

DUNELAND SCHOOL CORPORATION

INFORMATION ON SCHOOL CLOSINGS ON FRIDAY, OCTOBER 4, 2019

Version: 10-4-19-1400

1. How did Duneland School Corporation (DSC) become aware that Legionella bacteria may be present?

A DSC employee self-identified with a confirmed diagnosis of Legionnaires disease. DSC took immediate action to test the water at various building locations.

2. Was Legionnaires disease contracted at a DSC School?

We have no reason to believe the disease was contracted as a result of exposure to any water system within the DSC. The Porter County Health Department is indicating that it is very unlikely that a person could contract the disease at a DSC school. However, we are working with an environmental engineering company to make sure all precautionary recommendations set forth by the Occupational Safety and Health Administration (OSHA) are followed.

3. What is Legionella and/or Legionnaires disease?

According to the Center for Disease Control and Prevention (CDC), Legionella bacteria may cause Legionnaires disease. Legionella bacteria in airborne water droplets or mists from contaminated water sources are the primary source of human exposure. The incubation period for the disease is 2-10 days, with an average of 5-6 days, from initial exposure. Legionnaires disease is caused by several species of Legionella bacteria. The disease is a form of pneumonia and includes symptoms of pneumonia. Legionnaires disease affects mostly smokers, transplant patients, the elderly and immune-deficient people. Legionnaires disease is treatable with antibiotics (e.g. erythromycin, azithromycin, levofloxacin, etc.) if it is diagnosed quickly. The diagnosis is based on pneumonia symptoms and confirmed with chest x-ray and various laboratory diagnostic tests for evidence of recent exposure to Legionella bacteria.

4. How would I know if a person is affected by Legionella bacteria?

The CDC indicates the diagnosis is based on pneumonia like symptoms:

- Cough
- Shortness of Breath
- Chills
- Chest Pains
- Fever
- Headache
- Aching Joints and Muscles
- Loss of Appetite
- Low Energy and Fatigue

If symptoms are present, the diagnosis is confirmed with a chest x-ray and various laboratory diagnostic tests for evidence of recent exposure to Legionella bacteria. Legionnaires disease is treatable with antibiotics (e.g. erythromycin, azithromycin, levofloxacin, etc.) if it is diagnosed quickly. Talk to your doctor or Porter County Health Department if symptoms develop, such as fever, cough, chills, or muscle aches.

5. Is Legionnaires disease spread from person to person?

The CDC has explained that after Legionella grows and multiplies in a building water system, water containing Legionella then has to spread in droplets small enough for people to breathe in. People can get Legionnaires disease or Pontiac fever when they breathe in small droplets of water in the air that contain the bacteria. Less commonly, people can get sick by aspiration of drinking water containing Legionella. This happens when water accidentally goes into the lungs while drinking. People at increased risk of aspiration include those with swallowing difficulties. In general, people do not spread Legionnaires disease and Pontiac fever to other people.

6. From which buildings were water samples taken?

Initial testing samples were taken from Chesterton High School, Chesterton Middle School, Westchester Intermediate School and Yost Elementary School. Additional testing is taking place at all DSC facilities. Precautionary measures have taken place at Bailly Elementary, Brummitt Elementary, Jackson Elementary, Liberty Elementary, Liberty Intermediate, Transportation (Bus Barn), and Maintenance facilities.

7. What was the result of the water testing?

Water test results were released to DSC in the evening of October 3, 2019. Test results indicated Chesterton Middle School had a slight elevation of Legionella in the hot water system and Westchester Intermediate School also had a slight elevation of Legionella in the cooling system water tower (on the roof). Legionella bacteria has not been found in any water lines that supply drinking fountains.

8. Why was the decision made to close Westchester Intermediate School and Chesterton Middle School (Duneland Family YMCA Early Learning Academy and DSC Central Office) on Friday, October 4, 2019?

DSC made the decision to close school to ensure that appropriate measures were in place to address the situation before allowing students and staff to return to school or work.

9. What measures are recommended by OSHA to address Legionella in the water supply?

OSHA recommends the water temperature measured at water heaters is 140 degrees Fahrenheit or above, and the delivery temperature at distant faucets is 122 degrees Fahrenheit or higher. If this is the case, no further action is needed. As an added precaution, DSC is making sure all cold-water sources are less than 68 degrees Fahrenheit.

10. What precautionary measures is DSC taking to address the situation?

- Westchester Intermediate School cooling tower is being cleaned with biocides and drained for the cooling season (winter)
- All DSC cooling systems have been shut down for the season
- All DSC cold water systems are being checked for proper temperature levels.
 - Less than 68 degrees Fahrenheit
- All DSC hot water systems are being checked for proper temperature levels
 - Greater than 140 degrees Fahrenheit at water heater
 - Greater than 122 degrees Fahrenheit at tap
- All DSC building water faucet aerators are being removed
- All DSC building water lines are being flushed
- All DSC building water supplies are being checked and/or rechecked for bacteria levels
- All DSC cooling systems will be checked and tested prior to the 2020 cooling season

11. When are the precautionary measures expected to be completed and regular school attendance expected to resume?

Precautionary steps are expected to be completed by Sunday evening, October 6, 2019. All DSC schools are expected to be in session on Monday, October 7, 2019. Messaging will be sent to all DSC families and staff on Sunday evening and posted to the DSC website with an update on the situation.

12. What is the goal of the precautionary measures?

The goal is to receive a non-detectable level of Legionella in all DSC water sources.

13. Is the Porter County Health Department aware of this situation?

DSC has been in contact with the Porter County Health Department and all recommendations are being followed.

14. If a person drank water and/or filled his or her water bottle from a drinking source at CMS or WIS on or before October 3, is there concern of exposure to Legionnaires disease?

According to the CDC, Legionella bacteria can only survive in water temperature between 68-122 degrees Fahrenheit. Water fountains within the schools are much colder. As a result, exposure to Legionella is highly unlikely. In most cases, people become infected with Legionnaires disease when they inhale microscopic water droplets containing Legionella bacteria.

15. Is the Indiana Department of Education aware of the situation?

Upon receiving test results, DSC has been in contact with the Student Health Services Specialist and the Director of School Building Security at the Indiana Department of Education. The Indiana Department of Education is monitoring the situation to ensure that all necessary protocols are being followed.

16. What are the common causes for sources of Legionnaires disease?

The CDC has explained that Legionella is a type of bacterium found naturally in freshwater environments, like lakes and streams. It can become a health concern when it grows and spreads in human-made building water systems like:

- Showerheads and sink faucets
- Cooling towers (structures that contain water and a fan as part of centralized air-cooling systems for building or industrial processes)
- Hot tubs that aren't drained after each use
- Decorative fountains and water features
- Hot water tanks and heaters
- Large plumbing systems

Home and car air-conditioning units do not use water to cool the air, so they are not a risk for Legionella growth.

17. How will the DSC address water testing moving forward?

DSC conducts periodic water system checks. Moving forward, DSC will work with local and state agencies as well as an environmental engineering company to develop a formal water testing management plan.