

The Grosse Pointe Public School System recently conducted district wide water sampling and analysis at representative locations (bottle filling stations and kitchen/food prep sinks). The samples were forwarded to an accredited environmental microbiology laboratory and cultured for *Legionella* bacteria. A total of 34 samples were collected and analyzed. The laboratory results can be divided into four categories:

<b>Description</b>	<b>No. of samples</b>
No <i>Legionella</i> bacteria detected	18
<i>Legionella</i> bacteria detected but below quantitation limit	5
<i>Legionella</i> bacteria concentrations between 1 cfu/ml and 9 cfu/ml	5
<i>Legionella</i> bacteria concentration of >9 cfu/ml	4

There is no established maximum contaminant level (MCL) established by the Environmental Protection Agency (EPA) for *Legionella* bacteria in drinking water. Under the Safe Drinking Water Act, the EPA has set a maximum contaminant level goal (MCLG) for *Legionella* bacteria of 0 colony forming units per milliliter. MCLGs are non-enforceable public health goals based on the contaminant level below which there is no known or expected health risk.

The two forms of diseases caused by *Legionella* bacteria are Legionnaire's disease and Pontiac Fever. Both are respiratory in nature and are associated with the inhalation of contaminated water droplets. In general, as the concentration of *Legionella* bacteria in water droplets increases, the risk of receiving an infectious dose also increases.

The risk of exposure to contaminated aerosols from sources such as bottle filling stations is generally considered to be low. Exposures to aerosols generated at kitchen or food preparation sinks would be considered to be intermediate depending upon the amount of aerosolization that occurs.

In response to these findings, GPPSS will be implementing a district-wide flushing program as well as directed cleaning and or disinfection for locations with elevated *Legionella*. As a precautionary step, GPPSS will be restricting water use in those buildings with positive *Legionella* findings and providing bottled water to students and staff. Once flushing, cleaning and disinfection have been conducted, GPPSS will conduct follow-up *Legionella* testing to evaluate the effectiveness of the steps that were taken.