



**West Orange Public Schools**  
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**Superintendent of Schools**

**Mr. Jeffrey S. Rutzky**

## STATEMENT FROM WEST ORANGE PUBLIC SCHOOL DISTRICT

### **UPDATE ON LEGIONELLA TESTING (September 27, 2018)**

Dear Parents and Guardians:

There has been significant confusion about the Legionella bacteria found in our facilities. The information in this letter will hopefully clarify specific issues.

Omega Environmental Services, our consultant conducting the chlorination process, provided the following information on **hand washing, drinking the water, and car washes**.

- Exposure while washing hands. Typically there is low risk of exposure while washing hands particularly if there are no aerators on the sinks. The district will remove all sink aerators.
- Exposure from drinking water. Typically, most people drink cold water and the bacteria does not survive the GI tract. Therefore, exposure risk is low.
- Exposure from water used while car washing. While there can be aerosolized water using hoses, if only cold water is used, the exposure risk is low.

The district's drinking fountains and outside hose lines are only connected to cold water lines, while legionella bacteria typically reside in the holding tanks found in hot water systems.

**Legionella can only be transmitted by inhaling aerosolized droplets of water – mist.** It is highly unlikely that someone will catch the disease by drinking from a water fountain, washing your hands, etc. The most common methods of infection are decorative fountains, showers, cooling towers, and hot tubs. The district has no decorative fountains or hot tubs, our showers at the high school, which are rarely used, have been turned off until the chlorination process is completed, and Legionella bacteria was **not** detected in the only cooling tower in the district, at WOHS. This tower has a regular maintenance program conducted by CQI Water Treatment consisting of chlorination.

The U.S. Department of Health and Human Services, Center for Disease Control and Prevention states, "Most healthy people do not get Legionnaires Disease after being exposed to Legionella. Being 50 years or older or having certain risk factors can increase your chances of getting sick. These risk factors include:

- Being a current or former smoker
- Having chronic lung disease, such as emphysema or chronic obstructive pulmonary disease
- Having a weakened immune system from diseases like cancer, diabetes, or kidney failure
- Taking medication that weakens your immune system

Legionella lives in fresh water and rarely cause illness. In man-made settings, Legionella can grow if water is not properly maintained. These man-made water sources become a health problem when small droplets of water that contain the bacteria get into the air and people breathe them in. In general, people do not spread Legionnaires disease to other people.”

**We are taking aggressive action.** Each affected building is undergoing a chlorination procedure that can only be done when buildings are closed, such as on a weekend. This work is being done as quickly as possible, but there are very few contractors who do the work.

The health department has **not** recommended we close any facilities. As always, the safety of our students and staff is of the utmost importance. If closures were recommended, we would do so immediately. Township Director of Health, Theresa DeNova stated: “We have been advised of the following facts with regard to Legionella: (a) it is not contagious, person to person; (b) it is not airborne; (c) it cannot be contracted by drinking or touching water; and (d) the way it is contracted is by inhaling contaminated mist.”

**There is no cause for alarm.** The levels found in our facilities have all fallen into a range of <1 CFU/mL – 65 CFU/mL. Aerobiology, the testing laboratory we used for the initial testing at Redwood, reports that levels below CFU/10 mL requires cleaning and/or biocide treatment with low but increased level of concern. Levels between 10 and 99 CFU/mL represents a moderately high level of concern but is uncommon for samples to contain number of Legionella that fall into this category. Many of the testing results from Prestige EnviroMicrobiology, Inc. for each building, which are posted on the website, must be converted from (CFU/liter-L) to (CFU/milliliters-mL). To convert, you must divide the liter number by 1000. For example, 5,500 CFU/L divided by 1000 = 5.5 CFU/mL. After converting to milliliters, you can see by the chart below that the majority of results from our buildings fall into levels 3 and 4.

**Action Criteria for Legionella**

<i>Legionella</i> / ml	Suggested Remedial Action: Potable Water
Detectable, but <1	2
1 - 9	3
10 - 99	4
100 - 999	5
> 1,000	5

**Remedial Actions:**

**Level 1:**

Review routine maintenance program recommended by the manufacturer of the equipment to ensure that the recommended program is being followed. The presence of barely detectable number of Legionella represents a low level of concern.

**Level 2:**

Implement action 1. Conduct follow-up analysis after a few weeks for evidence of further Legionella amplification. This level of Legionella represents little concern, but the number of organisms detected indicates that the system is a potential amplifier of Legionella.

**Level 3:**

Implement action 2. Conduct review of premises for the direct and indirect bioaerosols contact with occupants and health risk status of people who may come in contact with bioaerosols. Depending on the results of the review of the premises, action related to cleaning and/or biocide treatment of the equipment may be indicated. This level of *Legionella* represents a low but increased level of concern.

**Level 4:**

Implement action 3. Cleaning and/or biocide treatment of the equipment is indicated. This level of *Legionella* represents a moderately high level of concern, since it is approaching levels that may cause outbreaks. It is uncommon for samples to contain number of *Legionella* that fall in this category.

**Level 5:**

Immediate cleaning and/or biocide treatment of the equipment is definitely indicated. Conduct post treatment analysis to ensure effectiveness of the corrective action. The level of *Legionella* represents a high level of concern, since it poses the potential for causing an outbreak. It is very uncommon for samples to contain number of *Legionella* that fall in this category.

Even though our expert consultants indicate that the exposure risk to drinking the water is low, bottled water will be available in each building until the chlorination process is completed and the district receives the retesting results.

I thank you for your cooperation and understanding as this process is very complex. I apologize if prior information was confusing.

Sincerely,  
Jeffrey Rutzky