

Pool Water Contamination and Recreational Water Illnesses (RWIs)

Over the past few years, there have been a number of incidents that have made national headlines involving pool water contamination at public pools and water parks. Most of the contamination has resulted in illnesses from bacteria or viruses such as Cryptosporidium or Giardia. The most common sources of these have been from stool, often infant diarrhea, that has found its way into the pool water.

Sometimes, we occasionally encounter the results of the prankster who has left a floating specimen for others to find. More likely, we'll have someone with a skinned knee or cut foot who might have bled a little in the pool or on the deck. Knowing how to respond to the reasonable threat of contamination can be a bit confusing, but the Center for Disease Control has some valuable information on addressing pool water and pool area contamination.

Germ Inactivation Time for Chlorinated Water*

GERM	TIME
E. coli 0157:H7	Bacterium Less than 1 minute
Hepatitis A Virus	About 16 minutes
Giardia Parasite	About 45 minutes
Cryptosporidium Parasite	About 9600 minutes (6.7 days)

*1ppm (1mg/L) chlorine at pH 7.5 and 77°F (25°C)

While most pool water contamination incidents don't result in fatalities, no youth organization wants to deal with 100 sick kids and the resulting Health Department investigation with media flurry. Knowing and utilizing the chlorination and time exposure values lets us get back to the fun of swimming as soon as safely possible.

If you have a safety or risk management question or a suggestion for a topic, please contact Markel's Risk Management Department at safety1st@markelcorp.com.