

## Recreational Water Illnesses at a Glance

Pathogen	Type	Method of Transmission	Symptoms	Real-World Occurrence	Chlorination Time (1 ppm FAC)
Cryptosporidium	Parasite	Swallowing contaminated water. Very contagious, through people-to-people contact.	Dehydration, weight loss, stomach cramps, fever, nausea, vomiting. No treatment.	In 2004, a water park in San Luis Obispo, CA caused 11 people to fall ill. The park closed for the rest of the summer.	About 9,600 minutes (6.7 days)
Escherichia coli (E.coli)	Bacteria	Swallowing contaminated water.	Severe bloody diarrhea, abdominal cramps, kidney failure. Antibiotics available.	In 1998, 26 children fell ill from an outbreak in an Atlanta waterpark's kiddie pool. Seven had kidney failure, one died.	Less than one minute.
Giardiasis	One-celled parasite	Swallowing contaminated water. Cysts can survive in cold water for months.	Diarrhea, gas, greasy stools, stomach cramps, upset stomach, nausea. Prescription drugs available.	In 2003, 55 people were struck at a country club in Milton, Massachusetts. The source is believed to be the children's swimming pool.	About 45 minutes.
Hepatitis A	Virus	Swallowing water contaminated with feces infected with virus.	Jaundice, fatigue, stomach pain, loss of appetite, nausea, diarrhea, fever. No real treatment. Vaccine available.	The public pools at a campground in Louisiana were the source of a multi-state outbreak in 1989. 20 people were infected.	About 16 minutes.
Legionnaires' Disease	Bacterium Legionella pneumophila	Breathing mists from hot tubs infected with the bacteria. Not contagious.	Fever, chills, cough, muscle aches, headache, fatigue, diarrhea, kidney malfunction. Legionnaires' treatable.	50 people reported flu-like symptoms at an Oklahoma City hotel pool in 2004. The cases were all Pontiac Fever.	Less than one minute.
Naegleria Infection	Microscopic ameba	Enters through the nose & travels to brain & spinal cord. Feeds on brain tissue. Very rare infection.	Causes primary amebic meningoencephalitis (PAM) a brain inflammation. Drugs available; high fatality rate.	In 1978, a 9 year old girl in San Francisco was infected in a hot spring pool; she is one of the only 3 known survivors of this disease.	Less than one minute.
Norovirus Gastroenteritis	Virus	Swallowing water contaminated with stool carrying the virus. Very contagious.	Nausea, vomiting, diarrhea, stomach cramping, fever, chills, muscle aches, fatigue. Most recover in 1-2 days.	In 2004, 53 people fell ill at a swim club in Vermont.	About 30 minutes to an hour.
Pseudomonas Dermatitis (Hot Tub Rash)	Bacteria	Direct skin contact with contaminated water. Usually in hot tubs, but also in pools.	Itchy skin, red rash, blisters around hair follicles. Clears up on it's own within a few days.	Nine cases were documented at a hotel pool and spa in Bangor, Maine in 2000.	Less than one minute.
Salmonellosis	Bacteria, Salmonella	Swallowing water contaminated with bacteria.	Diarrhea, fever, cramps. Antibiotics if infection spreads from intestines	Three cases were documented at a park pool in Idaho in 1995.	Less than one minute.
Shigellosis	Bacteria Shigella	Swallowing water contaminated with bacteria.	Bloody diarrhea, fever, cramps. Antibiotics - though forms of shigella have become resistant.	An unchlorinated wading pool in Dubuque, Iowa caused at least 69 cases in 2001.	Less than one minute.

**Questions? Please contact the Calaveras County Environmental Health Department at (209) 754-6399.**