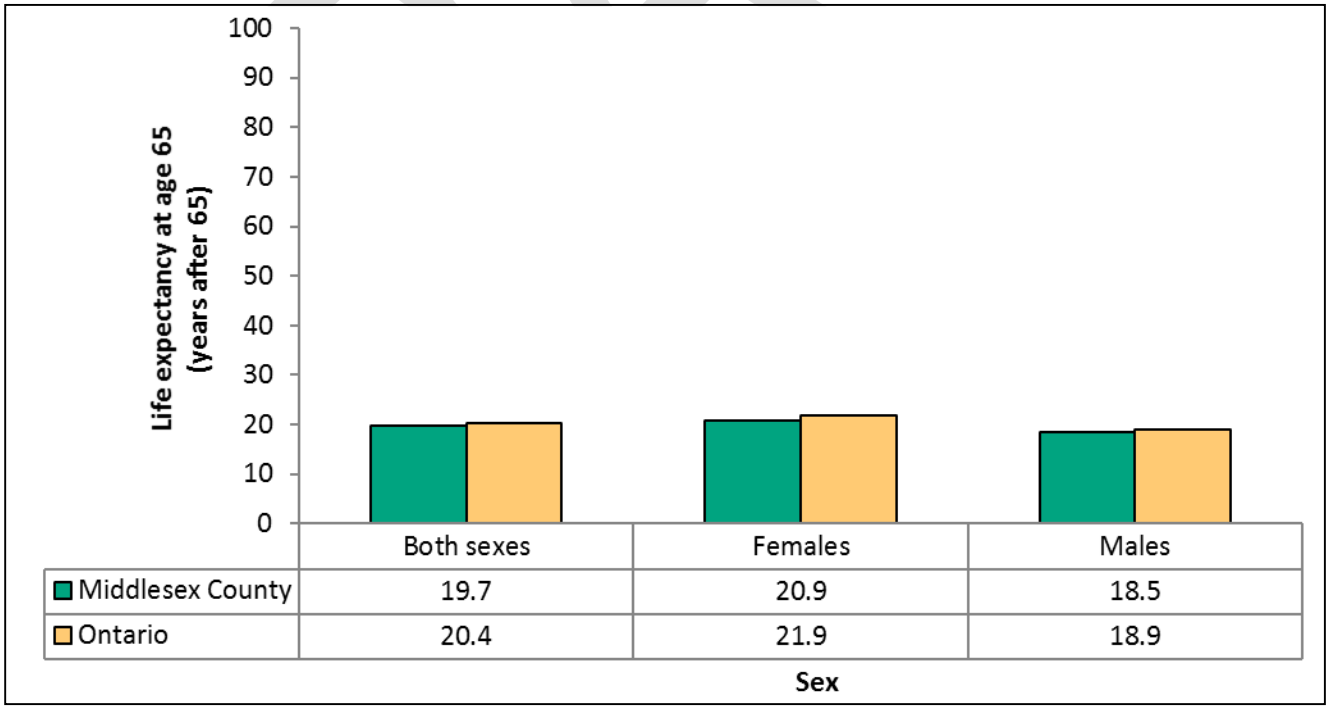
Males were much more likely to die prematurely than females in Middlesex County, generally reflecting higher rates of deaths in males at younger ages. Deaths due to breast cancer and lung cancer were the most common cause of premature death for females in Middlesex County; whereas for males it was ischemic heart disease.

Figure 3. Life expectancy at birth, by sex, Middlesex County and Ontario, 2008 to 2012 average.



Data source: Ontario Mortality Data, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: June 21, 2018.

Figure 4. Life expectancy at age 65, by sex, Middlesex County and Ontario, 2008 to 2012 average.



Data source: Ontario Mortality Data, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: June 21, 2018.

Potential years of lost life (PYLL) is an indicator of premature mortality. It measures the number of years lost from deaths before age 75. The younger a person is when they die, the greater the number of potential years of life that are lost.

As was the case in Ontario, males showed higher rates of PYLL than females in Middlesex County, generally reflecting higher rates of deaths in males at younger ages (Figure 5). Deaths due to breast cancer and lung cancer showed the highest PYLL rates for females in Middlesex County. The PYLL rates for both were slightly higher in Middlesex County females compared to Ontario females.

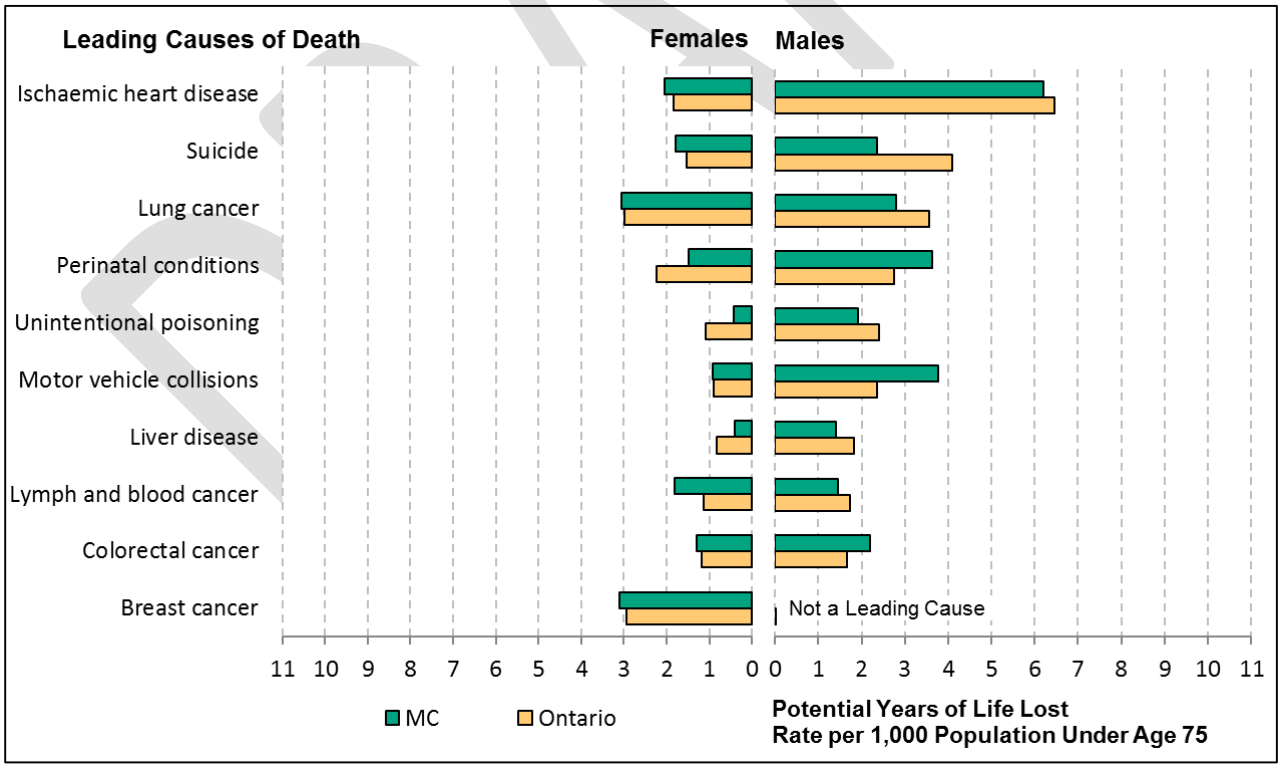
Ischaemic heart disease had the highest PYLL rate for males in both Middlesex County and Ontario. The PYLL rate for Middlesex County males was slightly lower than that for Ontario.

Deaths due motor vehicle collisions had the 2nd highest PYLL rate for males in Middlesex County; a rate higher than that for Ontario.

The presence of deaths due to perinatal conditions in this list of PYLL rates is largely reflective of the very young ages at which people die of these conditions. Compared to Ontario, the rate among women was lower for Middlesex County females, but higher for Middlesex County males.

For all cancers on the list (i.e., lung, lymph and blood, colorectal and breast), the PYLL rates for women were higher for Middlesex County than Ontario.

Figure 5. Potential years of life lost (PYLL) for leading causes of death, by sex, Middlesex County Ontario, 2010 to 2012 average.



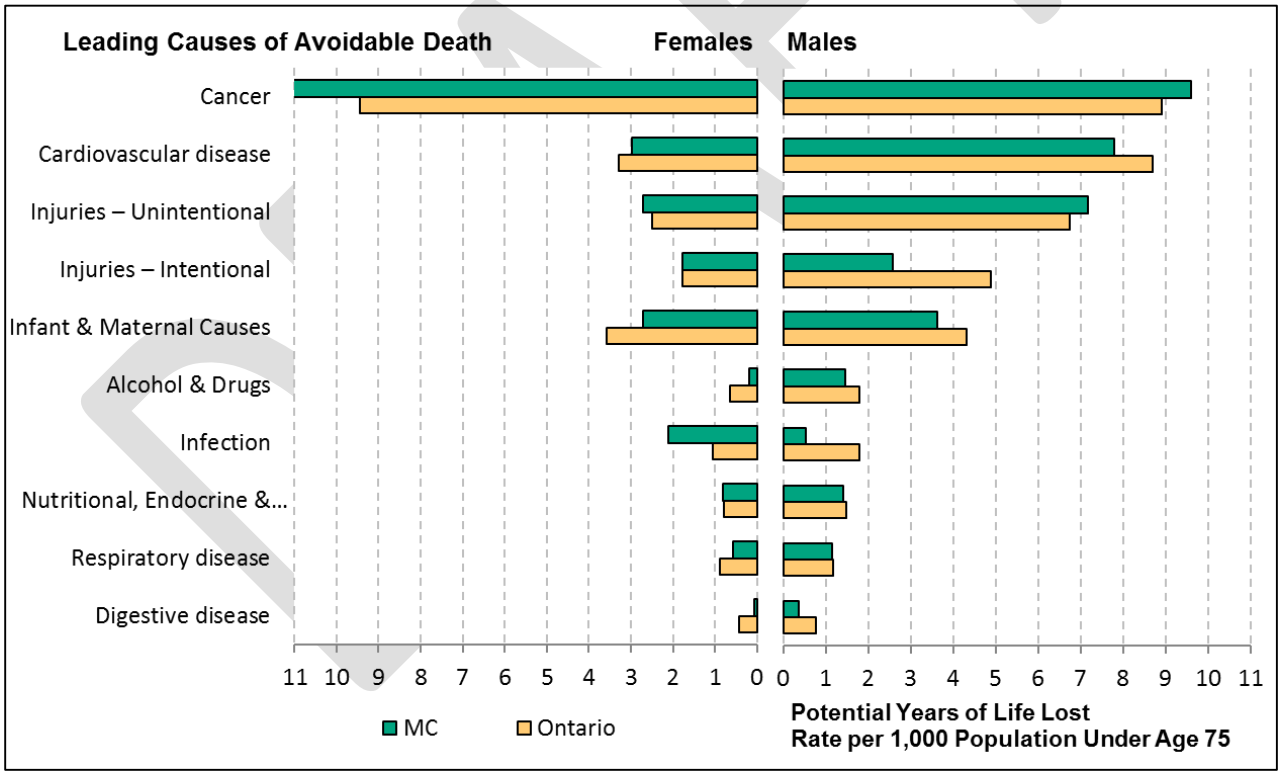
Data source: Ontario Mortality Data, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: June 21, 2018. Population Estimates, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH Ontario, Date Extracted: May 11, 2018.

Avoidable death refers to the number of deaths for every 1,000 people that could potentially have been avoided through effective health care, health promotion and disease prevention policies. The lower the number the better; it means that fewer individuals died prematurely from preventable or treatable causes. As was the case in Ontario, males showed higher rates of PYLL from avoidable causes than females in Middlesex County, generally reflecting higher rates of deaths in males at younger ages (Figure 6). For both sexes, cancer was the leading cause of avoidable death in both Middlesex County and Ontario. The PYLL rates for both sexes were higher for Middlesex County residents compared to Ontario.

Cardiovascular diseases, such as ischaemic heart disease, cerebrovascular disease, and rheumatic heart disease, were the second leading cause of avoidable death for both sexes in Middlesex County. PYLL rates for both females and males in Middlesex County were lower than Ontario.

Among females in Middlesex County, the third leading causes of avoidable death were due to unintentional injuries (e.g., falls, accidental poisoning, drowning) and infant and maternal causes (e.g., complications of perinatal period, congenital malformations, chromosomal anomalies). Among males in Middlesex County, the third leading cause of avoidable death was unintentional injuries and the PYLL rate was higher than Ontario.

Figure 6. Potential years of life lost from leading causes of avoidable death, by sex, Middlesex County and Ontario, 2010 to 2012 average.



Data source: Ontario Mortality Data, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: June 21, 2018. Population Estimates, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH Ontario, Date Extracted: May 11, 2018.

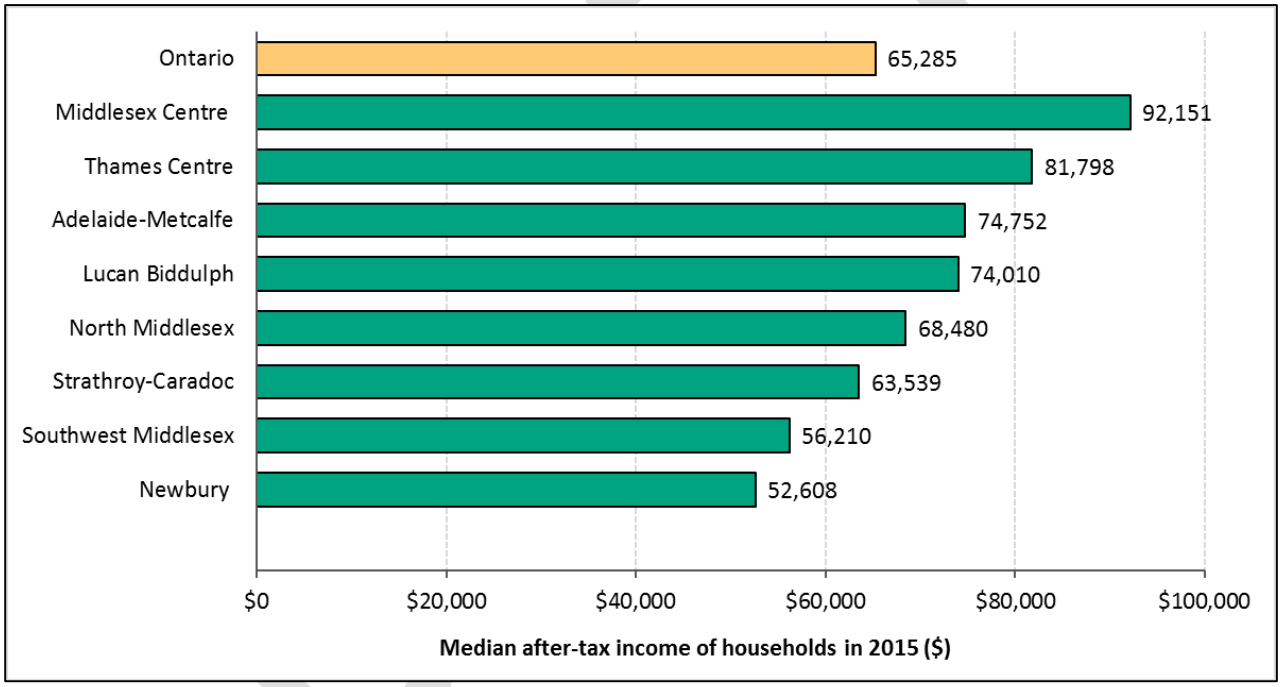
For further details regarding deaths in Middlesex County, refer to Appendix A.

Social Determinants of Health

Understanding the conditions in which people are born, grow up, live, work and play are known as the social determinants of health and contribute to the population health needs of communities. The programs and services delivered by the Middlesex-London Health Unit aim to reduce the negative impact of social determinants that contribute to avoidable differences in the health status of populations (i.e., health inequities) (Ontario Ministry of Health and Long-Term Care, 2018). Better health is associated with better socio-economic status (Williams, 2018). Generally, Middlesex County is better off than the province in terms of three key determinants of health: income, employment and education. However, within Middlesex County some disparities persist.

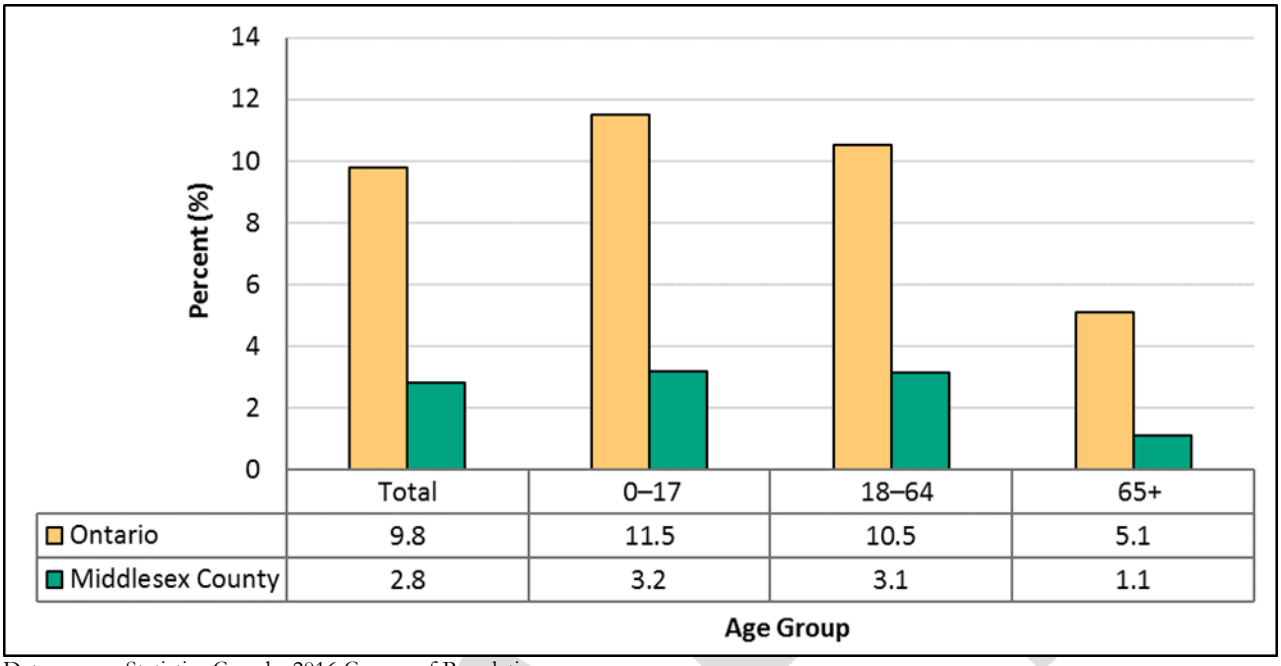
Median household income was higher than the Ontario median household income in five out of the eight municipalities and Middlesex County had a much lower percent of the population that was relatively worse-off financially living in low-income after tax in 2015 (2.8%) compared with Ontario (9.8%). However, children are disproportionately affected by low income within Middlesex County compared with seniors aged 65 and older.

Figure 7. Median after-tax income of households, Middlesex County by lower tier municipality and Ontario, 2015.



Data source: Statistics Canada. 2016 Census of Population

Figure 8. Percent of the population below the low income cut-off after tax, by age group, Middlesex County and Ontario, 2015.



Data source: Statistics Canada. 2016 Census of Population.

Unemployment rates in Middlesex County were generally better than the province and seven out of eight of the municipalities (all but the Village of Newbury) had rates lower than the province.

Table 2. Unemployment count and rate for population aged 15+, Middlesex County lower tier municipalities and Ontario, 2015.

Region	Number Unemployed	Number Participating in Labour Force	Unemployment Rate (%)
Newbury	35	190	18.4
Lucan Biddulph	130	2,730	7.4
Strathroy-Caradoc	545	11,235	4.9
Southwest Middlesex	135	3,000	4.5
Thames Centre	345	7,680	4.5
Middlesex Centre	425	9,690	4.4
North Middlesex	155	3,535	4.4
Adelaide-Metcalfe	65	1,715	3.8
Middlesex County	1,835	39,775	4.6
Ontario	529,525	7,141,675	7.4

Data source: Statistics Canada - 2016 Census, 25% Sample Data. Catalogue Number 98-400-X2016365.

Post-secondary education levels in Middlesex County have increased over time from 58.6% in 2006 to 64.1% in 2016 and became similar to the province in 2016 (65.1%). However, the type of postsecondary education differed. The residents of Middlesex County were more likely to have a college, apprenticeship or trades certificate and less likely to have a university degree than Ontarians as a whole.

Table 3. Percent of the population (age 25–64) by highest educational attainment, Middlesex County and Ontario, 2016.

Highest Level of Educational Attainment	Middlesex County (%)	Ontario (%)
No certificate, diploma or degree	9.9	10.4
High school certificate or equivalent	26.1	24.5
Postsecondary certificate, diploma or degree	64.1	65.1
Apprenticeship or trades certificate or diploma	9.2	6.2
College, CEGEP or other non-university certificate or diploma	33.7	24.7
University certificate or diploma below the bachelor level	2.2	2.4
University certificate, diploma or degree	19.0	31.9

Data source: Statistics Canada, 2016 Census of the Population.

For further details regarding social determinants of health, refer to Appendix A.

Organizational Practices

Overview

The Middlesex-London Health Unit takes great effort to deliver the best possible public health programs and services for the residents of Middlesex County and to meet the organizational requirements of the Ministry of Health and Long-Term Care. To meet these requirements, boards must:

- Deliver public health programs and services in accordance with the Foundational and Program Standards and incorporated protocols and guidelines
- Be accountable for using public health funding efficiently and for its intended purpose
- Use recommended best practices in governance and organizational processes
- Foster a culture of excellence in professional practice and a culture of quality and continuous organizational self-improvement.

Stakeholder Perspectives

There was no specific reference to organizational practices in the municipal councillor survey or the key informant interviews.

Current State

Considerable efforts have been undertaken to ensure that MLHU organizational practices optimize program and service delivery and ensure accountability for Middlesex County residents. Activities that support Ministry requirements include the annual service plan submission and reporting on accountability agreement indicators. The Annual Service Plan and Budget Submission is prepared by boards of health to communicate their program plans and budgeted expenditures for a given year. Information provided in the Annual Service Plan describes the programs and services boards of health deliver in accordance with the Ontario Public Health Standards: Requirements for Programs, Services, and Accountability, based on local needs and budgets at the program level. The Annual Service Plan includes board of health generated objectives and measures for monitoring achievements and reflects the requirements in the Standards.

From a fiduciary perspective, MLHU has adopted robust financial processes and controls including Program Budgeting Marginal Analysis (PBMA), quarterly variance reporting, and the factual certificate.

PBMA is a criteria-based budgeting process that facilitates reallocation of resources based on maximizing services. This is done through the transparent application of pre-defined criteria and decision-making processes to prioritize where proposed funding investments and disinvestments are made.

Health Unit management completes a factual certificate to increase oversight in key areas of financial and risk management. The certificate process ensures that the Finance and Facilities Committee has done its due diligence. The certificate is reviewed on a quarterly basis alongside financial updates. Management also provides financial analysis for each quarter and reports the actual and projected budget variance as well as any budget adjustments. Included are noteworthy items that have arisen since the previous financial update that could impact the Middlesex-London Health Unit budget.

From a governance perspective, MLHU has implemented a comprehensive governance program including board of health nomination, recruitment, orientation, development, annual attestations, risk management, strategic planning, Medical Officer of Health / Chief Executive Officer performance appraisal and bylaw, policy, and procedures review and development.

Regarding a culture of excellence, quality and continue improvement, MLHU has a chief nursing officer, nursing practice council, and a research advisory chair. MLHU has also implemented a detailed program planning and evaluation framework and is in the process of implementing a project management office.

Best Practices

Literature Scan

In other settings, it is public health professionals educating and supporting others to deliver the services rather than delivering services themselves. Some examples are family doctors or pharmacists providing immunizations, health screening, and health promotion messaging and schools implementing healthy policy and delivering public-health related curricula. Similarly, public health professionals can incorporate already existing facilities and infrastructure within the community into their public health services, such as referring clients to physical activity facilities or encouraging the use of walking trails; this reduces the amount of travel and potential costs to individuals while also not incurring operational costs for the public health system. Several results advocate for conducting community resource inventories or gap analyses to determine what services are being delivered and by whom to reduce redundancies in service provision.

While having public health issues addressed by others within the community has many benefits to improving access to services and reducing costs to the public health system, it can make it potentially challenging for community members to become aware of, and navigate to, all the different services. This emphasizes the importance of co-ordinating services. Developing formal partnerships with community stakeholders can improve co-ordination of effort, reduce duplication, incorporate non-health sector contributors to health and wellbeing, and provide consistent messaging; however, they also require planned communication to the community to raise awareness and inform how to access services. Some jurisdictions also incorporate the role of a wellness or system navigator who connects clients to the various services in their community depending upon their health needs.

Staffing mix also has an impact on maximizing service delivery and available resources. While mainly discussed within the context of primary health care teams whose services addressed public health issues, a prevalent model is multidisciplinary teams working together to provide services. The composition of these teams is dependent upon the needs of the specific community but can include not just physicians and nurses, but also allied health professionals, community health workers, and social service providers. Having multiple disciplines on the same team can improve the quality of care and reduce the need to travel as different disciplines are available together to provide their expertise. It can also improve the timeliness and cost-effectiveness of care as clients can receive service from the most appropriate professional, not necessarily the most expensive, for example receiving an immunization from a nurse practitioner or pharmacist rather than waiting to see the physician, who is then available to provide services outside of other professions' scopes. Success of this model necessitates that professionals practice at the full scope of their profession and with clear role delineation, thereby increasing the variety of services that are available in the community, often at reduced costs. Along those lines, several results also advocate for the increased use of generalist, as opposed to specialist professionals, as they can provide a greater breadth of services. This can be important in rural areas which may have difficulty recruiting or affording health care professionals or not have the volume of requests to support a specialist. Increasing the use of lay health educators or community health workers is also promoted as a more cost effective means of providing education and outreach, connecting clients to community resources, and possibly performing direct services such as screening and rapid tests.

For further details, see Appendix B

Environmental Scan

Other health units commented on the difficulty of obtaining data for rural areas but that it is important that feedback opportunities be built into program planning and evaluation.

Strategies to more effectively delivery services to rural populations included:

- Communication planning and resource coordination
- Educating municipal candidates about public health issues as a helpful way of ensuring key stakeholders understand the work of health units
- Development of a community engagement strategy to guide working with rural residents and municipalities
- Using community development approaches
- Ensuring that the board is representative of the community.

For further details, see Appendix E

Accessibility

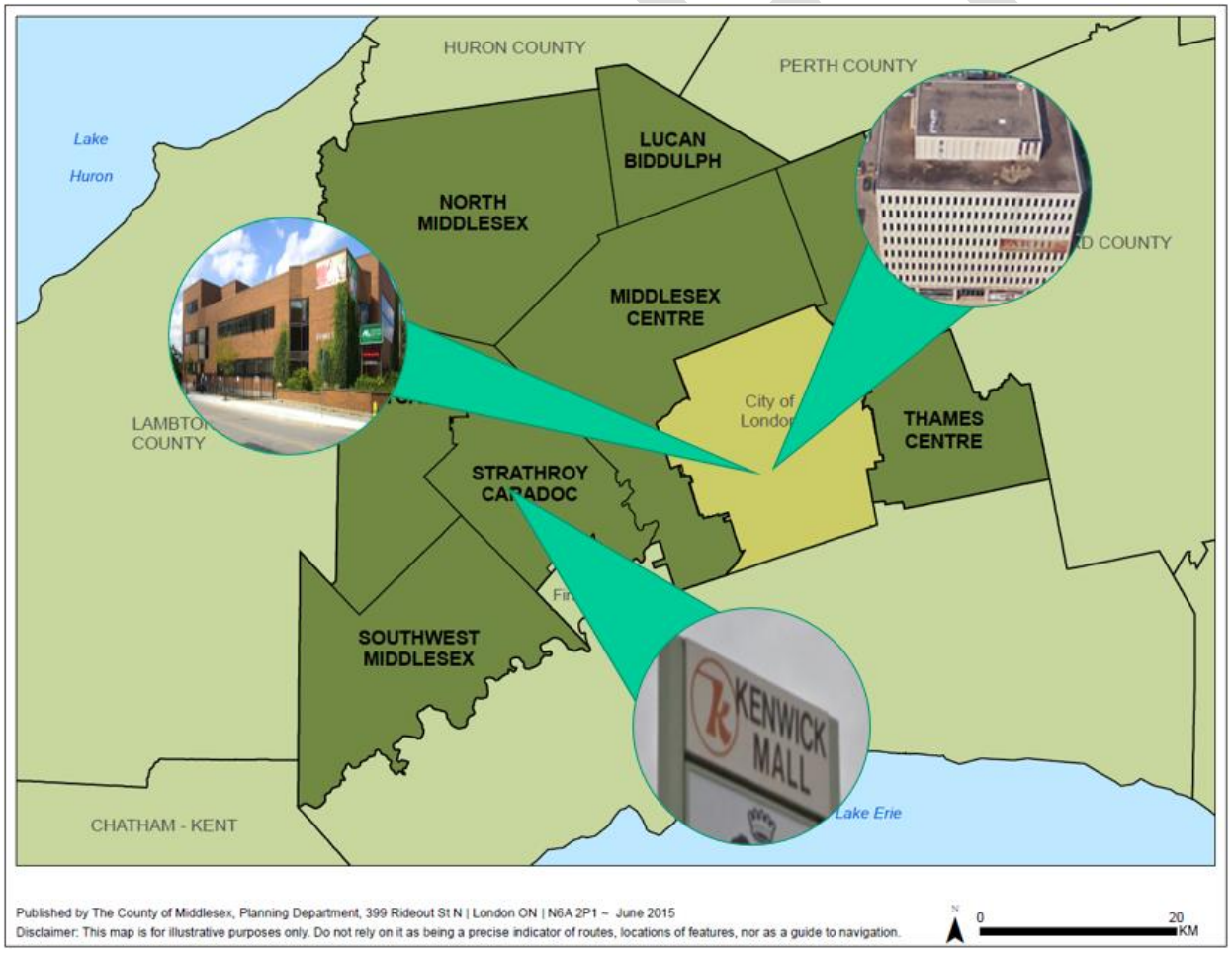
Overview

Low population densities can make it difficult to have health care offices and providers available in every community due to a lack of critical mass and economies of scale. This results in rural populations often needing to travel greater distances to access services or having trouble navigating the health system as some services are available locally while others are not.

Current State

The Middlesex-London Health Unit operates three different physical facilities, one of them being in Middlesex County at the Kenwick Mall in Strathroy. While MLHU does direct service delivery to clients in these offices, the majority of work is conducted as outreach in homes, schools, restaurants, long-term care homes and other spaces throughout Middlesex County as well as through numerous forms of print, electronic and social media. Online channels are increasingly important and MLHU has established a strong virtual presence, including online with its website, social media, online learning modules, over the phone, and through smart phone apps.

Figure 9. Middlesex-London Health Unit office locations, 2018.



Data source: The County of Middlesex, Planning Department. 399 Ridout St. N. | London ON | N6A 2P1 - July 2015

Stakeholder Perspectives

Of the respondents to the municipal councillor survey, 77% indicated that MLHU programs and services are very accessible or somewhat accessible to residents of Middlesex County.

Comments from the councillor survey indicated the Strathroy office services those in Strathroy or around it but not other parts of the county. Additionally, it was felt that there had been staffing cuts and fewer services are offered in Strathroy.

In the key informant interviews, all respondents noted that transportation is a significant challenge for their residents, particularly the most vulnerable residents. There is a lack of public transportation options for county residents and many residents are not familiar with MLHU locations and how to access them. It was also noted that it can be difficult for residents to get to downtown London for services.

All key informants also mentioned that libraries are becoming the hub of many communities and provide spaces for information to be shared and services to be delivered in a way that people would not be stigmatized for accessing MLHU services.

Lastly, all respondents touched upon the need to collaborate with community partners to share information and to use spaces that are already existing in the community. Some of the places to share information include schools, hospitals, primary care providers, town halls, municipality-specific web pages, local media, etc. Some of the physical spaces to use include schools, community rooms, grocery stores, libraries, town halls, social housing, etc.

Suggestions from the councillor survey to increase accessibility included:

- Providing programming in each community
- Offering more programming in Strathroy
- Participating in the regional transportation initiative
- Utilizing municipal/county spaces
- Offering rotating / mobile clinics around the county
- Improving the efficiency of responding to questions online or over the phone
- Offering programming through other health care providers / private sector

For further details, see Appendix C and D.

Best Practices

Literature Scan

Strategies to improve access to services in rural communities revolve around leveraging already-existing community assets. One approach is to collaborate with community organizations and other health service providers to deliver public health services. This can consist of public health employees delivering the services, but using other organizations' facilities, which reduces operational costs, increases the number of locations through which services can be delivered, and further encourages community development. It can also consist of already existing community organizations and health care providers addressing public health issues and providing public health services themselves, which expands potential hours and locations through which individuals can receive public health information and services, as well as reduces costs by requiring less public health-specific infrastructure and reducing duplication of efforts. In some settings, this is a component of the health care system as there are no specific public health agencies or organizations addressing specific issues.

In settings where primary care has responsibility for population and public health outcomes, the most prevalent model proposed is that of a "health hub", although the model goes by many different names. In

essence, a health hub is a model whereby many different health care providers and services are integrated, usually with multi-disciplinary teams, and co-located or networked with other social services such as housing, education, child services, and social assistance. Even in settings where separate public health entities exist, such as Ontario, the health hub model is promoted for rural settings with the vision that public health will collaborate with the health hubs. The health hub model helps to address several of the challenges rural communities face. Having multiple health and social services co-located or networked together can decrease operating costs such as physical and technological infrastructure. It can also decrease the amount of travelling rural residents are required to do to access various services. Having health and social services integrated to various degrees can also help to address the social determinants of health by improving access to, and collaboration among, the various services and supports such as housing, education, and social assistance and streamline referrals. Increased collaboration and integration of multiple services can also improve role clarity among providers, thereby reducing duplication of services which can free up capacity and resources.

Another theme which emerged was the need for expanding access to services in order to meet the diverse population needs within a community. In rural communities, populations are more dispersed, most services require driving to access, and unemployment and seasonal work are more prevalent, which can make accessing services from fixed sites during regular business hours more difficult. As such, different service delivery models are usually required; however, determining the appropriate service delivery model to implement depends upon the unique needs of each community and its residents, meeting people where they are and providing services in manners that are acceptable for them. Suggested methods for expanding access to services include, as mentioned above, providing services through other community organizations, facilities, or service providers, thereby increasing the number of locations and potential hours. Outreach, mobile, and home visiting services are also mentioned frequently, especially in the delivery of substance misuse, sexual health, and harm reduction services, but also to deliver maternal and child health services such as breastfeeding support. Developing formal service agreements between health authorities is another approach proposed from New South Wales in Australia to enable residents who live close to the border to access services from a neighbouring health authority should those services be closer. Finally, technology is advocated as being a manner through which to deliver both direct services through telehealth, as well as health education and information through web-based resources. Live telemedicine alleviates the challenge of having a full range of professionals located in the community, while pre-recorded telemedicine or web content and web-based tools address the challenge of accessing set locations during set hours. Examples of using technology to improve service delivery include using web-based tools to support self-care for chronic disease prevention and management, migrating vaccination reporting online, supplying information about community services online, telehealth for direct patient-provider consultations using either rooms equipped with required equipment or mobile smartphone applications, and telehealth to better connect community stakeholders and health care providers for collaboration, support, and professional development.

For further details, see Appendix B

Environmental Scan

Two of the five health units surveyed had more than one satellite office to service their populations and noted that these locations provided the same services as their main site.

All health units use community spaces for the delivery of their programs and services and described a wide range of locations including:

- Libraries
- Community centres
- Social housing common areas
- Recreation centres
- Municipal offices
- School spaces
- Community health centres
- Community hubs
- Early years centres
- Hospitals
- Faith-based organization spaces

They also outlined numerous other methods that they use to increase accessibility for their residents:

- Website, social media and other internet applications
- Phone service
- Information at municipal offices
- Drop off sites for water testing in rural communities
- Mobilizing and building capacity with community groups and partners to deliver services (health care providers, other social services, volunteers, etc.)
- Board meetings rotated between municipal and First Nation sites
- Partnerships with neighbouring health units when residents may have closer options
- Having staff working in schools across rural areas
- Staff attendance at community events
- Rotating the location of classes and courses
- Offering taxi vouchers

For further details, see Appendix E

Community Engagement

Overview

The Ontario Public Health Standards and the programs and services delivered by the Middlesex-London Health Unit are based on the principles of partnership, collaboration and engagement. This means engaging with multiple sectors, partners, communities, priority populations and citizens.

MLHU incorporates community engagement into all aspects of program planning, implementation and evaluation; however, there are always opportunities to improve engagement.

As part of this review, MLHU sought feedback from stakeholders on how to best engage the community using the International Association for Public Participation (IAP2) Spectrum.

Figure. 10 – IAP2 Spectrum of Public Participation

	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
PUBLIC PARTICIPATION GOAL	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives and/or solutions.	To obtain public feedback on analysis, alternatives and/or decision.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision-making in the hands of the public.
PROMISE TO THE PUBLIC	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.

Data source: International Association for Public Participation. https://iap2canada.ca/Resources/Documents/0702-Foundations-Spectrum-MW-rev2%20(1).pdf accessed May 2019.

Stakeholder Perspectives

Councillors and key informants identified potential opportunities for engaging with Middlesex County stakeholders across the spectrum including:

- Social media
- Sharing information at other locations (libraries, schools, town halls, doctors' offices, etc.)
- Online newsletters
- Regular delegations to municipal councils
- Developing good relationships with municipal decision makers
- Information sessions in the community and to service organizations
- Information in tax notices
- Digital media
- Print media
- Service clubs
- Billboards and portable signage

- Formal feedback mechanisms for the public to utilize on an ongoing basis
- Ensuring that mandates for decision-making are clear

Community assets that councillors and key informants felt MLHU should keep in mind during community engagement included:

- Local service clubs
- Existing health providers
- School boards and education providers
- Public transit providers
- Municipal councils and administrators
- Social service agencies and not-for-profits
- Faith-based organizations
- Community centres
- Private businesses
- Libraries
- Local media outlets
- Municipal offices
- Parks
- Arenas
- Sports clubs

For further details, see Appendix C and D.

Current State

The Middlesex-London Health Unit engages a wide-range of community partners on all public health issues. Community and stakeholder engagement is a core public health principle that is integrated into all of the programs and services delivered by MLHU.

A planning and evaluation framework that MLHU has implemented explicitly describes the importance of engaging with stakeholder and the process for effective engagement at the programmatic level.

At the organizational level, MLHU has partnership agreements with stakeholders across Middlesex County which formalize relationships and clarify mandates.

A major engagement initiative that MLHU also conducts is healthcare provider outreach. There is a dedicated team that provides a direct link between the programs and services that MLHU provides and the healthcare providers across Middlesex County. The team conducts annual visits to each healthcare provider in addition to sending out monthly communications regarding important public health issues.

Best Practices

Literature Scan

Consistent across the included papers was the idea that each rural community is unique with its own specific combination of challenges and assets. As such, there is no one-size-fits-all service delivery model that will work for rural communities. As a result, the importance of engaging with community members, community organizations, municipal government agencies, and other local health care providers to assess local needs and assets and to develop local strategies was prominent among the results.

For further details, see Appendix B

Environmental Scan

In regards to community engagement, Ontario public health units surveyed noted the following considerations:

- Surveys
- Community meetings
- Feedback is built into program delivery and evaluation
- Ensuring that residents and municipalities are involved in the planning process
- A community engagement strategy to guide work
- Residents and municipalities are involved in all aspects of planning, implementation and evaluation
- Staff that act as liaisons between stakeholder groups
- Use a community development approach
- Ensuring board representation of the community
- Build and use coalitions
- Public health units can provide advice to municipalities when they make decisions regarding public health matters

For further details, see Appendix E.

Foundational Standards

Overview

The Ontario Public Health Standards outline that public health programs and services are to be informed by evidence, responsive to the needs and emerging issues of the health unit's population and use the best available evidence to address them. This is done through:

- Population health assessment;
- A focus on health equity to support people to reach their full health potential;
- The application of evidence-informed decision-making, research, knowledge exchange, program planning and evaluation, and communication;
- A focus on quality and transparency; and
- Emergency management to ensure that programs and services have the capacity to respond to new and emerging events and cope with a range of disruptions.

Stakeholder Perspectives

In the municipal councillor survey, when asked how important is it for MLHU to focus on the following standards for public health practice:

- 91% of respondents indicated that Health Equity is very important or extremely important
- 93% indicated that Effective Public Health Practice is very important or extremely important
- 69% indicated that Emergency Preparedness is very important or extremely important
- 77% indicated that Population Health Assessment is very important or extremely important

For further details, see Appendix C and D.

Current State

The Middlesex-London Health Unit has staff dedicated to supporting the Foundational Standards and the work of all of the public health programs and services delivered in Middlesex-London. The teams that provide this support include the Population Health Assessment Team, the Health Equity Core Team, the Program Planning & Evaluation Team and the Emergency Management Team. These staff are based out of the London offices of MLHU.

Best Practices

Literature Scan

To further understand local community needs and the ability to monitor progress on desired health outcomes, another prevalent theme was having systems in place to collect, monitor, analyze, and share local data. Strategies included conducting regular community health assessments, having data sharing agreements with other community organizations, and having standard Electronic Medical Records in order to aggregate local data from multiple providers.

For further details, see Appendix B

Program Standard / Health Topics

Chronic Disease Prevention and Well-Being

Overview

The goal of these public health services is to reduce the burden of chronic diseases of public health importance including, but not limited to, obesity, cardiovascular diseases, respiratory disease, cancer, diabetes, intermediate health states (such as metabolic syndrome and prediabetes), hypertension, dementia, mental illness, and addictions and improve well-being.

The top eight leading causes of death between 2010 and 2012 in Middlesex County were chronic diseases (Table 1 – page 9): ischemic heart disease, dementia and Alzheimer's disease, lung cancer, cerebrovascular diseases, lower respiratory diseases, colorectal cancer, diabetes and lymph and blood cancer. These accounted for 58.4% of all deaths.

The top ten leading causes of death were the same for Middlesex County and Ontario, with the top eight causes following the same ranking order.

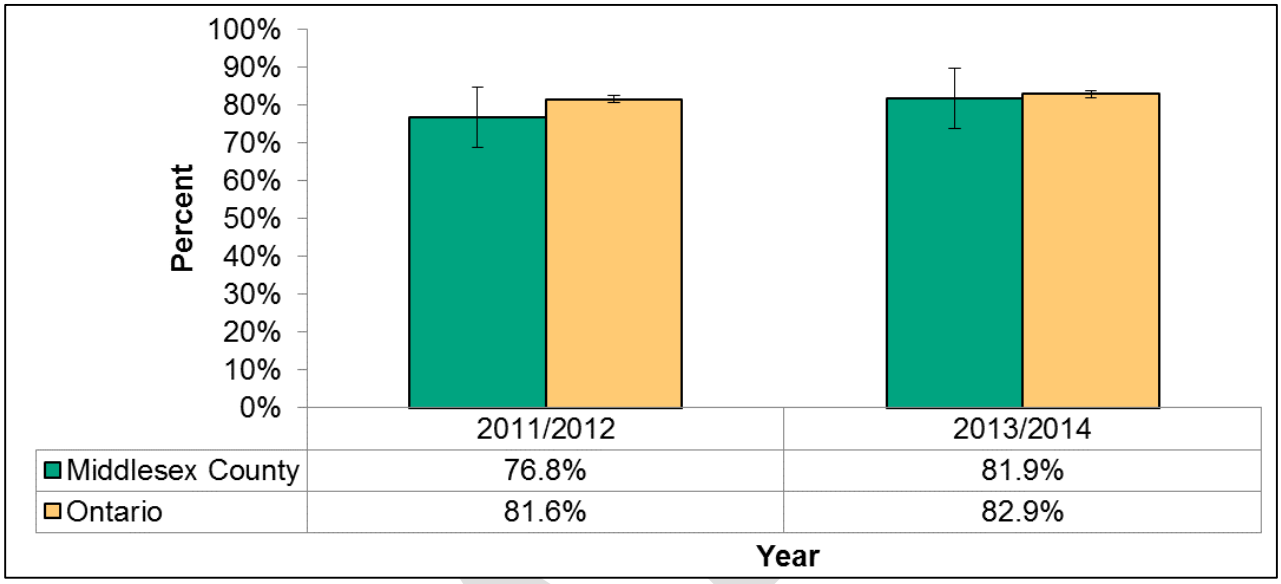
Ischemic heart disease, the leading cause of death in Middlesex County, accounted for 80% more deaths as lung cancer, the second leading cause of death.

Healthy weight has been measured by body mass index (BMI). This is ratio of weight to height (kg/m^2). Normal weight is classified as a BMI of 18.5–24.9, overweight is a BMI of 25.0–29.9 and obese is a BMI 30.0 and above. It is an important predictor of many chronic conditions including several of the leading preventable causes of death in Middlesex County. Over 60% the population was considered overweight or obese in Middlesex County in 2013/14. This represents an area of population health risk. Diabetes is a chronic condition for which BMI is a predictor. Looking at the rates of diabetes in the population there is a fairly steady rate over time between the years of 2004 to 2017. In general, the Middlesex County rate is lower than that of the province and males are disproportionately affected with higher rates.

Chronic diseases are linked to behavioural risk factors such as alcohol consumption, physical inactivity and smoking. In data from community health surveys from the years 2011 to 2014, a substantial portion of the population of Middlesex County reported behaviours that put them at risk for chronic diseases and injuries. For instance, only about half the population reported being active or moderately active during their leisure time, averaging 1.5 or more kcal/kg/day of energy expenditure from leisure-time physical activity. This is approximately the amount of exercise that is required to experience some health benefits. In the same time frame, only about half did not exceed the low risk alcohol drinking guidelines. Current smoking continues in about 20% of the adult population.

In 2013/2014, 81.9% of adults aged 19 years and over in Middlesex County reported that they were non-smokers (Figure 11). Compared to the province, Middlesex County had a similar proportion of non-smokers.

Figure 11. Percent of non-smokers among adults age 19 years or older, Middlesex County and Ontario, 2011/2012 and 2013/2014.

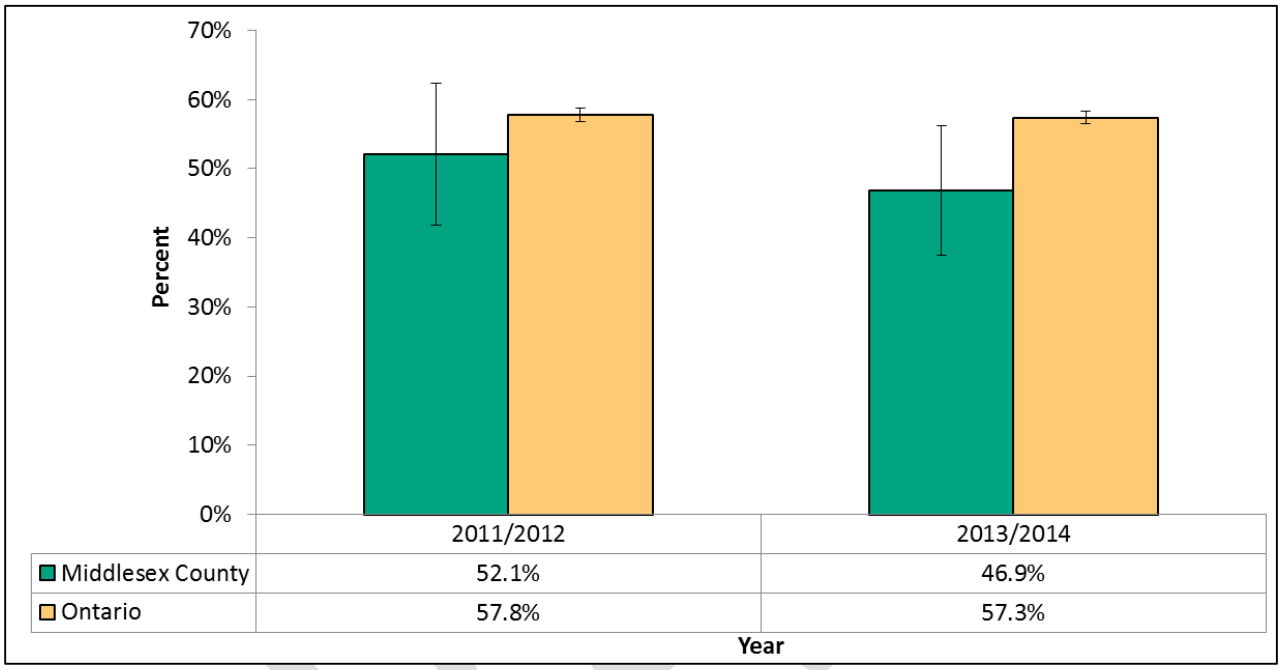


Data source: Canadian Community Health Survey, Statistics Canada, Share File, Ontario Ministry of Health and Long-Term Care.

The proportion of those aged 19 and older, in Middlesex County, who did not exceed the low risk drinking guidelines in 2013/2014 was 46.9% (Figure 12).

The rate in Middlesex County was significantly lower than that of Ontario (57.3%) in 2013/2014, however only approximately half did not exceed the drinking guideline in both 2011/2012 and 2013/2014 (Figure 12).

Figure 12. Percent of population (age 19 years and older) who did not exceed the Low Risk Drinking Guidelines, Middlesex County and Ontario, 2011/2012 and 2013/2014.

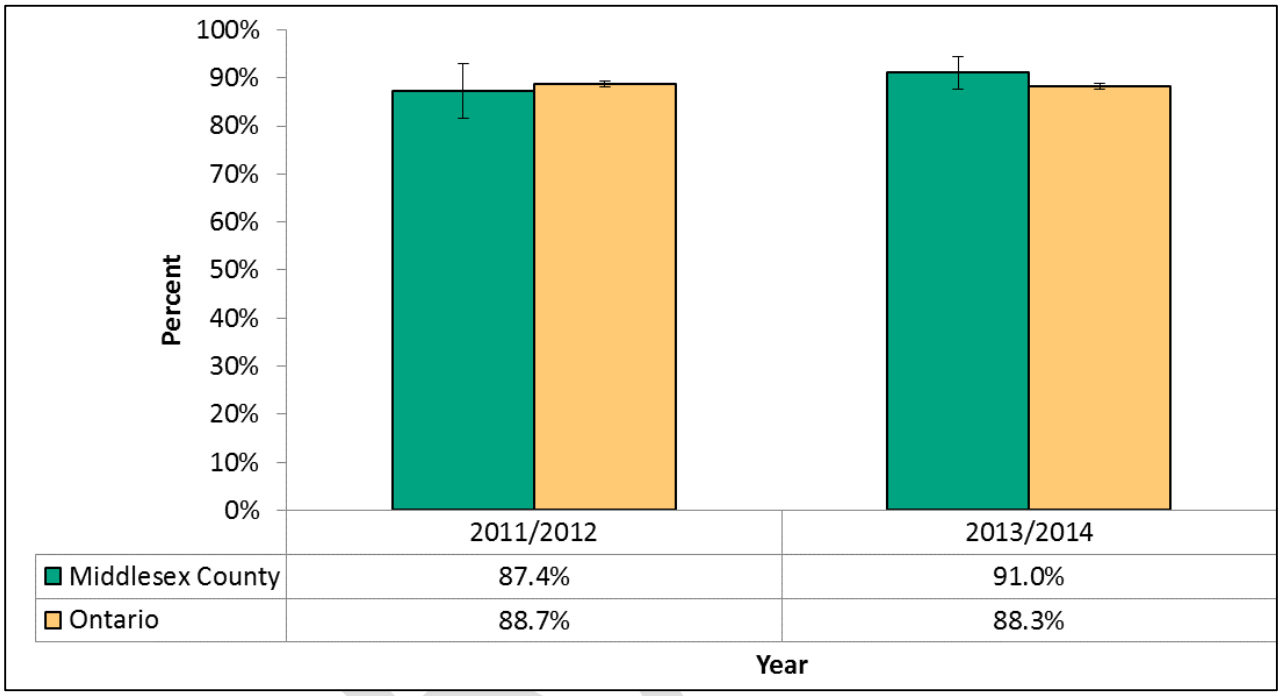


Data source: Canadian Community Health Survey, Statistics Canada, Share File, Ontario Ministry of Health and Long-Term Care.

Data indicates that Middlesex County patterns of behavioural risk factors are not different from Ontario. This could be due, partly, to a small number of people responding to the survey in Middlesex County. However, it likely indicates that lifestyle behaviour rates in Middlesex County are similar to the province.

Self-rated health is a self-assessment of an individual's current health status that encompasses both experiences and understanding of the causes and impacts of disease. It has been shown to be predictive of the development of chronic conditions and mortality. Over 90% of people rated their overall health as good, very good or excellent after taking physical, mental and social well-being into consideration. Respondents are asked to consider health, not just from the perspective of absence of disease and injury, but also to consider social, mental and physical aspects of their well-being.

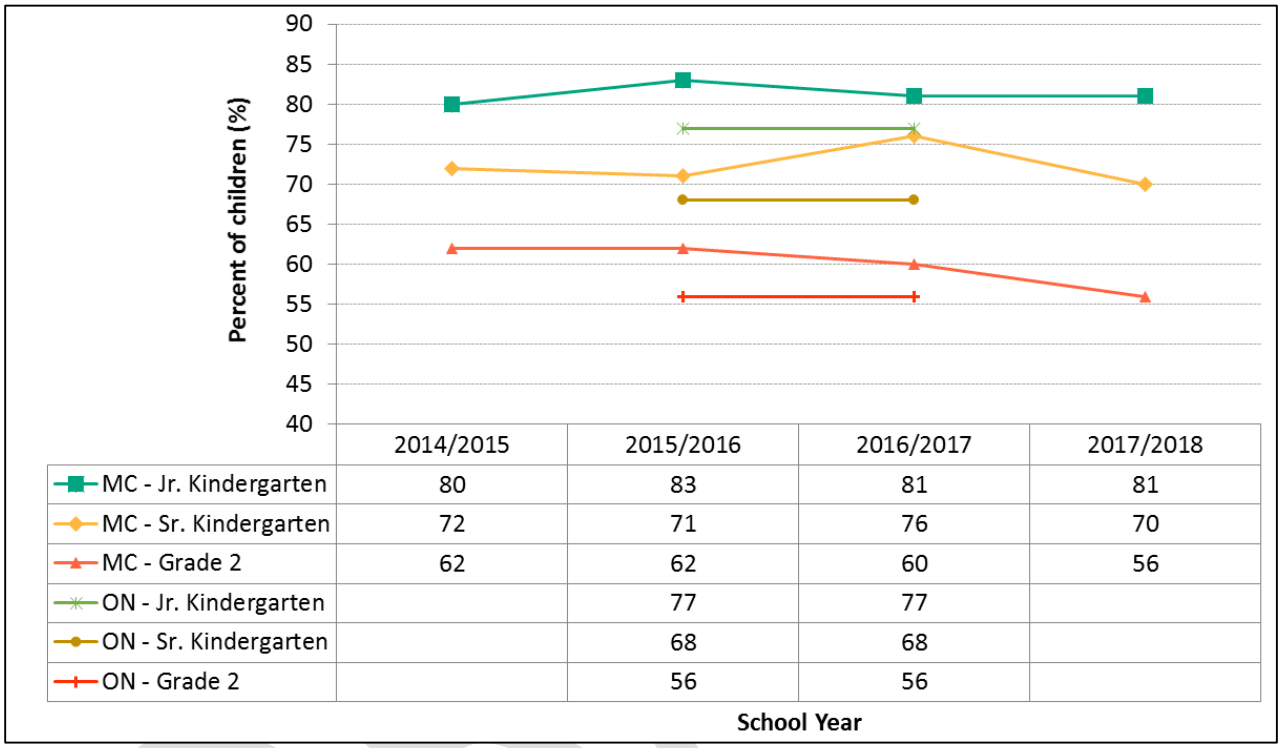
Figure 13. Percent of the population (age 12 years or older) who reported "excellent", "very good" or "good health", Middlesex County and Ontario, 2011/2012 and 2013/2014.



Data source: Canadian Community Health Survey, Statistics Canada, Share File, Ontario Ministry of Health and Long-Term Care.

Understanding tooth decay in the school aged children population is important because of its implications for quality of life. In Middlesex County, where some drinking water is not fluoridated, tooth decay increases as children age from junior kindergarten until grade 2. The percentage of children with no cavities or decay goes down and the number of teeth affected in those with decay increases as grade level goes up. In comparison to a sample of health units making up approximately half on the Ontario population, Middlesex County rates of decay were lower in the 2015/2016 and 2016/2017 school years.

Figure 14. Percent of children who had no visible tooth decay (caries free) in Middlesex County and Ontario.



	2014/2015	2015/2016	2016/2017	2017/2018
MC - Jr. Kindergarten	80	83	81	81
MC - Sr. Kindergarten	72	71	76	70
MC - Grade 2	62	62	60	56
ON - Jr. Kindergarten		77	77	
ON - Sr. Kindergarten		68	68	
ON - Grade 2		56	56	

Data source: Oral Health Information Surveillance System (OHISS), Ministry of Health and Long-Term Care. Extracted date: July 17, 2018 & Oakley, D. 2018. Summary of 2015-2017 Oral Health Screening: Results from Participating Ontario Health Units: For the Ontario Association of Public Health Dentistry.

For further details, see Appendix A.

Stakeholder Perspectives

In the councillor survey, 84% of respondents indicated that it is important for MLHU to focus on Chronic Disease Prevention and Well-being.

Mental health was also noted in both the survey and key informant interviews. Specifically, key informants felt that it is an issue that requires the involvement of many different community organizations to solve and not just the Health Unit. With limited resources, the response will depend on communication and awareness about where people can access services, and partnerships between those who have resources in the county.

For further details, see Appendix C and D.

Current Program and Service Delivery

Programming to meet Middlesex County needs for chronic disease prevention and well-being includes:

Sun Safety and Ultraviolet Radiation Exposure

Intervention/Service	Location of Delivery	Frequency of Delivery
Provide health education on Sun Safety	Anywhere in the community that is requesting education or information on Sun Safety	Upon request
Increase public awareness of skin cancer and sun protective behaviours through social media	Social media platforms such as Facebook, Instagram, Twitter and the Carrot app	Weekly in the summer months
Advocate and collaborate with the Ontario Sun Safety Working Group to raise awareness and provide province wide recommendations on skin cancer prevention	Meet with working group to provide province wide messaging on Sun protective behaviours	Meet 3-4 times a year
Collaborate with the school health team to raise awareness and provide education on skin cancer prevention	Middlesex County schools	Upon request
Provide supportive environments by providing sun hats to high risk families within the Healthy Babies Healthy Children program	Healthy Baby Healthy Children home visits	Frequency of visits would vary for each family
Promote the Skin Cancer Prevention Act to reduce youth access to artificial tanning services	Artificial tanning operators – 7 in Middlesex County	Annual inspection to provide vendor education and ensure that signage is posted. Additional inspections would occur after a complaint has been received.
Environmental Support/Policy Development/Advocacy	Municipalities, workplaces, childcare facilities and programs and schools	Ongoing – frequency and location of service is dependent upon uptake

Food Literacy

Intervention/Service	Location of Delivery	Frequency of Delivery
Ailsa Craig and Area Food Bank food literacy program– a group of community members interested in cooking healthy, seasonal, low-cost recipes meet to prepare and enjoy a full meal together. Food literacy skills are developed and enhanced (including food and nutrition knowledge; food skills; self-efficacy and confidence) to improve dietary behaviours.	Community space (e.g., recreation facility kitchen space, faith-based organization's kitchen; typically in Ailsa Craig and/or Parkhill)	Pilot project initially conducted in April 2018. Will offer programming as requested, likely 2-4 times annually (seasonally).
Increase public awareness of healthy eating behaviours and increased community service capacity for the provision of food literacy programs and services through partnerships and social media platforms	Social media platforms such as Facebook, Instagram, and Twitter and promotion of UnlockFood.ca	Ongoing
Group Home and Youth Opportunities Unlimited Food Literacy Programming and Group Home Client Consultations	Strathroy (YOU), Ailsa Craig (Craigwood Youth Services) and Parkhill (Anago-Parkhill Therapeutic Care Residence)	Approximately 3 – 4 times annually per site

Food Insecurity

Intervention/Service	Location of Delivery	Frequency of Delivery
Collection of Nutritious Food Basket costing data	Grocery stores (costing)	Once per year
Advocating for provincial and federal policies to reduce the rate of household food insecurity (e.g., increased social assistance rates, basic income, affordable housing, annual monitoring of food insecurity)	N/A	Ongoing
Distribution of Harvest Bucks (vouchers redeemable for fresh vegetables and fruit at participating locations)	Community organizations (e.g., in 2018 – Oneida Nation of the Thames, SOAHAC Muncey)	Ongoing – community organizations distribute Bucks through their programming throughout the year based on program schedules
Increase public awareness of impact of food insecurity and the	Social media platforms such as Facebook, Instagram, and Twitter	Ongoing – capitalizing on "opportunities" when they present themselves

need for income-based solutions through social media		

Food Systems and Food Environment

Intervention/Service	Location of Delivery	Frequency of Delivery
Partnerships and Capacity Building- Work with Healthy Kids Community Challenge (HKCC) Middlesex County	Komoka Community Centre	2015-2017 (3 meetings of steering committee per year)
Partnerships and Capacity Building- Participation in 2018 Middlesex County Agriculture Forum	Coldstream Community Centre	April 18, 2018
Public Awareness and Education, Policy; Partnerships and Capacity Building- Improve food environments in Middlesex-London re: sugar sweetened beverages/ Marketing to Kids	Social media platforms such as Facebook, Instagram, and Twitter, and mass media channels as resources permit	1/year campaign for sports teams Ongoing through website/social media
Advocacy and Policy, Public Awareness and Education, Partnerships and Capacity Building- Middlesex-London Food Policy Council	Social media and website, meetings held at Middlesex County Building Ridout St. London, events across City and County	Established Nov. 2016; 9 meetings/year Action Groups; 5 meetings/year Events; 2 in 2017, 4 in 2018
Public Awareness and Education, Partnerships and Capacity Building- Development of Get Fresh... Eat Local Guide with Middlesex County Federation of Agriculture	Office work; provided nutrition content for guide	1/year
Public Awareness and Education, Policy; Partnerships and Capacity Building- Supporting workplaces wanting to make policy and culture change that would encourage healthy eating for employees (e.g., policy related to food and drink offered at meetings and events)	Workplaces	Upon request

Prevention of Tobacco Use and Emerging Products

Intervention/Service	Location of Delivery	Frequency of Delivery
Creation of a comprehensive substance use toolkit for high schools to provide support and resources related to tobacco, e-cigarettes and cannabis	Online Print	Upon request / as required
Education and awareness sessions related to emerging products such as e-cigarettes	In-person / onsite at requested location	Upon request
Support the development of comprehensive high school policies that create supportive environments and provide protection from second-hand smoke, tobacco and emerging products	Phone Email Dissemination of information / materials via mail or in-person on site	Upon request and / or in response to complaints
Host Smoke-Free Movie events to increase public awareness about the causal link between child and youth exposures to tobacco impressions in movies and tobacco use initiation	Municipality of Strathroy-Caradoc – Strathroy Fairgrounds	1 time per year
Implement Smoke-Free Movie activities that garner support for legislative changes to the movie rating system, including collection of signatures on petitions and engaging with local MPPs	Community spaces (e.g. parks) Social media/mass media MPP offices	Events to gather petition signatures happen over the course of the year Typically visits to MPP offices occur once/year
Host grassroots events in parks and playgrounds to promote tobacco- and vape-free restrictions	Community spaces (e.g. parks and playgrounds) Social media/mass media	3-4 times per year
Support and promote the That's Risky campaign to profile the risk between second-hand smoke exposure and breast cancer with young adults	Community spaces Social media/mass media	Campaign will occur once per year, with grassroots activities happening 1-2 times per year, as opportunities present themselves for appropriate community engagement
Promote and implement the Know What's in Your Mouth campaign to increase awareness about the dangers of smokeless tobacco use to young athletes and their parents	Community spaces (e.g. parks and playgrounds) High schools	1-2 times per year

Promote and disseminate WouldURather campaign materials with an emphasis on the "Don't Start and Win" category	Community spaces Social media/mass media	1 time per year
Participate and support SWTCAN's development of the Young Adult Male campaign to increase lifetime smoking abstinence rates among young adult males working in sales, service, and blue collar trades and to prevent young adult males who smoke occasionally from progressing to regular smoking	(in development)	(in development)

Tobacco Cessation

Intervention/Service	Location of Delivery	Frequency of Delivery
Tobacco Cessation Services through the Quit Clinic (one on one counselling and provision of nicotine replacement therapy at no cost)	MLHU Strathroy Office - Kenwick Mall Home visits Phone call and medication drop-offs	1 x month on site at Kenwick (depending on number of clients) Home visits based on needs of individual clients
Healthcare provider capacity building and partnerships Maintain Middlesex-London Tobacco Cessation Community of Practice (CoP) - sharing and dissemination of training opportunities and updated tobacco cessation resources; knowledge exchange among CoP members via online discussion board Dissemination of You Can Make It Happen Materials Training related to brief cessation interventions	Online (CoP) Discussion Board Email In-person / onsite Mail	Training related to brief cessation interventions upon request CoP updated monthly on CoP discussion board and via e-newsletter Knowledge exchange among CoP members as required by members Distribution of YCMIH materials upon request
Promotion of mass media campaigns related to smoking cessation to increase quit attempts	Dissemination of materials and messaging through mail Social media and online Media release	Mail out of resources happens 1 - 2 x/year or more frequent if requested Social media monthly (6-8 x / month) Media release 1-2 x / year
Support the development of policies that promote and support cessation for clients and employees within workplaces	Onsite / in-person meetings Phone and email communication MLHU website	Upon request

Protection from Second-hand Smoke and Emerging Products

Intervention/Service	Location of Delivery	Frequency of Delivery
Smoke-Free Housing Respond to complaints/ inquiries related to drifting second-hand tobacco and cannabis smoke in multi-unit housing Promotion of and advocacy for comprehensive smoke-free policies to landlords, property managers and tenants	Phone, mail and email (inquiries / complaints) Social media and online Mail for dissemination of resources In-person / onsite at buildings	Upon request Social media Oct / November and throughout the year as opportunities arise
Support the development of comprehensive policies that create supportive environments and provide protection from second-hand smoke and emerging products	Phone Email Dissemination of information / materials via mail or in-person on site	Upon request and / or in response to complaints
Promotion of campaigns related to the law and protection from second-hand smoke and emerging products Workplace campaigns Smoke-Free Parks Changes in legislation or bylaws Smoke is Smoke	Social media and online Paid advertising (print) Radio On-site in parks, workplaces etc. Email	1-2 x / year and / or dependent on changes to the legislation Oct during healthy workplace month
Work towards reducing retail density related to tobacco and e-cigarette retailers by the implementation of retail zoning and licencing measures	In-person Reports Email Phone	Dependant upon implementation plan and uptake by municipalities Licensing inspections for tobacco and e-cigarette retailers occur as new applications are received by municipalities

Tobacco Enforcement – Smoke-Free Ontario Act, Electronic Cigarettes Act, 2015 and municipal bylaws

Intervention/Service	Location of Delivery	Frequency of Delivery
Enforcement of the Smoke-Free Ontario Act – youth access provisions and display, promotion and marketing restrictions	Tobacco Retailers – approx. 45 in the County	Youth Access - at least three times per year Display Promotion and Handling Inspection – at least once per year New Retailer Onsite Education Visit – as needed Complaints generate additional inspections
Public Disclosure of tobacco retailer convictions and respond to request for property inquiries	Health Unit website	Ongoing
Enforcement of the Smoke-Free Ontario Act – public places and enclosed workplaces	Public places, workplaces, Middlesex Hospital Alliance (Strathroy General and Four Counties), common areas of multi-unit housing complexes, and schools (private, secondary and elementary)	Mandated to respond to all complaints received. In addition to complaint-based inspections, proactive inspections occur to support and promote compliance (as resources and capacity permit). 100% of all secondary schools are inspected and a meeting with school administration occurs at least once annually. Total Workplace, Schools, Hospitals, Vendors, Public Place Inspections for SFOA for 2017: Total Inspections: 4,764 County Inspections: 795 (16.7%) London Inspections: 3,969 (83.3%)
Enforcement of the Electronic Cigarettes Act, 2015	E-Cigarette Retailers – approx. 20 in the County	Youth Access - at least once per year Display Promotion and Handling Inspection – at least once per year New Retailer Onsite Education Visit – as needed Complaints generate additional inspections
Promotion and enforcement of the Strathroy-Caradoc Bylaw to Regulate and Prohibit Smoking Near Municipally-Owned Buildings	Arenas, community centres, municipal administration building, outdoor special events	Consultation with Municipal staff as requested/required. Complaint-based and proactive inspections, and the provision of signage scheduled on an ongoing and as-needed basis.

Promotion and enforcement of the Lucan Biddulph Smoke-free Municipal Spaces Bylaw	Arenas, trails, municipal administration buildings, public works offices, community centres, playgrounds, parks and sports fields, outdoor special events	Consultation with Municipal staff as requested/required. Complaint-based and proactive inspections, and the provision of signage scheduled on an ongoing and as-needed basis.
Environmental Support/Policy Development/Advocacy	Property that is under the management and oversight of municipal council, including land/property/spaces that fall under the Municipal Act.	Ongoing – uptake is dependant upon Municipal staff and Council support for policy change

Cannabis

Intervention/Service	Location of Delivery	Frequency of Delivery
Smoke-Free Housing Respond to complaints/ inquiries related to drifting second-hand cannabis smoke in multi-unit housing Promotion of and advocacy for comprehensive smoke-free policies to landlords, property managers and tenants to address cannabis use and the growth of cannabis in rental housing	Phone, mail and email (inquiries / complaints) Social media and online Mail for dissemination of resources In-person / onsite at buildings	Upon request Social media throughout the year as opportunities arise
Support the development of comprehensive policies that create supportive environments and provide protection from second-hand cannabis smoke	Phone Email Dissemination of information / materials via mail or in-person on site Email List Serv	Upon request and / or in response to complaints
Promotion of campaigns and provision of information related to the legalization of cannabis and promotion of the lower risk cannabis use guidelines to minimize harm from use of cannabis Workplace campaigns / workshops/mail-outs/inquiries Changes in legislation or bylaws Smoke is Smoke Local implementation of provincial/federal campaigns	Social media and online Paid advertising (print) Radio On-site in workplaces or through community events, etc. Email Healthcare Provider Outreach Email List Serv	1-2 x / year and / or dependent on changes to the legislation Oct during healthy workplace month

Creation of targeted messaging / materials for priority populations		
Provide advice and information regarding the public health approach to cannabis legalization, and sharing lessons learned from comprehensive tobacco control and alcohol, including retail density and zoning	In-person Reports Email Phone Email List Serv	Dependant upon implementation plan set out by the Provincial Government and decisions made by local municipalities regarding policies and bylaws to control the retail sale of cannabis
Creation of a comprehensive substance use toolkit for high schools to provide support and resources related to tobacco, e-cigarettes and cannabis	Online Print	Upon request / as required

Active Living/Physical Activity

Intervention/Service	Location of Delivery	Frequency of Delivery
Knowledge Transfer (Education/Awareness /Skill Building/consultation support) based on request from community partners ---------- Recent example: Move, Sleep, Sit – Raising Active Children – promotion of the 24-Hour Movement Guidelines for the Early Years (0-4 Years) and connection with theme 4 of HKCC Power Off and Play via Ilderton EarlyON Programs in Middlesex County	From office via email/phone, at community spaces ---------- Ilderton EarlyON Programs (Ilderton, Thorndale, Lucan, Komoka, Dorchester)	On request ---------- Attended 9 Groups (month of July and 1st week of August 2018) during all Ilderton EarlyON Programs held in the county
Provide support, encouragement and skill building for daycare staff to encourage implementation of physical literacy and physical activity practices and policies in child care centres	Daycare centres in Middlesex	On request
2013- 2017 inMotion Challenge campaign to promote physical activity *large campaign completed 2017.	Across Middlesex	Month of October and year round

Healthy Communities/Healthy Community Design

Intervention/Service	Location of Delivery	Frequency of Delivery
Healthy Communities / Healthy Community Design - Consultation	Meetings with consultants and Planners (various locations within Middlesex County) From office via email/phone	Upon request – ad hoc, e.g. Middlesex County Trails Guide, Middlesex Centre Trails Master Plan
Active Transportation - Consultation	Meetings with consultants and Planners (various locations within Middlesex County) From office via email/phone	Upon request – ad hoc
Public Health recommendations for official plans, master plans, etc.	Reports & presentations (various locations within Middlesex County) From office	When municipal processes are undertaken
Campaigns	Various locations within Middlesex County, e.g. Share The Road Signage Project (2014) - presentations to municipal Councils, road signage, radio ads, social media, hard copy promotional materials at various MC outlets)	As per partnership opportunities

Active & Safe School Travel

Intervention/Service	Location of Delivery	Frequency of Delivery
As part of a partnership, create supportive environments for active school travel by providing schools opportunity to submit expressions of interest for bike racks, and "wayfinding" signs with education packages	Elementary Schools	One time 2018-2019
Consultation with school staff, school community, or PHN's assigned to schools for the facilitation of School Travel Planning (STP) in order to remove barriers and promote active school travel	MLHU office via email/phone Data collection activities, events, and STP meetings and/or presentations at the school level occur at schools. Since 2010- Schools committed to School Travel Planning (STP) process: LDSCB = London 4, Middlesex 1 TVDSB = London 17, Middlesex 2 *note higher proportion of county schools have majority of students bussed.	Dependent on a particular school's involvement and commitment to the program. Average weekly consultations in an STP program school.
Policy input: As part of ASRTS partnership, provides input with data and evidence into policy decisions affecting safe active travel to school	Meetings, site visits (various locations).	When municipal processes are undertaken & Upon request – ad hoc
Through ASRTS, Student transportation services is hoping to implement a pilot project for Walking School Bus for schools that consent	School neighbourhoods and school property	Undetermined. New project.

Healthy Workplace Program

Intervention/Service	Location of Delivery	Frequency of Delivery
Biweekly and seasonal electronic newsletter	Email to workplace contacts	Bi weekly
Resources – guides and displays	Physical copies are available for drop off or pick up at MLHU offices by workplace representatives and arrangements made according convenience for both parties	Intermittent through year as requested
Annual workplace workshop. Topic changes by year e.g. physical activity in the workplace, healthy aging in the workplace, Sept 2018: Cannabis and the Workplace	Workshop typically held at a central location in London	Annually
Consultation for workplaces	From office via email/phone On location at workplaces	As requested throughout year

Oral Health

Intervention/Service	Location of Delivery	Frequency of Delivery
Follow Up	Follow up for all children screened in the clinic or at school	As required
Client Navigation	Assist families in finding a dentist / establishing a dental home	As required
Healthy Smiles Ontario (HSO) Program Promotion	HSO program is promoted throughout Middlesex County.	Ongoing

Food Safety

Overview

The goal of these public health services is to reduce the burden of food-borne illnesses.

Stakeholder Perspectives

In the councillor survey, 93% of respondents indicated that it is important for MLHU to focus on Food Safety. There were no comments or feedback regarding MLHU food safety programming in the key informant interviews.

For further details, see Appendix C and D.

Current Program and Service Delivery

Programming to meet Middlesex County needs for food safety includes:

Food Safety Inspections

Intervention/Service	Location of Delivery	Frequency of Delivery
Food Premises Inspections	All food premises in Middlesex County	1 – 3 compliance inspections per year, or more if required including re-inspections.
Bylaw Enforcement	All food premises in Middlesex County	1 – 3 checks per year, or more if required during re-inspections.
Special Events Inspections	Throughout Middlesex County	1 vendor inspection, depending on level of risk, per special event. Not all events are inspected, but assessed to determine if inspections are necessary.
Farmers Markets	Throughout Middlesex County	1 – 2 assessments per year at each Farmers Market, follow ups on a complaint basis and as required.

Food Handler Training

Intervention/Service	Location of Delivery	Frequency of Delivery
Food Handler Training Exams	MLHU Strathroy Office	1 per month
Food Hander Training Course Instruction	Offsite at various locations throughout the County (churches, service clubs etc.)	This varies depending on demonstrated need (roughly 5 -10 per year)

DineSafe – Disclosure Program / Mandatory Food Handler Certification

Intervention/Service	Location of Delivery	Frequency of Delivery
DineSafe Website	Online	Ongoing
DineSafe on-site posting	All food premises in Middlesex County	Ongoing, checked during food premises inspections, 1 – 3 times per year
Mandatory Food Handler Certification	All food premises in Middlesex County	Ongoing, checked during food premises inspections, 1 – 3 times per year

Complaints and Service Requests (Food Safety, Health Hazards)

Intervention/Service	Location of Delivery	Frequency of Delivery
Food Safety Complaints (food handling, suspected and confirmed foodborne illness follow-ups, outbreak management work)	All food premises in Middlesex County	Several per week

Healthy Environments

Overview

The goal of these public health services is to reduce exposure to health hazards and promote the development of healthy natural environments that support health and mitigate existing and emerging risks, including the impact of a changing climate.

Stakeholder Priorities

In the councillor survey, 77% of respondents indicated that it is important for MLHU to focus on healthy environments. There were no comments or feedback regarding MLHU healthy environments programming in the key informant interviews.

For further details, see Appendix C and D.

Current Program and Service Delivery

Programming to meet Middlesex County needs for healthy environments includes:

Inspections of Facilities

Intervention/Service	Location of Delivery	Frequency of Delivery
Seasonal Farm Housing Surveillance and Inspections Management and Response Awareness and Education	Farms throughout Middlesex County	Inspections occur 2 times per year Ongoing surveillance, awareness and education
Recreational Camps Surveillance and Inspections Management and Response Awareness and Education	Recreational Camps throughout Middlesex County	Inspections occur 1 time per year, and more depending of food safety risk assessment Ongoing surveillance, awareness and education
Health Hazard Complaints (bed bugs, mould, indoor air quality, hoarding, special risk and vulnerable occupancies)	Private residences and various locations throughout the County	Several per week
Extreme temperature Warnings / Alerts	Through media releases with a focus on vulnerable residents (schools, retirement homes, shelters etc.)	Approximately 10 – 15 alerts are issued per year

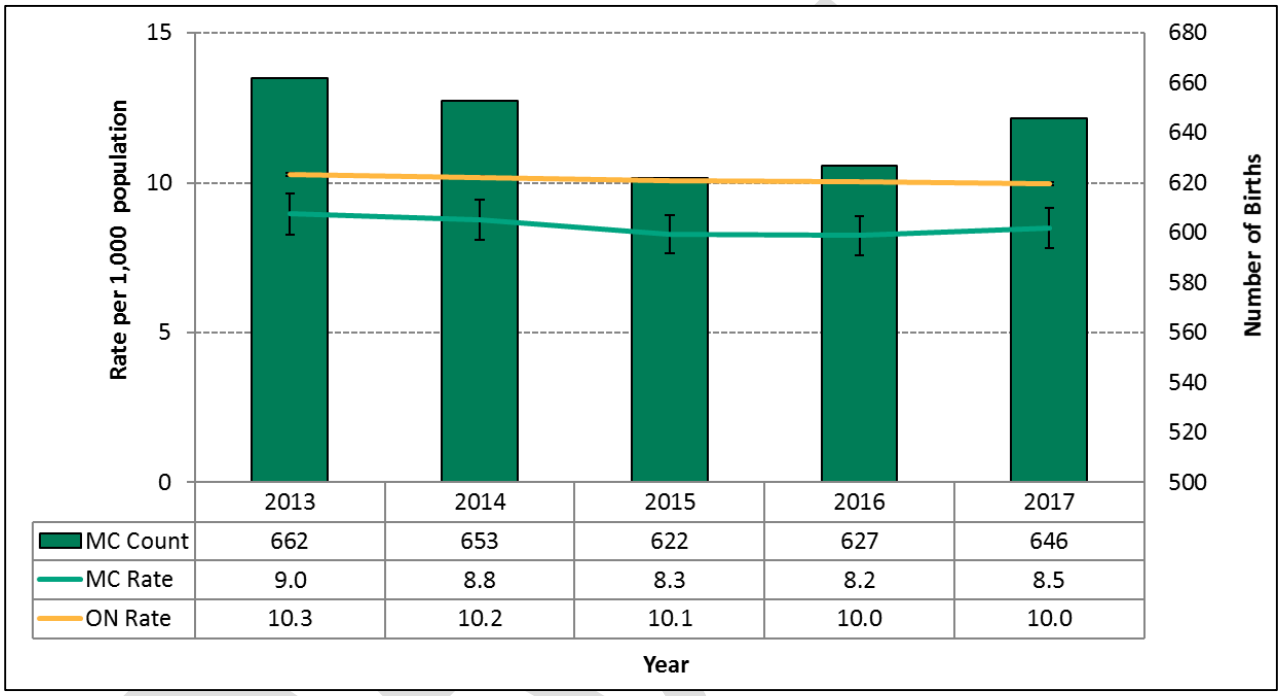
Healthy Growth and Development

Overview

The goal of these public health services is to achieve optimal preconception, pregnancy, newborn, child, youth, parental and family health.

Pregnancy rates in Middlesex County have remained relatively stable at a rate of approximately 8 births per 1,000 population. While stable, pregnancy rates in Middlesex County are consistently lower than those for Ontario.

Figure 15. Count and crude birth rates per 1,000 population, Middlesex County and Ontario, 2013 to 2017.

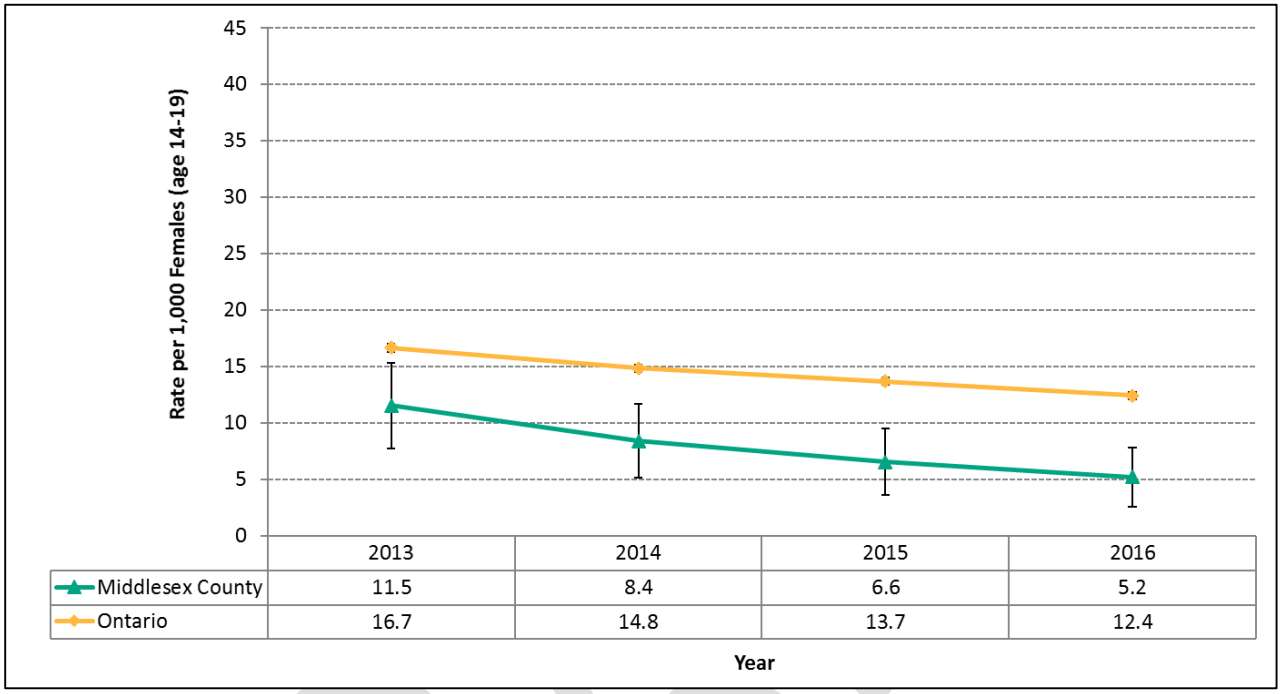


	2013	2014	2015	2016	2017
MC Count	662	653	622	627	646
MC Rate	9.0	8.8	8.3	8.2	8.5
ON Rate	10.3	10.2	10.1	10.0	10.0

Data source: BORN Information System, BORN Ontario. Information accessed on: July 7, 2018; Therapeutic abortions, Date Extracted: June 19, 2018 & Population Estimates, Date Extracted: May 11, 2018, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH Ontario.

In recent years, teen pregnancy (ages 14 to 19) rates in Middlesex County have been significantly lower than that for Ontario. The rates have declined each year from 2013 to 2016 which is a downward trend also observed in the province.

Figure 16. Teen pregnancy rate per 1,000 (age 14–19), Middlesex County and Ontario, 2013 to 2016.



	2013	2014	2015	2016
Middlesex County	11.5	8.4	6.6	5.2
Ontario	16.7	14.8	13.7	12.4

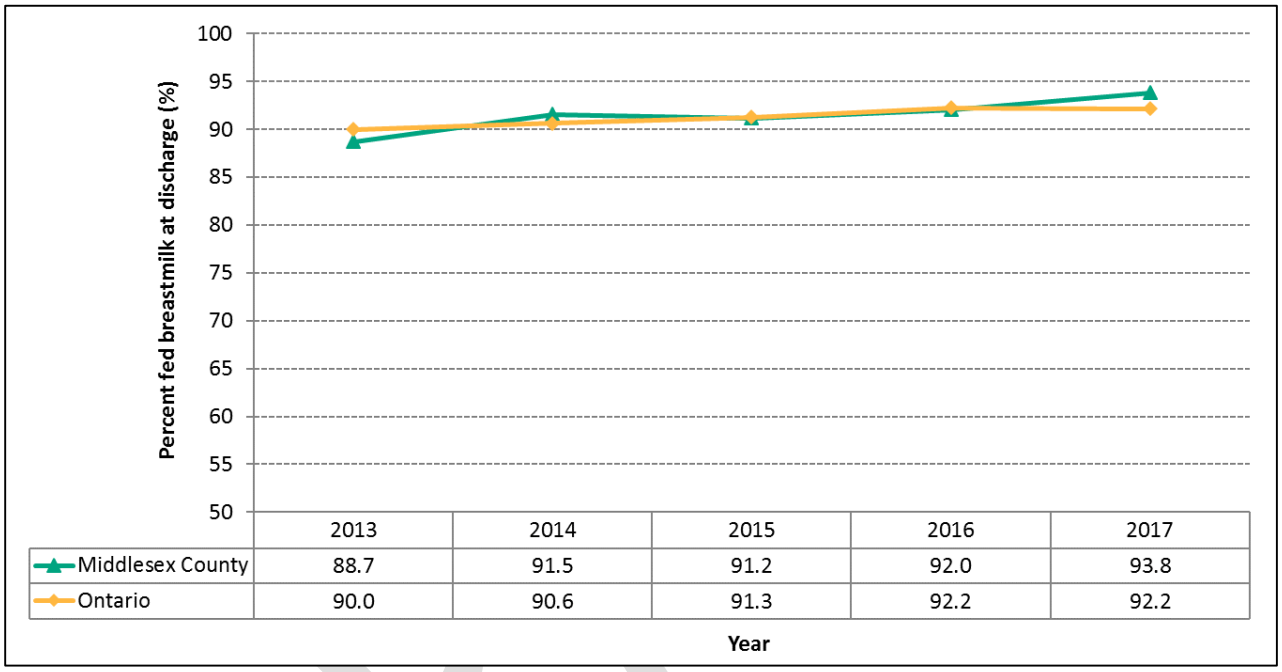
Data source: BORN Information System, BORN Ontario. Information accessed on: July 7, 2018; Therapeutic abortions, Date Extracted: June 19, 2018 & Population Estimates, Date Extracted: May 11, 2018, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH Ontario.

In Middlesex County and Ontario, the highest pregnancy rates are among women aged 30 to 34, followed by those aged 25 to 29. Compared to Ontario, females in Middlesex County tend to give birth at slightly younger ages: the third highest pregnancy rate is among women age 25 to 29, and pregnancy rates are significantly lower among women 35 years and older.

Pregnant women who are particularly young (i.e., teenagers) or old (i.e., ages 35 and older) tend to experience more problems delivering the baby and with various birth outcomes such as prematurity, low birth weight, and neonatal death. These mothers may therefore require more supports before and after birth than mothers in their twenties and early thirties.

Breastfeeding is the biologically natural way to provide infants with the nutrition they need for healthy growth and development. Health Canada recommends breastfeeding exclusively for the first six months, with continued breastfeeding for up to two years and beyond (Canadian Institute for Health Information, 2012). In 2017, over 93% of infants in Middlesex County were fed breastmilk at discharge from the hospital or midwifery practice group; a proportion slightly higher than the province and which has increased gradually over time since 2013.

Figure 17. Proportion of infants fed breastmilk (exclusively or in combination) at discharge from hospital or Midwifery Practice Group (MPG) per the number of live births discharged home and home births, Middlesex County and Ontario, 2013 to 2017.



	2013	2014	2015	2016	2017
Middlesex County	88.7	91.5	91.2	92.0	93.8
Ontario	90.0	90.6	91.3	92.2	92.2

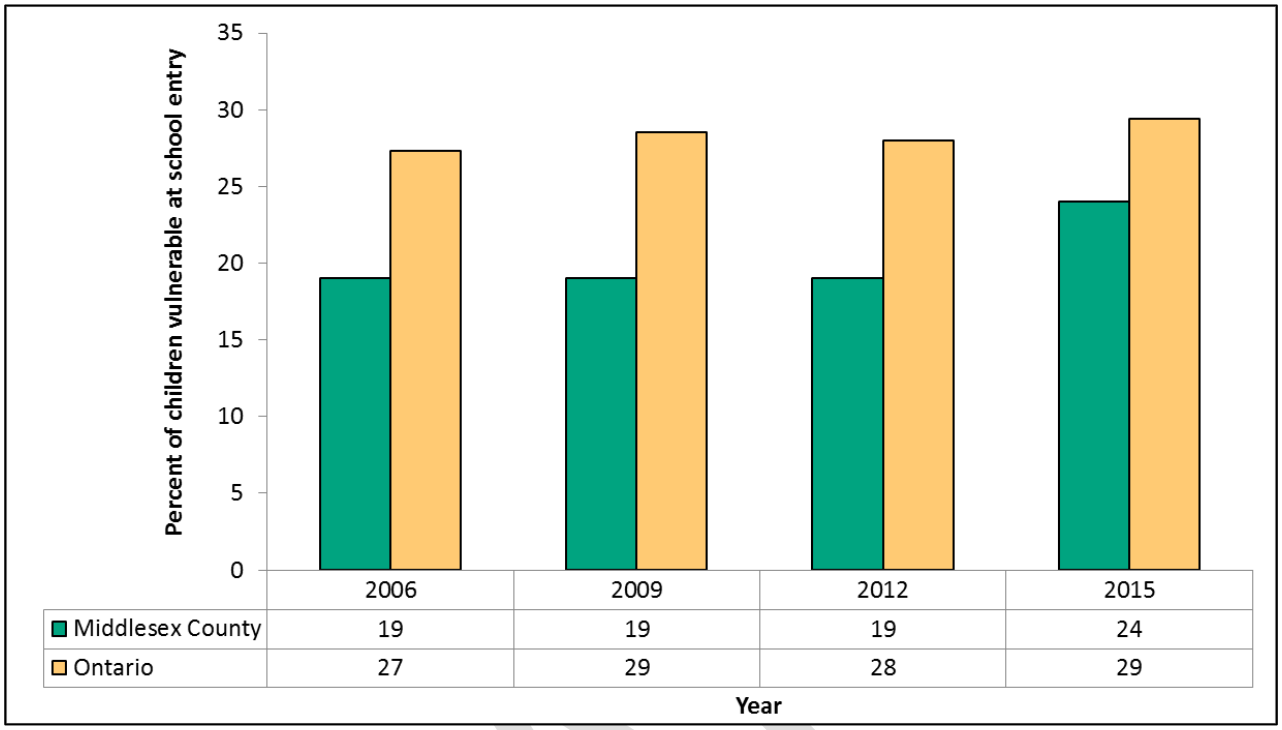
Data sources: (1) PHU – Newborn Clinical Report. BORN Information System, BORN Ontario. Information accessed on July 7, 2018. (2) Public Health Unit Analytic Reporting Tool (Cube), BORN Information System, BORN Ontario. Date Extracted: July 31, 2018.

The percent of children entering school that were vulnerable on at least one domain of the Early Development Instrument has been lower than the province since the inception of the measurement tool in 2006 (Figure 18). Recently, the Middlesex County rate has increased but continues to be lower than the province.

The physical health and well-being domain has the highest proportion of vulnerable children in Middlesex County (15.9%), followed by the emotional maturity domain (Table 4). These are also the top two areas for Ontario.

In all municipalities in Middlesex County results showed the percentage of children vulnerable from nearly all domains across all years tested to be lower than Ontario rates (data not shown).

Figure 18. Percentage of children vulnerable in one or more EDI domains, Middlesex County and Ontario, 2006, 2009, 2012, 2015.



Data source: Middlesex County Municipalities Child & Family Community Profile: Appendix 2: Early Development Instrument (EDI), 2012. (2013). Middlesex Children's Services Network. Available at https://www.middlesex.ca/sites/default/files/Appendix%202_Middlesex%20EDI%202012.pdf & Middlesex County community profile. (ca. 2016). [Unpublished report for the Middlesex Children's Service Network]. Middlesex Children's Service Network.

Table 4. Percentage of children at school entry vulnerable by EDI domain, 2015.

Early Development Instrument Domain	% of children vulnerable at school entry	
	Middlesex County	Ontario
Physical health and well-being	15.9	16.1
Emotional maturity	10.5	12.3
Social competence	7.3	10.7
Communication skills and general knowledge	7.2	10.2
Language and cognitive development	4.1	6.7
One or more EDI domains	24.0	29.4

Data source: Middlesex County Municipalities Child & Family Community Profile: Appendix 2: Early Development Instrument (EDI), 2012. (2013). Middlesex Children's Services Network. Available at https://www.middlesex.ca/sites/default/files/Appendix%202_Middlesex%20EDI%202012.pdf & Middlesex County community profile. (ca. 2016). [Unpublished report for the Middlesex Children's Service Network]. Middlesex Children's Service Network.

Stakeholder Priorities

In the councillor survey, 67% of respondents indicated that it is important for MLHU to focus on healthy growth and development. Key informants also commented on the challenges of mothers and families today who typically have to balance pregnancy and parenting with working and other priorities.

Mental health was also noted in both the survey and key informant interviews. Specifically, key informants felt that it is an issue that requires the involvement of many different community organizations to solve and not just the Health Unit. With limited resources, the response will depend on communication and awareness about where people can access services, and partnerships between those who have resources in the county.

For further details, see Appendix C and D.

Current Program and Service Delivery

Programming to meet Middlesex County needs for healthy growth and development includes:

Health Babies Health Children Home Visiting and Nurse Family Partnership

Intervention/Service	Location of Delivery	Frequency of Delivery
Home Visiting For families (pregnant women and families with children up to transition to school) that score with risk according to the HBHC Program Protocol 2018	Homes throughout Middlesex County	Offered continuously to all eligible families
Home Visiting – Nurse Family Partnership For first pregnancy or first time parenting; <21 years of age; enrolled prior to 28 weeks gestation; experiencing socioeconomic disadvantage	Homes throughout Middlesex County	Offered continuously to all eligible families

Shelter Work

Intervention/Service	Location of Delivery	Frequency of Delivery
Work in Shelters Public Health Nurses complete assessments, provide health teaching, and make referrals to other service providers and community agencies	Women's Rural Resource Centre (WRRC)	WRRC staff call PHN if there are appropriate referrals.

Healthy Start Infant Drop-ins

Intervention/Service	Location of Delivery	Frequency of Delivery
Assessment, education and support/counselling for a variety of topics including, but not limited to: Breastfeeding, infant feeding and nutrition, growth and early childhood development, safety, sleep, car seat safety, physical literacy, physical well being, attachment, perinatal and infant mental health, parenting, suggestions/referrals for community supports and interventions. Referrals are also made to other MLHU services	Glencoe Early ON Centre at Glencoe Presbyterian Church – biweekly Strathroy MLHU – biweekly Strathroy Early ON Centre – biweekly Ilderton (Library) Early ON Centre – every 4 weeks Komoka Wellness (Early ON) Centre – every 4 weeks Lucan (Library) Early ON Centre – biweekly Dochester (Library) Early ON Centre – biweekly Parkhill (Library) Early On Centre – biweekly	On a regular basis throughout Middlesex County

Breastfeeding Home Visiting

Intervention/Service	Location of Delivery	Frequency of Delivery
Breastfeeding Home Visits (screening, assessment and visits)	Homes throughout Middlesex County	Offered continuously to all eligible families

Preconception Health

Intervention/Service	Location of Delivery	Frequency of Delivery
Presentations through London Family Court Clinic	Community spaces in Ailsa Craig and Parkhill	As requested
Awareness and education	Social media Webpages Print material	Ongoing

Prenatal Health

Intervention/Service	Location of Delivery	Frequency of Delivery
Universal prenatal education sessions	Strathroy MLHU office	Groups run one night per week for 6 weeks; We offer 5 series per year in Strathroy. Other County locations (Ilderton, Dorchester, Lucan) have had low enrolment and are not currently offered
Online prenatal education modules	Online	Ongoing
Smart Start for Babies Prenatal and Postpartum Program	Strathroy MLHU office	If 3 clients are registered, the class would be once per week for 2 hours. If less than 3 clients, the program is offered in the client's home.

Preparation for Parenthood

Intervention/Service	Location of Delivery	Frequency of Delivery
Preparation for Parenthood Class	Ontario Early Years Centres /Family Centres	Several are scheduled throughout the year but are occasionally cancelled due to low registration

Baby-Friendly Initiative

Intervention/Service	Location of Delivery	Frequency of Delivery
Infant Feeding Surveillance System	Client's are contacted by telephone	Parents of newborns are phoned or emailed and asked to complete a survey – at 6 months, 12 months, and 18 months postpartum
Baby-Friendly Initiative (BFI) 20-Hour Breastfeeding Course for Health Care Providers	As requested	As requested
Printed information about infant feeding	Prenatal Classes in Strathroy; In hospital before discharge; home visits	Ongoing
MLHU website information about infant feeding	MLHU website	Ongoing
National Breastfeeding Week Awareness Campaign	MLHU website & social media	Annually

Food Skills

Intervention/Service	Location of Delivery	Frequency of Delivery
Awareness and education about healthy eating and food literacy	MLHU website	Ongoing
Food Skills Program	Family Centres, Community Centres (with approved commercial kitchen)	When a partnership is formed with a community partner, 8 sessions monthly or bi-monthly

Immunization

Overview

The goal of these public health services is to eliminate the burden of vaccine preventable disease through immunization.

The *Immunization of School Pupils Act* identifies a number of diseases against which students need to be vaccinated. Each year, the Middlesex-London Health Unit reviews the immunization records of students attending schools in the region to ensure that their immunizations are up to date (Ontario Ministry of Health and Long-Term Care, 2016). In the 2017–2018 school year, greater than 95% of immunization records of 7-year old students in Middlesex County schools were up-to-date for seven key diseases.

Table 5. Proportion of immunization records forecast up-to-date* for childhood vaccines among 7-year olds†, Middlesex County§, 2017–2018 school year.

Vaccine component	Up-to-date status	
	Middlesex County schools estimate (%)	Middlesex County schools range (%)
Diphtheria	96.9	80.0–100
Measles	97.4	80.0–100
Mumps	97.5	80.0–100
Pertussis	96.9	80.0–100
Polio	97.1	80.0–100
Rubella	98.8	80.0–100
Tetanus	96.9	80.0–100

Data source: Middlesex-London Health Unit Panorama Enhanced Analytics and Reporting (PEAR): Forecaster Compliance for Disease by Age or School – Aggregate – STD – PR2001. Toronto ON: Ontario Ministry of Health and Long-Term Care; 2018 August 14 [cited 2018 August 14].

* Records were considered to be up to date when the immunization forecast was classified as up to date, and not eligible, due or overdue for the identified immunization based on the Publicly Funded Immunization Schedule for Ontario (Ministry of Health and Long-Term Care, 2016).

† Birth year is 2010 for the 2017-18 school year.

§ Middlesex County estimate based on enrollment of children born in 2010 in elementary schools (public and private) located in Middlesex County for which the Middlesex-London Health Unit screened immunization records in the 2017-18 school year.

Stakeholder Priorities

In the councillor survey, 83% of respondents indicated that it is important for MLHU to focus on immunization. It was described as an issue of primary public health concern by three of the councillors responding to the survey and one councillor noted regarding adverse effects. There were no comments or feedback regarding MLHU immunization in the key informant interviews.

For further details, see Appendix C and D.

Current Program and Service Delivery

Programming to meet Middlesex County needs for immunization includes:

Immunization Program

Intervention/Service	Location of Delivery	Frequency of Delivery
Immunization clinic (walk-in and appointment based)	Strathroy office	First Wednesday of every month
School immunization clinics for grade 7 students and high school students (including private schools)	All schools in Middlesex County	Elementary schools are visited twice every school year High schools are visited once every school year
Immunization phone line, fax and email service (for immunization record submissions and contact with staff member)	Virtual - over the phone, email or fax machine	Available as needed
Immunization screening and follow up of select grades of students in elementary and high schools (and child care centres as of fall 2018)	Work is done within the London health unit office and information flow and suspension orders filter through school and child care offices	Once per year for each school /child care centre
Cold chain inspections of all fridges holding Ontario publicly funded vaccine	Every healthcare provider office in Middlesex County that holds publicly funded vaccine is inspected	Once per year

Infectious and Communicable Diseases Prevention and Control

Overview

The goal of these public health services is to reduce the burden of communicable diseases and other infectious diseases of public health significance.

There are approximately 70 diseases of public health significance that are reported to the local Medical Officer of Health under the *Health Protection and Promotion Act*. Among these, HIV/AIDS*, hepatitis C†, and active tuberculosis§ are all infections that can have long-term impacts on effected individuals and, once diagnosed, require follow up with a health care provider.

Between 2005 and 2017, the average reported incidence rates of HIV/AIDS, hepatitis C, and active tuberculosis cases were lower among Middlesex County residents compared to the provincial rate (Table 6).

Table 6. Reported incidence rate of HIV/AIDS, hepatitis C, and active tuberculosis, Middlesex County and Ontario, 2005–2017 average.

Infectious disease	Rate per 100,000 population	
	Middlesex County	Ontario
HIV/AIDS*	1.5	6.5
Hepatitis C†	16.9	33.3
Tuberculosis (active)§	<1.0	4.8

Data source: Middlesex County data: Middlesex London Health Unit integrated Public Health Information System (iPHIS) Cognos Report Net: custom report. Ontario Ministry of Health and Long-Term Care; Extracted August 13, 2018. Ontario data: Public Health Ontario. Infectious Diseases Query: Ontario: Case counts and crude rates of reportable diseases by public health unit and year. Ontario Agency for Health Protection and Promotion; Extracted August 15, 2018.

* HIV/AIDS cases are reported by encounter date, which is the date that public health was first notified of the case.

† Hepatitis C cases are reported by episode date, which is the earliest available of symptom onset date, specimen collection date, laboratory test date, or date reported to public health. Hepatitis C cases include all cases with a positive antibody test, and therefore includes people with acute infections, spontaneously resolved acute infections, chronic infections, and those who have received effective anti-viral therapy (cured).

§ Active tuberculosis cases are reported by the date the individual was diagnosed with active tuberculosis.

Stakeholder Priorities

In the councillor survey, 92% of respondents indicated that it is important for MLHU to focus on infectious and communicable disease prevention and control. Respondents to both the councillor survey and the key informant interviews indicated that vector-borne disease is a public health issue of primary concern particularly due to reports of West Nile Virus being present in North Middlesex. Respondents felt that the larviciding program is important to county residents.

For further details, see Appendix C and D.

Current Program and Service Delivery

Programming to meet Middlesex County needs for infectious and communicable disease prevention and control includes:

Rabies Prevention and Control

Intervention/Service	Location of Delivery	Frequency of Delivery
Investigating human exposures to animals suspected of having rabies	Based on the location of the animal owner and/or victim	Referral-based
Confirming the rabies vaccination status of the animals (suspected of having rabies)	Veterinary clinics	Referral-based
Rabies prevention awareness activities	Municipal offices, library locations, MLHU-Strathroy office	Regularly
Partnering with veterinary clinics to organize low-cost rabies clinic	Veterinary clinics	Once a year

Vector-Borne Disease

Intervention/Service	Location of Delivery	Frequency of Delivery
Assessing standing water sites in Middlesex-London on public property and develop local vector-borne disease control strategies based on this data	Bodies of standing water located on public property	May to September
Surveillance of ticks and mosquitos	Across the county	April to November
Responding to complaints and inquiries from residents regarding Vector Borne Diseases	Complaint-based	Year around
Assessing private properties when standing water concerns are reported and oversee remedial actions	Referral-based	May to September
Educating and engaging residents in practices and activities at local community events in order to reduce exposure to Vector Borne Diseases	Across the Middlesex County	May to September

Reportable Disease Follow up and Case Management

Intervention/Service	Location of Delivery	Frequency of Delivery
Investigation and management of cases of reportable enteric illnesses (e.g., salmonella, *E. coli*), vaccine preventable diseases (e.g., pertussis, mumps), and individuals with vector-borne diseases (e.g., West Nile virus, Lyme disease) Interview all reported suspect and confirmed cases. Ensure clients have been notified of their diagnosis, have completed appropriate testing, and receive counselling about their illness and how to prevent transmission to others	Over the phone	Year round
Support and education for facilities managing communicable disease cases (e.g., disease exposures in child care centres, long-term care homes with residents with communicable diseases)	By email, over the phone, or at the location of the centre/home	Year round
Follow up of active TB cases Coordinate the provision of publicly funded tuberculosis treatment medications and provide direct observed therapy (DOT)	In the client's home	Year round DOT can range from a daily to monthly visit to the client's home until the course of treatment is completed, usually six months to one year.
Follow up of suspect tuberculosis (TB) cases Ensure that appropriate testing has been completed, and that clients receive counselling about how to prevent transmission to others	Over the phone or in the client's home	Year round
TB assessment and treatment clinic – physician led Provide clinical assessment and treatment plan for high risk government assisted refugees and immigration surveillance clients who may have latent TB infection, and contacts of active TB cases who do not have a primary health care provider	MLHU 50 King Street site	Every two months

TB assessment and treatment clinic – public health nurse led Provide follow up, clinical assessment, and medication for clients of the physician led clinic who receive latent TB treatment	MLHU 50 King Street site	Every month

Outbreak Management

Intervention/Service	Location of Delivery	Frequency of Delivery
Follow up respiratory and gastroenteritis outbreaks in licensed long-term care homes, retirement homes, and hospitals Provide public health recommendations for outbreak management, and participate on outbreak management meetings as required.	By email, over the phone, or at the location of the home/hospital	Year round
Follow up gastroenteritis outbreaks in licensed child care centres Provide public health recommendations for outbreak management	By email, over the phone, or at the location of the centre	Year round

Inspections

Intervention/Service	Location of Delivery	Frequency of Delivery
Food Premises Inspections of licensed long-term care homes and retirement homes	At the location of the long-term care/retirement home	1 – 3 compliance inspections per year, or more if required including re-inspections.
Food Premises Inspections of licensed child care centres and extended day programs (before and after school programs)	At the location of the child care centre/extended day program	1 – 3 compliance inspections per year, or more if required including re-inspections.
Infection prevention and control (IPAC) inspections of personal service settings (e.g., tattoo and piercing shops, spas, nail salons)	At the location of the business	1 compliance inspection per year, or more if required including re-inspections
IPAC inspections of funeral homes	At the location of the business	1 compliance inspection every other year, or more if required including re-inspections
IPAC inspections of licensed child care centres and extended day programs (before and after school programs)	At the location of the child care centre/extended day program	1 compliance inspection per year, or more if required including re-inspections

Infection Prevention and Control (IPAC) Management and Investigations

Intervention/Service	Location of Delivery	Frequency of Delivery
Complaints and Service Requests (CSR) from members of the public related to IPAC practices in health care settings (e.g., medical and dental clinics) and personal service settings (e.g., tattoo shops, salons). Assess adherence to IPAC practices and determine if a lapse in practice has occurred. Assess risk of infectious disease transmission to clients of the service	At the location of the clinic/business	As reported. There are usually several CSR to investigate each month.
Participation in Professional Advisory Committee (PAC) meetings at licensed long-term care homes Provide support and recommendations regarding IPAC issues	At the location of the long-term care home	Quarterly
Licensing consultation for retirement homes Provide support and recommendations regarding IPAC issues	At the location of the retirement home	Annually
Licensing consultation for new personal service settings Provide support and recommendations regarding IPAC issues	At the location of the business	Year round, as new businesses open

Sexual Health Clinics

Intervention/Service	Location of Delivery	Frequency of Delivery
Sexually Transmitted Infection Clinic and Family Planning Clinic led by Public Health Nurse under Medical Directives	MLHU Strathroy location	Once a week on Thursdays three times per month
Sexually Transmitted Infection Clinic and Family Planning Clinic led by Physician	MLHU Strathroy location	Once a month

Needle Exchange

Intervention/Service	Location of Delivery	Frequency of Delivery
Access to harm reduction supplies and disposal of used equipment Referral to addiction services, housing etc. Access naloxone kits to prevent overdoses	MLHU Strathroy office Shopper's Drug Mart 78 Front Street	Once a week at MLHU Strathroy office and one evening a month Daily at the Shopper's Drug Mart

TI and Blood-Borne Infection Case Management

Intervention/Service	Location of Delivery	Frequency of Delivery
Case management for reportable infectious diseases i.e. Chlamydia, Gonorrhea, Syphilis, HIV, and Hepatitis B and C Ensure clients have been notified of their disease, treated according to Guidelines, and notification of for testing	Management of cases is conducted over the phone Clients in the county who need treatment can access the Strathroy office	Once a week on Thursdays three times per month for Public Health Nurse Care Once a month for Physician care

Sexual Health Promotion

Intervention/Service	Location of Delivery	Frequency of Delivery
Campaigns to target populations at risk. Campaigns include presentations, posters and social media.	Presentations are targeted to the priority populations of Middlesex-London. There are presentations in the county as requested.	Ongoing and as requested

Safe Water

Overview

The goal of these public health services is to prevent or reduce the burden of water-borne illnesses related to drinking water and to prevent or reduce the burden of water-borne illnesses and injuries related to recreational water use.

Stakeholder Priorities

In the councillor survey, 100% of respondents indicated that it is important for MLHU to focus on safe water. Key informants noted that the well water drop-off sites are a valuable service to Middlesex residents.

For further details, see Appendix C and D.

Current Program and Service Delivery

Programming to meet Middlesex County needs for safe water includes:

Drinking Water

Intervention/Service	Location of Delivery	Frequency of Delivery
Responding to Adverse Water Quality Incidents in municipal systems	Over the phone	N/A
Responding to Adverse Water Quality Incidents in Small Drinking Water Systems	Over the phone	N/A
Risk assessment of Small Drinking Water Systems	Location of the SDWS	Once every three years
Monitoring the test results of Small Drinking Water Systems regularly	Results reviewed at MLHU office	Bi-monthly
Issuing Drinking/Boil Water Advisories as needed	Advisories issued through media, online, etc.	N/A
Conducting water haulage vehicle inspections	Location of the business	Once a year
Delivering resources (test kits and information) and offering guidance to private well owners	Municipal offices, library locations, MLHU-Strathroy office	Every day
Fluoride Monitoring	Monitor fluoride levels on all municipal water systems	Monthly

Recreational Water

Intervention/Service	Location of Delivery	Frequency of Delivery
Inspection of public pools	All public pools in Middlesex County	4 times per year
Inspection of public spas	All public spas in Middlesex County	4 times per year
Inspection of wading pools and splash pads	All wading pools and splash pads in Middlesex County	2 times per year
Investigating complaints related to recreational water facilities	All public pools, spas, wading pools, splash pads in Middlesex County	Complaint-based

Beach Water Management Program

Intervention/Service	Location of Delivery	Frequency of Delivery
Testing and monitoring beaches	All public beaches in Middlesex County	Once per week, June to September

School Health

Overview

The goal of these public health services is to achieve optimal health of school-aged children and youth through partnership and collaboration with school board and schools.

Understanding tooth decay in the school aged children population is important because of its implications for quality of life. In Middlesex County, where some drinking water is not fluoridated, tooth decay increases as children age from junior kindergarten until grade 2. The percentage of children with no cavities or decay goes down and the number of teeth affected in those with decay increases as grade level goes up. In comparison to a sample of health units making up approximately half on the Ontario population, Middlesex County rates of decay were lower in the 2015/2016 and 2016/2017 school years.

The *Immunization of School Pupils Act* identifies a number of diseases against which students need to be vaccinated. Each year, the Middlesex-London Health Unit reviews the immunization records of students attending schools in the region to ensure that their immunizations are up to date (Ontario Ministry of Health and Long-Term Care, 2016). In the 2017–2018 school year, greater than 95% of immunization records of 7-year old students in Middlesex County schools were up-to-date for seven key diseases.

Stakeholder Priorities

In the councillor survey, 85% of respondents indicated that it is important for MLHU to focus on school health. There was also considerable feedback that highlighted schools as a primary location where MLHU should be delivering public health services.

Mental health was also noted in both the survey and key informant interviews. Specifically, key informants felt that it is an issue that requires the involvement of many different community organizations to solve and not just the Health Unit. With limited resources, the response will depend on communication and awareness about where people can access services, and partnerships between those who have resources in the county.

For further details, see Appendix C and D.

Current Program and Service Delivery

Programming to meet Middlesex County needs for school includes:

Healthy Schools

Intervention/Service	Location of Delivery	Frequency of Delivery
Increasing Vegetable and Fruit Consumption Toolkit	All elementary and secondary schools in Middlesex County	Ongoing / as needed
Reducing Sedentary Behaviour Toolkit	All elementary and secondary schools in Middlesex County	Ongoing / as needed
Improving School Connectedness Toolkit	All elementary and secondary schools in Middlesex County	Ongoing / as needed
Promoting Healthy Growth and Development Toolkit	All elementary and secondary schools in Middlesex County	Ongoing / as needed
Reducing Substance Use Toolkit	All elementary and secondary schools in Middlesex County	Ongoing / as needed
Let's Get Cookin'	Elementary Schools	N/A
Social Media Promotion	N/A	Ongoing / as needed
Healthy School Recognition Program	All elementary and secondary schools in Middlesex County	Ongoing / as needed
Active and Safe Routes to School	All elementary schools in Middlesex County	N/A

Situational Supports

Intervention/Service	Location of Delivery	Frequency of Delivery
One-on-one situation supports with students in secondary schools	All secondary schools in Middlesex County	As needed
Principal and school staff consultation	All elementary and secondary schools in Middlesex County	As needed
Parent consultations	All elementary and secondary schools in Middlesex County	As needed

Parenting

Intervention/Service	Location of Delivery	Frequency of Delivery
School Enterers packages	All elementary schools in Middlesex County	Once per year
Parenting presentations/workshops	All elementary and secondary schools in Middlesex County	As requested

Curriculum Supports

Intervention/Service	Location of Delivery	Frequency of Delivery
Fact Sheets	All elementary schools in Middlesex County	As needed
Presentations and Lesson Plans	All elementary schools in Middlesex County	As needed
Classroom Support – Reach and Teach Kits	All elementary schools in Middlesex County	As needed

Oral Health

Intervention/Service	Location of Delivery	Frequency of Delivery
Dental Screening in Schools	All elementary schools in Middlesex County	Once per year
Dental Screening + Fluoride Varnish Application in Daycare Settings	Dental screening and fluoride varnish are offered to daycares in the county.	Three times per year
Fluoride Varnish Application in Elementary Schools	Fluoride varnish is offered at schools in the county.	Three times per year

Substance Misuse and Injury Prevention

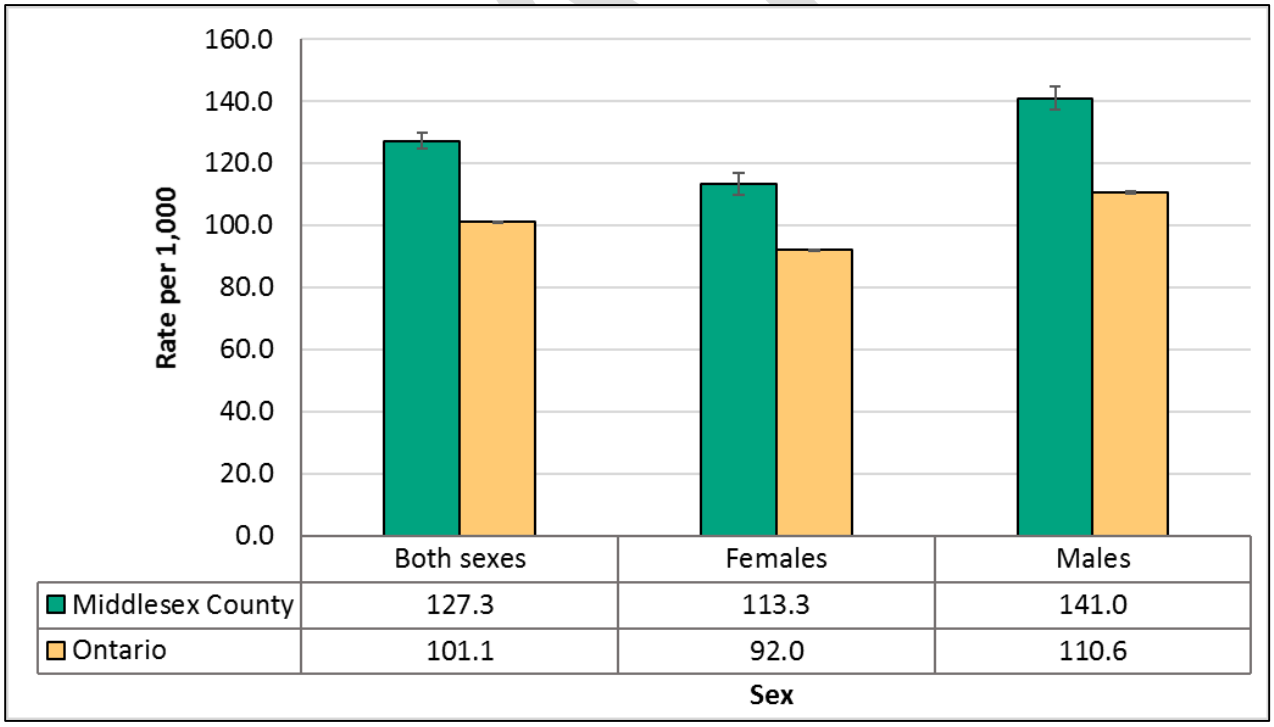
Overview

The goal of these public health services is to reduce the burden of preventable injuries and substance use.

While less impactful than chronic disease, injuries are also within the top causes of death and are a large burden in potential years of life lost. Injuries commonly bring people to the emergency department for care and Middlesex County is no exception. In fact, between 2015 and 2017 rates of emergency department (ED) visits for injury were significantly higher in Middlesex County (127.3 per 1,000 people) compared to Ontario (101.1 per 1,000 people). The rate of deaths from injuries, however, was not higher than Ontario. This indicates that residents of Middlesex County experienced more non-fatal injuries than those in the province overall. The most common reason for an injury-related visit to the ED was falls, which was higher in females than males. Being struck against or cut by objects and overexertion were the next most common causes for both sexes. Motor vehicle crashes were the fifth most common injury for females and sixth most common for males. Off-road vehicle collision rates were higher than the provincial rate; whereas, pedestrian-related injury visits are lower. There is no difference with cycling collisions.

Intentional injuries such as the ED visit rate for self-harm in Middlesex County was similar to the Ontario rate. The rate of assault-related ED visits was significantly lower than the province.

Figure 19. Emergency department visits for all injuries, unadjusted rates per 1,000 population, by sex, Middlesex County and Ontario, 2015 to 2017 annual average.



Data source: National Ambulatory Care Reporting System (NACRS), Ontario Ministry of Health and Long-term Care, IntelliHEALTH ONTARIO, Extracted: August 16, 2017.

Table 7. Emergency department visit counts and unadjusted rates per 100,000 population, by sex, Middlesex County, 2015 to 2017 annual average.

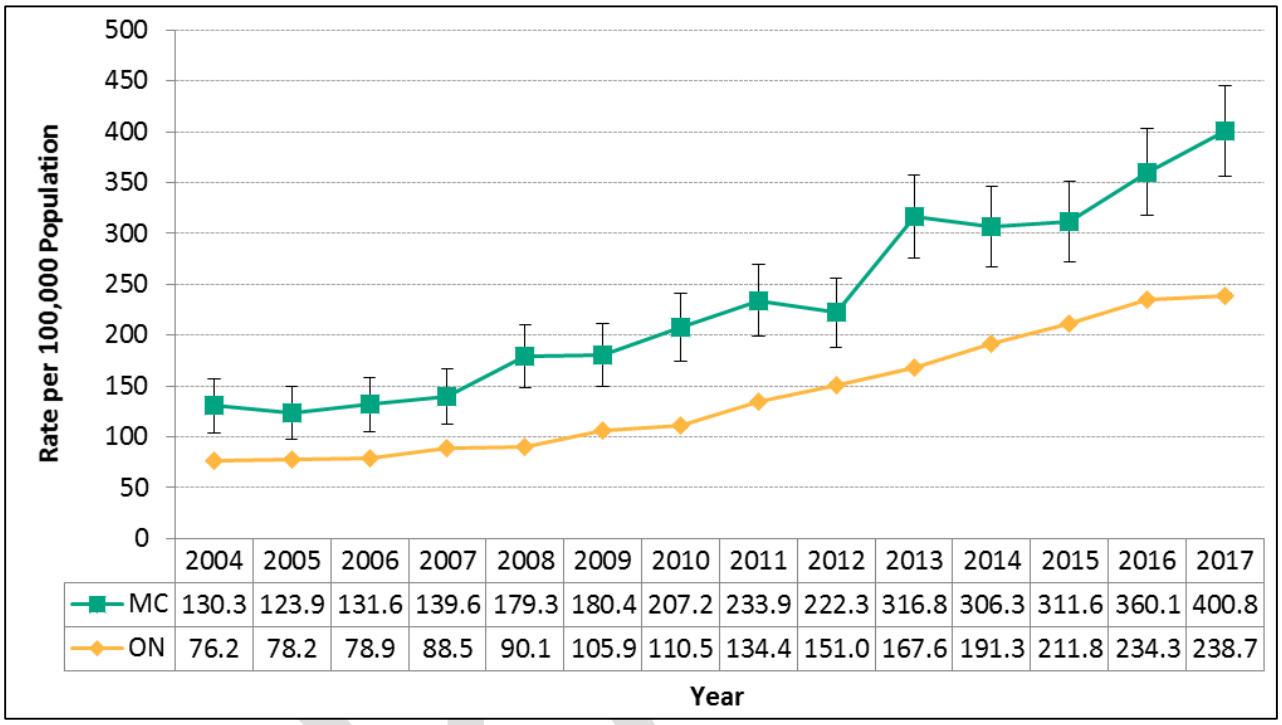
Middlesex County rank	Cause Unadjusted rate per 100,000 ± 95% Confidence Interval (Count)	
	Females	Males
1	Falls* 4,049.6 ± 203.1 (1527)	Falls* 3,377.3 ± 184.7 (1285)
2	Struck by/against object* 1,708.4 ± 131.9 (644)	Struck by/against object* 2,812 ± 168.5 (1,070)
3	Overexertion* 1,004.0 ± 101.1 (379)	Cut/pierced by object* 1,687.3 ± 130.5 (642)
4	Cut/pierced by object* 742.4 ± 87 (280)	Overexertion* 1,063.6 ± 103.6 (405)
5	Motor vehicle collision 637.2 ± 81 (240)	Foreign body in eye/orifice* 1,049.5 ± 102.9 (399)
6	Bite by Dog or other Mammal* 332.3 ± 58.2 (125)	Motor vehicle collision* 807.7 ± 90.3 (307)
7	Caught/crushed between objects* 295.2 ± 54.8 (111)	Caught/crushed between objects* 437.2 ± 66.4 (166)
8	Foreign body in eye/orifice 281.0 ± 53.5 (106)	Bite by dog or other mammal* 261.9 ± 51.4 (100)
9	Insect bite 198.9 ± 45.0 (75)	Other land transport collisions 223.4 ± 47.5 (85)
10	Other land transport collisions* 197.1 ± 44.8 (74)	Poisoning 184.9 ± 43.2 (70)
All unintentional injuries*	11,008.6 ± 334.9 (4,152)	13810.5 ± 373.4 (5,254)

Data source: National Ambulatory Care Reporting System (NACRS), Ontario Ministry of Health and Long-term Care, IntelliHEALTH ONTARIO, Extracted: August 16, 2017.

Note: * indicates the MC sex-specific rate is statistically significantly higher than the ON sex-specific rate.

Concussion-related ED visits have also been on the rise in recent years and Middlesex County experienced a substantially higher rate than in the province overall. Local research indicates children in rural populations who experience concussions are much more likely to have sustained the injury in a motor vehicle crash compared to their urban counterparts (Stewart, Gilliland & Fraser, 2014).

Figure 20. Unadjusted rates of emergency department visits for concussions per 100,000 population, Middlesex County and Ontario, 2004 to 2017.

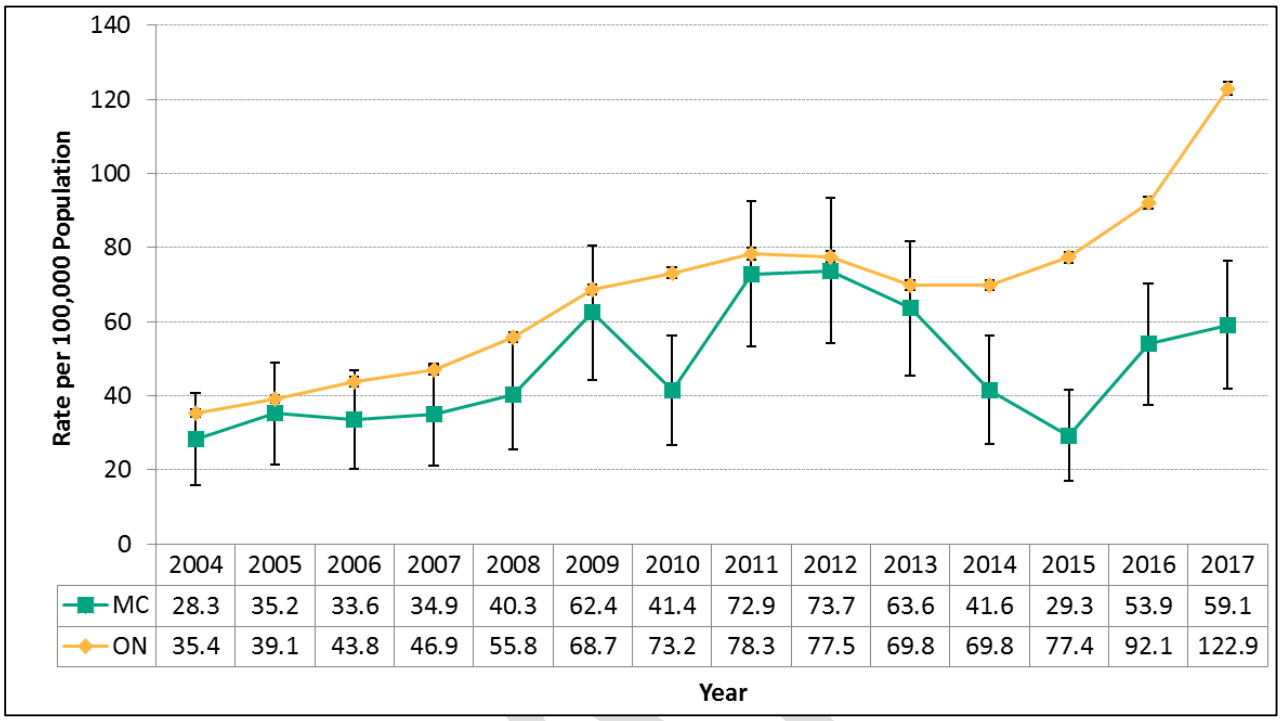


	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
MC	130.3	123.9	131.6	139.6	179.3	180.4	207.2	233.9	222.3	316.8	306.3	311.6	360.1	400.8
ON	76.2	78.2	78.9	88.5	90.1	105.9	110.5	134.4	151.0	167.6	191.3	211.8	234.3	238.7

Data source: National Ambulatory Care Reporting System (NACRS), Ontario Ministry of Health and Long-term Care, IntelliHEALTH ONTARIO, Extracted: August 9, 2018.

The harms associated with drug use are important to consider in light of the public health crisis related to opioids and cannabis legalization in Canada. In Ontario there has been an increase over time in emergency department visits associated with each of these substances both for poisonings and related mental or behavioural disorders. It is worth noting that rates of ED visits in Middlesex County are lower than Ontario and the difference is statistically significant for both cannabis and opioids. Cannabis visit rates have increased significantly since 2004. However, opioid ED visits have not shown a statistically significant increase between 2004 and 2017 in Middlesex County. This is a marked difference from the trend seen in Ontario and surrounding communities.

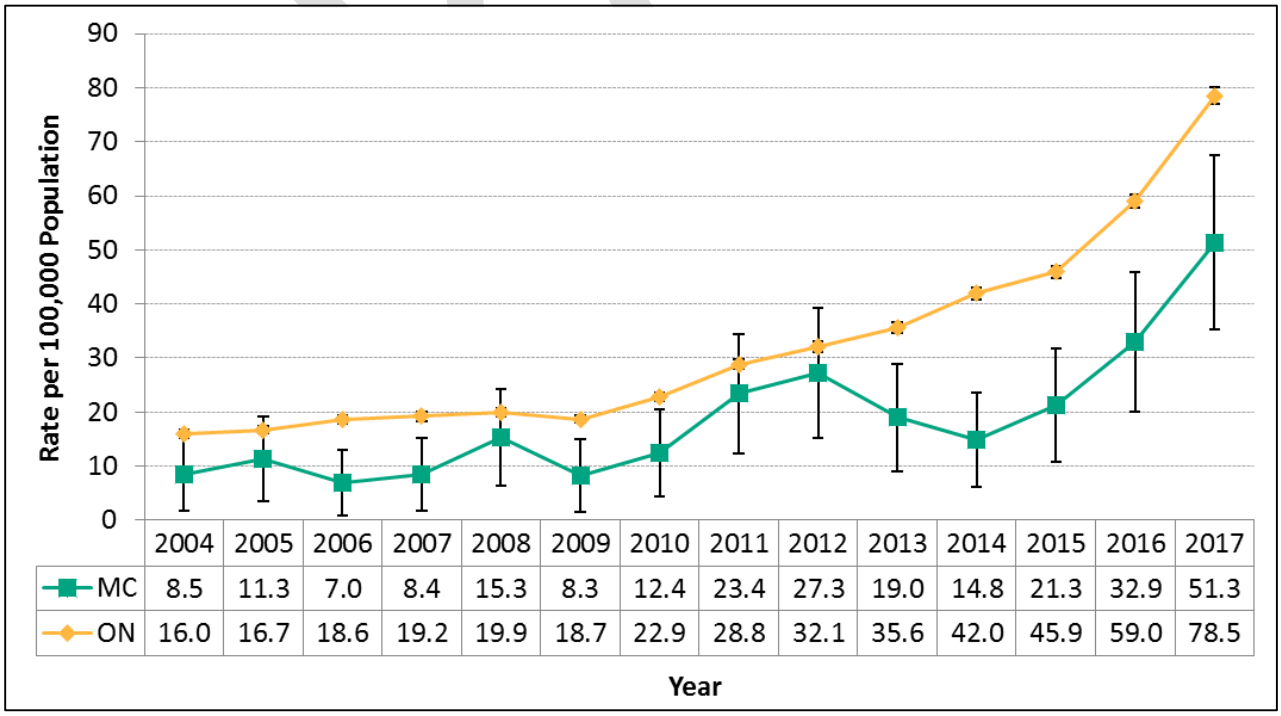
Figure 21. Opioid-related emergency department visits, counts and unadjusted rates per 100,000 population, Middlesex County and Ontario, 2004 to 2017.



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
MC	28.3	35.2	33.6	34.9	40.3	62.4	41.4	72.9	73.7	63.6	41.6	29.3	53.9	59.1
ON	35.4	39.1	43.8	46.9	55.8	68.7	73.2	78.3	77.5	69.8	69.8	77.4	92.1	122.9

Data source: National Ambulatory Care Reporting System (NACRS), Ontario Ministry of Health and Long-term Care, IntelliHEALTH ONTARIO, Extracted: August 23, 2018.

Figure 22. Cannabis-related emergency department visits, counts and unadjusted rates per 100,000 population, Middlesex County and Ontario, 2004 to 2017.



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
MC	8.5	11.3	7.0	8.4	15.3	8.3	12.4	23.4	27.3	19.0	14.8	21.3	32.9	51.3
ON	16.0	16.7	18.6	19.2	19.9	18.7	22.9	28.8	32.1	35.6	42.0	45.9	59.0	78.5

Data source: National Ambulatory Care Reporting System (NACRS), Ontario Ministry of Health and Long-term Care, IntelliHEALTH ONTARIO, Extracted: August 23, 2018.

Stakeholder Priorities

In the councillor survey, 77% of respondents indicated that it is important for MLHU to focus on substance use and injury prevention. Opioids were the public health issue of primary concern for councillors who responded to the survey. This was reiterated in the key informant interviews where respondents noted the intersections between opioids, drug addiction, housing and mental health.

Mental health was also noted in both the survey and key informant interviews. Specifically, key informants felt that it is an issue that requires the involvement of many different community organizations to solve and not just the Health Unit. With limited resources, the response will depend on communication and awareness about where people can access services, and partnerships between those who have resources in the county.

For further details, see Appendix C and D.

Current Program and Service Delivery

Programming to meet Middlesex County needs for substance use and injury prevention includes:

Healthy Aging & Falls Prevention

Intervention/Service	Location of Delivery	Frequency of Delivery
Education/Awareness /Skill Building and consultation support related to Healthy Aging / Fall Prevention	Website, social media, availability of paper resources ---------- Office by phone email, presentations at various locations	Ongoing ---------- On request

Substance Misuse Prevention (Alcohol and Other Drugs)

Intervention/Service	Location of Delivery	Frequency of Delivery
Municipal Alcohol Policy Review/Consultation	Done via email and/or in-person visit to municipal office	Every second year (review/consultation)
Provision of Health Promotion Information	Done via email/mail outs predominantly	As needed/requested/available
Public Inquiries regarding alcohol concerns	Via telephone or email	As requested
Middlesex-London Community Drug and Alcohol Strategy: 1)Environmental scan and survey of organizations and service providers to identify needs ---------- 2) community consultations as part of developing final strategy	Email and phone Online In person	Ongoing

Road Safety

Intervention/Service	Location of Delivery	Frequency of Delivery
2017-2018 Pedestrian cross over (PXO campaign)	Social media, Youtube, Note: no PXOs in Middlesex County however MLHU You Tube, Facebook and Twitter channels and the MTO - LMRSC Facebook channel cover city and county, for county-city commuters.	One time campaign (April 16, 2018 – May 18, 2018), ongoing information sharing
National Teen Driver Safety Week promotion of messaging and event	2018 event to be held at a county secondary school, exact location TBA	Yearly campaign
Not By Accident (NBA) fall forum (project of South West Injury Prevention Network). Focus changes annually e.g. Cannabis and road safety, vision zero etc. --- 2018 no NBA planned related to limited resources. Alternately a planned Vision Zero forum "Primer" for smaller number of participants (project of South West Injury Prevention Network)	Held in London – central location to surrounding municipalities --- to be held at MTO office, Exeter Road	Previous annual forum for >10 years
Winter driving campaign. --- 2018 Snow How Winter Driving campaign – LMRSC & Ontario Good Roads Association	Social media --- Social Media	Annual with MTO

Child Safety

Intervention/Service	Location of Delivery	Frequency of Delivery
Farm Safety day	Elementary schools	Annually at different schools
Drowning Prevention campaign messaging	Radio, Billboards, social media	Annually, usually June-September
Helmets on Kids campaign helmet distribution	Elementary schools & at request of community partners/organizations	Annually in June
Safety Never Hurts newsletter	Emailed newsletter	Seasonal
Kids Need a Boost program – Education to all populations and distribution of booster seats to families in need when requested	Various Community spaces, elementary schools, home visits, reserves, social media	Throughout the year as requested
Various presentations, resources and/or materials related to Child Safety as requested	Various community spaces, elementary schools, family centres, reserves	As requested throughout the year

Next Steps

The findings and considerations outlined in this report are intended to highlight tangible opportunities for MLHU and assist with the identification of recommendations that merit endorsement by the board of health.

These findings and considerations will be shared with Middlesex County Council to seek their input on the review findings and to identify recommendations they feel should be considered.

Additionally, these findings will be disseminated to all program teams at MLHU for inclusion in their ongoing planning processes.

Appendix B to Report No. 075-19

Review of Public Health Services in Middlesex County

Report Appendices

MIDDLESEX-LONDON HEALTH UNIT

September 2018

Appendix A

Community Health Status Report

For information, please contact:

Sarah Maaten
Epidemiologist
Middlesex-London Health Unit
E-mail: sarah.maaten@mlhu.on.ca

Contents

Executive Summary

An understanding of the overall health and wellbeing of the residents of Middlesex County[1] is key to effectively plan where to focus public health efforts. This information helps to assess where Middlesex County is doing well and understand where improvements can be made.

This report uses a collection of social and health indicators to create a picture of the health status of the Middlesex County population. It begins with an overview of population and geographic structure characteristics of the Middlesex County population, as well as the social factors, "social determinants" that influence people's health, including income, employment and education. It then looks specifically at health indicators based on local data available to public health related to deaths, illness and injury, behavioural risk factors, reproductive health and child health. Comparisons are provided, where the data permits, with Ontario and by sex and age group. This helps to identify priority groups in the population experiencing or at increased risk of poor health outcomes which may require special attention. Trends over time were also examined to indicate whether the health status in the Middlesex County community is improving or getting worse.

This report tells us that overall the population of Middlesex County is experiencing good health on a number of measures. Middlesex County residents are generally better off than the province in terms of three key determinants of health: income, education and employment. It is also worth noting that some issues of public health importance are lower in Middlesex County than the province including teen pregnancies, as well as opioid and cannabis-related emergency department visits. In addition, Middlesex County's average life expectancy at birth is similar to Ontario's overall at 81.0 years and residents that reach age 65 can expect to live 19.7 more years on average. A long life-expectancy is an indicator that a population is overall doing well on many factors that collectively influence our health.

While overall, Middlesex County is doing very well, there are some areas that warrant our attention. Chronic diseases (including cancers and cardiovascular diseases) and unintentional injuries continue to be the leading causes of avoidable death. Behavioural risk factors that contribute to the development of chronic disease and injury (e.g., alcohol consumption, physical inactivity and smoking), while not different than Ontario, continue to be higher in the population than is ideal for health and wellbeing. For instance, only about half of the population reported being active or moderately active during their leisure time. Preventable injuries of particular concern in the County include: falls, being struck or cut by objects, overexertion, motor vehicle crashes, off-road collisions and concussions. Concussion related emergency department visits have been on the rise in recent years in Middlesex County and are substantially higher than in the province overall.

In addition, some residents within Middlesex County are not as healthy as others or are at higher risk for poor health outcomes. For example, almost a quarter of children entering school in Middlesex County in

[1] In this report, "Middlesex County" refers to the eight lower tier municipalities (i.e., North Middlesex, Southwest Middlesex, Thames Centre, Strathroy-Caradoc, Middlesex Centre, Adelaide Metcalfe, Lucan Biddulph and the Village of Newbury) but excludes the City of London and the three First Nations communities (i.e., Chippewas of the Thames First Nation (Anishinaabeg of the territory of Deshkan Ziibiing), Munsee-Delaware Nation (Lenni Lenape) and Oneida (iOnyota'a:ka)) which are politically independent of the County. In addition, to honour the First Nations Ownership, Control, Access and Possession (OCAP) principles, data from the First Nations communities are not included in some of our public health data sources (e.g., BORN).

2015 were vulnerable on a least one area of the Early Development Instrument, and physical health and wellbeing was the single area with the greatest proportion of vulnerable children in Middlesex County.

In summary, this health status report provides a picture to understand and act on health gaps in Middlesex County. While continuing to provide programs and services that support and maintain the population's high levels of health, Middlesex County may benefit from additional efforts in chronic disease prevention including behavior risk factor reduction as well as injury prevention and targeted investments in children's early development.

1. Population characteristics

1.1. Summary

Meeting the public health needs of a population involves understanding the size and demographic characteristics of the population. For example, knowing that there is a high proportion of young children in a population might focus public health services on preventing childhood illnesses and injuries, while supporting families, and orienting communities, to ensure that children get the very best start in life as possible.

Middlesex County's population was 71,551 people according to the 2016 Census. The population of Middlesex County is concentrated in the three municipalities of: Strathroy-Caradoc, Middlesex Centre, Thames Centre. These three municipalities account for nearly three quarters of Middlesex County's population and one in five of the residents of Middlesex County live in the town of Strathroy itself.

Overall, there were similar numbers of males and females in Middlesex County in 2016. However, there were greater numbers of females than males in the oldest age group, 85 years and older (females 1025: males 545) which is consistent with the longer life expectancy for women in Middlesex County and may indicate that public health could continue to work to close this gap by reducing risk factors for males. Generally, the age pyramid of Middlesex County was constricted in the young adult category (ages 20-39). This may be consistent with a general pattern seen in Ontario where youth and young adults migrate to more urban areas in search of education and employment opportunities (R.A. Malatest & Associates Ltd., 2002). Compared to the population of Ontario, the population of Middlesex County lacks younger adults aged 20-39 years and has a higher proportion of older children and older adults particularly older adult males. This can become a health concern in places that are facing an aging population, as it may become more difficult for the working population to provide for those that may be more vulnerable in the non-working population (i.e., dependents generally considered aged 15 or younger or those 65 and older that are not typically working) (Williams, 2005) (United Nations, "n.d.").

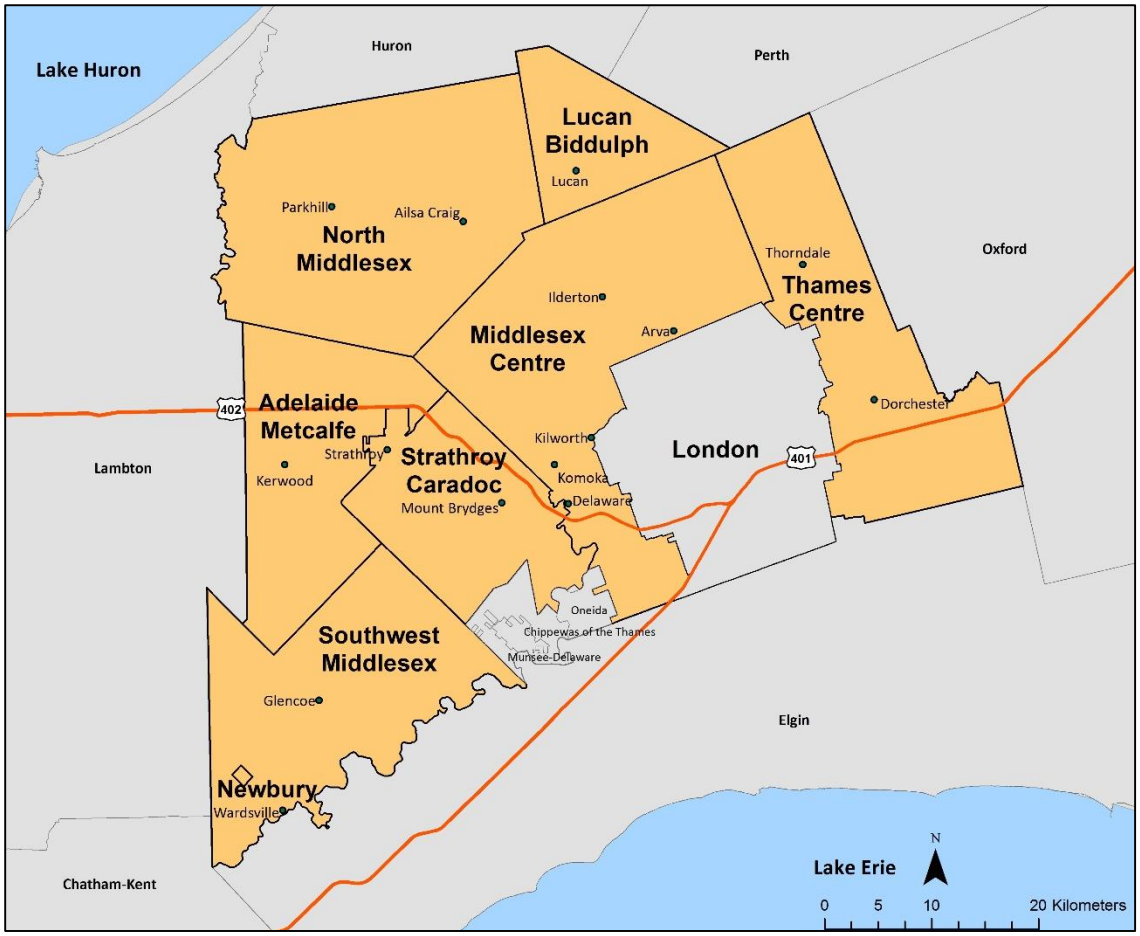
Middlesex County had few immigrants in the past five years, approximately 165 people in total in 2016. They made up a much lower percent of the population (0.2%) than in Ontario overall (3.5%) Recent immigrants were concentrated in the three largest municipalities that surround the City of London. In general, the health of immigrants tends to be better than that of the overall population. This is largely due to the fact that immigrants must generally be healthy to immigrate and often have better diets and health behaviours initially than the Ontario population. However, resettlement may create vulnerabilities and require tailored public health services to reduce the health risks and promote well-being to stay healthy.

About 97% of the population of Middlesex County spoke English most often at home in 2016. Middlesex County had approximately 90 people who spoke French most often at home in 2016. The Middlesex-London Health Unit is a designated French language service area, and therefore endeavors to provide services in both official languages. However, 2.4% of the Middlesex County population spoke neither English nor French at home on a regular basis and may require public health services that meet their specific language needs. This proportion is much lower compared to the 14.4% in Ontario that do not regularly speak an official language at home.

1.2. Geography

- Middlesex County covers an area of 2,821 square kilometres in Southwestern Ontario.
- It includes eight municipalities in order of geographic size: North Middlesex, Middlesex Centre, Thames Centre, Southwest Middlesex, Adelaide Metcalfe, Strathroy-Caradoc, Lucan Biddulph and the Village of Newbury (Figure 1).

Figure 1. Middlesex County, municipalities and neighbouring areas, 2018.



1.3. Total population and distribution

- The population of Middlesex County in 2016 was 71,551 (Table 1).
- Middlesex County was home to approximately 16% of the total population living in the Middlesex-London Health Unit's catchment area (MLHU's population was 455,526 including the City of London and the First Nations communities that participated in 2016 census).
- Strathroy-Caradoc had the largest population in Middlesex County (29.2%), followed by Middlesex Centre (24.1%) and Thames Centre (18.4%) (Table 1).
- The population of the town of Strathroy (14,401) accounted for 20.1% of Middlesex County's population.

- While the 2016 Census provides the most recent and comprehensive picture of the population, some people were missed during the count. Adjusted population figures will be released by Statistics Canada to more precisely account for this undercount, however until these are released the population in 2016 can generally be adjusted upward by 3.5% to 74,059 (Poirier & Vanderwerff, 2018). Population estimates for 2016 indicate that the count may be higher, closer to 76,093. For the purposes of calculating health indicators for this report, population estimates have been used to estimate the population denominators.

Table 1. Population of Middlesex County and the lower tier municipalities, 2016.

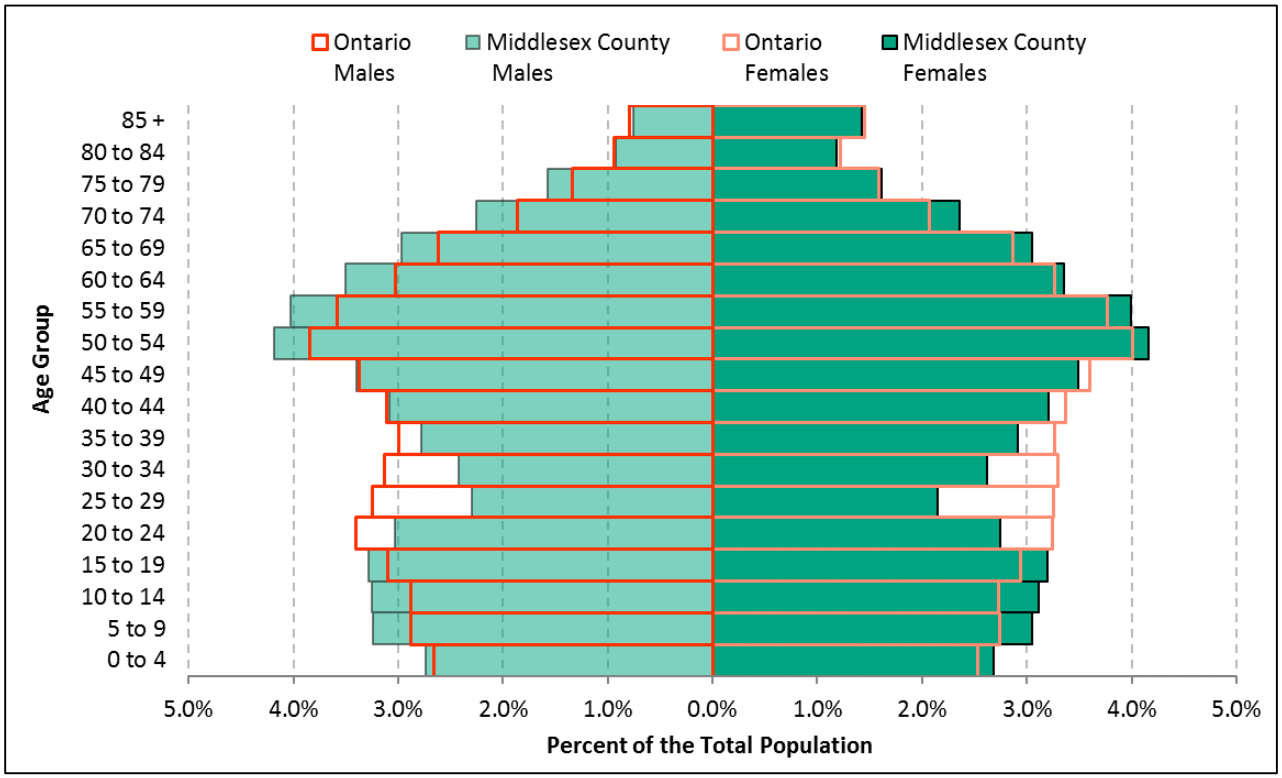
Region	Population	
	Count	Percent (%)
Strathroy-Caradoc	20,867	29.2
Middlesex Centre	17,262	24.1
Thames Centre	13,191	18.4
North Middlesex	6,352	8.9
Southwest Middlesex	5,723	8.0
Lucan Biddulph	4,700	6.6
Adelaide-Metcalfe	2,990	4.2
Newbury	466	0.7
Middlesex County	71,551	100

Source: Statistics Canada. 2016 Census of Population (Unadjusted)

1.4. Sex and age distribution

- There were similar numbers of males (35,640) and females (36,075) in Middlesex County. Much of this difference can be accounted for by the greater number of females than males in the oldest age group of 85 years and older (females 1025: males 545).
- Generally, the age pyramid was constricted in the young adult category (ages 20-39).
- Compared to the population of Ontario, Middlesex County had a greater proportion of children (both males and females) between the ages of 5 and 19 years. Middlesex County also had a greater proportion of older adults 50-79 years, particularly older adult males compared to Ontario (Figure 2).
- Middlesex County had a lower proportion of younger adults (both males and females) aged 20-39 (Figure 2). This finding was particularly interesting given the higher proportion of young children that might have parents in this age group.

Figure 2. Population Pyramid, percent of the population, by sex, by age group, Middlesex County and Ontario, 2016.



Data source: Statistics Canada. 2016 Census of Population (Unadjusted)

1.5. Recent immigrants

- In Middlesex County in 2016, approximately 165 people (0.2% of the population) were newcomers having recently immigrated to Canada (between 2011–2016; the five years prior to the 2016 Census). This is much lower than Ontario overall (3.5%) (Table 2). This is the most recent comprehensive information available, however it may not fully capture recent immigration waves, e.g., immigrants from Syria.
- Recent immigrants in Middlesex County were concentrated in the three largest municipalities adjacent to the City of London, specifically: Middlesex Centre, Thames Centre and Strathroy-Caradoc (Table 2 2).

Table 2. Number and percent of recent immigrants (immigrated between 2011–2016), Middlesex County and Ontario, 2016.

Region	Recent Immigrants	
	Number	Percent (%)
Adelaide-Metcalfe	10	0.3
Lucan Biddulph	15	0.3
Middlesex Centre	50	0.3
Newbury	0	0.0
North Middlesex	0	0.0
Southwest Middlesex	10	0.2
Strathroy-Caradoc	30	0.1
Thames Centre	50	0.4
Middlesex County	165	0.2
Ontario	472,170	3.5

Data source: Statistics Canada. 2016 Census of Population (Unadjusted)

1.6. Language

- 1,505 people (2.4%) of the population of Middlesex County spoke one of the non-official languages at home on a regular basis compared to 14.4% in Ontario (Table 3).
- 90 people in Middlesex County (0.02%) were estimated to speak French at home on a regular basis compared to 2.1% in Ontario in 2016 (Table 3).
- For those people in Middlesex County that spoke a non-official language at home, over half spoke Portuguese (505) or German (310). This is followed by Dutch, Polish and Spanish in the top five non-official languages spoken at home in Middlesex County (Table 4).

Table 3. Number and percent of the population, by language spoken most often at home, Middlesex County, lower tier municipalities and Ontario, 2016.

Region	English		French		Non-official language	
	Number	Percent (%)	Number	Percent (%)	Number	Percent (%)
Adelaide-Metcalfe	2,890	96.8	0	0.0	65	2.2
Lucan Biddulph	4,575	98.6	0	0.0	30	0.6
Middlesex Centre	16,480	97.0	25	0.1	295	1.7
Newbury	460	97.9	0	0.0	5	1.1
North Middlesex	6,045	98.3	0	0.0	55	0.9
Southwest Middlesex	5,625	98.3	0	0.0	45	0.8
Strathroy-Caradoc	19,615	95.4	35	0.2	600	2.9
Thames Centre	12,655	95.9	20	0.2	405	3.1
Middlesex County	**68,500**	**96.7**	**90**	**0.02**	**1,505**	**2.4**
Ontario	10,328,680	77.6	277,045	2.1	1,916,315	14.4

Data source: Statistics Canada. 2016 Census of Population (Unadjusted)

Table 4. Number of the population speaking non-official languages, by top five languages spoken at home in Middlesex County, Middlesex County, lower tier municipalities and Ontario, 2016.

Region	Portuguese	German	Dutch	Polish	Spanish	Other
Adelaide-Metcalfe	25	15	15	0	0	10
Lucan Biddulph	0	10	10	5	0	20
Middlesex Centre	15	20	20	50	30	140
Newbury	0	0	0	0	0	0
North Middlesex	5	5	15	5	0	15
Southwest Middlesex	10	15	10	0	0	5
Strathroy-Caradoc	430	5	20	5	10	115
Thames Centre	20	240	15	25	10	95
Middlesex County	**505**	**310**	**100**	**85**	**60**	**470**
Ontario	67,415	37,255	4,450	52,555	104,820	1,636,025

Data source: Statistics Canada. 2016 Census of Population (Unadjusted)

2. Social determinants of health

2.1. Summary

Understanding the conditions in which people are born, grow up, live, work and play—are known as the social determinants of health and contribute to the population health needs of communities. Public health aims to reduce the negative impact of social determinants that contribute to avoidable differences in the health status of populations (i.e., health inequities) (Ontario Ministry of Health and Long-Term Care, 2018). Better health is associated with better socio-economic status (Williams, 2018). Generally, Middlesex County is better off than the province in terms of three key determinants of health: income, employment and education. However, within Middlesex County some disparities persist.

Median household income was higher in five out of the eight municipalities and Middlesex County had a much lower percent of the population that was relatively worse-off financially living in low-income after tax in 2015 (2.8%) compared with Ontario (9.8%). However, children are disproportionally affected by low income within Middlesex County compared with seniors aged 65 and older.

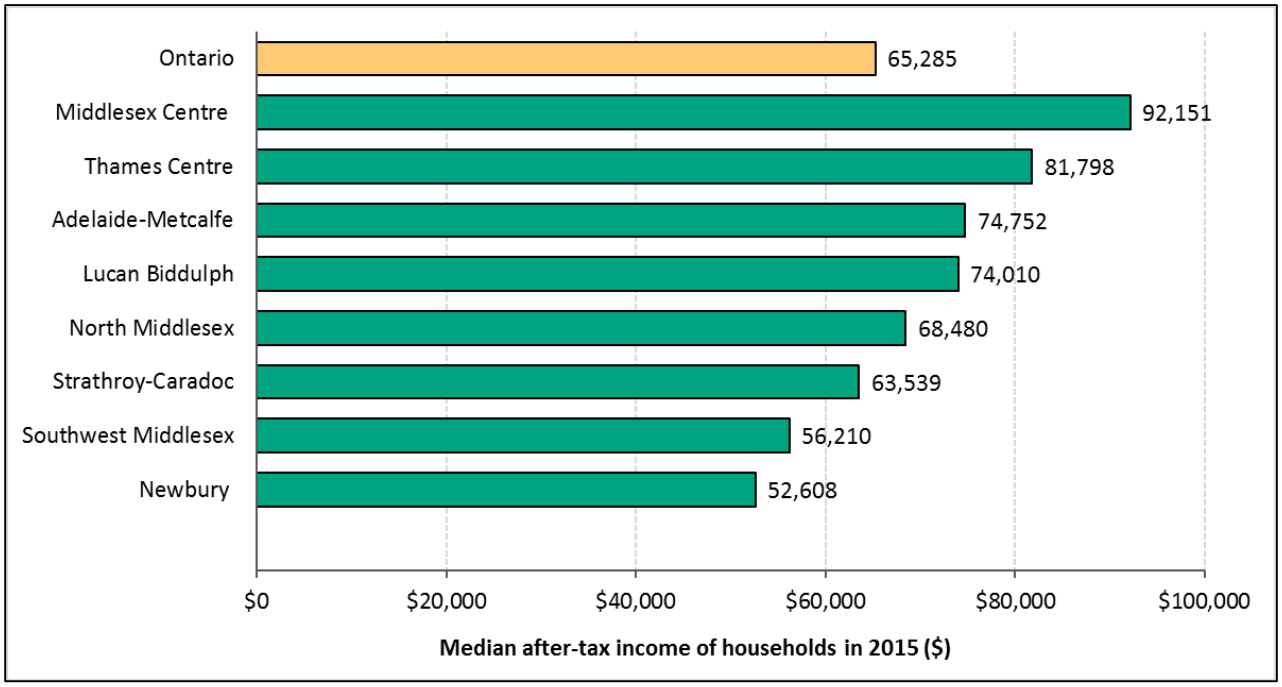
Unemployment rates in Middlesex County were generally better than the province and seven out of eight of the municipalities (all but the Village of Newbury) had rates lower than the province.

Post-secondary education levels in Middlesex County have increased over time from 58.6% in 2006 to 64.1% in 2016 and became similar to the province in 2016 (65.1%). However, the type of postsecondary education differed. The residents of Middlesex County were more likely to have a college, apprenticeship or trades certificate and less likely to have a university degree than Ontarians as a whole.

2.2. Income

- The 2015 median after-tax income for households was higher in five of the eight municipalities in Middlesex County compared with Ontario, specifically: Middlesex Centre, Thames Centre, Adelaide-Metcalfe, Lucan Biddulph and North Middlesex (Figure 3).
- Middlesex Centre households had a notably higher median income at $92,151.

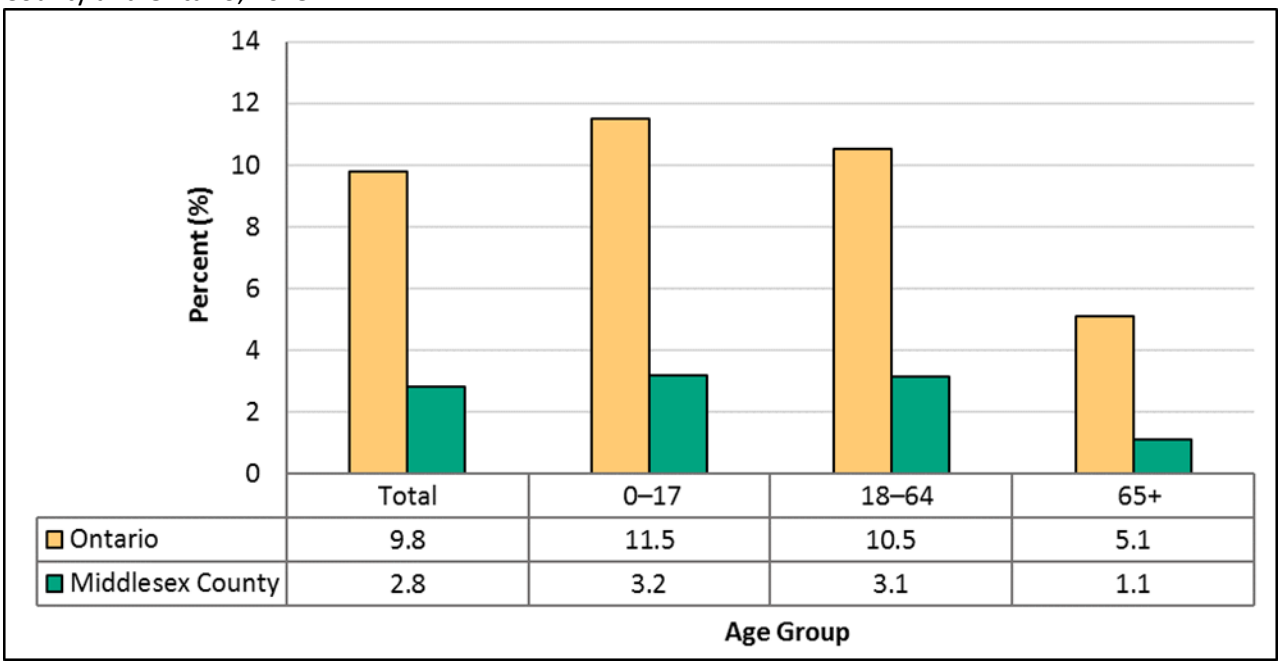
Figure 3. Median after-tax income of households, Middlesex County by lower tier municipality and Ontario, 2015.



Data source: Statistics Canada. 2016 Census of Population

- Overall, approximately 1,975 (2.8 %) of the population lived below the low-income cut-off (LICO) after-tax in 2015 in Middlesex County (Figure 4). Low-income cut-offs are used as a measure of those who are relatively worse-off financially, and not as an absolute measure of poverty. This measure reports the income level at which a family may be in financial difficulty because they will have to spend a greater proportion of their household income on food, clothing and shelter than the average family of a similar size. The cut-offs vary by family size and by size of community ("Table 4.3," 2017).
- The proportion of people living in low-income in Middlesex County was better (i.e., lower) than Ontario (9.8%).
- A greater percent of young people (less than 18 years of age) lived below the LICO in 2015 (3.2%) compared to seniors (aged 65+) (1.1%) in Middlesex County.

Figure 4. Percent of the population below the low income cut-off after tax, by age group, Middlesex County and Ontario, 2015.



Data source: Statistics Canada. 2016 Census of Population.

2.3. Employment

- In Middlesex County in 2015, approximately 1,835 or 4.6% were unemployed of those participating in the labour force aged 15 years and older (Table 5).
- Overall, the unemployment rate of Middlesex County was lower than the Ontario rate (7.4%). The 2015 unemployment rate by County municipality was lower than or the same as the Ontario rate for seven of the eight municipalities. The unemployment rate was higher in the Village of Newbury (18.4%) (Table 5).
- More recent information and time trends are not available for Middlesex County, however in general the employment rates in Ontario peaked in 2009 at 9.2% and have since improved.

Table 5. Unemployment count and rate for population aged 15+, Middlesex County lower tier municipalities and Ontario, 2015.

Region	Number Unemployed	Number Participating in Labour Force	Unemployment Rate (%)
Newbury	35	190	18.4
Lucan Biddulph	130	2,730	7.4
Strathroy-Caradoc	545	11,235	4.9
Southwest Middlesex	135	3,000	4.5
Thames Centre	345	7,680	4.5
Middlesex Centre	425	9,690	4.4
North Middlesex	155	3,535	4.4
Adelaide-Metcalfe	65	1,715	3.8
Middlesex County	1,835	39,775	4.6
Ontario	529,525	7,141,675	7.4

Data source: Statistics Canada - 2016 Census, 25% Sample Data. Catalogue Number 98-400-X2016365.

2.4. Education

- In 2016, in Middlesex County, 9.9% of adults aged 25-64 had not completed high school; 26.1% had a high school certificate or equivalent and 64.1% had a postsecondary certificate, diploma or degree (Table 6).

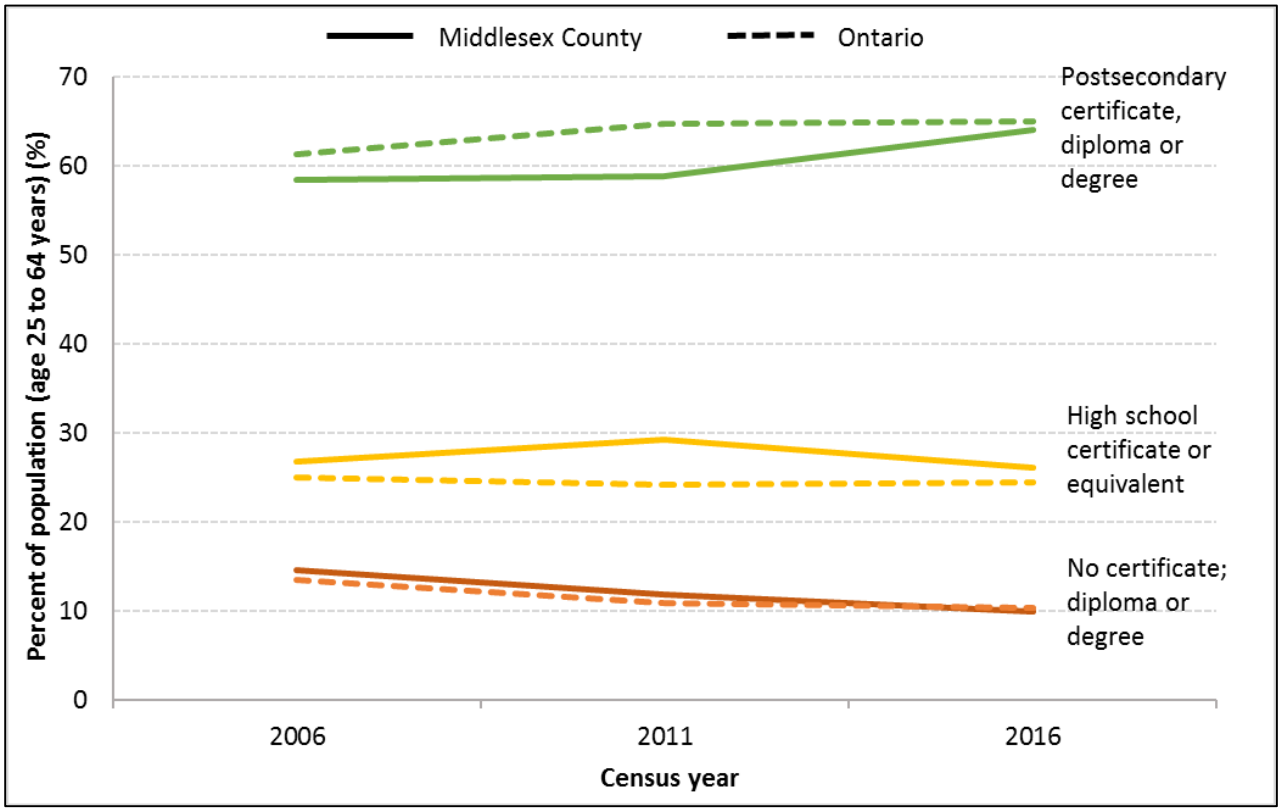
Table 6. Percent of the population (age 25–64) by highest educational attainment, Middlesex County and Ontario, 2016.

Highest Level of Educational Attainment	Middlesex County (%)	Ontario (%)
No certificate, diploma or degree	9.9	10.4
High school certificate or equivalent	26.1	24.5
Postsecondary certificate, diploma or degree	64.1	65.1
Apprenticeship or trades certificate or diploma	9.2	6.2
College, CEGEP or other non-university certificate or diploma	33.7	24.7
University certificate or diploma below the bachelor level	2.2	2.4
University certificate, diploma or degree	19.0	31.9

Data source: Statistics Canada, 2016 Census of the Population.

- The percent of the population aged 25–64 with postsecondary education in Middlesex County increased over time from 58.5% in 2006 to 64.1% and is now similar to Ontario (65.1%) (Figure 5)
- The type of postsecondary educational certificate obtained by the population in Middlesex County differs from Ontario. The residents of Middlesex County were more likely to have a college diploma (County 33.7%; Ontario 24.7%) or certificate in the apprenticeship or trades (County 9.2%; Ontario 6.2%) and less likely to have a university diploma (County 19.0%; Ontario 31.9%) (Figure 5).

Figure 5. Trends over time in highest level of educational attainment, percent of the population (25–64 years), Middlesex County and Ontario, 2006–2016.



Data source: Statistics Canada, 2006 Census, 2011 NHS, 2016 Census.

3. Deaths

3.1. Summary

Death rates, also referred to as mortality rates, are frequently used as indicators of the overall health of a population. Trends in mortality can illustrate the health problems in our community that have the biggest impact on the population. Changes in mortality rates over time may be due to several different factors taking place in the community such as changes in the standard of living, the environment or other social determinants of health. Changes may also be due to access to quality health care, improved diagnosis and treatment of illness or the emergence of new health issues not seen before. Health protection and promotion efforts, such as those related to smoking prevention and cessation, may also have an important impact on mortality rates in populations. Rates of leading causes of death indicate which diseases affect a community in the biggest way. Looking at the age and sex of people who die from each disease gives an idea of who is affected most by each cause of death.

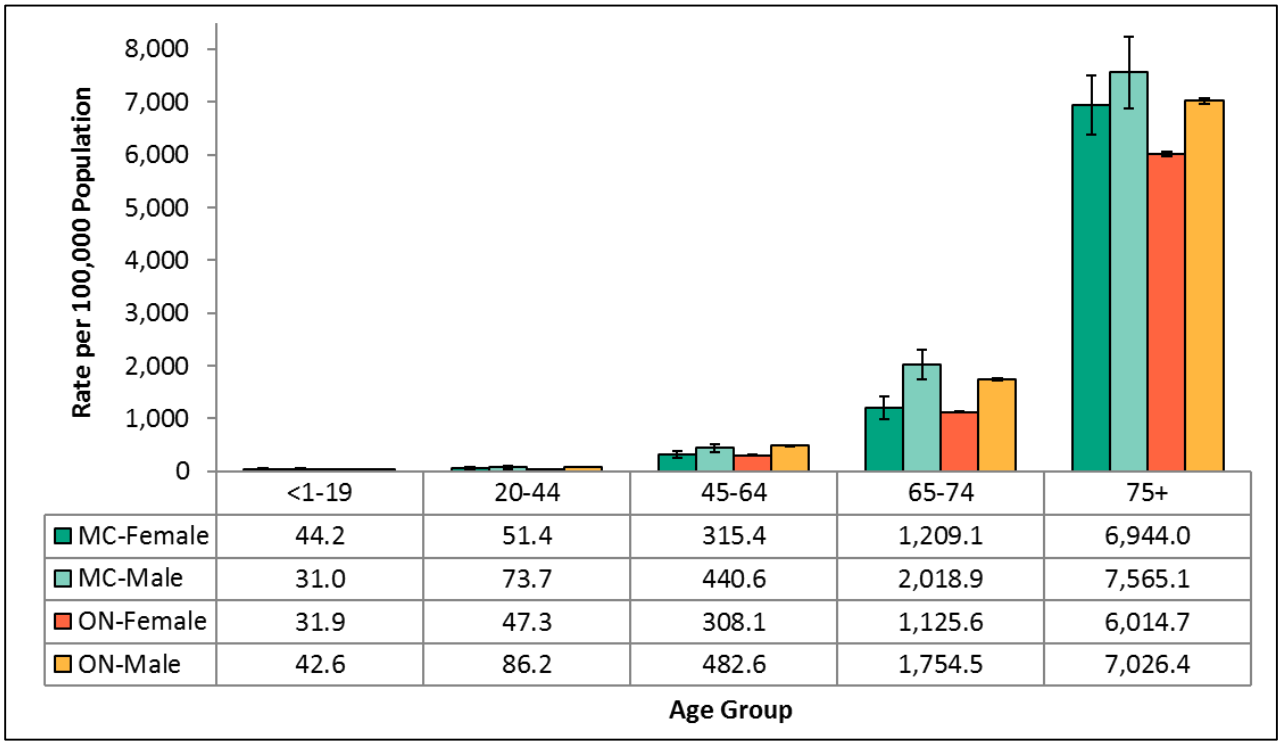
Life expectancy is the average length of time that an individual will live if subjected to the mortality experience for the specified population and time period. Using data from 2010 to 2012, Middlesex County residents can expect to live on average 81.0 years at birth and 19.7 more years at age 65. The life expectancy for males was lower than females and the mortality rate for males was higher than for females.

Males were much more likely to die prematurely than females in Middlesex County, generally reflecting higher rates of deaths in males at younger ages. Deaths due to breast cancer and lung cancer were the most common cause of premature death for females in Middlesex County; whereas for males it was ischemic heart disease.

3.2. Deaths by age group

- Death rates in Middlesex County and Ontario show an expected large rise in older age groups, particularly among those aged 75 years and older (Figure 6). For both sexes, mortality rates among those 75 years and older were higher for Middlesex County than Ontario, however the rates were only significantly different for females.
- For all groups above 20 years of age, age-specific mortality rates in Middlesex County were higher for males than for females. In Ontario, age-specific mortality rates were higher for males in age all groups.

Figure 6. All cause mortality rates per 100,000 population, by sex, by age group, Middlesex County and Ontario, 2010 to 2012 average.



	<1-19	20-44	45-64	65-74	75+
MC-Female	44.2	51.4	315.4	1,209.1	6,944.0
MC-Male	31.0	73.7	440.6	2,018.9	7,565.1
ON-Female	31.9	47.3	308.1	1,125.6	6,014.7
ON-Male	42.6	86.2	482.6	1,754.5	7,026.4

Data source: Ontario Mortality Data, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: June 21, 2018; Population Estimates, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH Ontario, Date Extracted: May 11, 2018.

3.3. Leading causes of death

- The top eight leading causes of death between 2010 and 2012 in Middlesex County were chronic diseases (Table 7): ischemic heart disease, dementia and Alzheimer's disease, lung cancer, cerebrovascular diseases, lower respiratory diseases, colorectal cancer, diabetes and lymph and blood cancer. These accounted for 58.4% of all deaths. The ninth and tenth leading causes of death were influenza and pneumonia, and falls, respectively.
- The top ten leading causes of death were the same for Middlesex County and Ontario, with the top eight causes following the same ranking order.
- Ischemic heart disease, the leading cause of death in Middlesex County, accounted for 80% more deaths as lung cancer, the second leading cause of death.
- The categories used for leading causes of death are based on a standard list derived by Becker *et al*. (2006) using the International Statistical Classification of Diseases and Related Health Problems tenth revision (ICD-10). They are ranked to demonstrate and compare the most frequently occurring causes out of the total number of deaths in a population. The number of deaths presented is the average number per year during this time period.

Table 7. Number, percent and rank of the leading causes of death, Middlesex County and Ontario, 2010 to 2012 annual average.

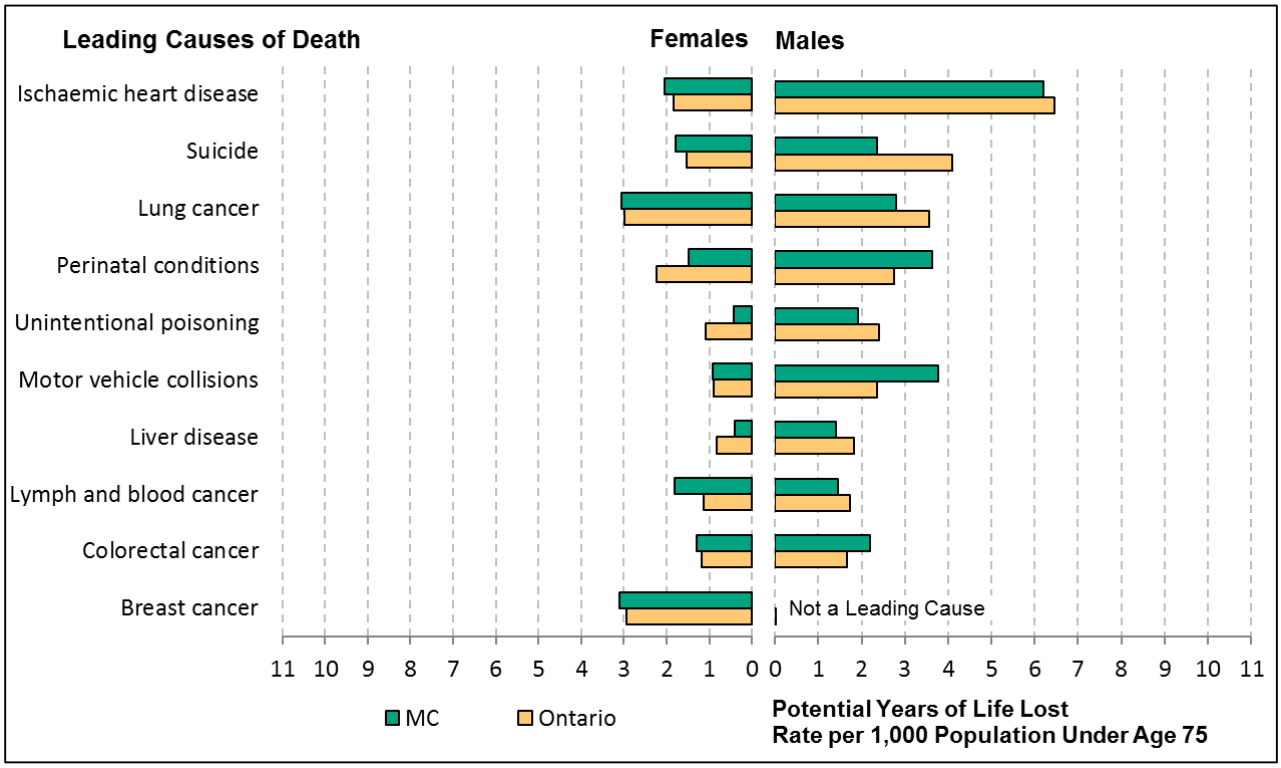
Leading Causes of Death	Average Annual Number of Deaths Middlesex County	Percent of All Deaths Middlesex County (%)	Ontario Rank
Ischemic Heart Disease	92	18.2	1
Dementia and Alzheimer's Disease	51	10.1	2
Lung Cancer	38	7.5	3
Cerebrovascular Diseases, incl. Stroke	31	6.2	4
Lower Respiratory Diseases	26	5.2	5
Colorectal Cancer	21	4.2	6
Diabetes	20	4.0	7
Lymph and Blood Cancer	14	2.9	8
Influenza and Pneumonia	14	2.7	10
Falls	13	2.7	9

Data source: Ontario Mortality Data, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: June 21, 2018.

3.4. Potential years of life lost (PYLL)

- PYLL is an indicator of premature mortality. It measures the number of years lost from deaths before age 75. The younger a person is when they die, the greater the number of potential years of life that are lost.
- As was the case in Ontario, males showed higher rates of PYLL than females in Middlesex County, generally reflecting higher rates of deaths in males at younger ages (Figure 7).
- Deaths due to breast cancer and lung cancer showed the highest PYLL rates for females in Middlesex County. The PYLL rates for both were slightly higher in Middlesex County females compared to Ontario females.
- Ischaemic heart disease had the highest PYLL rate for males in both Middlesex County and Ontario. The PYLL rate for Middlesex County males was slightly lower than that for Ontario.
- Deaths due motor vehicle collisions had the 2nd highest PYLL rate for males in Middlesex County; a rate higher than that for Ontario.
- The presence of deaths due to perinatal conditions in this list of PYLL rates is largely reflective of the very young ages at which people die of these conditions. Compared to Ontario, the rate among women was lower for Middlesex County females, but higher for Middlesex County males.
- For all cancers on the list (i.e., lung, lymph and blood, colorectal and breast), the PYLL rates for women were higher for Middlesex County than Ontario.

Figure 7. Potential years of life lost (PYLL) for leading causes of death, by sex, Middlesex County Ontario, 2010 to 2012 average.



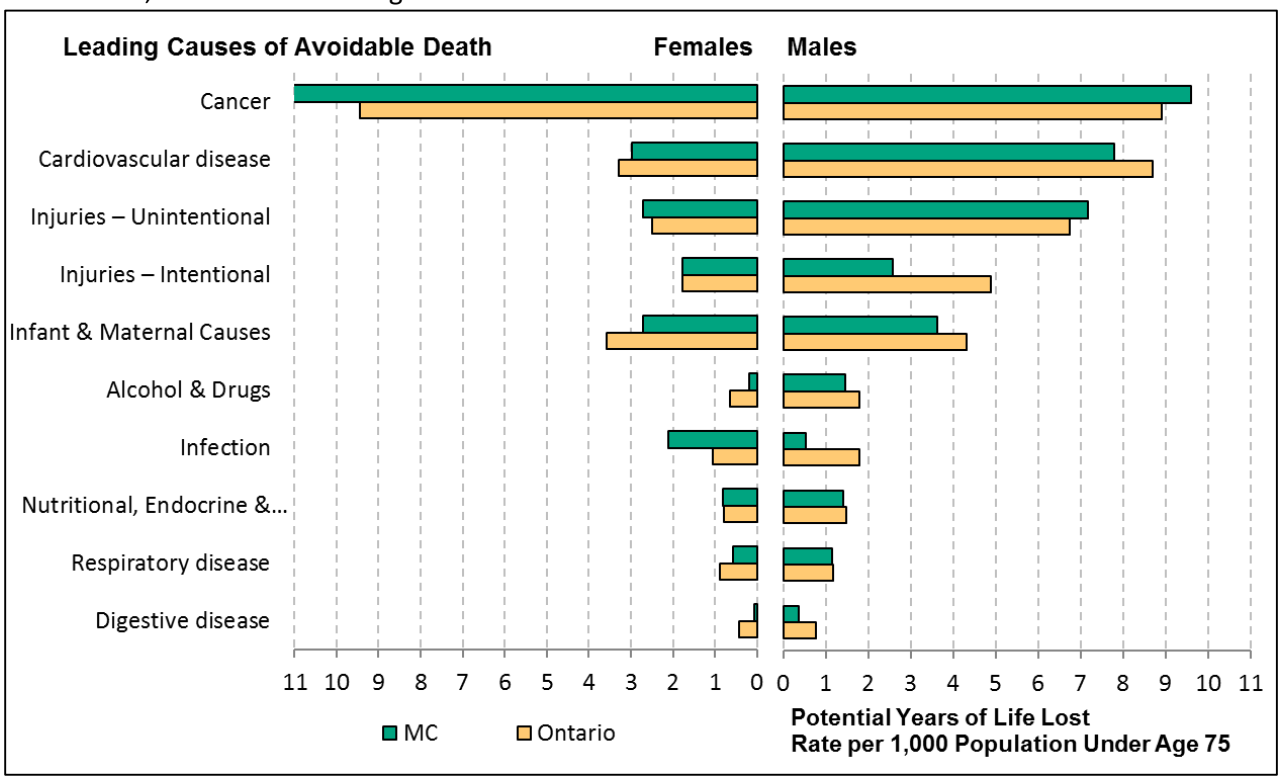
Data source: Ontario Mortality Data, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: June 21, 2018. Population Estimates, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH Ontario, Date Extracted: May 11, 2018.

3.5. Avoidable death

- Avoidable death refers to the number of deaths for every 1,000 people that could potentially have been avoided through effective health care, health promotion and disease prevention policies (CIHI, 2012).
- The lower the number the better; it means that fewer individuals died prematurely from preventable or treatable causes.
- As was the case in Ontario, males showed higher rates of PYLL from avoidable causes than females in Middlesex County, generally reflecting higher rates of deaths in males at younger ages (Figure 8).
- For both sexes, cancer was the leading cause of avoidable death in both Middlesex County and Ontario. The PYLL rates for both sexes were higher for Middlesex County residents compared to Ontario.
- Cardiovascular diseases, such as ischaemic heart disease, cerebrovascular disease, and rheumatic heart disease, were the second leading cause of avoidable death for both sexes in Middlesex County. PYLL rates for both females and males in Middlesex County were lower than Ontario.
- Among females in Middlesex County, the third leading causes of avoidable death were due to unintentional injuries (e.g., falls, accidental poisoning, drowning) and infant and maternal causes (e.g., complications of perinatal period, congenital malformations, chromosomal anomalies).

- Among males in Middlesex County, the third leading cause of avoidable death was unintentional injuries and the PYLL rate was higher than Ontario.

Figure 8. Potential years of life lost from leading causes of avoidable death, by sex, Middlesex County and Ontario, 2010 to 2012 average.



Data source: Ontario Mortality Data, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: June 21, 2018. Population Estimates, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH Ontario, Date Extracted: May 11, 2018.

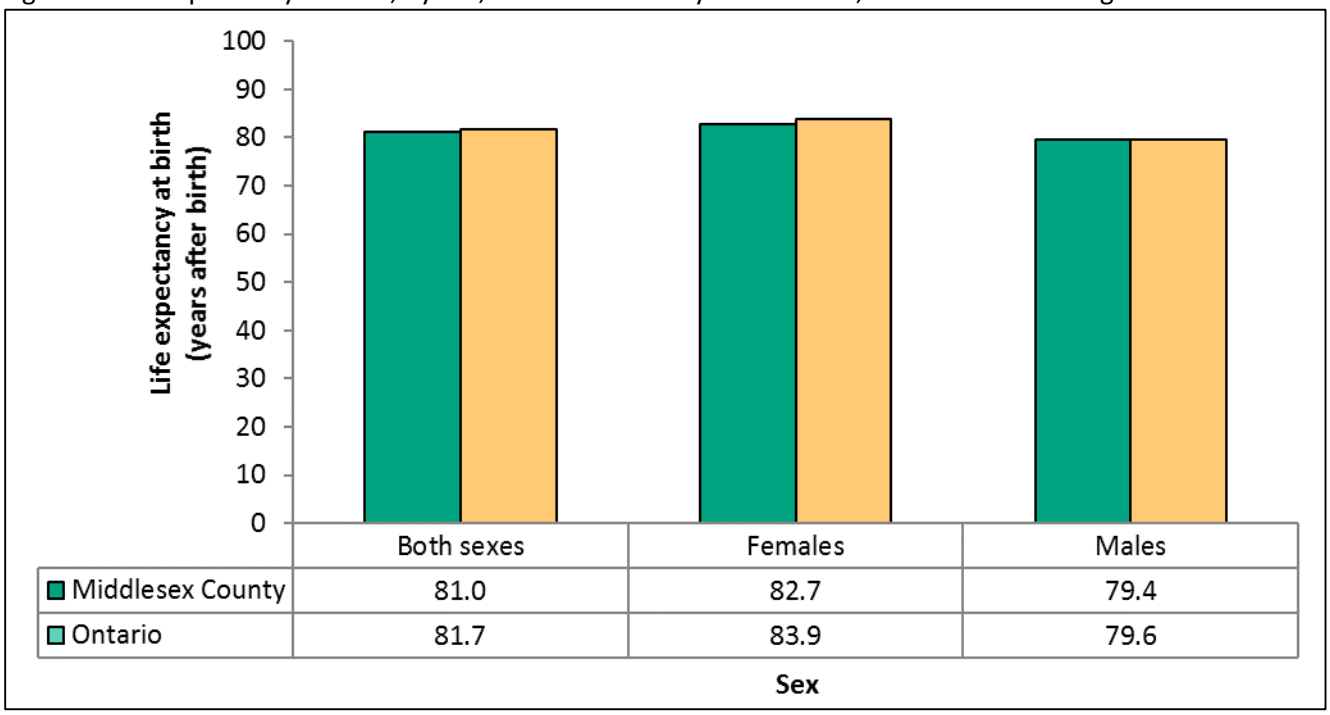
3.6. Life expectancy

- Life expectancy is the average length of time that an individual will live if subjected to the mortality experience for the specified population and time period.
- Years of life expectancy are based on life tables containing mortality rates specific to sex and age groups for Middlesex County during 2008 to 2012. The resulting life expectancies are averages which are assumed to hold true for as long as the mortality picture for that time period remains the same.
- Middlesex County residents can expect to live on average 81.0 years at birth and 19.7 more years at age 65.

3.6.1. Life expectancy at birth

- Life expectancies were higher for females than males at birth and at age 65 (Figure 9).
- Life expectancy at birth and at age 65 were slightly lower for Middlesex County compared to Ontario.

Figure 9. Life expectancy at birth, by sex, Middlesex County and Ontario, 2008 to 2012 average.

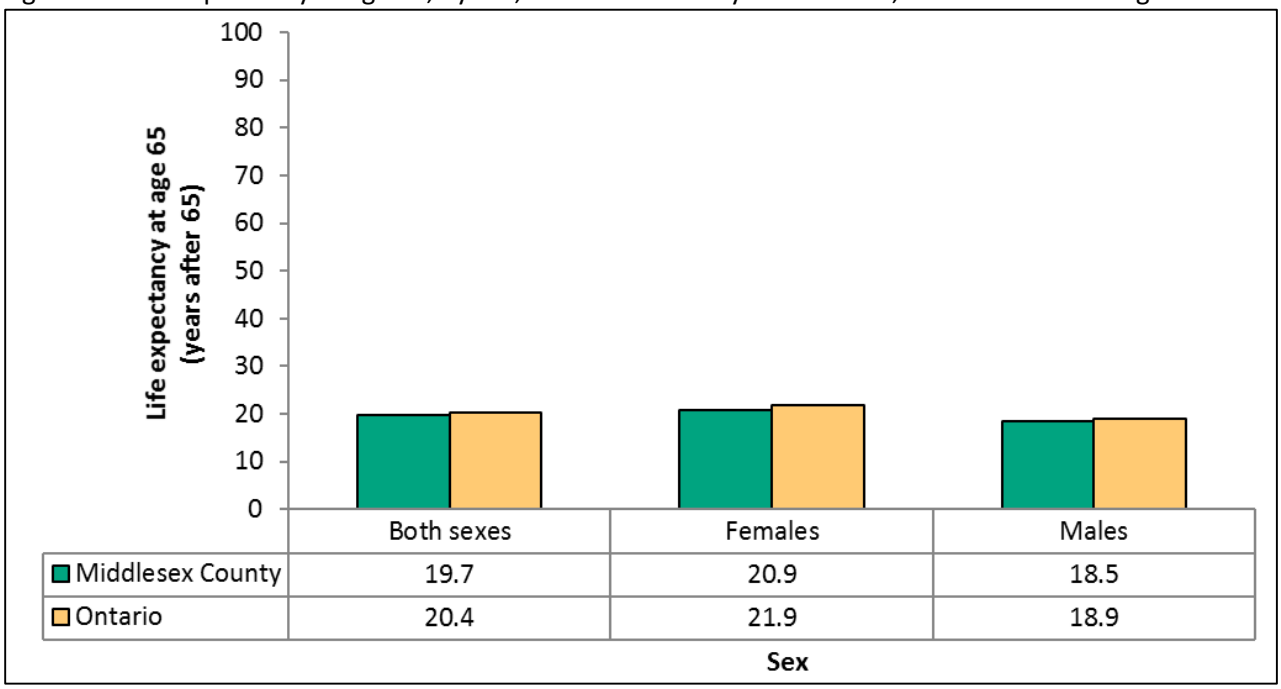


Data source: Ontario Mortality Data, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: June 21, 2018.

3.6.2. Life expectancy at age 65

- Life expectancy at age 65 was higher for females than males for both Middlesex County and Ontario (Figure 10).
- Middlesex County residents can expect to live on average an additional 19.7 years at age 65, compared to 20.4 years for Ontario.

Figure 10. Life expectancy at age 65, by sex, Middlesex County and Ontario, 2008 to 2012 average.



Data source: Ontario Mortality Data, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: June 21, 2018.

4. Illness and Injury

4.1. Summary

Chronic diseases make up the leading cause of premature death and potential years of life lost in Middlesex County. While less impactful than chronic disease, injuries are also within the top causes of death and show a large burden in potential years of life lost. Looking at trends of health services use for chronic conditions and injuries gives a sense of the diseases and conditions that affect people throughout their lives. By combining this information with leading causes of death and behavioural risk factor data, public health agencies can determine how to effectively focus health promotion and protection activities.

Healthy weight has been measured by body mass index (BMI). This is ratio of weight to height (kg/m^2). Normal weight is classified as a BMI of 18.5–24.9, overweight is a BMI of 25.0–29.9 and obese is a BMI 30.0 and above. It is an important predictor of many chronic conditions including several of the leading preventable causes of death in Middlesex County. Over 60% the population was considered overweight or obese in Middlesex County in 2013/14. This represents an area of population health risk. Diabetes is a chronic condition for which BMI is a predictor. Looking at the rates of diabetes in the population we see a fairly steady rate over time between the years of 2004 to 2017. In general, the Middlesex County rate is lower than that of the province and males are disproportionately affected with higher rates.

Injuries commonly bring people to the emergency department for care and Middlesex County is no exception. In fact, rates of emergency department (ED) visits for injury were significantly higher in Middlesex County (127.3 per 1,000 people) compared to Ontario (101.1 per 1,000 people). The rate of deaths from injuries, however, was not higher than Ontario. This indicates that residents of Middlesex County experienced more non-fatal injuries than those in the province overall. The most common reason for an injury-related visit to the ED was falls; which was higher in females than males. Being struck against or cut by objects and overexertion were the next most common causes for both sexes. Motor vehicle crashes were the fifth most common injury for females and sixth most common for males. Off-road vehicle collision rates were higher than the provincial rate; whereas, pedestrian-related injury visits are lower. There is no difference with cycling collisions.

Intentional injuries such as the ED visit rate for self-harm in Middlesex County was similar to the Ontario rate. The rate of assault-related ED visits was significantly lower than the province.

Concussion-related ED visits have also been on the rise in recent years and those in Middlesex County experience a substantially higher rate than in the province overall. Local research indicates children in rural populations who experience concussions are much more likely to have sustained the injury in a motor vehicle crash compared to their urban counterparts (Stewart, Gilliland & Fraser, 2014).

The harms associated with drug use is important to consider in light of the public health crisis related to opioids and cannabis legalization in Canada. In Ontario there has been an increase over time in emergency department visits associated with each of these substances both for poisonings and related mental or behavioural disorders. It is worth noting that rates of ED visits in Middlesex County are lower than Ontario and the difference is statistically significant for both cannabis and opioids. Cannabis visit rates have increased significantly since 2004. However, opioid ED visits have not shown a statistically

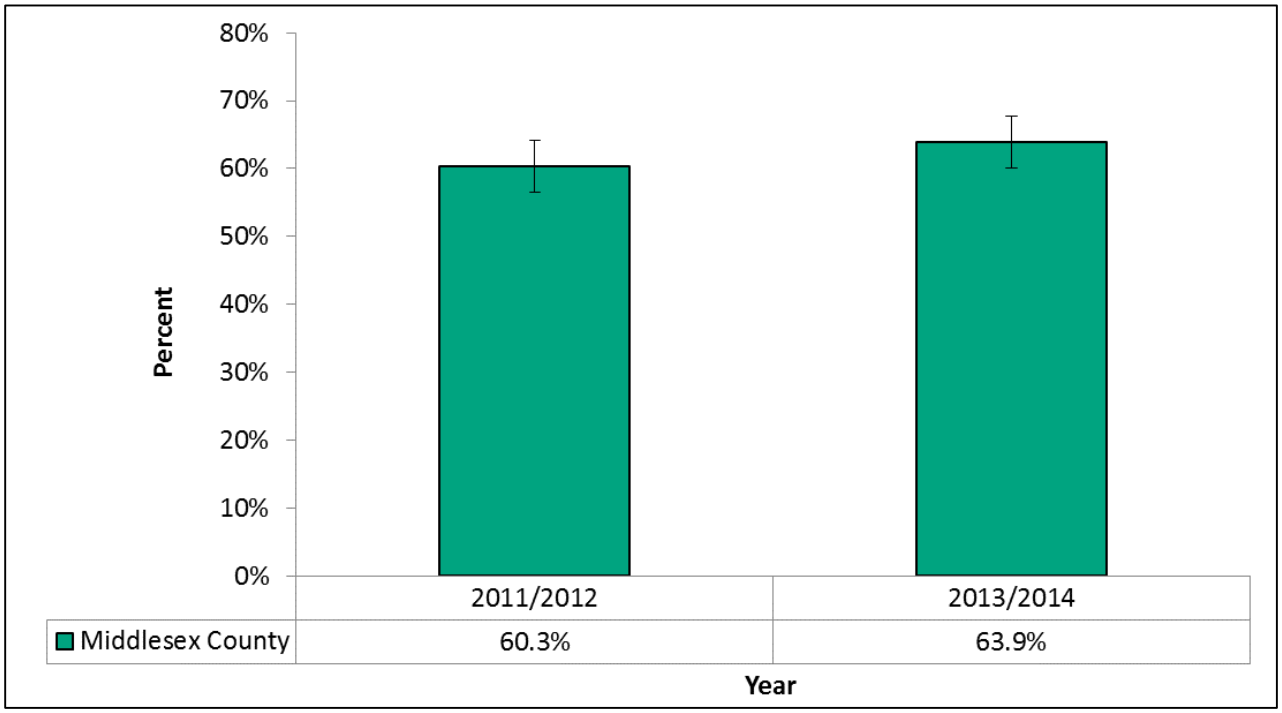
significant increase between 2004 and 2017. This is a marked difference from the trend seen in Ontario and surrounding communities.

There are approximately 70 diseases of public health significance that are reported to the local Medical Officer of Health under the *Health Protection and Promotion Act*. Between 2005 and 2017, the average reported incidence rates of HIV/AIDS, hepatitis C, and active tuberculosis cases was lower among Middlesex County residents compared to the provincial rate.

4.2. Healthy weights

- In 2013/2014, 63.9% of the adults aged 18 and over were considered overweight or obese based on their body mass index (BMI) (Figure 11).
- This was not significantly higher than the rate seen in 2011/2012 in Middlesex County.

Figure 11. Percent of population (age 18+) overweight or obese according to body mass index category, Middlesex County and Ontario, 2011–2012 and 2013-2014.

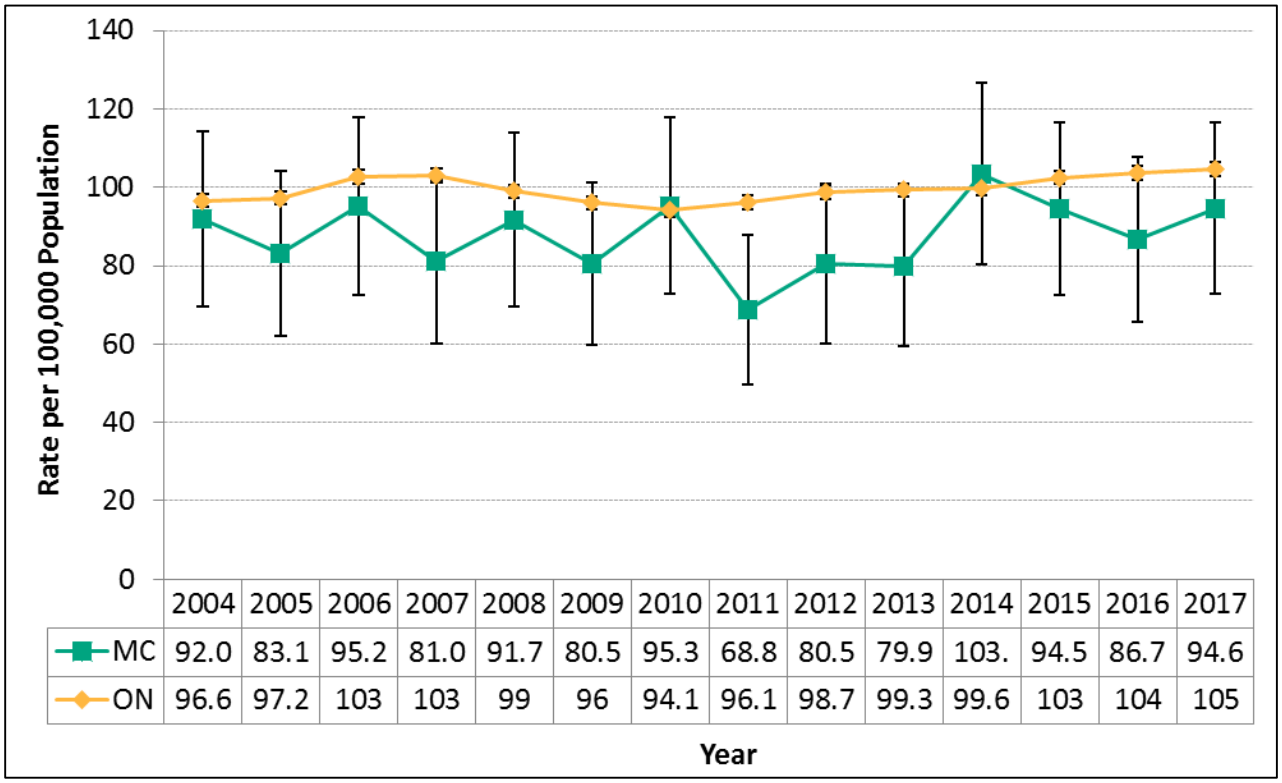


Data source: Rapid Risk Factor Surveillance System [Jan 2011 – Dec 2014], Extracted August 24, 2018

4.3. Diabetes

- The rate of hospitalizations for diabetes was 94.6 per 100,000 in 2017 (Figure 12).
- Between the years 2004 and 2017 the rate of diabetes-related hospitalizations in Middlesex County did not change significantly.
- Rates of hospitalizations for diabetes in Middlesex County were generally lower than provincial rates but not significantly. Because of small population numbers the rates varied from year to year but no clear upward or downward trend emerged over the time period.
- Males tended to have higher rates compared to females, but this difference was not statistically significant in all years (data not shown).

Figure 12. Diabetes hospitalizations, unadjusted rates per 100,000 population, Middlesex County and Ontario, 2004 to 2017.



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
MC	92.0	83.1	95.2	81.0	91.7	80.5	95.3	68.8	80.5	79.9	103.	94.5	86.7	94.6
ON	96.6	97.2	103	103	99	96	94.1	96.1	98.7	99.3	99.6	103	104	105

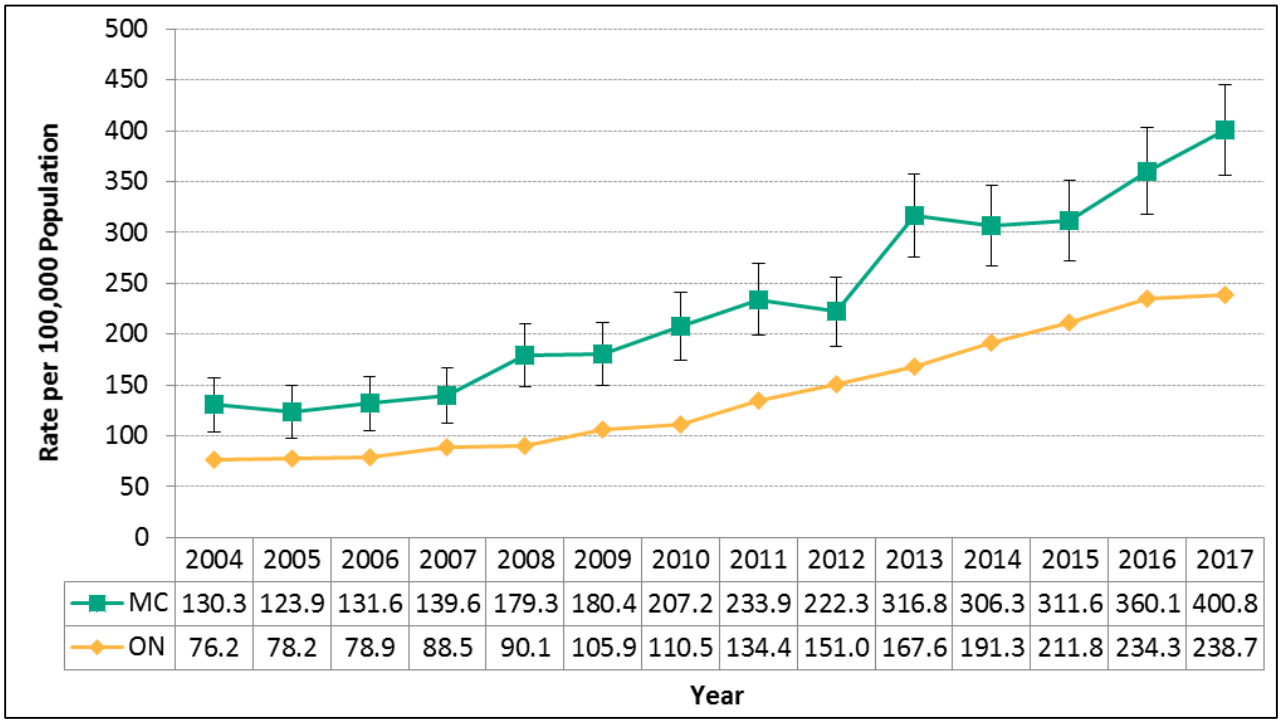
Data source: Inpatient Discharges 2004-2017, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: June 16, 2018.

4.4. Injuries

4.4.1. Concussions

- Concussion-related visits to the emergency department have been on the rise since 2004 for both Middlesex County and Ontario residents (Figure 13). The rate in 2017 was more than three times higher than it was in 2004 jumping to 400 visits per 100,000 people. This change over time is statistically significant.
- Over the entire time period the rate in Middlesex County has been significantly higher than the provincial rate.
- There was no statistically significant different in the rate between males and females (data not shown).

Figure 13. Unadjusted rates of emergency department visits for concussions per 100,000 population, Middlesex County and Ontario, 2004 to 2017.



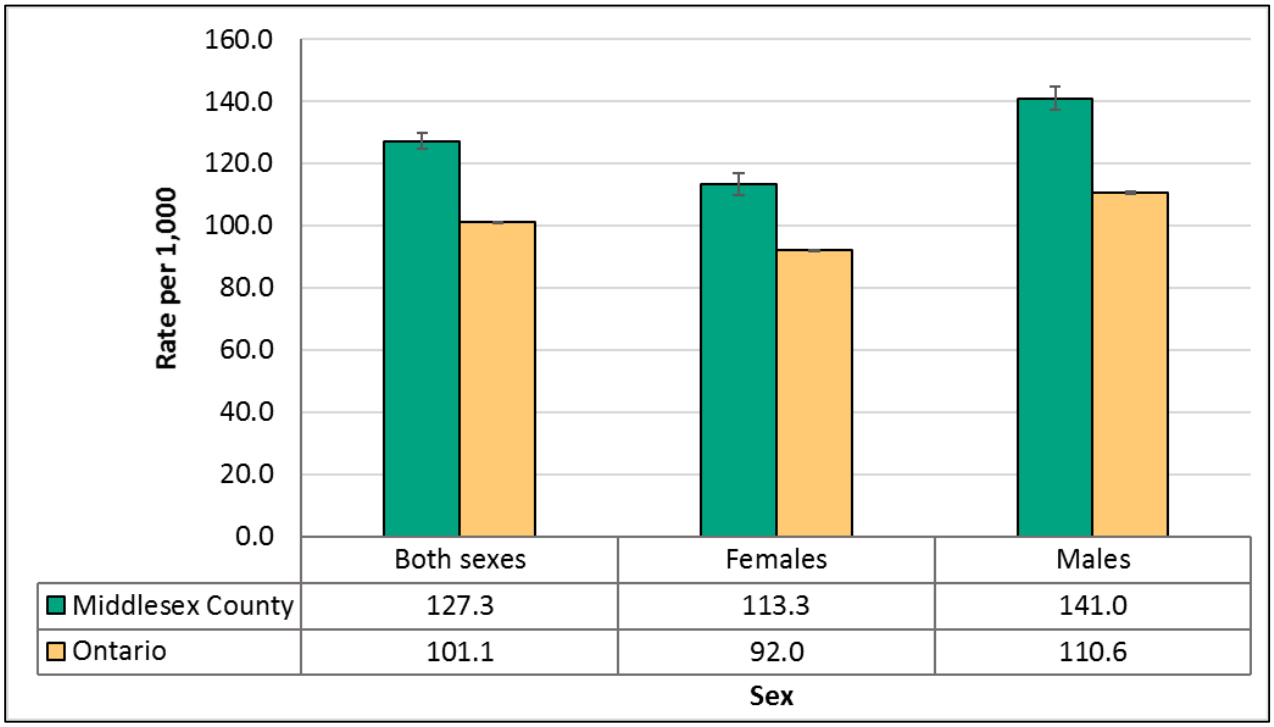
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
MC	130.3	123.9	131.6	139.6	179.3	180.4	207.2	233.9	222.3	316.8	306.3	311.6	360.1	400.8
ON	76.2	78.2	78.9	88.5	90.1	105.9	110.5	134.4	151.0	167.6	191.3	211.8	234.3	238.7

Data source: National Ambulatory Care Reporting System (NACRS), Ontario Ministry of Health and Long-term Care, IntelliHEALTH ONTARIO, Extracted: August 9, 2018.

4.4.2. Unintentional injuries

- Unintentional injury ED visit rates were significantly higher in Middlesex County than Ontario for both sexes. The rate in males was significantly higher than females (Figure 14).
- Falls were the leading cause of injuries bringing people in Middlesex County to the emergency department between 2015 and 2017. This is, by far, the injury cause with the largest number of ED visits for females (Table 8).
- Falls were also the leading cause of death due to injury in both men and women and transport collisions the 2nd leading cause of death (data not shown).
- Injuries related to being struck or cut by objects and overexertion were the next most common causes of emergency department visits.
- Motor vehicle collisions were the fifth leading cause of injury related ED visits in females and the sixth most common in males.
- Included within the motor vehicle and other land transport collisions categories are injuries related to cycling (148.7 ± 27.5 visits per 100,000 people) off-road vehicle (110.4 ± 23.7) and pedestrian-related (30.8 ± 12.5) collisions. Note that off-road vehicle collision rates were higher than the provincial rate; whereas, pedestrian-related injury visits were lower. There is no difference with cycling collisions.
- Emergency department visit rates for intentional injuries such as self-harm in Middlesex County (124.1 ± 25.1 visits per 100,000 people) was similar to the Ontario rate whereas assault-related ED visits (160.1 ± 28.5) were significantly lower than the province.

Figure 14. Emergency department visits for all injuries, unadjusted rates per 1,000 population, by sex, Middlesex County and Ontario, 2015 to 2017 annual average.



Data source: National Ambulatory Care Reporting System (NACRS), Ontario Ministry of Health and Long-term Care, IntelliHEALTH ONTARIO, Extracted: August 16, 2017.

Table 8. Counts and unadjusted rates per 100,000 population, by sex, Middlesex County, 2015 to 2017 annual average.

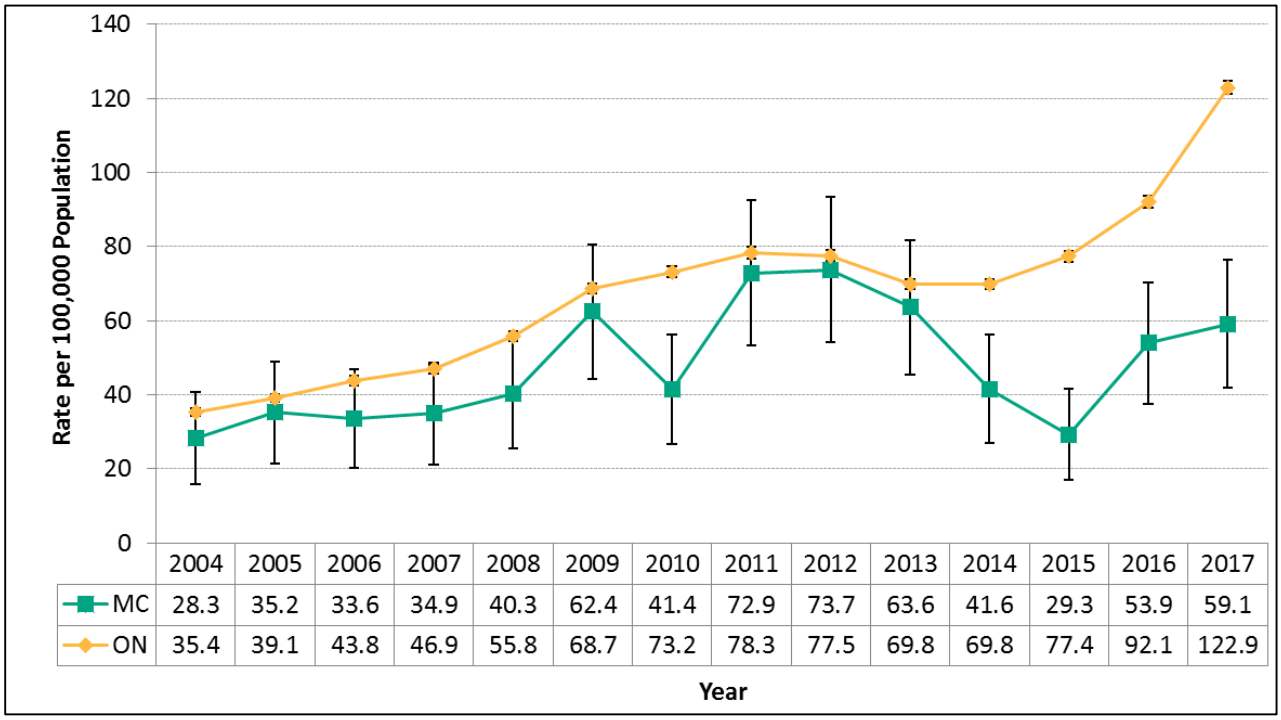
Middlesex County rank	Cause Unadjusted rate per 100,000 ± 95% Confidence Interval (Count)	
	Females	Males
1	Falls* 4,049.6 ± 203.1 (1527)	Falls* 3,377.3 ± 184.7 (1285)
2	Struck by/against object* 1,708.4 ± 131.9 (644)	Struck by/against object* 2,812 ± 168.5 (1,070)
3	Overexertion* 1,004.0 ± 101.1 (379)	Cut/pierced by object* 1,687.3 ± 130.5 (642)
4	Cut/pierced by object* 742.4 ± 87 (280)	Overexertion* 1,063.6 ± 103.6 (405)
5	Motor vehicle collision 637.2 ± 81 (240)	Foreign body in eye/orifice* 1,049.5 ± 102.9 (399)
6	Bite by Dog or other Mammal* 332.3 ± 58.2 (125)	Motor vehicle collision* 807.7 ± 90.3 (307)
7	Caught/crushed between objects* 295.2 ± 54.8 (111)	Caught/crushed between objects* 437.2 ± 66.4 (166)
8	Foreign body in eye/orifice 281.0 ± 53.5 (106)	Bite by dog or other mammal* 261.9 ± 51.4 (100)
9	Insect bite 198.9 ± 45.0 (75)	Other land transport collisions 223.4 ± 47.5 (85)
10	Other land transport collisions* 197.1 ± 44.8 (74)	Poisoning 184.9 ± 43.2 (70)
All unintentional injuries*	11,008.6 ± 334.9 (4,152)	13810.5 ± 373.4 (5,254)

Data source: National Ambulatory Care Reporting System (NACRS), Ontario Ministry of Health and Long-term Care, IntelliHEALTH ONTARIO, Extracted: August 16, 2017.
Note: * indicates the MC sex-specific rate is statistically significantly higher than the ON sex-specific rate.

4.5. Opioids

- Emergency department visits related to opioid poisonings combined with mental or behavioural disorders due to opioids have increased in Ontario over time, however rates in Middlesex County have not (Figure 15).
- Due to small numbers the yearly rates fluctuate. Since 2013 rates declined in Middlesex County and then increased again in 2016.
- Since 2014 there has been a lower rate of opioid-related ED visits in Middlesex County compared to Ontario. This difference is statistically significant.
- Differences between males and females were not seen in Middlesex County data, whereas males have a significantly higher proportion of visits than females in province overall (data not shown).

Figure 15. Opioid-related emergency department visits, counts and unadjusted rates per 100,000 population, Middlesex County and Ontario, 2004 to 2017.



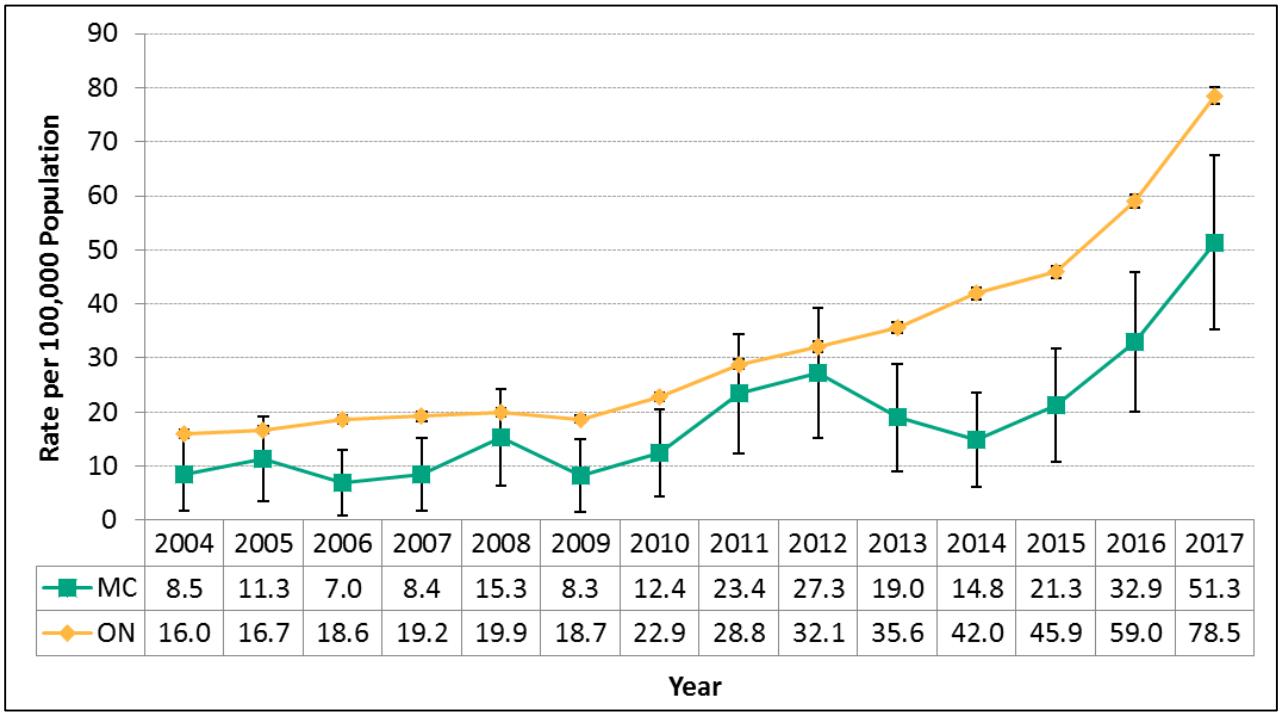
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
MC	28.3	35.2	33.6	34.9	40.3	62.4	41.4	72.9	73.7	63.6	41.6	29.3	53.9	59.1
ON	35.4	39.1	43.8	46.9	55.8	68.7	73.2	78.3	77.5	69.8	69.8	77.4	92.1	122.9

Data source: National Ambulatory Care Reporting System (NACRS), Ontario Ministry of Health and Long-term Care, IntelliHEALTH ONTARIO, Extracted: August 23, 2018.

4.6. Cannabis

- Cannabis-related visits to the emergency department have been on the rise since 2004 for both Middlesex County and Ontario residents (Figure 16). The rate in 2017 was more than five times higher than it was in 2004 jumping from 8.5 to 51.3 visits per 100,000 people. This difference is statistically significant.
- Cannabis-related visits include poisonings and mental or behavioural disorders due to cannabis use.
- Rates since 2012 declined briefly and then began to rise steadily after 2014 until 2017.
- Since 2013, the rate in Middlesex County has been significantly lower than the provincial rate.
- Males tended to have higher rates than females but the differences between them was not significant (data not shown).

Figure 16. Cannabis-related emergency department visits, counts and unadjusted rates per 100,000 population, Middlesex County and Ontario, 2004 to 2017.



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
MC	8.5	11.3	7.0	8.4	15.3	8.3	12.4	23.4	27.3	19.0	14.8	21.3	32.9	51.3
ON	16.0	16.7	18.6	19.2	19.9	18.7	22.9	28.8	32.1	35.6	42.0	45.9	59.0	78.5

Data source: National Ambulatory Care Reporting System (NACRS), Ontario Ministry of Health and Long-term Care, IntelliHEALTH ONTARIO, Extracted: August 23, 2018.

4.7. Infectious diseases

- There are approximately 70 diseases of public health significance that are reported to the local Medical Officer of Health under the Health Protection and Promotion Act. Among these, HIV/AIDS*, hepatitis C†, and active tuberculosis§ are all infections that can have long-term impacts on effected individuals and, once diagnosed, require follow up with a health care provider.
- Between 2005 and 2017, the average reported incidence rates of HIV/AIDS, hepatitis C, and active tuberculosis cases was lower among Middlesex County residents compared to the provincial rate (Table 9).

Table 9. Reported incidence rate of HIV/AIDS, hepatitis C, and active tuberculosis, Middlesex County and Ontario, 2005–2017 average.

Infectious disease	Rate per 100,000 population	
	Middlesex County	Ontario
HIV/AIDS*	1.5	6.5
Hepatitis C†	16.9	33.3
Tuberculosis (active)§	<1.0	4.8

Data source: Middlesex County data: Middlesex London Health Unit integrated Public Health Information System (iPHIS) Cognos Report Net: custom report. Ontario Ministry of Health and Long-Term Care; Extracted August 13, 2018. Ontario data: Public Health Ontario. Infectious Diseases Query: Ontario: Case counts and crude rates of reportable diseases by public health unit and year. Ontario Agency for Health Protection and Promotion; Extracted August 15, 2018.

* HIV/AIDS cases are reported by encounter date, which is the date that public health was first notified of the case.

† Hepatitis C cases are reported by episode date, which is the earliest available of symptom onset date, specimen collection date, laboratory test date, or date reported to public health. Hepatitis C cases include all cases with a positive antibody test, and therefore includes people with acute infections, spontaneously resolved acute infections, chronic infections, and those who have received effective anti-viral therapy (cured).

§ Active tuberculosis cases are reported by the date the individual was diagnosed with active tuberculosis.

5. Behavioural Risk Factors

5.1. Summary

Historically, the leading causes of death in Middlesex County are chronic diseases and injuries which are linked to behavioural risk factors such as alcohol consumption, physical inactivity and smoking. In data from community health surveys from the years 2011 to 2014, a substantial portion of the population reported behaviours that put them at risk for chronic diseases and injuries. For instance, only about half the population reported being active or moderately active during their leisure time, averaging 1.5 or more kcal/kg/day of energy expenditure from leisure-time physical activity. This is approximately the amount of exercise that is required to experience some health benefits.

In the same time frame, only about half did not exceed the low risk alcohol drinking guidelines. These guidelines outline the maximum number of daily and weekly drinks that can be consumed to reduce the risk of both long term chronic health conditions and the risk of injury (Butt, Beirness, Gliksman, Paradis & Stockwell, 2011). Current smoking continues in about 20% of the adult population.

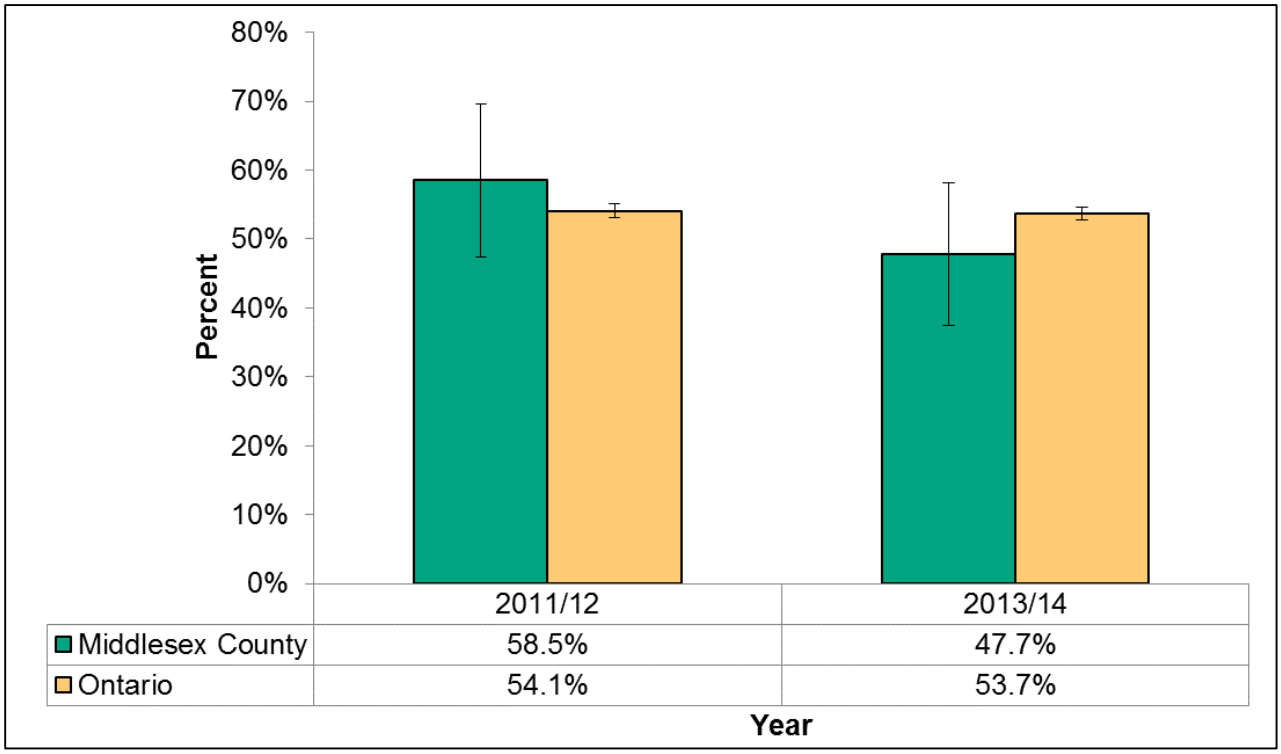
Self-rated health is a self-assessment of an individual's current health status that encompasses both experiences and understanding of the causes and impacts of disease. It has been shown to be predictive of the development of chronic conditions and mortality. Over 90% of people rated their overall health as good, very good or excellent after taking physical, mental and social well-being into consideration. Respondents are asked to consider health, not just from the perspective of absence of disease and injury but also to consider social, mental and physical aspects of their well-being.

Data indicates that Middlesex County patterns of behavioural risk factors are not different from Ontario. This could be due, partly, to a small number of people responding to the survey in Middlesex County. However, it likely indicates that lifestyle behaviour rates in Middlesex County are similar to the province.

5.2. Physical activity

- In 2013/2014, 47.7% of the Middlesex County population reported being moderately active or active during leisure time activities (Figure 17).
- While lower, there was no significant difference between Middlesex County and Ontario (Figure 17). It is also not different than the rate in 2011/2012.

Figure 17. Percent of population (age 12 years and older) who were moderately active or active during leisure time, Middlesex County and Ontario, 2011/2012 and 2013/2014.

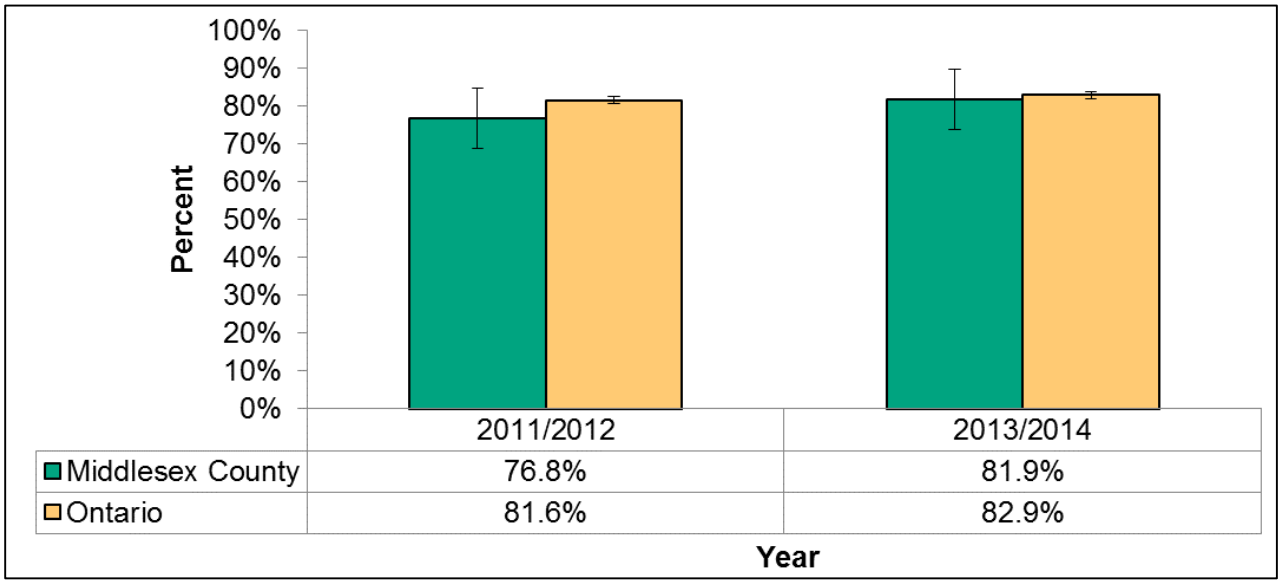


Data source: Canadian Community Health Survey, Statistics Canada, Share File, Ontario Ministry of Health and Long-Term Care.

5.3. Smoking

- In 2013/2014, 81.9% of adults aged 19 years and over in Middlesex County reported that they were non smokers (Figure 18). Compared to the province, Middlesex County had a similar proportion of non smokers.

Figure 18. Percent of non-smokers among adults age 19 years or older, Middlesex County and Ontario, 2011/2012 and 2013/2014.

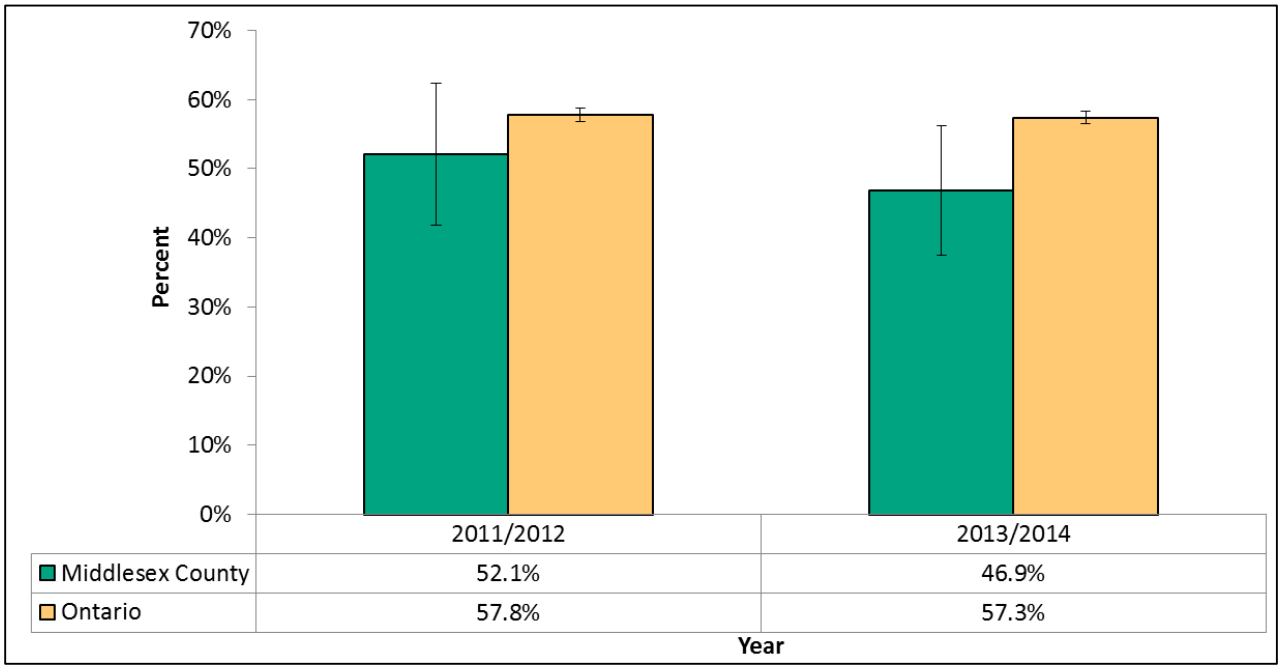


Data source: Canadian Community Health Survey, Statistics Canada, Share File, Ontario Ministry of Health and Long-Term Care.

5.4. Alcohol use

- The proportion of those aged 19 and older, in Middlesex County, who did not exceed the low risk drinking guidelines in 2013/2014 was 46.9% (Figure 19).
- There are two parts to Canada's low risk alcohol drinking guidelines (Butt *et al*., 2011):
    - Reducing your long term health risks by drinking no more than 2 standard drinks on any one day for women and no more than 3 standard drinks on any one day for men with a maximum of 10 and 15 standard drinks a week for women and men, respectively. A couple of days with no alcohol drinking should be taken each week.
    - Women can reduce their risk of injury by drinking 3 or fewer drinks and 4 or fewer drinks, for men, on any single occasion.
- The rate in Middlesex County was significantly lower than that of Ontario (57.3%) in 2013/2014, however only approximately half did not exceed the drinking guideline in both 2011/2012 and 2013/2014 (Figure 19).

Figure 19. Percent of population (age 19 years and older) who did not exceed the Low Risk Drinking Guidelines, Middlesex County and Ontario, 2011/2012 and 2013/2014.

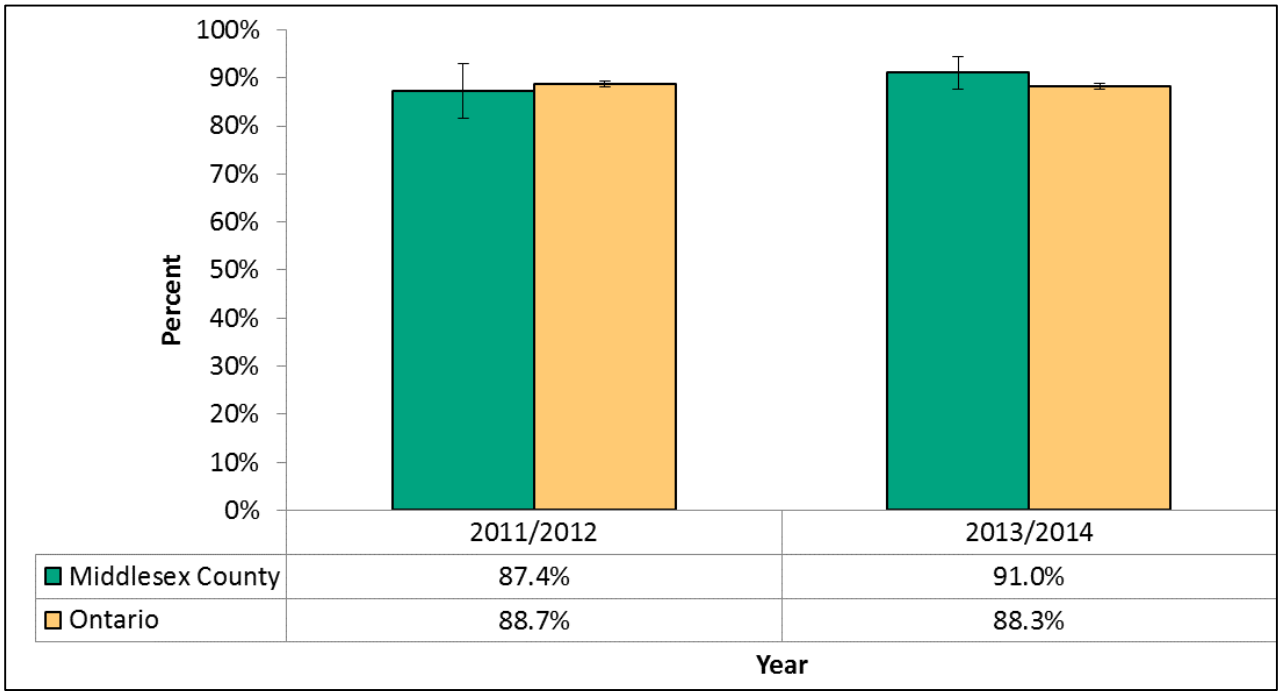


Data source: Canadian Community Health Survey, Statistics Canada, Share File, Ontario Ministry of Health and Long-Term Care.

5.5. Self-reported health

- In 2013/2014, 89.1% of the population of Middlesex County reported “excellent”, “very good” or “good health”. This was not significantly higher than the rate in Ontario (Figure 20).

Figure 20.Percent of the population (age 12 years or older) who reported “excellent”, “very good” or “good health”, Middlesex County and Ontario, 2011/2012 and 2013/2014.



Data source: Canadian Community Health Survey, Statistics Canada, Share File, Ontario Ministry of Health and Long-Term Care.

6. Reproductive Health

6.1. Summary

Pregnancy rates in Middlesex County have remained relatively stable, at a rate of approximately 8 births per 1,000 population. While stable, pregnancy rates in Middlesex County are consistently lower than those for Ontario.

Pregnant women who are particularly young (i.e., teenagers) or old (i.e., ages 35 and older) tend to experience more problems delivering the baby and with various birth outcomes—such as prematurity, low birth weight, and neonatal death. These mothers may therefore require more supports before and after birth than mothers in their twenties and early thirties.

In recent years, teen pregnancy (ages 14 to 19) rates in Middlesex County have been significantly lower than that for Ontario. And the rates have declined each year from 2013 to 2016; a downward trend also observed in the province.

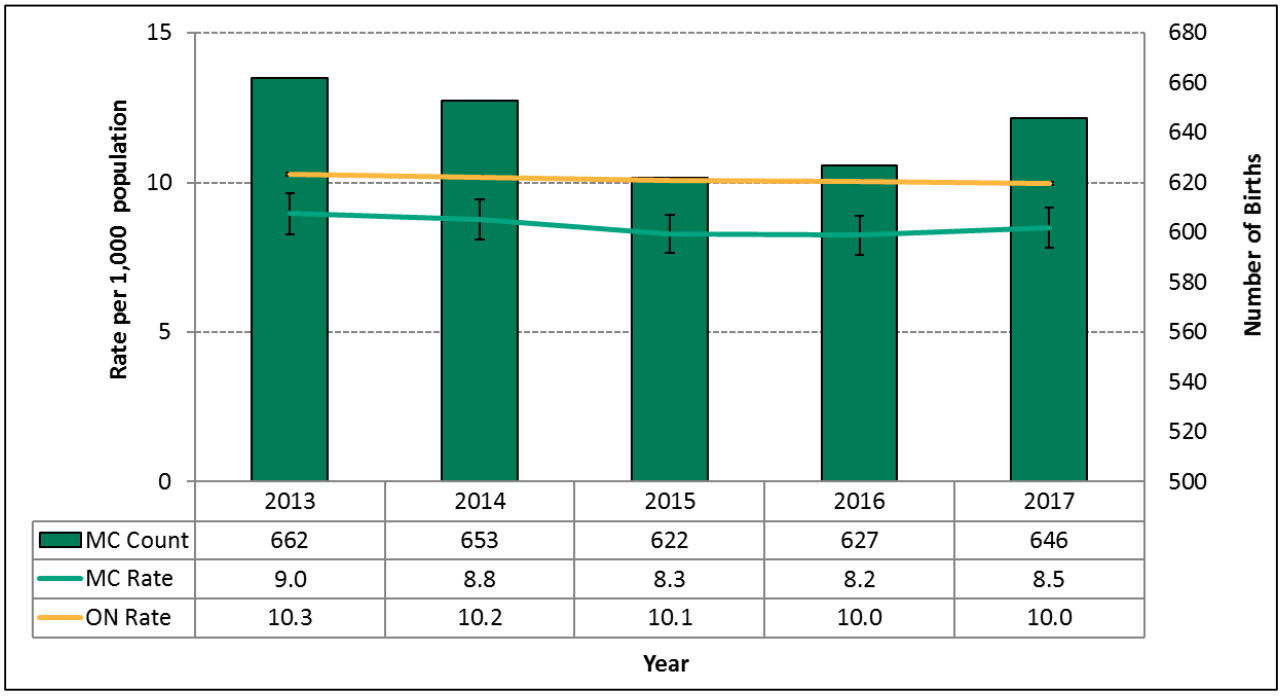
In Middlesex County and Ontario, the highest pregnancy rates are among women aged 30 to 34, followed by those aged 25 to 29. Compared to Ontario, females in Middlesex County tend to give birth at slightly younger ages: the third highest pregnancy rate is among women age 25 to 29, and pregnancy rates are significantly lower among women 35 years and older.

6.2. Pregnancy rates

6.2.1. Overall pregnancy rate

- In 2017, there were 646 pregnancies in Middlesex County, corresponding to a pregnancy rate of 8.5 per 1,000 population (Figure 21).
- Pregnancy rates in Middlesex County and Ontario were relatively stable from 2013 to 2017. During this period, pregnancy rates in Middlesex County were consistently lower than those in Ontario.

Figure 21. Count and crude birth rates per 1,000 population, Middlesex County and Ontario, 2013 to 2017.



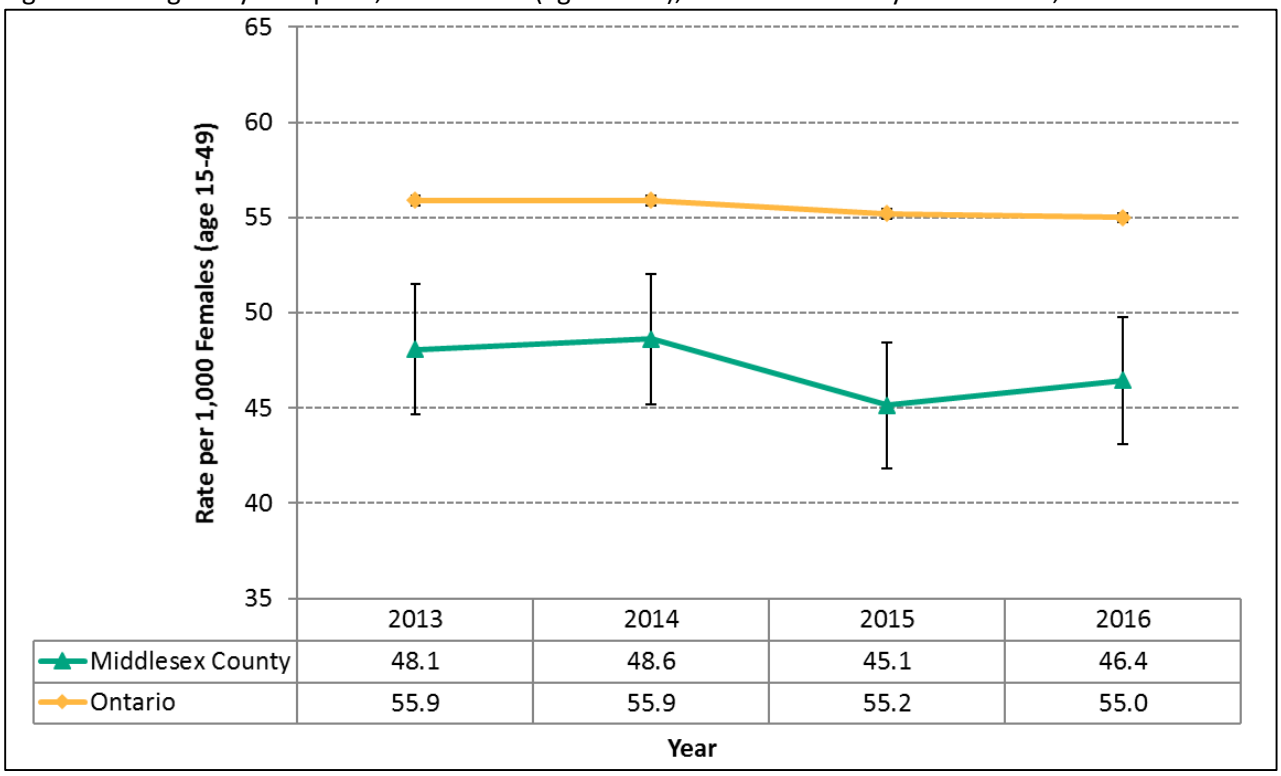
	2013	2014	2015	2016	2017
MC Count	662	653	622	627	646
MC Rate	9.0	8.8	8.3	8.2	8.5
ON Rate	10.3	10.2	10.1	10.0	10.0

Data source: BORN Information System, BORN Ontario. Information accessed on: July 7, 2018; Therapeutic abortions, Date Extracted: June 19, 2018 & Population Estimates, Date Extracted: May 11, 2018, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH Ontario.

6.2.2. Pregnancy rate per 1,000 females

- Pregnancy rates have been relatively stable from 2013 to 2016 in Ontario and Middlesex County (Figure 22).
- Between 2013 and 2016, pregnancy rates in Middlesex County were significantly lower than Ontario.

Figure 22. Pregnancy rate per 1,000 females (age 15–49), Middlesex County and Ontario, 2013 to 2016.



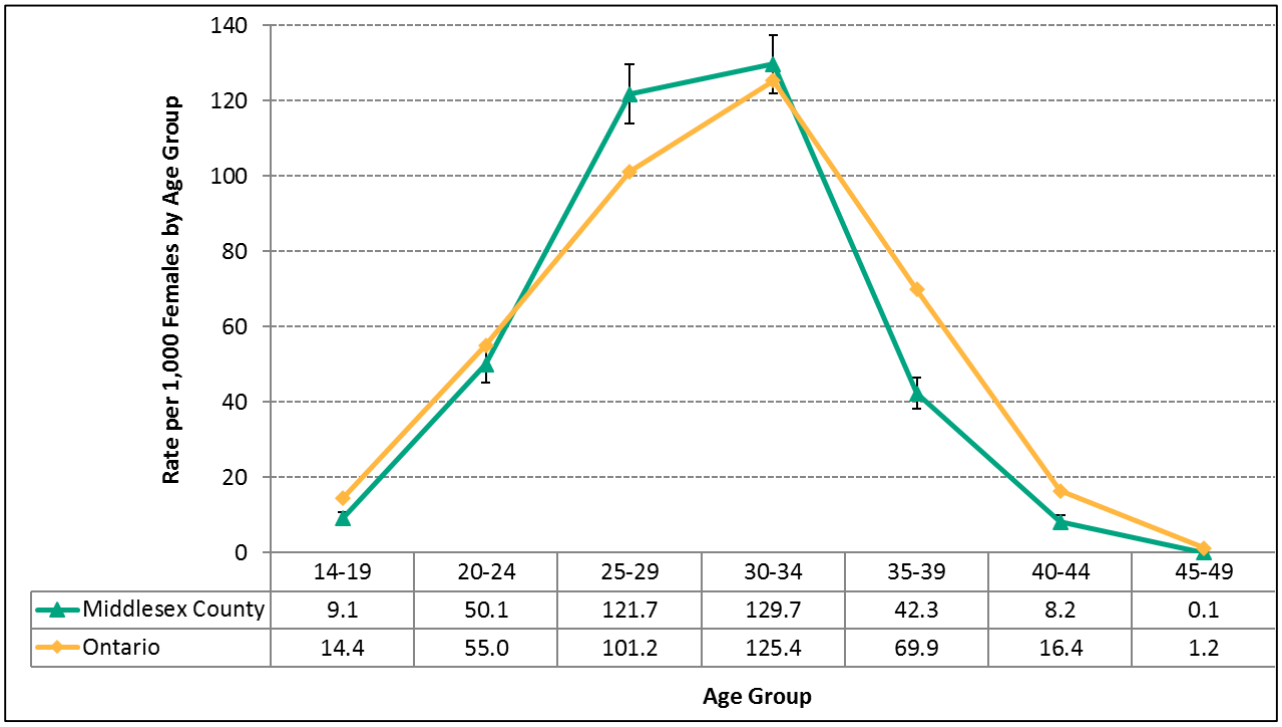
	2013	2014	2015	2016
Middlesex County	48.1	48.6	45.1	46.4
Ontario	55.9	55.9	55.2	55.0

Data source: BORN Information System, BORN Ontario. Information accessed on: July 7, 2018; Therapeutic abortions, Date Extracted: June 19, 2018 & Population Estimates, Date Extracted: May 11, 2018, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH Ontario.

6.3. Pregnancy rate by maternal age group

- Between 2013 and 2016, pregnancy rates across age groups in Middlesex County followed a trend similar to Ontario with a peak among women age 30–34 (Figure 23).
- Compared to Ontario, females in Middlesex County tended to be pregnant at slightly younger ages, with a significantly higher pregnancy rate among women age 25 to 29 and lower rates among women age 35 to 44.

Figure 23. Pregnancy rate per 1,000 females, by age group, Middlesex County and Ontario, 2013–2016 average.



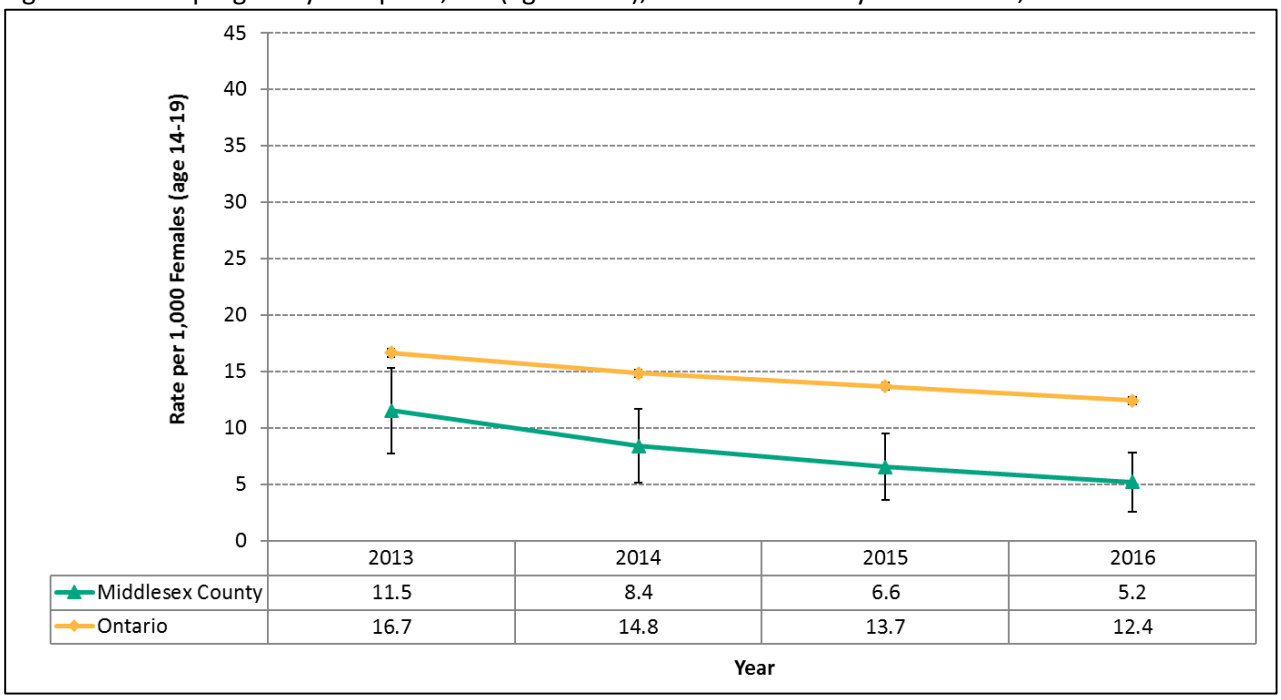
	14-19	20-24	25-29	30-34	35-39	40-44	45-49
Middlesex County	9.1	50.1	121.7	129.7	42.3	8.2	0.1
Ontario	14.4	55.0	101.2	125.4	69.9	16.4	1.2

Data source: BORN Information System, BORN Ontario. Information accessed on: July 7, 2018; Therapeutic abortions, Date Extracted: June 19, 2018 & Population Estimates, Date Extracted: May 11, 2018, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH Ontario.

6.3.1. Teenage pregnancy rates

- Between 2013 and 2016, pregnancy rates for teens (14–19) in Middlesex County were significantly lower than for Ontario (Figure 24).
- For both Middlesex County and Ontario, rate of teen pregnancy decreased from 2013 to 2016.

Figure 24. Teen pregnancy rate per 1,000 (age 14–19), Middlesex County and Ontario, 2013 to 2016.



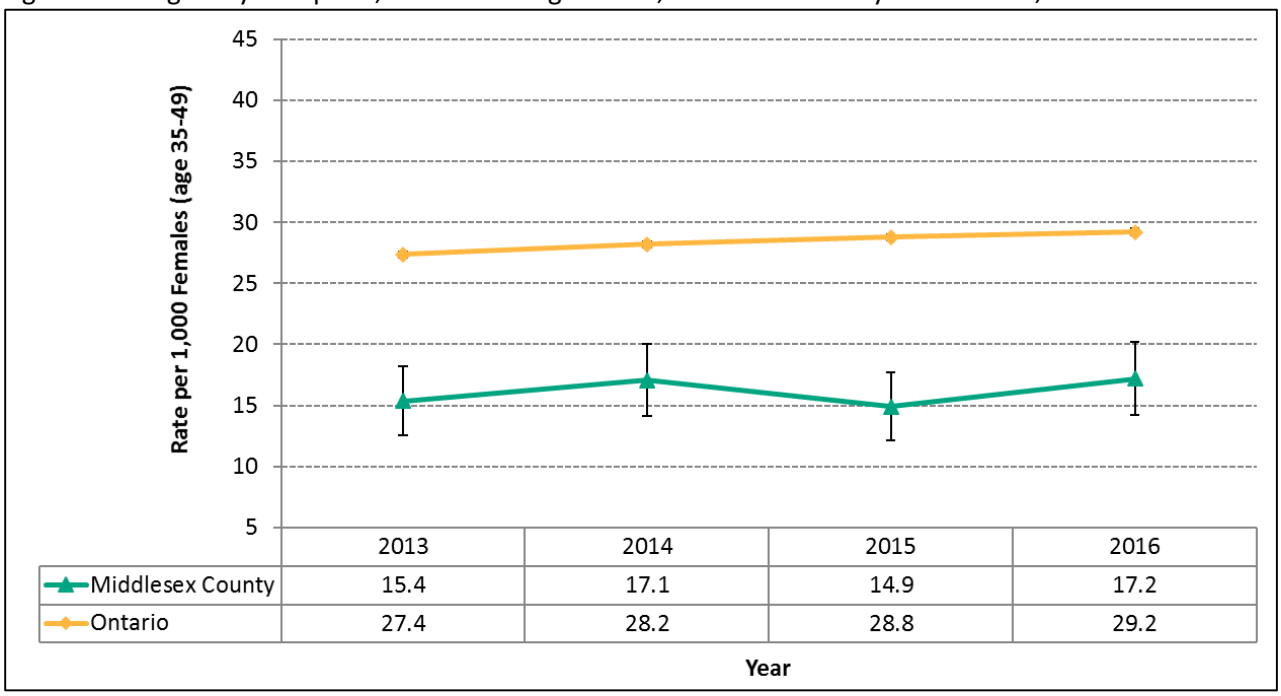
	2013	2014	2015	2016
Middlesex County	11.5	8.4	6.6	5.2
Ontario	16.7	14.8	13.7	12.4

Data source: BORN Information System, BORN Ontario. Information accessed on: July 7, 2018; Therapeutic abortions, Date Extracted: June 19, 2018 & Population Estimates, Date Extracted: May 11, 2018, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH Ontario.

6.3.2. Pregnancy rate for females 35 years of age and older

- Pregnancy rates for females age 35 to 49 in Middlesex County were significantly lower than those for Ontario from 2013 to 2016 (Figure 25).
- For Ontario, there was a slight increase over time in the rate of pregnancy among women age 35–49.

Figure 25. Pregnancy rate per 1,000 females age 35–49, Middlesex County and Ontario, 2013 to 2016.



	2013	2014	2015	2016
Middlesex County	15.4	17.1	14.9	17.2
Ontario	27.4	28.2	28.8	29.2

Data source: BORN Information System, BORN Ontario. Information accessed on: July 7, 2018; Therapeutic abortions, Date Extracted: June 19, 2018 & Population Estimates, Date Extracted: May 11, 2018, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH Ontario.

7. Child Health

7.1. Summary

Breastfeeding is the biologically natural way to provide infants with the nutrition they need for healthy growth and development. Health Canada recommends breastfeeding exclusively for the first six months, with continued breastfeeding for up to two years and beyond (Canadian Institute for Health Information, 2012). In 2017, over 93% of infants in Middlesex County were fed breastmilk at discharge from the hospital or midwifery practice group; a proportion slightly higher than the province and which has increased gradually over time since 2013.

The Early Development Instrument (EDI) is a population level measure of children's developmental health at school entry (Janus & Offord, 2007). Every three years all children in senior kindergarten in publically funded schools are assessed by their The EDI assists communities in assessing the educational and social needs of their young children, as well as monitoring children's developmental health across time. The EDI measures five areas (domains) of development: physical health and well-being, social competence, emotional maturity, language and cognitive development, communication skills and general knowledge. In Middlesex County, the proportion of children identified as vulnerable in at least one domain was lower than Ontario for all time periods. Physical health and well being was the area with the greatest proportion vulnerable when measured in 2015. This domain assesses whether children are physically ready for the school day with questions about appropriate dress for school, being late, hungry or tired. It also measures physical independence and gross and fine motor skills. Since vulnerability levels above 10% may be avoidable (Kershaw, Anderson, Warburton, and Hertzman 2009), this area represents an opportunity for improvement.

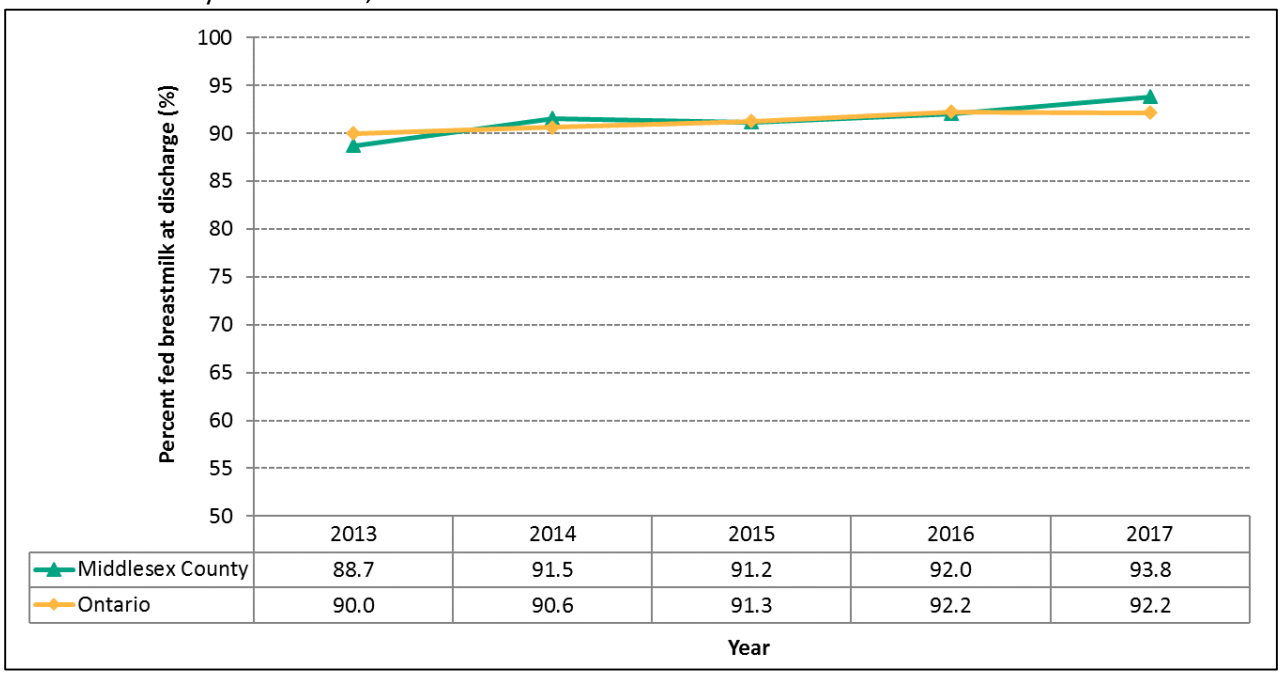
Understanding tooth decay in the school aged children population is important because of its implications for quality of life. In Middlesex County, where some drinking water is not fluoridated, tooth decay increases as children age from junior kindergarten until grade 2. The percentage of children with no cavities or decay goes down and the number of teeth affected in those with decay increases as grade level goes up. In comparison to a sample of health units making up approximately half on the Ontario population, Middlesex County rates of decay were lower in the 2015/2016 and 2016/2017 school years.

The *Immunization of School Pupils Act* identifies a number of diseases against which students need to be vaccinated. Each year, the Middlesex-London Health Unit reviews the immunization records of students attending schools in the region to ensure that their immunizations are up to date (Ontario Ministry of Health and Long-Term Care, 2016). In the 2017–2018 school year, greater than 95% of immunization records of 7-year old students in Middlesex County schools were up-to-date for seven key diseases.

7.2. Breastfeeding rate

- In 2017, 93.8% of infants in Middlesex County were fed breastmilk at discharge from hospital or Midwifery Practice Group, compared to 92.2% in Ontario (Figure 26).
- Between 2013 and 2017, the proportion of infants in Middlesex County fed breastmilk at discharge has gradually increased over time.
- The proportion of infants in Middlesex County fed breastmilk at discharge has followed a similar trend to Ontario from 2013 to 2017.

Figure 26. Proportion of infants fed breastmilk (exclusively or in combination) at discharge from hospital or Midwifery Practice Group (MPG) per the number of live births discharged home and home births, Middlesex County and Ontario, 2013 to 2017.



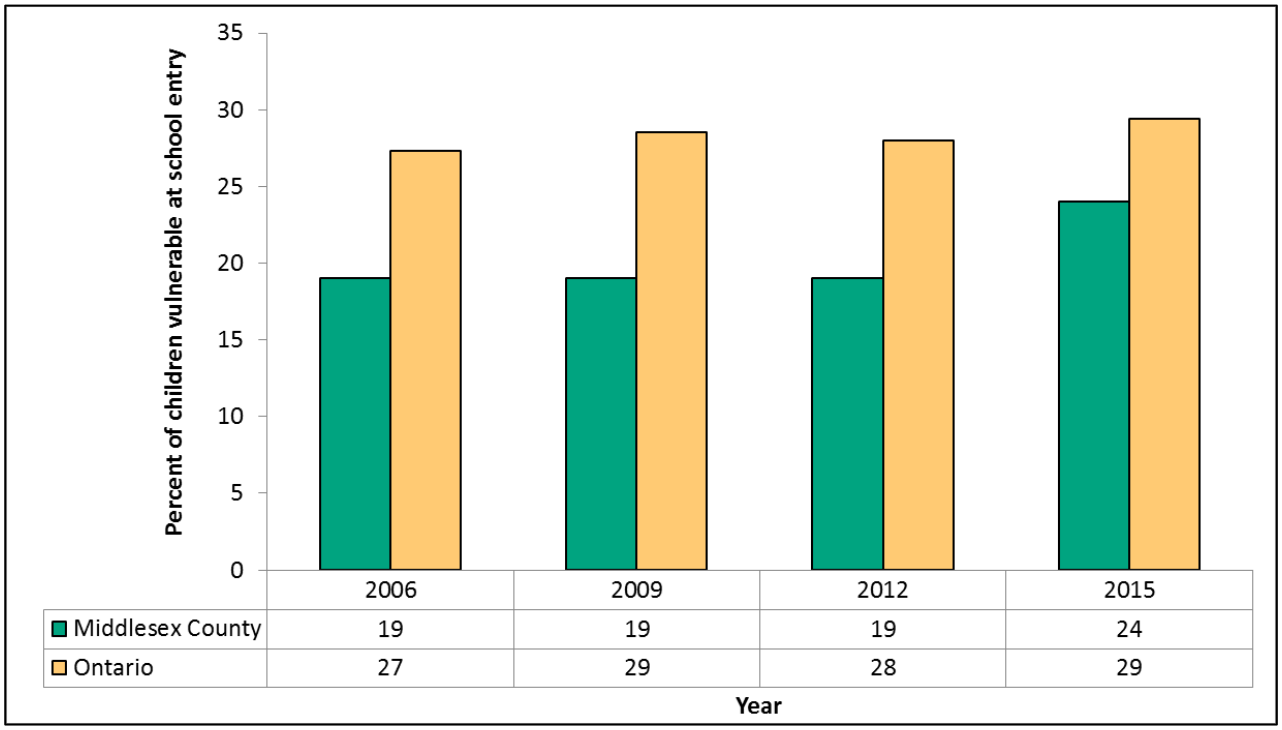
	2013	2014	2015	2016	2017
Middlesex County	88.7	91.5	91.2	92.0	93.8
Ontario	90.0	90.6	91.3	92.2	92.2

Data sources: (1) PHU – Newborn Clinical Report. BORN Information System, BORN Ontario. Information accessed on July 7, 2018. (2) Public Health Unit Analytic Reporting Tool (Cube), BORN Information System, BORN Ontario. Date Extracted: July 31, 2018.

7.3. Early development

- The percent of children entering school that were vulnerable on at least one domain of the Early Development Instrument has been lower than province since the inception of the measurement of the tool in 2006 (Figure 27). Recently, the Middlesex County rate has increased but continues to be lower than the province.
- The physical health and well-being domain has the highest proportion of vulnerable children in Middlesex County (15.9%), followed by the emotional maturity domain (Table 10). These are also the top two areas for Ontario.
- In all municipalities in Middlesex County results showed the percentage of children vulnerable from nearly all domains across all years tested to be lower than Ontario rates (data not shown).

Figure 27. Percentage of children vulnerable in one or more EDI domains, Middlesex County and Ontario, 2006, 2009, 2012, 2015.



Data source: Middlesex County Municipalities Child & Family Community Profile: Appendix 2: Early Development Instrument (EDI), 2012. (2013). Middlesex Children's Services Network. Available at https://www.middlesex.ca/sites/default/files/Appendix%202_Middlesex%20EDI%202012.pdf & Middlesex County community profile. (ca. 2016). [Unpublished report for the Middlesex Children's Service Network]. Middlesex Children's Service Network.

Table 10. Percentage of children at school entry vulnerable by EDI domain, 2015.

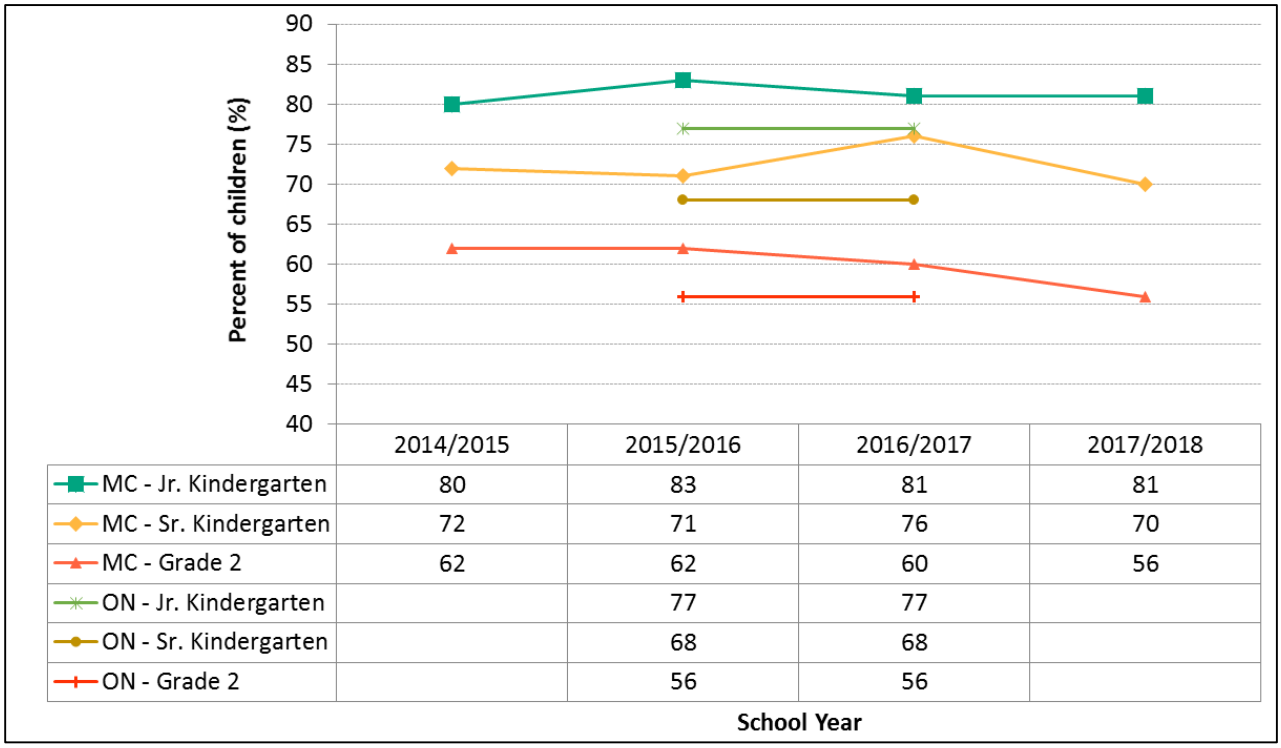
Early Development Instrument Domain	% of children vulnerable at school entry	
	Middlesex County	Ontario
Physical health and well-being	15.9	16.1
Emotional maturity	10.5	12.3
Social competence	7.3	10.7
Communication skills and general knowledge	7.2	10.2
Language and cognitive development	4.1	6.7
One or more EDI domains	24.0	29.4

Data source: Middlesex County Municipalities Child & Family Community Profile: Appendix 2: Early Development Instrument (EDI), 2012. (2013). Middlesex Children's Services Network. Available at https://www.middlesex.ca/sites/default/files/Appendix%202_Middlesex%20EDI%202012.pdf & Middlesex County community profile. (ca. 2016). [Unpublished report for the Middlesex Children's Service Network]. Middlesex Children's Service Network.

7.4. Oral health

- The proportion of children in Middlesex County with no visible tooth decay (caries free) has remained consistent over time for those in junior (81% in 2017/2018) and senior kindergarten (70% in 2017/2018) (Figure 28). The rate of those in Grade 2 with caries has increased since the 2014/2015 school year.
- In comparison to an Ontario sample in the 2015/2016 and 2016/2017 school years, there was a smaller proportion of Middlesex County children with visible tooth decay, across all grades (Figure 28).
- In all children between junior kindergarten and Grade 2 there were between three and four teeth affected by decay, in those with some decay (Figure 29). While those in Middlesex County had fewer teeth affected than a sample of Ontario children, this still represents preventable tooth decay in children.

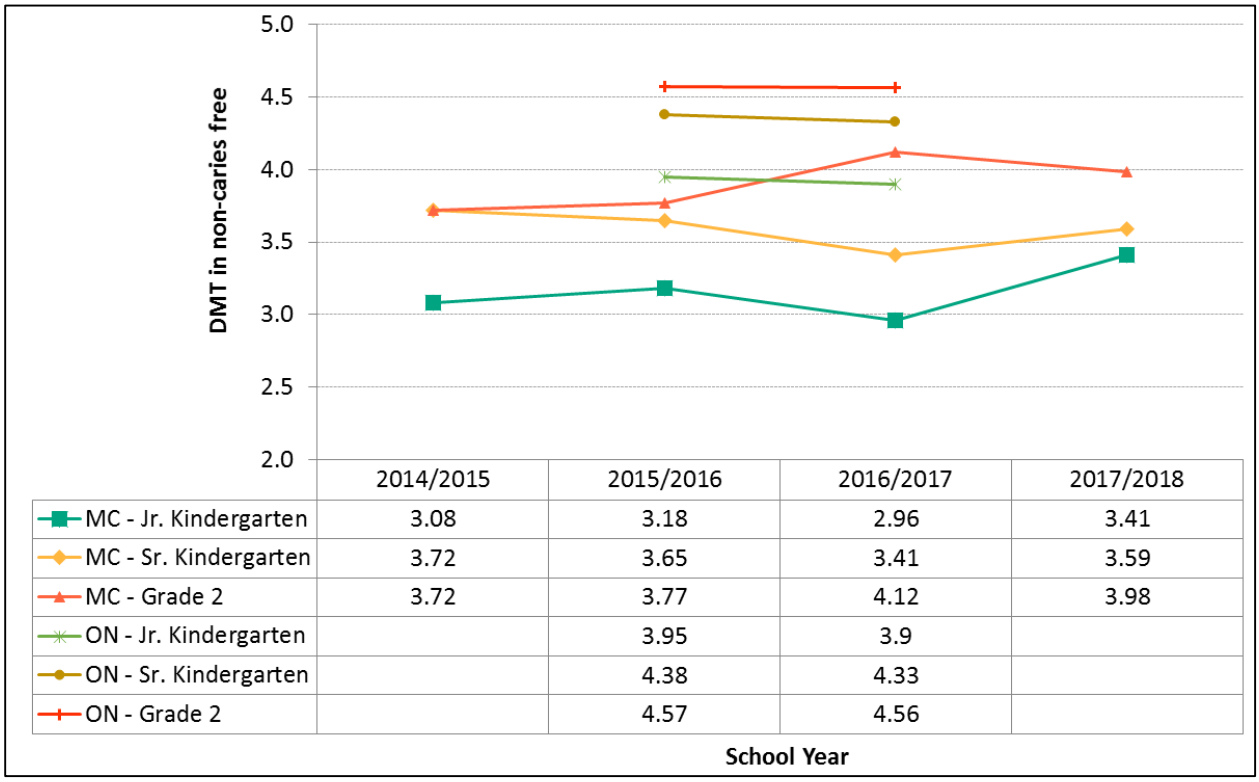
Figure 28. Percent of children who had no visible tooth decay (caries free) in Middlesex County and Ontario.



	2014/2015	2015/2016	2016/2017	2017/2018
MC - Jr. Kindergarten	80	83	81	81
MC - Sr. Kindergarten	72	71	76	70
MC - Grade 2	62	62	60	56
ON - Jr. Kindergarten		77	77	
ON - Sr. Kindergarten		68	68	
ON - Grade 2		56	56	

Data source: Oral Health Information Surveillance System (OHISS), Ministry of Health and Long-Term Care. Extracted date: July 17, 2018 & Oakley, D. 2018. Summary of 2015-2017 Oral Health Screening: Results from Participating Ontario Health Units: For the Ontario Association of Public Health Dentistry.

Figure 29. Average Decay Missing Teeth (DMT) scores for children in Middlesex County and Ontario schools, by school year and grade.



	2014/2015	2015/2016	2016/2017	2017/2018
MC - Jr. Kindergarten	3.08	3.18	2.96	3.41
MC - Sr. Kindergarten	3.72	3.65	3.41	3.59
MC - Grade 2	3.72	3.77	4.12	3.98
ON - Jr. Kindergarten		3.95	3.9	
ON - Sr. Kindergarten		4.38	4.33	
ON - Grade 2		4.57	4.56	

Data source: Oral Health Information Surveillance System (OHISS), Ministry of Health and Long-Term Care. Extracted date: July 17, 2018 & Oakley, D. 2018. Summary of 2015-2017 Oral Health Screening: Results from Participating Ontario Health Units: For the Ontario Association of Public Health Dentistry.

7.5. Immunization rates

- The Immunization of School Pupils Act identifies a number of diseases against which students need to be vaccinated. Each year, the Middlesex-London Health Unit reviews the immunization records of students attending schools in the region to ensure that their immunizations are up to date.
- In the 2017–2018 school year, greater than 95% of immunization records of 7-year old students in Middlesex County schools were up-to-date for seven key diseases (Table 11). Proportions ranged from 96.9% to 98.8% depending on the vaccine component.

Table 11. Proportion of immunization records forecast up-to-date* for childhood vaccines among 7-year olds†, Middlesex County§, 2017–2018 school year.

Vaccine component	Up-to-date status	
	Middlesex County schools estimate (%)	Middlesex County schools range (%)
Diphtheria	96.9	80.0–100
Measles	97.4	80.0–100
Mumps	97.5	80.0–100
Pertussis	96.9	80.0–100
Polio	97.1	80.0–100
Rubella	98.8	80.0–100
Tetanus	96.9	80.0–100

Data source: Middlesex-London Health Unit Panorama Enhanced Analytics and Reporting (PEAR): Forecaster Compliance for Disease by Age or School – Aggregate – STD – PR2001. Toronto ON: Ontario Ministry of Health and Long-Term Care; 2018 August 14 [cited 2018 August 14].

* Records were considered to be up to date when the immunization forecast was classified as up to date, and not eligible, due or overdue for the identified immunization based on the Publicly Funded Immunization Schedule for Ontario (Ministry of Health and Long-Term Care, 2016).

† Birth year is 2010 for the 2017-18 school year.

§ Middlesex County estimate based on enrollment of children born in 2010 in elementary schools (public and private) located in Middlesex County for which the Middlesex-London Health Unit screened immunization records in the 2017-18 school year.

References

Becker, R. Silvi, J., Ma Fat, D., L'Hours, A., & Laurenti, R. (2006). A method for deriving leading causes of death. *Bulletin of the World Health Organization*, *84*(4), 297–304. Retrieved from http://www.who.int/bulletin/volumes/84/4/297.pdf

Butt, P., Beirness, D., Gliksman, L., Paradis, C., & Stockwell, T. (2011). *Alcohol and health in Canada: A summary of evidence and guidelines for low-risk drinking*. Ottawa, ON: Canadian Centre on Substance Use and Addiction. Retrieved from http://www.ccsa.ca/Resource%20Library/2011-Summary-of-Evidence-and-Guidelines-for-Low-Risk%20Drinking-en.pdf

Canadian Institute for Health Information. (2012). *Health Indicators 2012.* Ottawa, ON:Author..
Infant Feeding Joint Working Group. (2012). Nutrition for healthy term infants: Recommendations from birth to six months [Webpage]. Retrieved from http://www.hc-sc.gc.ca/fn-an/nutrition/infant-nourisson/recom/index-eng.php

Janus, M., & Offord, D. (2007). Development and psychometric properties of the early development instrument (EDI): A measure of children's school readiness. *Canadian Journal of Behavioural Science*, *39*(1), 1-22. Retrieved from https://edi.offordcentre.com/wp/wp-content/uploads/2015/10/Janus-Offord-2007.pdf

Kershaw, P., Anderson, L., Warburton, B., & Hertzman, C. (2009). *15 by 15: A comprehensive policy framework for early human capital investment in BC*. Vancouver, BC: Human Early Learning Partnership. Retrieved from http://earlylearning.ubc.ca/media/publications/15by15-full-report.pdf

Poirier, S., & Vanderwerff, D. (2018, July 17). Population projections for Middlesex County (Agenda report no. B5-CW Action). In *Middlesex County Council Agenda*. *(*Retrieved from https://egenda.middlesex.ca/files/agendas/171/package.pdf

Ontario Ministry of Health and Long-Term Care. (2016). *Publicly funded immunization schedules for Ontario – December 2016*. Retrieved from http://www.health.gov.on.ca/en/pro/programs/immunization/docs/immunization_schedule.pdf

Ontario Ministry of Health and Long-Term Care. (2018). *Ontario public health standards: Requirements for programs, services and accountability* Retrieved from http://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/protocols_guidelines/Ontario_Public_Health_Standards_2018_en.pdf

R.A. Malatest & Associates Ltd. (2002). Rural youth study, phase II, rural youth migration: Exploring the reality behind the myths (Agriculture and Agri-Food Canada Publication No. 2146/E). Ottawa, ON: Agriculture and Agri-Food Canada.

Stewart, T. C., Gilliland, J., & Fraser, D. D. (2014). An epidemiologic profile of pediatric concussions: Identifying urban and rural differences. *Journal of Trauma and Acute Care Surgery, 76*(3), 736-742. doi: 10.1097/TA.0b013e3182aafdf5.

Table 4.3 Low-income cut-offs, after tax (LICO-AT – 1992 base) for economic families and persons not in economic families, 2015. (2017). In Statistics Canada (Ed.), Dictionary, census of population, 2016. Retrieved from https://www12.statcan.gc.ca/census-recensement/2016/ref/dict/tab/t4_3-eng.cfm

United Nations. (n.d.). Dependency ratio demographics population core indicator. Retrieved from http://www.un.org/esa/sustdev/natlinfo/indicators/methodology_sheets/demographics/dependency_ratio.pdf

Williams, D. C. (2018). Improving the odds: Championing health equity in Ontario (2016 annual report of the Chief Medical Officer of Health of Ontario to the Legislative Assembly of Ontario). Retrieved from Ontario Ministry of Health and Long-Term Care website: http://www.health.gov.on.ca/en/common/ministry/publications/reports/cmoh_18/cmoh_18.pdf

Williams, C. (2005). The sandwich generation. *Canadian Social Trends, Summer*,16-21. Retrieved from https://www150.statcan.gc.ca/n1/pub/11-008-x/2005001/article/7033-eng.pdf

Appendix B

Literature Scan

For information, please contact:

Carolynne Gabrielle
Librarian
Middlesex-London Health Unit
E-mail: carolynne.gabrielle@mlhu.on.ca

Review of Public Health Services in Middlesex County – Literature Scan

Executive Summary

As part of the Review of Public Health Services in Middlesex County a literature scan was undertaken to determine effective service delivery models for public health services in rural settings. The scan was limited to service delivery frameworks, models, or plans by provincial, state, or federal public health agencies, both in Canada and abroad, as well as the websites of the health agencies in the same Statistics Canada health peer group (Group A) as Middlesex-London Health Unit.

In many jurisdictions, unlike Ontario, public health is integrated within larger health authorities alongside primary care. As this literature scan was interested in public health services, in such cases effort was made to extract only information about delivering services which, in Ontario, are considered public health.

From these results, there was much consensus, the most prevalent one being that each rural community is unique, with different needs, assets, and challenges, and that there is no one-size-fits-all service delivery model that will work. The following were the most common findings:

- The need for engagement with community members, organizations, non-profits, and other health care providers in order to determine the needs of the community and how best to address them
- The importance of collecting, monitoring, and using local data for service planning and delivery
- The potential value of integration or co-location. Many jurisdictions advocate for a "health hub" type model where various primary care providers as well as social services are integrated to some extent and ideally co-located
- Leveraging community assets through collaboration and co-ordination. This could be delivering public health services out of another organization's location, using local facilities and physical environment in public health interventions, supporting other community health care providers to provide public health services themselves, or referring clients to already existing programs and services in the community
- The importance of providing services as close to home as possible, usually necessitating expanding access to services. The particular service delivery model used will depend upon the needs of the particular community, but possibilities include mobile outreach, home visits, multiple locations, extended hours, telehealth, and online services
- The potential value of appropriate staffing mixes involving multi-disciplinary teams and professionals working to their fullest scope. Role clarity is important to reduce duplication. Generalists were also perceived as being more appropriate to rural settings

Introduction

As part of the Review of Public Health Services in Middlesex County a literature scan was undertaken to determine effective service delivery models for public health services in rural settings. A difficulty encountered in this scan was the lack of universal definitions or classifications of what constitutes "rural," the lack of such impacting the potential applicability and transferability of findings to Middlesex County. In an attempt to address this, the scan was limited to service delivery frameworks, models, or plans by provincial, state, or federal public health agencies, both in Canada and abroad, the rationale being that higher-level government plans for rural settings would provide synthesized evidence, the nature of which is more likely to be generalizable. Additionally, the websites of the health agencies in the same Statistics Canada health peer group (Group A) as Middlesex-London Health Unit were also searched for service delivery frameworks, models, or plans, as their plans for service delivery would most likely be applicable and transferable to the Middlesex County setting, regardless of their definition of "rural" (Statistics Canada, 2017)

Methodology

The searches were conducted throughout the month of July using private browsing in Google to reduce aspects like previous searches, pages visited, and location from filtering the search results. Custom Google searches developed by the Ontario Public Health Libraries Association were used to search the websites of all Canadian and American health authorities (specifically public health when available) at the federal and provincial/state level as well as all Ontario public health units. Additional searches were conducted of the websites of all health authorities within the same Statistics Canada health peer group as Middlesex-London Health Unit, Australian and United Kingdom governments, and various rural health associations.

Due to Google's search word limit, multiple search strings were used to capture all combinations of the selected search terms. In essence, the search strategy combined terms for the concepts of: "rural" including rural, non-urban, peri-urban, non-metropolitan, peri-metropolitan, town, township, and county; "public health" including public health, community health, population health, health protection, health promotion, health authority, health department, outreach, chronic disease, maternal health, infectious disease, environmental health, child health, and sexual health; "service delivery" including delivery, delivering, delivery, system, structure, access, staffing mix, staffing complement, location, and infrastructure; and "framework" including framework, model, strategy, and plan. The search terms for "rural" were not included for websites which were already focussed on rural settings or for health authorities in Statistics Canada health peer group A. The searches were limited to 2008 to 2018. Results were screened by one individual, the same who conducted the data extraction, and were included if they dealt with a rural setting, were focussed on a public health issue, discussed service delivery, and were a framework, model, strategy, or plan rather than specific interventions. Results were excluded if they were not English, focussed on remote or northern settings, or were exclusively primary care without considerable public health components.

From the search results, 1 164 links were selected. Of those, 129 had their full text reviewed, with 7 additional results being added from reference lists, and 54 were eventually included for data extraction. No formal critical appraisal process was followed given the nature of the reports.

Information was extracted into a table with the following fields: the included definition of rural, whether a formal definition or the attributes of rural described such as population density or proximity to metropolitan centres (in many cases these were not provided, but rather just described as "rural"); the public health issues, areas, or services addressed; and the service delivery model or approach described. Some included papers discussed service delivery for entire health systems, including, but not exclusive to, public health components. In many of these papers, each branch of the health care system was discussed separately in terms of the issues they addressed, but then service delivery approaches were described more generally for the entire system. In these cases, the service delivery approaches were extracted unless specific to a non-public health related service (for example surgeries or EMS), but then identified as not being exclusive to public health. Outside of scope, and therefore not extracted, was information about specific interventions or programs, approaches to improve recruitment, or models or organizational structure at a government level beyond the control of an individual health unit or health authority, for example having a separate department or ministry of public health. The extracted information was then assessed for common themes or service delivery approaches to arrive at generalizable findings.

Findings

Providing public health, or any health services, in rural settings presents challenges unique from more metropolitan settings. On average, rural areas have aging populations and higher rates of unemployment and poverty as compared to more urban areas, all social determinants of health which can negatively impact health and wellbeing (White, 2011). As well, they have higher death rates due to injuries, circulatory and respiratory diseases, diabetes, and suicide which can stress the health care system (White, 2011). In addition to generally poorer health statuses, rural populations tend to have challenges accessing health services. Low population densities can make it difficult to have health care offices and providers available in every community due to a lack of critical mass and economies of scale (British Columbia Ministry of Health, 2015; Ontario Hospital Association, 2015; White, 2011). This results in rural populations often needing to travel greater distances to access services or have trouble navigating the health system as some services are available locally while others are not (Government of Newfoundland and Labrador Ministry of Health and Community Services, 2015; Iowa Department of Public Health, 2011; Island Health, 2013; Nova Scotia Health Authority Central Zone, 2017; White, 2011). The service delivery models described in the included results aim to address these challenges.

Consistent across the included papers was the idea that each rural community is unique with its own specific combination of challenges and assets. As such, there is no one-size-fits-all service delivery model that will work for rural communities. As a result, the importance of engaging with community members, community organizations, municipal government agencies, and other local health care providers to assess local needs and assets and to develop local strategies was prominent among the results (British Columbia Ministry of Health, 2015; Capital Health Primary Health Care & District Department of Family Practice, 2011; City of Hamilton Public Health Services, 2011; Drug Strategy Coordination Committee, 2017; Government of Australia Department of Health, 2011; Government of

Newfoundland and Labrador Ministry of Health and Community Services, 2015; Interior Health Authority, 2014, 2015, 2016, 2017; Iowa Department of Public Health, 2011; Nova Scotia Health Authority Central Zone, 2017; NSW Government Department of Health, 2014; Ontario Hospital Association, 2015; Queensland Government Department of Health, 2013; State of Indiana, 2012; Vancouver Island Health Authority, 2016, 2018; Virginia Department of Health, 2013; Windsor-Essex County Health Unit, 2017; Winnipeg Regional Health Authority, 2010, 2013, 2014, 2016; Winnipeg Regional Health Authority Population & Public Health, 2013b, 2015a, 2015b). To further understand local community needs and the ability to monitor progress on desired health outcomes, another prevalent theme was having systems in place to collect, monitor, analyze, and share local data. Strategies included conducting regular community health assessments, having data sharing agreements with other community organizations, and having standard Electronic Medical Records in order to aggregate local data from multiple providers (Government of Australia Department of Health, 2011; Government of Colorado, 2013; Government of Newfoundland and Labrador Ministry of Health and Community Services, 2015; Interior Health Authority, 2017; Iowa Department of Public Health, 2011; Ontario Hospital Association, 2012, 2015; Vancouver Island Health Authority, 2009; Windsor-Essex County Health Unit, 2017, 2018; Winnipeg Regional Health Authority Population & Public Health, 2012b, 2015a, 2015b).

One of the most prevalent findings, which greatly impacted the extraction and interpretation of the available information, is that Ontario is relatively unique in having a separate agency for public health. In many jurisdictions, within Canada and abroad, population and public health are departments or branches of a larger health authority also directing primary health care and emergency health services. As such, many of the included documents are plans for the service delivery of primary health care through which public health issues like chronic disease prevention, healthy lifestyles, maternal and child health, and immunizations are addressed (British Columbia Ministry of Health, 2015; Capital Health Primary Health Care & District Department of Family Practice, 2011; Government of Australia Department of Health, 2011; Government of Colorado, 2013; Government of Newfoundland and Labrador Ministry of Health and Community Services, 2015; Horizon Health Network, 2010; Interior Health Authority, 2012, 2014, 2015, 2016; Iowa Department of Public Health, 2011; Island Health, 2013; Michigan Center for Rural Health, 2008; Nevada Department of Health and Human Services, 2016; NSW Government Department of Health, 2014; Prince Edward Island Department of Health, 2008; Queensland Government Department of Health, 2013, 2014; State of Indiana, 2012; State of Victoria Department of Health, 2011; Vancouver Island Health Authority, 2009; Victoria State Government, 2017; Virginia Department of Health, 2013). In many organizations with this structure there is a focus within primary health care on population health and the social determinants of health (British Columbia Ministry of Health, 2015; Horizon Health Network, 2010; Interior Health Authority, 2014, 2015, 2016; Island Health, 2013; Ontario Hospital Association, 2012, 2015; State of Indiana, 2012). As a result, many service delivery models for primary health care are used to address issues which are, in Ontario, traditionally the territory of public health.

In settings where primary health has responsibility for population and public health outcomes, the most prevalent model proposed is that of a “health hub”, although the model goes by many different names. In essence, a health hub is a model whereby many different health care providers and services are integrated, usually with multi-disciplinary teams, and co-located or networked with other social services such as housing, education, child services, and social assistance (Capital Health Primary Health Care &

District Department of Family Practice, 2011; City of Hamilton, 2014; Horizon Health Network, 2010; Interior Health Authority, 2016; Nevada Department of Health and Human Services, 2016; NSW Government Department of Health, 2014; Prince Edward Island Department of Health, 2008; Queensland Government Department of Health, 2014; State of Indiana, 2012; Vancouver Island Health Authority, 2009, 2018; Victoria State Government, 2017). Even in settings where separate public health entities exist, such as Ontario, the health hub model is promoted for rural settings with the vision that public health will collaborate with the health hubs (Ontario Hospital Association, 2012, 2015). The health hub model helps to address several of the challenges rural communities face. Having multiple health and social services co-located or networked together can decrease operating costs such as physical and technological infrastructure (Interior Health Authority, 2012; Ontario Hospital Association, 2015). It can also decrease the amount of travelling rural residents are required to do to access various services (Ontario Hospital Association, 2015). Having health and social services integrated to various degrees can also help to address the social determinants of health by improving access to, and collaboration among, the various services and supports such as housing, education, and social assistance and streamline referrals (Vancouver Island Health Authority, 2009, 2018; Winnipeg Regional Health Authority, 2013). Increased collaboration and integration of multiple services can also improve role clarity among providers, thereby reducing duplication of services which can free up capacity and resources (Island Health, 2013; Victoria State Government, 2017).

Other strategies to improve access to services in rural communities revolve around leveraging already-existing community assets. One approach is to collaborate with community organizations and other health service providers to deliver public health services. This can consist of public health employees delivering the services, but using other organizations' facilities, which reduces operational costs, increases the number of locations through which services can be delivered, and further encourages community development (City of Hamilton, 2017; City of Hamilton Public Health Services, 2011; Drug Strategy Coordination Committee, 2017; Nova Scotia Health Authority Central Zone, 2017; Queensland Government Department of Health, 2014; Winnipeg Regional Health Authority, 2013; Winnipeg Regional Health Authority Population & Public Health, 2016a). It can also consist of already existing community organizations and health care providers addressing public health issues and providing public health services themselves, which expands potential hours and locations through which individuals can receive public health information and services, as well as reduces costs by requiring less public health-specific infrastructure and reducing duplication of efforts. In some settings, this is a component of the health care system as there are no specific public health agencies or organizations addressing specific issues (see above). In other settings, it is public health professionals educating and supporting others to deliver the services. Some examples are family doctors or pharmacists providing immunizations, health screening, and health promotion messaging and schools implementing healthy policy and delivering public-health related curricula (Drug Strategy Coordination Committee, 2017; Government of Australia Department of Health, 2011; Government of Newfoundland and Labrador Ministry of Health and Community Services, 2015; Horizon Health Network, 2010; Interior Health Authority, 2012; Island Health, 2017; National Collaborating Centre for Healthy Public Policy, 2016; Nevada Department of Health and Human Services, 2016; NSW Government Department of Health, 2014; Ontario Hospital Association, 2012, 2015; Public Health England, 2017; Queensland Government Department of Health, 2013; State of Victoria Department of Health, 2011; Virginia Department of Health, 2013; Windsor-Essex County Health Unit, 2017, 2018; Winnipeg Regional Health Authority, 2017; Winnipeg Regional Health Authority Population & Public Health, 2012a, 2012b, 2013a, 2015a, 2015b, 2016b). Similarly, public

health professionals can incorporate already existing facilities and infrastructure within the community into their public health services, such as referring clients to physical activity facilities or encouraging the use of walking trails; this reduces the amount of travel and potential costs to individuals while also not incurring operational costs for the public health system (Nova Scotia Health Authority Central Zone, 2017; Virginia Department of Health, 2013; White, 2011; Winnipeg Regional Health Authority, 2014). Several results advocate for conducting community resource inventories or gap analyses to determine what services are being delivered and by whom to reduce redundancies in service provision (Capital Health Primary Health Care & District Department of Family Practice, 2011; Government of Newfoundland and Labrador Ministry of Health and Community Services, 2015; Island Health, 2013; Vancouver Island Health Authority, 2009; Winnipeg Regional Health Authority Population & Public Health, 2012a).

While having public health issues addressed by others within the community has many benefits to improving access to services and reducing costs to the public health system, it can make it potentially challenging for community members to become aware of, and navigate to, all the different services. This emphasizes the importance of co-ordinating services. Developing formal partnerships with community stakeholders can improve co-ordination of effort, reduce duplication, incorporate non-health sector contributors to health and wellbeing, and provide consistent messaging; however, they also require planned communication to the community to raise awareness and inform how to access services (Capital Health Primary Health Care & District Department of Family Practice, 2011; Drug Strategy Coordination Committee, 2017; Government of Australia Department of Health, 2011; Government of Newfoundland and Labrador Ministry of Health and Community Services, 2015; Nova Scotia Health Authority Central Zone, 2017; NSW Government Department of Health, 2014; State of Indiana, 2012; Vancouver Island Health Authority, 2009, 2016, 2018; Virginia Department of Health, 2013; Windsor-Essex County Health Unit, 2017, 2018; Winnipeg Regional Health Authority, 2016; Winnipeg Regional Health Authority Population & Public Health, 2015b). Some jurisdictions also incorporate the role of a wellness or system navigator who connects clients to the various services in their community depending upon their health needs (Capital Health Primary Health Care & District Department of Family Practice, 2011; City of Hamilton, 2014; Government of Colorado, 2013; Iowa Department of Public Health, 2011; Winnipeg Regional Health Authority Population & Public Health, 2013b).

Another theme which emerged was the need for expanding access to services in order to meet the diverse population needs within a community. In rural communities, populations are more dispersed, most services require driving to access, and unemployment and seasonal work are more prevalent, which can make accessing services from fixed sites during regular business hours more difficult. As such, different service delivery models are usually required; however, determining the appropriate service delivery model to implement depends upon the unique needs of each community and its residents, meeting people where they are and providing services in manners that are acceptable for them (Interior Health Authority, 2012, 2017; NSW Government Department of Health, 2014; Vancouver Island Health Authority, 2018; Virginia Department of Health, 2013; Winnipeg Regional Health Authority, 2013; Winnipeg Regional Health Authority Population & Public Health, 2012a, 2016a). Suggested methods for expanding access to services include, as mentioned above, providing services through other community organizations, facilities, or service providers, thereby increasing the number of locations and potential hours. Outreach, mobile, and home visiting services are also mentioned frequently, especially in the

delivery of substance misuse, sexual health, and harm reduction services, but also to deliver maternal and child health services such as breastfeeding support (Capital Health Primary Health Care & District Department of Family Practice, 2011; City of Hamilton, 2017; City of Hamilton Public Health Services, 2011; Drug Strategy Coordination Committee, 2017; National Collaborating Centre for Healthy Public Policy, 2016; White, 2011; Windsor-Essex County Health Unit, 2018; Winnipeg Regional Health Authority, 2013, 2016; Winnipeg Regional Health Authority Population & Public Health, 2012a, 2013b). Developing formal service agreements between health authorities is another approach proposed from New South Wales in Australia to enable residents who live close to the border to access services from a neighbouring health authority should those services be closer (NSW Government Department of Health, 2014). Finally, technology is advocated as being a manner through which to deliver both direct services through telehealth, as well as health education and information through web-based resources. Live telemedicine alleviates the challenge of having a full range of professionals located in the community, while pre-recorded telemedicine or web content and web-based tools address the challenge of accessing set locations during set hours. Examples of using technology to improve service delivery include using web-based tools to support self-care for chronic disease prevention and management, migrating vaccination reporting online, supplying information about community services online, telehealth for direct patient-provider consultations using either rooms equipped with required equipment or mobile smartphone applications, and telehealth to better connect community stakeholders and health care providers for collaboration, support, and professional development (City of Hamilton, 2017; Interior Health Authority, 2014, 2017; NSW Government Department of Health, 2014; Prince Edward Island Department of Health, 2008; Victoria State Government, 2017).

A final theme which emerged through the included results was that of staffing mix and its impact on maximizing service delivery and available resources. While mainly discussed within the context of primary health care teams whose services addressed public health issues, a prevalent model is multidisciplinary teams working together to provide services. The composition of these teams is dependent upon the needs of the specific community but can include not just physicians and nurses, but also allied health professionals, community health workers, and social service providers (Capital Health Primary Health Care & District Department of Family Practice, 2011; Government of Newfoundland and Labrador Ministry of Health and Community Services, 2015; Nevada Department of Health and Human Services, 2016; Ontario Hospital Association, 2012, 2015; Winnipeg Regional Health Authority, 2013; Winnipeg Regional Health Authority Population & Public Health, 2013b). Having multiple disciplines on the same team can improve the quality of care and reduce the need to travel as different disciplines are available together to provide their expertise. It can also improve the timeliness and cost-effectiveness of care as clients can receive service from the most appropriate professional, not necessarily the most expensive, for example receiving an immunization from a nurse practitioner or pharmacist rather than waiting to see the physician, who is then available to provide services outside of other professions' scopes. Success of this model necessitates that professionals practice at the full scope of their profession and with clear role delineation, thereby increasing the variety of services that are available in the community, often at reduced costs (First Nation's Health Authority, 2015; Government of Australia Department of Health, 2011; Government of Newfoundland and Labrador Ministry of Health and Community Services, 2015; Interior Health Authority, 2012; Iowa Department of Public Health, 2011; NSW Government Department of Health, 2013, 2014; State of Victoria Department of Health, 2011; Victoria State Government, 2017; Virginia Department of Health, 2013; White, 2011). Along those lines, several results also advocated for the increased use of generalist, as opposed to specialist professionals

as they can provide a greater breadth of services, important in rural areas which may have difficulty recruiting or affording health care professionals or not have the volume of requests to support a specialist (British Columbia Ministry of Health, 2015; Iowa Department of Public Health, 2011; NSW Government Department of Health, 2014). Increasing the use of lay health educators or community health workers was also promoted as a more cost effective means of providing education and outreach, connecting clients to community resources, and possibly performing direct services such as screening and rapid tests (Capital Health Primary Health Care & District Department of Family Practice, 2011; Government of Colorado, 2013; Nevada Department of Health and Human Services, 2016; Virginia Department of Health, 2013).

Discussion

Isolating service delivery models for rural public health has some challenges. For one, issues which public health traditionally addresses are not solely the realm of public health professionals and systems anymore, but rather are becoming a priority and service component of other fields such as primary health care. As such, some components of service delivery used by primary health care to address public health may make sense for a public health-specific organization whereas others may not. Another challenge is the lack of a consistent definition of "rural," which makes it difficult to assess the applicability and transferability of findings to the Middlesex County setting. Many of the included papers which focussed on rural settings do not even define "rural." In an attempt to address this issue, papers were sought that either focussed on rural settings, by any definition, or were from health authorities which are in the same Statistics Canada health region peer group as Middlesex-London Health Unit, regardless if they considered themselves rural or not. A possibility was that service delivery models articulated in the self-identified rural papers would not agree with those articulated by Middlesex-London Health Unit's peer group members. Generally speaking, this was not the case, with the themes and strategies outlined above appearing in both sets of results.

It should also be noted that some components of public health are to a large degree lacking from the results, namely services which typically are associated with environmental health and infectious disease control. While terms for these public health components were included in the search strategy, ultimately the results which were included did not address these areas.

An additional limitation to this literature scan is that it was conducted by a single individual and therefore is at increased risk of bias. These findings should be incorporated into other forms of evidence for decision-making purposes.

Conclusion

Each rural community is unique, facing its own challenges and containing its own assets. As such, there is no one-size-fits-all service delivery model that will work across all rural settings; however, there are several consistent considerations for planning how to deliver services: determining the needs, assets, and challenges of the local community through collecting local data and engaging with community members and stakeholders, the better to tailor approaches to that community; collaborating and co-ordinating services, using assets and providers already existing in the community or technology, to enable more services to be delivered locally and with greater accessibility and to better address the social determinants of health; and incorporating many different disciplines and professions within the

staffing mix, working to their fullest scope, to maximize the variety of services and expertise available with available staff.

References

British Columbia Ministry of Health. (2015). Rural health services in BC: A policy framework to provide a system of quality care. Retrieved from https://www.health.gov.bc.ca/library/publications/year/2015/rural-health-policy-paper.pdf

Capital Health Primary Health Care & District Department of Family Practice. (2011). *The difference of primary health care: A report on the work of primary health care*. Halifax, Nova Scotia: Capital Health, Primary Health Care & District Department of Family Practice.

City of Hamilton. (2014). Hamilton's plan for an age-friendly city. Retrieved from https://www.hamilton.ca/sites/default/files/media/browser/2016-01-20/hamilton-plan-age-friendly-strategy.pdf

City of Hamilton. (2017). A healthy, safe and supportive community for all. Retrieved from https://d3fpllf1m7bbt3.cloudfront.net/sites/default/files/media/browser/2018-05-25/phs-annual-report-2017.pdf

City of Hamilton Public Health Services. (2011). *Harm reduction program - street health & van needle exchange situational assessment* (BOH11031). Retrieved from Hamilton, ON: http://www2.hamilton.ca/NR/rdonlyres/927FEAE2-F94C-436C-92B0-3FA25EF98966/0/Sep26EDRMS_n216099_v1_BOH11031_Harm_Reduction_Program_Review.pdf

Drug Strategy Coordination Committee. (2017). Brantford-Brant County community drug strategy. Retrieved from https://www.bchu.org/ServicesWeProvide/HealthyLivingAndSafety/harmreduction/Documents/Brantford_Brant%20Community%20Drugs%20Strategy-5.pdf

First Nation's Health Authority. (2015). Nursing review. Retrieved from http://www.fnha.ca/Documents/FHNA-Nursing-Review-Report-November-2015.pdf

Government of Australia Department of Health. (2011). National strategic framework for rural and remote health. Retrieved from http://www.health.gov.au/internet/main/publishing.nsf/content/A76BD33A5D7A6897CA257F9B00095DA3/$File/National%20Strategic%20Framework%20for%20Rural%20and%20Remote%20Health.pdf

Government of Colorado. (2013). Colorado's state health innovation plan. Retrieved from https://www.colorado.gov/pacific/sites/default/files/Colorado%27s%20State%20Health%20Innovation%20Plan%20December%202013.pdf

Government of Newfoundland and Labrador Ministry of Health and Community Services. (2015). Healthy people, healthy families, health communityes: A primary health care framework for Newfoundland and Labrador, 2015-2025. Retrieved from http://www.health.gov.nl.ca/health/publications/phc_framework.pdf

Horizon Health Network. (2010). Building healthier communities: Community update, spring 2010. Retrieved from http://en.horizonnb.ca/media/33792/reporttocomm_spring10.pdf

Interior Health Authority. (2012). Charting the course: Interior Health's planning principles and considerations for change. Retrieved from

https://www.interiorhealth.ca/AboutUs/StrategicDirection/Documents/Charting_the_Course.pdf
Interior Health Authority. (2014). 2014/15 - 2016/17 service plan. Retrieved from https://www.interiorhealth.ca/AboutUs/Accountability/Documents/Service%20Plan%202014-15_2016-17.pdf
Interior Health Authority. (2015). 2015/16 - 2017/18 service plan. Retrieved from https://www.interiorhealth.ca/AboutUs/Accountability/Documents/Service%20Plan%202015-16_2017-18.pdf
Interior Health Authority. (2016). 2016/17 - 2018/19 service plan. Retrieved from https://www.interiorhealth.ca/AboutUs/Accountability/Documents/Service%20Plan%202016-17_2018-19.pdf
Interior Health Authority. (2017). Aboriginal mental wellness plan. Retrieved from https://www.interiorhealth.ca/YourHealth/AboriginalHealth/Documents/Aboriginal%20Mental%20Wellness%20Plan.pdf
Iowa Department of Public Health. (2011). Iowa rural and agricultural health and safety resource plan. Retrieved from https://idph.iowa.gov/Portals/1/Files/RuralHealthPrimaryCare/2011_safety_resource_plan.pdf
Island Health. (2013). Rural health services framework. Retrieved from https://www.viha.ca/NR/rdonlyres/4C9BD3D9-D783-49BA-917F-217AFA421E2B/0/FinalRuralHealthFrameworkSept172014.pdf
Island Health. (2017). Opioid harm reduction and treatment strategies. Retrieved from https://www.viha.ca/NR/rdonlyres/E11CA209-293C-43A5-BF94-039219A3CC83/0/fsopioidharmreductiontreatment.pdf
Michigan Center for Rural Health. (2008). Michigan strategic opportunities for rural health improvement: A state rural health plan 2008-2012. Retrieved from https://www.michigan.gov/documents/mdch/Plan_4-15-08_FinalwCover_232037_7.pdf
National Collaborating Centre for Healthy Public Policy. (2016). Overdose prevention programming: Education and naloxone distribution. Retrieved from https://www.ncchpp.ca/docs/2016_OBNL_NGO_PracticalGuidelines_En.pdf
Nevada Department of Health and Human Services. (2016). Nevada state health system innovation plan: State innovation model. Retrieved from http://dhcfp.nv.gov/uploadedFiles/dhcfpnvgov/content/Resources/Rates/Nevada%20State%20Health%20System%20Innovation%20Plan(1).pdf
Nova Scotia Health Authority Central Zone. (2017). 2017 community health plan. Retrieved from https://static1.squarespace.com/static/58d93c67b8a79bb89e7df56c/t/5908b519c534a5315059b9dc/1493742874355/2017_05_02+CZ_CommHealthPlan.pdf
NSW Government Department of Health. (2013). Oral health 2020: A strategic framework for dental health in NSW. Retrieved from http://www.health.nsw.gov.au/oralhealth/Publications/oral-health-2020.pdf
NSW Government Department of Health. (2014). NSW rural health plan: Towards 2021. Retrieved from http://www.health.nsw.gov.au/rural/Publications/rural-health-plan.pdf
Ontario Hospital Association. (2012). Local health hubs for rural and norther communities: An integrated service delivery model whose time has come. Retrieved from https://www.oha.com/Documents/Local%20Health%20Hubs%20for%20Rural%20and%20Northern%20Communities.pdf
Ontario Hospital Association. (2015). Rural health hub framework for Ontario. Retrieved from https://www.oha.com/Documents/Rural%20Health%20Hub%20Framework%20Ontario.pdf

Prince Edward Island Department of Health. (2008). An integrated health system review in PEI. A call to action: A plan for change. Retrieved from https://www.princeedwardisland.ca/sites/default/files/publications/ihsrcsi08h.pdf

Public Health England. (2017). Pharmacy: A way forward for public health. Opportunities for action through pharmacy for public health. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/643520/Pharmacy_a_way_forward_for_public_health.pdf

Queensland Government Department of Health. (2013). Queensland rural and remote health services framework. Retrieved from https://www.health.qld.gov.au/__data/assets/pdf_file/0032/432878/randr_hsp_framework.pdf

Queensland Government Department of Health. (2014). Queensland universal child health framework - implementation guide. Retrieved from https://www.childrens.health.qld.gov.au/wp-content/uploads/PDF/qcycn/imp-guide.pdf

State of Indiana. (2012). Indiana state rural health plan. Retrieved from https://www.in.gov/isdh/files/Indiana_State_Rural_Health_Plan_2012.pdf

State of Victoria Department of Health. (2011). *Victorian health priorities framework 2012-2022: Rural and regional health plan*. Melbourne, Australia: State of Victoria Department of Health.

Statistics Canada. (2017). Health regions 2017 by peer group. Ottawa, ON: Statistics Canada.

Vancouver Island Health Authority. (2009). Primary health care strategy: Framework refresh, 2009/10 - 2014/15. Retrieved from https://www.viha.ca/NR/rdonlyres/453A2276-E33E-400E-82A7-F618D65A922B/0/phcstrategyframework.pdf

Vancouver Island Health Authority. (2016). 2015/16 annual service plan report. Retrieved from https://www.viha.ca/NR/rdonlyres/53E125DD-3467-4460-BF1D-277FD19E1FE4/0/annualserviceplanreport201617.pdf

Vancouver Island Health Authority. (2018). 2017/18 - 2019/20 service plan. Retrieved from https://www.viha.ca/NR/rdonlyres/4C3C7017-633B-4258-8579-04CE8848E259/0/IslandHealthHealthServicePlan1718_1920_April2018.pdf

Victoria State Government. (2017). Statewide design, service and infrastructure plan for Victoria's health system, 2017-2037. Retrieved from https://www2.health.vic.gov.au/hospitals-and-health-services/health-system-design-planning/statewide-plan

Virginia Department of Health. (2013). Virginia's state rural health plan. Retrieved from http://www.vdh.virginia.gov/content/uploads/sites/76/2016/06/2013VSRHP-final.pdf

White, D. (2011). Development of a rural health framework: Implications for program service planning and delivery. Retrieved from http://hnhu.org/wp-content/uploads/Development_of_a_Rural_Health_Framework_Report_with_Cover_low_res.pdf

Windsor-Essex County Health Unit. (2017). Strategic plan, 2017-2021. Retrieved from https://www.slideshare.net/WECHU/wechu-strategic-plan-20172021/1

Windsor-Essex County Health Unit. (2018). Windsor-Essex community opioid strategy: An action plan for our community. Retrieved from https://www.wechu.org/sites/default/files/chronic-disease-prevention-and-workplace-wellness/OpioidStrategyJAN222018_FINALPrintVersion.pdf

Winnipeg Regional Health Authority. (2010). Understanding the health and health issues of immigrant and refugee populations. Part two: Developing an evidence-informed response. Retrieved from http://www.wrha.mb.ca/research/cha/files/ImmRefug_PART02.pdf

Winnipeg Regional Health Authority. (2013). Health for all: Building Winnipeg's health equity action plan. Retrieved from http://www.wrha.mb.ca/about/healthequity/files/HealthForAll_Documentwithlinks.pdf

Winnipeg Regional Health Authority. (2014). Community development framework, updated 2014. Retrieved from http://www.wrha.mb.ca/community/commdev/files/CommDev-Framework.pdf

Winnipeg Regional Health Authority. (2016). Practice guideline for public health nurses working with healthy children and youth population. Retrieved from http://www.wrha.mb.ca/extranet/publichealth/files/HealthyChildrenYouthGuideJly2016.pdf

Winnipeg Regional Health Authority. (2017). Operational guideline for collaborative practice between public health nurses and midwives - perinatal services. Retrieved from http://www.wrha.mb.ca/extranet/publichealth/files/PHNsandMidwivesPerinatalServicesJune2017.pdf

Winnipeg Regional Health Authority Population & Public Health. (2012a). Healthy sexuality and harm reduction strateic planning conceptual framework. Retrieved from http://www.wrha.mb.ca/extranet/publichealth/files/services/healthy-sexuality/CF2012-17v3.pdf

Winnipeg Regional Health Authority Population & Public Health. (2012b). Physical activity promotion strategic plan. Retrieved from http://www.wrha.mb.ca/extranet/publichealth/files/FINAL2012-2017PPHPAPStratPlan.pdf

Winnipeg Regional Health Authority Population & Public Health. (2013a). Nutrition promotion strategic planning conceptual framework. Retrieved from http://www.wrha.mb.ca/extranet/nutrition/files/PPHNutritionStrategy.pdf

Winnipeg Regional Health Authority Population & Public Health. (2013b). Public health nurse professional practice model. Retrieved from http://www.wrha.mb.ca/extranet/publichealth/files/PHNPPMPSversion2014Sept5FINAL.pdf

Winnipeg Regional Health Authority Population & Public Health. (2015a). Healthy built environments strategic planning conceptual framework. Retrieved from http://www.wrha.mb.ca/extranet/publichealth/files/HBEStratPlan_Dec2015.pdf

Winnipeg Regional Health Authority Population & Public Health. (2015b). Injury prevention conceptual framework. Retrieved from http://www.wrha.mb.ca/extranet/publichealth/files/InjuryFramework2015final.pdf

Winnipeg Regional Health Authority Population & Public Health. (2016a). Immunization programs. Retrieved from http://www.wrha.mb.ca/extranet/publichealth/files/PPHImmsStrat.pdf

Winnipeg Regional Health Authority Population & Public Health. (2016b). Mental health promotion program - strategic planning conceptual framework. Retrieved from http://www.wrha.mb.ca/extranet/publichealth/files/MentalHlthPromoStratPlanSept2016.pdf

Appendix C

Municipal Council Survey

For information, please contact:

Jordan Banninga
Manager, Program Planning & Evaluation
Middlesex-London Health Unit
E-mail: jordan.banninga@mlhu.on.ca

Introduction

As part of the process to understand the community needs and identify strategies to enhance access to public health services, the Middlesex-London Health Unit commissioned an online survey of municipal councillors to assess their areas of public health priority, how the Health Unit can increase accessibility, and gather feedback on way to improve services.

Specifically, in order to ensure that the Health Unit is meeting the needs of its Middlesex County residents, this consultation was conducted to keep key decision makers informed, and to understand and acknowledge the interests and concerns that can be integrated into decision-making.

Results from this survey will be used to inform future strategies to improve service delivery.

The survey was conducted by Middlesex-London Health Unit staff during the period of June 4th, 2018 to August 31st, 2018.

Study Implementation

Survey Instrument

A survey instrument was developed by the Middlesex-London Health Unit in order to collect information about municipal council needs and priorities for Health Unit service. The final instrument consisted of 13 items.

Survey Sample

The survey was distributed to all municipal councillors at lower-tier council meetings attended during June and August 2018. It was distributed in pre-addressed postage paid envelopes with an option to complete the survey online using CheckMarket Survey software. An additional reminder email was sent to all councillors in August 2018. At the time of survey distribution, there were 52 councillors.

Survey Fielding

The overall completion rate was 26.9%, with a total of 14 surveys completed. Average completion time of the survey was 11 minutes and 20 seconds. Only completed surveys were included for analysis.

Survey Limitations

There are a number of study limitations given the sampling strategy used for conducting this online self-administered survey.

Due to the nature of the self-administered survey, respondents were not able to clarify questions that they may have at the time of survey completion. However, there was contact information for the Project Manager available to participants at the outset of the survey in order to provide the opportunity to seek clarification if questions did arise.

The main limitation of a sampling strategy is that municipal councillors, while elected, may not be representative of the views of all Middlesex County residents.

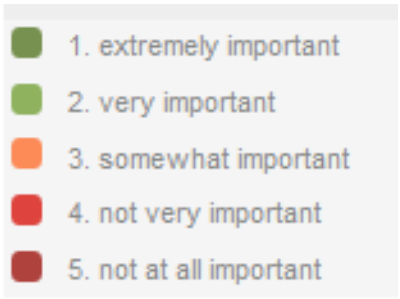
Furthermore, participants could have completed the online survey more than once as there was no method established to control for this issue.

1. How familiar are you with MLHU's programs and services?

N=13

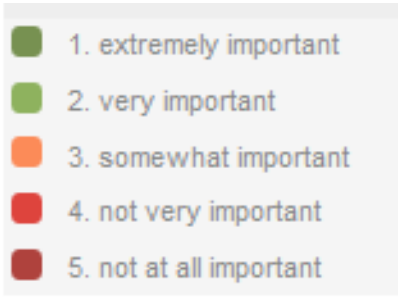
2. How important is it for MLHU to focus on the following areas of public health program and service delivery in Middlesex County?

Sub-questions	Resp.	% of responses
Safe Water	13	69 / 31
Infectious and Communicable Disease Prevention and Control	13	69 / 23 / 8
Food Safety	13	62 / 31 / 8
Immunization	12	58 / 25 / 17
Chronic Disease Prevention and Well-Being	13	38 / 46 / 15
School Health	13	23 / 62 / 15
Substance Use and Prevention	13	31 / 46 / 23
Healthy Growth and Development	12	42 / 25 / 33
Healthy Environments	13	15 / 62 / 23



3. How important is it for MLHU to focus on the following foundational standards for public health practice?

Sub-questions	Resp.	% of responses
Health Equity	12	33 / 58 / 8
Effective Public Health Practice	13	8 / 85 / 8
Emergency Management	13	31 / 38 / 23 / 8
Population Health Assessment	13	8 / 69 / 23



4. Please describe the public health issues that are of primary concern to Middlesex County residents.

Respondents were asked to give their own opinions and comments about the primary concern to Middlesex County residents.

A wide range of concerns were mentioned across the commentary. The most frequent responses were related to opioids and drug addiction, immunization and vector-borne disease.

Issues outside the authority of public health (access to primary care providers and specialists, home care, etc.) were not included in the counts below.

Concern	Count
Opioids & Drug Addiction	4
Immunization	3
Vector Borne Disease	3
Mental Health	2
Prenatal Health	2
Safe Water	2
Sexual Health	2
Accessibility of Physical Locations	2
Early Growth and Development	1
Food Safety	1
Health Equity	1
Infectious Disease Control	1
Marijuana Legalization	1
Parenting	1

5. How accessible (physically, with outreach programs, and virtually) are MLHU's programs and services to residents of Middlesex County?

N = 13

6. How could MLHU increase accessibility for Middlesex County residents?

Theme	Count
Provide programming in each community	3
Offer more programming in Strathroy	3
Participate in the regional transportation initiative	2
Utilize municipal/county spaces	2
Offer rotating / mobile clinics around the county	2
Improve the efficiency of responding to questions online or over the phone	1
Offer programming through other health care providers / private sector	1

7. What are the best ways for MLHU to share information to assist partners with their understanding of public health issues and/or opportunities?

Theme	Count
Social media	3
Share information at other locations (libraries, schools, town hall, doctors offices, etc.)	3
Online newsletters	2
Regular visits to municipal councils	2
Information sessions	2
Information in tax notices	2
Digital media	2
Print media	2
Service clubs	1

8. What are the best ways for MLHU to obtain feedback from community partners on public health issues and/or opportunities?

Theme	Count
Social media	3
Share information at other locations (libraries, schools, town hall, doctors offices, etc.)	3
Online newsletters	2
Regular visits to municipal councils	2
Information sessions / community meetings	2
Information in tax notices	2
Digital media	2
Print media	2
Service clubs	1

9. What are the best ways for MLHU to consider the concerns and needs of community partners for public health issues and/or opportunities?

Theme	Count
Formal feedback mechanisms	2
Work with community partners	2
Consultation sessions	2
Delegations to municipal councils	1
Social media	1

10. What are the best ways for MLHU to with engage community partners in decision-making for public health issues and/or opportunities?

Theme	Count
Delegations to municipal councils	3
Listen to community about issues	3
Hold public meetings regarding budget priorities and other priorities	2
Work with community partners	1
Develop good relationships with municipal officials	1
Social media	1

11. What are the best ways for MLHU to place final decision-making in the hands of the community partners for public health issues and/or opportunities?

Theme	Count
Ensure that mandates for decision-making are clear	2
Work with committees that have broad community representation	2
Gather information from public meetings and present finding to decision-making bodies like municipalities	2
Define what success looks like when empowering decision-makers	1

12. What are the community assets (individuals, associations, institutions, physical assets, and connections, etc.) in Middlesex County that you feel MLHU should be aware to enhance public health program and service delivery?

Theme	Count
Local service clubs	4
Existing health providers	3
Education system	3
Public transit providers	3
Work closely with municipal councils	2
Social service agencies and not-for-profits	4
Faith-based organizations	2
Community centres	2
Private businesses	2
Libraries	2
Work closely with municipal administrators	1
Local media outlets	1
Municipal offices	1
Parks	1
Arenas	1
Sports clubs	1

13. Please share any additional thoughts about how the Middlesex-London Health Unit can enhance services that have not previously been addressed.

Theme	Count
Enhanced communication and visibility	2
Increase physical presence in county if financially viable	1
Continuous dialogue with public and community partners	1
Enhance outreach in-person and electronic	1
Ensure low cost travel to programs and facilities	1
Partner and coordinate with existing service providers	1
Offer mobile services	1

Appendix D

Key Informant Interviews

AUGUST 2018

For information, please contact:

Jordan Banninga
Manager, Program Planning & Evaluation
Middlesex-London Health Unit
E-mail: jordan.banninga@mlhu.on.ca

Introduction

As part of the process to understand the community needs and identify strategies to enhance access to public health services, the Middlesex-London Health Unit reached out to Mayors and Deputy Mayors of municipalities in Middlesex County to understand their perspectives on public health services being provided to their residents and opportunities for improvement.

The key informant interviews were conducted by Middlesex-London Health Unit staff during the period of July 19th, 2018 to September 6th, 2018.

Study Implementation

Survey Instrument

A survey instrument was developed by the Middlesex-London Health Unit in order to collect information from key informants regarding the services provided to rural populations. The final instrument consisted of 9 items.

Survey Sample

All mayors, deputy mayors or designates were invited to participate.

Survey Fielding

A total of three telephone interviews were completed. Average completion time of the survey was 30 minutes.

Survey Limitations

There are a number of study limitations given the sampling strategy used for conducting the interviews.

The main limitation of a sampling strategy is that there were few respondents and it was not possible to reach data saturation. Additionally, municipal councillors, while elected, may not be representative of the views of all Middlesex County residents.

1. Please describe the public health issues that are of primary concern to Middlesex County residents.

Opioids and Drug Addictions

- Opioids and drug addition was raised as a public health issue of concern by two of the three key informants interviewed
- One key informant noted that there is a stigma associated with drug and drug addiction and many try to turn a blind eye
- This issue is intertwined with other issues such as housing and mental health

Mental Health

- Mental health was a concern of two of the three key informants
- It was felt that is an issue that requires the involvement of many different community organizations to solve and not just the Health Unit
- With limited resources, the response will depend on communication and awareness – about where people can access services, and partnerships between those who have resources in the county

Vector-borne disease (West Nile Virus)

- Vector-borne disease (West Nile Virus) was commented on by two of the three key informants
- West Nile Virus is present in North Middlesex and the larviciding program is important to county residents

Other public health issues of concern

- Prenatal and postnatal health and support for mothers and families who have to balance jobs and other priorities
- Vaccination (no details provided)
- Bullying

Other comments not specific to public health issues

- The relationship with municipalities is important
- Continue to by present physically in the community
- The public has a difficult time knowing who we are and what we do. There could be improvement in the ways we communicate (using newsletters, visits to councils, working with community partners, etc.)

2. How accessible (physically, with outreach programs, and virtually) are MLHU's programs and services to residents of Middlesex County?

Transportation Challenges

- All respondents noted that transportation is a significant challenge for their residents, particularly the most vulnerable residents. There is a lack of public transportation options for county residents. Many residents are not familiar with our locations and how accessible we are and it can be difficult for residents to get to downtown London for services

Libraries as Community Hubs

- All respondents noted that libraries are becoming the hub of many communities and provides a space for information to be shared and services to be delivered in a way that people would not be stigmatized for accessing health unit services

Community Partnerships

- All respondents touched upon the need to collaborate with community partners to share information and to use spaces that are already existing in the community.
- Some of the places to share information include schools, hospitals, primary care providers, town halls, municipality-specific web pages, local media, etc.
- Some of the physical spaces to use include schools, community rooms, grocery stores, libraries, town hall, social housing, etc.

3. What are some of the items of public health importance that municipalities and community partners should be informed of?

- The Health Unit could inform residents of items of public health importance through:
  - Newsletters to municipal councils (could be sent as correspondence)
  - Speaking at service organizations
  - Tax bill inserts
  - Specific websites (i.e. Strathroy Buy and Sell)
  - Billboards and portable signs
  - Social media
  - Communication with schools

4. What are some of the items of public health importance that municipalities and community partners should be consulted on?

- The Health Unit should consult municipalities regarding the opioid crisis and where consumption sites might be located
- The Health Unit should also consult with municipalities regarding where clinics could best be located
- Suggested methods to effectively consult include:
  - Delegations to municipal councils
  - Speaking at service organizations

5. What are some of the items of public health importance that municipalities and community partners should be involved in the planning and decision-making?

- Issues regarding wind turbines and municipal land use were mentioned by key informants
- One key informant noted that the Health Unit board is the body responsible for decision-making and that municipalities and community partners should be comfortable in having the Health Unit make decisions
- Suggested methods to effectively involve municipalities and community partners in decision-making included:
  - Surveys (although they can be unreliable)
  - Open houses
  - Conversations with municipalities and decision-makers
  - Regularly scheduled engagement opportunities

6. What are some of the items of public health importance that municipalities and community partners should be collaborating with MLHU on?

    - Key informants noted that the Health Unit could collaborate with municipalities on safe consumptions facilities, movies in the park, dental for low-income adults, mental health, bullying and infectious disease outbreaks
    - One informant felt that any issues that is controversial or could have significant impact on people should involve collaboration

7. What are some of the items of public health importance that municipalities and community partners should be making the final decisions on?

    - One key informant noted that zoning is an issue that municipalities have the final decision on but that the Health Unit should have input if there is a public health impact

8. What are the community assets (individuals, associations, institutions, physical assets, and connections, etc.) in Middlesex County that you feel MLHU should be aware to enhance public health program and service delivery?

    - All of the key informants noted the importance of schools, service groups in their community,
    - Two of the key informants noted libraries as physical infrastructure
    - Other community assets included:
        - Faith-based organizations
        - Community centres and halls
        - Not-for-profits
        - For-profit businesses
        - Primary care providers
        - Retirement and nursing homes

9. Do you have any additional thoughts about how the Middlesex-London Health Unit can enhance services that have not previously been addressed?

    - Communicating to the public is paramount to ensuring people know who we are, where to find our programs and services and how to contact us
    - Utilize community events to reach municipal residents and be physically present

Appendix E

Environmental Scan of Ontario Public Health Units

AUGUST 2018

For information, please contact:

Jordan Banninga
Manager, Program Planning & Evaluation
Middlesex-London Health Unit
E-mail: jordan.banninga@mlhu.on.ca

Introduction

As part of the process to understand the community needs and identify strategies to enhance access to public health services, the Middlesex-London Health Unit reached out to Ontario Public Health Units with similar demographics to understand their strategies for servicing rural populations.

Specifically, in order to ensure that the Health Unit is considering all possible strategies and best practices, this environmental scan sought to identify potential service improvements for Middlesex County residents.

The environmental scan was conducted by Middlesex-London Health Unit staff during the period of July 19th, 2018 to August 31st, 2018.

Study Implementation

Survey Instrument

A survey instrument was developed by the Middlesex-London Health Unit in order to collect information from Ontario Public Health Units regarding the services they provide to rural populations. The final instrument consisted of 9 items.

Survey Sample

The survey was distributed to 14 health units during July and August 2018. It was distributed to the business administrators via email to complete using an online survey.

Survey Fielding

The overall completion rate was 35.7%, with a total of 5 surveys completed. Average completion time of the survey was 7 minutes and 28 seconds. Only completed surveys were included for analysis.

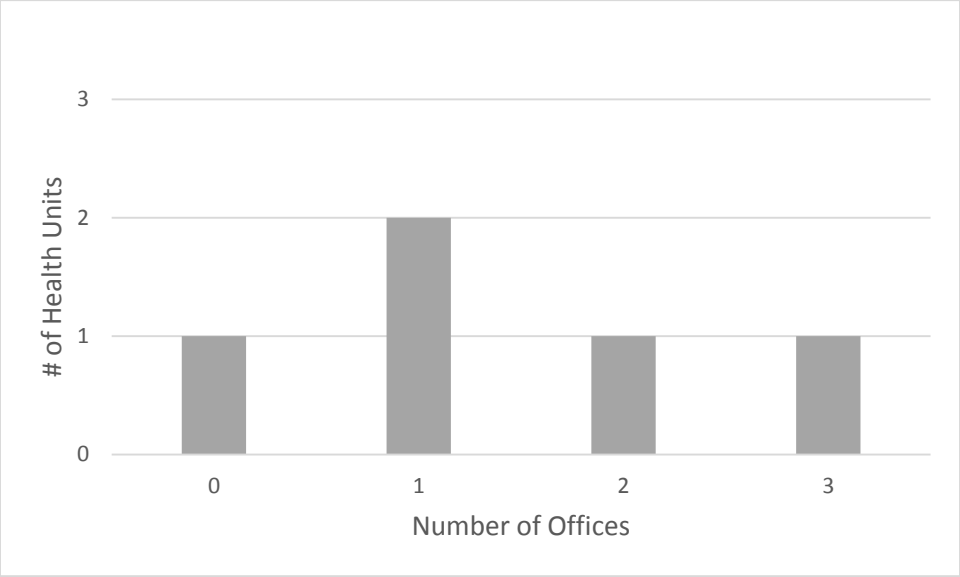
Survey Limitations

There are a number of study limitations given the sampling strategy used for conducting this online self-administered survey.

Due to the nature of the self-administered survey, respondents were not able to clarify questions that they may have at the time of survey completion. However, there was contact information for the Project Manager available to participants at the outset of the survey in order to provide the opportunity to seek clarification if questions did arise.

The main limitation of a sampling strategy is that each health unit has different community needs, strategies and characteristics that must be considered.

1. Do you have satellite offices in the rural communities the health unit serves? If yes, how many satellite sites does the Health Unit have?



- Three of the health units also noted the use of other shared office spaces and "service centres"

2. If yes, what public health programs and services are available at the satellite sites?

- Two health units noted almost all services are provided at satellite sites
- Other health units noted:
    - Sexual health services
    - Infant feeding supports
    - Tobacco cessation
    - Oral health
    - Environmental health programs
    - Mother and young child clinics

3. Does the Health Unit use community spaces (e.g. library, community centres) to deliver public health programs and services?

- One health unit indicated they do but not on a regular basis
- Other health units indicated they utilize:
    - Libraries
    - Community centres
    - Social housing common areas
    - Recreation centres
    - Municipal offices
    - Schools spaces
    - Community health centres
    - Community hubs
    - Early years centres
    - Hospitals
    - Faith-based organization spaces

4. Besides physical locations, what does your Health Unit do to increase the accessibility of its public health programs and services to rural residents?

- Website, social media and other internet applications
- Phone service
- Information at municipal offices
- Drop off sites for water testing in rural communities
- Mobilize and build capacity with community groups and partners to deliver services (health care providers, other social services, volunteers, etc.)
- Board meetings are rotated between municipal and First Nation sites
- Partnerships with neighbouring health units when residents may have closer options
- Have staff working in schools across rural areas
- Staff attendance at community events
- Rotate the location of classes and courses
- Offer taxi vouchers

5. How do you provide rural residents / municipalities with balanced and objective information to assist them in understanding the problems, alternatives and/or solutions?

- Website
- Town hall meetings and presentations
- Board of Health reports and meeting minutes are accessible
- Communication team ensure that strategies are in place to reach all residents
- Maintain listing of people and organizations to disseminate information to

6. How do you obtain rural residents/municipalities feedback on analysis, alternatives and/or decisions?

- Surveys
- Community meetings
- Feedback is build into program delivery and evaluation (each program ensures they are obtaining feedback)

7. How do you work directly with rural residents / municipalities throughout the process to ensure that public concerns and aspirations are consistently understood and considered?

- Ensure that residents and municipalities are involved in the planning process
- A community engagement strategy has been developed to guide this work

8. How do you partner with the rural residents / municipalities in aspects of decision-making including the development of alternatives and the identification of the preferred solution?

    - Ensure that residents and municipalities are involved in all aspects of planning, implementation and evaluation
    - Have staff that act as liaisons between stakeholder groups
    - Use a community development approach
    - Ensure board representation of the community
    - Build and use coalitions

9. When do you place final decision-making in the hands of the rural residents / municipalities?

    - Public health units can provide advice to municipalities when they make decisions regarding public health matters

10. Please provide any additional comments you would like to share about engaging with rural residents/municipalities

    - It is difficult to obtain data specific to rural municipalities
    - Engage with candidates for municipal offer by having a conversation café to help them understand key public health issues

BUREAU DE SANTÉ DE MIDDLESEX-LONDON HEALTH UNIT

Review of Public Health Services in Middlesex County
Action Planning

Appendix C to Report No. 075-19

Recommendation	#	Action Item	Lead	Expected Date of Completion / Implementation	Status Update
Establish regular communication channels (delegations, newsletters / correspondence) to all municipal councils (upper and lower tier)	1	*Develop Board of Health Governance Policy for Relationships with Other Health Service Providers and Key Stakeholders that outlines regular communication channels*	o Manager, Privacy, Risk and Governance o Manager, Program Planning and Evaluation o Manager, Communications o Manager, Health Equity and Indigenous Reconciliation	On hold pending public health restructuring	
	2	*Schedule and conduct regular delegations to all municipal councils (at least once every two years)*	o MOH / CEO o Senior Leadership Team	2020 - Q4	
	3	*Board of health updates sent as correspondence following each board meeting*	o MOH / CEO o Executive Assistant to the Board of Health	2019 - Q4	Process implemented at the beginning of Q4 - Board of Health will send a letter to County Council the Monday following each Board meeting with the approved minutes from the last meeting and the draft motions from the current meeting.
	4	*Provide informational packages about public health to all municipal candidates running for municipal council*	o Executive Assistant to the Board of Health	2022 - Q4	
Enhance staff and programming presence at the Strathroy office	5	*Ensure intake line project considers a dedicated staff person in Strathroy to provide in-person and over the phone service*	o Intake Line Project Team	2020 - Q1	The Strathroy office will be getting a full time Customer Service Representative effective December 2019. Hours will be from 8:30 to 4:30 Monday to Friday.
	6	*Identify programs and make changes that could enhance programming to meet community health needs*	o Program Planning and Evaluation Team o Program Teams	2019 - Q4	As a result of a breastfeeding program planning process that was completed in 2018, home visits are now offered during the early postpartum period to all Middlesex County residents experiencing breastfeeding challenges. In reviewing Healthy Babies Healthy Children screening processes, and after discussion with administrators at the Middlesex Health Alliance - Strathroy site, it was determined that MLHU would enhance involvement in postpartum HBHC screening prior to hospital discharge. Processes and agreements have been confirmed and screening changes have been recently implemented. A current growth and development program planning process is underway, and may have implications for enhancing programs and services in the County. The Program Planning and Evaluation (PPE) and Population Health Assessment and Surveillance (PHAS) Teams provide ongoing support to program teams to consider enhancements to programs or develop new programs to meet community health needs. For example, a funding application has been submitted to the Ministry of Health for a new Seniors Dental Care Program, which includes the delivery of dental services at the MLHU Strathroy office location, and a mobile bus unit to provide services across the City of London and Middlesex County locations. This would include capital investments, and would expand dental services to seniors, and enhance capacity to offer the Healthy Smiles Program for children in the County. If awarded funds, MLHU anticipates that these services could be initiated by late Spring 2020. A program review was conducted of the Public Health Inspection activities in Middlesex-London to optimize service delivery to the community. As a result, county-based Public Health Inspectors were relocated to provide better geographic coverage and strengthened client relationships. Inspection zones were also realigned in the county and city creating regional interdisciplinary teams supporting inspection activity in food safety, healthy environments, personal service settings, commercial kitchens, residential care homes, seasonal farm housing, rabies response, and safe drinking and recreational water. Public Health Inspectors conduct routine and complaint-based inspections in every one of these settings throughout Middlesex County. During the review, an opportunity for improved service delivery was identified to investigate whether there may be an appetite for the lower-tier municipalities to enact a business licensing bylaw similar to the approach used by the City of London and other municipalities. As it is often difficult to identify new businesses operating in the county such as food services, group homes and tattoo parlors, business licensing bylaws are helpful in providing improved consumer safety by coordinating an initial and subsequent routine health inspection regimen with other mandated inspections such as building code and fire prevention. Without a mechanism for the municipality to identify new businesses to the Health Unit, there are often delays to beginning inspections until the Health Unit becomes aware of their existence through passive means or public complaints. The Vaccine Preventable Disease team has improved its service delivery in Middlesex-London area schools by collaborating with the School Health teams to streamline the school vaccine clinic program. This has resulted in increased efficiency and improved uptake of vaccinations provided in schools. All population health assessment and surveillance activities to consider data specific to rural and County residents whenever such data is available.
Explore a partnership with Middlesex County to utilize comprehensive libraries for program and service delivery	7	*Identify current leases and other spaces that are utilized across Middlesex County*	o Manager, Procurement and Operations	2020 - Q2	
	8	*Identify an MLHU lead to act as the liaison with Middlesex County Library*	o Manager, Procurement and Operations	2019 - Q3	The Manager, Procurement and Operations has been identified as the lead, as this role is often asked to assist programs with finding locations to offer services. Further, all managers are encouraged to consider the library for programming.
	9	*Identify programs that could enhance service delivery through the use of comprehensive libraries*	o Program Planning and Evaluation Team o Program Teams	2019 - Q4	Ongoing efforts are made to consider program and service delivery to Middlesex residents through local libraries, where applicable.

Recommendation	#	Action Item	Lead	Expected Date of Completion / Implementation	Status Update
Ensure MLHU's planning processes takes into consideration the public health needs of Middlesex residents and that staff seek input from Middlesex residents	10	*Revise the planning and evaluation framework (PEF) to consider the public health needs of county residents* *o Situational Assessment Stage Guide* *o Population Health Assessment and Surveillance Tool* *o Program Description* *o Intervention Description* *o Engage Stakeholders Concept Guide* *o Stakeholder Analysis Tool*	o Program Planning and Evaluation Team o Population Health Assessment and Surveillance Team	2019 - Q3	Throughout 2019, the PPE and PHAS Teams have been supporting teams with planning and evaluation projects that consider the public health needs of county residents. For example, population health surveillance data specific to the needs of Middlesex residents has been reviewed to support program planning with the new Seniors Dental Care Program, Mental Health Promotion Program and Violence Prevention Program. Efforts to revise guides and tools in the PEF to specifically consider the needs of Middlesex residents will be focused on in 2020.
	11	*Disaggregation of data to allow for identification of needs for different areas of Middlesex County*	o Population Health Assessment and Surveillance Team	Ongoing	The Community Health Status Resource (CHSR) is MLHU's online and publicly available population health assessment tool. During the 2018/19 update of the CHSR, data was assessed and analyzed, when available, by rural and urban status. This information will help to guide the work of MLHU programs and community partners.
	12	*Seek input from Middlesex residents on programming decisions*	o Program Teams	Ongoing	This now occurs with all program reviews. As an example, changes to Healthy Start drop-in programs that were drafted as part of the Breastfeeding program planning process were subsequently revised based on feedback from County partners.
Develop data sharing agreements with local organizations	13	*Catalogue existing data sharing agreements and establish a process for developing new agreements*	o Manager, Privacy, Risk and Governance	2019 - Q3	New Policy Manager software was launched at MLHU in December 2019 which will house governance and administrative policies as well as Medical Directives, Contracts and Data Sharing Agreements. The initial focus has been on policies but work to utilize the system for cataloguing data sharing agreements has begun.
	14	*Identify organizations with whom data sharing would enhance MLHU planning*	o Population Health Assessment and Surveillance Team	2019 - Q4	Through the updating of the Community Health Status Resource (CHSR), the Population Health Assessment and Surveillance Team has identified county partners for whom the data would be helpful and informative. This information will be shared broadly, including with County Council.
	15	*Engage with organizations to establish data sharing agreements*	o TBD	Ongoing	
	16	*Use data in ongoing MLHU planning*	o Program Teams o Population Health Assessment and Surveillance Team o Program Planning and Evaluation Team o Health Equity Core Team	Ongoing	This now occurs with all program reviews.
Develop a community engagement strategy that includes stakeholders identified during asset mapping	17	*Develop policy for Community Engagement*	o Manager, Privacy, Risk and Governance o Manager, Program Planning and Evaluation o Manager, Communications o Manager, Health Equity and Indigenous Reconciliation	2019 - Q4	Policy will be developed based on information gleaned from analysis of the client engagement survey is conducted. The analysis is currently underway per the comments in action item 20.
	18	*Develop community partner inventory to assist programs with identifying stakeholders for community engagement*	o Program Planning and Evaluation o Population Health Assessment Team o Program Teams	2019 - Q4	The Community Health Status Resource (CHSR) is MLHU's online and publicly available population health assessment tool. In the process of updating the CHSR, the Population Health Assessment and Surveillance Team has identified county partners for whom the data would be helpful and informative. This list of stakeholders will also help MLHU programs identify areas for community engagement. Additionally this data has ben collected through our mandatory MOHLTC reporting tool, the Annual Service plan (ASP). The ASP includes a Community Assessment, wherein the Board of Health has an opportunity to describe the communities being served, to identify strategic program and service delivery decisions, current priorities, opportunities, and challenges. In addition, the Plan allows MLHU to highlight information regarding local health issues, priority populations, key partners and stakeholders, community assets and needs, political climate, and public engagement.
Increase opportunities to deliver services and connect with Middlesex County residents online, over the phone and through other non-physical means	19	*Consider additional service offerings online and over the phone that are not currently offered*	o Intake Line Project Team o Program Teams	Ongoing	
Develop mechanisms for the public to provide feedback on how to improve service delivery	20	*Implementation of the Client Experience Surveys*	o Client Experience and Community Partner Experience Project Team o Program Planning and Evaluation Team	2020 - Q4	The Community Health Nursing Specialist and the Program Planning and Evaluation Team have been working together to implement The Client Experience Survey (CES), an organizational strategic initiative developed to support the Client & Community Confidence section of our Balanced Scorecard. In 2019, Sexual Health, Immunization, Oral Health, and Healthy Growth and Development program areas have been working hard to implement the CES. The intent of this project is to obtain quality client feedback that will support our ability to enhance client confidence in our organization, help us more effectively live our organizational values, and strengthen MLHU's culture of excellence and quality. Data collection from service-seeking clients in both London and Middlesex County is complete, and data analysis will be completed by the end of 2019. In Q1 2020, findings will be used to develop recommendations, which will be implemented throughout the remainder of 2020. Additional phases of this initiative will focus on mandated clients, clients that do not speak English or French, and community partners; it is expected that these phases will be planned and implemented by the end of 2021.

MIDDLESEX-LONDON HEALTH UNIT

REPORT NO. 076-19

TO: Chair and Members of the Board of Health

FROM: Christopher Mackie, Medical Officer of Health / CEO

DATE: 2019 December 12

PUBLIC HEALTH MODERNIZATION UPDATE – CONSULTATION AND RESPONSE

Recommendation

It is recommended that the Board of Health:

1) ***Receive Report No. 076-19 re: "Public Health Modernization Update – Consultation and Response" for information;***
2) ***Direct staff to conduct consultations with internal and external stakeholders to develop a comprehensive and unified Middlesex-London Health Unit response;***
3) ***Direct staff to arrange for a focused off-site retreat in January 2020 for Board of Health consultation; and***
4) ***Direct staff to arrange for a special board meeting in early February 2020 for approval of the MLHU response in anticipation of the submission deadline on February 10th, 2020.***

Key Points

- In April 2019, the Ontario government proposed changes to the structure and funding of public health in the province, including amalgamations of local public health units and significant budget reductions. The government has subsequently reevaluated these changes and committed to extensive consultations across the province on how best to transform and strengthen the role of public health.
- In late November 2019, the Ministry of Health released a discussion paper which will frame the conversation about public health modernization. The Ministry has invited input and feedback through written and in-person consultation.
- The Middlesex-London Health Unit will be engaging with staff, the Board of Health, and other stakeholders to formulate an organizational response to the discussion paper. Written responses are due for submission by February 10th, 2020.

Background

On April 11th, 2019, the provincial budget proposed to significantly restructure Ontario's public health system, including the dissolution of its 35 health units and the creation of 10 new regional public health entities. New boards of health were to be established and substantial adjustments to provincial-municipal cost-sharing were proposed, as well as a reduction of the overall budget envelope for local public health. Consultations were expected to be held by the Ministry of Health in the summer and fall of 2019.

Subsequently, the provincial government has indicated that the proposed amalgamations and budgetary changes required further consideration and confirmed the need for robust and broad consultation. It has been specifically noted that there are no pre-determined outcomes from this consultation process, and that all reasonable options will be considered. The consultations will be led by Jim Pine, Special Advisor, Alison Blair, Executive Lead for Public Health Modernization, and Dr. David Williams, the Chief Medical Officer of Health.

The consultations were launched on November 18, 2019 via a webinar and the release of a discussion paper. A summary of the webinar and the discussion paper can be found in Appendix A and Appendix B, respectively. The Ministry has invited input and feedback through written and in-person consultation with public health and municipal stakeholders. Written responses are due for submission by February 10, 2020. The Ministry recommendations will be developed in Spring 2020.

Development of a Response to the Discussion Paper

The Middlesex-London Health Unit ("MLHU") will respond to the Ministry of Health's call for input and advice on specific key issues for the public health sector.

Previous efforts and reflections on the structure and function of local public health will inform MLHU's response during this consultative process. In July 2019, the Board of Health approved a response paper titled Keeping Middlesex-London Safe and Healthy to be forwarded to the Minister of Health, other boards of health and relevant stakeholders (Report No. 053-19). Additionally, previous reports of relevance to this process include Review of Public Health Services in Middlesex County (Report No. 055-18) and What Makes a High Performing Health Unit? A Research Report to Inform Strategic Planning (Report 01-15GC Appendix C).

To develop a comprehensive and unified MLHU response, consultations with staff, management, and the Board of Health will be conducted in January 2020. Specifically, it is recommended that the Board consultation occur during a focused off-site retreat. Indigenous communities, the City of London, and Middlesex County will be approached to determine their desire to contribute to the MLHU response. Approval of the response by the Board would be sought at a special board meeting in early February 2020 in anticipation of the submission deadline. A proposed schedule of consultation can be found in Appendix C.

Next Steps

The proposed schedule of consultation will guide the necessary action of staff and the Board of Health to ensure the submission of a robust and fulsome response. Feedback from the Board of Health will ensure that the consultation plan engages MLHU staff and all relevant stakeholders in a meaningful way.

This report was prepared by the Healthy Organization Division and the Associate Medical Officer of Health.

Christopher Mackie, MD, MHSc, CCFP, FRCPC
Medical Officer of Health / CEO

Association of Local PUBLIC HEALTH Agencies

Summary
Emergency Health Services and Public Health Modernization Webinar
November 18, 2019
10:00 – 11:00 AM

A live webcast was held on November 18, 2019 to launch the first phase of the Emergency Health Services and Public Health Modernization consultation process, featuring remarks from Christine Elliott, Minister of Health and Deputy Premier; Dr. David Williams, Chief Medical Officer of Health; Alison Blair, Executive Lead for Public Health Modernization; and Jim Pine, Special Adviser, Public Health Modernization; followed by a question-and-answer period moderated by Colleen Kiel, Director (Acting), Strategy and Planning Branch, Ministry of Health.

The following is a summary of key messages. Content has been edited and condensed for clarity and to focus on issues of most interest to alPHa's members. A recording of the full webcast is available on the consultation website along with all of the resources referred to therein.

Minister Elliott: Opening Remarks

Minister Elliott characterized this initiative as part of the broader transformation of Ontario's health sector, the goal of which is to ensure that an integrated health system is available to everyone who needs care when they need it. She touched on the progress that has already been made with Ontario Health Teams before introducing the need to ensure that public health and emergency health services are modernized and strengthened in parallel.

She added that municipal partners have clearly communicated the need for a longer and more substantial consultation process, which is what is being launched today. She then introduced the team that will be leading the process to ensure that changes are informed by the expertise and daily experience of those who are on the front lines.

Jim Pine: *Remarks*

Jim Pine introduced the consultation plan, which he characterized as "resetting the discussion" to gather the best ideas that we can and learn from as many stakeholders as possible throughout the province to modernize these two sectors (EHS and Public Health). He clarified that the consultations for each are being carried out at the same time simply because of their respective integration with the municipal sector. Two separate discussion papers will be released later today, which will outline key challenges (i.e. the "why") and propose some ideas to address them (i.e. the "what").

Timing and location of the consultations are to be determined, and the aim will be to conduct them as part of existing meetings in a variety of settings and locations to make it as convenient for stakeholders as possible. Submissions in writing will also be welcome and there is a dedicated e-mail address to receive these. A survey tool will also be made available and regular updates will be posted on the Connected Care platform (subscribe to these here). He then reported that they are planning to provide a preliminary presentation of what the team has heard to date at the Rural Ontario Municipal Association conference in January 2020.

David Williams: Remarks

Dr. Williams indicated that neither the challenges facing public health nor the prospect of significant change are anything new, and this is another chance to examine the strengths of the existing system and the emerging issues that are confronting it to generate ideas for a vision of what we want the sector to look like in the long-term. The Discussion Paper will be a core aspect of these discussions, in that it will focus on improving capacity, strengthening alignments with other stakeholders, eliminating duplication and inefficiencies, fostering more consistent priority setting, and ensuring that responses to public health emergencies is robust throughout the province. The team will also be asking stakeholders to provide ideas on the consultation process itself.

Alison Blair: Remarks

Alison Blair focused mainly on the EHS aspect of this consultation. She reiterated that this is in fact a reset and that there are no predetermined outcomes. Please see the recorded webinar if you are interested in more details about this (her remarks begin approximately 20 minutes in).

Colleen Kiel: Q&A

Is there a plan to merge PH and EHS?
No. The discussion papers are separate and the consultations for each are being carried out at the same time simply because of their respective integration with the municipal sector.

Is there consideration of the role of PHO?
Yes. The concept of the "three-legged stool" (Ministry, PHO, local public health) remains foundational and the modernization is expected to touch on all three as part of an iterative process.

What about First Nations and Indigenous communities?
Specific consideration is being given. Please see the memo linked below.

Where and when will consultations take place?
The goal is to start meetings towards the end of this month. Plenty of notice will be provided to allow for proper preparation and every effort will be made to piggyback on existing meetings (e.g. conferences, board meetings etc.). The process itself will be flexible in this regard and ideas about specific timing, locations and engagement with other stakeholders will be welcome. The deadline for submitting responses to the discussion paper questions via the survey tool will be February 10. Initial set of recommendations will likely not happen until early spring 2020.

Will written submissions be accepted?
Written submissions are encouraged and can be transmitted via the ehsphmodernization@ontario.ca e-mail address.

What are the major public health issues now?
Coordination, updating and integration of technology, need for consistency and improving communications to ensure that each part of the system knows what the others are doing. Monitoring of health status is becoming imperative and we need improve the collection and analysis of data for more

timely and decisive responses, better targeting of resources and staff to ensure equity, addressing needs of high-risk groups, and how we apply our epidemiological knowledge to the health care system.

Are the April 2020 dates for implementation that were announced in the 2019 Ontario Budget still valid?
No. We can't implement what we don't know we're implementing.

RESOURCES:

- Consultation Website English and French (portal to most of what is included below).
- Discussion Paper: Public Health Modernization
- November 18, 2019 Webcast recording
- E-mail address: ehsphmodernization@ontario.ca.
- Survey Tool
- Memo to First Nations / Indigenous Communities
- Sign up here to receive Connected Care updates.

alPHa will be making a submission to the consultation and will be requesting feedback from our members to inform it. Please visit alPHa's Public Health Modernization page to view materials collected to date related to this initiative since the 2019 Budget announcement on April 11.

We hope you find this information useful.

Ministry of Health

Discussion Paper:

Public Health Modernization

November 2019

Ontario

Purpose

At the Ministry of Health, we are committed to ending hallway health care and ensuring the people of Ontario have access to high quality services, both now and in the future. To meet this goal, changes are needed to create strong, sustainable foundations for our health system. As an integral part of this system, we need to consider how we are delivering public health services to ensure these services continue to meet the evolving needs of people across Ontario.

Following the introduction of the government's proposals, we clearly heard and responded to the need for more extensive consultations across the province on how best to move forward. This discussion paper is intended to frame a meaningful conversation on how we can update and improve public health in Ontario. We are asking for your input and advice on specific key issues for the sector, both through the responses to the questions posed in this paper and in upcoming in-person consultations with public health and municipal stakeholders.

We look forward to hearing from you.

Introduction

The Ontario government is transforming the whole health care system to improve patient experience and strengthen local services. This means a connected health care system through the establishment of Ontario Health Teams, and a new model to integrate care and funding that will connect health care providers and services focused on patients and families in the community. These changes will strengthen local services, making it easier for patients to navigate the system and transition among providers. Changes will also include the integration of multiple provincial agencies into a single agency – Ontario Health – to provide a central point of accountability and oversight for the health care system.

While the broader health care system undergoes transformation, a clear opportunity has emerged to transform and strengthen the role of public health as a foundational partner in improving the health of all Ontarians.

This comes at a time when there are many challenges facing today's world that require a coordinated public health sector that is resilient and responsive to the province's evolving health needs. This includes the unpredictable nature of infectious diseases that seldom respects geographic boundaries, recognition that disease risk factors are related to a multitude of social conditions, and the rise of unprecedented emergencies such as opioids, vaping and vaccine hesitancy. A modernized public health system that is not only well-coordinated, but also integrated with other sectors, is imperative to addressing these challenges.

As we transform and strengthen the role of public health, we will work toward the following outcomes:

- Better consistency and equity of service delivery across the province;
- Improved clarity and alignment of roles and responsibilities between the province, Public Health Ontario and local public health;
- Better and deeper relationships with primary care and the broader health care system to support the goal of ending hallway health care through improved health promotion and disease prevention; and
- Improved public health delivery and the sustainability of the system.

As the system modernizes, it is also important that the strengths of public health are harnessed as they are critical elements to the success of a modern public health system. Key strengths of the current public health sector include a focus on health protection, health promotion, and health equity, as well as its local presence, relationship with municipalities, highly trained workforce, relationships outside the health care system, and an in-depth understanding of, and capacity to, assess population-level health. Public health can broker relationships among health care, social services, municipal governments, and other sectors to create healthier communities. We will maintain and expand these key strengths.

Public Health in Ontario

The work of public health is focused on the health of populations and is embedded in the daily lives of the people of Ontario. Public health interventions have made the food we eat

safer, protected us from infectious diseases and environmental threats to health, and created healthier environments to support and inform choices about risks, including those related to tobacco and alcohol. Public health interventions and initiatives also impact communities by developing policies to support healthier built environments, promoting social conditions that improve health, and responding to public health emergencies.

Our public health system reflects the diversity of Ontario's population. Boards of health serve populations large and small, in urban and rural settings. Each board of health has responsibility for delivering local public health programs and services within its geographic borders, defined in legislation as the "health unit." Most boards of health follow geographic boundaries aligned with municipal borders. There are currently 35 boards of health, far more than any other province in the country. For example, public health in British Columbia is delivered by five regional health authorities, and by 18 Regional Public Health Authorities in Quebec. The size of populations served by Ontario's boards of health ranges from less than 34,000 to almost 3,000,000.

The majority of boards of health in Ontario have an autonomous governance structure, meaning they are an independent corporation separate from any municipal organization. There are four other board of health governance models currently operating in Ontario, each of which have varying degrees of connection with their local municipal organization. Of the 35 current public health units, the majority have Medical Officers of Health (MOH) who also hold a Chief Executive Officer (CEO) role, while a number have a designated CEO position that is separate from the MOH.

Public Health Ontario is a key partner in the public health system. It provides scientific and technical advice and support directly to public health units and the Ministry of Health, and it conducts over 5 million public health laboratory tests for public health units, hospitals, and physicians every year.

Key Challenges

The public health system is at the frontline of delivering programs and services that keep Ontarians healthy and addressing emerging threats to the population's health. Building on the findings from several reports over the past 20 years, including Ontario's independent Auditor General, there are a number of critical challenges in the public health sector (see

section "Learning from Past Reports" for more information). The following sections identify these key challenges and include:

- Insufficient capacity;
- Misalignment of health, social, and other services;
- Duplication of effort; and
- Inconsistent priority setting.

Insufficient Capacity

Current State

All of the reports have noted that the capacity of public health units varies significantly across the province. Some boards of health have had well-documented challenges in recruiting and retaining skilled public health personnel, both in leadership and in front-line staff. This means that some public health units do not have sufficient human resources to deliver the full scope of the Ontario Public Health Standards, which are the mandated public health programs and services that public health units are required to deliver, such as food safety, infectious and communicable disease prevention and control, healthy growth and development, immunization, safe water, school health, chronic disease prevention as well as monitoring population health data and managing outbreaks. For example, in 2017 the Auditor General reported that some public health units do not have the required time and/or staff expertise to review and analyze epidemiological data and some were not evaluating or measuring the effectiveness of new programs. Both activities are requirements in the Ontario Public Health Standards. This has resulted in **inequities** across the province with some Ontarians not receiving the same public health programs and services as others. It also means **parts of the province are vulnerable** when the public health unit is called on to prevent and prepare for public health threats and emergencies.

Some public health units are too small to have the minimum amount of resources, expertise and capacity needed to deliver all programs and services (critical mass) and to meet unexpected surges in demand (surge capacity). Every public health unit needs specialized staff that perform specific duties, often to fulfill statutory requirements, including epidemiology and data analysis and emergency preparedness and coordination. Public health units also need program teams that are large enough to allow for surge capacity, coverage for vacancies and vacations, development opportunities, and an adequate mix of skill sets and experiences. Some public health units are lacking these core capacity needs.

Strengths to Build On

Despite these challenges, individuals working in public health deliver core programs and services every day, and prepare for and respond to emerging threats. This is accomplished because of some of the sector's key strengths, including leveraging **strong local relationships and partnerships** that allows the work of public health to be based in and responsive to the needs of their communities. But there are opportunities to address the variations of capacity in the province that would help public health units provide a more nimble response to emerging threats and emergencies, bolster the public health workforce to meet the evolving health needs of the province and improve public health service delivery for Ontarians.

Questions for Discussion

- What is currently working well in the public health sector?
- What are some changes that could be considered to address the variability in capacity in the current public health sector?
- What changes to the structure and organization of public health should be considered to address these challenges?

Misalignment of Health, Social, and Other Services

Current State

It has also been well documented that there are **barriers to collaborating effectively** among public health, health care and social services. This locks the value of public health away in siloes and makes the work of public health harder to do by impeding progress on key public health goals. Much of what affects the health of Ontarians depends on factors outside the health sector – housing, education, working conditions and the environment all play a role. Public health units must engage with these areas to make progress on improving population health, while also playing an active role in the health system by providing immunizations, delivering sexual health services and case management and contact tracing for infectious diseases, to name a few. Furthermore, public health's prevention focus complements the functions of the health care system and has the ability to stop patients from entering the health care system in the first place, which is critical for ending hallway health care. In the current organization and structure of the public health sector, fostering action on shared goals across sectors, such as disease prevention and

health promotion, requires significant effort and resources. If action is not taken to break down these siloes, there is concern that opportunities to improve the health of Ontarians will be missed.

Strengths to Build On

Despite these challenges, one of the public health sector's strengths is as a **broker between the health system and social services**, to support individuals and communities as they engage across sectors. Public health's understanding of local health needs can help **identify top priorities for the health system** while at the same time informing health policies and services. These collaborative relationships also lend themselves to the integration of health protection and promotion interventions that can be delivered in other sectors to improve population health. These are significant opportunities that can be harnessed through the modernization of the public health sector.

Questions for Discussion

- What has been successful in the current system to foster collaboration among public health, the health sector and social services?
- How could a modernized public health system become more connected to the health care system or social services?
- What are some examples of effective collaborations among public health, health services and social services?

Duplication of Effort

Current State

Within the public health system there is duplication, unnecessary redundancies, inconsistencies and lack of coordination. For example, there is currently a disconnect amongst evidence products, policy and delivery among public health units. In 2017, the Auditor General reported that public health units are **poorly coordinated and duplicating work**. It notes, "significant inefficiencies exist across the public health units because there are limited formal systems in place to co-ordinate their activities and share best practices." Many public health units reported independently conducting research, obtaining data and reviewing the same evidence and best practices on various health promotion programs as

other public health units. Research and evidence activities that are not locally specific are being duplicated at multiple public health units when there are opportunities to leverage others in undertaking and sharing this work. As well, public health units tend to work individually to develop systems to collect data and the type of data collected differs, which is not conducive to being compared among public health units. Similar duplication was also found in the development of chronic disease programming and campaigns.

Strengths to Build On

One of the strengths of the public health sector is its **expertise in population health assessment, data and analytics** related to population level health. The public health sector provides critical information on the state of the population's health and on the health status and needs of local communities. Addressing the duplication and lack of coordination can strengthen research capacity, knowledge exchange and shared priority setting among public health units. Research, evidence and program development are all critically important to the work of public health. However, these activities can be better organized and coordinated so that information is shared among public health units and effort is not duplicated across the system, while also creating more bandwidth for individual health units to concentrate on localized research projects. There are also opportunities to leverage technology for more efficient and effective information sharing and service provision.

Questions for Discussion

- What functions of public health units should be local and why?
- What population health assessments, data and analytics are helpful to drive local improvements?
- What changes should the government consider to strengthen research capacity, knowledge exchange and shared priority setting for public health in the province?
- What are public health functions, programs or services that could be strengthened if coordinated or provided at the provincial level? Or by Public Health Ontario?
- Beyond what currently exists, are there other technology solutions that can help to improve public health programs and services and strengthen the public health system?

Inconsistent Priority Setting

Current State

At a time when there are critical public health challenges that are facing Ontario, there are inconsistencies across the province in how priorities are set and decisions made regarding public health programs and services. To address these issues, public health units need to be aligned with one another and focused in their response. Meanwhile, individual public health units must also be responsive to their own local needs and issues. The variation in public health unit's governance and leadership models may contribute to inconsistent priority setting. There are five governance models in the current system, which means that the **balance of local needs and system priorities for decision making is different across the province**. This can make it hard for the sector to take collective action on public health issues that span the province. The variation in leadership models also means that organizational decision making and accountability within public health units is inconsistent, which presents challenges in how public health units collaborate among themselves and other sectors to address societal challenges that impact population health.

Strengths to Build On

Public health units are **embedded in their local communities** and deeply aware of the issues and opportunities that can affect their population's health. This is one of the key assets of public health. As the public health sector modernizes, it needs to be grounded in strong leadership and governance structures that preserve the local relationship and expertise of the public health units. In addition, there may be opportunities to shift responsibility for certain public health activities, programs and service delivery to different organizations within the system, particularly those that address province-wide issues.

Questions for Discussion

- What processes and structures are currently in place that promote shared priority setting across public health units?
- What should the role of Public Health Ontario be in informing and coordinating provincial priorities?
- What models of leadership and governance can promote consistent priority setting?

Figure 1: Overview of the current challenges and path to a modern public health system.

	Current Challenges	What We Want to Achieve
Insufficient Capacity	Challenges retaining and recruiting skilled public health personnel resulting in inequities in service delivery across Ontario Insufficient critical mass and surge capacity in some smaller public health units resulting in lack of capacity for public health response	Highly-skilled public health workforce and improved access to professional resources available in all parts of Ontario Nimble response to emerging public health threats and emergencies
Misalignment	Instances of misalignment with the broader health system and social services resulting in added complexity for collaboration and missed opportunities	Continuous local collaboration with health and social services to improve population health
Duplication of Effort	Duplication and lack of coordination resulting in disconnect between evidence products, policy and delivery	Strengthened research capacity, knowledge exchange and common evidence base to support shared priority setting
Inconsistent Priority Setting	Inconsistencies in priority setting and decision making across the province	Strong accountability, leadership, and governance capacity that balances local needs and system priorities

Leverage Existing Strengths

- Focus on health protection, health promotion and health equity
- Local presence and relationships with municipalities
- A highly trained workforce
- In-depth understanding of population level health
- Collaborative relationships outside the health care system

Indigenous and First Nation Communities

The Indigenous population in Ontario is comprised of the First Nations, Métis and Inuit peoples who may live on and off reserve, in urban, rural and remote areas, each with their own histories, languages, cultures, organizational approaches and jurisdictional realities. Both the provincial and federal governments provide public health services to Indigenous People in Ontario, including First Nations. Provincially, boards of health are required to engage in public health practice that results in decreased health inequities such that everyone has equal opportunities for optimal health and can attain their full health potential without disadvantage due to social position or other socially determined circumstances.

It has been widely recognized that Indigenous communities in Ontario (including First Nations peoples living on and off-reserve, Metis and Inuit) do not experience the same level of health status as other populations in Ontario. Historically, relationships between Indigenous communities/organizations and boards of health have varied across the province, and jurisdictional responsibilities split between the federal and provincial governments, as well as differing interpretations of the legislative responsibility of health units to form relationships with Indigenous communities and organizations, have complicated the effective delivery of public health services.

To improve the access issues currently experienced, it is fundamental to recognize that the approach to Indigenous engagement will differ across the province and within communities, depending on local culture and demographics, proposed initiatives and existing relationships. Recently, developing relationships with Indigenous communities and organizations in a culturally safe and meaningful way was added as a requirement for boards of health in the Ontario Public Health Standards. This requirement is further supported by The Relationship with Indigenous Communities Guideline, 2018 which was developed in partnership with Indigenous organizations, and provides information to support and/or build these partnerships.

There are several examples of existing initiatives where Indigenous communities and organizations have been establishing integrated public health service delivery models and/or moving towards achieving greater control and decision-making on how public health services and programs are delivered and by whom. There are also currently three formal agreements in place in the province where First Nation communities have agreed to

purchase services from their local public health unit (as per section 50, under the *Health Protection and Promotion Act*).

Any changes made to modernize public health across Ontario must build on these initiatives and consider ways of enhancing opportunities for partnerships in a meaningful and respectful way.

Questions for Discussion

- What has been successful in the current system to foster collaboration among public health and Indigenous communities and organizations?
- Are there opportunities to strengthen Indigenous representation and decision-making within the public health sector?

Francophone Communities

While the French Language Services Act (FLSA) does not currently apply to boards of health, the Ontario Public Health Standards address the needs of the Francophone populations and state that "boards of health should bear in mind that in keeping with the FLSA, services in French should be made available to French-speaking Ontarians located in designated areas." The Ontario Public Health Standards also require boards of health to consider the needs of priority populations in the planning, delivery and evaluation of public health programs and services.

Question for Discussion

- What has been successful in the current system in considering the needs of Francophone populations in planning, delivery and evaluation of public health programs and services?
- What improvements could be made to public health service delivery in French to Francophone communities?

Learning from Past Reports

The issues outlined above (among others) have been identified and considered by many reports, some of which are listed in Table 1 below. These reports have consistently called for significant reforms to public health to strengthen the sector. Most recently in 2017, the Minister's Expert Panel on Public Health was asked to provide advice on changes to the structure, organization and governance of public health to address the lack of integration of public health with the broader health sector and improve public health capacity and delivery. Prior to this, a series of reports following both Walkerton and SARS identified critical challenges in the sector that were seen to contribute to these crises. These reports raised common issues such as a lack of capacity and critical mass, structural governance challenges and skills gaps in boards of health, misalignment of public health with other health and social services, as well as challenges with the public health workforce, including with recruitment, retention and leadership, among others. The table below outlines select findings identified in the reports that persist today, and the recommendations that were provided.

Table 1: Findings and recommendations of previous reports

Report	Findings	Recommendations
Ontario Auditor General Report (2017)	• Inefficiencies as a result of duplication of effort and inconsistencies among public health units, particularly related to research and program development • Lack of epidemiological and evaluation capacity in some public health units	• Develop a central approach to update, co-ordinate and share research and best practices • Evaluate feasibility of centralizing epidemiological expertise

Report	Findings	Recommendations
Minister's Expert Panel on Public Health (2017)	• Lack of critical mass and surge capacity and challenges recruiting and retaining public health personnel, causing inequities in service delivery • Lack of capacity of smaller health units • Wide variety of governance models, gaps in skills on some boards of health, and challenges with provincial and municipal appointments • Lack of mechanisms to coordinate across public health units and work within the health sector	• Establish fewer regional public health entities • Establish autonomous boards of health to have a consistent, independent governance structure • Establish regional public health entities with one CEO, a regional MOH, and senior public health leaders; maintain local delivery with a local MOH
Revitalizing Ontario's Public Health Capacity: The Final Report of the Capacity Review Committee (2006)	• A need to strengthen the critical capacity of public health units • A need to ensure quality governance with a province-wide public health system • A need to revitalize the public health work force, including related to recruitment, retention, and leadership	• Amalgamate certain public health units to achieve critical mass and strengthen public health capacity • Establish autonomous, locally-based boards of health that focus primarily on the delivery of public health programs and services • MOHs should be able to serve as CEOs of public health units; did not reach consensus on whether the role of CEO should be assumed by non-MOHs.

Report	Findings	Recommendations
The SARS Commission: Volume 5 SARS and Public Health Legislation, Second Interim Report (2005)	• Weak governance structures and practices in local boards of health • Medical Officers of Health require independence from political and bureaucratic pressures	• Establish qualifications for board membership, including demonstrated experience or interest in public health and board members should reflect the community to be served. • Amend legislation to state that the MOH is the CEO of the public health unit.
Reports of the Ontario Expert Panel on SARS and Infectious Disease Control (2003, 2004)	• Lack of capacity and critical mass in smaller public health units • Misalignment of public health with other health and social sector boundaries	• Consolidate the number of public health units while retaining local presence.

While a number of reports have made recommendations on these issues, there is a need to consider the challenges and potential solutions in the current context.

Questions for Discussion

- What improvements to the structure and organization of public health should be considered to address these challenges?
- What about the current public health system should be retained as the sector is modernized?
- What else should be considered as the public health sector is modernized?

Your Feedback

With the release of this paper, we are renewing our consultation process to discuss the way forward on modernizing the public health sector. We hope to receive your input on the questions in this paper. Feedback can be submitted by completing our survey. The submission deadline is Feb 10, 2020.

We will also be conducting in-person consultation sessions where we look forward to continuing the conversation about how we build a modernized public health sector.

Proposed schedule of consultation - Appendix C to Report No. 076-19

Consultation	Stakeholders to be Consulted	Tentative Date(s) of Consultation(s)	Discussion Paper Areas of Focus
Board of Health and Senior Leadership Team Retreat	Board of Health Senior Leadership Team	TBD	All Areas: • Insufficient Capacity • Misalignment of Health, Social and other Services • Duplication of Effort • Inconsistent priority setting • Indigenous and First Nation Communities • Francophone Communities • Past Reports
Staff Consultations	All MLHU Staff	January 14 January 16 January 20 January 22	• All Areas: ○ Specific questions to be generated
Consultation with Indigenous communities	To be determined through discussions with Manager, Health Equity and Indigenous Reconciliation	TBD	Specific Questions for: • Insufficient Capacity • Misalignment of Health, Social and other Services • Indigenous and First Nation Communities • Past Reports
Municipal Consultation - City of London, Middlesex County	If helpful, as determined through discussions with municipal partners	TBD	• Insufficient Capacity • Misalignment of Health, Social and other Services
Management Team Consultation	Management Leadership Team	January 30	• All Areas

MIDDLESEX-LONDON HEALTH UNIT

REPORT NO. 077-19

TO: Chair and Members of the Board of Health

FROM: Christopher Mackie Medical Officer of Health / CEO

DATE: 2019 December 12

SUMMARY INFORMATION REPORT FOR DECEMBER 2019

Recommendation

It is recommended that Report No. 077-19 re: "Summary Information Report for December 2019" be received for information.

Key Points

- The provincial government has proposed amendments to Regulation 493/17 Food Premises under the *Health Protection and Promotion Act, RSO 1990, c.H.7*. and Reg 50/16 under the *Healthy Menu Choices Act, 2015, S.O. 2015, c. 7.* Through an open consultation process, MLHU provided comments to the Ministry of Health on November 28, 2019.
- The first official report from the Canadian Nurse-Family Partnership® Education (CaNE) project, which ended in December 2018, is now available; two additional reports will be available early in 2020.

MLHU Feedback to Proposed Regulatory Amendments

On October 29, 2019, the Minister of Health, Hon. Christine Elliot, announced proposed amendments to Ontario Regulation 493/17 Food Premises, and O. Reg. 50/16 under the Healthy Menu Choices Act, 2015. These amendments were proposed in an effort to reduce bureaucratic impediments under the *Better for People, Smarter for Business Act*. As the provincial government had provided a time-limited opportunity for stakeholder feedback, the Food Safety and Healthy Environments Team at the Middlesex-London Health Unit identified several concerns with the proposed amendments and drafted recommendations for consideration. These recommendations were submitted to the consultation process through the Ministry of Health (Appendix A).

Proposed amendments to Reg. 50/16 include exempting sections of grocery stores that serve single service food items, fruits and vegetables sold by weight, and pre-packaged goods that have a Nutrition Facts Table (in grocery stores), in-store advertisements and catering menus.

Proposed amendments to Reg. 493/17 include the allowance of dogs on patios where food is served, and in food premises where only low risk and / or pre-packaged foods are sold to the public. Additional proposed amendments include the exemption of Food Handler Training certification and reduced equipment requirements (handwashing stations and sinks used for dishwashing purposes) for operators serving 'low risk' food to people in need, through community feeding organizations.

CaNE Project: First Report Available

In May 2019, the Middlesex-London Board of Health received Report No. 039-19, 'Completion of the Canadian Nurse-Family Partnership® Education Project". A presentation of findings from the CaNE project

was provided to the Board of Health at the time of this report. The primary findings demonstrated that the new model of education: 1) prepared public health nurses and supervisors to implement the program with a high degree of fidelity to the program's core model elements; and 2) was perceived to be sustainable to provide education to a growing NFP workforce in Canada. Nurse-Family Partnership program implementation continues in five health units, with MLHU as the Ontario license-holder. The first official report of the CaNE project is now available and was recently shared with the Ontario NFP Provincial Advisory Committee (Appendix B). Two additional reports, with enhanced information on the educational curriculum content and process, and the acceptability of the education, will be available early in 2020.

Christopher Mackie, MD, MHSc, CCFP, FRCPC
Medical Officer of Health / CEO

Appendix A to Report No. 077-19

November 27, 2019

Laura Pisko, Director
Health Improvement Policy and Program Branch
Ministry of Health
393 University Avenue, Suite 2100
Toronto, ON M7A 2S1
Laura.pisko@ontario.ca

Dear Ms. Pisko,

The Middlesex-London Health Unit (MLHU) welcomes the opportunity to provide feedback on the proposed amendments to the following regulations:

- Proposal Number: 19-HLTC033
  - Regulation 50/16 under the Healthy Menu Choices Act, 2015
- Proposal Number: 19-HLTC030
  - Food Premises Regulation 493/17 under the Health Protection and Promotion Act
- Proposal Number: 19-HLTC028
  - Food Premises Regulation 493/17 under the Health Protection and Promotion Act

This feedback reflects the front-line experience of a range of public health professionals who oversee health protection and promotion activities in the City of London and the County of Middlesex.

Proposal Number: 19-HLTC033 (Regulation 50/16 under the Healthy Menu Choices Act, 2015)

We have identified the following concerns for consideration:

- This change may exclude things like single-serve bakery sections in grocery stores from the HMCA. Items available from these sections of the grocery store could be intended for immediate consumption. Therefore, it may be appropriate to not exclude this type of service.
- The exemption of pre-packaged foods that have a Nutrition Facts Table under federal Food and Drug regulations may result in greater consumption of these pre-packaged, single-serve food items (e.g. crackers, milk or creamers, condiments). This outcome does not align with direction in the new Canada's Food Guide regarding environmentally sustainable practices and the reduction of food packaging. In addition, it is our experience from supporting the implementation of the Ontario School Food and Beverage policy that food operators offer condiments in unlimited quantities. These individual items are exempt, and the unlimited access may result in a nutritionally significant number of calories.
- Catering menus still provide an opportunity to inform consumers about the caloric content of the foods they are consuming or serving. The inclusion of catering menus in this regulation helps to facilitate healthy choices. Consumers viewing a catering menu can make a more-informed choice if nutrition information is provided.

Proposal Number: 19-HLTC030 (Food Premises Regulation 493/17 under the Health Protection and Promotion Act)

We have identified the following concerns for consideration regarding the allowance of dogs on patios and in food premises that have only pre-packaged food items and/or low risk foods:

- Health hazards such unclean environments, allergies and threats to food safety, human safety and animal safety.
- Pubs and bars can be boisterous places. Even given adequate training, the potential for risk to patrons and employees from a startled or irritated dog exists. It could be anticipated that there will be an increase in the number of food safety complaints and animal bite investigations.
- Most craft breweries or drinking establishments sell and prepare food to fulfill requirements for a liquor license. Therefore, this food would not necessarily be low risk or pre-packaged.

Additional standards or safeguards may be required and should be created in concert and through consultation with local Public Health. The Operational Approaches for Food Safety Guideline could provide best practices for dogs on patios (e.g. limit on number of dogs, proper signage etc.). Examples of some fine details that may need to be addressed include:

- Limiting the dogs to only the outdoor environment and not allowing them to enter through the food premises.
- Ensuring that dogs are tethered in some way to the owner and under the control of the owner.
- Trip hazards should be avoided in aisles.
- Have premises owners post signs marking 'dog-friendly' areas.
- Limiting the number of dogs in an area.

Given these considerations, it may be appropriate to permit dogs in outdoor areas of food premises (patios) where a separate entrance is present, or in a food premises where no food handling is occurring provided that (A) a public health inspector has risk assessed and approved the allowance of dogs, and (B) the owner/operator posts a sign.

Proposal Number: 19-HLTC028 (Food Premises Regulation 493/17 under the Health Protection and Promotion Act)

We have identified the following concerns for feedback consideration regarding the exemption of food premises that serve low risk foods, which may include community feeding organizations and other entities serving those in need, from certain structural and equipment requirements, and from having a trained food handler on site:

- This exemption may lead to additional public risk from compromised food safety.
- Structural requirements such as hand washing basins and the provision of potable water under pressure are necessary to facilitate satisfactory food hygiene practices.
- Food that may be low in risk, and not pre-packaged, is still subject to contamination through the food handling process which can be averted should the premises maintain the requirement for adequate handwashing facilities.
- If food handling occurs, access to a handwashing station should be mandatory.

Further clarification is required regarding the definition of 'community feeding organizations and other entities serving those in need.' Many community meal programs, such as 'soup kitchens', undertake a significant amount of high-risk food preparation which is served to individuals that are medically vulnerable. The elimination of structural and/or equipment standards including the requirement for food handler training certification would elevate the potential for foodborne illness and outbreaks. Therefore, it is essential that there is no confusion regarding the food safety expectations for facilities or programs which undertake high-risk food preparation.

The city of London and Middlesex County has had mandatory food handler certification in place since 2012. The bylaw requires at least one certified food handler on-site at all times when food is being prepared. MLHU recognizes the value and importance that community feeding organizations play in providing meals to people who are experiencing life challenges. Public Health Inspectors (PHI) have taken risk-based approaches and have made concerted efforts to work with community feeding organizations in achieving regulatory compliance. Examples include offering low cost courses and providing course instruction on Saturdays when volunteer groups can attend. MLHU has received favourable feedback from community feeding organizations, as it relates to these assisted compliance efforts.

Alternative approaches to these amendments could include:

- Food premises may operate, pending approval from the local health unit, with a lower number of sinks than required by the Regulation if they can demonstrate that adequate handwashing and dishwashing practices can be performed.
- Regarding food handler training certification, resources and attention should be targeted at premises where there is active food preparation. The exemption would only apply to food premises where exclusively pre-packaged foods are served. That being stated, there is content within the food handler course that would be relevant to operators of premises where there is only pre-packaged food, including information on regulatory requirements and food recalls.

Thank you once again for the opportunity to provide this feedback regarding these proposed changes. If you have any questions or would like further clarification, please let us know. We would invite the opportunity to participate in any future consultation.

Sincerely,

Christopher Mackie, MD, MHSc, CCFP, FRCPC
Medical Officer of Health and Chief Executive Officer

Appendix B to Report No. 077-19

Implementation & Delivery

of Nurse-Family Partnership® in Four Ontario Public Health Units

2019

Acknowledgements

The Middlesex-London Health Unit was responsible for overall development, implementation and evaluation of the Canadian Nurse-Family Partnership Education pilot project, conducted in collaboration with the third-party evaluation team from McMaster University.

We express our warmest appreciation to...

The Nurse-Family Partnership educators, public health nurses and supervisors who made the career decision to work in this home visiting program and who so generously shared their experiences, stories and recommendations.

The administration teams and directors in each participating public health unit who supported the process to adopt and integrate Nurse-Family Partnership into their existing Healthy Babies, Healthy Children services.

All of the pregnant women and girls, and first-time mothers and their infants who enrolled in the program.

The many individuals and teams who shared their expertise through ongoing consultation throughout the project, including:

- Ann Rowe, International Nurse-Family Partnership Program, Denver, Colorado
- Elly Yost, Nurse-Family Partnership National Service Office, Denver, Colorado
- Dønna Jepsen, Population and Public Health Division, BC Ministry of Health, Vancouver, BC
- Hamilton Nurse-Family Partnership Team, Hamilton Public Health Services - Healthy Families, Healthy and Safe Communities Department
- CaNE Provincial Advisory Committee

How to cite this document:

Jack, S.M., Gonzalez, A., Strohm, S., Croswell, L., Sheehan, D., Orr, E., & Lokko, H. (2019). Implementation & delivery of Nurse-Family Partnership in four Ontario public health units. Hamilton, ON: McMaster University.

https://nfp.mcmaster.ca

BUREAU DE SANTÉ DE MIDDLESEX-LONDON HEALTH UNIT
www.healthunit.com

York Region

Niagara Region PUBLIC HEALTH

McMaster University

Toronto Public Health

Table of Contents

Executive Summary

Nurse-Family Partnership® (NFP) is a home-visiting program for young pregnant women and first-time mothers experiencing social and economic disadvantage. Home visits start early in pregnancy (before 28 weeks gestation) and continue until the child is two years of age.[1] Goals of the program are to improve: pregnancy outcomes, child health and development, and families' economic self-sufficiency.[2]

Findings from three randomized controlled trials (RCTs) in the United States (US) have demonstrated the effectiveness of the program at achieving these goals.[3-4]

Adapting NFP for the Canadian context

The consistent and enduring effects of the NFP program demonstrated in the US make it an attractive population health intervention for implementation in other countries, including Canada. However, differing contextual factors between the US and Canada including policy, geography, socioeconomics and demographics requires adaptation and evaluation of the NFP program within the Canadian context.[2]

Efforts to bring NFP to Canada began over a decade ago, closely adhering to the protocol for international replication and evaluation of NFP.

The Canadian Nurse-Family Partnership Education (CaNE) project

As part of the ongoing process to adapt existing NFP materials, as well as to develop new resources for use in Canada, there was an identified need for a program of NFP education specific to the Canadian context. This revised curriculum would reflect what is most needed and relevant for public health nursing practice in Canada; be practical and sustainable for individual provinces to access and implement; introduce and integrate new NFP innovations seamlessly into one curriculum; and introduce a nursing theory to underpin the NFP intervention.

The overall objectives of the CaNE pilot project were to develop, deliver and evaluate a model of Nurse-Family Partnership education to be used by public health nurses (PHNs) and supervisors in Canada.

The purpose of this document is to present findings from the evaluation regarding how the NFP program was implemented and delivered in four Ontario public health units and if fidelity to the program's core model elements was achieved. Additional documents outlining other findings from this project will also be available.

Key Findings

Following completion of the CaNE curriculum, PHNs and supervisors from four Ontario public health units demonstrated the ability and capacity to enroll eligible pregnant women in the program and then deliver NFP with a high degree of fidelity to the program's 14 core model elements.

Purpose

The overall goals of the Canadian Nurse-Family Partnership Education (CaNE) pilot project conducted in four Ontario public health units were to: 1) **develop** a model of Nurse-Family Partnership (NFP) education to be used by public health nurses (PHNs) and supervisors in Canada; 2) **deliver** this novel model of education to two cohorts of PHNs and supervisors hired to implement NFP; and 3) **evaluate** the acceptability of this model of education and to explore how this training prepared NFP teams to implement this public health program of nurse home visitation, targeted to young, first-time mothers experiencing social and economic disadvantage, with fidelity to the program's core model elements.

In this document, evaluation findings on the implementation and delivery of NFP (Goal 3) within Middlesex-London Health Unit, Niagara Region Public Health, Toronto Public Health, and York Region Public Health are summarized. Additional reports addressing CaNE pilot project goals 1 and 2 are also available.

Background

Nurse-Family Partnership® (NFP)

NFP is a home-visiting program for young pregnant women and girls and first-time mothers experiencing social and economic disadvantage. Home visits start early in pregnancy (before 28 weeks gestation) and continue until the child is two years of age.[1]

Through the establishment of a therapeutic relationship, nurses:

- provide support and life coaching
- review preventive health and prenatal practices
- guide clients with system navigation
- engage in health education and skill building
- discuss child development and parenting[2]

Goals of the program include:

- improving pregnancy outcomes
- improving child health and development
- improving families' economic self-sufficiency[2]

Box 1: Protocol for international research and implementation of Nurse-Family Partnership[2]

Phase 1: Adaptation and Preparation

Phase 2: Feasibility and Acceptability

Phase 3: Randomized Controlled Trial

Phase 4: Continued Refinement and Expansion

Findings from three randomized controlled trials (RCTs) in the United States (US) have demonstrated the effectiveness of the program at achieving these goals.[3-4]

Adapting NFP for the Canadian context

The consistent and enduring effects of the NFP program demonstrated in the US make it an attractive population health intervention for implementation in other countries, including Canada. However, differing contextual factors between the US and Canada including policy, geography, socioeconomics and demographics requires adaptation and evaluation of the NFP program within the Canadian context.[2]

Efforts to bring NFP to Canada began over a decade ago (see Table 1) – closely adhering to the protocol for international replication and evaluation of NFP (see Box 1).

Table 1: Timeline for adapting, piloting and evaluating NFP in Canada[2]

YEARS	EVALUATION COMPONENT	ACTIVITIES
2008-11	Phase 1: Adaptation	Adapt NFP guidelines to include Canadian standards of evidence and update content
2008-12	Phase 2a: Feasibility study	Pilot study testing procedures for recruitment and retention and instruments for collecting clinical and interview data from participants
2008-12	Phase 2b: Acceptability study	A qualitative case study[2] exploring the acceptability of NFP to clients, their families, PHNs, supervisors and community stakeholders
2011-ongoing	Phase 3a: Ongoing adaptation to program materials	Update and revise the NFP Canadian guidelines
2011-14	Phase 3b: Preparation for RCT - PHN/Supervisor education in British Columbia (BC)	Hiring of PHNs and supervisors; complete nurse education
2013-ongoing	Phase 3c: Large scale RCT in British Columbia (BC Healthy Connections Project)[5]	Eligible pregnant girls and women enrolled in RCT comparing NFP to existing services
2013-18	Phase 3d: Process evaluation[6]	Document the process for implementing and delivering NFP in five BC Health Authorities
2014-18	Phase 3e: Healthy Foundations Study[7]	Measure and determine effect of NFP on biological mechanisms linking intervention and behavioural outcomes in children

Development of new Canadian content or adaptations to NFP materials from other countries have included:

- integration of Canadian standards of practice and best practice guidelines on topics such as immunization schedules, food and nutritional intake recommendations, and injury prevention guidelines;[1]
- augmentation of materials to meet identified local needs or priority issues, including meeting recommendations from the Baby-Friendly Initiative to promote breastfeeding;[8]
- integration of new NFP innovations, including an intervention to identify and respond to intimate partner violence;[9] and
- development of an updated NFP program model visual diagram included in the piloted education model in Ontario.

The Canadian Nurse-Family Partnership Education (CaNE) project

As part of the ongoing process to adapt existing NFP materials, as well as to develop new Canadian resources, there was an identified need for a program of NFP education specific to the Canadian context. The overall objectives of the CaNE pilot project were to **develop**, **deliver** and **evaluate** a Canadian model of NFP education for PHNs and supervisors (see Table 2 for CaNE detailed objectives and timeline, and Box 2 for public health units involved).

Box 2: Public Health Units involved in the CaNE pilot project

- Middlesex-London Health Unit
- City of Toronto (Public Health Division)
- Regional Municipality of York, Public Health Branch
- Niagara Region Public Health

Table 2: CaNE Objectives & Timeline

OBJECTIVE	TIMELINE
Develop - a model of NFP education to be used by PHNs and supervisors in Canada	September - December 2016
Deliver – this novel model of education to two cohorts of nurses and supervisors hired to implement NFP	January 2017 - December 2018
Evaluate – the acceptability of this model of education and to explore how this training prepared PHNs and supervisors to implement NFP with fidelity to the program's core model elements	September 2017 - December 2018

The CaNE project methods

Box 3: Project data

Multiple data types were collected:

- interviews with PHNs and supervisors
- program documents
- program implementation data

The program data reflects implementation and delivery activities from Jan. 4, 2017 to Sept. 30, 2018.

In order to reproduce the program model that has been rigorously tested, the key features of the program (both the clinical model and the organizational supporting arrangements) have been identified as Core Model Elements (CMEs); with each country or organization implementing NFP agreeing to adhere to these as they deliver the program within their own context.

Maintaining and assessing program fidelity is critical for both achieving effective outcomes and for monitoring variation in program implementation across sites. This is especially important when launching the NFP in new settings and across multiple service sites.

Adherence to NFP program fidelity was evaluated following the delivery of the CaNE model to PHNs and nurse supervisors. Details regarding project data are presented in Box 3. A mixed methods case study was conducted to determine if Ontario PHNs and supervisors were able to implement and deliver the NFP program with fidelity to the program's core model elements, with a specific focus on the following fidelity indicators:

1. PHN and supervisor caseloads;
2. duration of the program;
3. service dosage to the program;
4. content of home visits; and
5. client eligibility.

WHAT IS FIDELITY & WHY IS IT IMPORTANT?[4]

It is the extent to which there is adherence to the CMEs alongside application of new research findings, and carefully developed innovations.

Fidelity protects the integrity, quality and effectiveness of the NFP program while remaining sensitive to the local context and to the individual needs of families.

It is the responsibility of NFP-implementing agencies, NFP nurses and nurse supervisors.

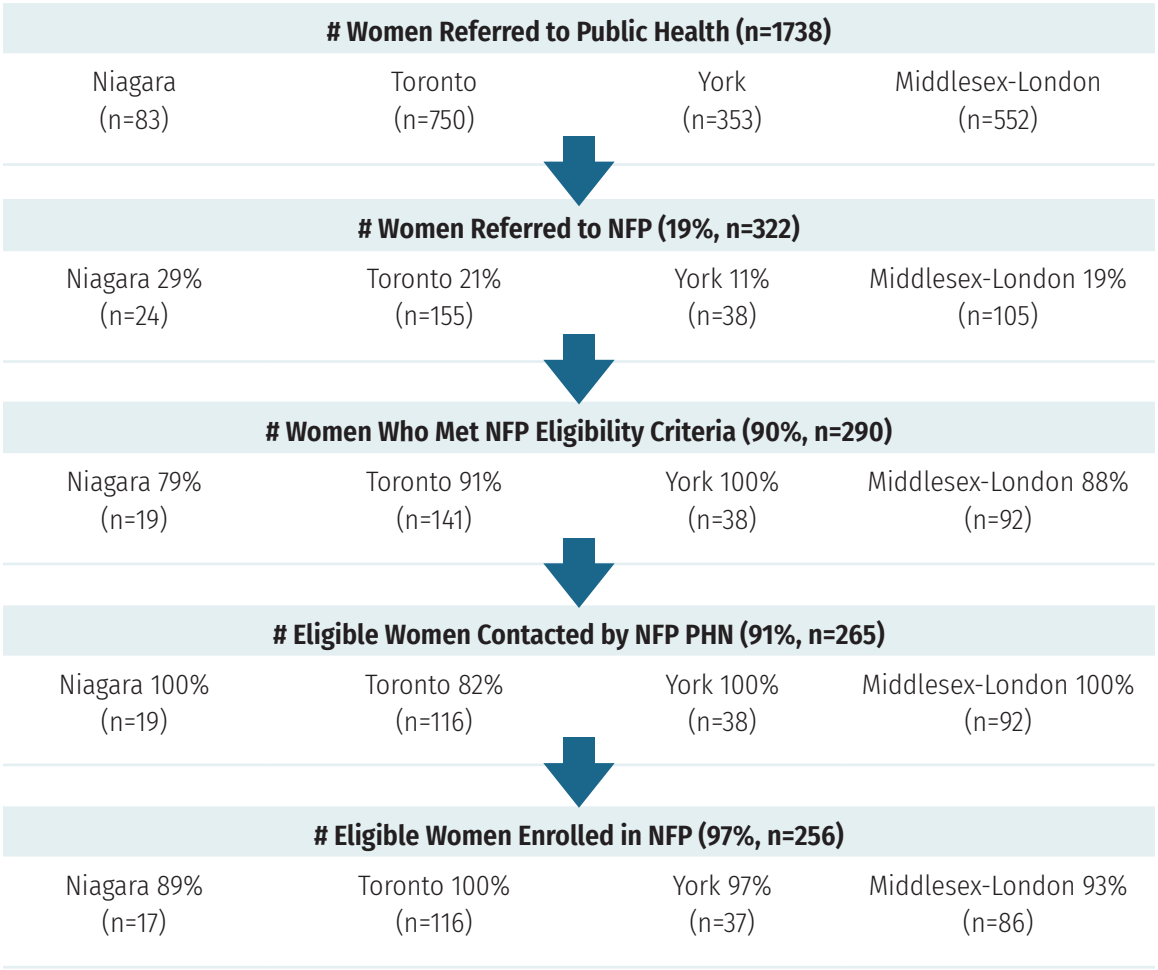
Implementation and Delivery of the NFP Program in Four Ontario Public Health Units

Nearly 1 in 5 (17%) pregnant women referred to CaNE pilot public health units were experiencing significant social and economic disadvantage and were assessed as eligible for NFP.

NFP referral and enrollment across four sites

Overall, across all pregnant women referred to the four public health units (n=1738), 19% (range 11-29%) were internally referred to the NFP program. The NFP program assessed that 90% (79-100%) of those referred met program eligibility criteria (or 17% of all pregnant women referred to public health). Of those who met the eligibility criteria, 91% (range 82-100%) were contacted by an NFP PHN and nurses were successful in enrolling 97% of those women (range 89-100%). From the women enrolled, 96% (245/256) received at least one home visit. (see Figure 1 for referral and enrollment flowchart).

Figure 1: CaNE Client Referral and Enrollment Flowchart



Evaluation of Program Implementation by Core Model Element

1

Client participates voluntarily in the NFP program.

"Voluntary participation is a key component of the development of a trusting relationship between a NFP nurse and client that is supportive, empowering and long lasting."[4 (p. 9)]

During the first home visit encounter, all NFP PHNs are required to discuss the voluntary nature of the program and seek the woman's permission to enroll her in the program. The majority of women (97%) contacted by an NFP PHN agreed to be enrolled in the program.

2

Client is a first-time mother.

"A woman with no prior parenting experience is more open to advice and guidance and may be more receptive to intervention and change. The skills and sense of her identity as a mother should carry over to subsequent pregnancies and births."[4 (p. 13)]

Overall, 99.67% (305/306 records) of pregnant women enrolled were identified as first-time mothers (first live birth). Only one participant was listed as not a first-time time mother; data were missing on five participants.

3

Client meets socioeconomic disadvantage criteria at intake.

Extensive evaluation of NFP has identified that the most pronounced program benefits are among clients meeting socioeconomic disadvantage criteria at intake.[4]

Socioeconomic disadvantage was determined by meeting local criterion for low-income and by age (< 21 yrs or < 24 yrs depending on demographics of health unit catchment area). Across the four public heath units, the mean age at baseline of the pregnant women enrolled in NFP was 18 years (range 14-26).*

*Note: *Quantitative data on participant income levels were not transferred as per the data sharing agreements.*

NFP teams working in areas characterized by high numbers of families living in poverty, experienced few to no difficulties in enrolling pregnant women that met socioeconomic eligibility criteria.

4 Client is enrolled in the program early in her pregnancy and receives her first home visit no later than the 28th week of pregnancy.

"Early enrolment allows time both for the client and NFP nurse to establish a relationship before the birth of the child and to address important prenatal health behaviours that affect the child's neurodevelopment and birth outcomes."[4 (p. 19)]

91.8% of eligible women were enrolled no later than the 28th week of pregnancy (See Table 3). The mean gestation at time of enrollment was 19.79 weeks (range 4-36 weeks). The International NFP benchmark is that 60% of pregnant women are enrolled by 16 weeks gestation.[4]

Table 3: Client Enrollment by Gestation

ENROLLMENT PERIOD	% WOMEN ENROLLED (n)
Enrolled < 16 weeks gestation	35.1% (n=94)
Enrolled between 17-25 weeks	36.2% (n=97)
Enrolled between 26-28 weeks	20.5% (n=55)
Enrolled > 28 weeks	8.2% (n=22)

In the qualitative interviews, nurses reflected that a key barrier to early enrollment might be that young women may delay seeking prenatal care, limiting physicians' and midwives' capacity to refer around 16 weeks gestation.

An identified practice challenge included frequent requests to public health from referral sources to allow a pregnant woman, not meeting all of the NFP eligibility criteria, to enroll in the program. Despite this, nurses demonstrated that they understood the importance of enrolling only eligible clients and could theoretically explain and provide rationale for why these specific client eligibility criteria have been pre-determined.

5 Each client is assigned an identified NFP nurse who establishes a therapeutic relationship through individual NFP home visits.

The success of the NFP has been attributed to the nurses' development of therapeutic relationships with their clients.[10] "An identified NFP nurse allows for a relationship to be established that can become a model for attachment. This is a foundation for developing capacity for healthy attachment between the client and her baby."[4 (p. 23)]

For many clients with histories of trauma, building trust with a service provider can take time - time which is afforded to NFP PHNs working with this population.

Each eligible pregnant woman that enrolled in the NFP program was assigned a PHN who had completed the NFP education.

6 Client is visited face-to-face in the home, or occasionally in another setting (mutually determined by the NFP nurse and client), when this is not possible.

"Seeing a client in her home environment is an essential part of the NFP program. When a client is visited in her home, the NFP nurse or supervisor will have a better opportunity to observe, assess, understand, and monitor the client's context and challenges."[4 (p. 27)]

A total of 3,338 visits were recorded. Of these, 84.5% (n=2,820) were recorded as "home" visits however, only 70.8% (n=1,996) actually took place in the client's home. Table 4 summarizes the number of completed home visits and alternate visits, as well as attempted and cancelled visits.

Table 4: Completed and Cancelled Home Visits

ENCOUNTER TYPE	% VISITS (n)
Completed home visits	84.5% (n=2,280)
Completed alternate visits*	8.9% (n=297)
Attempted home visits	1.9% (n=65)
Scheduled home visit, cancelled by client	4.1% (n=138)
Scheduled home visit, cancelled by PHN	0.5% (n=18)

*Note: *Of the 297 alternate visits completed, most were telephone visits with the client 48.5% (n=144), followed by texting with the client 19.7% (n=29).*

The locations of completed home visits are summarized in Table 5.

Table 5: Location of Completed Home Visits

LOCATION OF HOME VISIT	% VISITS (n)
Client's home	70.8% (n=1,996)
Family/friend's home	4.9 % (n=137)
Public health unit	3.4% (n=95)
Doctor's office/clinic	1.7% (n=49)
School	0.7% (n=20)
Other (e.g., Early ON centre)	18.5% (n=523)

7 Client is visited throughout her pregnancy and the first two years of her child's life in accordance with the current standard NFP visit schedule or an alternative visit schedule agreed upon between the client and nurse.

While there is flexibility within the program to alter the visit schedule to meet client needs, the standard schedule of visits that is recommended is as follows:

- Four weekly visits upon initial enrollment prenatally, then every other week until delivery.
- Six weekly visits after infant birth, followed by visits every other week until the baby is 21 months of age.
- Monthly visits from 21-24 months of age.

This schedule has been developed for the program to: match the expected stage of program delivery and public health issues; schedule assessments for maternal, or child health and development; build the therapeutic relationship; and support achievement of program goals.[4 (p. 31)]

At the time of analysis of program delivery data from the CaNE pilot project:

- 311 clients were referred and given a client ID number
  - 58.8% (n=181) were listed as active in the program,
  - 40% were discharged (n=125) (see Table 6 for discharge reason),
  - 2.25% (n=7) were listed as active, but had no home visit encounter recorded,
  - less than 1% (n=2) were reactivated, and there were no data available for 3 clients.
- A total of 245 clients had Home Visit Encounter (HVE) data collected at least once during pregnancy, infancy or toddlerhood.
  - Pregnancy Phase - 228 clients had one or more HVE
  - Infancy Phase – 141 clients had one or more HVE*
- During pregnancy (n=228), the mean number of home visits was 7.40 (SD=5.25; range: 1-35)
- During infancy (n=141), the mean number of visits was 11.6 (SD=8.78; range: 1-41).

Table 6: Reasons for Client Discharge

REASONS FOR DISCHARGE	% CLIENTS (n)
Client-initiated discharge	37.7% (n=26)
Lost to follow-up	17.4% (n=12)
Client moved	29.0% (n=20)
Pregnancy loss/infant death	5.8% (n=4)
PHN unable to provide NFP	1.4% (n=1)
Client lost custody of the child	2.9% (n=2)
No reason provided or data missing	5.8% (n=4)

The long-term retention of young mothers in NFP is an important program priority. In the CaNE education PHNs learned to offer a flexible schedule of home visiting by tailoring the frequency, duration and content of visits to meet their clients' specific needs.

*Note: *During toddlerhood, only 6 clients had HVE data. Lower HVE numbers in both the infancy and toddler phases are likely due to the CaNE pilot data collection time period – with data for analyses collected prior to many of the clients reaching later phases of the NFP program.*

8 NFP nurses and supervisors are registered nurses or registered nurse-midwives with a minimum of a baccalaureate/bachelor's degree.

A fundamental tenet of NFP is that it is a nurse-led program and nurses provide direct clinical care to women and children as part of their NFP nurse role. At a minimum, a baccalaureate or bachelor's degree is required because of the complexity of the role, the level of critical thinking required, and the expected level of autonomy in practice and decision-making in ambiguous situations.[4]

All NFP PHNs and supervisors in the CaNE pilot study held, as a minimum degree, a bachelor's degree in nursing.

9 NFP nurses and supervisors develop the core NFP competencies by completing the required NFP educational curricula and participating in on-going learning activities.

"International NFP nurse core competencies have been developed and each country's NFP educational curricula should reflect these. The NFP curricula should include content designed to prepare nurses and supervisors for their roles, as well as activities developed to sustain and maintain competence over the longer term."[4 (p. 41)]

The CaNE curriculum was piloted with two cohorts of learners. Cohort 1 started in January 2017 (n=3 supervisors; n=12 PHNs) and Cohort 2 started in March 2018 (n=1 supervisor; n=5 PHNs).

Three NFP supervisors completed NFP Fundamentals: Supervisor Education in March 2017. A new supervisor was hired in 2018 and she completed the Supervisor Education in December 2018.

10 NFP nurses, using professional knowledge, judgment and skill, utilize the visit-to-visit guidelines; individualizing them to the strengths & risks of each family, and apportioning time appropriately across the six program domains.

PHNs use the NFP Visit-to-Visit guidelines to plan and implement their home visits, individualizing their approach to meet the individual needs of each client and family. During their visits, the PHNs apportion time across the six program domains.[4]

The domains are listed below with examples to demonstrate the scope of content covered within each domain:

1. **Personal Health** (health maintenance practices; nutrition and exercise; substance use; mental health)
2. **Environmental Health** (home; work; school and neighbourhood)
3. **Life Course** (family planning; education and livelihood)
4. **Maternal Role** (mothering role; physical care; behavioural and emotional care of child)
5. **Family and Friends** (personal network relationships; assistance with childcare)
6. **Health and Human Services** (linking families with needed referrals and services)

Goals for the amount of time spent in each area are based on the content covered in the three US clinical trials and address the varying needs of clients and families in different stages of pregnancy and child development.

Table 7 displays aggregated data across each of the four participating public health units by each domain across all three program phases – pregnancy, infancy and toddlerhood. These data are summarized and compared to the NFP designated benchmarks for program domain content coverage at each stage.

Overall, PHNs generally met the designated benchmarks for program domain content covered at each stage. **More time than recommended was consistently spent addressing: 1) personal health across the three program phases and 2) environmental health during pregnancy and toddlerhood. PHNs spent less than the recommended time addressing maternal role across the three program phases.**

Table 7: NFP Content Domain Data by Program Phase: Pregnancy, Infancy and Toddlerhood

	DISTINCT VISITS (n)	PERSONAL HEALTH (%)	ENVIRONMENTAL HEALTH (%)	LIFE COURSE DEVELOPMENT (%)	MATERNAL ROLE (%)	FAMILY & FRIENDS (%)
PREGNANCY						
Benchmark		35-40%	5-7%	10-15%	23-25%	10-15%
Total/Mean	1,433	41%	13%	12%	21%	13%
INFANCY						
Benchmark		14-20%	7-10%	10-15%	45-50%	10-15%
Total/Mean	1,375	23%	9%	13%	43%	12%
TODDLERHOOD						
Benchmark		10-15%	7-10%	18-20%	45-50%	10-15%
Total/Mean	10	16%	12%	19%	42%	11%

NFP nurses and supervisors apply the theoretical framework that underpins the program (self-efficacy, human ecology, and attachment theories) to guide their clinical work and achievement of the three NFP goals.

The underlying theories are the basis for the NFP Program. There are three theories that provide a framework for practice in the NFP:

1. Human Ecology[11]
2. Attachment[12-13]
3. Self-Efficacy[14-15]

The three theories that serve as the foundation for NFP, complement one another and have been a part of the model since the original trials.[4]

For NFP PHNs theory can be a helpful way to "remind the client of why this is going to make a difference" – for example explaining the importance of attachment.

The majority of NFP PHNs participating in the CaNE pilot had experience home visiting pregnant and parenting women. As such they had a broad foundation of knowledge about public health nursing practice and competencies, and were familiar with concepts such as attachment, self-efficacy, reflection and therapeutic relationships. However, what was unique for many was that **following immersion in the NFP education, both nurses and supervisors expressed a much deeper understanding of the theories underpinning their practice.**

Most notable in the data was the transformative impact that learning about self-efficacy theory had on how the nurses approached, supported and worked with the women on their caseloads. One nurse shared:

> *"The other theory, I think is so critical is the self-efficacy. Oh my goodness. Believing in them. They actually have someone that believes in them – telling them, 'yes, you can do this.' Like right from the beginning it's always about their strengths. We always are pumping their tires, building their … And then the fact that you always try to wrap the visit up with a positive affirmation."*

The CaNE curriculum added Critical Caring Theory[16] to the original three theories underpinning the program. NFP PHNs participating in the pilot project acknowledged that the addition of Critical Caring Theory provided concepts to support the nature of the caring and social justice work they engage in as PHNs, as well as that the theory was complementary to the increased focus on social determinants of health occurring within various health units.

12 Each NFP team has an assigned NFP supervisor who leads and manages the team and provides nurses with regular reflective supervision.

NFP clinical work is emotionally demanding, carries many clinical challenges, and is carried out by individual nurses who are largely unobserved within home visits. NFP nurses need to practice with high levels of autonomous decision-making, often in situations of risk and uncertainty. For all these reasons, having a supportive, encouraging space to critically reflect on their practice is a core element of the NFP implementation model. It enables nurses to maintain emotional resilience, make robust decisions and develop their understanding and skillfulness.[4 (p. 59)]

For the CaNE pilot an NFP supervisor was trained and assigned to each NFP team within each of the four public health units. The Core Model Elements advise that a single supervisor provide support to a team of no more than 8 or no fewer than 4 full-time NFP nurses. With smaller teams, the amount of supervisor time dedicated to NFP can be proportionally reduced.

For this pilot project, all NFP supervisors had public health programming responsibilities in addition to their NFP work and all supervised teams of less than 8 nurses. During the pilot there were 2 teams that (at times) unexpectedly fell to a team size of 3 NFP PHNs. As such, a variance to the Core Model Element was successfully obtained for those team sizes to be smaller during the pilot project. The mean monthly supervisor caseload of PHNs supported is reported in Table 8.

Table 8: Mean Monthly* Supervisor Caseload of PHNs

Public Health Unit	PHNs (M)
Middlesex-London	4.3
Niagara Region	3.0
York Region	3.2
Toronto	3.9

**Calculated for a period of 21 months, January 2017-September 2018, with the exception of Niagara Region who implemented the program April-September 2018.*

Reflective supervision is distinct from other types of supervision as it utilizes a reflective cycle to explore the NFP nurse's experiences, allowing her to discover solutions, concepts and perceptions on her own without direction from the supervisor.

13 NFP teams, implementing agencies, and national units collect/and utilize data to: guide program implementation, inform continuous quality improvement, demonstrate program fidelity, assess indicative client outcomes, and guide clinical practice/reflective supervision.

For the purpose of the CaNE pilot project, tables to record information about referral and enrollment patterns, client demographics, home visit patterns, referrals and client outcomes were developed. Additionally, for every home visit or encounter, nurses were required to record information about the interaction, including data such as visit location, type of visit, and time spent per domain.

Throughout the CaNE evaluation, the need for an NFP specific database, integrated into existing local and provincial data collection systems, was identified as a priority. In the analysis of the data for this project, challenges were also noted – specific to the amount of missing data, the lack of consistent interpretations of codes, and minor errors in data entry. Specific recommendations for improvements will be outlined in a subsequent report.

14 High quality NFP implementation is developed and sustained through national and local organized support.

In Ontario, as part of the CaNE initiative, an NFP Nursing Practice Lead position was established to ensure that implementation and delivery of NFP across public health units was a coordinated effort. The NFP Nursing Practice Lead continues to serve as the lead educator and to provide extensive support and consultation to all five Ontario health units delivering NFP (including the City of Hamilton, Public Health Services).

An Ontario NFP Community of Practice was formed through CaNE, which continues to exist beyond the CaNE initiative. Members of this group include all NFP supervisors working in Ontario, the Ontario NFP Nursing Practice Lead, and research representatives. The objectives of the group are described in Box 4.

Box 4: Ontario NFP Community of Practice Objectives

- ensure fidelity to the NFP program, excellence in nursing practice, and consistency in program implementation across the province
- create a safe environment for exploring, sharing, learning, and engaging in reflective practice and professional growth
- keep informed of and provide perspective on NFP initiatives
- build and maintain positive relationships between and to provide mutual support for all health units implementing NFP
- contribute meaningfully to the development of tools and resources to strengthen the program in Ontario for clients and PHNs
- clarify and enhance how NFP aligns, complements, and integrates with the Healthy Babies Healthy Children program
- ensure connectivity between NFP research and practice

As part of the CaNE project, an Ontario NFP Steering Committee was formed. The Steering Committee includes the license-holder for NFP in Ontario, the Ontario NFP Nursing Practice Lead, Directors (or alternates) from all implementing health units, and a research consultant from McMaster University. This committee is continuing its work beyond the CaNE project. The objectives of the committee are described in Box 5.

Box 5: Ontario NFP Steering Committee Objectives

- provide strategic oversight for NFP in Ontario
- ensure fidelity to the NFP program and licensing requirements
- provide consultative support for province-wide challenges or issues (and local challenges, as needed)
- act as decision-making body for NFP in Ontario
- promote excellence in nursing practice

Additionally, the CaNE project resulted in the development of an NFP Provincial Advisory Committee. This group's objectives are to advise the Ontario NFP Steering Committee regarding strategic, policy and province-wide issues, to support cohesiveness and promote effective provincial collaboration and communication, to inform long-term visioning for NFP in Ontario (pending results of the RCT in BC), and to enhance alignment of NFP with existing services and systems. This committee is continuing its work beyond the CaNE initiative; its membership is described in Box 6. Provincial level representation from the poverty reduction sector, as well as the primary care/midwifery sector is still pending.

Box 6: Membership of the NFP Provincial Advisory Committee

Invited members include:

- all members of the Ontario NFP Steering Committee
- managers/supervisors and Medical Officers of Health from all implementing health units
- representation from Ontario's Ministry of Children, Community and Social Services
- representation from the Ministry of Health in British Columbia;
- researchers
- representation from Public Health Ontario
- provincial and local representation from child protection services
- representation from an Indigenous-led provincial-level organization

And finally, at a national level, a Nurse-Family Partnership Collaborative in Canada has been established. Its vision is "a cohesive approach to achieve a future where maternal, child, and family health and well-being are supported by evidenced-informed policies and programs." The group's mission is to share and collaborate on NFP between Ontario and British Columbia, with the objective to provide strategic leadership and build capacity to achieve the shared responsibilities associated with required core functions. Membership of this group includes the following roles and areas: NFP International, research, license holders, BC provincial government, provincial NFP clinical/nursing practice leads, and implementation sites.

Multiple groups have been formed at the provincial and national levels to support high quality NFP implementation. These groups and supports continue to exist beyond the CaNE initiative.

Conclusion

Following completion of the piloted Canadian Nurse-Family Partnership Education model, PHNs and supervisors demonstrated the capacity to implement the program with an exceptionally high degree of fidelity to the program's core model elements, particularly with respect to enrolling women that meet program eligibility criteria, client retention, and application of content distributed across all program domains.

References

1. Jack SM, Catherine N, Gonzalez A, et al. Adapting, piloting and evaluating complex public health interventions: lessons learned from the Nurse-Family Partnership in Canadian public health settings. Health Prom Chronic Dis Prev Canada. 2015;35(8/9):151-159.
2. Jack SM, Busser D, Sheehan D, Gonzalez A, Zwygers EJ, MacMillan HL. Adaptation and implementation of the Nurse-Family Partnership in Canada. Can J Public Health. 2012;103:S42-S48.
3. Olds DL. The Nurse-Family Partnership: An evidence-based preventive intervention. Infant Ment Health J. Jan 2006;27(1):5-25.
4. Nurse-Family Partnership International. International NFP core model elements. 2019. Prevention Research Center for Family and Child Health, Denver, CO.
5. Catherine NL, Gonzalez A, Boyle M, et al. Improving children's health and development in British Columbia through nurse home visiting: a randomized controlled trial protocol. BMC Health Serv Res. 2016;16(a):349.
6. Jack SM, Sheehan D, Gonzalez A, et al. British Columbia Healthy Connections Project process evaluation: a mixed methods protocol to describe the implementation and delivery of the Nurse-Family Partnership in Canada. BMC Nurs. 2015;14:47.
7. Gonzalez A, Catherine N, Boyle M, et al. Healthy Foundations Study: a randomised controlled trial to evaluate biological embedding of early-life experiences. BMJ Open. 2018;8(1):e018915.
8. Pound CM, Unger SL, Society CP, Nutrition Gastroenterology Committee Hospital Paediatrics Section. The baby-friendly initiative: Protecting, promoting and supporting breastfeeding. Paediatr Child Health. 2012;17(6):317-321.
9. Jack SM, Ford-Gilboe M, Wathen CN, et al. Development of a nurse home visitation intervention for intimate partner violence. BMC Health Serv Res. 2012;12:50.
10. Kitzman H, Olds DL, Henderson CR, et al. Effect of prenatal and infancy home visitation by nurses on pregnancy outcomes, childhood injuries, and repeated childbearing. A randomized controlled trial. JAMA. 1997;278(8):644-652.
11. Bronfenbrenner U. (1994). Ecological models of human development. In International Encyclopaedia of Education, Vol. 3, 2nd ed. Oxford: Elsevier. Reprinted in: Gauvain M, Cole M (Eds), Readings on the development of children, 2nd Ed. (1993, pp37-43). New York: Freeman. http://www.columbia.edu/
12. Bowlby J, Ainsworth M. The origins of attachment theory. Devel Psychol. 1992;28:759-775.
13. Bretherton I. The origins of attachment theory: John Bowlby and Mary Ainsworth. Devel Psychol. 1992;28(5):759-775.
14. Bandura A. Self-efficacy: Toward a unifying theory of behavioral change. Psychol Rev. 1977 Mar;84(2):191-215. https://www.uky.edu/~eushe2/Bandura/Bandura1977PR.pdf
15. Bandura A. (1994). Self-efficacy. In VS Ramachaudran (Ed.), Encyclopedia of human behavior (Vol. 4, pp. 71-81). New York: Academic Press. (Reprinted in H. Friedman [Ed.], Encyclopedia of mental health. San Diego: Academic Press, 1998). https://www.uky.edu/~eushe2/Bandura/BanEncy.html
16. Falk-Rafael A. Advancing nursing theory through theory-guided practice: the emergence of a critical caring perspective. Adv Nurs Sci. 2005;28(1):38-49.

MIDDLESEX-LONDON HEALTH UNIT

REPORT NO. 078-19

TO: Chair and Members of the Board of Health

FROM: Christopher Mackie, Medical Officer of Health / CEO

DATE: 2019 December 12

MEDICAL OFFICER OF HEALTH / CEO ACTIVITY REPORT FOR DECEMBER

Recommendation

It is recommended that the Board of Health receive Report No. 078-19 re: "Medical Officer of Health Activity Report for December" for information.

The following report presents activities of the Medical Officer of Health (MOH) / CEO for the period November 11 – December 2, 2019.

November 11 Met with Medical Student, Michelle Quaye
Teleconference budget discussion with Anna Lisa Barbon, City of London

November 13 Monthly Board of Health meeting preparation call with Board Chair

November 14 Attended Middlesex-London Health Unit Staff Appreciation Day at Western Fair District
Attended the City of London's Annual Emergency Management Training and Exercise

November 18 Attended the City Manager's Breakfast meeting at Museum London
Chaired a meeting of the London Opioid Crisis Working Group

November 19 Lectured at a class of the Masters of Public Health – Leading People and Organizations in Public Health at Western University

November 20 Participated in Council of Medical Officers of Health (COMOH) Executive Committee teleconference
Met with Dr. Sharon Koivu at University Hospital to discuss opioid drug related issues
Attended the 2019 Pillar Community Innovation Awards

November 21 Phone call with Dr. Robert Kyle in regard to modernization of public health
Interviewed by Kate Dubinski, CBC London in regard to a vaping illness case study comment from Canadian Medical Association Journal (CMAJ)
Phone call with Brent Moloughney in regard to collaboration on a health promotion review
Interviewed by Celine Zadorsky, CTV in regard to a vaping illness case study comment from Canadian Medical Association Journal (CMAJ)
Interviewed by Jennifer Bieman, London Free Press in regard to a vaping
Attended a meeting at London InterCommunity Health Centre (LIHC) in regard to safe supply
Attended both the Governance and Board of Health meetings

November 22 Inverviewed by Craig Needles, AM980 in regard to vaping

November 26 Attended the Gleed Youth Opportunities Unlimited (YOU) event

November 27 Met with Matthew Meyer, London Health Sciences Centre to discuss the Western Ontario Health Team
Met with Board Chair for a one on one meeting

November 28 Attended the YOU Board meeting

November 28 Was interviewed by Andrew Lupton - CBC London, Daryl Newcombe - CTV London, Megan Stacey – The London Free Press and Scott Monich – AM980 about the Local Planning Appeal Tribunal decision regarding a permanent site at 446 York St. for the supervised consumption facility
Lectured for the Governance, Leadership and Ethics students at Western University

November 29 Attended a tour of the Citi Plaza construction site

December 2 Met with Board Chair and Vice Chair for an update meeting
Attended the London Free Press Talks: Face It Fix it event

This report was submitted by the Office of the Medical Officer of Health.

Christopher Mackie, MD, MHSc, CCFP, FRCPC
Medical Officer of Health / CEO

CORRESPONDENCE – December 2019

a) Date: 2019 November 18
Topic: Association of Local Public Health Agencies (alPHa) Information Break
From: alPHa
To: All Health Units

Background:

On November 18, 2019, the Association of Local Public Health Agencies (alPHa) issued information that included an update on public health modernization and announced the submission of the alPHa document *Statement of Principles for Public Health Modernization.* The Fall Symposium took place on November 6, 2019 where Dr. David Williams, Alison Blair and Jim Pine led a panel to update members on the upcoming consultations. The new 2020-2023 alPHa strategic plan was approved by the alPHa Board of Directors at its November meeting. The alPHa information break also includes new releases pertaining to provincial announcements, legislation, alPHa activities and events.

Recommendation: Receive.

b) Date: 2019 November 19
Topic: Statement of Principles – Public Health Modernization
From: Association of Local Public Health Agencies (alPHa)
To: All Health Units

Background:

In advance of the upcoming consultations with municipal governments and the public health sector, the Association of Local Public Health Agencies (alPHa) has prepared a statement of principles as a foundation for its formal submissions to the consultation process. The principles are outlined as follows: Foundational Principle (1), Organizational Principles (5), Capacity Principles (3) and Governance Principles (3).

Recommendation: Receive.

c) Date: 2019 November 21
Topic: Promotion of Vapor Products in Convenience Stores and Gas Stations
From: Haliburton, Kawartha, Pine Ridge District Health Unit
To: The Honourable Patty Hadju, The Honourable Christine Elliott

Background:

On November 21, 2019 the Board of Health for the Haliburton, Kawartha, Pine Ridge District Health Unit wrote to Minister Hajdu and Minister Elliott to commend the Ontario Government on the decision to prohibit the promotion of vapour products in convenience stores and gas stations as of January 1, 2020. The Board of Health for the Haliburton, Kawartha, Pine Ridge District Health Unit also requested more stringent vaping regulations, similar to those regulating tobacco products.

Recommendation: Receive.

d) Date: 2019 November 25
Topic: Public Health Modernization Discussion Paper – Member Feedback
From: Association of Local Public Health Agencies
To: All Health Units

Background:

The Association of Local Public Health Agencies (alPHa) requested member feedback in relation to the questions posed in the Public Health Modernization Discussion Paper. The questions were sorted based on the following themes: 1) Insufficient Capacity 2) Misalignment of Health, Social, and Other Services 3) Duplication of Effort 4) Inconsistent Priority Setting 5) Indigenous and First Nations Communities 6) Francophone Communities and 7) Learning from Past Reports. Members are to respond to the questions provided so that feedback can be synthesized, condensed and edited for clarity so that respondents will not be identified.

Recommendation: Receive.

e) Date: 2019 October 30 [Received November 25]
Topic: Opposition to Co-Payment for Dentures under the New Ontario Seniors Dental Care Program
From: Fred Eisenberger, Mayor, City of Hamilton
To: The Honourable Christine Elliott

Background:

On October 30, 2019, the City of Hamilton wrote to Minister Elliott regarding the concern over the possible co-payment for dentures under the new Ontario Seniors Dental Care Program (OSDCP). The local population health data indicates that 47% of all seniors wear dentures and imposing a 10% co-payment would compound the dental care barrier that currently exists. Dentures would remain inaccessible for many low-income seniors and would adversely affect seniors' overall quality of life. The City of Hamilton opposes the possibility of a 10% co-payment under the OSDCP.

Recommendation: Receive.

f) Date: 2019 October 30 [Received November 25]
Topic: Request for Weekly Data Reports on Vaping Cases
From: Fred Eisenberger, Mayor, City of Hamilton
To: The Honourable Christine Elliott

Background:

On October 30, 2019, the City of Hamilton wrote to Minister Elliott to request that reports to the Ontario Chief Medical Officer of Health by Hamilton hospitals be shared with Hamilton's Medical Officer of Health in relation to the ill-effects of vaping on the health of those in Hamilton.

Recommendation: Receive.

g) Date: 2019 October 30 [Received November 25]
Topic: Support for Seamless Provincial Immunization Registry
From: Fred Eisenberger, Mayor, City of Hamilton
To: The Honourable Christine Elliott, Dr. David Williams

Background:

On October 30, 2019, the City of Hamilton wrote to Minister Elliott and Dr. Williams in support of the Council of Ontario Medical Officers of Health's support of a seamless immunization registry. Refer to correspondence item v) in the June 20, 2019 Board of Health agenda.

Recommendation: Receive.

h) Date: 2019 November 19
Topic: Summary – Emergency Health Services and Public Health Modernization Webinar
From: Association of Local Public Health Agencies (alPHa)
To: All Health Units

Background:

On November 18, 2019, a live webcast was held to launch the first phase of the Emergency Health Services and Public Health Modernization consultation process featuring remarks from Christine Elliott, Minister of Health and Deputy Premier; Dr. David Williams, Chief Medical Officer of Health; Alison Blair, Executive Lead for Public Health Modernization; and Jim Pine, Special Advisor, Public Health Modernization. The Association of Local Public Health Agencies (alPHa) issued a summary of the webcast on November 19, 2019, and it was confirmed during the question and answer period that the April 2020 dates for implementation of public health modernization are no longer valid.

Recommendation: Receive.

i) Date: 2019 November 26
Topic: Proceedings – alPHa Fall Symposium, Wednesday November 6, 2019
From: Association of Local Public Health Agencies (alPHa)
To: All Health Units

Background:

The Association of Local Public Health Agencies (alPHa) hosted its Fall Symposium on November 6, 2019, in Toronto Ontario. The session summaries included topics related to updates on public health modernization, alPHa's strategic plan, transformation and change, public health and the news and remarks from Minister Christine Elliott.

Recommendation: Receive.

j) Date: 2019 November 27
Topic: City Appointment to the Board of Health
From: Cathy Saunders, City Clerk, City of London
To: Chair and Members, Middlesex-London Health Unit Board of Directors

Background:

On November 26, 2019, the City of London appointed Councillor A. Kayabaga to the Middlesex-London Health Unit Board of Directors for the term ending November 15, 2022.

Recommendation: Receive.

k) Date: 2019 November 29
Topic: Impact of vaping on non-smokers and youth
From: Peterborough Public Health
To: The Honourable Patty Hadju, All Health Units

Background:

On November 29, 2019, the Board of Health for Peterborough Public Health wrote to Minister Hadju regarding concerns on the impact of vaping on non-smokers and youth. The Board of Health for Peterborough Public Health urges the Federal Government to place the same restrictions on vaping products that are currently in place for tobacco products.

Recommendation: Receive.

l) Date: 2019 December 2
Topic: Vapor product use among youth
From: Leeds, Grenville & Lanark District Health Unit
To: The Honourable Christine Elliott, All Health Units

Background:

On December 2, 2019, the Board of Health of the Leeds, Grenville and Lanark District Health Unit wrote to Minister Elliott in support for Bill 151, the Smoke-Free Ontario Amendment Act (Vaping is not for Kids), 2019.

Recommendation: Receive.

Elizabeth Milne

From: Susan Lee <susan@alphaweb.org>
Sent: Monday, November 18, 2019 1:28 PM
To: All Health Units
Subject: alPHa Information Break - November 18, 2019

PLEASE ROUTE TO:

All Board of Health Members / Members of Health & Social Services Committees

alPHa
Association of Local PUBLIC HEALTH Agencies

Information Break

November 18, 2019

This update is a tool to keep alPHa's members apprised of the latest news in public health including provincial announcements, legislation, alPHa activities, correspondence and events.

Update on Public Health Modernization

Today, via webinar, the Ministry of Health launched the long-awaited consultation process for public health and emergency health services modernization. The Deputy Premier and Minister of Health, the Hon. Christine Elliott, announced there would be two discussion papers that will "anchor consultations in the coming weeks." Jim Pine, Special Advisor on Public Health and Emergency Health Services, noted the ministry was keen on meeting with as many stakeholders as possible and looked forward to "thoughtful input and dialogue" with stakeholders, who will be invited to make written submissions via email and a Ministry survey during the process. Chief Medical Officer of Health Dr. David Williams outlined a few of the key challenges in the public health discussion paper

after speaking to the need for changing the current systems. Alison Blair, ADM, Emergency Health Services and Executive Lead for Public Health Modernization, also spoke to the key challenges facing the emergency health services sector that will be addressed in the consultations. In our ongoing efforts to help members stay updated on the latest news, alPHa will draft a summary shortly on the information presented at the webinar and share it broadly with the membership, so please stay tuned.

On November 15, alPHa submitted a foundational document, *Statement of Principles for Public Health Modernization*, to the Minister of Health, the Chief Medical Officer of Health, and the Special Advisor and the Executive Lead for Public Health Modernization. Approved by the alPHa Board, the document will inform the association's contributions to the upcoming consultations and is in advance of responses that will be submitted.
View the Statement of Principles here
Go to alPHa's web page on Public Health Modernization

The recently concluded alPHa Fall Symposium, held on November 6, featured many key figures in public health modernization. Minister Christine Elliott provided welcoming remarks to the assembled delegates and confirmed that keeping patients as healthy as possible in their communities and out of hospitals through investments in health protection and promotion is a key pillar in Ontario's comprehensive plan to end hallway health care. She also provided updates on the Public Health Modernization consultations, approaches to reducing youth vaping and the launch of this year's Universal Influenza Immunization Program. Dr. David Williams, along with Alison Blair and Jim Pine, led a panel to update members on the upcoming consultations.

At their November 5 meeting, alPHa Board members met with Jim Pine, Alison Blair and Colleen Kiel from the Ministry of Health. Mr. Pine looked forward to working with the sector during the consultations, noting that he and staff had been given a mandate by the Minister to meet with many stakeholders and to listen to as much feedback as possible. He also shared his expectation that the consultations would be fairly broad in scope and cover much ground on system-related issues.

Fall 2019 Symposium

alPHa held its best-attended Fall Symposium last week in Toronto. More than 130 attendees gathered at the Dalla Lana School of Public Health to hear from high-profile speakers in government and partner organizations on transformation and change management. Ending the day was a reception and guest lecture by Dr. Peter Donnelly, President and CEO of Public Health Ontario. His message was that catastrophic biological risks are ever-present and that investment, vigilance and the capacity to apply lessons learned can only reinforce public health's resident experience and expertise to respond to them.

Many thanks to the members and speakers for participating and the Dalla Lana School of Public Health for providing the venue, all of which helped to make the day a successful event.

Please click the link below to view the slide decks from November 6 and the Section meetings of November 7 (login and password required).
Download the Fall 2019 Symposium & Section Meeting presentations

---

alPHa Strategic Plan

The alPHa Board of Directors approved a new 2020-2023 strategic plan at its meeting in November. The three-year plan builds on the previous one, which focused on member relations, and adds an external component that will see alPHa leading the dialogue and engaging with government and ministries to advocate for the health of Ontarians through a strong local public health system. Click the link below to view the updated alPHa Strategic Plan.
Learn more about alPHa's 2020-2023 Strategic Plan here

Rapid Risk Factor Surveillance System (RRFSS) Update

It's not too late to sign up for the Rapid Risk Factor Surveillance System (RRFSS) 2020 data collection! There are more reasons than ever to be a member of RRFSS: Survey questions can be added at any time during the year on new/emerging issues (such as e-cigarettes and cannabis) and RRFSS sample area/size can be adapted very quickly if needed. Contact Lynne Russell, RRFSS Coordinator, at lynnerussell@rrfss.ca for more information.

News Roundup

Province reorganizes LHINs to five transitional regions and transfers five provincial agencies to new Ontario Health - 2019/11/13

Ontario announces Digital First for Health Strategy to improve patient experience - 2019/11/13

Expert panel releases report, When Antiobotics Fail, on socioeconomic impacts of antimicrobial resistance - 2019/11/12

Ontario undertakes multi-sector provincial climate impact assessment - 2019/11/07

Province releases 2019 Ontario Economic Outlook and Fiscal Review - 2019/11/06

Standing Committee on Public Accounts' Report on Public Health: Chronic Disease Prevention - 2019/11/05

Ontario legislature resumes and announces priorities for upcoming session - 2019/10/28

Province gives $143M funding to municipalities to help lower costs and improve municipal services - 2019/10/25

Government of Ontario bans vaping product promotion outside of specialty stores - 2019/10/25

Ministry of Finance allocates 2020 Ontario Municipal Partnership Fund - 2019/10/24

CIHI releases data on changing opioid prescribing practices - 2019/10/17

Current Consultations of Public Health Interest

Health units and boards of health are invited to provide comments this month on a number of provincial regulatory amendments affecting public health practice. For many of these, the deadline to submit input is November 27, 2019. Click the link below to see a list of proposed amendments.
Go to alPHa's Current Consultations web page

Upcoming Events - Mark your calendars!

Winter 2019 Symposium/Section Meetings -Tentative dates: February 20 & 21, 2020, Toronto.

The Ontario Public Health Convention (TOPHC) 2020 - March 25-27, 2020; Beanfield Centre, 105 Princes' Blvd., Toronto. www.tophc.ca

June 2020 Annual General Meeting & Conference - June 10-12, 2020; Toronto.

Susan Lee
Manager, Administrative and Association Services
Association of Local Public Health Agencies (alPHa)
2 Carlton Street, Suite 1306
Toronto ON M5B 1J3
Tel: (416) 595-0006 ext. 25
Email: susan@alphaweb.org
Visit us at www.alphaweb.org

Statement of Principles
Public Health Modernization
November 2019

BACKGROUND

On April 11, 2019 the Minister of Finance announced the 2019 Ontario Budget, which included a pledge to modernize "the way public health units are organized, allowing for a focus on Ontario's residents, broader municipal engagement, more efficient service delivery, better alignment with the health care system and more effective staff recruitment and retention to improve public health promotion and prevention".

Plans announced for this initiative included regionalization and governance changes to achieve economies of scale, streamlined back-office functions and better-coordinated action by public health units, adjustments to the provincial-municipal cost-sharing of public health funding and an emphasis on digitizing and streamlining processes.

On November 6, 2019, further details were presented as part of the government's Fall Economic Statement, which reiterates the Province's consideration of "how to best deliver public health in a way that is coordinated, resilient, efficient and nimble, and meets the evolving health needs and priorities of communities". To this end, the government is renewing consultations with municipal governments and the public health sector under the leadership of Special Advisor Jim Pine, who is also the Chief Administrative Officer of the County of Hastings. The aim of the consultation is to ensure:

- Better consistency and equity of service delivery across the province;
- Improved clarity and alignment of roles and responsibilities between the Province, Public Health Ontario and local public health;
- Better and deeper relationships with primary care and the broader health care system to support the goal of ending hallway health care through improved health promotion and prevention;
- Unlocking and promoting leading innovative practices and key strengths from across the province; and
- Improved public health delivery and the sustainability of the system.

In preparation for these consultations and with the intent of actively supporting positive systemic change, the alPHa Board of Directors has agreed on the following principles as a foundation for its separate and formal submissions to the consultation process.

PRINCIPLES

Foundational Principle

1) Any and all changes must serve the goal of strengthening the Ontario public health system's capacity to improve population health in all of Ontario's communities through the effective and efficient local delivery of evidence-based public health programs and services.

Organizational Principles

2) Ontario's public health system must remain financially and administratively separate and distinct from the health care system.

3) The strong, independent local authority for planning and delivery of public health programs and services must be preserved, including the authority to customize centralized public health programming or messaging according to local circumstances.

4) Parts I-V and Parts VI.1 – IX of the Health Protection and Promotion Act should be retained as the statutory framework for the purpose of the Act, which is to "provide for the organization and delivery of public health programs and services, the prevention of the spread of disease and the promotion and protection of the health of the people of Ontario".

5) The *Ontario Public Health Standards: Requirements for Programs, Services, and Accountability* should be retained as the foundational basis for local planning and budgeting for the delivery of public health programs and services.

6) Special consideration will need to be given to the effects of any proposed organizational change on Ontario's many Indigenous communities, especially those with a close relationship with the boards of health for the health units within which they are located. Opportunities to formalize and improve these relationships must be explored as part of the modernization process.

Capacity Principles

7) Regardless of the sources of funding for public health in Ontario, mechanisms must be included to ensure that the total funding envelope is stable, predictable, protected and sufficient for the full delivery of all public health programs and services whether they are mandated by the province or developed to serve unique local needs as authorized by Section 9 of the Health Protection and Promotion Act.

8) Any amalgamation of existing public health units must be predicated on evidence-based conclusions that it will demonstrably improve the capacity to deliver public health programs and services to the residents of that area. Any changes to boundaries must respect and preserve existing municipal and community stakeholder relationships.

9) Provincial supports (financial, legal, administrative) must be provided to assist existing local public health agencies in their transition to any new state without interruption to front-line services.

Governance Principles

10) The local public health governance body must be autonomous, have a specialized and devoted focus on public health, with sole oversight of dedicated and non-transferable public health resources.

11) The local public health governance body must reflect the communities that it serves through local representation, including municipal, citizen and / or provincial appointments from within the area. Appointments should be made with full consideration of skill sets, reflection of the area's socio-demographic characteristics and understanding of the purpose of public health.

12) The leadership role of the local Medical Officer of Health as currently defined in the Health Protection and Promotion act must be preserved with no degradation of independence, leadership or authority.

DESIRED OUTCOMES

- Population health in Ontario will benefit from a highly skilled, trusted and properly resourced public health sector at both the provincial and local levels.
- Increased public and political recognition of the critical importance of investments in health protection and promotion and disease prevention to population health and the sustainability of the health care system.
- Local public health will have the capacity to efficiently and equitably deliver both universal public health programs and services and those targeted at at-risk / vulnerable / priority populations.
- The geographical and organizational characteristics of any new local public health agencies will ensure critical mass to efficiently and equitably deliver public health programs and services in all parts of the province.
- The geographical and organizational characteristics of any new local public health agencies will preserve and improve relationships with municipal governments, boards of education, social services organizations, First Nations communities, Ontario Health Teams and other local stakeholders.
- The geographical and organizational characteristics of any new local public health agencies will reflect the geographical, demographic and social makeup of the communities they serve in order to ensure that local public health needs are assessed and equitably and efficiently addressed.
- Local public health will benefit from strong provincial supports, including a robust Ontario Agency for Health Protection and Promotion (Public Health Ontario) and a robust and independent Office of the Chief Medical Officer of Health.
- The expertise and skills of Ontario's public health sector will be recognized and utilized by decision makers across sectors to ensure that health and health equity are assessed and addressed in all public policy.

HALIBURTON, KAWARTHA, PINE RIDGE DISTRICT HEALTH UNIT

www.hkpr.on.ca • info@hkpr.on.ca
1-866-888-4577

November 21, 2019

Honourable Patty Hajdu
Minister of Health, Canada
House of Commons
Ottawa, ON K1A 0A6
Sent via email: patty.hajdu@parl.gc.ca

Honourable Christine Elliott, Deputy Premier
Minister of Health, Ontario
Hepburn Block 10th Floor 80 Grosvenor Street Toronto,
ON M7A 1E9
Sent via email: christine.elliott@pc.ola.org

Dear Minister Hajdu/Minister Elliott:

The Haliburton, Kawartha, Pine Ridge District Health Unit would like to commend the Ontario Government on the decision to prohibit the promotion of vapour products in convenience stores and gas stations as of January 1, 2020. However, we believe that further steps are necessary to protect our youth and prevent the continued rise in vapour product use in youth and other vulnerable populations.

Vaping has been rapidly increasing in our youth, with a 74% increase in vaping among Canadian youth aged 16-19 reported from 2017 to 2018[1]. While vaping products have been regarded as safer than combustible tobacco cigarettes, recent reports of severe pulmonary illness associated with vaping in the United States and Canada have given rise to concerns about the use of vaping products, especially among youth. Most vaping products contain nicotine at varying levels. This is concerning as children and youth may become dependent on nicotine more rapidly than adults leading to addiction and physical dependence[2]. Research has demonstrated that youth are especially susceptible to the negative effects of nicotine, as it can alter their brain development and can affect memory and concentration.[2,3] There are thousands of flavours of e-liquids available, including candy and fruit flavoured varieties that are greatly appealing to youth, and there is a strong body of evidence to support that flavours attract youth to e-cigarette use where research concludes that flavour influences youth to try and buy e-cigarettes and the appeal of ads promoting flavours is linked to uptake of vaping by youth[4].

[1] Hammond, D., Reid, J.L., Rynard, V.L., Fong, G.T., Gummings, K.M., McNeill, A., & O'Conner, R. (2019). Prevalence of vaping and smoking among adolescents in Canada, England, and the United States: repeat national cross-sectional surveys. BJM, 365, I2219.
[2] Health Canada. (2019-02-04). Vaping: Get the Facts. Retrieved November 2019 from: tobacco/vaping/risks.html?utm_source=google&utm_medium=cpc_en&utm_content=risks_2&utm_campaign=vapingprevention2019&utm_term=%2Bvape
[3] England, L.J., Bunnell, R.E., Pechacek, T.F., Tong, V.T. and McAfee, T.A., 2015. Nicotine and the developing human: a neglected element in the electronic cigarette debate. American journal of preventive medicine, 49(2), pp.286-293.
[4] Vasiljevic M, Petrescu DC, Marteau TM. Impact of advertisements promoting candy-like flavoured e-cigarettes on appeal of tobacco smoking among children: an experimental study, Tobacco Control, 2016:25(e2):e107-e112.

.../2

At its meeting held on November 21, 2019, the Board of Health for the Haliburton, Kawartha, Pine Ridge District Health Unit approved a motion to write to you to request more stringent vaping regulations, similar to those regulating tobacco products, to address the rise in vapour product use in youth and other vulnerable populations.

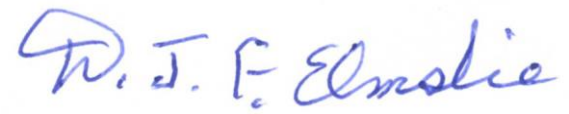
These recommended regulations include:

- Require a ban on flavoured e-cigarettes to help prevent the further uptake of vaping by youth.
- Restrict the nicotine concentration in all vaping products.
- Require health and toxicity warnings on all vapour products.
- Require mandatory testing and reporting for vapour products.
- Require standardized and tamper proof packaging on all vapour products.
- Require an age of 21 years for tobacco, vaping and cannabis sales.
- Develop a robust and sustainable monitoring and surveillance strategy to ensure compliance.
- Revise the Federal *Tobacco and Vaping Products Act* (TVPA) to ban display, promotion and advertising, mirroring the restrictions on tobacco in the TVPA.

Thank you for your attention to this very important matter for the protection of the health of our youth.

Sincerely

BOARD OF HEALTH FOR THE HALIBURTON, KAWARTHA,
PINE RIDGE DISTRICT HEALTH UNIT



Doug Elmslie, Chair, Board of Health

DE/lm

Cc (via email): The Hon. Doug Ford, Premier
Jamie Schmale, MP, Haliburton-Kawartha Lakes-Brock
Philip Lawrence, MP, Northumberland-Peterborough South
The Hon. Laurie Scott, MPP Haliburton-Kawartha Lakes-Brock
David Piccini, MPP Northumberland-Peterborough South
Dr. David Williams, Ontario Chief Medical Officer of Health
Dr. Paul Roumeliotis, Chair, Council of Medical Officers of Health
Ontario Boards of Health
Loretta Ryan, Association of Local Public Health Agencies

Public Health Modernization Discussion Paper
Member Feedback
Questions for Discussion by Theme

The questions that are posed in the Public Health Modernization Discussion Paper are reproduced below, sorted by theme. Please provide answers that you believe should be included in alPHa's written submission, which is intended to reflect the themes and priorities that are common to the local public health sector throughout the province.

Please note that this document is being provided only to capture responses to the Discussion Paper questions, which are preceded by important contextual information in the Discussion Paper itself. We ask that you carefully review the Paper prior to submitting your answers.

Feedback will be synthesized, condensed and edited for clarity and respondents will not be identified. Responding to these questions here is not meant to pre-empt any of our members' own responses to the survey. alPHa strongly encourages its members to submit separate responses to the discussion paper to ensure that unique local circumstances and priorities are captured.

Theme: Insufficient Capacity

What is currently working well in the public health sector?

What are some changes that could be considered to address the variability in capacity in the current public health sector?

What changes to the structure and organization of public health should be considered to address these challenges?

Theme: Misalignment of Health, Social, and Other Services

What has been successful in the current system to foster collaboration among public health, the health sector and social services?

How could a modernized public health system become more connected to the health care system or social services?

What are some examples of effective collaborations among public health, health services and social services?

Theme: Duplication of Effort

What functions of public health units should be local and why?

What population health assessments, data and analytics are helpful to drive local improvements?

What changes should the government consider to strengthen research capacity, knowledge exchange and shared priority setting for public health in the province?

What are public health functions, programs or services that could be strengthened if coordinated or provided at the provincial level? Or by Public Health Ontario?

Beyond what currently exists, are there other technology solutions that can help to improve public health programs and services and strengthen the public health system?

Theme: Inconsistent Priority Setting

What processes and structures are currently in place that promote shared priority setting across public health units?

What should the role of Public Health Ontario be in informing and coordinating provincial priorities?

What models of leadership and governance can promote consistent priority setting?

Theme: Indigenous and First Nation Communities

What has been successful in the current system to foster collaboration among public health and Indigenous communities and organizations?

Are there opportunities to strengthen Indigenous representation and decision- making within the public health sector?

Theme: Francophone Communities

What has been successful in the current system in considering the needs of Francophone populations in planning, delivery and evaluation of public health programs and services?

What improvements could be made to public health service delivery in French to Francophone communities?

Theme: Learning from Past Reports

What improvements to the structure and organization of public health should be considered to address these challenges?

What about the current public health system should be retained as the sector is modernized?

What else should be considered as the public health sector is modernized?

OFFICE OF THE MAYOR
CITY OF HAMILTON

October 30, 2019

VIA: Email

Hon. Christine Elliot
Minister of Health and Long-Term Care
Ministry of Health and Long-Term Care
777 Bay Street, 5th Floor
Toronto, ON M7A 2J3
christine.elliott@pc.ola.org

RE: Opposition to Co-Payment for Dentures under the New Ontario Seniors Dental Care Program

Dear Minister Elliott,

At its meeting on October 18, 2019, the City of Hamilton Board of Health received a report and presentation on the Ontario Senior's Dental Program. As a result, the Board of Health was very happy to have this new program, but concerned about a possible co-payment for dentures.

Many seniors in Hamilton cannot afford dental care and either pay out of pocket or forgo regular dental care. As a result, many seniors increasingly seek dental care in hospital emergency departments. Seniors living in low-income areas are two times more likely to visit hospitals than those living in high income areas.

Oral health is linked to overall health and is an important health matter for many seniors in the community. As people age, their oral health may become worse due to medications, medical conditions as well as mobility limitations that make good oral hygiene difficult to maintain. In addition, seniors may face barriers to accessing dental care due to cost, limited physical and cognitive abilities and transportation.

In Hamilton there are approximately 10,230 seniors who could be eligible for the new Ontario Seniors Dental Care program (OSDCP). Local population health data indicates that 47% of all seniors wear dentures, and without regular dental care it could be surmised that the proportion of low-income seniors would be greater than the overall 47%. Dentures are important functional appliances to replace missing teeth. Dentures allow people to speak and chew properly therefore supporting good nutrition, communication, social interaction and self esteem.

.../2

The purpose of the new OSDCP program is to increase access and reduce barriers to care so low-income seniors could be provided with proper dental care and maintain good oral health, without the cost of dental care being a factor.

Given that the cost of dental care has been identified as one of the main barriers to care, imposing a 10% co-payment would compound this barrier and dentures would remain inaccessible for many low-income seniors. This would adversely affect seniors' overall quality of life and is contrary to the original purpose of the program. Due to the factors listed above, we are opposed to the possibility of a 10% co-payment for the OSDCP.

Sincerely,

Fred Eisenberger
Mayor

CC:
Hon. Donna Skelly, MPP, Flamborough – Glanbrook
Hon. Andrea Horwath, Leader of the Official Opposition, MPP, Hamilton Centre
Hon. Paul Miller, MPP, Hamilton East – Stoney Creek
Hon. Monique Taylor, MPP, Hamilton Mountain
Hon. Sandy Shaw, MPP, Hamilton West – Ancaster, Dundas
Council of Ontario Medical Officers of Health
Association of Local Public Health Agencies (alPHa)
Ontario Boards of Health

OFFICE OF THE MAYOR
CITY OF HAMILTON

October 30, 2019

VIA: Email

Hon. Christine Elliot
Minister of Health and Long-Term Care
Ministry of Health and Long-Term Care
777 Bay Street, 5th Floor
Toronto, Ontario M7A 2J3
christine.elliott@pc.ola.org

RE: Request for Weekly Data Reports on Vaping Cases

Dear Minister Elliott,

At its meeting on October 18, 2019 the City of Hamilton Board of Health discussed the potential health effects associated with the use of electronic cigarettes, in particular, the current outbreak of severe pulmonary disease, and your recent order for hospitals to report such cases to Ontario's Chief Medical Officer of Health.

In order to enable Hamilton's Board of Health to better assess the extent of the ill-effects of vaping on the health of those in Hamilton, I am writing on behalf of the Hamilton Board to request that any such reports to Ontario's Chief Medical Officer of Health by Hamilton hospitals be shared with Hamilton's Medical Officer of Health.

Sincerely,

Fred Eisenberger
Mayor

CC:
Hon. Donna Skelly, MPP, Flamborough – Glanbrook
Hon. Andrea Horwath, Leader of the Official Opposition, MPP, Hamilton Centre
Hon. Paul Miller, MPP, Hamilton East – Stoney Creek
Hon. Monique Taylor, MPP, Hamilton Mountain

.../2

Hon. Sandy Shaw, MPP, Hamilton West – Ancaster, Dundas
Council of Ontario Medical Officers of Health
Association of Local Public Health Agencies (alPHa)
Ontario Boards of Health

OFFICE OF THE MAYOR
CITY OF HAMILTON

October 30, 2019

VIA: Email

Hon. Christine Elliott
Minister of Health and Long-Term Care
Ministry of Health and Long-Term Care
777 Bay Street, 5th Floor
Toronto, ON M7A 2J3
christine.elliott@pc.ola.org

Dr. David Williams
Chief Medical Office of Health
Ministry of Health and Long-Term Care
21st Flr, 393 University Avenue, 21st Floor
Toronto, ON M5G 2M2
dr.david.williams@ontario.ca

RE: Support for a Seamless Provincial Immunization Registry

Dear Minister Elliott and Dr. David Williams,

At its meeting on October 18, 2019, the City of Hamilton Board of Health received a report and presentation on the *Immunization of School Pupils Act* (ISPA). As a result, the Board of Health was happy to support the position of the Council of Ontario Medical Officers of Health in support of a seamless immunization registry and asked that the report (BOH19029) be circulated to those copied on this letter.

Local public health units are responsible for the enforcement of the ISPA, a provincial law that requires children attending school to be vaccinated according to the Ontario immunization schedule. The Hamilton Public Health Vaccine Program engages in a screening and suspension process that ensures parents and guardians are adequately notified of ISPA requirements. The program is responsible for assessing and maintaining vaccine records for over 70,000 students enrolled in Hamilton elementary and secondary schools. For the 2018-2019 school year, at the completion of the screening and suspension process, the compliance rate ranged between 94.3% to 98.5% for 7 to 8 year-old school students and 93.1% to 99.8% for 17 to 18 year-old students.

Although ISPA is an effective tool to ensure individual and community level immunity, the process is resource intensive both from a staff and time perspective. This is a result of most vaccine records requiring manual input into the provincial database by program staff, and follow-up required on records received that are missing information such as date of administration, required demographics or fax error.

.../2

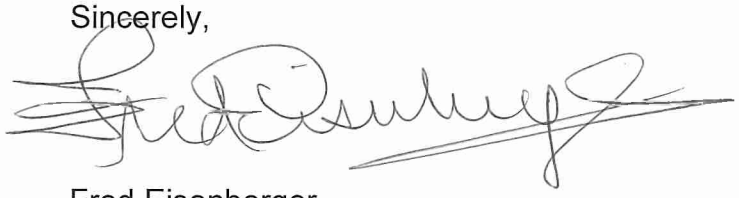
A major challenge to the administration of ISPA is the lack of a provincial immunization registry to seamlessly transfer immunization information from primary and community health care providers, at the time a vaccine is given, to the Digital Health Immunization Repository. As a result, parents/guardians are responsible for reporting their child(ren)'s vaccine records to Public Health. Furthermore, public health units across Ontario do not have a process to verify information received from parents/guardians with their health care provider, as this would be both labour intensive and costly.

Support for a seamless immunization registry would address several of the challenges with the current system, including:

- Eliminating the burden on parents/guardians to report vaccines to Public Health;
- Reducing the risk of inaccurate information being reported by parents;
- Reducing staff time and resources needed to manually input vaccine records; and,
- Reducing the number of suspensions due to the lack of reporting by parents.

Immunizations remain one of the most successful and cost-effective public health interventions as they protect individuals from the harmful effects of vaccine-preventable diseases in additional to providing community level protection. Hamilton Public Health Services is committed to protecting the health of the community by preventing vaccine-preventable diseases. To achieve this goal, Hamilton Public Health Services will continue to collaborate and support parents and local school boards to ensure compliance with the Immunization of School Pupils Act. Moving toward a seamless immunization registry would increase efficiencies in the screening and suspension process while reducing parental burden to report vaccines to public health.

Sincerely,



Fred Eisenberger
Mayor

CC:
Hon. Donna Skelly, MPP, Flamborough – Glanbrook
Hon. Andrea Horwath, Leader of the Official Opposition, MPP, Hamilton Centre
Hon. Paul Miller, MPP, Hamilton East – Stoney Creek
Hon. Monique Taylor, MPP, Hamilton Mountain
Hon. Sandy Shaw, MPP, Hamilton West – Ancaster, Dundas
Council of Ontario Medical Officers of Health
Association of Local Public Health Agencies (alPHa)
Ontario Boards of Health

Summary
Emergency Health Services and Public Health Modernization Webinar
November 18, 2019
10:00 – 11:00 AM

A live webcast was held on November 18, 2019 to launch the first phase of the Emergency Health Services and Public Health Modernization consultation process, featuring remarks from Christine Elliott, Minister of Health and Deputy Premier; Dr. David Williams, Chief Medical Officer of Health; Alison Blair, Executive Lead for Public Health Modernization; and Jim Pine, Special Adviser, Public Health Modernization; followed by a question-and-answer period moderated by Colleen Kiel, Director (Acting), Strategy and Planning Branch, Ministry of Health.

The following is a summary of key messages. Content has been edited and condensed for clarity and to focus on issues of most interest to alPHa's members. A recording of the full webcast is available on the consultation website along with all of the resources referred to therein.

Minister Elliott: Opening Remarks

Minister Elliott characterized this initiative as part of the broader transformation of Ontario's health sector, the goal of which is to ensure that an integrated health system is available to everyone who needs care when they need it. She touched on the progress that has already been made with Ontario Health Teams before introducing the need to ensure that public health and emergency health services are modernized and strengthened in parallel.

She added that municipal partners have clearly communicated the need for a longer and more substantial consultation process, which is what is being launched today. She then introduced the team that will be leading the process to ensure that changes are informed by the expertise and daily experience of those who are on the front lines.

Jim Pine: *Remarks*

Jim Pine introduced the consultation plan, which he characterized as "resetting the discussion" to gather the best ideas that we can and learn from as many stakeholders as possible throughout the province to modernize these two sectors (EHS and Public Health). He clarified that the consultations for each are being carried out at the same time simply because of their respective integration with the municipal sector. Two separate discussion papers will be released later today, which will outline key challenges (i.e. the "why") and propose some ideas to address them (i.e. the "what").

Timing and location of the consultations are to be determined, and the aim will be to conduct them as part of existing meetings in a variety of settings and locations to make it as convenient for stakeholders as possible. Submissions in writing will also be welcome and there is a dedicated e-mail address to receive these. A survey tool will also be made available and regular updates will be posted on the Connected Care platform (subscribe to these here). He then reported that they are planning to provide a preliminary presentation of what the team has heard to date at the Rural Ontario Municipal Association conference in January 2020.

David Williams: Remarks

Dr. Williams indicated that neither the challenges facing public health nor the prospect of significant change are anything new, and this is another chance to examine the strengths of the existing system and the emerging issues that are confronting it to generate ideas for a vision of what we want the sector to look like in the long-term. The Discussion Paper will be a core aspect of these discussions, in that it will focus on improving capacity, strengthening alignments with other stakeholders, eliminating duplication and inefficiencies, fostering more consistent priority setting, and ensuring that responses to public health emergencies is robust throughout the province. The team will also be asking stakeholders to provide ideas on the consultation process itself.

Alison Blair: Remarks

Alison Blair focused mainly on the EHS aspect of this consultation. She reiterated that this is in fact a reset and that there are no predetermined outcomes. Please see the recorded webinar if you are interested in more details about this (her remarks begin approximately 20 minutes in).

Colleen Kiel: Q&A

Is there a plan to merge PH and EHS?
No. The discussion papers are separate and the consultations for each are being carried out at the same time simply because of their respective integration with the municipal sector.

Is there consideration of the role of PHO?
Yes. The concept of the "three-legged stool" (Ministry, PHO, local public health) remains foundational and the modernization is expected to touch on all three as part of an iterative process.

What about First Nations and Indigenous communities?
Specific consideration is being given. Please see the memo linked below.

Where and when will consultations take place?
The goal is to start meetings towards the end of this month. Plenty of notice will be provided to allow for proper preparation and every effort will be made to piggyback on existing meetings (e.g. conferences, board meetings etc.). The process itself will be flexible in this regard and ideas about specific timing, locations and engagement with other stakeholders will be welcome. The deadline for submitting responses to the discussion paper questions via the survey tool will be February 10. Initial set of recommendations will likely not happen until early spring 2020.

Will written submissions be accepted?
Written submissions are encouraged and can be transmitted via the ehsphmodernization@ontario.ca e-mail address.

What are the major public health issues now?
Coordination, updating and integration of technology, need for consistency and improving communications to ensure that each part of the system knows what the others are doing. Monitoring of health status is becoming imperative and we need improve the collection and analysis of data for more

timely and decisive responses, better targeting of resources and staff to ensure equity, addressing needs of high-risk groups, and how we apply our epidemiological knowledge to the health care system.

Are the April 2020 dates for implementation that were announced in the 2019 Ontario Budget still valid?
No. We can't implement what we don't know we're implementing.

RESOURCES:

- Consultation Website English and French (portal to most of what is included below).
- Discussion Paper: Public Health Modernization
- November 18, 2019 Webcast recording
- E-mail address: ehsphmodernization@ontario.ca.
- Survey Tool
- Memo to First Nations / Indigenous Communities
- Sign up here to receive Connected Care updates.

alPHa will be making a submission to the consultation and will be requesting feedback from our members to inform it. Please visit alPHa's Public Health Modernization page to view materials collected to date related to this initiative since the 2019 Budget announcement on April 11.

We hope you find this information useful.

alPHa
Association of Local PUBLIC HEALTH Agencies

2019 FALL SYMPOSIUM
Wednesday, November 6, 2019
6th Floor, Room 610 Auditorium
Dalla Lana School of Public Health
Health Sciences Building, University of Toronto
155 College Street, Toronto, ON M5T 3M7

PROCEEDINGS
alPHa Fall Symposium, Wednesday, November 6th, 2019
Dalla Lana School of Public Health, University of Toronto
Health Sciences Building, 155 College Street, 6th Floor
Toronto, ON M5T 3M7

Speaker Biographies are included following the session summaries.

Update on Public Health Modernization

Speakers: **Dr. David Williams**, Chief Medical Officer of Health; **Alison Blair**, Public Health Modernization Executive Lead and Assistant Deputy Minister, Emergency Health Services; **Jim Pine**, Special Advisor on Public Health and Emergency Health Services. ***Moderator*****: Dr. Robert Kyle,** Commissioner & Medical Officer of Health for the Regional Municipality of Durham.

Dr. Robert Kyle introduced the panelists from the Public Health and Emergency Health Services Modernization team and invited them to make introductory remarks prior to the discussion. Jim Pine spoke of his previous experiences in consultation and assured the assembly that the Government wants to do the right thing and that there are no predetermined outcomes.

Alison Blair indicated that her role is to support Jim and to ensure that the lines of communication remain open while also ensuring that the day-to-day work of public health at the provincial level can continue under the leadership of the CMOH. She also mentioned that the common municipal link between EHS and PH is the only reason that both are being addressed in the same conversation and that there is no intent to amalgamate the two. She reiterated that the purpose of the consultation is entirely to seek our advice on what will make public health better and that the focus of the conversation will be on structures and practices, not content.

Dr. David Williams continued by reflecting on where we are in the process. He reminded delegates that different versions of this have arisen over the years, and the common question has always been about what systemic supports are required to address known shortcomings. He characterized this as a great opportunity, because the Government has demonstrated an understanding of public health's roles and responsibilities and an interest in making the system better in and of itself.

The consultation will be launched via webinar in the coming weeks and feedback will be guided by a discussion paper to be released around the same time. The consultation will be broad, and feedback will be

welcome in a variety of formats (regional visits, remote participation, written feedback). It will also be responsive to new ideas and questions that emerge along the way.

During the ensuing discussion, clarification was given that the approaches and timelines proposed in the original 2019 budget announcement no longer apply (other than the already-confirmed change to the cost-sharing) but also that the status quo is an unlikely end point. The impetus for this initiative is to ensure that issues that have been identified in several assessments of the public health system over the years can be appropriately addressed. These will be outlined in the discussion paper, which is designed to gather the best ideas and experience from the field to inform solutions. Jim Pine reiterated that his primary job is to listen and that the team is receptive to any and all ideas.

Members took the opportunity to provide preliminary advice on both the process and the content of the consultation, as well as to express ongoing concerns about the absence of information provided since the budget announcement, the potential effects of transformation on daily public health work, and the implication that "modernization" assumes that the public health system as a whole is out-of-date.

Alison Blair then outlined her best estimate of the consultation timeline, which will see the consultation launch in the coming weeks and continue into the winter, followed by a synthesis and communication of what they've heard along with some preliminary proposals for further comment. She guessed that presenting something to the government that is acceptable to the field will not occur until early spring.

alPHa Strategic Plan

alPHa President Carmen McGregor announced that alPHa's new strategic plan for 2020-2023 has just been finalized and endorsed. The previous Strategic Plan served the association well, putting members at the centre of activities and built upon five areas of focus: promoting members; representing members; enriching members; supporting members; and connecting members.

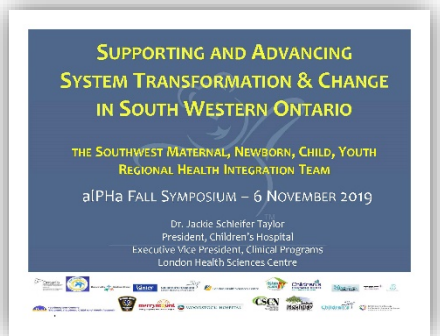
Following a review of the plan that began in 2018, which included member outreach, survey and consultation sessions as

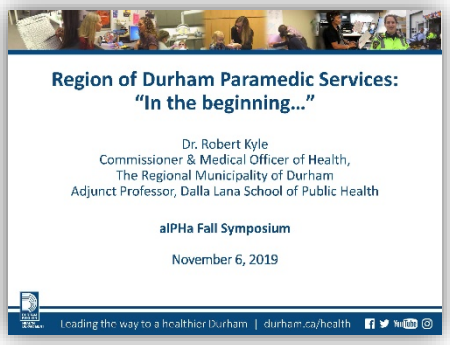
well as frequent discussions by the alPHa Board, it was determined that while key elements of the previous plan would be retained, the new plan would have a more outward focus.

Transformation and Change

Panelists: **Dr. Jackie Schleifer Taylor**, President, Children's Hospital, Executive Vice President, Clinical Programs, London Health Sciences Centre; **Dr. Robert Kyle,** Commissioner & Medical Officer of Health for the Regional Municipality of Durham; **Janice Sheehy,** Commissioner, Human Services Peel Region. ***Moderator***: **Cynthia St. John,** CEO of Southwestern Public Health.

Panel moderator Cynthia St. John introduced the concept of radical change, which reorients systems and people in new directions and encourages new ways of thinking and acting. She introduced the panelists, who are from other sectors that have undergone such transformative change and invited them to share their experiences in navigating challenges, provide insights, outline lessons learned, and offer advice. Each of the presenters has provided detailed slide decks that reflect the content of their talks.





Minister of Health and Deputy Premier Christine Elliott

Minister Christine Elliott provided welcoming remarks to the assembled delegates and confirmed that keeping patients as healthy as possible in their communities and out of hospitals through investments in health protection and promotion is a key pillar in Ontario's comprehensive plan to end hallway health care. She also provided updates on the Public Health Modernization consultations, approaches to reducing youth vaping and the launch of this year's Universal Influenza Immunization Program.

Much of what she said about Public Health Modernization was reflected in the Government's Fall Economic Statement, which was released later that day.

On vaping, she acknowledged that the Minister's Order to gather data about vape-related hospitalizations and the decision to ban point-of-sale promotion of vape products (effective January 1, 2020) were just first steps in an effort to curb vaping among youth in Ontario.

Finally, the Province is about to launch its annual Universal Influenza Immunization campaign, with the recognition that getting vaccinated is important not just for personal health but also that of the community, which is an important contributor to reducing hallway health care.

Public Health and the News – What's Making the Front Page?

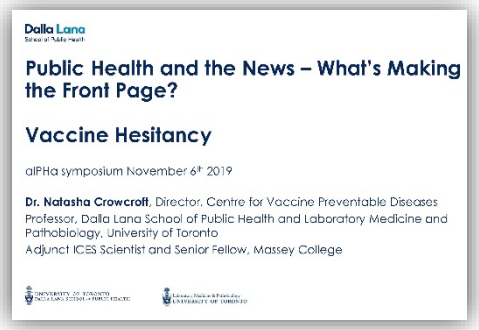
***Panelists**: **Dr. Michael Rieder,** CIHR-GSK Chair in Paediatric Clinical Pharmacology University of Western Ontario Professor; **Professor Robert Schwartz,** Dalla Lana School of Public Health, Executive Director, Ontario Tobacco Research Unit, University of Toronto; **Professor Natasha Crowcroft,** Dalla Lana School of Public Health, ICES and LMP, University of Toronto. **Moderator**: **Dr. Paul Roumeliotis** Medical Officer of Health and Chief Executive Officer, Eastern Ontario Health Unit; Chair, Council of Ontario Medical Officers of Health (COMOH).*

Dr. Paul Roumeliotis introduced the session with a slide deck capturing the themes of the panel discussion and invited panelists to provide their perspectives on these three areas where public health and mediated public perception are often misaligned.

Dr. Michael Rieder gave an outline of the legalization and subsequent issues related to cannabis use.

Professor Robert Schwartz gave a timeline of the slow development and sudden emergence of e-cigarettes as a popular technology whose harm reduction attributes are grossly overstated when measured against alarming youth uptake.

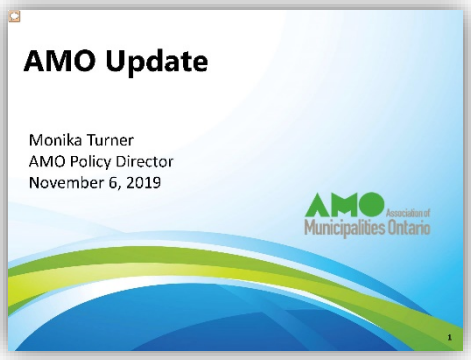
Professor Natasha Crowcroft outlined the issue of vaccine hesitancy, its connection to political and social issues, and the proliferation of misinformation and eroding trust in science.



Update from the Association of Municipalities of Ontario

Speakers: **Monika Turner**, Director, Policy, AMO and **Jamie McGarvey**, President, AMO

Monika Turner's updates are captured in detail in her accompanying slide deck and a full transcript of **Jamie McGarvey's** remarks is available here.



Death, disease and destitution: understanding global catastrophic biological risk. Speaker: Dr. Peter Donnelly, President & CEO, Public Health Ontario. Co-hosted by the Dalla Lana School of Public Health, University of Toronto, and alPHa.

As a special addition to the alPHa Symposium, Dr. Peter Donnelly provided an informative and entertaining evening lecture on catastrophic biological risks, their potentially widespread effects on health, economy and society, and the importance of preparation. The central message was that such catastrophes can and do happen anywhere and at any time, and that investment, vigilance and the capacity to recall and apply lessons learned is essential to any kind of response.

alPHa
Association of Local PUBLIC HEALTH Agencies

SPEAKER BIOGRAPHIES
2019 FALL SYMPOSIUM

The Honourable Christine Elliott
Deputy Premier of Ontario and Minister of Health

As a mother, lawyer, businesswoman, and entrepreneur, Christine Elliott knows how to bring people together. She knows the importance of balancing a family budget and how to manage a successful business.

Christine graduated from the University of Western Ontario with a Bachelor of Laws degree. She then built a successful career in business and law, working first as an auditor at one of Canada's largest banks. Christine later co-founded a law firm with her late husband Jim Flaherty, where she specialized in real

estate, corporate law, and estate law. Christine has worked tirelessly to help businesses all across the province expand and thrive.

Christine also used her business and legal expertise to pursue her commitment to public service. Her pro bono legal work for charitable organizations gained her the recognition as a Rotary International Paul Harris Fellow, the highest award with Rotary. As well, Christine is a co-founder of the Abilities Centre in Whitby, a facility built with the vision of celebrating all people, regardless of ability. The centre has become a hub of its community, hosting various Parapan Am Games events in 2015.

In 2006, Christine was elected MPP. She has won five elections, and for nine years has served the people of Ontario at Queen's Park, including six years as Deputy Leader of the PC Party.
In 2016, Christine became Ontario's Patient Ombudsman, where she fought for better access to health care for all.

She currently serves as the Deputy Premier of Ontario, Minister of Health and is the MPP for Newmarket-Aurora.

Christine has triplet sons, John, Galen and Quinn.

Alison Blair
Assistant Deputy Minister, Emergency Health Services Division, and Executive Lead, Public Health Modernization, Ministry of Health
Alison Blair is the Assistant Deputy Minister of the Emergency Health Services (EHS) Division, and Executive Lead, Public Health Modernization, in the Ministry of Health. The EHS division provides and regulates services to all Ontarians ranging from emergency health services in land and air ambulances, to advocacy and rights advice services to patients in psychiatric facilities across the province.

Alison was previously the Executive Director of the Emergency Health Services Office, Hospitals and Emergency Services Division in the Ministry of Health and Long-Term Care. Prior to this role, Alison served as the acting Assistant Deputy Minister, Direct Services Division of the Ministry of Health and Long-Term Care where she provided leadership and oversight on emergency health services in land and air ambulances, funding programs for assistive devices and medical supplies to Ontario residents with long term physical disabilities, programs under the OHIP program, advocacy and rights advice services to patients in psychiatric facilities across the province.

Alison brings with her a wealth of experience in strategy development, stakeholder management, and implementation, through roles within government and in the health sector. Alison has a Master of Business Administration, McMaster University, specialization in Health Services Management and a Bachelor of Arts and Sciences (Honours), McMaster University.

Professor Natasha Crowcroft
Dalla Lana School of Public Health, ICS and LMP, University of Toronto
Dr. Crowcroft is a public health medical practitioner with more than 25 years' experience in public health at local, national and global levels, and two decades of senior management and leadership experience in infectious disease surveillance, prevention, control and outbreak response. She has published over 250 peer-reviewed scientific papers including in Lancet, BMJ, NEJM, with an h-factor of 47 (Google scholar). She is an Associate Editor for Eurosurveillance and on the International Advisory

Board of Lancet Infectious Diseases. With a strong track record of research funding, she reviews for a variety of national and global funding bodies. Her research aims to maximize the health benefits of immunization.

Dr. Crowcroft's expert role includes as current co-chair of the Canadian Association for Immunization Research, Evaluation and Education (CAIRE), and member of the Canadian Immunization Research Network. Globally, she is an expert for PAHO, SEARO and WHO and also serves on the Independent Review Committee of Gavi.

Dr. Crowcroft trained in medicine and public health at the Universities of Cambridge and London, UK, and in field epidemiology in the European Programme for Intervention Epidemiology Training (EPIET) in Belgium. From 1997-2007 Dr. Crowcroft was a medical consultant in the Immunisation Department at the national centre for England. In 2007 she was recruited to be one of the founding leadership group at Public Health Ontario, Canada, helping to rebuild the public health system post-SARS. She became Director of Surveillance and Epidemiology in 2008, Chief of Infectious Disease in 2012, Chief of Applied Immunization Research and Evaluation in 2015, and Chief Science Officer in 2019. In 2019, Dr. Crowcroft launched the Centre for Vaccine Preventable Diseases at the University of Toronto as its inaugural Director.

Dr. Peter Donnelly
President and CEO, Public Health Ontario

Dr. Donnelly is President and CEO of Public Health Ontario (PHO), which provides evidence for policy formulation and undertakes public health capacity building, as well as provides integrated public health laboratory and surveillance systems. Prior to joining PHO, Dr. Donnelly was the Professor of Public Health

Medicine at the University of St. Andrews in Scotland, where he established and led public health medicine research and teaching. From 2004 to 2008 he was the Deputy Chief Medical Officer to the Scottish Government, providing senior leadership and coordination at a national level. As the Director of Public Health in two jurisdictions, he was responsible for the delivery of local public health services and programs.

Dr. Robert Kyle
Commissioner and Medical Officer of Health, Durham Region

Dr. Kyle has been the Commissioner & Medical Officer of Health for the Regional Municipality of Durham since 1991. He is an active member of many provincial and regional health organizations. For example, he is currently Past President of the Association of Local Public Health Agencies, having assumed the presidency from June 2018 to June 2019. He is also Chair of the Durham Nuclear Health Committee; Past Chair of the Port Hope Community Health Centre; Past Chair of the Public Health Ontario Board of Directors and Past Chair of its Governance Committee. Dr. Kyle is a former Medical Officer of Health for the Peterborough County-City Health Unit and Associate Medical Officer of Health for the Borough of East York Health Unit. He is also an Adjunct Professor, Dalla Lana School of Public Health, University of Toronto.

Jamie McGarvey
President, Association of Municipalities of Ontario

Jamie was acclaimed President of the Association of Municipalities of Ontario (AMO) on August 22, 2018 at the Association's 2018 conference in Ottawa. He has served on municipal councils for more than 30 years, including the last nine as the Mayor of Parry Sound. Jamie has been on the AMO board for nine years. The AMO President serves as the voice of a 43-member Board made of up of elected officials and senior municipal staff from across Ontario. The AMO Board represents a cross-section of Ontario's diverse municipalities, including rural, northern and urban communities from all regions of the province.

Carmen McGregor
President, alPHa

Carmen is a Municipal Councillor with Chatham-Kent. She joined the alPHa Board in June 2015 as the South West region's Boards of Health Representative and became alPHa Vice President in June 2016. She served as alPHa President from June 2017 to June 2018 and Past President from June 2018 to June 2019.

Prior to municipal council, Carmen was a publicly elected School Board Trustee for the Lambton Kent District School Board for 11 years. She served as Chairperson for 3 years and Vice Chair for 2 years. Her responsibilities included many different committees including representing her board provincially as Director to the Ontario Public School Board Association (OPSBA) and Vice President of the Western Region group of Public School Boards.

Along with her political career Carmen is the Office Manager of a law firm and has continued to be an active volunteer within her community. She is the Past President and a current Director of the Wallaceburg and District Chamber of Commerce, a member of the Chatham-Kent Not-for-Profit Network, a member of the Age Friendly Committee, a Toastmaster and she has chaired the Wallaceburg, United Way of Chatham-Kent Campaigns, 1999, 2009 & 2013.

Jim Pine
Special Advisor on Public Health and Emergency Services
Jim is currently the Chief Administrative Officer (A) of the County of Hastings, having been in the municipal affairs business for nearly 39 years. He has worked as a chief administrative officer in small municipalities, as a city administrator and, for the past seventeen years, has been leading the administration of the County of Hastings. Jim started his career with the Ministry of Municipal Affairs and Housing and served in various positions in his 9 years with the Ministry including as Regional Director for Eastern Ontario.

Jim is also co-chairing the ONWARD Initiative which includes major municipal staff organizations in Ontario dedicated to promoting local government as a career and supporting succession planning in municipalities across the province. He has also taken an active role in municipal advocacy through his work with the Association of Municipalities of Ontario, where he served in a number of roles including Secretary-Treasurer and member of the Board of Directors.

Jim is a past president of the Ontario Municipal Administrators' Association. He has participated in many municipal reform projects, including the *Provincial-Municipal Fiscal and Services Delivery Review*. Along

with his two panel partners, he authored a wide-ranging review of Ontario's water and waste water sector entitled: *Watertight: A Case for Change.*

Dr. Michael Rieder
CIHR-GSK Chair in Paediatric Clinical Pharmacology
University of Western Ontario

Dr. Rieder obtained his MD at the University of Saskatchewan in 1980 and his Ph.D. at the University of Toronto in 1992. His paediatric resident training was at the Children's Hospital of Michigan and he completed fellowships in Paediatric Clinical Pharmacology and Paediatric Emergency Medicine at the Hospital for Sick Children in Toronto.

Dr. Rieder is a Professor with the Department of Paediatrics, Physiology and Pharmacology and Medicine at Western University and a Scientist at the Robarts Research Institute. He is the Past President of the Canadian Society of Pharmacology and Therapeutics and is a member of the Drug Therapy Committee of the Canadian Paediatric Society and has served as a consultant to Health Canada, the NIH, the MRC and the Canadian College of Academies. Dr. Rieder's research focuses on drug safety and adverse drug reactions as well as on optimal therapeutics in children. This includes studying genetic variations and their impact on drug efficacy and safety and mechanistic studies of drug hypersensitivity. He is the author of the CPS Statement on Medical Marijuana in Children and has spoken on this topic in many venues.

Dr. Rieder has been the recipient of many awards including the 1994 and 1996 Young Investigator of the Year for the Canadian and American Societies of Clinical Pharmacology, the Senior Investigator Award of the Canadian Society of Clinical Pharmacology and the Academic Leadership Award in Clinical Investigation from the Paediatric Chairs of Canada as well as Sumner Yaffe Lifetime Achievement Award for Pediatric Pharmacotherapy. Other distinguished awards include the Harvard Macy Scholar Award, the Douglas Bocking Award, several Teacher of the Year Awards, Fellowships from the Royal Colleges of Physicians and Surgeons of Glasgow and Edinburgh and a Distinguished University Professor award at Western. He holds the CIHR-GSK Chair in Paediatric Clinical Pharmacology, the only endowed Chair in Paediatric Clinical Pharmacology in Canada.

Dr. Paul Roumeliotis
Medical Officer of Health and CEO, Eastern Ontario Health Unit & COMOH Section Chair

Dr. Roumeliotis is the Medical Officer of Health and Chief Executive Officer of the Eastern Ontario Health Unit since 2017. He received his medical degree in 1983 at McGill University and trained as a pediatrician at the Montreal Children's Hospital. He was Director of Continuing Medical Education in the Department of Pediatrics and founding Director of Multiformat Health Communications at McGill. Dr. Paul created and directed the Montreal Children's Hospital Asthma Centre and Pediatric Consultation Centre in 1990. He also holds a Master of Public Health (MPH) Degree from the Johns Hopkins School of Public Health, where he is now an Associate Faculty member. In May 2013, he completed the Advanced Management Diploma program at the Harvard Business School. In February 2018, he received the Canadian Certified Physician Executive (CCPE) credential designation by the Canadian Society of Physician Leaders.

Trudy Sachowski
Vice Chair, Northwestern Board of Health & Boards of Health Section Chair, alPHa

Trudy is a Provincial Appointee, is the Vice Chair of the Northwestern Board of Health and Chair of the Board's Executive Committee. Trudy is a retired corporate leadership consultant. Trudy's extensive community and volunteer involvement includes serving as: Chair of the Ontario Parent Council, Chair of the Northwestern Healthy Living Partnership, Chair of the Dryden Public Library Board, Vice-Chair of the Northwestern Early Years Steering Committee, Board member of Points North Family Health Team and numerous provincial, regional and local initiatives. She is also currently a member of the alPHa Board of Directors.

Dr. Jackie Schleifer Taylor
President, Children's Hospital
Executive Vice President, Clinical Programs
London Health Sciences Centre

With over 20 years' experience in local to international health sector leadership, Dr. Jackie Schleifer Taylor has been recognized for her demonstrated successes in systems development and strategy implementation. Jackie promotes and advances leadership/administrative best practices in operations management to support innovation in health sector business and practice management. Equally important to her is the call to volunteerism. She has served on a number of committees, boards, and think tanks. Her scope of service includes appointments on Boards of health care service provider agencies, advisory committees of government (regionally, provincially, nationally and internationally), regional agencies, international think tanks, regulatory bodies (provincially, nationally), and appointments at academic institutions. Currently, provincially Dr. Schleifer Taylor holds several appointments, including serving as Chair of the Provincial Council of Maternal and Child Health. Nationally, she serves on the Board of Children's Healthcare Canada. Her academic credentials include Baccalaureate degrees in Science, and Health Sciences from McMaster University, where she graduated from Physical Therapy. Jackie also holds two graduate degrees, a Master of Science and a PhD, from the University of Toronto.

Professor Robert Schwartz
Dalla Lana School of Public Health
Executive Director, Ontario Tobacco Research Unit, University of Toronto

Robert Schwartz is Executive Director of the Ontario Tobacco Research Unit, Professor at the Institute of Health Policy, Management and Evaluation in the Dalla Lana School of Public Health at the University of Toronto and Senior Scientist, Centre for Addiction and Mental Health. Dr. Schwartz is Director of the U of T Collaborative Specialization in Public Health Policy. At OTRU, Dr. Schwartz directs research, evaluation, knowledge exchange and capacity building programs. His research interests include (1) Tobacco Control Policy, (2) e-cigarettes (3) Strategy design and evaluation, (3) Evaluation of Tobacco Control Programs and Policies, (4) Public Health Policy (5) Accountability (6) The Politics and Quality of Evaluation, (7) Performance Measurement and Performance Auditing, He has published widely about tobacco control, accountability, public health policy, policy change, program evaluation and government – third sector relations.

Janice Sheehy
Commissioner, Human Services
The Regional Municipality of Peel

Janice joined the Region of Peel in March 2016 as Commissioner, Human Services. In this role she provides strategic leadership to programs and services in the areas of housing and homelessness, early learning and childcare, as well as social assistance and employment support. Janice shares accountability with the executive leadership team for successfully implementing Peel's strategy to achieve Regional Council's long-term vision.

Over the course of her 30-year career, Janice has had the opportunity to work in various leadership roles within the public sector. Before joining the Region of Peel, she was the General Manager of Finance and Treasurer with the City of Guelph and employed with Halton Region, the City of Hamilton, the Ministry of the Attorney General, and the Ministry of Municipal Affairs and Housing - all in senior management roles.

Throughout her career Janice has held positions that provide connections between her strong financial background and her desire to make an impact on the lives of residents. Janice's focus is on delivering the best possible customer service that will have a positive effect on clients and tenants.

Janice has a Bachelor of Commerce (B.Com.) and has achieved certified designations with the Association of Certified Fraud Examiners (CFE), Institute of Internal Auditors (CIA), and Institute of Chartered Professional Accountants (CPA).

Cynthia St. John
CEO, Southwestern Public Health

Cynthia is the CEO of Southwestern Public Health, formed in 2018 by the merger of the former Oxford County Public Health and Elgin-St. Thomas Public Health. Prior to the merger, Cynthia presided as the Executive Director of Elgin-St. Thomas Public Health for 18 years. Cynthia now leads an organization of approximately 200 employees responsible for providing public health programming to a population of over 200,000 in southwestern Ontario. Cynthia began her career in the charitable sector having had the privilege of working with exceptional organizations such as the YWCA, the Anne Johnston Community Health Centre, and Dying with Dignity Canada. She holds a Masters of Business Administration with a specialization in Leadership and is currently a member of alPHa's Board of Directors.

Monika Turner
Director of Policy, Association of Municipalities of Ontario

Monika is the Director of Policy for the Association of Municipalities of Ontario (AMO). She joined AMO in 2010 after 25 years with the Ontario Government as both a public servant and a political assistant. Monika worked at the Ministry of Health and Long-Term Care twice. From 1998 to 2003, she led a series of physician compensation negotiations on behalf of the province. In 2006, Monika returned to the MOHLTC as the Director of Public Health Standards and oversaw the development of the 2008 Ontario Public Health Standards. She has a Masters of Law degree (ADR) from Osgoode Law School and received her Masters of Public Health from the University of Waterloo in 2011.

Dr. David Williams
Chief Medical Officer of Health, Ontario Ministry of Health

Dr. Williams is currently the Chief Medical Officer of Health for the province of Ontario and was appointed on February 16, 2016. Dr. Williams assumed the Interim Chief Medical Officer of Health position on July 1, 2015 having been in the position of Medical Officer of Health for the Thunder Bay District Board of Health from October 2011 to June 30, 2015. Prior to that, Dr. Williams had been at the Ontario Ministry of Health and Long-Term Care from 2005 to 2011 as the Associate Chief Medical Officer of Health, Infectious Disease and Environmental Health Branch Director. During this time he was also the Acting Chief Medical Officer of Health for Ontario from November 2007 to June of 2009. Before working at the province Dr. Williams was the Medical Officer of Health and CEO for the Thunder Bay District Health Unit from 1991 to 2005.

P.O. Box 5035
300 Dufferin Avenue
London, ON
N6A 4L9

November 27, 2019

Chair and Members
Middlesex-London Health Unit Board of Directors

I hereby certify that the Municipal Council, at its meeting held on November 26, 2019 resolved:

That Councillor A. Kayabaga BE APPOINTED to the Middlesex-London Health Unit Board of Directors for the term ending November 15, 2022. (4.2/22/SPPC) (2019-C12)

C. Saunders
City Clerk
/hw

cc: Councillor A. Kayabaga

The Corporation of the City of London
Office 519.661.2489 ext. 4599
Fax 519.661.4892
hwoolsey@london.ca
www.london.ca

Peterborough Public Health
1889-2019 LOCAL & STRONG

Jackson Square, **185 King Street**, Peterborough, ON K9J 2R8
P: **705-743-1000** or 1-877-743-0101
F: 705-743-2897
peterboroughpublichealth.ca

November 29, 2019

The Honourable Patty Hajdu
Minister of Health
House of Commons
Ottawa, ON K1A 0A6
Sent via e-mail: Patty.Hajdu@parl.gc.ca

Dear Minister Hajdu,

Congratulations on your appointment as Federal Minister of Health. We look forward to working with you to advance the health and well-being of all Canadians.

Peterborough Public Health (PPH) has been long involved in raising concerns regarding the impact of vaping on non-smokers and in particular, youth. Continuing with this advocacy in order to protect youth in our community is critical. At the October 9, 2019 meeting of the Board of Health, communications from both the Simcoe Muskoka District Health Unit and Kingston Frontenac Lennox & Addington Boards of Health (attached) were reviewed regarding vaping in Ontario.

PPH has provided feedback to a number of Health Canada consultations related to vaping and youth including advertising of vaping products (March 2019), regulatory measures to reduce youth access and appeal of vaping products (June 2019) and labelling and packaging of vaping products (August 2019). PPH responses to these consultations have noted that while vaping may be less harmful than smoking tobacco, it is not harm free. This has been demonstrated most recently by the hospitalization of a young person in the Middlesex-London Health Unit area, following hundreds of hospitalizations and deaths in the United States as a result of vaping-related pulmonary illness.[1]

On September 19, 2019, representatives from eight health organizations (Action on Smoking and Health, Canadian Cancer Society, Canadian Medical Association, Canadian Lung Association, Coalition québécoise pour le contrôle du tabac, Heart & Stroke, Ontario Campaign for Action on Tobacco and Physicians for a Smoke-Free Canada) made an appeal for immediate federal action to curb the marketing of vaping products.[2] These groups urged all federal political parties to commit to an urgent interim order that would put vaping products under the same kind of restrictions that are currently in place for tobacco products. Acceptance of this interim order would result in having protective restraints in place this calendar year using the powers of the Department of Health Act within sixty (60) days of a forming government.

We ask that action using the interim order is taken immediately to curb the marketing of vaping products in order to protect youth and reverse the current trend in both youth vaping and tobacco rates. Vaping products must be under the same kind of restrictions that are currently in place for tobacco products. Acceptance of an interim order using the powers of the Department of Health Act would result in having protective restraints in place this calendar year. Placing stronger restrictions on vape promotion is one of the most obvious solutions to protect the health of Canadians.

Sincerely,

Original signed by

Councillor Kathryn Wilson
Chair, Board of Health

/ag
Encl.

cc: Hon. Christine Elliott, Ontario Minister of Health
Dr. Theresa Tam, Chief Public Health Officer of Canada
Dr. David Williams, Chief Medical Officer of Health, Ontario
Local MPs and MPPs
Ontario Boards of Health
Association of Local Public Health Agencies

---

[1] CBC London (September 2019) Ontario teen was on life-support after respiratory illness linked to vaping. Retrieved from: https://www.cbc.ca/news/canada/london/middlesex-london-heatlh-unit-vaping-respiratory-illness-1.5288065

[2] CTV News (September 2019) Canadian health groups concerned about teen vaping call for urgent government action. Retrieved from: https://www.ctvnews.ca/health/canadian-health-groups-concerned-about-teen-vaping-call-for-urgent-government-action-1.4601027

Leeds, Grenville & Lanark District
HEALTH UNIT
Your Partner in Public Health

December 2, 2019

VIA EMAIL

The Honourable Christine Elliott
Minister of Health
10th Floor, Hepburn Block
80 Grosvenor Street
Toronto, ON M7A 2C4

Dear Minister Elliott:

Subject: Vapour Product Use Among Youth

On behalf of the Board of Health of the Leeds, Grenville and Lanark District Health Unit, I congratulate you on taking an important first step to address the serious problem of vapour product use (with e-cigarettes) among youth in our communities by restricting the advertising of vaping products to adult access stores.

Since 2017 there has been a dramatic increase in the number of youth who are now using vapour products, including youth who are non-smokers. New high tech vapour products, the addition of flavours that appeal to youth, easy access, its marketing as being safe, as well as high levels of nicotine leading to addiction are all contributing to this increase. Nicotine affects the growth and development of the youth brain, and the other inhaled, unregulated vaping compounds likely have a serious impact on the respiratory system.

Our Board of Health urges you to continue your work to protect the youth by supporting Bill 151, the *Smoke-Free Ontario Amendment Act (Vaping is not for Kids), 2019.* The Bill includes the following measures concerning vapour products:

- Banning promotion
- Banning flavours unless exempted by regulation
- Setting a maximum nicotine level in pods and liquids of 20 mg/ml
- Banning sales except in adult-only specialty vape stores
- Requiring specialty vape stores to be approved by the local Board of Health
- Authorizing the Health Minister to direct that tax revenue from e-cigarette sales in specialty vape shops be directed to public education, provided that the Legislature appropriates funds for this purpose
- Requiring Ontario Health to prepare an annual report to the Health Minister on youth vaping with information and recommendations

Sincerely,

Doug Malanka
Board Chair

cc: Ontario Boards of Health
Randy Hillier, MPP, Lanark-Frontenac-Kingston
Steve Clark, MPP, Leeds-Grenville-Thousand Islands & Rideau Lakes

2020 Revised Board of Health, Governance Committee and Finance & Facilities Committee meeting dates

2020 Board of Health and Governance Committee Meeting Dates	
Thursday, January 23	Inaugural meeting
Thursday, February 27	Also Governance Committee
Thursday, March 19	
Thursday, April 16	
Thursday, May 21	
Thursday, June 18	Also Governance Committee
Thursday, July 16	
Thursday, August 20	***usually cancelled**
Thursday, September 17	
Thursday, October 15	Also Governance Committee
Thursday, November 19	
Thursday, December 10	

2020 Finance & Facilities Committee Meeting Dates
Thursday, February 6 *half-day budget meeting, 9:00 a.m. - 12 noon
Thursday, February 13 *half-day budget meeting, 9:00 a.m. - 12 noon
Thursday, March 5
Thursday, April 2
Thursday, May 7
Thursday, June 4
Thursday, July 2
Thursday, August 6 ***usually cancelled**
Thursday, September 3
Thursday, October 1
Thursday, November 5
Thursday, December 3