

## **Arsenic Sub-study: The Atlantic Partnership for Tomorrow's Health Study**

### **Tap Water Sampling and Analysis**

In Nova Scotia, about 45% of households receive their drinking water from a well. Because of the nature of the geology of Nova Scotia, some water supplies have high levels of arsenic and other metals. When consumed in high quantities, these can be harmful to our health. The Nova Scotia Environment recommends that individuals have their well water supply tested for the presence of metals at least every two years.

As a sub-study of the Atlantic Path, we are collecting samples of tap water from Nova Scotia participants and will analyze these to measure the levels of arsenic and other heavy metals in the water. With this information, we will be able to draw a map showing the levels of arsenic and other metals across the province. We will then compare this map with maps of cancer rates (especially bladder and kidney cancer), which we will get from the provincial cancer registry. We will use these maps to see if cancer rates are higher in areas with higher levels of arsenic in drinking water. The maps will not be used to identify you or your home individually.

If you agree to take part in this sub-study, we will ask you to provide us with a sample of the water from your household water supply (a sample bottle and instruction sheet will be provided). Your water will be tested for the following elements: arsenic, antimony, barium, boron, cadmium, nickel, selenium, thallium, lead, uranium, and copper. You will receive a copy of the results of your water analysis if you want, and these will be provided alongside the Canadian Drinking Water Guideline levels and information on what to do if an elevated level of a particular element is found. Please note that as this is a research study, the results of your tap water analysis will take several months to obtain and will be sent to you in the mail.

If you agree to take part, we will need you to return your water sample to the Assessment Centre. If you have been provided with a sample bottle in advance, please bring it along with you to your Assessment Centre visit. Please remember to also complete the short questionnaire provided with the instructions and also return that along with the filled sample bottle. Please speak to a project assistant at the assessment centre if you are interested in this study or have any questions. You can also find out more information on our project website. Nova Scotia Department of Environment provides information for private well owners at [www.gov.ns.ca/nse/water/privatewells.asp](http://www.gov.ns.ca/nse/water/privatewells.asp), they also produce a range of help sheets providing information on what you should do if your water supply contains high levels of specific materials, these are available at: <http://www.gov.ns.ca/nse/water/thedroponwater.Complete.asp>.

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