

HALTON REGION HEALTH DEPARTMENT  
OFFICE OF THE MEDICAL OFFICER OF HEALTH  
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TO: Halton Physicians

Medical Chiefs of Staff: Joseph Brant Hospital, Halton Healthcare (Oakville, Milton and Georgetown Hospitals)  
Chairs of: Family Practice, Paediatrics, Internal Medicine, Emergency, Obstetrics and Gynaecology, Surgery  
Chief of Laboratory Services and Infection Control Practitioners

POST IN: Emergency Department and Physicians Lounge

FROM: Dr. Hamidah Meghani, Medical Officer of Health

DATE: November 8, 2019

**RE: Screening and testing for lead exposure**

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### QUICK FACTS

- Recent reporting in the media may increase concern about lead levels in drinking water.
- Water in Halton Region is safe to drink. The potential for lead in Halton Region's drinking water system is extremely low. All known public service lead water pipes and connections have been replaced.
- Schools are required by law to do regular lead testing and notify adverse results to public health, who then ensure appropriate and timely corrective action is taken by the school.

### KEY MESSAGES FOR HEALTHCARE PROVIDERS

- Evidence does not support routine lead screening for asymptomatic individuals.
- Even at the highest media-reported lead levels in drinking water, clinical lead toxicity is not expected in the general population.
- The following risk factors increase lead exposure and individuals could benefit from blood lead testing:
  - Live in an older home (built prior to 1990) that has a lead service pipe or lead paint
  - Consume wild game killed with lead shot
  - Work with lead including making stained glass, lead fishing weights, shooting etc.
  - Consume traditional medications or privately imported medications, supplements, and spices
  - Use consumer products that may contain lead, such as costume jewelry, art supplies, leaded crystal, and glazes on ceramics and pottery
- Chronic lead exposure has been associated with abdominal colic, arthralgia/myalgia, headache, malaise, fatigue, tinnitus, microcytic anemia with stippling, renal dysfunction, peripheral neuropathy, wrist drop, and neurological deficits in children related to learning and attention.
- Health risk from lead exposure is best assessed by testing venous blood lead level (BLL).
- Individuals with a BLL above 10 µg/dL (0.48 µmol/L) need a detailed assessment of their environment.
- Chelation treatment is rarely indicated and should be performed by an experienced clinician.

### RESOURCES

- [Canadian Pediatric Society: Addressing low-level lead exposure in Canadian Children \(June 2019\)](#)
- Ontario Poison Centre 1-800-268-9017
- Occupational and Environmental Health Clinic at St Michael's Hospital: 416-864-5074
- Halton Region Health Department for assistance in investigating potential sources of lead exposure where the BLL is > 0.48 µmol/L (10 µg/dL).

Please report all suspected or confirmed cases of [Diseases of Public Health Significance](#) (formerly Reportable Diseases) to the Halton Region Health Department as soon as possible. Diseases marked \* should be reported immediately by telephone (24 hours a day, 7 days a week) or fax (Mon-Fri, 8:30 am – 4:30 pm only). Other diseases can be reported the next working day. Call 311, 905-825-6000 or toll free at 1-866-442-5866. For general information, please visit [halton.ca](http://halton.ca).

If you can't access hyperlinks, please sign-up for electronic updates by emailing [doctors@halton.ca](mailto:doctors@halton.ca)