

FactSheet

Para Su Información

Recreational Water Illnesses (RWIs)

Swimming, one of the most popular activities in Las Vegas, is a fun, active, and healthy way to spend leisure time. Every year, people visit “recreational water” sites, such as swimming pools, water parks, hot tubs, lakes and rivers.

The use of modern disinfection systems in pools and environmental improvements in our lakes, rivers, and oceans has improved the quality of recreational water. Despite this, there has been an increase over the past decade in the number of outbreaks of illness associated with swimming.

What are recreational water illnesses (RWIs)?

RWIs are illnesses that are spread by swallowing, breathing or having contact with contaminated water from swimming pools, spas, lakes, rivers or oceans.

Recreational water illnesses can cause a wide variety of symptoms, including skin, ear, respiratory, eye and wound infections. The most commonly reported RWI is diarrhea. Diarrheal illnesses can be caused by germs such as *Cryptosporidium*, *Giardia*, *Shigella* and *E. coli* O157:H7.

How are RWIs spread?

Diarrheal Illnesses

If swimmers are ill with diarrhea, the germs that they carry can contaminate the water if they have an “accident” in the pool. On average people have about 0.14 grams of feces on their bottoms which, when rinsed off, can contaminate recreational water. 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.

In addition, lakes, rivers, and the ocean can be contaminated by sewage spills, animal waste and water runoff following rainfall. Some common germs can also live for long periods of time in salt water.

So, if someone swallows water that has been contaminated with feces, he or she may become sick. Many of these diarrhea-causing germs do not have to be swallowed in large amounts to cause illness.

Other RWIs

Germs live naturally in the environment (water, soil). In the pool or hot tub, if disinfectant is not maintained at the appropriate levels, these germs can increase to the point where they can cause illness (eye, skin, ear, and respiratory infections) when swimmers breathe or have contact with water containing these germs.

Why doesn't chlorine kill these RWI germs?

Chlorine in swimming pools does kill the germs that may 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 takes longer to kill some germs such as *Cryptosporidium*, which can survive for days in even a properly disinfected pool. This means that without your help, illness can spread even in well-maintained pools.

Healthy swimming behaviors are needed to protect you and your family from RWIs and will help stop germs from getting in the pool.

Where are RWIs found?

In addition to swimming pools, swimming in contaminated hot tubs, oceans, lakes, rivers and

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playing in decorative water fountains can also spread RWIs.

Hot Tubs

Skin infections like “hot tub rash” are the most common RWIs spread through hot tubs and spas. Chlorine and other disinfectant levels evaporate more quickly because of the higher temperature of the water in the tubs. It is important to check disinfectant levels even more regularly than in swimming pools. “Hot tub rash” can also occur in pools and at the lake or beach.

Decorative Water Fountains

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 contaminated water can then cause diarrheal illness.

Lakes, Rivers and Oceans

Lakes, rivers, and oceans can become contaminated with germs from sewage, animal waste, water runoff following rainfall, fecal accidents, and germs rinsed off the bottoms of swimmers. 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.

Who is most likely to get ill from an RWI?

Children, pregnant women, and people with compromised immune systems (such as those living with AIDS, those who have received an organ transplant, or those receiving certain types of chemotherapy) can suffer from more severe illness if infected.

People with compromised immune systems should be aware that recreational water might be contaminated with human or animal waste that contains *Cryptosporidium*, 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.

This fact sheet was based on the Centers for Disease Control and Prevention’s “Healthy Swimming Fact Sheets for Swimmers.”



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Updated 06-2006