BACKGROUND

In 2014, the Massachusetts Department of Environmental Protection (MassDEP) began investigating groundwater contamination in the Nonantum area of Newton caused by the chemical trichloroethylene (TCE). MassDEP conducted indoor air sampling in nearby homes to find out if TCE evaporated from the groundwater and entered homes through seams and cracks in the foundation (a process called vapor intrusion). In a small number of cases where contamination was found above threshold levels, MassDEP installed systems to prevent vapors from entering homes. See the MassDEP fact sheet TCE Contamination, Nonantum Area of Newton, October 2017 for more details regarding the groundwater investigation.

WHY IS THE MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH (DPH) EVALUATING HEALTH INFORMATION IN NEWTON?

MassDEP presented at several public meetings to keep residents informed of the ongoing investigation of TCE contamination in groundwater. In response to health-related questions from residents, MassDEP asked DPH to attend a community meeting on April 12, 2017. Residents at the meeting voiced concerns about potential health effects due to exposure to TCE and requested DPH’s help. DPH routinely conducts health data reviews across the state to respond to questions from residents and local health departments. To address concerns, DPH will review relevant health data collected by DPH.

WHAT TYPE OF HEALTH INFORMATION WILL BE REVIEWED?

DPH routinely collects health data across the state to monitor health and disease patterns in our communities. DPH will use data collected by the Massachusetts Cancer Registry to evaluate the pattern of three cancer types that could be associated with TCE exposure: kidney, liver, and non-Hodgkin lymphoma (NHL). Exposure to TCE at high levels, such as in industrial workplaces, has been linked with an increased risk for these three cancer types.

DPH will also use readily available data from the Massachusetts Birth Defects Monitoring Program (MBDMP) to evaluate the pattern of certain heart birth defects. Some scientific studies indicate that exposure to TCE during early pregnancy may result in a small increased risk of heart defects in the developing fetus.

WILL EXPOSURE TO TCE AFFECT MY HEALTH?

The health risk from exposure to any chemical depends on how much you were exposed to, how long the exposure lasted, and how you were exposed. Possible harm from exposure may also depend on personal factors such as age, sex, diet, lifestyle, health status, family history, and work history. More information regarding TCE and health can be found at http://www.mass.gov/eohhs/docs/dph/environmental/exposure/trichloroethylene-fact-sheet.pdf.

WHAT IS BEING DONE NOW TO PROTECT HEALTH?

MassDEP is working closely with the community to test the indoor air of homes that could be affected and install systems where needed to prevent vapors from entering.
WHERE IN NEWTON IS THE DPH EVALUATION AREA?

For health data reviews, DPH uses U.S. Census Bureau census tracts. Census tracts are small areas for which reliable disease rates can be calculated. DPH will focus on an entire census tract, part of which includes the area of groundwater contamination (census tract 3732). See the map below.

WHAT WILL THE RESULTS TELL US?

Diseases occur in the general population at a certain frequency and with certain characteristics. DPH will look to see if the pattern of these types of cancer and birth defects appears unusual.

If the pattern appears unusual, DPH will provide additional support to residents, MassDEP, and local physicians to eliminate future exposures and increase awareness about relevant health screening.


HOW WILL THE RESULTS BE SHARED?

DPH will share the findings in writing with the Newton Health Department and attendees of the public meeting held on April 12, 2017 who provided contact information. DPH staff will also be available to answer questions from residents.

No personal health information will be shared, only summary information for census tract 3732.

WHERE CAN I GET MORE INFORMATION?

For questions about health concerns or this review of health data contact:
Massachusetts Department of Public Health Community Assessment Program
Phone: 617-624-5757
www.mass.gov/dph/environmental_health

If you are experiencing symptoms or have medical care questions, DPH always recommends consulting with your health care provider.

For questions about the TCE groundwater investigation or indoor air testing contact:
Massachusetts Department of Environmental Protection
Northeast Regional Office
Phone: 978-694-3200