Waterborne Illnesses

Definition:
Waterborne illnesses are spread by bacteria, viruses, parasites, or toxins that can contaminate recreational or drinking water including drinking water sources, swimming pools, water parks, hot tubs, spas, lakes, rivers, ponds, and the ocean. Diseases that might be waterborne include but are not limited to: giardiasis, norovirus, cryptosporidiosis, Shiga toxin-producing E. coli, and vibriosis.

Signs and symptoms:
Waterborne illnesses can cause many symptoms. They can cause a wide variety of infections, including gastrointestinal, skin, ear, respiratory, eye, neurologic, and wound infections. The most common symptom is diarrhea. Persons with a weakened immune system, children, and pregnant women may be at greater risk for more severe illness.

Transmission:
Coming into contact with or ingesting contaminated water are both transmission methods. Many waterborne pathogens can also be spread through food, animals, or person-to-person contact, so identifying the method of transmission of illness can sometimes be challenging.

Diagnosis:
Waterborne illnesses can be diagnosed by medical providers with the assistance of laboratory testing. Diagnosing an illness as being waterborne transmitted as opposed to other transmission routes usually requires information on the ill individual’s history of exposures.

Role of the School Nurse:
- Prevention
  - Encourage students to not swim while ill with diarrhea, to not swallow pool water, and practice good hygiene around pool and other swimming areas.
  - Encourage hand washing particularly after using the bathroom and before handling food or drinks to prevent the spread of disease.
  - There is no vaccine for most waterborne illnesses in Maine.

  Treatment Recommendations
  - If experiencing diarrhea or other illness, the student should be referred to their primary care provider for further evaluation.

Exclusions
Cases in schools should be excluded until diarrhea is resolved.

Reporting Requirements
Waterborne illnesses that may be part of suspected outbreaks are reportable and should be reported upon recognition or strong suspicion to Maine CDC at 1-800-821-5821.

Resources:
- Maine CDC recreational water illness website: https://www.maine.gov/dhhs/mecdc/infectious-disease/epi/healthyswimming
- Federal CDC website: https://www.cdc.gov/healthywater/swimming

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