MIDDLESEX-LONDON HEALTH UNIT

REPORT NO. 059-17

TO: Chair and Members of the Board of Health

FROM: Dr. Christopher Mackie, Medical Officer of Health

DATE: 2017 December 14

ONGOING OUTBREAK OF INVASIVE GROUP A STREPTOCOCCAL (IGAS) DISEASE

Recommendation

It is recommended that Report No. 059-17 re: "Ongoing Outbreak of Invasive Group A Streptococcal (iGAS) Disease" be received for information.

Key Points

- There is an ongoing community outbreak of invasive Group A Streptococcal (iGAS) disease in Middlesex-London.
- A large percentage of cases has occurred among injection drug users and people who are under-housed; however, unrelated cases have also increased among people with stable housing and no history of drug use.
- The outbreak investigation into potential mechanisms of transmission continues, as well as efforts to raise awareness about the ongoing situation.

Background

In the spring of 2016, the MLHU declared a community outbreak of invasive Group A Streptococcal (iGAS) disease following reports of a higher-than-expected number of cases. A previous Board report (No. 022-17) was submitted to the Board of Health at its April 20, 2017 meeting.

Outbreak Information

Since April 1, 2016, 133 cases of iGAS disease have been reported to the MLHU. Of these cases, 12% developed necrotizing fasciitis, 15% had Streptococcal Toxic Shock Syndrome (STSS) and 7% died. Almost a quarter of cases have required treatment in intensive care. Patient age has ranged from 3 to 98 years, with an average of 47. A large percentage of cases has occurred among injection drug users and under-housed individuals; however, incidence has also increased among unrelated cases (i.e., individuals with stable housing and no history of drug use). Twelve different strains (*emm* types) have been identified among these cases to date. Two main types (*emm* 74 and 81) have predominated among individuals who inject drugs and/or are under-housed; among the unrelated cases, several different *emm* types have been identified. The outbreak is still ongoing, and the MLHU's investigation into potential mechanisms of transmission and other potential risk factors for infection continues.

MLHU Actions

The MLHU declared a public health emergency in June 2016 to raise awareness among key stakeholders and the community about overlapping outbreaks of HIV, Hepatitis C, infective endocarditis and iGAS. The MLHU has reached out to other public health authorities that have recently experienced similar iGAS outbreaks in their jurisdictions. A field epidemiologist from the Public Health Agency of Canada was deployed to MLHU to assist with the investigation. To help reduce the spread of infection among individuals who inject drugs or are under-housed, MLHU has revised its protocols for offering antibiotic chemoprophylaxis to these higher-risk populations.

Locally, the Health Unit has communicated broadly with community partners (including homeless shelters, needle exchange facilities, first responders and other service providers) to raise awareness about the risks of iGAS, and its signs and symptoms. Information has been disseminated by various means, including MLHU's physician newsletter, notices to community partners, and posters in needle exchanges, shelters and clinics that mostly serve injection drug users and/or under-housed clientele. The Health Unit has also continued to enhance harm reduction services with key stakeholders and promote harm reduction practices to prevent transmission. In April 2017, MLHU's Outreach Team was launched to provide street-level support for clients who inject drugs. Meetings have been held with key stakeholders, including Middlesex-London EMS, the London Police Service, RHAC, LIHC, local hospitals, local shelters and the City of London, to provide updates about the outbreak, to identify gaps and to discuss strategies to increase early detection of cases and referrals for wound care.

Next Steps

Educational materials for frontline staff will be developed with the support of SW LHIN, LIHC and emergency department physicians on how to recognize wound infections that require medical care. Efforts to coordinate wound care and early referral will continue. The Health Unit is also working to assist shelters in improving infection and control practices.

This report was submitted by the Infectious Disease Team and the Foundational Standard Division

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