

CARDIOVASCULAR DISEASE RISK FACTOR TRENDS IN MIDDLESEX-LONDON (2001-2007): A COMMUNITY HEALTH STATUS REPORT



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For information, please contact

Evelyn Crosse
Health Unit Epidemiologist
Research, Education, Evaluation and Development (REED) Services
Middlesex-London Health Unit
50 King Street, London, Ontario, N6A 5L7
Phone: 519-663-5317 ext. 2481
Fax: 519-432-9430
Email: evelyn.crosse@mlhu.on.ca

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

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Authors:

Evelyn Crosse, Health Unit Epidemiologist, Research, Education, Evaluation and Development (REED) Services, Middlesex-London Health Unit

Jessica Sontrop, Epidemiologist Consultant, Research, Education, Evaluation and Development (REED) Services, Middlesex-London Health Unit

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Introduction

Purpose of Report

In 1998, the Good Hearted Living Program of the Middlesex-London Heart Health Program was established. It is now known as Healthy Living Partnership Middlesex-London and is dedicated to providing resources to help residents of Middlesex-London achieve a healthier lifestyle. More specifically, it encourages our community to improve their cardiovascular health by:

- getting active,
- eating healthy, and
- being smoke-free.

How much progress are we making? Are there areas which require more public health action than others? These are questions that can be answered by monitoring and evaluating related health risk factors and outcomes. This practice is referred to as public health surveillance and involves the ongoing systematic collection, analysis, interpretation, and dissemination of health data.

This report provides an analysis of current local data on cardiovascular risk factor behaviours and knowledge resulting from public health surveillance. This information is integral to planning health programs within the mandate of Healthy Living Partnership Middlesex-London. It is also a follow-up to the Middlesex-London Health Unit (MLHU) report published in 2003 entitled *Cardiovascular Disease Risk Factors: A Community Health Status Report for Middlesex-London*, which presented data from 2001 and 2002.

The current report presents data collected mostly from 2001 to 2007 for Middlesex County including the City of London. It enables us to assess how much progress we have made over time and compared to established targets, in adopting healthy risk factor behaviours, such as getting active, eating healthy, and being smoke-free, and thereby lowering our risk of cardiovascular disease.

Report Structure and Data Analysis

The report is organized according to the following seven areas of focus:

- Cardiovascular Risk Factors Awareness
- Adult Smoking
- Youth Smoking and Access To Tobacco By Minors
- Smoke-Free Places
- Physical Activity
- Healthy Eating
- Healthy Weights.

Each chapter includes a summary of the main findings followed by a review of chapter-related indicators, each analyzed by age group, sex and education level, where possible. Household income level was not included in the analysis due to the significant proportion of survey respondents who did not report this information. The end of each chapter provides specific information related to the data presented and its analysis. Definitions such as the exact wording of a survey question from which an indicator was developed are also provided here.

The main data source used in the analysis of statistics presented in this report is the MLHU component of the Rapid Risk Factor Surveillance System (RRFSS). Other data presented were from the Youth Smoking Survey component of the Canadian Tobacco Use Monitoring Survey (CTUMS) and the Canadian Community Health Survey (CCHS). Data sources are described in Appendix A. The representativeness of the RRFSS sample was assessed by comparing Census data for Middlesex-London from 2001 and 2006 with RRFSS samples (see Appendix B). Detailed data tables including counts, percentages, 95% confidence intervals and sample sizes are provided for each indicator in Appendices C1 to C7. More information on analysis is provided in Appendix B.

The objectives evaluated in the report are presented below and include those established in 1998 by Healthy Living Partnership Middlesex-London and those stipulated by the Ontario Ministry of Health in the Ontario Mandatory Health Programs and Services Guidelines, 1997.

Local Heart Health Behavioural Objectives

By March 2003:

- Fewer than 31% of males over 15 will be smokers.
- Fewer than 23% percent of females over 15 will be smokers.
- Fewer than 16% of youth (12-19) will be smokers.
- Fewer than 30% of adult males will be overweight.
- Fewer than 23% of adult females will be overweight.
- At least 53% of males over 15 will exercise regularly.
- At least 48% of females over 15 will exercise regularly.
- At least 59% of youth will participate in daily physical activity.

Local Heart Health Knowledge-based Objectives

By March 2003 there will be an:

- Increased awareness of Eat Smart! Restaurant Program.
- Increased awareness and knowledge of risk factors for heart disease among residents.
- Increased number of residents aware of area walking trails and bicycle paths.

Ontario Mandatory Health Programs and Services Guidelines Objectives

- Reduce the proportion of 12-19 year olds who smoke daily to 10% by the year 2005.
- Reduce the proportion of adults who smoke daily to 15% by the year 2005.
- Increase the proportion of smoke-free homes by the year 2010.
- Increase to 75%, the proportion of the population age four and older consuming 5+ servings of vegetables and fruit daily by the year 2010.
- Slow the decrease in the proportion of adults ages 20-64 with healthy weight status by the year 2010.

Chapter 1: Awareness of Risk Factors for Heart Disease

Key Findings

- More than three-quarters of respondents were able to identify at least one of smoking, unhealthy eating, or lack of exercise as a risk factor for heart disease.
- Unhealthy eating was the most commonly identified risk factor, chosen by over 60% of respondents between 2001 and 2006.
- The proportion of residents who identified smoking as a risk factor for heart disease declined by 26% between 2001 and 2006 (50% to 37%, respectively).
- The 18-24 year age group had the highest level of awareness that smoking is a risk factor for heart disease at 50% in 2006. It is also the only age group whose awareness of smoking did not decline from 2001 to 2006. Likewise, this age group experienced the most dramatic decline in smoking rates (see Chapter 2).
- Just over one-third of males and females were able to identify lack of exercise as a risk factor for heart disease.
- Seniors ages 65+ was the only age group in which awareness of lack of exercise as a risk factor increased (19.3% in 2001 to 34.4% in 2006).

Progress on Meeting Public Health Objectives

Objective: Increased awareness and knowledge of risk factors for heart disease among residents.

Work needed

- The proportion of residents able to identify at least 1 of 3 risk factors for heart disease (unhealthy eating, lack of exercise or smoking) has not changed appreciably, with 77.2% ($\pm 2.0\%$) in 2001 and 78.0% ($\pm 2.9\%$) in 2006.
- Levels of awareness of individual risk factors (smoking, lack of exercise, unhealthy eating) did not improve from 2001 to 2006. The only exception was for the 65+ age group whose awareness level of lack of exercise increased over time.

Background

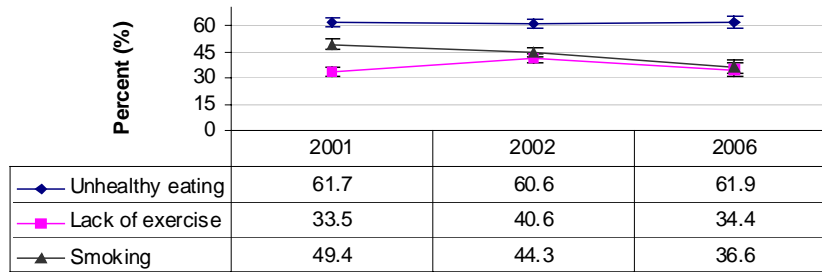
The objectives of the Healthy Living Partnership Middlesex-London included raising awareness of modifiable risk factors for heart disease in the population. Three important modifiable risk factors for heart disease are smoking, physical inactivity, and unhealthy eating¹. Population level knowledge of these risk factors was determined among adult residents of Middlesex-London between 2001 and 2006.

Results

Overall Awareness

The percentage of respondents able to identify at least one of smoking, unhealthy eating, or lack of exercise as a risk factor for heart disease did not change significantly between 2001 and 2006. The percentage identifying at least one of these risk factors was 77.2% ($\pm 2.4\%$) in 2001 and 78.0% ($\pm 2.9\%$) in 2006. The percentage who identified smoking declined significantly from 49.4% ($\pm 3.0\%$) in 2001 to 36.6% ($\pm 3.5\%$) in 2006 (Figure 1.1). Unhealthy eating was the most commonly identified risk factor, chosen by over 60% of respondents in each year of data collection.

Figure 1.1: Knowledge of Risk Factors for Heart Disease
Adults 18+, Middlesex-London, 2001, 2002, 2006



Original Data Source: MLHU RRFSS 2001, 2002, 2006

Smoking

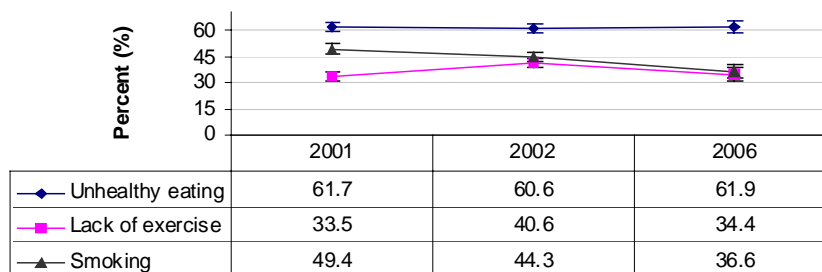
Identification of smoking as a risk factor for heart disease declined significantly among both males and females between 2001 and 2006 (Figure 1.2). Among males, the percentage decreased from 53.0% ($\pm 4.3\%$) to 36.7% ($\pm 5.5\%$). Among females, the percentage decreased from 46.2% ($\pm 4.1\%$) to 36.5% ($\pm 4.6\%$). Between 2001 and 2006, the percentage that identified smoking as a risk factor declined significantly among those aged 25 to 64 (Figure 1.3).

Respondents who were 65+ were significantly more likely to identify smoking as a risk factor compared to those aged 18 to 24 in both 2001 and 2006.

The percentage identifying smoking as a risk factor declined in different age groups among males and females between 2001 and 2006. A significant decline occurred among males aged 35+ and among females aged 18 to 35 (Table 1.1).

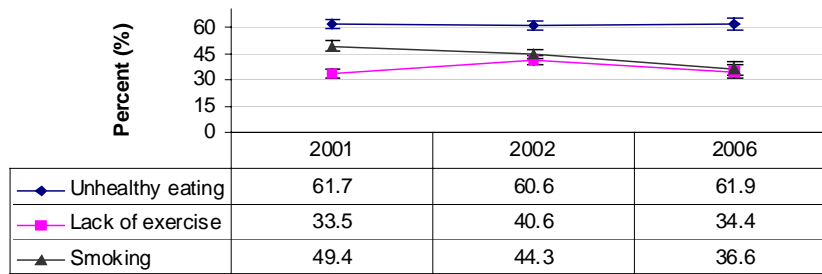
Between 2001 and 2006, the percentage of respondents identifying smoking as a risk factor for heart disease declined slightly across all levels of education, although no differences were statistically significant. Those with higher levels of education tended to identify smoking as a risk factor more frequently.

Figure 1.2: Percentage Identifying Smoking as a Risk Factor for Heart Disease by Sex
Adults 18+, Middlesex-London, 2001, 2002, 2006



Original Data Source: MLHU RRFSS 2001, 2002, 2006

Figure 1.3: Percent Identifying Smoking as a Risk Factor for Heart Disease across Age Groups
Adults 18+, Middlesex-London, 2001, 2002, 2006



Original Data Source: MLHU RRFSS 2001, 2002, 2006

Table 1.1. Percent Identifying Smoking as a Risk Factor for Heart Disease
Adults 18+, Middlesex-London 2001, 2006

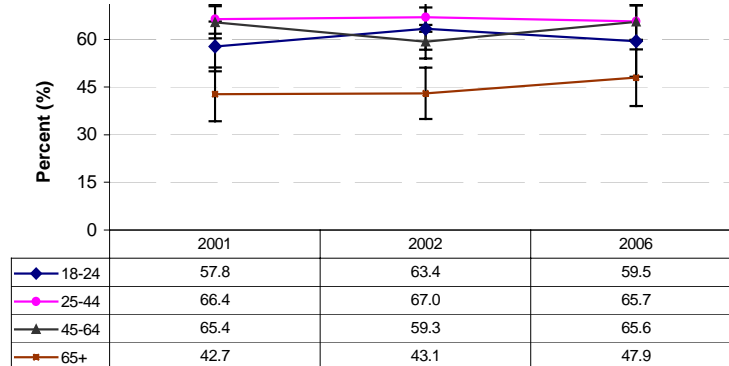
Sex	Age Group	2001	2006
		% \pm 95% CI	% \pm 95% CI
Male	18-34	50.0 \pm 7.6%	42.9 \pm 11.6%
	35+	54.4 \pm 5.3%	35.2 \pm 6.2%
Female	18-34	48.5 \pm 7.7%	31.2 \pm 8.7%
	35+	45.2 \pm 5.0%	38.4 \pm 5.5%

Original Data Source: MLHU RRFSS 2001, 2006

Unhealthy Eating

The percentage of respondents identifying unhealthy eating as a risk factor did not differ between males or females. In 2001 and 2002, respondents aged 65+ were less likely to identify unhealthy eating as a risk factor compared to those aged 25 to 44 and 45 to 64; however, these differences were not statistically significant in 2006 (Figure 1.4). In 2001, young males (aged 18 to 34) appeared more likely to identify unhealthy eating as a risk factor than their older counterparts and women, although no differences were statistically significant (Table 1.2). The percentage of respondents identifying unhealthy eating appeared to increase the most among young women (aged 18 to 34), from 60.9% (\pm 7.5%) in 2001 to 69.4% (\pm 8.7%) in 2006 (Table 1.2). In 2001, the percentage of respondents identifying unhealthy eating as a risk factor increased significantly with level of completed education; however, these differences disappeared by 2006.

Figure 1.4: Heart Disease Risk Factor Identification: Unhealthy Eating Across Age Groups
Adults 18+, Middlesex-London, 2001, 2002, 2006



Original Data Source: MLHU RRFSS 2001, 2002, 2006

Table 1.2. Percent Identifying Unhealthy Eating as a Risk Factor for Heart Disease
Adults 18+, Middlesex-London, 2001, 2006

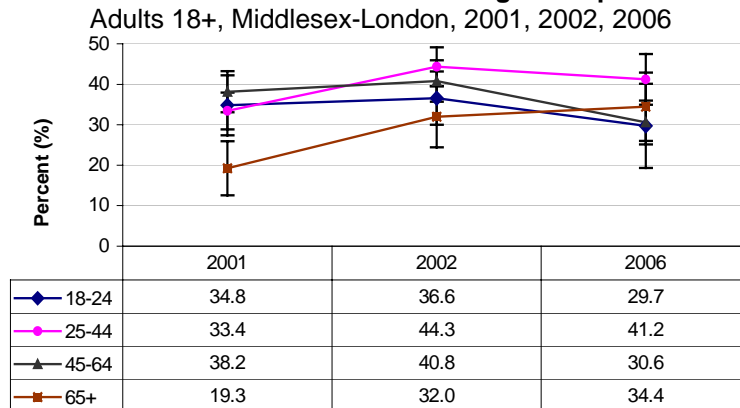
Sex	Age Group	2001	2006
		% \pm 95% CI	% \pm 95% CI
Male	18-34	67.7 \pm 7.2%	67.6 \pm 11.1%
	35+	60.2 \pm 5.3%	59.5 \pm 6.5%
Female	18-34	60.9 \pm 7.5%	69.4 \pm 8.7%
	35+	60.6 \pm 5.0%	59.8 \pm 5.5%

Original Data Source: MLHU RRFSS 2001, 2006

Lack of Exercise

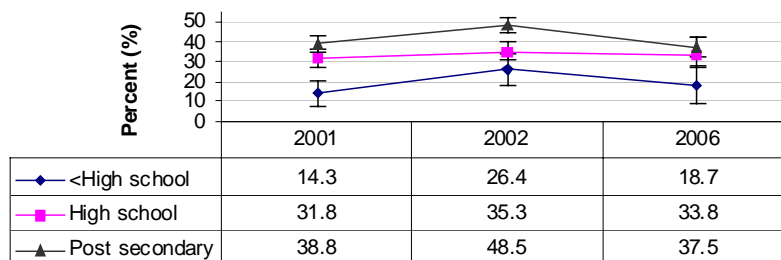
Males and females were equally likely to identify lack of exercise as a risk factor for cardiovascular disease. In 2006, lack of exercise was identified as a risk factor by 35.0% (\pm 5.4%) of males and 33.9% (\pm 4.5%) of females. In 2001, the percentage who identified lack of exercise was significantly lower among those aged 65+ (19.3% \pm 6.7%) compared to the other age groups; however, this difference disappeared by 2006 (Figure 1.5). Respondents with a post-secondary education were significantly more likely to identify lack of exercise as a risk factor compared to those with less than high school at all time-points (Figure 1.6).

Figure 1.5: Percent Identifying Lack of Exercise as a Risk Factor For Heart Disease across Age Group



Original Data Source: MLHU RRFSS 2001, 2002, 2006

Figure 1.6: Percent Identifying Lack of Exercise as a Risk Factor For Heart Disease by Highest Level of Completed Education
Adults 18+, Middlesex-London, 2001, 2002, 2006



Original Data Source: MLHU RRFSS 2001, 2002, 2006

Data and Methods

Data related to heart disease risk factor awareness is from RRFSS 2001 to 2002 (waves 1-24) and May to December 2006 (waves 65-72). For each year of data collection, the unweighted sample size of respondents from Middlesex-London is shown in Table 1.3. Non-responses to individual questions were included in the calculation of the proportion of respondents who did not select the given risk factor. The sample was weighted to account for each individual's probability of being selected within households of different sizes. Bar charts and line graphs include error bars showing 95% confidence intervals. Detailed tables for Chapter 1 are located in Appendix C.1.

Table 1.3. Unweighted Sample Size for RRFSS Data on Heart Disease Risk Factor Awareness
Adults 18+, Middlesex-London, 2001-2002; 2006

Year	2001	2002	2006
Sample size	1078	1139	739

Original Data Source: MLHU RRFSS 2001, 2002, 2006

Definitions

Awareness of risk factors for heart disease:

Question: "In your opinion, what are the main causes of heart disease?"

- Options were not read to respondents
- More than one response was allowed
- Smoking as a risk factor for heart disease included smoking or tobacco.
- Unhealthy eating as a risk factor for heart disease included poor diet (not eating properly, overeating, and poor choice of food) as well as eating too many fatty foods and foods high in cholesterol.

Highest level of Completed Education

Question: "What is the highest level of education you have obtained?"

- Less than high school: included those respondents who had not obtained a high school diploma.
- High school: included those respondents who had obtained a high school diploma or had completed some post-secondary education.
- Post secondary: included those respondents who had obtained a college diploma or university degree.

Chapter 2: Adult Smoking Status

Key Findings

- The proportion of current smokers declined by 20% from 25% in 2001 to 20% in 2007.
- The greatest decline was observed in the age group 18 to 24 years. This same age group also had the highest awareness of smoking as a heart disease risk factor which did not decline over time, unlike the other age groups (see Chapter 1).
- A greater proportion of males were current smokers than females in 2001; however, a greater decline in smoking was observed in males compared to females from 2001 to 2007.
- The proportion of current smokers decreased with increasing level of education, and this trend remained relatively constant between 2001 and 2007.
- Nearly three-quarters of current smokers indicated they would like to quit smoking in the future. There were no significant changes between 2001 and 2007.

Progress on Meeting Public Health Objectives

Objective: Fewer than 31% of males over 15 years will be smokers by March 2003.

✓ Assessment: **Achieved***

The proportion of male smokers (age 18+) decreased to 20.6% ($\pm 3.5\%$) in 2007 from 27.4% ($\pm 3.5\%$) in 2001.

Objective: Fewer than 23% of females over 15 years will be smokers by March 2003.

✓ Assessment: **Achieved***

The proportion of female smokers (age 18+) decreased to 19.1% ($\pm 3.0\%$) in 2007 from 21.7% ($\pm 3.2\%$) in 2001.

Objective: Reduce the proportion of adults who smoke *daily* to 15% in the year 2005.

→ Assessment: **Progress**

The proportion of daily smokers (adults 18+) decreased to 16.1% ($\pm 2.1\%$) in 2007 from 19.9% ($\pm 1.7\%$) in 2001.

*Note: RRFSS data does not include participants younger than 18 years; thus, a direct evaluation of local objectives cannot be made.

Background

Cigarette smoking is a major cause of cardiovascular disease² and the number one preventable cause of death and disease in Canada³. In 1996, smoking was responsible for 45,200 deaths in Canada, of which 17,703 (39%) were from cardiovascular disease³. Between 1991 and 1996, the number of smoking-attributable deaths in Canada increased by 8%³. A 1% decline in the prevalence of smoking would save Canada more than 50 million dollars in health care costs⁴.

In Ontario, smoking is estimated to cause 12,000 deaths each year⁵. The province of Ontario set objectives to reduce the proportion of adults who smoke daily to 15% by the year 2005⁶. One of the objectives of the Healthy Living Partnership Middlesex-London was to reduce the number of smokers among male and female adults to 31% and 23%, respectively.

Smoking cessation is difficult to achieve. In 2004, 17% of Canadian smokers contemplated quitting, and 9% prepared themselves to quit; however, only 2% took action to quit⁵.

Results

Smoking status among adult residents of Middlesex-London between 2001 and 2007 is shown in Figure 2.1. The proportion of residents who reported never smoking increased slightly from 47.0% ($\pm 2.8\%$) to 50.0% ($\pm 2.8\%$) between 2001 and 2007. During this time, the proportion of respondents defined as former smokers also increased slightly from 28.5% ($\pm 2.5\%$) to 30.2% ($\pm 2.6\%$).

The proportion of Middlesex-London residents that smoked daily or occasionally between 2001 and 2007 is shown in Figure 2.2. The proportion of current smokers, defined as daily or occasional smokers decreased from 24.5% ($\pm 2.4\%$) in 2001 to 19.8% ($\pm 2.3\%$) in 2007.

Sociodemographics

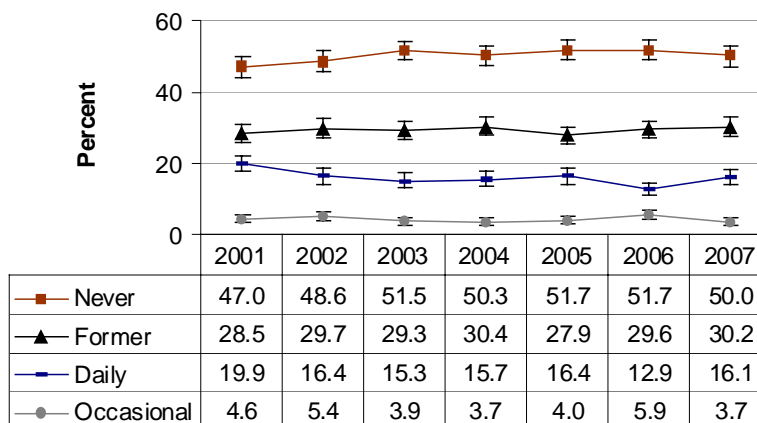
In 2001, significantly more males were current smokers than females; however, a greater decline in smoking was observed among males compared to females (Figure 2.3). The proportion of current smokers among males decreased from 27.4% ($\pm 3.6\%$) in 2001 to 20.6% ($\pm 3.5\%$) in 2007; this difference, however, was not statistically significant. In contrast, the proportion of current smokers among females only decreased from 21.7% ($\pm 3.2\%$) in 2001 to 19.1% ($\pm 3.0\%$) in 2007.

While the proportion of current smokers was highest among those aged 18 to 24 in 2001 (32.0% $\pm 6.4\%$), in 2007 the highest proportion of current smokers was observed among those aged 25 to 34 (27.9% $\pm 6.4\%$) (Table 2.1). Respondents aged 65+ were the least likely to be current smokers: 10.4% ($\pm 9.7\%$) in 2001 and 9.7% ($\pm 4.1\%$) in 2007.

From 2001 to 2007, the proportion of current smokers among those aged 18 to 24 decreased significantly from 32.0% ($\pm 6.4\%$) to 17.0% ($\pm 7.6\%$) (Figure 2.4). In the other age categories, current smoking status appeared to decrease only slightly.

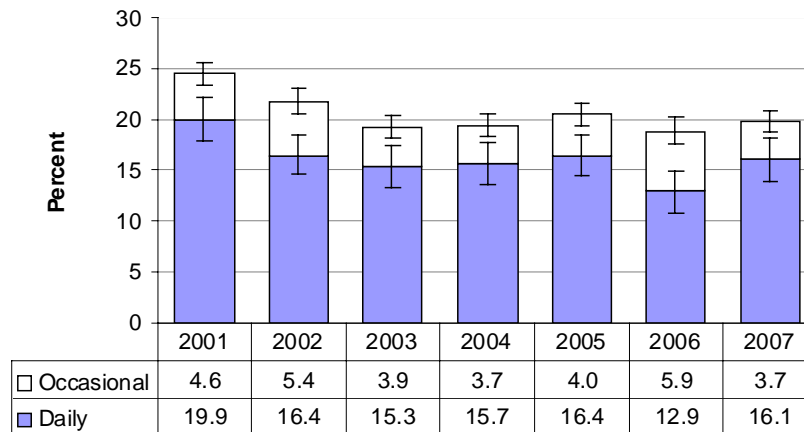
The proportion of current smokers was significantly lower among those with higher levels of education. An inverse relationship was consistently observed across the years 2001 to 2007 (Figure 2.5). In 2007, the proportion of current smokers among post-secondary graduates was 14.6% ($\pm 2.8\%$) compared to 27.8% ($\pm 8.2\%$) among those with less than a high school education.

Figure 2.1: Smoking Status
Adults 18+, Middlesex-London, 2001-2007



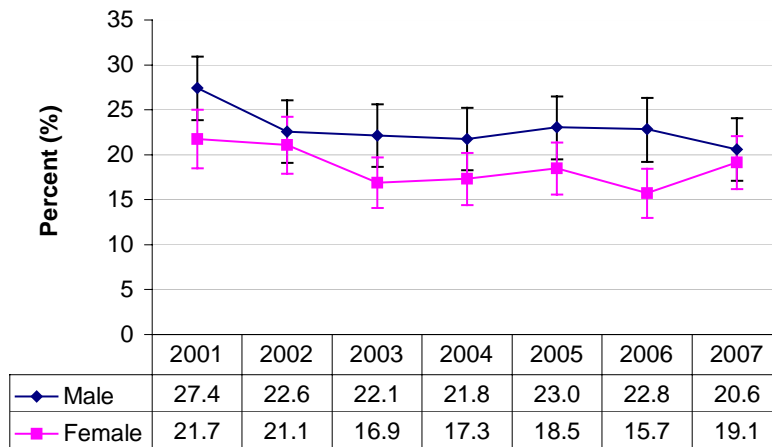
Original Data Source: MLHU RRFSS 2001-2007

Figure 2.2: Current Smoking Status
Adults 18+, Middlesex-London, 2001-2007



Original Data Source: MLHU RRFSS 2001-2007

Figure 2.3: Current Smoking Status Among Males & Females
Adults 18+, Middlesex-London, 2001-2007



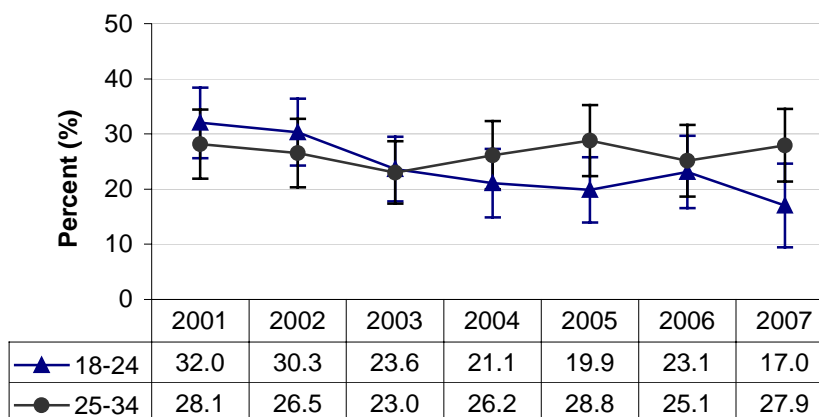
Original Data Source: MLHU RRFSS 2001-2007

Table 2.1. Percent who are Current Smokers across Age Groups
Adults 18+, Middlesex-London, 2001 and 2007

Age Group	Percent Current Smokers (\pm 95% CI)	
	2001	2007
18-24	32.0 \pm 6.4%	17.0 \pm 7.6%
25-34	28.1 \pm 6.2%	27.9 \pm 6.6%
35-64	25.0 \pm 3.4%	20.9 \pm 3.0%
65+	10.4 \pm 4.8%	9.7 \pm 4.1%

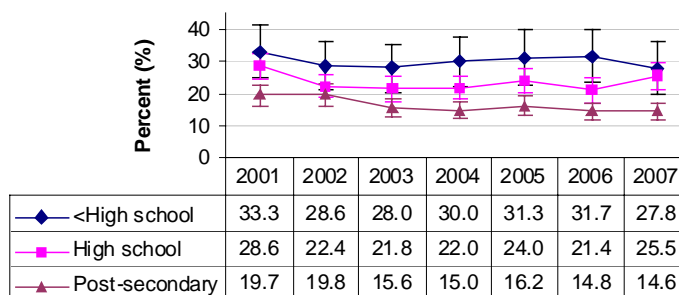
Original Data Source: MLHU RRFSS 2001, 2007

Figure 2.4: Current Smoking Status Among Adults Aged 18-34 Years
Middlesex-London, 2001-2007



Original Data Source: MLHU RRFSS 2001-2007

Figure 2.5: Current Smoking Status by Highest Level of Education
Adults 18+, Middlesex-London, 2001-2007

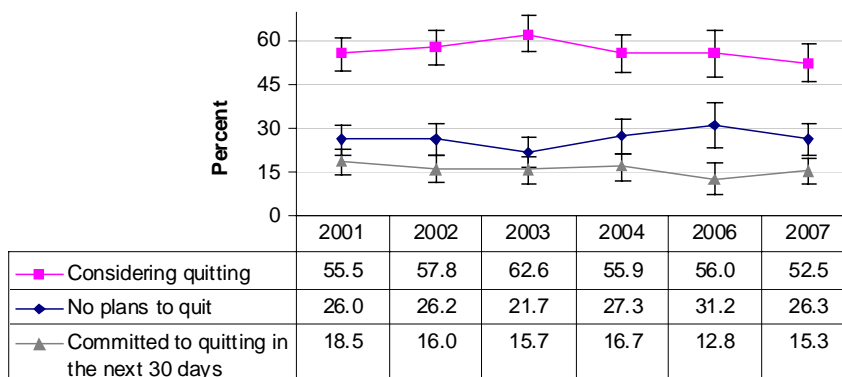


Original Data Source: MLHU RRFSS 2001-7

Plans for Smoking Cessation

Nearly three-quarters of current smokers indicated they would like to quit smoking in the future. This number did not change significantly between 2001 and 2007 (Figure 2.6). In 2007, 15.3% ($\pm 4.6\%$) of current smokers indicated they were committed to quitting in the next 30 days; an additional 52.5% ($\pm 6.4\%$) reported they were considering quitting at some point in the future. There was a non-significant trend towards younger age-groups expressing greater desire for quitting smoking; however, rates were unstable due to small sizes and are not reported here. Plans for smoking cessation did not differ significantly by sex or level of education.

Figure 2.6: Plans for Smoking Cessation
Adults 18+, Middlesex-London, 2001-2007



Original Data Source: MLHU RRFSS 2001-2004; 2006-2007

Data and Methods

Questions related to smoking status were included in all waves between 2001 and 2007 (waves 1 to 84). Questions related to smoking cessation were included in all waves between 2001 and 2004 and May 2006 to December 2007 (waves 1 to 48 and 65 to 84). For each year of data collection, the unweighted sample of respondents from Middlesex-London is shown in Table 2.2. Those that did not respond to any individual question were excluded prior to calculating proportions, provided the non-response category represented <5% of total respondents. The sample was weighted to account for each individual's probability of being selected within households of different sizes. Bar charts and line graphs include error bars illustrating 95% confidence intervals. Detailed tables for Chapter 2 are located in Appendix C2.

Table 2.2. Unweighted Sample Size for RRFSS Data on Smoking Behaviour
Adults 18+, Middlesex-London, 2001-2007

Year	2001	2002	2003	2004	2005	2006	2007
Sample size	1210	1204	1232	1201	1219	1200	1193

Original Data Source: MLHU RRFSS 2001-2004; 2006-2007

Definitions

Smoking status was determined from the response to the following questions: "Have you smoked at least 100 cigarettes in your life?" Respondents who answered yes were then asked "Currently do you smoke cigarettes everyday, some days, or not at all?"

Never smokers: Respondents who were not smoking at the time of the interview and answered "no" to the question "Have you smoked at least 100 cigarettes in your life?"

Former smokers: Respondents who were not smoking at the time of the interview, but answered "yes" to the question "Have you smoked at least 100 cigarettes in your life?"

Occasional smokers: Respondents who reported smoking some days, but not every day.

Daily smokers: Respondents who reported smoking everyday.

Current smokers: Respondents who were daily or occasional smokers.

Smoking Cessation: Respondents who were daily or occasional smokers were asked how they felt about quitting smoking. Response options included: 1) Currently not thinking of smoking, 2) Not thinking of quitting, 3) Considering quitting in the next six months, or 4) Committed to quit smoking in the next 30 days. For cross tabulations with sociodemographic variables, participants were defined as 'planning smoking cessation' if they were considering quitting or were committed to quitting in the next 30 days.

Highest level of Completed Education

Question: "What is the highest level of education you have obtained?"

- Less than high school: included those respondents who had not obtained a high school diploma.
- High school: included those respondents who had obtained a high school diploma or had completed some post-secondary education.
- Post secondary: included those respondents who had obtained a college diploma or university degree.

Chapter 3: Youth Smoking

Key Findings

- About 15% of youth (12 to 19 years) in the Middlesex-London area were current smokers in 2003.
- The proportion of current smokers among Ontario youth aged 15 to 24 decreased markedly between 1999 and 2006.
 - Current smokers among males decreased from 32% to 23%.
 - Current smokers among females decreased from 27% to 14%.
 - Males were 65% more likely to be current smokers than females.
- The proportion of Middlesex-London adults asked by minors to provide or purchase cigarettes declined significantly between 2001 and 2007, from 16% to 6%.
- The proportion of Middlesex-London adults asked by minors to provide or purchase cigarettes was significantly greater among smokers than non-smokers; however, the proportions fell significantly in both groups between 2001 to 2007.

Progress on Meeting Public Health Objectives

Local Objective: Less than 16% of youth age 12 to 19 will be smokers by March 2003.

It is possible that the objective was met in 2003 with a rate of 15.9% (+6.3%). However, 2003 data was considered unstable, there are no more recent data available to assess such change, and estimates from 2000 and 2003, although not highly stable, suggest that the proportion may have increased from 14.2% (+2.7%) in 2000 to 15.9% (+6.3%) in 2003.*

Provincial Objective: Reduce the proportion of 12 to 19 year olds who smoke *daily* to 10% in the year 2005.

Data was not available to assess whether the objective was met in 2005. It is possible that it was met in 2003 at 10.1% (+5.4%). This estimate, however, is considered unstable, there are no further data to assess change, and estimates from 2000 and 2003, although not highly stable, suggest the proportion may have risen from 9.2% (+4.8%) in 2000/2001 to 10.1% (+5.4%) in 2003.*

* Unstable estimates are usually due to small sample sizes

Background

In Canada, a person must be 18 years of age or older to legally purchase tobacco products; in Ontario, the legal age is 19⁷. Despite this preventive measure, rates of tobacco use remain high among Canadian youth. According to the Canadian Tobacco Use Monitoring Survey (CTUMS), the proportion of current smokers among Canadian youth aged 15 and older was 19% in 2005⁸. In the 2006-2007 CTUMS, the proportion of Ontario youth who had ever tried smoking was 13% among youth in grades 5 to 9, and 42.7% among youth in grades 10 to 12².

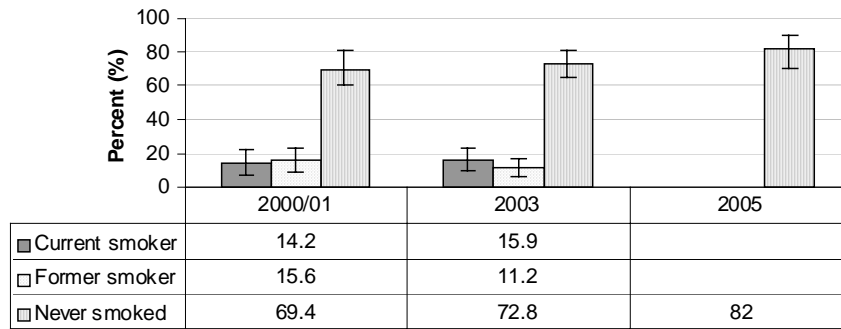
Smoking habits typically begin during the adolescent years and earlier initiation is associated with heavier smoking and earlier onset of adverse health outcomes⁹. In Canada, the majority of current smokers in grades 5 to 12 obtain cigarettes from social sources⁸.

Results:

The percentage of youth who have never smoked rose from 69% in 2000 to 82% in 2005 (Figure 3.1). This increase, however, is not statistically significant. Between 2000 and 2003, the proportion of current smokers among youth aged 12 to 19 years in the Middlesex-London area appear to have increased slightly from 14.2% (+6.1%) to 15.9% (+6.3%) (Figure 3.1). This difference is not statistically significant, however, and estimates for current smokers should be interpreted with caution. The proportion of current smokers did not differ between males and females during this time period.

The proportion of daily smokers among youth aged 12 to 19 years in the Middlesex-London area did not change significantly with 9.2% (+4.8%) in 2000/2001 and 10.1% (+5.4%) in 2003. These rates are moderately variable and should be interpreted with caution. Rates for 2005 were too unreliable to report.

Figure 3.1: Smoking Status Among Youth (12-19 years)
Middlesex-London, 2000/2001, 2003, 2005

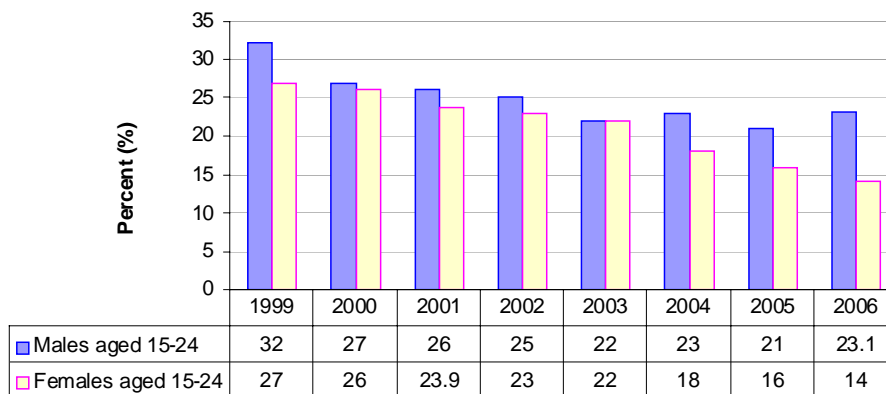


Original Data Source: CCHS 2000/2001; 2005; 2007

Youth Smoking in Ontario

The prevalence of youth smoking in Ontario decreased markedly between 1999 and 2006 among both males and females (Figure 3.2). During this time, the proportion of current smokers among males aged 15 to 24 decreased from 32% to 23.1%. Similarly, the proportion of current smokers among females aged 15 to 24 decreased from 27% to 14.0%. In 2006, males were 65% more likely to be smokers than females; a notable increase from 1999.

Figure 3.2: Current Smoking Status Among Young Adults in Ontario
Youth (15-24 years), Ontario 1999-2006

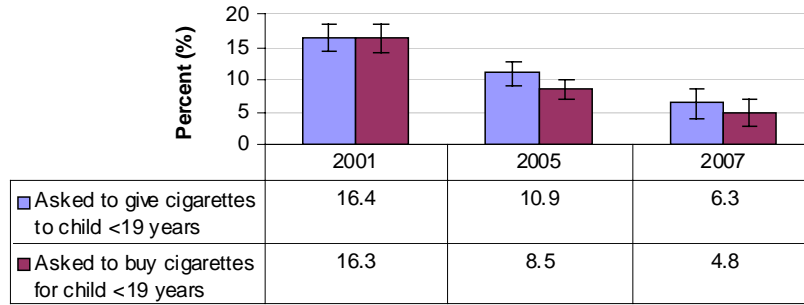


Original Data Source: CTUMS 1999-2006

Access to Tobacco by Minors

The proportion of adults (ages 19+) in Middlesex-London asked by minors to provide or purchase cigarettes declined significantly between 2001 and 2007 (Figure 3.3). Of the respondents asked to purchase cigarettes for minors, the proportion who agreed to the request increased slightly between 2001 and 2005 (Table 3.1). Compared to non-smokers, current smokers were significantly more likely to be asked by minors to provide (Figure 3.4) or purchase (Figure 3.5) cigarettes; however, in both cases the proportions decreased significantly between 2001 and 2007.

Figure 3.3: Proportion of Adults asked by Minors to Provide or Purchase Cigarettes
Adults 18+, Middlesex-London, 2001-2007



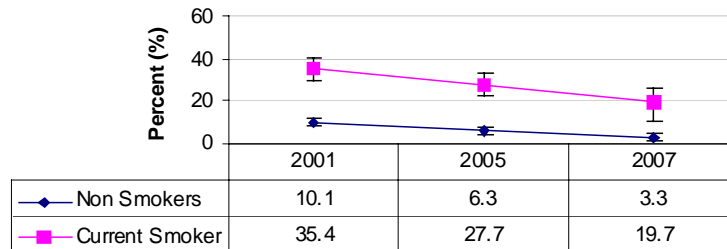
Original Data Source: MLHU RRFSS 2001, 2005, 2007

Table 3.1. Percent of Adults that Provided/Purchased Cigarettes to/for Minors
Adults 18+, Middlesex-London, 2001 and 2005

Year	Percent (+95% CI)	
	Provided	Purchased
2001	8.5 ±4.0%	5.8 ±3.3%
2005	8.5 ±4.8%	8.8 ±5.5%

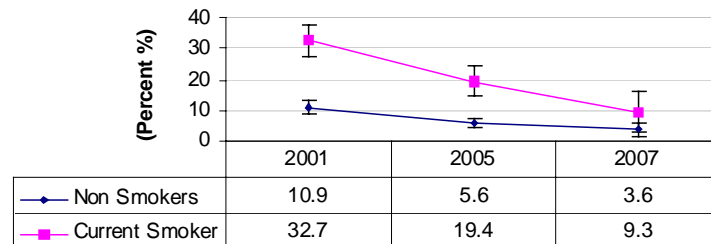
Original Data Source: MLHU RRFSS 2001, 2005

Figure 3.4: Proportion of Adults asked by Minors to Provide Cigarettes across Smoking Status
Adults 18+, Middlesex-London, 2001-2007



Original Data Source: MLHU RRFSS 2001; 2005; 2007

Figure 3.5: Proportion of Adults asked by Minors to Purchase Cigarettes across Smoking Status
Adults 18+, Middlesex-London, 2001-2007



Original Data Source: MLHU RRFSS 2001; 2005; 2007

Data and Methods

Youth smoking rates for Ontario were obtained from the Youth Smoking Survey collected as part of the Canadian Tobacco Use Monitoring Survey (CTUMS)⁸. More information on CTUMS is provided in Appendix A.

Data on requests by minors to provide or purchase cigarettes were collected by RRFSS in 2001, 2005, and from September to December in 2007 (waves 1 to 12; 49 to 60; and 81 to 84, respectively). Questions on whether respondents provided or purchased cigarettes to/for minors were only asked in 2001 and 2005. For each year of data collection, the unweighted sample of respondents from Middlesex-London is shown in Table 3.2. Those that did not respond to any individual question were excluded prior to calculating proportions, provided the non-response category represented <5% of total respondents. The sample was weighted to account for each individual's probability of being selected within households of different sizes. Bar charts and line graphs include error bars showing 95% confidence intervals. Detailed tables for Chapter 3 are located in Appendix C3.

Table 3.2. Unweighted Sample Size for RRFSS Data on Requests by Minors to Provide or Purchase Cigarettes

Adults 18+, Middlesex-London, 2001; 2005; September to December 2007

Year	2001	2005	2007
Sample size	1182	1212	408

Original Data Source: MLHU RRFSS 2001; 2005; 2007

Definitions:

Current Smoker: Smoked at least 100 cigarettes in his/her lifetime and smoked at least 1 cigarette during the 30 days preceding the interview.

Former Smoker: Did not smoke at the time of the interview, but answered 'Yes' to the question "Have you smoked at least 100 cigarettes in your life?"

Never smokers: Did not smoke at the time of the interview, and answered "No" to the question "Have you smoked at least 100 cigarettes in your life?"

Non-smokers: Respondents who were not current smokers.

Accessing Tobacco among Minors

Question: "In the last six months, has a young person, under 19 years of age, asked you to GIVE them cigarettes?"

Question: Did you GIVE them cigarettes?

Question: In the last six months, has a young person, under 19 years of age, asked you to BUY them cigarettes?

Question: Did you BUY them cigarettes?

* Only asked of respondents who were 19 years and older.

Chapter 4: Smoke-free Homes and Vehicles

Key Findings

- The proportion of respondents living in smoke-free homes increased by 45% (55% in 2001 to 80% in 2007).
- The proportion of respondents who do not allow smoking in their vehicles increased by 21% (67% in 2001 to 81% in 2007).
- The proportion of respondents living in smoke-free homes *and* driving smoke-free vehicles rose among both males and females and across all age groups from 2001 to 2007.
- The proportion of respondents living in smoke-free homes or driving smoke-free vehicles increased significantly with higher levels of education and this relationship was consistent over time.

Progress on Meeting Public Health Objectives

Provincial Objective: Increase the proportion of smoke-free homes by the year 2010.

✓ Assessment: **Achieved**

The proportion of residents living in smoke-free homes increased from 55.4% (+3.5) in 2001 to 80.1% (+2.3%) in 2007.

Background

Exposure to environmental tobacco smoke (ETS) is an important modifiable risk factor for many diseases including heart disease, respiratory problems and cancer^{10,11}. Health Canada maintains that there is no safe exposure level of environmental tobacco smoke¹¹. In 1997, more than 800 Canadians died of coronary heart disease caused by passive ETS exposure in 1997¹². The authors suggest this mortality figure is likely an underestimation, since it did not include the number of deaths among non-smokers exposed to ETS in the workplace.

Between 2001 and 2002, 21% of Ontarians reported that smoking occurred inside their home occasionally, and 15% said smoking occurred daily¹³. Children living in homes with smokers are frequently exposed to second hand smoke: of the 55% of Ontario respondents in homes with smokers and children, 33% reported that smoking occurred inside their homes daily¹³.

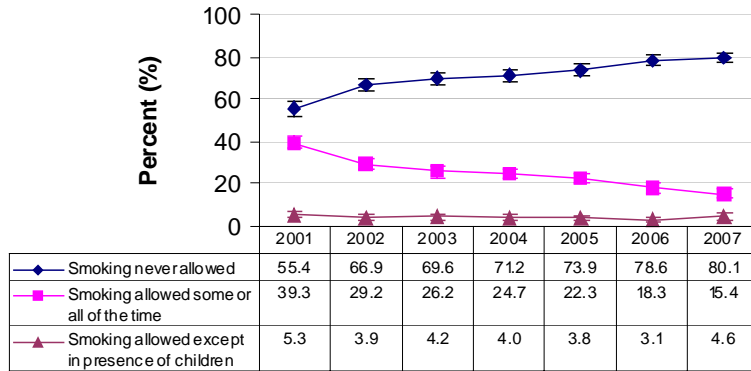
Smoke-free environments are one way to assist smokers to quit and prevent young people from starting¹⁴. Municipal and provincial legislation in the early 1990's made all municipal buildings health care facilities, municipal arenas, theatres, movie houses and common areas of apartments 100% smoke-free public places^{15,16}. Middlesex-London has taken a lead in creating smoke-free places. As of January 2002, all restaurants in the City of London were made 100% smoke-free as a result of provisions in the Smoking Control By-law, PH-8¹⁶. In 2003, the City of London Smoke-free Public Places and Smoke-free Workplaces By-laws were mandated to designate all public places and workplaces (bars, bingo parlours, and billiard halls) as smoke-free.

The attainment of smoke-free homes and vehicles, particularly in the presence of children, is an important goal. In the province of Ontario, the Smoke Free Ontario Act went into effect on May 31, 2006. In June 2008, an amendment to the Act, Smoking in Motor Vehicles (Bill 69), was introduced and will come into effect on January 21, 2009. The amendment restricts anyone smoking or carrying lighted tobacco in a private motor vehicle while a person who is less than 16 years old is present in the vehicle and imposes fines up to \$250. It will be enforced by London Police Service and the Ontario Provincial Police. Similar legislation is found in Nova Scotia and British Columbia.

Results

The proportion of respondents living in smoke-free homes increased significantly from 55.4% ($\pm 3.5\%$) in 2001 to 80.1% ($\pm 2.3\%$) in 2007 (Figure 4.1). The proportion of residents who allowed smoking in their homes except in the presence of children decreased slightly from 5.3% ($\pm 1.6\%$) in 2001 to 4.6% ($\pm 1.2\%$) in 2007 (Figure 4.1).

Figure 4.1: Smoking in Homes by Residents and Visitors
Adults 18+, Middlesex-London, 2001-2007



Original Data Source: MLHU RRFSS 2001-2007

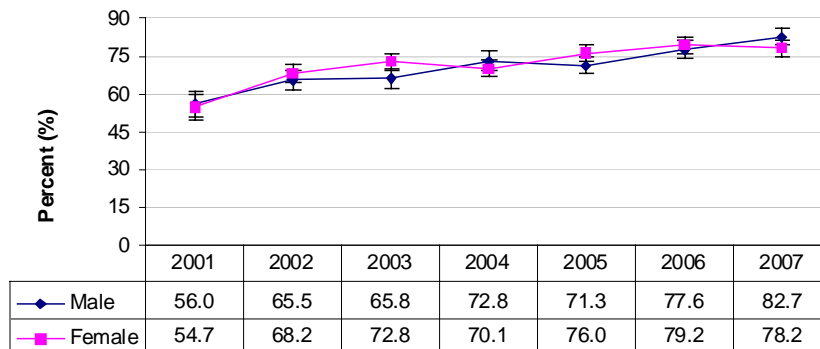
Sociodemographics

Between 2001 and 2007, the proportion of residents living in smoke-free homes increased significantly among both males and females (Figure 4.2). Between 2001 and 2007, the proportion of respondents living in smoke-free homes increased significantly within all age groups (Figure 4.3).

The proportion of respondents living in smoke-free homes was significantly higher among those with higher levels of education. This relationship was consistent across the years 2001 and 2007 (Figure 4.4). In 2007, the proportion of post-secondary graduates living in smoke-free homes was 86.0% ($\pm 2.7\%$) compared to 72.6% ($\pm 8.2\%$) among those with less than a high school education.

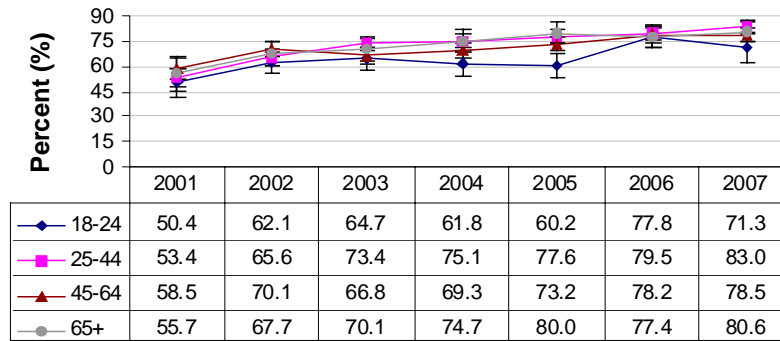
Significantly fewer current smokers than non-smokers lived in smoke-free homes; however, between 2001 and 2007, the proportion of smokers living in smoke-free homes more than doubled from 21.3% ($\pm 5.9\%$) to 48.7% ($\pm 6.4\%$) (Figure 4.5).

Figure 4.2: Smoke-free Homes Among Males and Females
Middlesex-London, 2001-2007



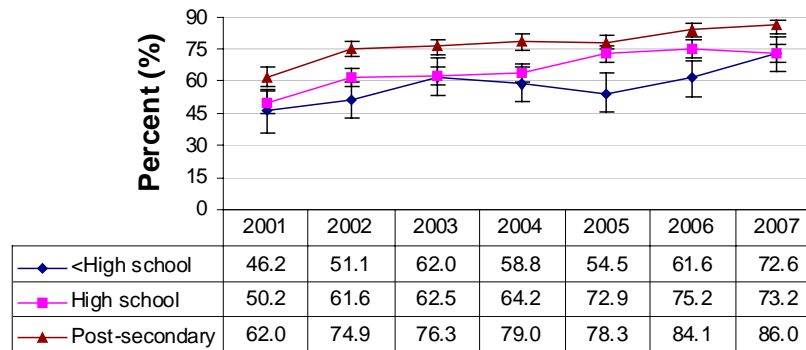
Original Data Source: MLHU RRFSS 2001-2007

Figure 4.3: Smoke-free Homes across Age Groups
Adults 18+, Middlesex-London, 2001-2007



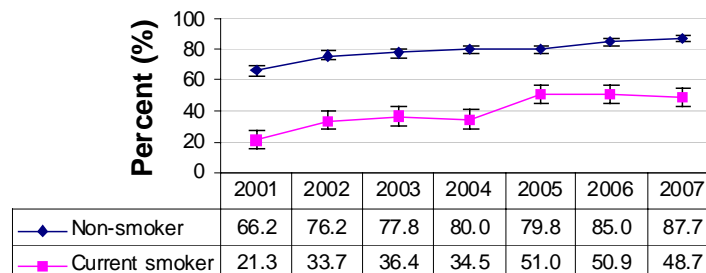
Original Data Source: MLHU RRFSS 2001-2007

Figure 4.4: Smoke-free Homes by Highest Level of Completed Education
Adults 18+, Middlesex-London, 2001-2007



Original Data Source: MLHU RRFSS 2001-2007

Figure 4.5: Smoke-free Homes by Smoking Status
Adults 18+, Middlesex-London, 2001-2003, 2007

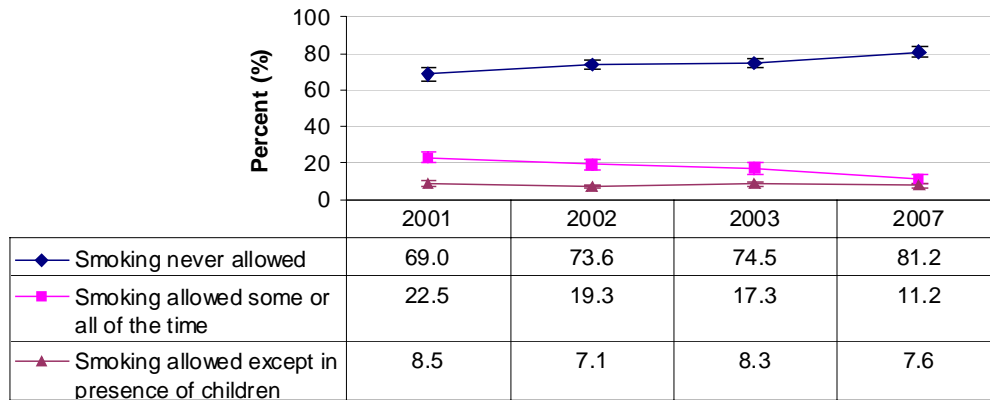


Original Data Source: MLHU RRFSS 2001-2007

Smoke-free Vehicles

Between 2001 and 2007, the proportion of respondents who did not allow smoking in their vehicles increased significantly from 69.0% ($\pm 2.7\%$) to 81.2% ($\pm 2.3\%$) (Figure 4.6). The proportion who allowed smoking in their vehicles except in the presence of children decreased slightly from 8.5% ($\pm 1.6\%$) in 2001 to 7.6% ($\pm 1.5\%$) in 2007 (Figure 4.6).

Figure 4.6: Smoking Allowances in Respondent’s Vehicle
Adults 18+, Middlesex-London, 2001-2003, 2007



Original Data Source: MLHU RRFSS 2001-2003; 2007

Sociodemographics

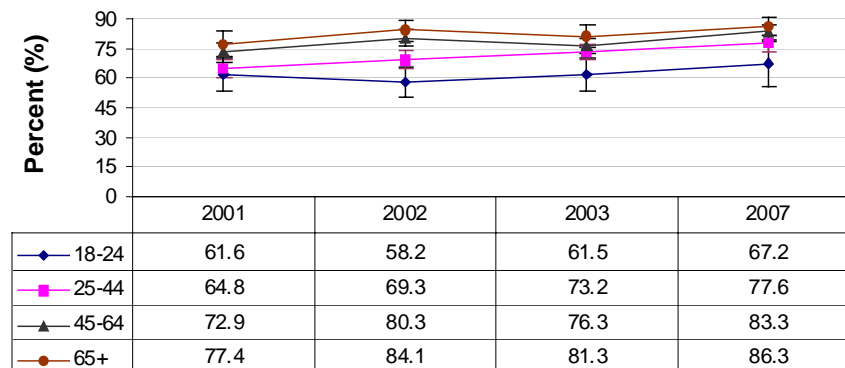
Between 2001 and 2007, the proportion of residents driving smoke-free vehicles increased significantly among both males and females (Table 4.1). The likelihood of driving a smoke-free vehicle increased with age; this relationship was consistent across the years 2001 and 2007 (Figure 4.7). The proportion of respondents driving smoke-free vehicles was significantly higher among post-secondary graduates. Between 2001 and 2007, the proportion of post-secondary graduates driving smoke-free vehicles increased from 76.1% ($\pm 3.4\%$) to 85.8% ($\pm 2.7\%$) (Figure 4.8). Significantly fewer current smokers than non-smokers drove smoke-free vehicles; however, between 2001 and 2007, the proportion of residents driving smoke-free vehicles increased by about 9% in both current and non-smokers alike (Figure 4.9). Between 2001 and 2007, the proportion of residents who had both smoke-free homes *and* vehicles increased significantly from 51.1% ($\pm 3.6\%$) to 74.1% ($\pm 2.6\%$) (Figure 4.10).

Table 4.1. Percent Living in Smoke-free Homes and Driving Smoke-free Vehicles by Sex
Adults 18+, Middlesex-London, 2001-2007

	2001	2007
Male	65.9 $\pm 4.0\%$	79.5 $\pm 3.6\%$
Female	71.9 $\pm 3.6\%$	82.5 $\pm 2.9\%$

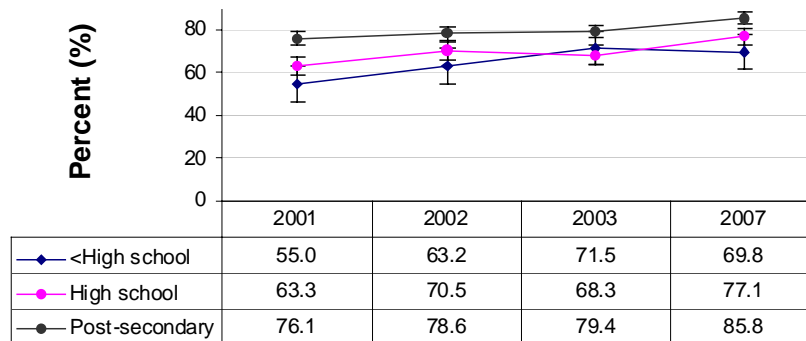
Original Data Source: MLHU RRFSS 2001, 2007

4.7: Smoke-free Vehicles across Age Groups
Adults 18+, Middlesex-London, 2001-2003, 2007



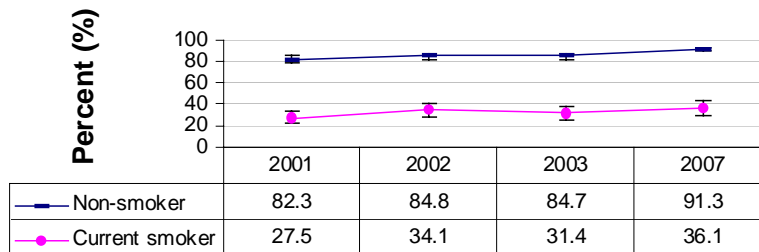
Original Data Source: MLHU RRFSS 2001-2003; 2007

Figure 4.8: Smoke-free Vehicles by Highest Level of Completed Education
Adults 18+, Middlesex-London, 2001-2003, 2007



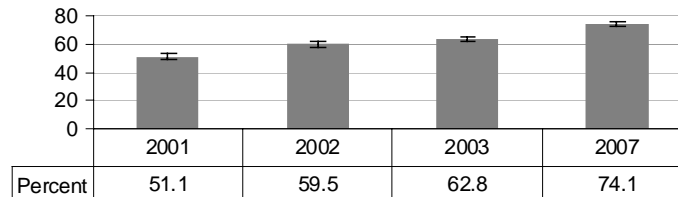
Original Data Source: MLHU RRFSS 2001-2003; 2007

4.9: Smoke-free Vehicles by Smoking Status
Adults 18+, Middlesex-London, 2001-2003, 2007



Original Data Source: MLHU RRFSS 2001-2003; 2007

4.10: Percent Living in Smoke-free Homes and Driving Smoke-free Vehicles
Adults 18+, Middlesex-London, 2001-2003, 2007



Original Data Source: MLHU RRFSS 2001-2003; 2007

Data and Methods

Data on smoke-free homes were from RRFSS May to December 2001 (waves 5 to 12) and 2002 to 2007 (waves 13 to 84). Data on smoke-free vehicles were from RRFSS 2001 to 2003 and 2007 (waves 1 to 36 and 73 to 84, respectively). For each year of data collection, the unweighted samples of respondents from Middlesex-London who answered questions related to smoke-free homes and vehicles are shown in Tables 4.2 and 4.3, respectively. Those that did not respond to any individual question were excluded prior to calculating proportions, provided the non-response category represented <5% of total respondents. For questions related to smoke-free homes, the sample was weighted to account for each individual's probability of being selected within households of different sizes; no weighting was used to calculate the proportion of smoke-free vehicles. Bar charts and line graphs include error bars showing 95% confidence intervals. Detailed tables for Chapter 4 are located in Appendix C4.

Table 4.2. Unweighted Sample Size for RRFSS Data on Smoke-free Homes

Adults 18+, Middlesex-London, 2001-2007

Year	2001	2002	2003	2004	2005	2006	2007
Sample size	801	1202	1220	1190	1211	1190	1182

*Original Data Source: MLHU RRFSS 2001-2007***Table 4.3. Unweighted Sample Size for RRFSS Data on Smoke-free Vehicles**

Adults 18+, Middlesex-London, 2001-2003; 2007

Year	2001	2002	2003	2007
Sample size	1147	1147	1182	1139

Original Data Source: MLHU RRFSS 2001-2003; 2007

Definitions

Smoke-free homes Question: “Does anyone in this household smoke regularly inside the home?” (Yes; No; Don’t know; Refused)

Question: “Which best describes the rules or understandings about not smoking inside the home for visitors: would you say...not allowed at all; allowed sometimes; allowed in certain areas; allowed except in the presence of children; smokers do whatever they want; don’t know; refused?”

Smoke-free vehicles Question: “Which best describes the rules or understandings about people smoking in the vehicle you drive most”:

- not allowed at all; allowed sometimes; allowed in certain areas; allowed except in the presence of children; smokers do whatever they want; don’t know; refused?
- Only those residents who had driven a motor vehicle in the past 12 months were included in calculating the proportion of smoke-free vehicles.

Respondents living in smoke-free homes and driving smoke-free vehicles Respondents who never allowed smoking in their home *and* never allowed smoking in their cars.

Highest level of Completed Education

Question: “What is the highest level of education you have obtained?”

- Less than high school: included those who had not obtained a high school diploma.
- High school: included those who had obtained a high school diploma or had completed some post-secondary education.
- Post secondary: included those who had obtained a college diploma or university degree.

Chapter 5: Physical Activity

Key Findings

- The proportion of adults in Middlesex-London with a health-enhancing level of physical activity remained stable at about 60% between 2004 and 2007.
- Males were 19% more likely to have a health-enhancing level of physical activity than females.
- In general, the likelihood of high physical activity decreased with age
 - Differences between age groups were less pronounced in 2007 compared to 2004.
 - Activity levels decreased with age more rapidly in males after age 35 than in females.
- More than two-thirds (68%) of youth (aged 12 to 19) were at least moderately active during leisure time in 2007.
- Knowledge of recreational trails in Middlesex-London increased somewhat between 2001 and 2008 from 81% to 88%, respectively. Use of recreational trails, at 63% in 2008, has not changed significantly since 2001.

Progress on Meeting Public Health Objectives

Local Objective: At least 53% of males over 15 will exercise regularly by March 2003.

✓ Assessment: **Achieved***

Achieved in 2004 with 64.9% ($\pm 4.4\%$) of men (ages 18+) who were at least moderately active; has not improved, however, as of 2007 at 64.8% ($\pm 4.6\%$).

Local Objective: At least 48% of females over 15 will exercise regularly by March 2003.

✓ Assessment: **Achieved***

Achieved in 2004 with 56.4% ($\pm 4.3\%$) of women (ages 18+) who were at least moderately active; has not improved, however, as of 2007 at 54.3% ($\pm 4.2\%$).

*Note: RRFSS data does not include participants younger than 18 years; thus, a direct evaluation of local objectives cannot be made.

Local Objective: At least 59% of youth will participate in daily physical activity by March 2003.

✓ Assessment: **Achieved**

Achieved in 2001 with 60.9% ($\pm 8.7\%$) of youth (ages 12 to 19) who were at least moderately active during leisure time; proportion has increased to 68.4% ($\pm 11.7\%$) in 2007, but change is not statistically significant.

Local Objective: Increase the number of residents aware of walking trails and bicycle paths.

✓ Assessment: **Achieved**

Knowledge of recreational trails in Middlesex-London increased from 80.6% ($\pm 2.3\%$) in 2001 to 87.9% ($\pm 3.7\%$) in 2008.

Background

Physical activity has long been recognized as a strategy to help promote well being, reduce stress, achieve a healthy body weight, and prevent a number of chronic diseases including cardiovascular disease, diabetes, and cancer^{1,17-19}.

A number of provincial reports have emphasized the importance of physical activity, and have set specific population-level targets²⁰. In 2004, the Chief Medical Officer of Health Report included the following recommendations with respect to physical activity²¹:

- Develop policy promoting physical activity, investigate the impact of user fees on recreational facility use, and support safe active transportation options.
- Create workplace environments that help people increase physical activity at work.
- Provide daily physical activity in schools and homes.
- Encourage individuals to follow Canada's Physical Activity Guide to Healthy Active Living.

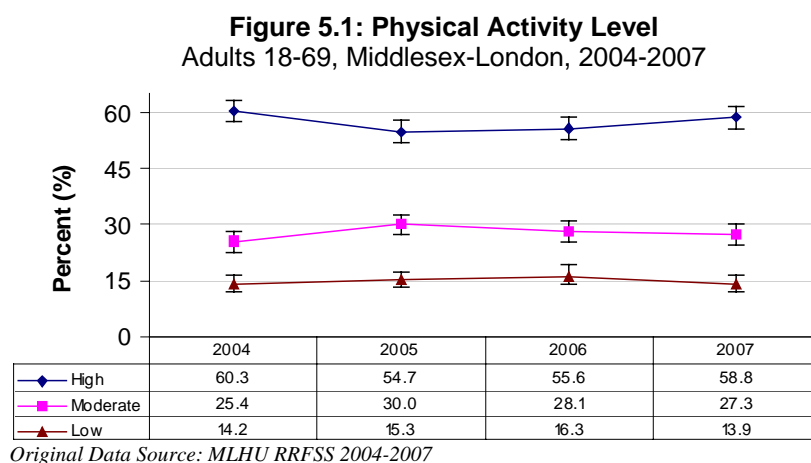
In 2005, the Ontario Ministry of Health Promotion released Active 2010: Ontario's Sport and Physical Activity Strategy^{20,22}. A primary target of this report specified that by 2010, 55% of Ontarians will perform the equivalent of at least 30 minutes/day of physical activity.

The Ontario Heart Health Program began its second five-year phase in 2003²⁰. In this second phase, the Healthy Living Partnership transitioned from a heart health model to an integrated chronic disease prevention model, which included a broader chronic disease focus. Programs and initiatives included pedometer challenges, Healthy Active School Award, Turn Off The Screens Week, Challenge of the Heart, and the Healthy Living Campaign²⁰.

In 1998, the Middlesex-London Health Unit in collaboration with other community partners began offering organized walks on a monthly basis²³. This initiative was continued by the Thames Valley Trail Association, which has offered weekly walks since 2002. In addition, a "City of London Walking Map" has been printed and distributed since 2001. In 2002, a map of "Walking Trails of Middlesex County" was distributed. The goal for both the weekly walks and map production was to increase awareness and use of walking trails and pathways in London.

Results

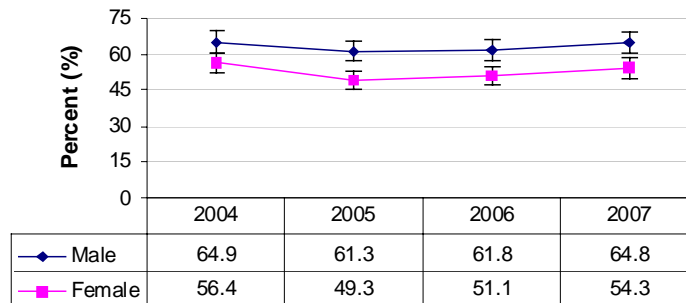
The proportion of respondents defined as having a high or health-enhancing level of physical activity (≥ 1 hour/day of at least moderate-intensity activity, or 0.5 hours/day of vigorous-intensity activity) remained relatively constant, not exceeding 60%, between 2004-2007 (Figure 5.1).



Sociodemographics

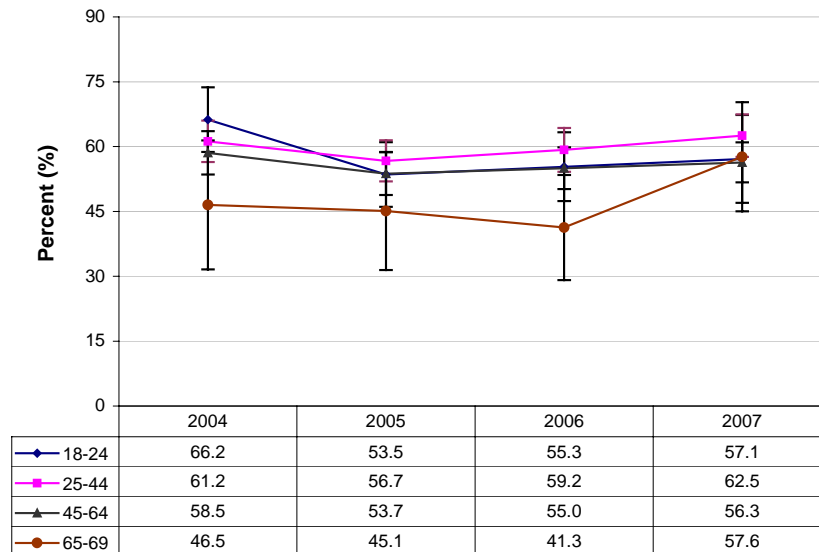
Males were more likely to have a health enhancing level of physical activity compared to females. This difference was statistically significant from 2005 to 2007 (Figure 5.2). In general, the likelihood of high physical activity decreased with age, although differences between age groups were less pronounced in 2007 compared to 2004 (Figure 5.3). Figure 5.4 shows physical activity level across age and sex averaged over the years 2004 to 2007. Although males were more physically active than females, activity levels decreased more rapidly with age in men after age 35. No significant differences were observed between high level of physical activity and education level (Table 5.1). Respondents with less than a high school education reported the highest level of physical activity in three of the four years of data collection.

Figure 5.2: High Physical Activity Level Among Males and Females
Adults 18-59, Middlesex-London, 2004-2007



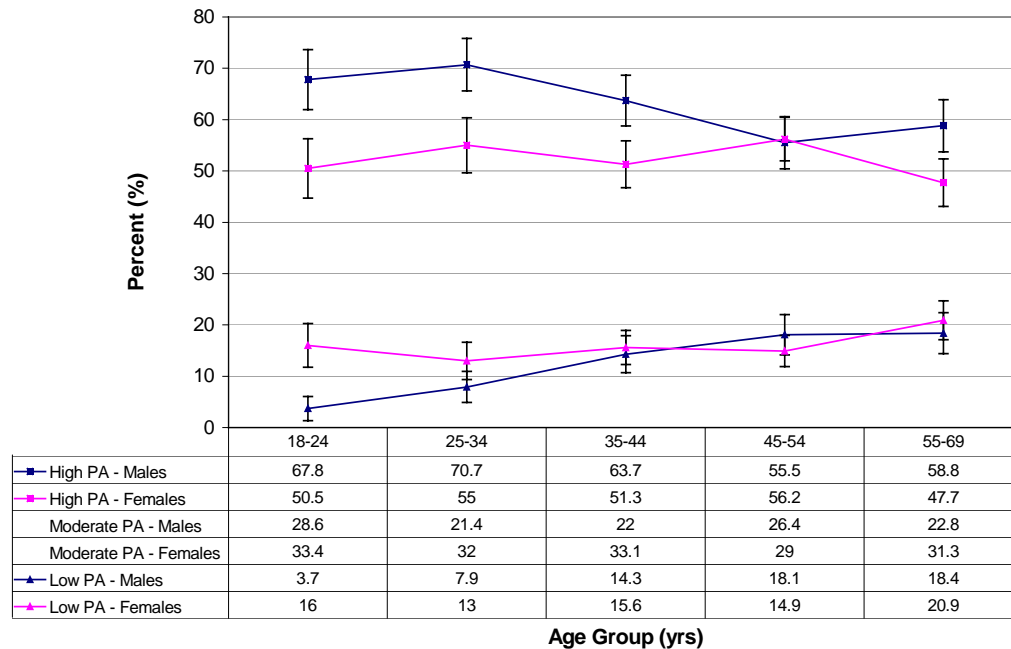
Original Data Source: MLHU RRFSS 2004-2007

Figure 5.3: High Physical Activity Level across Age Groups
Adults 18-69, Middlesex-London, 2004-2007



Original Data Source: MLHU RRFSS 2004-2007

Figure 5.4: Physical Activity Levels by Age Group and Sex
Adults 18-69, Middlesex-London, Averaged over 2004-2007



Original Data Source: MLHU RRFSS 2004-2007

Table 5.1. High Level of Physical Activity by Education
Adults 18-69 years, Middlesex-London, 2004-2007

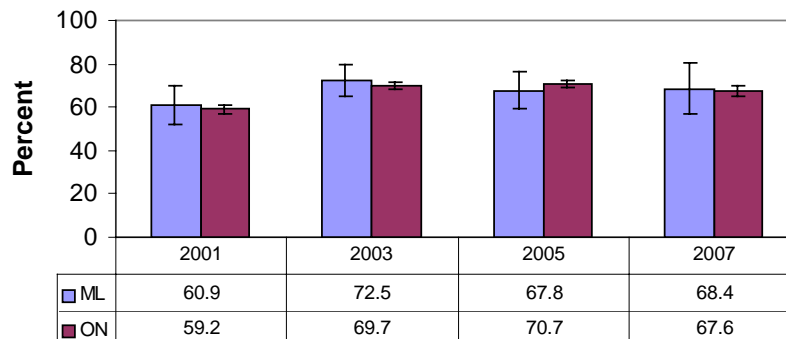
Highest level of completed education	2004	2005	2006	2007
< High school	66.2 ±10.6%	45.9 ±11.4%	56.3 ±11.5%	60.9 ±11.5%
High school	59.1 ±5.2%	53.6 ±5.0%	54.8 ±5.4%	59.5 ±5.2%
Post-secondary	60.3 ±4.1%	56.5 ±4.1%	56.2 ±4.0%	58.4 ±4.1%

Original Data Source: MLHU RRFSS 2004-2007

Physical Activity Among Youth During Leisure Time

Over two-thirds (68%) of youth aged 12 to 19 years in Middlesex-London were at least moderately active during their leisure time in 2007 (Figure 5.5). This represents a 12% increase from 2001 but is not statistically significant. These rates are similar to those for Ontario as a whole.

Figure 5.5: Youth Ages 12 to 19 Who Are at Least Moderately Active During Leisure Time, Middlesex-London and Ontario 2001-2007

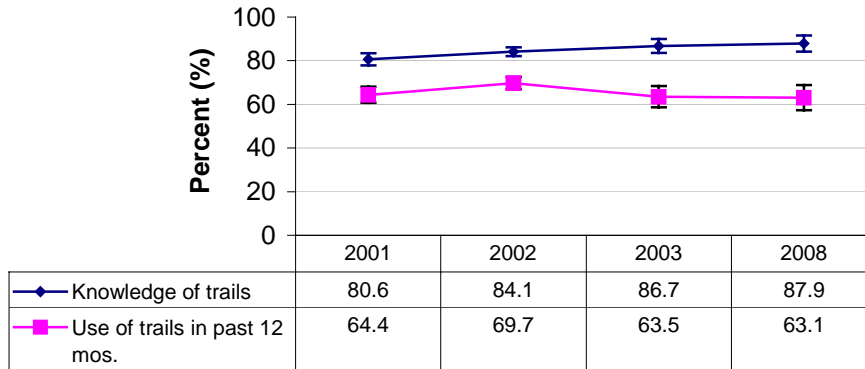


Original Data Source: CCHS Cycles 1.1, 2.1, 3.1, 4.1

Knowledge and Use of Recreational Trails in Middlesex-London

Knowledge of recreational trails in Middlesex-London increased somewhat from 80.6% (+2.3%) in 2001 to 87.9% (+3.7%) in 2008. Use of trails, however, remained relatively unchanged (Figure 5.6).

Figure 5.6: Knowledge and Use of Recreational Trails
Adults 18+, Middlesex-London, 2001-2003, 2008

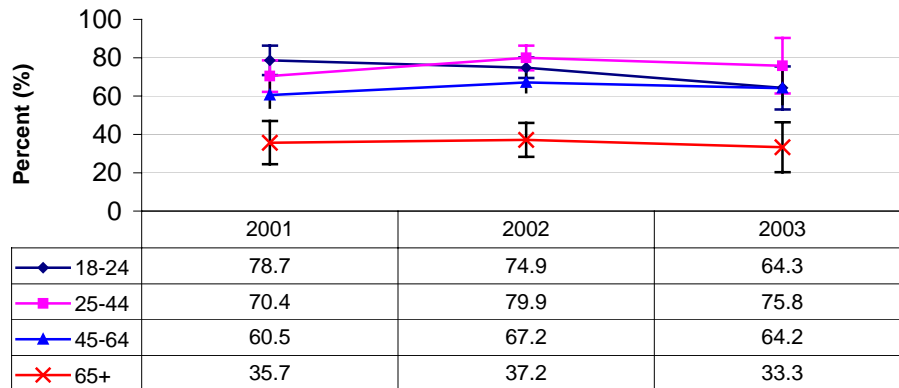


Original Data Source: MLHU RRFSS 2001-2003, 2008

Sociodemographics

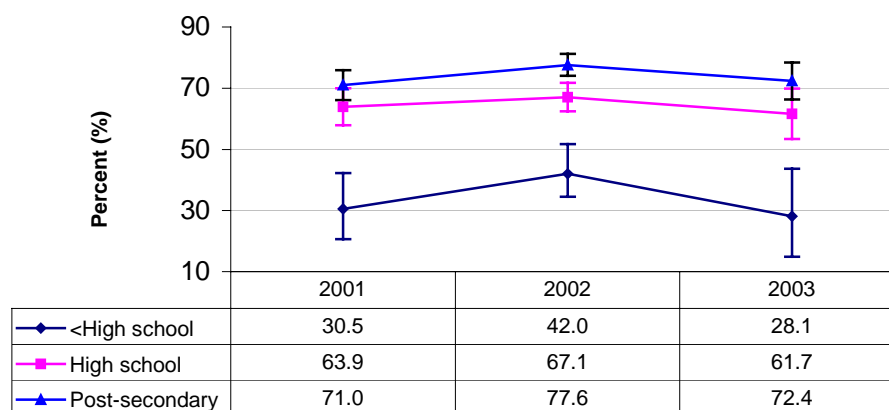
Knowledge and use of recreational trails did not differ significantly between males and females. Knowledge and use tended to be lowest among respondents aged 65+ and greatest among those aged 25 to 44. Between 2001 and 2003, use of recreational trails was significantly lower among those aged 65+ (Figure 5.7). Knowledge and use of recreational trails increased with level of education. Use of recreational trails was significantly higher among those who had completed a post-secondary education compared to those with less than a high school education (Figure 5.8).

Figure 5.7: Use of Recreational Trails in Past 12 Months Across Age Groups
Adults 18+, Middlesex-London, 2001-2003



Original Data Source: MLHU RRFSS 2001-2003

Figure 5.8: Use of Recreational Trails in Past 12 Months by Level of Education
Adults 18+, Middlesex-London, 2001-2003



Original Data Source: MLHU RRFSS 2001-2003

Data and Methods

Data on physical activity among adults (age 18 to 69) was collected through RRFSS between 2004 and 2007 (waves 37-84). The RRFSS module is based on the International Physical Activity Questionnaire (IPAQ)–Short form. The IPAQ has been validated for populations aged 15 to 69 years old²⁴, thus respondents aged 69 and older were excluded. For each year of data collection, the unweighted sample size of respondents from Middlesex-London is shown in Table 5.2. Non-responses to individual questions in the IPAQ were excluded prior to calculating proportions. The maximum allowable minutes for all walking, moderate and vigorous time variables were truncated at 240 minutes.

Data on youth (aged 12 to 19) physical activity during leisure time was obtained from the Physical Activity Index of the Canadian Community Health Survey (CCHS), 2000/2001, 2003, 2005.

Data on recreational trail use and knowledge were from RRFSS from May 2001 to May 2003 (waves 5 to 29). For each year of data collection, the unweighted sample size of respondents from Middlesex-London is shown in Table 5.3. Those that did not respond to any individual question were excluded prior to calculating proportions, provided the non-response category represented <5% of total respondents.

For both physical activity and recreational trail use/knowledge, the samples were weighted to account for each individual's probability of being selected within households of different sizes. Bar charts and line graphs include error bars illustrating 95% confidence intervals. Detailed tables for Chapter 5 are located in Appendix C5.

Table 5.2. Unweighted Sample Size for RRFSS Data on Physical Activity
Adults 18-69 years, Middlesex-London, 2004-2007

Year	2004	2005	2006	2007
Sample size	924	990	944	925

Original Data Source: MLHU RRFSS 2004-2007

Table 5.3. Unweighted Sample Size for RRFSS Data on Knowledge of Recreational Trails
Adults 18+, Middlesex-London, 2001-2003

Year	2001	2002	2003
Sample size	806	1209	439

Original Data Source: MLHU RRFSS 2001-2003

Definitions

International Physical Activity Questionnaire–Short Form (IPAQ)²⁴: The RRFSS physical activity module was based on a short form of IPAQ, which was designed to assess physical activity across leisure time, domestic and gardening activities, work-related and active transportation. The respondent is asked to recall physical activity levels in the past 7 days. IPAQ classifications for physical activity level include high, moderate, and low (Table 5.4).

It should be noted that changes to the IPAQ classification of physical activity changed in 2005. Prior to 2005, there were four categories of activity: high, moderate, low and inactive. Moderate or higher was considered to be health enhancing physical activity (HEPA). Since the analysis for this report applied the updated classification scheme to all years (2004 to 2007), estimates for physical activity level differ from those using the older classification scheme.

CCHS Physical Activity Index: Calculated based on the type and duration of exercise, thus reflecting energy expenditure (EE).

- Physically Active: the highest activity level, those who averaged an EE of 3.0+kcal/kg/day.
- Moderately Active: included those who averaged an EE of 1.5 to 2.9+kcal/kg/day.
- Physically Inactive: included those with an EE below 1.5 kcal/kg/day.

Table 5.4: Definition of IPAQ Physical Activity Level

IPAQ Category	Description	Risk Level
High	<p>Equivalent to 12,500 steps/day, or ≥ 1 hour/day of at least moderate intensity activity, or 0.5 hour/day of vigorous-intensity activity over and above basal levels daily.</p> <p>Meets any one of the following criteria:</p> <ul style="list-style-type: none"> • Vigorous-intensity activity on ≥ 3 days achieving a minimum total physical activity of at least 1500 MET*-minutes/week OR • ≥ 7 days of any combination of walking, moderate-intensity or vigorous-intensity activities achieving a minimum total physical activity of at least 3000 MET*-minutes/week. 	<p>Low risk</p> <p>Considered to be health enhancing physical activity (HEPA)</p>
Moderate	<p>Equivalent to 0.5 hours of at least moderate-intensity physical activity on most days accumulated in leisure and work time.</p> <p>Meets any one of the following criteria:</p> <ul style="list-style-type: none"> • ≥ 3 days of vigorous-intensity activity of at least 20 minutes per day. OR • ≥ 5 days of moderate-intensity activity and/or walking of at least 30 minutes/day. OR • ≥ 5 days of any combination of walking, moderate-intensity or vigorous intensity activities achieving a minimum total physical activity of at least 600 MET*-minutes/week. 	<p>At risk for chronic disease and obesity</p>
Low	<ul style="list-style-type: none"> • No activity is reported or some activity is reported, but not enough to meet moderate activity. 	<p>At highest risk of premature death due to cardiovascular disease</p>

*MET = Metabolic equivalent. A MET is a measure of physical activity intensity. It is the ratio of energy expended in kilocalories, divided by the resting energy expenditure in kilocalories. A MET-minute is computed by multiplying the MET score of an activity by the minutes performed. MET-minute scores are equivalent to kilocalories for a 60 kilogram person (REF: IPAQ, 2005).

Knowledge of Recreational Trails

Question: “Do you know of any walking, biking, or nature trails in Middlesex-London?” (Response options: yes; no; don’t know).

Use of Recreational Trails

Question: “Have you used any of these walking, biking, or nature trails in the last 12 months?” (Response options: yes; no; don’t know).

Respondents who indicated no knowledge of recreational trails in Middlesex-London were not asked if they used the trails.

Highest level of Completed Education

Question: “What is the highest level of education you have obtained?”

- Less than high school: included those respondents who had not obtained a high school diploma.
- High school: included those respondents who had obtained a high school diploma or had completed some post-secondary education.
- Post secondary: included those respondents who had obtained a college diploma or university degree.

Chapter 6: Healthy Eating

Key Findings

- Just over one-third (35%) of Middlesex-London adults reported eating at least 5 servings of fruit and vegetables per day in 2007.
- Women and those with a post-secondary education were more likely to consume at least 5 servings of fruit and vegetables per day than men and those with lower levels of education, respectively.
- Consumption of at least 5 daily servings of fruit and vegetables tended to increase with age.

Progress on Meeting Public Health Objectives

Provincial Objective: Increase to 75% the proportion of the population age 4 years and older consuming 5 or more servings of vegetables and fruit daily by the year 2010.

Work needed*

The proportion has increased from 30.2% in 2001 to 35.1% in 2007. An additional 113% increase would be required to meet the objective for adults in 2010.

*Note: RRFSS data does not include participants younger than 18 years; thus, a direct evaluation of provincial objectives cannot be made.

Fruit & Vegetable Consumption

Background

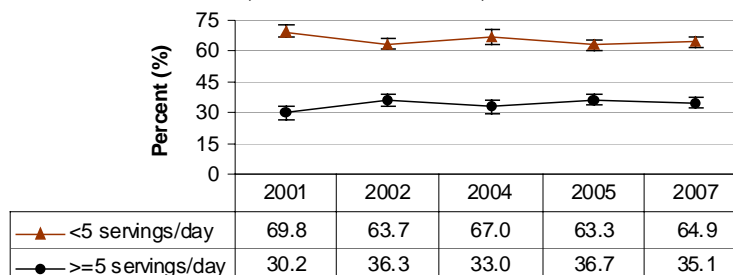
A large body of research indicates that the higher the consumption of fruits and vegetables, the lower the incidence of cardiovascular disease^{25,26}. Fruit and vegetables contain a host of vitamins, minerals and phytochemicals such as vitamin C, potassium, flavonoids and carotenoids. In addition to supplying these beneficial nutrients, fruits and vegetables may change gut flora and increase roughage and fiber intake. Being low in calories, fruits and vegetables may simply displace the consumption of energy dense foods²⁵.

One of the objectives of the Ontario Mandatory Health Programs and Service Guidelines, 1997 for Middlesex-London was to increase the proportion of individuals consuming five or more daily servings of fruits and vegetables to 75% by the year 2010⁶.

Results

The proportion of Middlesex-London residents who ate at least 5 servings of fruit and vegetables per day increased from 30.2% (+2.9%) in 2001 to 35.1% (+2.7%) in 2007; however this difference was not statistically significant (Figure 6.1).

Figure 6.1: Fruit & Vegetable Consumption
Adults 18+, Middlesex-London, 2001-2007

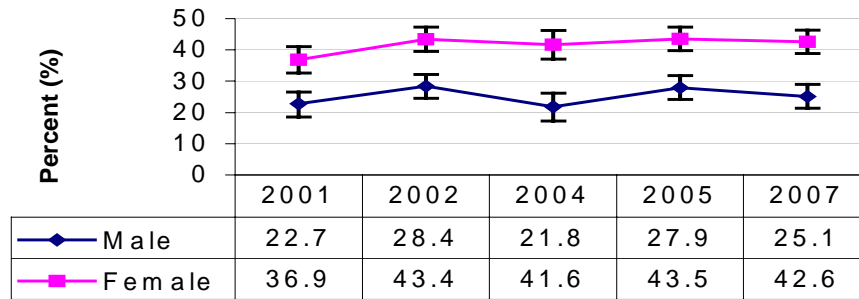


Original Data Source: MLHU RRFSS 2001-2002; 2004-2005; 2007

Sociodemographics

Significantly more females than males ate 5 or more servings of fruit and vegetables per day between 2001-2007. In 2007, 42.6% (+3.8%) of females consumed ≥ 5 servings/day compared to men (25.1% $\pm 3.8\%$) (Figure 6.2). The proportion of respondents consuming ≥ 5 servings/day of fruits and vegetables tended to increase with age. Respondents aged 65+ were significantly more likely to consume ≥ 5 servings/day compared to younger age groups (Table 6.1). The proportion of respondents consuming ≥ 5 servings/day of fruits and vegetables tended to increase with higher levels of completed education. In 2001, respondents with a post-secondary education were significantly more likely to consume ≥ 5 servings/day compared to those who had not completed high school; however, this difference was not statistically significant in 2007 (Table 6.2).

Figure 6.2: Fruit & Vegetable Consumption (≥ 5 /day) Among Males and Females
Adults 18+, Middlesex-London, 2001-2007



Original Data Source: MLHU RRFSS 2001, 2007

Table 6.1. Fruit and Vegetable Consumption across Age Groups
Adults 18+, Middlesex-London, 2001 and 2007

Age Group	Percent Consuming ≥ 5 Servings/day ($\pm 95\%$ CI)	
	2001	2007
18-24	25.3 $\pm 6.5\%$	34.0 $\pm 9.6\%$
25-34	28.0 $\pm 4.6\%$	30.9 $\pm 4.6\%$
35-64	31.6 $\pm 5.2\%$	32.6 $\pm 4.2\%$
65+	39.6 $\pm 9.1\%$	50.0 $\pm 7.3\%$

Original Data Source: MLHU RRFSS 2001, 2007

Table 6.2. Fruit and Vegetable Consumption by Education
Adults 18+, Middlesex-London, 2001 and 2007

Highest Level of Completed Education	Percent Consuming ≥ 5 Servings/day ($\pm 95\%$ CI)	
	2001	2007
Less than high school	17.9 $\pm 7.7\%$	26.9 $\pm 8.4\%$
High school	27.4 $\pm 4.6\%$	33.7 $\pm 4.5\%$
Post-secondary	34.3 $\pm 4.1\%$	37.3 $\pm 3.8\%$

Original Data Source: MLHU RRFSS 2001, 2007

Eat Smart! Program

In 2007 the Eat Smart! Restaurant Program was discontinued in Middlesex-London due to limitations in local resources required to promote and maintain the program. Efforts were re-focused on promoting Eat Smart! Cafeterias in both schools and workplaces RRFSS tracking of local awareness and use of the Eat Smart! Designated restaurants was discontinued in 2004.

Data and Methods

Data on fruit and vegetable consumption was from RRFSS between January and April and July and December, 2001 (waves 1 to 4; 7 to 12), 2002, January to August 2004 (waves 37 to 48), 2005 and 2007 (waves 49 to 60; 73-84). For each year of data collection, the unweighted samples of respondents from Middlesex-London are shown in Table 6.3. Those that did not respond to any individual question were excluded prior to calculating proportions, provided the non-response category represented <5% of total respondents. The sample was weighted to account for each individual's probability of being selected within households of different sizes. Bar charts and line graphs include error bars illustrating 95% confidence intervals. Detailed tables for Chapter 6 are located in Appendix C6.

Table 6.3. Unweighted Sample Size for RRFSS Data on Fruit and Vegetable Consumption
Adults 18+, Middlesex-London, 2001-2004

Year	2001*	2002	2004**	2005	2007
Sample size	959	1168	781	1180	1153

*January to April; July to December.

**January to August.

Original Data Source: MLHU RRFSS 2001-2004

Definitions

Fruit and Vegetable Consumption:

The following questions were used to estimate the number of daily servings of fruits and vegetables.

Question: "How many times per day, week, or month do you drink 100% fruit juice such as orange, grapefruit or tomato juice?"

Question: "Not counting juice, how many times per day, week, or month do you eat fruit?"

Question: "How many times a day, week, or month do you eat a green salad?"

Question: "Not including French fries, fried potatoes or potato chips, how many times per day, week or month do you eat potatoes?"

Question: "What about carrots? How many times per day, week or month do you eat carrots?"

Question: "Not counting carrots, potatoes or green salad, how many times per day, week or month do you eat other vegetables?"

Highest level of Completed Education

Question: "What is the highest level of education you have obtained?"

- Less than high school: included those respondents who had not obtained a high school diploma.
- High school: included those respondents who had obtained a high school diploma or had completed some post-secondary education.
- Post secondary: included those respondents who had obtained a college diploma or university degree.

Chapter 7: Healthy Weights

Key Findings

- Six out of every 10 adults (aged 20 to 64 years) in Middlesex-London were overweight or obese in 2007. This represents an increase of 20% since 2001.
- The proportion of adults (20 to 64 yrs) who were overweight (BMI: 25-29) has risen by 15% from 2001 to 2007 (36.1% to 41.6 %, respectively); the proportion who were obese (BMI: 30+) has risen more rapidly by 32% from 14.2% in 2001 to 18.7% in 2007.
- Although males were more likely to be overweight or obese than females, the rate of increase from 2001 to 2007 was greater for females than males.
- The proportion who were overweight or obese tended to increase with age.
- Although middle-age women (ages 35 to 64) were more likely to be overweight or obese than younger women, the proportion of younger women ages 20 to 34 who were overweight or obese rose at a significantly more rapid rate of 79% between 2001 and 2007, from 19.6% to 35.1%, respectively.
- Adults (ages 20 to 64) without a high school diploma were more likely to be overweight or obese compared to post-secondary school graduates. This gap in overweight/obesity rates between the higher and less well educated populations appears to have grown from 2001 to 2007.

Progress on Meeting Public Health Objectives

Local Objective: Fewer than 30% of adult males will be overweight (BMI >27) by March 2003.

Much work needed*

The objective has not been met. The proportion of men ages 20 to 64 who are overweight or obese (BMI \geq 25) has increased from 64.7% (+4.3%) in 2001 to 72.0% (+4.3%) in 2007. This trend needs to be reversed and the proportion decreased by 58% to meet the above target.

Local Objective: Fewer than 23% of adult females will be overweight (BMI >27) by March 2003.

Much work needed*

The objective has not been met. The proportion of women ages 20 to 64 who are overweight or obese (BMI >25) has increased by 44% from 34.6% (+4.5%) in 2001 to 49.9% (+4.5%) in 2007. This trend needs to be reversed and the proportion decreased by 54% to meet the above target.

Provincial Objective: Slow the decrease in the proportion of adults ages 20-64 with healthy weight status by the year 2010.

Much work needed

The objective has not been met. The proportion of adults with a healthy weight (BMI 18.5-24.9) declined from 47.4% (+3.2%) in 2007 to 38.1% (+3.2%) in 2001, and more rapidly during the latter half of that time period.

*Note: Health Canada now defines overweight as BMI \geq 25 rather than >27 (7).

Background

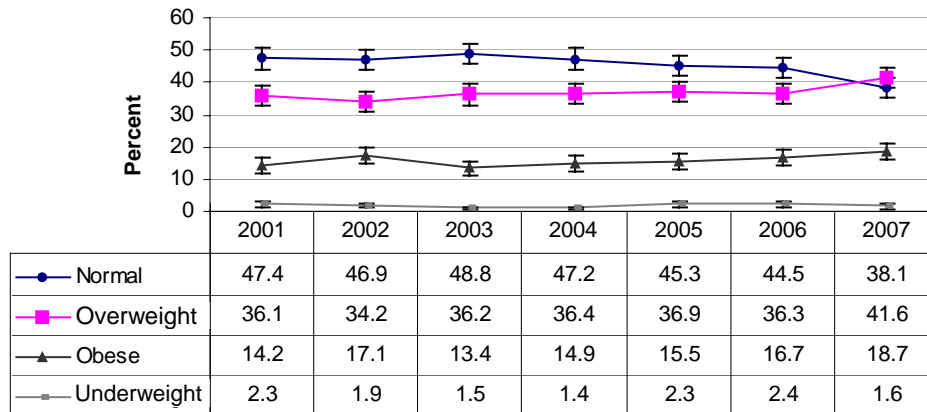
Excess body weight is associated with increased risk of heart disease, in addition to other health problems^{1,21}. The Chief Medical Officer of Health Report in 2004 warned that an epidemic of overweight and obesity was threatening Ontario's health²¹. In the United States, poor diet and physical inactivity may soon overtake smoking as the leading cause of death²⁷. Some have predicted that the current generation of children may be the first to have poorer health outcomes and a shorter lifespan than their parents²⁸. Factors that may contribute to the obesity epidemic include obesogenic environments that discourage walking and biking through lack of sidewalks/bikepaths and require people to drive long distances to work^{21,29}.

The Healthy Living Partnership Middlesex-London has a mandate to reduce the proportion of overweight male and non-pregnant female adults (20 to 64) to 30% and 23%, respectively⁶. Rates of overweight and obesity were measured using the Body Mass Index (BMI). For more information, see the Data and Methods section for this chapter.

Results: Body Mass Index

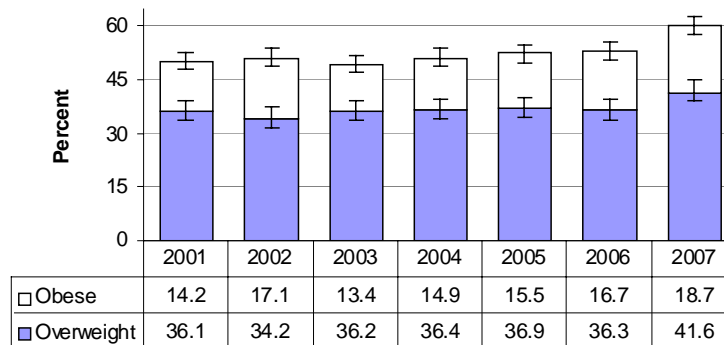
The proportion of respondents with a normal BMI declined significantly from 47.4% ($\pm 3.2\%$) in 2001 to 38.1% ($\pm 3.2\%$) in 2007 (Figure 7.1). The proportion of respondents who were overweight or obese increased significantly from 50.2% ($\pm 3.2\%$) in 2001 to 60.3% ($\pm 3.3\%$) in 2007 (Figure 7.2).

Figure 7.1: Body Mass Index Among Females, 20-64 years
Middlesex-London, 2001-2007



Original Data Source: MLHU RRFSS 2001-2007

Figure 7.2: Overweight or Obese BMI Among Females aged 20-64
Middlesex-London, 2001-2007



Original Data Source: MLHU RRFSS 2001-2007

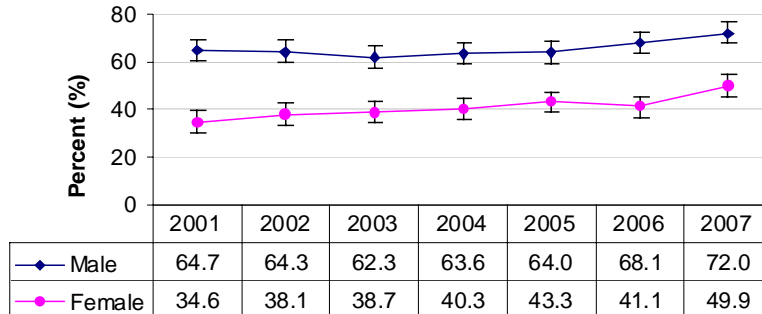
Sociodemographics

Although significantly more males than females had an overweight or obese BMI across all years, this difference narrowed from 30.1% in 2001 to 22.1% in 2007 (Figure 7.3). A significant increase in the proportion of respondents with an overweight or obese BMI was observed among females, but not males. The proportion of females who were overweight or obese increased from 34.6% ($\pm 4.5\%$) in 2001 to 49.9% ($\pm 4.5\%$) in 2007.

The likelihood of being overweight or obese increased with age. In 2007, the proportion of respondents with an overweight or obese BMI among those aged 20 to 24 was 39.7% ($\pm 12.6\%$); 57.3% ($\pm 5.0\%$) among those aged 25 to 44, and 65.3% ($\pm 4.3\%$) among those aged 45 to 64 (Figure 7.4). Compared to respondents aged 25 and older, respondents aged 18 to 24 were significantly less likely to be overweight or obese in all years except 2007.

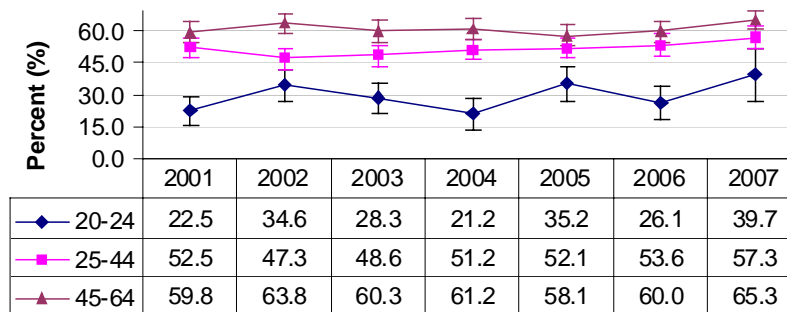
Between 2001 and 2007, the proportion of respondents with an overweight or obese BMI increased significantly among females aged 35 to 64, from 42.6% ($\pm 5.8\%$) to 54.8% ($\pm 5.1\%$) (Figure 7.5).

Figure 7.3: Overweight/Obese BMI by Sex
Adults 20-64, Middlesex-London, 2001-2007



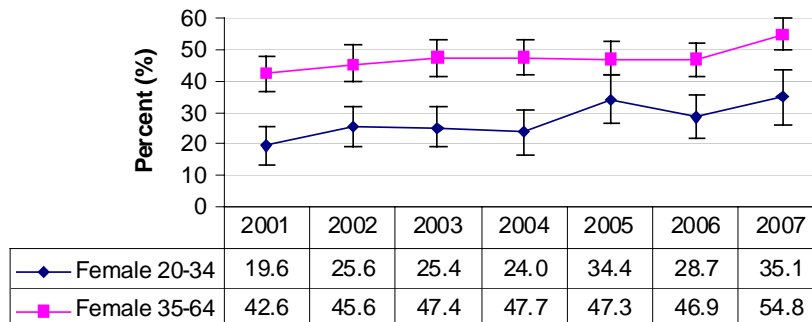
Original Data Source: MLHU RRFSS 2001-2007

Figure 7.4: Overweight/Obese BMI Among Adults aged 20-64
Middlesex-London, 2001-2007



Original Data Source: MLHU RRFSS 2001-2007

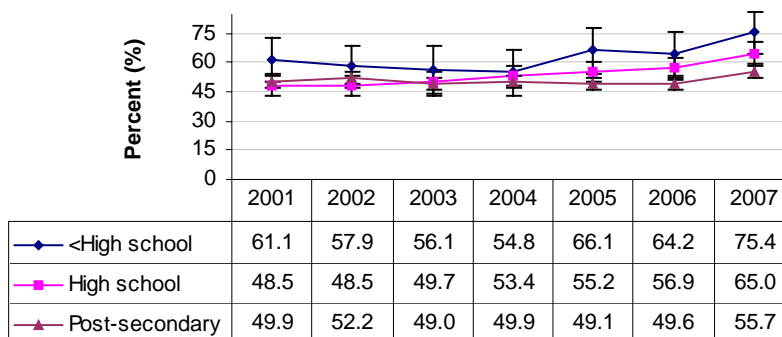
Figure 7.5: Overweight/Obese BMI Among Females Aged 20-64
Middlesex-London, 2001-2007



Original Data Source: MLHU RRFSS 2001-2007

The proportion of respondents with a post-secondary education who were overweight/obese was lower compared to those with less than a high school education (Figure 7.6). This difference was 8.0% in 2001 and it increased to 19.7% in 2007. In 2007, the proportion of overweight/obese post-secondary graduates (55.7% $\pm 4.3\%$) was significantly lower than the proportion among those with less than a high school education (75.4% $\pm 10.8\%$).

Figure 7.6: Overweight/Obese BMI by Highest Level of Completed Education
Non-Pregnant Adults 20-64, Middlesex-London, 2001-2007



Original Data Source: MLHU RRFSS 2001-2007

Data and Methods

Data on height and weight were from RRFSS 2001 to 2007 (waves 1 to 84). For each year of data collection, the unweighted sample of respondents from Middlesex-London is shown in Table 7.1. Those that did not respond to any individual question were excluded prior to calculating proportions, provided the non-response category represented <5% of total respondents. The sample was weighted to account for each individual's probability of being selected within households of different sizes. Bar charts and line graphs include error bars illustrating 95% confidence intervals. Detailed tables for Chapter 7 are located in Appendix C7.

Table 7.1. Unweighted Sample Size for RRFSS Data on Height and Weight
Non-pregnant Adults Age 18-64, Middlesex-London, 2001-2007

Year	2001	2002	2003	2004	2005	2006	2007
Sample size	1125	1138	1119	1112	1118	1147	1151

Original Data Source: MLHU RRFSS 2001-2007

Definitions

The Body Mass Index (BMI) is the most practical indicator of weight-related health risk for adult populations. It is not considered a valid measurement, however, for children, pregnant or lactating women and very muscular persons like athletes. Its validity is also questionable regarding the elderly. BMI is therefore calculated for those between the ages of 18 to 64 and excludes pregnant women. Those less than three feet (0.914 metres) tall or greater than 6 feet 11 inches (2.108 metres) are also excluded. It is calculated by dividing one's body weight in kilograms by the square of one's height in meters (kg/m^2).

Body Mass Index ³⁰	Weight Category
<18.5 kg/m^2	Underweight
18.5-24.9 kg/m^2	Normal
25.0-29.9 kg/m^2	Overweight
≥ 30.0 kg/m^2	Obese

Highest level of Completed Education

Question: "What is the highest level of education you have obtained?"

- Less than high school: included those respondents who had not obtained a high school diploma.
- High school: included those respondents who had obtained a high school diploma or had completed some post-secondary education.
- Post secondary: included those respondents who had obtained a college diploma or university degree.

Chapter 8: Summary of Progress Towards Meeting Healthy Living Objectives

This community health status report was undertaken by the Middlesex-London Health Unit, Research, Education, Evaluation and Development (REED) Services, for the Healthy Living Partnership Middlesex-London to measure the impact on population level changes in knowledge and behaviours related to heart disease in the Middlesex-London area. The Healthy Living Partnership Middlesex-London is a provincial initiative funded by the Ontario Heart Health Program (OHHP), Ministry of Health Promotion.

The following chart is a summary of trends over time and progress towards meeting the Healthy Living objectives referred to throughout this report. Definitions to assess progress and their corresponding symbols are provided in the legend below.

Healthy Living Objective	Trend Over Time		Objective Met?	Notes	
	Evidence	Meaning			
Cardiovascular Risk Factor Awareness					
Increased awareness and knowledge of risk factors for heart disease among residents by March 2003.	Overall		☺	☒	
	Smoking for ages 25-44: 2001 2006 50.7% 34.9%	↓ by 32%	☹	☒	
	Exercise for ages 65+: 2001 2006 19.3% 34.4%	↑ by 44%	☺	✓	
Adult Smoking					
Fewer than 31% of males over 15 will be smokers by March 2003.	2001 2007 27.4% 20.6%	↓ by 25%	☺	✓ 2001	Data is for persons ages 18+
Fewer than 23% percent of females over 15 will be smokers by March 2003.	2001 2007 21.7% 19.1%	↓ by 12% Not S. S.	☺	✓ 2001	Data is for persons ages 18+
Reduce the proportion of adults who smoke daily to 15% by the year 2005.*	2001 2007 19.9% 16.1%	↓ by 19% Not S. S.	☺	→	Need to decrease by an additional 7% to reach target.
Youth Smoking					
Fewer than 16% of youth (12-19) will be smokers by March 2003.	15.9 ±6.3% in 2003	?	?	?	No reportable data exists since 2003. 2003 data considered unstable. Possibility that target was met in 2003.
Reduce the proportion of 12-19 year olds who smoke daily to 10% to the year 2005.*	10.1 ±5.4% in 2003	?	?	?	No reportable data exists since 2003. 2003 data considered unstable. Unknown whether target was met in 2005..
Smoke-free Homes					
Increase the proportion of smoke-free homes by the year 2010.*	2001 2007 55.4% 80.1%	↑ by 45%	☺	✓	
Physical Activity					
At least 53% of males over 15 will exercise regularly by March 2003.	2004 2007 64.9% 64.8%	↓ by 0.2% Not S.S.	☺	✓ 2004	
At least 48% of females over 15 will exercise regularly by March 2003.	2004 2007 56.4% 54.3%	↓ by 4% Not S.S.	☺	✓ 2004	
At least 59% of youth will participate in daily physical activity by March 2003.	2001 2007 60.9% 68.4%	↑ by 12% Not S.S.	☺	✓ 2001	Data is based on physical activity during leisure time only.
Increased number of residents aware of area walking trails and bicycle paths by March 2003.	2001 2008 80.61% 87.9%	↑ by 9%	☺	✓	
Healthy Eating					
Increase to 75%, the proportion of the population age four and older consuming 5+ servings of vegetables and fruits daily by the year 2010.*	2001 2007 30.2% 35.1%	↑ by 17% Not S.S.	☺	☒	Data is for adults ages 18+. Need a further increase of 113% to reach target.
Healthy Weights					
Fewer than 30% of adult males will be overweight by March 2003.	2001 2007 64.7% 72.0%	↑ by 11% Not S.S.	☹	☒	Need to reverse trend and decrease proportion by 58% to reach target.
Fewer than 23% of adult females will be overweight by March 2003.	2001 2007 34.6% 49.9%	↑ by 44%	☹	☒	Need to reverse trend and decrease proportion by 54% to reach target.
Slow the decrease in the proportion of adults ages 20-64 with healthy weight status by the year 2010.*	2001 2007 47.4% 38.1%	↓ by 20%	☹	☒	Need to reverse trend.

* Objectives from the Mandatory Health Program and Services Guidelines, Ontario Ministry of Health, 1997.

Legend:

- ☺ **Progress:** evidence shows that the local prevalence of behaviour/awareness **has improved** during the specified time period
- ☺ **Possible progress:** evidence shows that the local prevalence of behaviour/awareness **may have improved** during the specified time period; sample size was too small, however, to determine if this change was meaningful or due solely to random variation.
- ☺ **No significant change:** evidence shows that the local prevalence of behaviour/awareness **has neither substantially improved nor gotten worse** during the specified time period.
- ☹ **Possibly getting worse:** evidence shows that the local prevalence of behaviour/awareness **may have gotten worse** during the specified time period; sample size was too small, however, to determine if this change was meaningful or due solely to random variation.
- ☹ **Getting worse:** evidence shows that the local prevalence of behaviour/awareness **has gotten worse** during the specified time period.
- ✓ **Objective has been met:** earliest year objective was met based on available evidence is also indicated.
- **Objective has not been met yet but progress is evident** based on available evidence.
- ☒ **Objective has not been met yet, much work needed** based on available evidence.
- ? Not able to assess
- Not S. S. means not statistically significant

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Appendix A. Data Source Descriptions

Rapid Risk Factor Surveillance System (RRFSS)

Data sources for this report were primarily from the Rapid Risk Factor Surveillance System (RRFSS), which was conducted for the Middlesex-London Health Unit (MLHU) by the Institute of Social Research, York University. Data were collected in a series of waves of monthly telephone surveys. Households were selected randomly from all households with telephones in London & Middlesex and respondents 18 years and older were systematically selected from each household. Once an individual was identified as the person with the next birthday in the household, every effort was made to complete the interview with the appropriate respondent. Although on average 5 calls were made to a single household in order to complete the interview with the designated respondents in this survey, up to 14 call attempts was standard practice.

Canadian Tobacco Use Monitoring Survey (CTUMS)

Data on youth smoking rates in Ontario were obtained from the Youth Smoking Survey collected as part of the Canadian Tobacco Use Monitoring Survey (CTUMS). CTUMS was initiated in 1999 to provide Health Canada with reliable data on tobacco use. The primary objective is to track changes in smoking status, particularly among those aged 15-24, who are most at risk for taking up smoking. Statistics Canada conducted computer-assisted interviews by telephone between February and December, annually. Only direct reports (i.e., not third party) with selected persons were accepted. To allow provincial comparisons of approximately equal reliability, the overall sample size for the survey was divided equally across all 10 Canadian provinces (residents of Yukon, Nunavut, and the Northwest Territories, full-time residents of institutions were excluded). Every telephone number called by Statistics Canada was fully accounted for in order to properly weight the data to represent the Canadian population.

Canadian Community Health Survey (CCHS)

Data on youth smoking in the Middlesex-London area was obtained from the Canadian Community Health Survey (CCHS) in 2000/01, 2003, and 2005. The survey collected information by telephone from individuals 12 and older in the Middlesex-London area (residents of First Nations reserves, Canadian Forces Bases, and some remote areas were excluded)

Appendix B. Analysis Notes

Given that RRFSS uses random household surveys, weights were applied to account for each respondent's probability of being selected within households of different sizes. Designated respondents who refused to respond to individual questions within each of the sections were excluded prior to calculating proportions provided the refusal category represented less than 5% of the total respondents. Non-responders for descriptive or demographic variables were excluded in each individual table prior to calculation of percentages. However, non-responses to individual questions were included in the calculation of the proportion if non-response was larger than 5%. Results were considered unstable and subject to suppression if any of the following conditions existed: denominator of a rate <30, numerator <5, or coefficient of variation >33.3.

Confidence intervals

Confidence intervals are provided to indicate the precision of an estimate. The narrower the confidence interval is, the more precise is the estimate; conversely, the wider the interval, the less precise the estimate. Ninety-five percent confidence intervals represent the range within which the true proportion should occur 95 times out of 100. In other words, we can be 95% confident that the true proportion lies within the lower and upper limits of the confidence interval. The difference between two proportions is said to be 'statistically significant' and not likely due to chance alone when their respective confidence intervals do not overlap.

Representativeness of RRFSS sample

The representativeness of a survey sample refers to how similar the sample is to the population it is meant to represent. If a demographic group is over or under-represented in a sample, then the overall prevalence estimates of related variables (eg smoking status) may be biased. Stratifying on these demographic variables provides information with regards to the direction of bias. For example, if current smoking status is more likely among participants with lower levels of education, and the sample is underrepresented with respect to this demographic group then the overall estimate of smoking prevalence will be underestimated.

One method of assessing representativeness is to compare the distribution of demographic variables to available Canada Census figures for the same geographic region. Compared to Census figures, the 2006 RRFSS sample slightly over-represented females and adults between the ages of 45 and 64, and slightly under-represented males and those with a high school diploma or less as the highest level of education completed. The 2001 RRFSS sample over-represented adults between the ages of 20 to 24 and under-represented adults ages 65 and older as well as those with a high school diploma or less education.

Appendix C1. Data Tables: Heart Disease Risk Factors

Heart Disease Risk Factors

Source: RRFSS 2001, 2002, May-Dec 2006, Waves 1-24, 65-72

C1 A: AWARENESS OF SMOKING AS RISK FACTOR FOR HEART DISEASE

Sex		Smoking			Not Chosen			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	Male	269	53.0	4.3	239	47.0	4.3	508
	Female	257	46.2	4.1	299	53.8	4.1	556
	Total	526	49.4	3.0	538	50.6	3.0	1064
2002	Male	234	44.7	4.3	289	55.3	4.3	523
	Female	271	44.0	3.9	345	56.0	3.9	616
	Total	505	44.3	2.9	634	55.7	2.9	1139
2006	Male	110	36.7	5.5	190	63.3	5.5	300
	Female	153	36.5	4.6	266	63.5	4.6	419
	Total	263	36.6	3.5	456	63.4	3.5	719

Age Group		Smoking			Not Chosen			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	18-24	77	48.7	7.8	81	51.3	7.8	158
	25-44	210	50.7	4.8	204	49.3	4.8	414
	45-64	182	52.6	5.3	164	47.4	5.3	346
	65+	52	38.5	8.2	83	61.5	8.2	135
	Total	521	49.5	3.0	532	50.5	3.0	1053
2002	18-24	89	43.2	6.8	117	56.8	6.8	206
	25-44	198	47.7	4.8	217	52.3	4.8	415
	45-64	163	46.3	5.2	189	53.7	5.2	352
	65+	47	32.0	7.5	100	68.0	7.5	147
	Total	497	44.4	2.9	623	55.6	2.9	1120
2006	18-24	37	50.0	11.4	37	50.0	11.4	74
	25-44	83	34.9	6.1	155	65.1	6.1	238
	45-64	105	37.8	5.7	173	62.2	5.7	278
	65+	36	29.5	8.1	86	70.5	8.1	122
	Total	261	36.7	3.5	451	63.3	3.5	712

Sex By Age								
		Smoking			Not Chosen			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	Male 18-34	83	50.0	7.6	83	50.0	7.6	166
	Male 35+	184	54.4	5.3	154	45.6	5.3	338
	Female 18-34	79	48.5	7.7	84	51.5	7.7	163
	Female 35+	174	45.2	5.0	211	54.8	5.0	385
	Total	520	49.4	3.0	532	50.6	3.0	1052
2002	Male 18-34	80	41.7	7.0	112	58.3	7.0	192
	Male 35+	153	46.6	5.4	175	53.4	5.4	328
	Female 18-34	96	48.0	6.9	104	52.0	6.9	200
	Female 35+	168	42.1	4.8	231	57.9	4.8	399
	Total	497	44.4	2.9	622	55.6	2.9	1119
2006	Male 18-34	30	42.9	11.6	40	57.1	11.6	70
	Male 35+	80	35.2	6.2	147	64.8	6.2	227
	Female 18-34	34	31.2	8.7	75	68.8	8.7	109
	Female 35+	117	38.4	5.5	188	61.6	5.5	305
	Total	261	36.7	3.5	450	63.3	3.5	711

Education								
		Smoking			Not Chosen			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	<High school	51	45.9	9.3	60	54.1	9.3	111
	High school	199	50.3	4.9	197	49.7	4.9	396
	Post secondary	273	49.5	4.2	279	50.5	4.2	552
	Total	523	49.4	3.0	536	50.6	3.0	1059
2002	<High school	56	45.2	8.8	68	54.8	8.8	124
	High school	189	41.7	4.5	264	58.3	4.5	453
	Post secondary	258	46.4	4.1	298	53.6	4.1	556
	Total	503	44.4	2.9	630	55.6	2.9	1133
2006	<High school	26	34.2	10.7	50	65.8	10.7	76
	High school	78	33.2	6.0	157	66.8	6.0	235
	Post secondary	159	39.2	4.7	247	60.8	4.7	406
	Total	263	36.7	3.5	454	63.3	3.5	717

C1 B: AWARENESS OF UNHEALTHY EATING AS A RISK FACTOR FOR HEART DISEASE

		Unhealthy Eating			Not Chosen			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	Male	310	62.9	4.3	183	37.1	4.3	493
	Female	329	60.7	4.1	213	39.3	4.1	542
	Total	639	61.7	3.0	396	38.3	3.0	1035
2002	Male	300	59.8	4.3	202	40.2	4.3	502
	Female	365	61.3	3.9	230	38.7	3.9	595
	Total	665	60.6	2.9	432	39.4	2.9	1097
2006	Male	180	61.6	5.6	112	38.4	5.6	292
	Female	258	62.2	4.7	157	37.8	4.7	415
	Total	438	62.0	3.6	269	38.0	3.6	707

		Unhealthy Eating			Not Chosen			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	18-24	89	57.8	7.8	65	42.2	7.8	154
	25-44	265	66.4	4.6	134	33.6	4.6	399
	45-64	221	65.4	5.1	117	34.6	5.1	338
	65+	56	42.7	8.5	75	57.3	8.5	131
	Total	631	61.7	3.0	391	38.3	3.0	1022
2002	18-24	128	63.4	6.6	74	36.6	6.6	202
	25-44	266	67.0	4.6	131	33.0	4.6	397
	45-64	198	59.3	5.3	136	40.7	5.3	334
	65+	62	43.1	8.1	82	56.9	8.1	144
	Total	654	60.7	2.9	423	39.3	2.9	1077
2006	18-24	44	59.5	11.2	30	40.5	11.2	74
	25-44	155	65.7	6.1	81	34.3	6.1	236
	45-64	177	65.6	5.7	93	34.4	5.7	270
	65+	58	47.9	8.9	63	52.1	8.9	121
	Total	434	61.9	3.6	267	38.1	3.6	701

Sex by Age								
		Unhealthy Eating			Not Chosen			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	Male 18-34	109	67.7	7.2	52	32.3	7.2	161
	Male 35+	197	60.2	5.3	130	39.8	5.3	327
	Female 18-34	98	60.9	7.5	63	39.1	7.5	161
	Female 35+	226	60.6	5.0	147	39.4	5.0	373
	Total	630	61.6	3.0	392	38.4	3.0	1022
2002	Male 18-34	122	65.9	6.8	63	34.1	6.8	185
	Male 35+	177	56.4	5.5	137	43.6	5.5	314
	Female 18-34	128	65.3	6.7	68	34.7	6.7	196
	Female 35+	228	59.7	4.9	154	40.3	4.9	382
	Total	655	60.8	2.9	422	39.2	2.9	1077
2006	Male 18-34	46	67.6	11.1	22	32.4	11.1	68
	Male 35+	132	59.5	6.5	90	40.5	6.5	222
	Female 18-34	75	69.4	8.7	33	30.6	8.7	108
	Female 35+	180	59.8	5.5	121	40.2	5.5	301
	Total	433	61.9	3.6	266	38.1	3.6	699

Education								
		Unhealthy Eating			Not Chosen			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	<High school	39	36.1	9.1	69	63.9	9.1	108
	High school	225	58.0	4.9	163	42.0	4.9	388
	Post secondary	372	69.7	3.9	162	30.3	3.9	534
	Total	636	61.7	3.0	394	38.3	3.0	1030
2002	<High school	50	42.4	8.9	68	57.6	8.9	118
	High school	264	60.0	4.6	176	40.0	4.6	440
	Post secondary	350	65.7	4.0	183	34.3	4.0	533
	Total	664	60.9	2.9	427	39.1	2.9	1091
2006	<High school	43	58.1	11.2	31	41.9	11.2	74
	High school	140	60.6	6.3	91	39.4	6.3	231
	Post secondary	253	63.6	4.7	145	36.4	4.7	398
	Total	436	62.0	3.6	267	38.0	3.6	703

C1 C: AWARENESS OF LACK OF EXERCISE AS A RISK FACTOR FOR HEART DISEASE

Sex		Lack of Exercise			Not Chosen			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	Male	171	33.7	4.1	337	66.3	4.1	508
	Female	185	33.3	3.9	371	66.7	3.9	556
	Total	356	33.5	2.8	708	66.5	2.8	1064
2002	Male	197	37.6	4.1	327	62.4	4.1	524
	Female	266	43.1	3.9	351	56.9	3.9	617
	Total	463	40.6	2.8	678	59.4	2.8	1141
2006	Male	105	35.0	5.4	195	65.0	5.4	300
	Female	142	33.9	4.5	277	66.1	4.5	419
	Total	247	34.4	3.5	472	65.6	3.5	719

Age Group		Lack of Exercise			Not Chosen			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	18-24	55	34.8	7.4	103	65.2	7.4	158
	25-44	138	33.4	4.5	275	66.6	4.5	413
	45-64	132	38.2	5.1	214	61.8	5.1	346
	65+	26	19.3	6.7	109	80.7	6.7	135
	Total	351	33.4	2.8	701	66.6	2.8	1052
2002	18-24	75	36.6	6.6	130	63.4	6.6	205
	25-44	184	44.3	4.8	231	55.7	4.8	415
	45-64	144	40.8	5.1	209	59.2	5.1	353
	65+	47	32.0	7.5	100	68.0	7.5	147
	Total	450	40.2	2.9	670	59.8	2.9	1120
2006	18-24	22	29.7	10.4	52	70.3	10.4	74
	25-44	98	41.2	6.3	140	58.8	6.3	238
	45-64	85	30.6	5.4	193	69.4	5.4	278
	65+	42	34.4	8.4	80	65.6	8.4	122
	Total	247	34.7	3.5	465	65.3	3.5	712

Sex by Age								
		Lack of Exercise			Not Chosen			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	Male 18-34	71	42.5	7.5	96	57.5	7.5	167
	Male 35+	97	28.8	4.8	240	71.2	4.8	337
	Female 18-34	50	30.9	7.1	112	69.1	7.1	162
	Female 35+	134	34.8	4.8	251	65.2	4.8	385
	Total	352	33.5	2.9	699	66.5	2.9	1051
2002	Male 18-34	67	34.9	6.7	125	65.1	6.7	192
	Male 35+	129	39.3	5.3	199	60.7	5.3	328
	Female 18-34	93	46.3	6.9	108	53.7	6.9	201
	Female 35+	162	40.5	4.8	238	59.5	4.8	400
	Total	451	40.2	2.9	670	59.8	2.9	1121
2006	Male 18-34	28	40.0	11.5	42	60.0	11.5	70
	Male 35+	77	33.8	6.1	151	66.2	6.1	228
	Female 18-34	43	39.4	9.2	66	60.6	9.2	109
	Female 35+	99	32.5	5.3	206	67.5	5.3	305
	Total	247	34.7	3.5	465	65.3	3.5	712

Education								
		Lack of Exercise			Not Chosen			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	<High school	16	14.3	6.5	96	85.7	6.5	112
	High school	126	31.8	4.6	270	68.2	4.6	396
	Post secondary	214	38.8	4.1	338	61.2	4.1	552
	Total	356	33.6	2.8	704	66.4	2.8	1060
2002	<High school	33	26.4	7.7	92	73.6	7.7	125
	High school	160	35.3	4.4	293	64.7	4.4	453
	Post secondary	270	48.5	4.2	287	51.5	4.2	557
	Total	463	40.8	2.9	672	59.2	2.9	1135
2006	<High school	14	18.7	8.8	61	81.3	8.8	75
	High school	79	33.8	6.1	155	66.2	6.1	234
	Post secondary	152	37.5	4.7	253	62.5	4.7	405
	Total	245	34.3	3.5	469	65.7	3.5	714

Appendix C2. Data Tables: Smoking Status Among Adults 18+

Smoking Status Among Adults 18+
Source: RRFSS 2001-2007, Waves 1-84

		Daily	Occasional	Former	Never	Total
2001	Number	240	55	343	566	1204
	Percent	19.9	4.6	28.5	47.0	100.0
	±95% CI	2.3	1.2	2.5	2.8	
2002	Number	197	65	357	585	1204
	Percent	16.4	5.4	29.7	48.6	100.0
	±95% CI	2.1	1.3	2.6	2.8	
2003	Number	188	48	361	633	1230
	Percent	15.3	3.9	29.3	51.5	100.0
	±95% CI	2.0	1.1	2.5	2.8	
2004	Number	188	44	365	603	1200
	Percent	15.7	3.7	30.4	50.3	100.0
	±95% CI	2.1	1.1	2.6	2.8	
2005	Number	200	49	340	631	1220
	Percent	16.4	4.0	27.9	51.7	100.0
	±95% CI	2.1	1.1	2.5	2.8	
2006	Number	155	71	355	621	1202
	Percent	12.9	5.9	29.6	51.7	100.1
	±95% CI	1.9	1.3	2.6	2.8	
2007	Number	192	44	360	597	1193
	Percent	16.1	3.7	30.2	50.0	100.0
	±95% CI	2.1	1.1	2.6	2.8	

C2 A: CURRENT SMOKER (DAILY + OCCASIONAL)

Sex		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	Male	160	27.4	3.6	423	72.6	3.6	583
	Female	135	21.7	3.2	486	78.3	3.2	621
	Total	295	24.5	2.4	909	75.5	2.4	1204
2002	Male	127	22.6	3.5	436	77.4	3.5	563
	Female	135	21.1	3.2	506	78.9	3.2	641
	Total	262	21.8	2.3	942	78.2	2.3	1204
2003	Male	123	22.1	3.5	433	77.9	3.5	556
	Female	114	16.9	2.8	561	83.1	2.8	675
	Total	237	19.3	2.2	994	80.7	2.2	1231
2004	Male	118	21.8	3.5	424	78.2	3.5	542
	Female	114	17.3	2.9	544	82.7	2.9	658
	Total	232	19.3	2.2	968	80.7	2.2	1200
2005	Male	124	23.0	3.6	414	77.0	3.6	538
	Female	126	18.5	2.9	556	81.5	2.9	682
	Total	250	20.5	2.3	970	79.5	2.3	1220
2006	Male	119	22.8	3.6	402	77.2	3.6	521
	Female	107	15.7	2.7	574	84.3	2.7	681
	Total	226	18.8	2.2	976	81.2	2.2	1202
2007	Male	107	20.6	3.5	413	79.4	3.5	520
	Female	129	19.1	3.0	545	80.9	3.0	674
	Total	236	19.8	2.3	958	80.2	2.3	1194

Age Group		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	18-24	65	32.0	6.4	138	68.0	6.4	203
	25-34	56	28.1	6.2	143	71.9	6.2	199
	35-64	159	25.0	3.4	476	75.0	3.4	635
	65+	16	10.4*	4.8	138	89.6	4.8	154
	Total	296	24.9	2.5	895	75.1	2.5	1191
2002	18-24	67	30.3	6.1	154	69.7	6.1	221
	25-34	52	26.5	6.2	144	73.5	6.2	196
	35-64	119	19.6	3.2	488	80.4	3.2	607
	65+	22	13.8	5.4	137	86.2	5.4	159
	Total	260	22.0	2.4	923	78.0	2.4	1183
2003	18-24	48	23.6	5.8	155	76.4	5.8	203
	25-34	49	23.0	5.7	164	77.0	5.7	213
	35-64	127	20.6	3.2	490	79.4	3.2	617
	65+	13	7.2*	3.8	168	92.8	3.8	181
	Total	237	19.5	2.2	977	80.5	2.2	1214
2004	18-24	35	21.1	6.2	131	78.9	6.2	166
	25-34	51	26.2	6.2	144	73.8	6.2	195
	35-64	130	20.4	3.1	506	79.6	3.1	636
	65+	15	8.2*	4.0	168	91.8	4.0	183
	Total	231	19.6	2.3	949	80.4	2.3	1180
2005	18-24	35	19.9	5.9	141	80.1	5.9	176
	25-34	55	28.8	6.4	136	71.2	6.4	191
	35-64	145	21.7	3.1	522	78.3	3.1	667
	65+	11	6.6*	3.8	156	93.4	3.8	167
	Total	246	20.5	2.3	955	79.5	2.3	1201
2006	18-24	37	23.1	6.5	123	76.9	6.5	160
	25-34	43	25.1	6.5	128	74.9	6.5	171
	35-64	128	19.3	3.0	536	80.7	3.0	664
	65+	15	7.8*	3.8	178	92.2	3.8	193
	Total	223	18.8	2.2	965	81.2	2.2	1188
2007	18-24	16	17.0	7.6	78	83.0	7.6	94
	25-34	50	27.9	6.6	129	72.1	6.6	179
	35-64	147	20.9	3.0	557	79.1	3.0	704
	65+	19	9.7*	4.1	177	90.3	4.1	196
	Total	232	19.8	2.3	941	80.2	2.3	1173

* High coefficient of variation; interpret with caution.

Sex By Age								
		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	Male 18-34	65	31.6	6.3	141	68.4	6.3	206
	Male 35+	95	25.7	4.5	275	74.3	4.5	370
	Female 18-34	55	28.2	6.3	140	71.8	6.3	195
	Female 35+	80	19.1	3.8	339	80.9	3.8	419
	Total	295	24.8	2.5	895	75.2	2.5	1190
2002	Male 18-34	59	28.8	6.2	146	71.2	6.2	205
	Male 35+	66	18.8	4.1	286	81.3	4.1	352
	Female 18-34	59	28.0	6.1	152	72.0	6.1	211
	Female 35+	75	18.2	3.7	338	81.8	3.7	413
	Total	259	21.9	2.4	922	78.1	2.4	1181
2003	Male 18-34	46	23.5	5.9	150	76.5	5.9	196
	Male 35+	77	21.7	4.3	278	78.3	4.3	355
	Female 18-34	51	23.2	5.6	169	76.8	5.6	220
	Female 35+	63	14.2	3.3	380	85.8	3.3	443
	Total	237	19.5	2.2	977	80.5	2.2	1214
2004	Male 18-34	44	24.4	6.3	136	75.6	6.3	180
	Male 35+	73	20.9	4.3	277	79.1	4.3	350
	Female 18-34	42	23.2	6.1	139	76.8	6.1	181
	Female 35+	73	15.5	3.3	397	84.5	3.3	470
	Total	232	19.6	2.3	949	80.4	2.3	1181
2005	Male 18-34	46	26.6	6.6	127	73.4	6.6	173
	Male 35+	76	21.1	4.2	285	78.9	4.2	361
	Female 18-34	44	22.6	5.9	151	77.4	5.9	195
	Female 35+	81	17.1	3.4	393	82.9	3.4	474
	Total	247	20.5	2.3	956	79.5	2.3	1203
2006	Male 18-34	46	32.9	7.8	94	67.1	7.8	140
	Male 35+	73	19.4	4.0	303	80.6	4.0	376
	Female 18-34	34	17.8	5.4	157	82.2	5.4	191
	Female 35+	71	14.7	3.2	411	85.3	3.2	482
	Total	224	18.8	2.2	965	81.2	2.2	1189
2007	Male 18-34	39	29.8	7.8	92	70.2	7.8	131
	Male 35+	68	17.7	3.8	317	82.3	3.8	385
	Female 18-34	28	19.6	6.5	115	80.4	6.5	143
	Female 35+	98	19.0	3.4	417	81.0	3.4	515
	Total	233	19.8	2.3	941	80.2	2.3	1174

Education								
		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	<High school	44	33.3	8.0	88	66.7	8.0	132
	High school	132	28.6	4.1	329	71.4	4.1	461
	Post-secondary	119	19.7	3.2	484	80.3	3.2	603
	Total	295	24.7	2.4	901	75.3	2.4	1196
2002	<High school	40	28.6	7.5	100	71.4	7.5	140
	High school	109	22.4	3.7	377	77.6	3.7	486
	Completed post secondary	113	19.8	3.3	457	80.2	3.3	570
	Total	262	21.9	2.3	934	78.1	2.3	1196
2003	<High school	37	28.0	7.7	95	72.0	7.7	132
	High school	98	21.8	3.8	352	78.2	3.8	450
	Completed post secondary	100	15.6	2.8	540	84.4	2.8	640
	Total	235	19.2	2.2	987	80.8	2.2	1222
2004	<High school	42	30.0	7.6	98	70.0	7.6	140
	High school	95	22.0	3.9	337	78.0	3.9	432
	Completed post secondary	92	15.0	2.8	523	85.0	2.8	615
	Total	229	19.3	2.2	958	80.7	2.2	1187
2005	<High school	35	31.3	8.6	77	68.8	8.6	112
	High school	113	24.0	3.9	357	76.0	3.9	470
	Completed post secondary	102	16.2	2.9	527	83.8	2.9	629
	Total	250	20.6	2.3	961	79.4	2.3	1211
2006	<High school	40	31.7	8.1	86	68.3	8.1	126
	High school	89	21.4	3.9	326	78.6	3.9	415
	Completed post secondary	97	14.8	2.7	558	85.2	2.7	655
	Total	226	18.9	2.2	970	81.1	2.2	1196
2007	<High school	32	27.8	8.2	83	72.2	8.2	115
	High school	112	25.5	4.1	327	74.5	4.1	439
	Completed post secondary	92	14.6	2.8	537	85.4	2.8	629
	Total	236	19.9	2.3	947	80.1	2.3	1183

Appendix C3. Data Tables: Youth Smoking Status

Smoking Status Among Youth in the Middlesex-London Area (12-19 years)

Source: CCHS 2000/01; 2003; 2005

Access to Tobacco by Minors

Source: RRFSS 2001, 2005, Sept-Dec 2007 (waves 1 to 12; 49 to 60; 81 to 84)

C3 A: SMOKING STATUS AMONG YOUTH IN THE MIDDLESEX-LONDON AREA (12-19 YEARS)

SMOKING STATUS		Number	Percent	±95% CI	Males		Females	
					Percent	±95% CI	Percent	±95% CI
2000/ 2001	Current smoker	6379	14.2*	6.1	14.3*	7.8	14*	8.2
	Former smoker	7030	15.6*	6.7	F	F	14.5*	7.6
	Never smoked	31220	69.4	8.6	67.4	12.6	71.5	11.3
2003	Current smoker	7284	15.9*	6.3	15.9*	8.8	15.9*	9.6
	Former smoker	5141	11.2	5.4	8.5*	6	F	F
	Never smoked	33307	72.8	7.6	75.6	9.6	70	12.5
2005	Current smoker	F	F	F	F	F	F	F
	Former smoker	F	F	F	F	F	F	F
	Never smoked	38137	82	11.5	77.5	15.5	86.7	16.9

* High coefficient of variation; interpret with caution

C3 B: ASKED BY MINORS TO GIVE CIGARETTES

Smoking Status		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	Non Smoker	88	10.1	2.0	784	89.9	2.0	872
	Current Smoker	104	35.4	5.5	190	64.6	5.5	294
	Total	192	16.5	2.1	974	83.5	2.1	1166
2005	Non Smoker	60	6.3	1.5	890	93.7	1.5	950
	Current Smoker	69	27.7	5.6	180	72.3	5.6	249
	Total	129	10.8	1.8	1070	89.2	1.8	1199
2007	Non Smoker	11	3.3	1.9	326	96.7	1.9	337
	Current Smoker	15	19.7	8.9	61	80.3	8.9	76
	Total	26	6.3	2.3	387	93.7	2.3	413

C3 C: ASKED BY MINORS TO PURCHASE CIGARETTES

SMOKING STATUS

SMOKING STATUS		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	Non Smoker	95	10.9	2.1	779	89.1	2.1	874
	Current Smoker	96	32.7	5.4	198	67.3	5.4	294
	Total	191	16.4	2.1	977	83.6	2.1	1168
2005	Non Smoker	53	5.6	1.5	897	94.4	1.5	950
	Current Smoker	48	19.4	4.9	200	80.6	4.9	248
	Total	101	8.4	1.6	1097	91.6	1.6	1198
2007	Non Smoker	12	3.6	2.0	325	96.4	2.0	337
	Current Smoker	7	9.3	6.6	68	90.7	6.6	75
	Total	19	4.6	2.0	393	95.4	2.0	412

Appendix C4. Data Tables: Smoke-free Homes and Vehicles

Smoke-free Homes and Vehicles Among Adults 18+
Smoke-free Homes Among Adults 18+

Source: RRFSS May-Dec 2001, 2002-7, Waves 5-84
Smoke-free Vehicles Among Adults 18+

Source: RRFSS 2001-3, 2007, Waves 1-36, 73-84

C4 A: RULES ABOUT SMOKING IN HOMES

		Never allowed	Allowed some or all of the time	Allowed except in presence of children	Total
2001	Number	439	312	42	793
	Percent	55.4	39.3	5.3	100.0
	±95% CI	3.5	3.4	1.6	
2002	Number	804	351	47	1202
	Percent	66.9	29.2	3.9	100.0
	±95% CI	2.7	2.6	1.1	
2003	Number	853	321	51	1225
	Percent	69.6	26.2	4.2	100.0
	±95% CI	2.6	2.5	1.1	
2004	Number	847	294	48	1189
	Percent	71.2	24.7	4.0	100.0
	±95% CI	2.6	2.5	1.1	
2005	Number	896	270	46	1212
	Percent	73.9	22.3	3.8	100.0
	±95% CI	2.5	2.3	1.1	
2006	Number	935	218	37	1190
	Percent	78.6	18.3	3.1	100.0
	±95% CI	2.3	2.2	1.0	
2007	Number	947	182	54	1183
	Percent	80.1	15.4	4.6	100.0
	±95% CI	2.3	2.1	1.2	

Sex		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	Male	218	56.0	4.9	171	44.0	4.9	389
	Female	221	54.7	4.9	183	45.3	4.9	404
	Total	439	55.4	3.5	354	44.6	3.5	793
2002	Male	366	65.5	3.9	193	34.5	3.9	559
	Female	437	68.2	3.6	204	31.8	3.6	641
	Total	803	66.9	2.7	397	33.1	2.7	1200
2003	Male	366	65.8	3.9	190	34.2	3.9	556
	Female	487	72.8	3.4	182	27.2	3.4	669
	Total	853	69.6	2.6	372	30.4	2.6	1225
2004	Male	390	72.8	3.8	146	27.2	3.8	536
	Female	457	70.1	3.5	195	29.9	3.5	652
	Total	847	71.3	2.6	341	28.7	2.6	1188
2005	Male	377	71.3	3.9	152	28.7	3.9	529
	Female	519	76.0	3.2	164	24.0	3.2	683
	Total	896	73.9	2.5	316	26.1	2.5	1212
2006	Male	402	77.6	3.6	116	22.4	3.6	518
	Female	533	79.2	3.1	140	20.8	3.1	673
	Total	935	78.5	2.3	256	21.5	2.3	1191
2007	Male	424	82.7	3.3	89	17.3	3.3	513
	Female	523	78.2	3.1	146	21.8	3.1	669
	Total	947	80.1	2.3	235	19.9	2.3	1182

C4 B: COMPLETELY SMOKE-FREE HOMES

Sex		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	Male	218	56.0	4.9	171	44.0	4.9	389
	Female	221	54.7	4.9	183	45.3	4.9	404
	Total	439	55.4	3.5	354	44.6	3.5	793
2002	Male	366	65.5	3.9	193	34.5	3.9	559
	Female	437	68.2	3.6	204	31.8	3.6	641
	Total	803	66.9	2.7	397	33.1	2.7	1200
2003	Male	366	65.8	3.9	190	34.2	3.9	556
	Female	487	72.8	3.4	182	27.2	3.4	669
	Total	853	69.6	2.6	372	30.4	2.6	1225
2004	Male	390	72.8	3.8	146	27.2	3.8	536
	Female	457	70.1	3.5	195	29.9	3.5	652
	Total	847	71.3	2.6	341	28.7	2.6	1188
2005	Male	377	71.3	3.9	152	28.7	3.9	529
	Female	519	76.0	3.2	164	24.0	3.2	683
	Total	896	73.9	2.5	316	26.1	2.5	1212
2006	Male	402	77.6	3.6	116	22.4	3.6	518
	Female	533	79.2	3.1	140	20.8	3.1	673
	Total	935	78.5	2.3	256	21.5	2.3	1191
2007	Male	424	82.7	3.3	89	17.3	3.3	513
	Female	523	78.2	3.1	146	21.8	3.1	669
	Total	947	80.1	2.3	235	19.9	2.3	1182

Age Group		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	18-24	66	50.4	8.6	65	49.6	8.6	131
	25-44	158	53.4	5.7	138	46.6	5.7	296
	45-64	151	58.5	6.0	107	41.5	6.0	258
	65+	54	55.7	9.9	43	44.3	9.9	97
	Total	429	54.9	3.5	353	45.1	3.5	782
2002	18-24	136	62.1	6.4	83	37.9	6.4	219
	25-44	282	65.6	4.5	148	34.4	4.5	430
	45-64	258	70.1	4.7	110	29.9	4.7	368
	65+	109	67.7	7.2	52	32.3	7.2	161
	Total	785	66.6	2.7	393	33.4	2.7	1178
2003	18-24	132	64.7	6.6	72	35.3	6.6	204
	25-44	329	73.4	4.1	119	26.6	4.1	448
	45-64	253	66.8	4.7	126	33.2	4.7	379
	65+	124	70.1	6.7	53	29.9	6.7	177
	Total	838	69.4	2.6	370	30.6	2.6	1208
2004	18-24	102	61.8	7.4	63	38.2	7.4	165
	25-44	323	75.1	4.1	107	24.9	4.1	430
	45-64	275	69.3	4.5	122	30.7	4.5	397
	65+	133	74.7	6.4	45	25.3	6.4	178
	Total	833	71.2	2.6	337	28.8	2.6	1170
2005	18-24	106	60.2	7.2	70	39.8	7.2	176
	25-44	350	77.6	3.8	101	22.4	3.8	451
	45-64	297	73.2	4.3	109	26.8	4.3	406
	65+	128	80.0	6.2	32	20.0	6.2	160
	Total	881	73.8	2.5	312	26.2	2.5	1193
2006	18-24	123	77.8	6.5	35	22.2	6.5	158
	25-44	307	79.5	4.0	79	20.5	4.0	386
	45-64	348	78.2	3.8	97	21.8	3.8	445
	65+	147	77.4	6.0	43	22.6	6.0	190
	Total	925	78.5	2.3	254	21.5	2.3	1179
2007	18-24	67	71.3	9.1	27	28.7	9.1	94
	25-44	333	83.0	3.7	68	17.0	3.7	401
	45-64	375	78.5	3.7	103	21.5	3.7	478
	65+	154	80.6	5.6	37	19.4	5.6	191
	Total	929	79.8	2.3	235	20.2	2.3	1164

SEX by AGE								
		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	Male 18-34	73	54.5	8.4	61	45.5	8.4	134
	Male 35+	140	56.0	6.2	110	44.0	6.2	250
	Female 18-34	57	50.0	9.2	57	50.0	9.2	114
	Female 35+	160	55.9	5.8	126	44.1	5.8	286
	Total	430	54.8	3.5	354	45.2	3.5	784
2002	Male 18-34	118	57.6	6.8	87	42.4	6.8	205
	Male 35+	243	69.6	4.8	106	30.4	4.8	349
	Female 18-34	148	70.5	6.2	62	29.5	6.2	210
	Female 35+	276	66.7	4.5	138	33.3	4.5	414
	Total	785	66.6	2.7	393	33.4	2.7	1178
2003	Male 18-34	118	60.5	6.9	77	39.5	6.9	195
	Male 35+	244	68.5	4.8	112	31.5	4.8	356
	Female 18-34	167	75.9	5.7	53	24.1	5.7	220
	Female 35+	307	70.6	4.3	128	29.4	4.3	435
	Total	836	69.3	2.6	370	30.7	2.6	1206
2004	Male 18-34	102	61.8	7.4	63	38.2	7.4	165
	Male 35+	323	75.1	4.1	107	24.9	4.1	430
	Female 18-34	275	69.3	4.5	122	30.7	4.5	397
	Female 35+	133	74.7	6.4	45	25.3	6.4	178
	Total	833	71.2	2.6	337	28.8	2.6	1170
2005	Male 18-34	103	59.5	7.3	70	40.5	7.3	173
	Male 35+	270	76.9	4.4	81	23.1	4.4	351
	Female 18-34	148	75.9	6.0	47	24.1	6.0	195
	Female 35+	361	76.0	3.8	114	24.0	3.8	475
	Total	882	73.9	2.5	312	26.1	2.5	1194
2006	Male 18-34	106	76.3	7.1	33	23.7	7.1	139
	Male 35+	293	78.1	4.2	82	21.9	4.2	375
	Female 18-34	154	80.6	5.6	37	19.4	5.6	191
	Female 35+	373	78.5	3.7	102	21.5	3.7	475
	Total	926	78.5	2.3	254	21.5	2.3	1180
2007	Male 18-34	102	80.3	6.9	25	19.7	6.9	127
	Male 35+	317	83.2	3.8	64	16.8	3.8	381
	Female 18-34	113	79.0	6.7	30	21.0	6.7	143
	Female 35+	395	77.5	3.6	115	22.5	3.6	510
	Total	927	79.8	2.3	234	20.2	2.3	1161

Education								
		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	<High school	42	46.2	10.2	49	53.8	10.2	91
	High school	158	50.2	5.5	157	49.8	5.5	315
	Completed post secondary	237	62.0	4.9	145	38.0	4.9	382
	Total	437	55.5	3.5	351	44.5	3.5	788
2002	<High school	72	51.1	8.3	69	48.9	8.3	141
	High school	299	61.6	4.3	186	38.4	4.3	485
	Completed post secondary	424	74.9	3.6	142	25.1	3.6	566
	Total	795	66.7	2.7	397	33.3	2.7	1192
2003	<High school	80	62.0	8.4	49	38.0	8.4	129
	High school	280	62.5	4.5	168	37.5	4.5	448
	Completed post secondary	487	76.3	3.3	151	23.7	3.3	638
	Total	847	69.7	2.6	368	30.3	2.6	1215
2004	<High school	80	58.8	8.3	56	41.2	8.3	136
	High school	273	64.2	4.6	152	35.8	4.6	425
	Completed post secondary	485	79.0	3.2	129	21.0	3.2	614
	Total	838	71.3	2.6	337	28.7	2.6	1175
2005	<High school	61	54.5	9.2	51	45.5	9.2	112
	High school	339	72.9	4.0	126	27.1	4.0	465
	Completed post secondary	490	78.3	3.2	136	21.7	3.2	626
	Total	890	74.0	2.5	313	26.0	2.5	1203
2006	<High school	77	61.6	8.5	48	38.4	8.5	125
	High school	309	75.2	4.2	102	24.8	4.2	411
	Completed post secondary	546	84.1	2.8	103	15.9	2.8	649
	Total	932	78.6	2.3	253	21.4	2.3	1185
2007	<High school	82	72.6	8.2	31	27.4	8.2	113
	High school	320	73.2	4.2	117	26.8	4.2	437
	Completed post secondary	536	86.0	2.7	87	14.0	2.7	623
	Total	938	80.0	2.3	235	20.0	2.3	1173

		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	Non-smoker	399	66.2	3.8	204	33.8	3.8	603
	Current smoker	40	21.3	5.9	148	78.7	5.9	188
	Total	439	55.5	3.5	352	44.5	3.5	791
2002	Non-smoker	713	76.2	2.7	223	23.8	2.7	936
	Current smoker	88	33.7	5.7	173	66.3	5.7	261
	Total	801	66.9	2.7	396	33.1	2.7	1197
2003	Non-smoker	766	77.8	2.6	218	22.2	2.6	984
	Current smoker	86	36.4	6.1	150	63.6	6.1	236
	Total	852	69.8	2.6	368	30.2	2.6	1220
2004	Non-smoker	765	80.0	2.5	191	20.0	2.5	956
	Current smoker	79	34.5	6.2	150	65.5	6.2	229
	Total	844	71.2	2.6	341	28.8	2.6	1185
2005	Non-smoker	764	79.8	2.5	193	20.2	2.5	957
	Current smoker	127	51.0	6.2	122	49.0	6.2	249
	Total	891	73.9	2.5	315	26.1	2.5	1206
2006	Non-smoker	820	85.0	2.3	145	15.0	2.3	965
	Current smoker	114	50.9	6.5	110	49.1	6.5	224
	Total	934	78.6	2.3	255	21.4	2.3	1189
2007	Non-smoker	830	87.7	2.1	116	12.3*	2.1	946
	Current smoker	114	48.7	6.4	120	51.3	6.4	234
	Total	944	80.0	2.3	236	20.0	2.3	1180

* High coefficient of variation; interpret with caution.

C4 C: RULES ABOUT SMOKING IN VEHICLES

		Never allowed	Allowed some or all of the time	Allowed except in presence of children	Total
2001	Number	792	258	97	1147
	Percent	69.0	22.5	8.5	100.0
	±95% CI	2.7	2.4	1.6	
2002	Number	844	221	82	1147
	Percent	73.6	19.3	7.1	100.0
	±95% CI	2.6	2.3	1.5	
2003	Number	880	204	98	1182
	Percent	74.5	17.3	8.3	100.0
	±95% CI	2.5	2.2	1.6	
2007	Number	925	128	86	1139
	Percent	81.2	11.2	7.6	100.0
	±95% CI	2.3	1.8	1.5	

C4 D: COMPLETELY SMOKE-FREE VEHICLES

Sex		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	Male	355	65.9	4.0	184	34.1	4.0	539
	Female	437	71.9	3.6	171	28.1	3.6	608
	Total	792	69.0	2.7	355	31.0	2.7	1147
2002	Male	368	71.2	3.9	149	28.8	3.9	517
	Female	476	75.6	3.4	154	24.4	3.4	630
	Total	844	73.6	2.6	303	26.4	2.6	1147
2003	Male	370	70.3	3.9	156	29.7	3.9	526
	Female	510	77.7	3.2	146	22.3	3.2	656
	Total	880	74.5	2.5	302	25.5	2.5	1182
2007	Male	380	79.5	3.6	98	20.5	3.6	478
	Female	545	82.5	2.9	116	17.5	2.9	661
	Total	925	81.2	2.3	214	18.8	2.3	1139

Age-Group		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	18-24	85	61.6	8.1	53	38.4	8.1	138
	25-44	307	64.8	4.3	167	35.2	4.3	474
	45-64	256	72.9	4.6	95	27.1	4.6	351
	65+	130	77.4	6.3	38	22.6	6.3	168
	Total	778	68.8	2.7	353	31.2	2.7	1131
2002	18-24	99	58.2	7.4	71	41.8	7.4	170
	25-44	300	69.3	4.3	133	30.7	4.3	433
	45-64	278	80.3	4.2	68	19.7	4.2	346
	65+	148	84.1	5.4	28	15.9	5.4	176
	Total	825	73.3	2.6	300	26.7	2.6	1125
2003	18-24	88	61.5	8.0	55	38.5	8.0	143
	25-44	331	73.2	4.1	121	26.8	4.1	452
	45-64	284	76.3	4.3	88	23.7	4.3	372
	65+	161	81.3	5.4	37	18.7	5.4	198
	Total	864	74.2	2.5	301	25.8	2.5	1165
2007	18-24	43	67.2	11.5	21	32.8	11.5	64
	25-44	301	77.6	4.2	87	22.4	4.2	388
	45-64	368	83.3	3.5	74	16.7	3.5	442
	65+	196	86.3	4.5	31	13.7	4.5	227

Sex by Age		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	Male 18-34	108	62.1	7.2	66	37.9	7.2	174
	Male 35+	241	67.5	4.9	116	32.5	4.9	357
	Female 18-34	109	63.4	7.2	63	36.6	7.2	172
	Female 35+	320	74.8	4.1	108	25.2	4.1	428
	Total	778	68.8	2.7	353	31.2	2.7	1131
2002	Male 18-34	103	59.9	7.3	69	40.1	7.3	172
	Male 35+	261	76.8	4.5	79	23.2	4.5	340
	Female 18-34	125	66.8	6.7	62	33.2	6.7	187
	Female 35+	336	78.9	3.9	90	21.1	3.9	426
	Total	825	73.3	2.6	300	26.7	2.6	1125
2003	Male 18-34	95	59.4	7.6	65	40.6	7.6	160
	Male 35+	270	74.8	4.5	91	25.2	4.5	361
	Female 18-34	138	71.1	6.4	56	28.9	6.4	194
	Female 35+	361	80.2	3.7	89	19.8	3.7	450
	Total	864	74.2	2.5	301	25.8	2.5	1165
2007	Male 18-34	72	66.1	8.9	37	33.9	8.9	109
	Male 35+	304	83.3	3.8	61	16.7	3.8	365
	Female 18-34	97	74.6	7.5	33	25.4	7.5	130
	Female 35+	435	84.1	3.1	82	15.9	3.1	517
	Total	908	81.0	2.3	213	19.0	2.3	1121

Education								
		Yes			No			Total
		Number	Percent	95% CI	Number	Percent	95% CI	
2001	<High school	72	55.0	8.5	59	45.0	8.5	131
	High school	262	63.3	4.6	152	36.7	4.6	414
	Post-secondary	453	76.1	3.4	142	23.9	3.4	595
	Total	787	69.0	2.7	353	31.0	2.7	1140
2002	<High school	84	63.2	8.2	49	36.8	8.2	133
	High school	320	70.5	4.2	134	29.5	4.2	454
	Completed post secondary	434	78.6	3.4	118	21.4	3.4	552
	Total	838	73.6	2.6	301	26.4	2.6	1139
2003	<High school	93	71.5	7.8	37	28.5	7.8	130
	High school	287	68.3	4.4	133	31.7	4.4	420
	Completed post secondary	494	79.4	3.2	128	20.6	3.2	622
	Total	874	74.6	2.5	298	25.4	2.5	1172
2007	<High school	81	69.8	8.4	35	30.2	8.4	116
	High school	303	77.1	4.2	90	22.9	4.2	393
	Completed post secondary	533	85.8	2.7	88	14.2	2.7	621
	Total	917	81.2	2.3	213	18.8	2.3	1130

Smoking Status								
		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	Non-smoker	714	82.3	2.5	154	17.7	2.5	868
	Current smoker	76	27.5	5.3	200	72.5	5.3	276
	Total	790	69.1	2.7	354	30.9	2.7	1144
2002	Non-smoker	757	84.8	2.4	136	15.2	2.4	893
	Current smoker	86	34.1	5.9	166	65.9	5.9	252
	Total	843	73.6	2.6	302	26.4	2.6	1145
2003	Non-smoker	807	84.7	2.3	146	15.3	2.3	953
	Current smoker	71	31.4	6.1	155	68.6	6.1	226
	Total	878	74.5	2.5	301	25.5	2.5	1179
2007	Non-smoker	848	91.3	1.8	81	8.7	1.8	929
	Current smoker	75	36.1	6.5	133	63.9	6.5	208
	Total	923	81.2	2.3	214	18.8	2.3	1137

Appendix C5. Data Tables: Physical Activity

Physical Activity Among Adults 18-69
Source: RRFSS 2004-7, Waves 37-84

Recreational Trail Knowledge and Use Among Adults 18+
Source: RRFSS May 2001 – May 2003, Waves 5-29

C5 A: PHYSICAL ACTIVITY AMONG ADULTS 18-69

		High	Moderate	Low	Total
2004	Number	581	245	137	963
	Percent	60.3	25.4	14.2	100
	±95% CI	3.1	2.8	2.2	
2005	Number	561	308	157	1026
	Percent	54.7	30.0	15.3	100
	±95% CI	3.0	2.8	2.2	
2006	Number	550	278	161	989
	Percent	55.6	28.1	16.3	100
	±95% CI	3.1	2.8	2.3	
2007	Number	567	263	134	964
	Percent	58.8	27.3	13.9	100
	±95% CI	3.1	2.8	2.2	

C5 B: HIGH LEVEL OF PHYSICAL ACTIVITY

Sex								
		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2004	Male	287	64.9	4.4	155	35.1	4.4	442
	Female	294	56.4	4.3	227	43.6	4.3	521
	Total	581	60.3	3.1	382	39.7	3.1	963
2005	Male	280	61.3	4.5	177	38.7	4.5	457
	Female	281	49.3	4.1	289	50.7	4.1	570
	Total	561	54.6	3.0	466	45.4	3.0	1027
2006	Male	262	61.8	4.6	162	38.2	4.6	424
	Female	288	51.1	4.1	276	48.9	4.1	564
	Total	550	55.7	3.1	438	44.3	3.1	988
2007	Male	274	64.8	4.6	149	35.2	4.6	423
	Female	293	54.3	4.2	247	45.7	4.2	540
	Total	567	58.9	3.1	396	41.1	3.1	963

Age Group		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2004	18-24	102	66.2	7.5	52	33.8	7.5	154
	25-44	243	61.2	4.8	154	38.8	4.8	397
	45-64	216	58.5	5.0	153	41.5	5.0	369
	65-69	20	46.5	14.9	23	53.5	14.9	43
	Total	581	60.3	3.1	382	39.7	3.1	963
2005	18-24	91	53.5	7.5	79	46.5	7.5	170
	25-44	237	56.7	4.8	181	43.3	4.8	418
	45-64	209	53.7	5.0	180	46.3	5.0	389
	65-69	23	45.1	13.7	28	54.9	13.7	51
	Total	560	54.5	3.0	468	45.5	3.0	1028
2006	18-24	83	55.3	8.0	67	44.7	8.0	150
	25-44	215	59.2	5.1	148	40.8	5.1	363
	45-64	226	55.0	4.8	185	45.0	4.8	411
	65-69	26	41.3	12.2	37	58.7	12.2	63
	Total	550	55.7	3.1	437	44.3	3.1	987
2007	18-24	52	57.1	10.2	39	42.9	10.2	91
	25-44	232	62.5	4.9	139	37.5	4.9	371
	45-64	249	56.3	4.6	193	43.7	4.6	442
	65-69	34	57.6	12.6	25	42.4	12.6	59
	Total	567	58.9	3.1	396	41.1	3.1	963

Sex by Age		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2004	Male 18-34	124	72.5	6.7	47	27.5	6.7	171
	Male 35-69	163	60.1	5.8	108	39.9	5.8	271
	Female 18-34	85	51.8	7.6	79	48.2	7.6	164
	Female 35-69	210	58.7	5.1	148	41.3	5.1	358
	Total	582	60.4	3.1	382	39.6	3.1	964
2005	Male 18-34	103	64.8	7.4	56	35.2	7.4	159
	Male 35-69	176	59.1	5.6	122	40.9	5.6	298
	Female 18-34	99	52.9	7.2	88	47.1	7.2	187
	Female 35-69	182	47.5	5.0	201	52.5	5.0	383
	Total	560	54.5	3.0	467	45.5	3.0	1027
2006	Male 18-34	92	71.9	7.8	36	28.1	7.8	128
	Male 35-69	170	57.4	5.6	126	42.6	5.6	296
	Female 18-34	93	52.0	7.3	86	48.0	7.3	179
	Female 35-69	194	50.4	5.0	191	49.6	5.0	385
	Total	549	55.6	3.1	439	44.4	3.1	988
2007	Male 18-34	81	68.1	8.4	38	31.9	8.4	119
	Male 35-69	193	63.5	5.4	111	36.5	5.4	304
	Female 18-34	77	57.0	8.4	58	43.0	8.4	135
	Female 35-69	217	53.4	4.9	189	46.6	4.9	406
	Total	568	58.9	3.1	396	41.1	3.1	964

Education								
		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2004	<High school	51	66.2	10.6	26	33.8	10.6	77
	High school	201	59.1	5.2	139	40.9	5.2	340
	Completed post secondary	327	60.3	4.1	215	39.7	4.1	542
	Total	579	60.4	3.1	380	39.6	3.1	959
2005	<High school	34	45.9	11.4	40	54.1	11.4	74
	High school	203	53.6	5.0	176	46.4	5.0	379
	Completed post secondary	320	56.5	4.1	246	43.5	4.1	566
	Total	557	54.7	3.1	462	45.3	3.1	1019
2006	<High school	40	56.3	11.5	31	43.7	11.5	71
	High school	181	54.8	5.4	149	45.2	5.4	330
	Completed post secondary	328	56.2	4.0	256	43.8	4.0	584
	Total	549	55.7	3.1	436	44.3	3.1	985
2007	<High school	42	60.9	11.5	27	39.1	11.5	69
	High school	206	59.5	5.2	140	40.5	5.2	346
	Completed post secondary	319	58.4	4.1	227	41.6	4.1	546
	Total	567	59.0	3.1	394	41.0	3.1	961

C5 c: KNOWLEDGE OF WALKING, BIKING, OR NATURE TRAILS IN MIDDLESEX-LONDON

Sex		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	Males	315	81.4	3.9	72	18.6*	3.9	387
	Females	324	79.8	3.9	82	20.2	3.9	406
	Total	639	80.6	2.8	154	19.4	2.8	793
2002	Males	499	88.6	2.6	64	11.4*	2.6	563
	Females	513	80.0	3.1	128	20.0	3.1	641
	Total	1012	84.1	2.1	192	15.9	2.1	1204
2003	Males	F	F	F	F	F	F	F
	Females	195	83.3	4.8	39	16.7*	4.8	234
	Total	376	86.0	3.2	61	14.0	3.2	437

* High coefficient of variation; interpret with caution.

Age Group		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	18-24	94	72.3	7.7	36	27.7	7.7	130
	25-44	249	83.8	4.2	48	16.2*	4.2	297
	45-64	218	83.8	4.5	42	16.2*	4.5	260
	65+	70	70.7	9.0	29	29.3	9.0	99
	Total	631	80.3	2.8	155	19.7	2.8	786
2002	18-24	175	79.9	5.3	44	20.1	5.3	219
	25-44	383	88.9	3.0	48	11.1*	3.0	431
	45-64	327	88.4	3.3	43	11.6*	3.3	370
	65+	113	70.2	7.1	48	29.8	7.1	161
	Total	998	84.5	2.1	183	15.5	2.1	1181
2003	18-24	42	76.4	11.2	13	23.6*	11.2	55
	25-44	F	F	F	F	F	F	F
	45-64	F	F	F	F	F	F	F
	65+	51	70.8	10.5	21	29.2*	10.5	72
	Total	373	86.1	3.3	60	13.9	3.3	433

Education		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	<High school	58	63.7	9.9	33	36.3	9.9	91
	High school	246	78.1	4.6	69	21.9	4.6	315
	Completed post secondary	331	86.6	3.4	51	13.4*	3.4	382
	Total	635	80.6	2.8	153	19.4	2.8	788
2002	<High school	100	70.4	7.5	42	29.6	7.5	142
	High school	388	80.2	3.6	96	19.8	3.6	484
	Completed post secondary	520	91.4	2.3	49	8.6*	2.3	569
	Total	1008	84.4	2.1	187	15.6	2.1	1195
2003	<High school	32	71.1	13.2	13	28.9*	13.2	45
	High school	133	82.6	5.9	28	17.4*	5.9	161
	Completed post secondary	F	F	F	F	F	F	F
	Total	375	86.6	3.2	58	13.4	3.2	433

* High coefficient of variation; interpret with caution.

C5 D: USE OF WALKING, BIKING, OR NATURE TRAILS IN LAST 12 MONTHS

Sex		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	Males	206	66.0	5.3	106	34.0	5.3	312
	Females	203	62.8	5.3	120	37.2	5.3	323
	Total	409	64.4	3.7	226	35.6	3.7	635
2002	Males	349	69.9	4.0	150	30.1	4.0	499
	Females	358	70.1	4.0	153	29.9	4.0	511
	Total	707	70.0	2.8	303	30.0	2.8	1010
2003	Males	121	66.9	6.9	60	33.1	6.9	181
	Females	122	62.6	6.8	73	37.4	6.8	195
	Total	243	64.6	4.8	133	35.4	4.8	376

Age Group		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	18-24	74	78.7	8.3	20	21.3	8.3	94
	25-44	174	70.4	5.7	73	29.6	5.7	247
	45-64	130	60.5	6.5	85	39.5	6.5	215
	65+	25	35.7	11.2	45	64.3	11.2	70
	Total	403	64.4	3.8	223	35.6	3.8	626
2002	18-24	131	74.9	6.4	44	25.1	6.4	175
	25-44	307	79.9	4.0	77	20.1	4.0	384
	45-64	219	67.2	5.1	107	32.8	5.1	326
	65+	42	37.2	8.9	71	62.8	8.9	113
	Total	699	70.0	2.8	299	30.0	2.8	998
2003	18-24	27	64.3	14.5	15	35.7	14.5	42
	25-44	119	75.8	6.7	38	24.2	6.7	157
	45-64	79	64.2	8.5	44	35.8	8.5	123
	65+	17	33.3	12.9	34	66.7	12.9	51
	Total	242	64.9	4.8	131	35.1	4.8	373

Education		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	<High school	18	30.5	11.7	41	69.5	11.7	59
	High school	156	63.9	6.0	88	36.1	6.0	244
	Completed post secondary	233	71.0	4.9	95	29.0	4.9	328
	Total	407	64.5	3.7	224	35.5	3.7	631
2002	<High school	42	42.0	9.7	58	58.0	9.7	100
	High school	261	67.1	4.7	128	32.9	4.7	389
	Completed post secondary	402	77.6	3.6	116	22.4	3.6	518
	Total	705	70.0	2.8	302	30.0	2.8	1007
2003	<High school	9	28.1	15.6	23	71.9	15.6	32
	High school	82	61.7	8.3	51	38.3	8.3	133
	Completed post secondary	152	72.4	6.0	58	27.6	6.0	210
	Total	243	64.8	4.8	132	35.2	4.8	375

Appendix C6. Data Tables: Healthy Eating

Healthy Eating Among Adults 18+

Source: RRFSS Jan-Apr; Jul-Dec 2001, 2002, Jan-Aug 2004, 2005; 2007; Waves 1-4, 7-12, 37-48, 49-60, 73-84.

C6 A: FRUIT AND VEGETABLE INTAKE 5 OR MORE SERVINGS/DAY

Sex		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	Male	105	22.7	3.8	357	77.3	3.8	462
	Female	188	36.9	4.2	322	63.1	4.2	510
	Total	293	30.1	2.9	679	69.9	2.9	972
2002	Male	157	28.4	3.8	396	71.6	3.8	553
	Female	271	43.4	3.9	353	56.6	3.9	624
	Total	428	36.4	2.7	749	63.6	2.7	1177
2004	Male	75	21.8	4.4	269	78.2	4.4	344
	Female	184	41.6	4.6	258	58.4	4.6	442
	Total	259	33.0	3.3	527	67.0	3.3	786
2005	Male	145	27.9	3.9	374	72.1	3.9	519
	Female	289	43.5	3.8	375	56.5	3.8	664
	Total	434	36.7	2.7	749	63.3	2.7	1183
2007	Male	126	25.1	3.8	375	74.9	3.8	501
	Female	280	42.6	3.8	377	57.4	3.8	657
	Total	406	35.1	2.7	752	64.9	2.7	1158

Age Group		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	18-24	44	25.3	6.5	130	74.7	6.5	174
	25-44	104	28.0	4.6	268	72.0	4.6	372
	45-64	96	31.6	5.2	208	68.4	5.2	304
	65+	44	39.6	9.1	67	60.4	9.1	111
	Total	288	30.0	2.9	673	70.0	2.9	961
2002	18-24	78	36.3	6.4	137	63.7	6.4	215
	25-44	128	29.9	4.3	300	70.1	4.3	428
	45-64	135	37.2	5.0	228	62.8	5.0	363
	65+	78	52.3	8.0	71	47.7	8.0	149
	Total	419	36.3	2.8	736	63.7	2.8	1155
2004	18-24	26	23.4	7.9	85	76.6	7.9	111
	25-44	93	32.3	5.4	195	67.7	5.4	288
	45-64	92	34.5	5.7	175	65.5	5.7	267
	65+	39	37.1	9.2	66	62.9	9.2	105
	Total	250	32.4	3.3	521	67.6	3.3	771
2005	18-24	46	26.4	6.6	128	73.6	6.6	174
	25-44	166	38.1	4.6	270	61.9	4.6	436
	45-64	154	38.7	4.8	244	61.3	4.8	398
	65+	61	39.1	7.7	95	60.9	7.7	156
	Total	427	36.7	2.8	737	63.3	2.8	1164
2007	18-24	32	34.0	9.6	62	66.0	9.6	94
	25-44	122	30.9	4.6	273	69.1	4.6	395
	45-64	153	32.6	4.2	316	67.4	4.2	469
	65+	91	50.0	7.3	91	50.0	7.3	182
	Total	398	34.9	2.8	742	65.1	2.8	1140

		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	Male 18-34	45	27.1	6.8	121	72.9	6.8	166
	Male 35+	57	19.7	4.6	233	80.3	4.6	290
	Female 18-34	50	29.8	6.9	118	70.2	6.9	168
	Female 35+	136	40.4	5.2	201	59.6	5.2	337
	Total	288	30.0	2.9	673	70.0	2.9	961
2002	Male 18-34	65	32.0	6.4	138	68.0	6.4	203
	Male 35+	92	26.7	4.7	253	73.3	4.7	345
	Female 18-34	75	36.4	6.6	131	63.6	6.6	206
	Female 35+	187	46.6	4.9	214	53.4	4.9	401
	Total	419	36.3	2.8	736	63.7	2.8	1155
2004	Male 18-34	19	17.3	7.1	91	82.7	7.1	110
	Male 35+	53	23.5	5.5	173	76.5	5.5	226
	Female 18-34	47	36.4	8.3	82	63.6	8.3	129
	Female 35+	130	42.5	5.5	176	57.5	5.5	306
	Total	249	32.3	3.3	522	67.7	3.3	771
2005	Male 18-34	43	25.4	6.6	126	74.6	6.6	169
	Male 35+	100	29.0	4.8	245	71.0	4.8	345
	Female 18-34	77	40.3	7.0	114	59.7	7.0	191
	Female 35+	206	44.9	4.6	253	55.1	4.6	459
	Total	426	36.6	2.8	738	63.4	2.8	1164
2007	Male 18-34	30	23.4	7.3	98	76.6	7.3	128
	Male 35+	96	25.9	4.5	275	74.1	4.5	371
	Female 18-34	52	36.4	7.9	91	63.6	7.9	143
	Female 35+	221	44.3	4.4	278	55.7	4.4	499
	Total	399	35.0	2.8	742	65.0	2.8	1141

Education								
		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	<High school	17	17.9	7.7	78	82.1	7.7	95
	High school	100	27.4	4.6	265	72.6	4.6	365
	Completed post secondary	173	34.3	4.1	332	65.7	4.1	505
	Total	290	30.1	2.9	675	69.9	2.9	965
2002	<High school	42	31.6	7.9	91	68.4	7.9	133
	High school	162	34.3	4.3	310	65.7	4.3	472
	Completed post secondary	221	39.3	4.0	342	60.7	4.0	563
	Total	425	36.4	2.8	743	63.6	2.8	1168
2004	<High school	29	33.0	9.8	59	67.0	9.8	88
	High school	88	29.4	5.2	211	70.6	5.2	299
	Completed post secondary	141	36.2	4.8	249	63.8	4.8	390
	Total	258	33.2	3.3	519	66.8	3.3	777
2005	<High school	29	28.4	8.8	73	71.6	8.8	102
	High school	142	31.3	4.3	312	68.7	4.3	454
	Completed post secondary	262	42.3	3.9	357	57.7	3.9	619
	Total	433	36.9	2.8	742	63.1	2.8	1175
2007	<High school	29	26.9	8.4	79	73.1	8.4	108
	High school	142	33.7	4.5	279	66.3	4.5	421
	Completed post secondary	231	37.3	3.8	389	62.7	3.8	620
	Total	402	35.0	2.8	747	65.0	2.8	1149

Appendix C7. Data Tables: Healthy Weights

Source: RRFSS 2001-7, Waves 1-84

C7 A: BODY MASS INDEX (ADULTS 20-64 YEARS)

		Underweight	Normal	Overweight	Obese	Total
2001	Number	21	432	328	129	910
	Percent	2.3	47.4	36.1	14.2	100.0
	±95% CI	1.0	3.2	3.1	2.3	
2002	Number	17	425	310	155	907
	Percent	1.9	46.9	34.2	17.1	100.0
	±95% CI	0.9	3.2	3.1	2.4	
2003	Number	14	434	322	119	889
	Percent	1.5	48.8	36.2	13.4	100.0
	95% CI	0.8	3.3	3.2	2.2	
2004	Number	13	421	325	133	891
	Percent	1.4	47.2	36.4	14.9	100.0
	±95% CI	0.8	3.3	3.2	2.3	
2005	Number	21	410	334	140	905
	Percent	2.3	45.3	36.9	15.5	100.0
	95% CI	1.0	3.2	3.1	2.4	
2006	Number	22	401	328	151	902
	Percent	2.4	44.5	36.3	16.7	100.0
	±95% CI	1.0	3.2	3.1	2.4	
2007	Number	14	344	375	169	902
	Percent	1.6	38.1	41.6	18.7	100.0
	±95% CI	0.8	3.2	3.2	2.5	

C7 B: OVERWEIGHT OR OBESE BODY MASS INDEX (ADULTS 20-64 YEARS)

Sex		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	Male	306	64.7	4.3	167	35.3	4.3	473
	Female	151	34.6	4.5	286	65.4	4.5	437
	Total	457	50.2	3.2	453	49.8	3.2	910
2002	Male	294	64.3	4.4	163	35.7	4.4	457
	Female	171	38.1	4.5	278	61.9	4.5	449
	Total	465	51.3	3.3	441	48.7	3.3	906
2003	Male	256	62.3	4.7	155	37.7	4.7	411
	Female	185	38.7	4.4	293	61.3	4.4	478
	Total	441	49.6	3.3	448	50.4	3.3	889
2004	Male	269	63.6	4.6	154	36.4	4.6	423
	Female	189	40.3	4.4	280	59.7	4.4	469
	Total	458	51.3	3.3	434	48.7	3.3	892
2005	Male	256	64.0	4.7	144	36.0	4.7	400
	Female	219	43.3	4.3	287	56.7	4.3	506
	Total	475	52.4	3.3	431	47.6	3.3	906
2006	Male	273	68.1	4.6	128	31.9	4.6	401
	Female	206	41.1	4.3	295	58.9	4.3	501
	Total	479	53.1	3.3	423	46.9	3.3	902
2007	Male	304	72.0	4.3	118	28.0	4.3	422
	Female	239	49.9	4.5	240	50.1	4.5	479
	Total	543	60.3	3.2	358	39.7	3.2	901

Age Group		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	20-24	34	22.5	6.7	117	77.5	6.7	151
	25-44	222	52.5	4.8	201	47.5	4.8	423
	45-64	201	59.8	5.2	135	40.2	5.2	336
	Total	457	50.2	3.2	453	49.8	3.2	910
2002	20-24	55	34.6	7.4	104	65.4	7.4	159
	25-44	190	47.3	4.9	212	52.7	4.9	402
	45-64	220	63.8	5.1	125	36.2	5.1	345
	Total	465	51.3	3.3	441	48.7	3.3	906
2003	20-24	43	28.3	7.2	109	71.7	7.2	152
	25-44	193	48.6	4.9	204	51.4	4.9	397
	45-64	205	60.3	5.2	135	39.7	5.2	340
	Total	441	49.6	3.3	448	50.4	3.3	889
2004	20-24	25	21.2	7.4	93	78.8	7.4	118
	25-44	207	51.2	4.9	197	48.8	4.9	404
	45-64	226	61.2	5.0	143	38.8	5.0	369
	Total	458	51.4	3.3	433	48.6	3.3	891
2005	20-24	43	35.2	8.5	79	64.8	8.5	122
	25-44	208	52.1	4.9	191	47.9	4.9	399
	45-64	223	58.1	4.9	161	41.9	4.9	384
	Total	474	52.4	3.3	431	47.6	3.3	905
2006	20-24	30	26.1	8.0	85	73.9	8.0	115
	25-44	193	53.6	5.2	167	46.4	5.2	360
	45-64	256	60.0	4.6	171	40.0	4.6	427
	Total	479	53.1	3.3	423	46.9	3.3	902
2007	20-24	23	39.7	12.6	35	60.3	12.6	58
	25-44	217	57.3	5.0	162	42.7	5.0	379
	45-64	303	65.3	4.3	161	34.7	4.3	464
	Total	543	60.3	3.2	358	39.7	3.2	901

		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	Male 20-34	88	50.6	7.4	86	49.4	7.4	174
	Male 35-64	218	73.2	5.0	80	26.8	5.0	298
	Female 20-34	30	19.6	6.3	123	80.4	6.3	153
	Female 35-64	121	42.6	5.8	163	57.4	5.8	284
	Total	457	50.3	3.3	452	49.7	3.3	909
2002	Male 20-34	92	53.2	7.4	81	46.8	7.4	173
	Male 35-64	202	71.1	5.3	82	28.9	5.3	284
	Female 20-34	43	25.6	6.6	125	74.4	6.6	168
	Female 35-64	128	45.6	5.8	153	54.4	5.8	281
	Total	465	51.3	3.3	441	48.7	3.3	906
2003	Male 20-34	85	53.8	7.8	73	46.2	7.8	158
	Male 35-64	171	67.3	5.8	83	32.7	5.8	254
	Female 20-34	46	25.4	6.3	135	74.6	6.3	181
	Female 35-64	139	47.4	5.7	154	52.6	5.7	293
	Total	441	49.8	3.3	445	50.2	3.3	886
2004	Male 20-34	76	49.4	7.9	78	50.6	7.9	154
	Male 35-64	193	71.7	5.4	76	28.3	5.4	269
	Female 20-34	35	24.0	6.9	111	76.0	6.9	146
	Female 35-64	154	47.7	5.4	169	52.3	5.4	323
	Total	458	51.3	3.3	434	48.7	3.3	892
2005	Male 20-34	73	56.2	8.5	57	43.8	8.5	130
	Male 35-64	183	67.8	5.6	87	32.2	5.6	270
	Female 20-34	54	34.4	7.4	103	65.6	7.4	157
	Female 35-64	165	47.3	5.2	184	52.7	5.2	349
	Total	475	52.4	3.3	431	47.6	3.3	906
2006	Male 20-34	67	56.3	8.9	52	43.7	8.9	119
	Male 35-64	206	72.8	5.2	77	27.2	5.2	283
	Female 20-34	45	28.7	7.1	112	71.3	7.1	157
	Female 35-64	161	46.9	5.3	182	53.1	5.3	343
	Total	479	53.1	3.3	423	46.9	3.3	902
2007	Male 20-34	66	57.4	9.0	49	42.6	9.0	115
	Male 35-64	238	77.5	4.7	69	22.5	4.7	307
	Female 20-34	40	35.1	8.8	74	64.9	8.8	114
	Female 35-64	200	54.8	5.1	165	45.2	5.1	365
	Total	544	60.4	3.2	357	39.6	3.2	901

Education								
		Yes			No			Total
		Number	Percent	±95% CI	Number	Percent	±95% CI	
2001	<High school	44	61.1	11.3	28	38.9	11.3	72
	High school	159	48.5	5.4	169	51.5	5.4	328
	Completed post secondary	255	49.9	4.3	256	50.1	4.3	511
	Total	458	50.3	3.2	453	49.7	3.2	911
2002	<High school	44	57.9	11.1	32	42.1	11.1	76
	High school	166	48.5	5.3	176	51.5	5.3	342
	Completed post secondary	254	52.2	4.4	233	47.8	4.4	487
	Total	464	51.3	3.3	441	48.7	3.3	905
2003	<High school	32	56.1	12.9	25	43.9	12.9	57
	High school	152	49.7	5.6	154	50.3	5.6	306
	Completed post secondary	257	49.0	4.3	268	51.0	4.3	525
	Total	441	49.7	3.3	447	50.3	3.3	888
2004	<High school	40	54.8	11.4	33	45.2	11.4	73
	High school	163	53.4	5.6	142	46.6	5.6	305
	Completed post secondary	255	49.9	4.3	256	50.1	4.3	511
	Total	458	51.5	3.3	431	48.5	3.3	889
2005	<High school	39	66.1	12.1	20	33.9	12.1	59
	High school	179	55.2	5.4	145	44.8	5.4	324
	Completed post secondary	255	49.1	4.3	264	50.9	4.3	519
	Total	473	52.4	3.3	429	47.6	3.3	902
2006	<High school	43	64.2	11.5	24	35.8	11.5	67
	High school	164	56.9	5.7	124	43.1	5.7	288
	Completed post secondary	272	49.6	4.2	276	50.4	4.2	548
	Total	479	53.0	3.3	424	47.0	3.3	903
2007	<High school	46	75.4	10.8	15	24.6	10.8	61
	High school	206	65.0	5.3	111	35.0	5.3	317
	Completed post secondary	290	55.7	4.3	231	44.3	4.3	521
	Total	542	60.3	3.2	357	39.7	3.2	899