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## 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

Date: April 2009

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) surveillance of diabetes in the kindergarten – grade 8 population and public health activities related to type 1 diabetes in the communities of Weston, Wellesley, and Newton. These activities fall into four areas:

- Through the Environmental Public Health Tracking Program, BEH is now collecting year 2 information from school nurses in elementary and middle schools throughout the state to initiate the surveillance of pediatric diabetes in Massachusetts.
- In response to concerns raised by residents of Weston, Wellesley, and Newton, BEH is investigating the prevalence and pattern of type 1 diabetes in children and adolescents (ages 0 – 18) in these three communities.
- Due to the exploratory nature of this work, BEH is consulting with endocrinologists and medical experts in diabetes at major Boston area facilities focused on diabetes treatment and research.
- MDPH hopes to apply what is learned about type 1 diabetes and environmental factors in the three communities under active investigation to address the many calls and emails received from residents across the state.

As part of the Environmental Public Health Tracking Program, staff in the BEH have begun collecting information on the number of children with diabetes in elementary and middle schools across the Commonwealth. Through federal funding, the collection of EPHTP data constitutes the beginning of the surveillance of pediatric diabetes in the state and, to date, is the only statewide system of its kind in the United States.

An exploratory, more focused investigation of type 1 diabetes in Weston, Wellesley, and Newton will be based on data from pre-schools, high schools, health care providers, and hospitals serving these three

communities, so as to include ages 0 through 18 in the prevalence estimates for these communities. This investigation will allow for an evaluation of the spatial pattern of type 1 diabetes in these communities as well as a preliminary evaluation of some potential environmental risk factors identified in the epidemiological literature as having a possible role, along with genetic risk factors, in the development of type 1 diabetes. The medical literature suggests that gene/environment interactions may be important in the development of autoimmune diseases like type 1 diabetes. On February 2, 2009 MDPH met with a group of parents from the communities involved with this effort, to explain the steps MDPH is taking to best address concerns associated with type 1 diabetes prevalence and environmental factors.

A slide presentation developed by BEH that includes an introduction to BEH and the new Environmental Public Health Tracking Program, the beginning of the surveillance of pediatric diabetes in Massachusetts, what is known about risk factors for pediatric diabetes as well as autoimmune diseases and environmental exposures, and then follow-up activities can be found at:

[http://www.mass.gov/Eeohhs2/docs/dph/environmental/investigations/diabetes\\_tracking.pdf](http://www.mass.gov/Eeohhs2/docs/dph/environmental/investigations/diabetes_tracking.pdf).

To be placed 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.