



The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
Bureau of Environmental Health
250 Washington Street, Boston, MA 02108-4619
Phone: 617-624-5757 Fax: 617-624-5777
TTY: 617-624-5286

DEVAL L. PATRICK
GOVERNOR

TIMOTHY P. MURRAY
LIEUTENANT GOVERNOR

JUDYANN BIGBY, M.D.
SECRETARY

JOHN AUERBACH
COMMISSIONER

MEMORANDUM

To: Individuals Interested in MDPH's Public Health Activities Related to Type 1 Diabetes

From: Suzanne K. Condon, Associate Commissioner
Director, Bureau of Environmental Health

Subject: Status Report/Update on Type 1 Diabetes Investigation in Weston, Wellesley, and Newton

Date: May 2011

The purpose of this memorandum is to provide an update on the Massachusetts Department of Public Health's (MDPH) Bureau of Environmental Health's (BEH) statewide K-8 surveillance of pediatric diabetes in elementary and middle schools and its exploratory investigation in Weston, Wellesley, and Newton.

As many of you are aware, through the BEH's Environmental Public Health Tracking program (EPHT), we have been conducting school-based diabetes surveillance in Massachusetts since 2008. Diabetes surveillance efforts for the 2010-2011 school year began in January 2011. We anticipate a near 100% reporting rate for this 4th year, similar to the participation rate for previous years.

Since the last status update of October 2010, BEH has been involved in the following activities as part of its exploratory investigation into the prevalence of type 1 diabetes in Weston, Wellesley, and Newton:

- BEH staff met in March 2011 with Dr. Lori Laffel of the Joslin Diabetes Center to review type 1 diabetes prevalence data submitted to MDPH by the major health care providers in Massachusetts treating children and adolescents with type 1 diabetes. Prevalence estimates made using the EPHT pediatric diabetes data and supplemental prevalence data collected via two mailings were also reviewed. The two mailings, conducted by school nurses on behalf of MDPH, went to the parents/guardians of students with type 1 diabetes in public and private pre-schools, elementary schools, middle schools, and high schools in the three communities. Data were reviewed in relation to national prevalence estimates reported in the epidemiological literature.
- BEH staff have completed a literature review to collect the most recent research articles on the epidemiology of type 1 diabetes. The purpose of the critical review is to identify any/all possible environmental risk factors for type 1 diabetes.
- During the period of January through March, BEH staff spent several days at the Massachusetts Department of Environmental Protection's (MDEP) office in Wilmington conducting file reviews

of sites of oil and/or hazardous materials releases in Weston, Wellesley, and Newton. The purpose of these site reviews is to identify potential environmental exposure opportunities related to these releases and to consider the contaminants involved in light of what the epidemiological literature has identified as potential environmental risk factors for type 1 diabetes.

Given the amount of time required to analyze the large amount of information collected during the MDEP file reviews, BEH decided it was probably best to provide an interim report on the prevalence of type 1 diabetes with a second report to follow. At this time, we anticipate completion of an interim report on the prevalence of type 1 diabetes in Weston, Wellesley, and Newton in early summer. The interim report will also focus on the three contiguous census tracts in these communities to best address the questions related to the pattern of type 1 diabetes in the area of greatest interest. Only summary statistics will be reported so as to protect the privacy of children and families included in the evaluation. The follow-up report will then be prepared that focuses on the environmental information gathered through the MDEP file reviews as well as a summary of the epidemiological literature on potential environmental risk factors for type 1 diabetes.

If individuals are not already on the MDPH mailing list for updates on BEH activities related to type 1 diabetes in children and adolescents in Massachusetts, please call 617-624-5757 and ask for the Community Assessment Program to be included for future updates.