

# Swimming-Related Illness Fact sheet

**Swimming in contaminated pools, hot tubs, water park attractions, decorative fountains, rivers, lakes, bays, and oceans can cause infections of the stomach and intestines (gastroenteritis), and skin (infectious dermatitis). Less often, other areas of the body are affected by waterborne disease. These include the ears, eyes, wounds, the respiratory tract, and the nervous system.**

**Swimmers can get gastroenteritis from water contaminated by viruses, parasites, or bacteria.**

- Germs that cause gastroenteritis are shed in the feces of infected persons. Small amounts of feces that cannot be seen are present on everyone's skin and get rinsed into the water. This allows germs to spread even without having a fecal accident. However, when an infected person has a fecal accident of diarrhea, the risk of spreading the illness to others is much higher. People become ill when they swallow the germ-containing water, or put hands or objects contaminated with the water into their mouths. Contamination with germs from animals, sewage, and runoff is also possible and occurs more often in lakes and beaches.
- Common causes of swimming-related gastroenteritis:
  - Viral: Norovirus. Causes vomiting and diarrhea. Usually lasts 24-48 hours.
  - Parasites: *Giardia* and *Cryptosporidium*. Primarily cause diarrhea. More resistant to chlorination than others. *Cryptosporidium* is the most common agent associated with treated swimming pool outbreaks.
  - Bacterial: *Shigella* and *Escherichia coli*. Primarily cause diarrhea.

See fact sheets on viral gastroenteritis, giardiasis, and cryptosporidiosis, shigellosis, and *E. coli* O157:H7 for more information about these diseases. Swimmers can also get gastroenteritis from other bacteria, viruses, and parasites.

**Dermatitis can be caused by chemicals such as too much chlorine in the water (chemical dermatitis) or by germs such as bacteria, viruses and fungi. A bacteria called *Pseudomonas* often causes infections in hot tubs, spas, and whirlpools**

- *Pseudomonas* causes an itchy rash over most of the body with bumps or blisters.
- It can also cause a sore throat, nose, eyes or ears.
- The rash will usually go away on its own.

**Swimming-related illnesses can be prevented:**

- Do not swim if experiencing diarrhea or an upset stomach. If infected with *Cryptosporidium* or *Giardia*, do not swim for 2 weeks until after diarrhea has ended.
- Do not let children with diarrhea enter a pool or wading pool.
- Do not drink or swallow pool water.
- Do not change diapers at poolside.
- Take children to the bathroom often to prevent accidents.
- Wash hands with soap and water after changing diapers or using the bathroom.
- Shower with warm water and soap before entering the water. Young children need to be washed thoroughly, especially the rear end.
- Rinse off before getting into a swimming pool, wading pool, or hot tub.
- Rinse off after leaving the "kiddie pool" before going into another pool.
- Avoid swimming in pools with cloudy looking water or in pools that are not properly maintained.
- Notify lifeguards or pool management of any feces in a pool.
- Do not expose open wounds or cuts to ocean or bay water, especially if you have a weakened immune system or chronic liver disease.

Pools stay clean by proper filtration and chlorine and pH levels, but chlorine does not kill all of the organisms that can cause infections.