

MIDDLESEX-LONDON BOARD OF HEALTH

REPORT NO. 52-24

TO: Chair and Members of the Board of Health
FROM: Dr. Alexander Summers, Medical Officer of Health
Emily Williams, Chief Executive Officer
DATE: 2024 July 18

PRIVATE WELL WATER TESTING IN MIDDLESEX-LONDON

Recommendation

It is recommended that the Board of Health receive Report No. 52-24 re: "Private Well Water Testing in Middlesex-London" for information.

Report Highlights

- In 2017, Public Health Ontario (PHO) proposed the gradual discontinuation of private drinking water testing, which was then referenced in the 2023 Auditor General's Value for Money Audit of PHO.
- The MLHU spends approximately \$19,800 annually on the pickup and delivery of private drinking water samples to the Public Health Ontario Laboratory (PHOL) from the 17 pick-up locations throughout Middlesex-London.
- As of 2012, approximately 25% of Middlesex County residents lived in homes with private wells.
- Since 2017, an average of 1891 well water samples per year have been submitted to the PHOL from residents within Middlesex-London.

Background

Currently, PHO offers a well water testing program that identifies bacteriological indicators of contamination in private drinking water systems at no cost. Homeowners are encouraged to test their well water three times annually (spring, summer, and fall), though more frequent testing is permitted. The focus is on detecting two specific parameters:

- **Coliforms:** Bacteria often linked to animal waste, sewage, and environmental sources, serving as indicators for potential waterborne illness.
- **E.coli:** Bacteria found in the digestive systems of humans and animals, indicating possible contamination from nearby waste sources.

In 2017, PHO proposed a modernization plan, jointly with the Ontario Ministry of Health, for the PHOL. The Auditor General's Value for Money Audit of Public Health Ontario, released in December 2023, referenced this earlier plan. The gradual discontinuation of publicly funded testing of private drinking water was one recommendation within the proposed plan. The decision follows a strategic review of public health expenditures and aims to redirect resources towards programs considered higher impact or cost-effective. If implemented, homeowners with private wells would be responsible for arranging and financing their own water testing through accredited laboratories or private providers.

In response to this report, the Council for the Township of Lucan-Biddulph passed a resolution urging the province to reconsider this recommendation, and was [received for information \(correspondence\) by the Board of Health at the June 20, 2024 Board meeting](#). The council's resolution was received by the MLHU as correspondence, as well as being distributed to all Ontario municipalities, the Minister of the Environment, Conservation, and Parks (MECPP), and the MPP for Elgin-Middlesex London. The Ministry of Health has not yet made a final decision regarding the future of PHO's well water testing program.

MLHU Private Well Water Program

The MLHU supports PHO's well water testing program with a comprehensive approach to safeguarding private well water. Public health inspectors from the Safe Water, Tobacco Enforcement, and Vector Borne Disease team educate residents, assist owners with adverse sample results, and collaborate with the Ministry of the Environment, Conservation and Parks and local municipalities. To encourage well water sampling, the MLHU facilitates access by providing sample bottles at 17 locations throughout Middlesex County and City of London and offering nine drop-off locations for courier services to PHOL. The annual cost for courier services amounts to approximately \$19,800. Since 2017, the local PHOL has received an average of 1,891 private well water samples annually from Middlesex-London residents, which would be approximately 10% of individuals supplied by private wells. The samples submitted have an average pass rate of 74% for contamination, compared to a provincial average of 70%.

Impact of Private Well Water Testing

Provincially, it is estimated that 20% of homes have water supplied from private wells (Ministry of the Environment, Conservation and Parks, 2018). In previous studies, less than 10% of Ontarians have tested their private water supply at the recommended frequency in the last year (Jones et al., 2006). Over 5 years, less than 0.3% have consistently tested their private water supply at the recommended frequency (Maier et al., 2014). In one study in Ontario of an intervention where public health inspectors made phone calls to individuals to remind them to test their water, and also delivered the testing kits directly to individuals' houses and picked them up the following day, testing rates increased to 50% (Hexemer et al., 2008).

Given well water quality can shift rapidly and frequently, there is limited evidence to inform the recommendation regarding frequency of well water testing to impact health outcomes. Thus, jurisdictions have varying recommendations. Testing is one component of ensuring safe drinking water. Protecting the quality of groundwater and routine maintenance of water treatment and disinfection systems are essential.

References are affixed as [Appendix A](#).

This report was written by the Acting Manager, Infectious Disease Control,



Alexander Summers, MD, MPH, CCFP, FRCPC
Medical Officer of Health



Emily Williams, BScN, RN, MBA, CHE
Chief Executive Officer

This report refers to the following principle(s) set out in Policy G-490, Appendix A:

- The Safe Water standard as outlined in the [Ontario Public Health Standards: Requirements for Programs, Services and Accountability](#).
- The *Health Protection and Promotion Act, R.S.O. 1990, c. H.7*
- The following goal or direction from the [Middlesex-London Health Unit's Strategic Plan](#):
 - Program Excellence

This topic has been reviewed to be in alignment with goals under the Middlesex-London Health Unit's [Taking Action for Reconciliation](#) plan, specifically equitable access and service delivery for communities relying on private wells for water supply.