Region of Waterloo
Public Health and Emergency Services
Infectious Diseases, Dental and Sexual Health

To: Chair Geoff Lorentz and Members of the Community Services Committee
Date: February 3, 2015 File Code: P03-30
Subject: Hepatitis C – Tri-City Colonoscopy Clinic Investigation

Recommendation:
For information.

Summary:
Region of Waterloo Public Health has identified an outbreak of hepatitis C associated with a colonoscopy clinic in Waterloo Region, Tri-City Colonoscopy Clinic in Kitchener, Ontario.

As part of Public Health’s routine follow up of hepatitis C cases, two clients who had colonoscopies performed on the same day (Dec. 24, 2013) at the same clinic (Tri-City Colonoscopy Clinic in Kitchener) were recently found to have similar genetic fingerprints of hepatitis C. Public Health then continued its investigation to determine whether other clients had been affected. Late last week, test results of the other clients seen on Dec. 24, 2013 at the clinic revealed an additional 3 clients with evidence of hepatitis C infection, for a total of 5 cases of hepatitis C among 13 clients who underwent procedures that day. This is strong evidence of patient to patient transmission of hepatitis C due to a lapse in infection prevention and control practices at the clinic on Dec. 24, 2013.

At this point in time, Public Health has no evidence that there was a risk to clients seen on other days at Tri-City Colonoscopy Clinic. A review of all known hepatitis C cases in Waterloo Region since the clinic’s inception date (October 14, 2010) has not identified other cases of hepatitis C linked to this clinic. Region of Waterloo Public Health recently
conducted an assessment of the infection prevention and control practices of the clinic. We did not observe any current practices that are likely to have caused transmission of Hepatitis C. Public Health has provided advice to the clinic on how to further strengthen their infection prevention practices, and the clinic has implemented the advice provided. The clinic continues to operate. We have no evidence of an ongoing risk to clients and their practices currently meet recommended infection prevention and control standards.

Public Health is continuing to investigate in an effort to determine what could have caused transmission of hepatitis C on Dec. 24, 2013. Tri-City Colonoscopy has been collaborating with Public Health in this investigation.

Public Health is also working with the College of Physicians and Surgeons of Ontario, as community colonoscopy clinics are inspected and overseen by the College of Physicians and Surgeons of Ontario. Public Health investigates such clinics only in response to the identification of specific infection prevention and control concerns.

Public Health will provide updates to the Board of Health on this investigation as it progresses. In addition, the Ministry of Health and Long-Term Care will very shortly introduce a new requirement for public health units to publicly report infection prevention and control lapses in regulated health care settings (including out-of-hospital premises) that public health units discover during the course of their duties. Local public health units are to report such lapses on their websites in a location that is easily located by the public. Once the specific reporting requirements from the Ministry are known, Region of Waterloo Public Health will be posting information regarding this investigation on its website to comply with this new transparency requirement.

Report:

Situation:

As mandated by the Ontario Public Health Standards, Region of Waterloo Public Health follows up on all new diagnoses of hepatitis C in Waterloo Region. Hepatitis C is one of a number of infectious diseases reportable to Public Health. In November 2014 an investigation was initiated as a result of a routine follow up with an individual who was recently diagnosed with hepatitis C. (See Appendix B for more information about Hepatitis C.) The case reported no risk factors other than a procedure at a colonoscopy clinic in the region. During its investigation, Region of Waterloo Public Health became aware of a second person who was diagnosed with Hepatitis C and also underwent a procedure on the same day, at the same clinic. The hepatitis C blood samples from the two clients were obtained and sent to the National Public Health Lab in Winnipeg for sequencing and comparison. Expert opinion regarding the genetic relatedness of the samples established there was a high degree of similarity in the genetic fingerprints of the two hepatitis C samples. This raised the possibility that hepatitis C was transmitted
at this colonoscopy clinic.

Public Health proceeded to recommend screening for hepatitis C among the other clients who underwent procedures at Tri-City Colonoscopy Clinic on Dec. 24, 2013, as well as for the staff who worked that day. Guidelines for investigating Hepatitis C transmission\(^1\) also recommend screening for clients seen up to 2 days before and after the day transmission may have occurred. There was only one other clinic day during this time period - Dec. 23, 2013. Public Health therefore also recommended hepatitis C screening for clients and staff of the Dec. 23, 2013 procedure day. Public Health supported and counselled potentially affected clients and staff, and set up special clinics to assist them in receiving their results quickly.

On Jan. 29 and 30, 2015, Public Health received test results which indicated 3 additional clients who underwent procedures on Dec. 24, 2013, also have evidence of infection with hepatitis C. Eight (8) other clients seen that day do not have hepatitis C. This brings the total number of persons with evidence of hepatitis C among those seen on Dec. 24, 2013 to 5 out of 13 clients. Further testing is being organized for genetic fingerprinting of the 3 additional, newly diagnosed cases of hepatitis C; the results are not expected for several weeks.

Although we are still receiving test results for clients seen the previous clinic day (Dec. 23, 2013), to date, there have been no cases of Hepatitis C detected in that group. We are also currently awaiting test results for staff who worked on either of the two clinic days.

**Implications:**

With 5 cases of hepatitis C detected among 13 clients on a single procedure day, two of which have similar genetic fingerprints, this is strong evidence of patient to patient transmission of hepatitis C due to a lapse in infection prevention and control practices at the clinic on Dec. 24, 2013.

At this point in time, we have no evidence of a risk of infection with hepatitis C to clients seen on other days at Tri-City Colonoscopy Clinic. A review of all known hepatitis C cases in Waterloo Region since the clinic's inception (October 14, 2010) has not identified other cases of hepatitis C linked to this clinic. Region of Waterloo Public Health recently conducted an assessment of the infection prevention and control practices of the clinic. We did not observe any current practices that are likely to have caused transmission of Hepatitis C. Public Health has provided advice to the clinic on how to further strengthen their infection prevention practices, and the clinic has implemented the advice provided. The clinic continues to operate. We have no evidence of an ongoing risk to clients and their practices currently meet recommended

infection prevention and control standards.

**Next Steps:**

Public Health is continuing to investigate in an effort to determine what could have caused transmission of hepatitis C on Dec. 24, 2013. Tri-City Colonoscopy has been collaborating with Public Health.

Public Health is also working with the College of Physicians and Surgeons of Ontario in this investigation, as community colonoscopy clinics are inspected and overseen by the College of Physicians and Surgeons of Ontario. Public Health investigates such clinics only in response to identification of specific infection control concerns related to new infections in the community. See Appendix A for more information regarding the respective roles of the College of Physicians and Surgeons of Ontario and Public Health Units.

**New Transparency Requirement:**

The Ministry of Health and Long-Term Care will very shortly introduce a new requirement for public health units to publicly report infection prevention and control lapses in regulated health care settings (including out of hospital premises) that public health units discover during the course of their duties. Local public health units are to report these lapses on their websites in a location that is easily accessible by the public. Once the specific reporting requirements from the Ministry are known, Region of Waterloo Public Health will be posting information regarding this investigation on our website to comply with this new transparency requirement.

An infection prevention control lapse is defined as any deviation from or breach of infection prevention and control best practices that the medical officer of health believes on reasonable and probable grounds, may result in acquiring and/or transmitting of infectious disease by the premises’ clients, attendees or staff.

**Corporate Strategic Plan:**

4. Healthy and Inclusive Communities: Foster healthy, safe, inclusive and caring communities

5. Service Excellence: Deliver excellent and responsive services that inspire public trust

**Ontario Public Health Standards:**

Under the Health Protection and Promotion Act, Region of Waterloo Council serves as
Waterloo Region’s Board of Health. Boards of Health are expected to adhere to the Ontario Public Health Standards, which outline the expectations for providing public health programs and services. This report provides information related to an investigation conducted by Public Health in accordance with its mandate outlined in the Ontario Public Health Standards and its associated Protocols, specifically the Infectious Diseases Program Standard.

**Financial Implications:**

The majority of infectious diseases prevention and control activities referred to within this report are funded within existing resources in Region of Waterloo Public Health’s cost shared base budget (75% provincial/25% regional tax levy). Following SARS in 2003, the province introduced 100% funding allocations to health units to increase the province’s capacity in the area of infectious disease prevention and control. This 100% provincial allocation provides base funding for an additional 5.8 full time equivalent staff who are dedicated to this program.

**Other Department Consultations/Concurrence:**

Region of Waterloo Legal Services staff were consulted in the preparation of this report.

**Attachments**

**Appendix A:** Roles of the College of Physicians and Surgeons of Ontario and Local Public Health Units


**Prepared By:** Dr. Hsiu-Li Wang, Associate Medical Officer of Health  
Karen Quigley Hobbs, Director, Infectious Diseases, Dental, and Sexual Health

**Approved By:** Dr. Liana Nolan, Commissioner/Medical Officer of Health
## Appendix A: Roles of the College of Physicians and Surgeons of Ontario, and Public Health Units:

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<th>Role of College of Physicians &amp; Surgeons of Ontario (CPSO)²</th>
<th>Role of Public Health Units</th>
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<td>• Out of hospital colonoscopy clinics are inspected by the College of Physicians and Surgeons of Ontario.</td>
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<td>• The College is responsible to consider all issues related to the provision of procedural services within out of hospital premises, such as colonoscopy clinics.</td>
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<td>• The College’s responsibilities include but are not limited to:</td>
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<td>o Developing and maintaining the standards for out of hospital premises</td>
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<td>o Conducting inspection-assessments of the premises and medical procedures to ensure that services for patients are provided according to the standard of the profession</td>
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<td>o Determining the outcome of inspection-assessments</td>
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<td>o Maintaining a current public record of Inspection Outcomes (on the CPSO website)</td>
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<td>• Local public health units work to prevent the spread of infectious diseases of public health importance, including Hepatitis C.</td>
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<td>• As part of this work, Public Health follows up on all cases of hepatitis C infections and looks for potential causes that could be prevented.</td>
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<td>• Public Health investigates if we receive a complaint, a referral from a regulatory college (such as the College of Physicians and Surgeons of Ontario), or if we suspect there may have been transmission due to receiving reports of infectious diseases.</td>
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<td>• The Ministry of Health and Long-Term Care will very shortly introduce a new requirement for public health units to report on their websites infection prevention and control lapses they identify in regulated health care settings and personal services settings.</td>
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