



April 2016

Recommended practices for the prevention of endoscopy-related infections

Background: The Public Health Agency of Canada (the Agency) was informed of an US outbreak of Carbapenem-resistant Enterobacteriaceae (CRE) that was associated with reprocessed duodenoscopes (1). To date there have been no similar reports of outbreaks associated with duodenoscopes in Canada.

Objective: To summarize what is known about the risk of CRE infection associated with duodenoscopy and make recommendations for Canada.

Findings: Outbreaks associated with flexible endoscopy (including duodenoscopes) have usually, but not always been associated with breaks in the cleaning and/or disinfection/sterilization stage of flexible endoscope reprocessing. Duodenoscopes are more difficult to clean than other types of endoscopes due to their complex design. Health Canada (HC) regulates the safety, effectiveness and quality of medical devices in Canada. In response to the US outbreak, HC contacted the Canadian manufacturers / suppliers of the duodenoscopes and the reprocessing cleaning system, respectively, which resulted in a Health Product Risk Communication Notice (2).

Recommendations: The Agency has consulted the Infection Prevention and Control Expert Working Group (with expertise in infectious diseases, medical microbiology, infection prevention and control, healthcare epidemiology and public health).

1. At this time, the Agency is not recommending enhanced reprocessing procedures for duodenoscopes nor periodic microbiologic surveillance cultures of endoscopes.
2. The Agency reminds users of the importance of adherence to current infection prevention and control guidelines, standards and requirements to prevent endoscopy-related infections. This includes following the manufacturer's instructions for reprocessing devices.
3. For more information on reprocessing duodenoscopes, please refer to the Agency's Infection Prevention and Control Guideline for Flexible Gastrointestinal Endoscopy and Flexible Bronchoscopy (3), or consult your endoscope manufacturer, the Canadian Association of Medical Device Reprocessing (4) or your provincial/territorial Ministry of Health (5).
4. Health Canada continues to monitor the situation and will take further action, if needed. Any case of patient infection or other serious side effects with the use of endoscopes should be reported to Health Canada (6).

References

1. Centers for Disease Control and Prevention. Healthcare-associated infections (HAIs) [Internet]. Atlanta, GA: CDC; 2015. [updated 2015 Nov 16; cited 2016 Apr 6] <http://www.cdc.gov/hai/outbreaks/cdcstatement-LA-CRE.html>.

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6. Health Canada. Drugs and health products: Health product complaint form (FRM-0317) [Internet]. Ottawa, ON: Health Canada; 2015. [updated 2015 Feb 20; cited 2016 Apr 6]. <http://www.hc-sc.gc.ca/dhp-mps/compli-conform/prob-report-rapport/frm-0317-eng.php>.