

## Recreational Water Illnesses (RWIs)

### **Do I need to take precautions when swimming?**

Unfortunately there are infections and illnesses that people can get from swimming pools, water fountains, spas or hot tubs, and oceans, rivers, and lakes. People should take certain precautions to help prevent them from becoming ill when swimming in such places.

### **What are recreational water illnesses?**

RWIs are illnesses that are spread by swallowing, breathing, or coming into contact with contaminated water from swimming pools, spas, lakes, rivers, or oceans. Recreational water illnesses can cause a wide variety of symptoms, including gastrointestinal (GI), skin, ear, respiratory, eye, neurologic, and wound infections.

### **What illnesses are of concern for swimmers?**

The most commonly reported RWI is diarrhea. Diarrheal illnesses can be caused by germs such as *Crypto*, short for *Cryptosporidium*, *Giardia*, *Shigella*, norovirus, and *E. coli* O157:H7.

### **Where are RWIs found?**

#### ***Swimming Pools***

The most common illness spread through swimming pools is diarrhea. When people are ill with diarrhea, their stool can contain millions of germs. Therefore, swimming when ill with diarrhea can easily contaminate large pools or waterparks. As a result, if someone swallows

water that has been contaminated with feces, he/she may become sick. Many of these diarrhea-causing germs do not have to be swallowed in large amounts to cause illness. Remember that standing water is not necessary for RWIs to spread. To ensure that most germs are killed, chlorine or other disinfectant levels and pH should be checked regularly as part of good pool maintenance.

#### ***Hot Tubs (Spas)***

Skin infections like "hot tub rash" are the most common RWIs spread through hot tubs and spas. Chlorine and other disinfectants evaporate more quickly because of the higher temperature of the water in the tubs. Respiratory illnesses are also associated with hot tub use if the hot tub is not well maintained. Because of this, it is important to check disinfectant levels even more regularly than in swimming pools. "Hot tub rash" can also be spread in pools and at the lake or beach.

#### ***Decorative Water Fountains/Water Parks***

Not all decorative or interactive fountains are chlorinated or filtered. Therefore, when people, especially diaper-aged children, play in the water, they can contaminate the water with fecal matter. Swallowing this water can then cause illness.

#### ***Lakes, Rivers, and Oceans***

Lakes, rivers, and oceans can become contaminated with germs from sewage, animal waste, water runoff after rainfall, and fecal accidents. It is important to avoid swallowing the water because natural recreational water is not disinfected. Avoid swimming after rainfalls

or in areas identified as unsafe by the NH Department of Health and Human Services or the NH Department of Environmental Services.

### **How are these illnesses spread?**

People can become ill with these diseases by drinking contaminated water, by breathing contaminated water, and through their ears, eyes, or a cut or wound.

### **Why doesn't chlorine kill these RWI germs?**

Chlorine in swimming pools does kill the germs that make people sick, but it takes time. Chlorine in properly disinfected pools kills most germs that can cause RWIs in less than an hour. Chlorine does take longer to kill some germs, such as Crypto, which can survive for days in even a properly disinfected pool.

### **Who is most likely to get sick from an RWI?**

Children, pregnant women, and people with compromised immune systems can suffer from more severe illness if they become infected. People with compromised immune systems should be aware that recreational water might be contaminated with human or animal waste that contains *Cryptosporidium* (or Crypto), which can be life threatening in persons with weakened immune systems. People with a compromised immune system should consult their health care provider before participating in behaviors that place them at risk for illness.

### **How can RWIs be prevented?**

#### ***Steps for Swimmers***

- **Please** don't swim when you have diarrhea. You can spread germs in the water and make other people sick.
- **Please** don't swallow the pool water. Avoid getting water in your mouth too.
- **Please** practice good hygiene. Shower with soap before swimming and wash your hands after using the bathroom or changing diapers. Germs on your body end up in the water.

#### ***Steps for Parents of Young Children***

- **Please** take your kids on bathroom breaks and check diapers often. Waiting to hear "I have to go" may mean it's too late.
- **Please** change diapers in a bathroom or a diaper-changing area, not at poolside. Germs can spread in and around the pool.
- **Please** wash your child thoroughly (especially the rear end) with soap and water before swimming. Invisible amounts of fecal matter can end up in the pool and make people sick.

**For more information about recreational water illnesses, call the New Hampshire Department of Health and Human Services, Division of Public Health Services at 1-800-852-3345 x4496 or 603-271-4496 or visit our website at [www.dhhs.state.nh.gov](http://www.dhhs.state.nh.gov). For more detailed information on prevention steps, visit the Centers for Disease Control and Prevention (CDC) website at [www.cdc.gov/healthyswimming/prevent.htm](http://www.cdc.gov/healthyswimming/prevent.htm).**