

# SPEAKING NOTES ON ASBESTOS-CEMENT WATER PIPES



## The use of Asbestos-Cement (A-C) Pipe:

Water utilities have transitioned through many different materials used for water conveyance pipes over many, many years. One material, used for a brief period in Canada during the 1940's through to the 1970's, was cement containing asbestos. This asbestos-cement (A-C) pipe is no longer installed and has not been installed in municipal water systems for over 50 years. While there is not an aggressive plan to seek out and remove A-C pipe, it is recommended, and is a generally accepted practice, that A-C pipe be removed and replaced during any construction that exposes such pipe.



# Health Risks of Asbestos:

It is well documented that breathing in (inhaling) asbestos fibers can lead to respiratory damage and/or lung cancer. However, Health Canada and the World Health Organization have concluded that **there is no consistent, convincing evidence that asbestos ingested through water is harmful to your health.** They note that, if you drink water containing asbestos fibers, you eliminate the fibers, mostly through feces<sup>6</sup>. They also state that your risk of exposure to airborne asbestos from tap water is very low. Their research has shown very low percentages of asbestos fibers transferring into the air from humidifiers or showers<sup>2</sup>.

Health Canada has not set any maximum contaminant levels for asbestos in water. The US Environmental Protection Agency has set a maximum contaminant level of 7 million fibers per liter (MFL), and suggest that exposure above that MFL can increase the risk of developing benign intestinal polyps<sup>5</sup>.



# Asbestos in Water:

Asbestos fibers may be released into drinking water sources from runoff of mining tailings, improperly disposed contaminated household wastes, stream and groundwater contact with asbestos-bearing bedrock. **Standard water treatment can effectively remove these asbestos fibers from drinking water supplies<sup>1</sup>.**

There is no evidence of any significant amounts of asbestos fibers entering water systems from leaching or the deterioration of A-C pipes. Utilities that do have A-C pipe, ensure, through their water treatment processes, that their water is not aggressive to A-C pipe.

The greatest threat to fibers entering the water system is when the pipe is cut during a repair or removal, therefore, municipal utilities follow strict procedures to mitigate or eliminate the release of fibers. Utility workers are at the greatest risk from the airborne dust and, therefore, must wear appropriate PPE when cutting into A-C pipe.

## Conclusion:

While there is no consistent, convincing evidence that asbestos in water is a threat to the water consumers in our communities, Canadian water utilities are committed to the safe handling of these materials and the practical removal of asbestos-cement pipe at every opportunity.

# References:

- (1) Asbestos in drinking water - Canada.ca.  
<https://www.canada.ca/en/health-canada/services/publications/healthy-living/asbestos-drinking-water-infographic-2021.html> Accessed 2023-03-22.
- (2) Asbestos in drinking water - Canada.ca.  
<https://www.canada.ca/en/health-canada/services/publications/healthy-living/asbestos-drinking-water-infographic-2021.html> Accessed 2023-03-22.
- (3) Is the Asbestos in Our Drinking Water Dangerous?.  
<https://www.asbestos.com/blog/2014/12/31/asbestos-in-drinking-water/> Accessed 2023-03-22.
- (4) Risks of Asbestos in Water Pipes | Asbestos in Drinking Water.  
<https://www.mesothelioma.com/blog/asbestos-in-drinking-water-the-danger-of-old-asbestos-pipes-and-natural-disasters/> Accessed 2023-03-22.
- (5) Guide to Asbestos in the Water Supply.  
<https://www.asbestos.com/exposure/water-supply/> Accessed 2023-03-22.
- (6) Asbestos in drinking-water - World Health Organization.  
<https://www.who.int/publications-detail-redirect/WHO-HEP-ECH-WSH-2021.4> Accessed 2023-03-22.
- (7) Testing the waters: Do Regina's asbestos-cement water mains pose ... - CBC.  
<https://www.cbc.ca/news/canada/saskatchewan/regina-asbestos-drinking-water-1.5749485> Accessed 2023-03-22.
- (8) Asbestos in drinking-water - World Health Organization.  
<https://www.who.int/publications-detail-redirect/WHO-HEP-ECH-WSH-2021.4> Accessed 2023-03-22.
- (9) Asbestos | Public Health Statement | ATSDR - Centers for Disease ....  
<https://wwwn.cdc.gov/TSP/PHS/PHS.aspx?phsid=28&toxid=4> Accessed 2023-03-22.