



## Avoiding *Crypto* at the Pool this Summer

By Chris Wiant, M.P.H., Ph.D. and Ralph Morris, M.D., M.P.H.



Sign on a door to a hotel pool in Santa Barbara, California, April 2017

This summer the Centers for Disease Control and Prevention (CDC) and health departments across the country will strive to keep an unwanted parasite out of America’s pools, hot tubs and water parks. The microscopic organism, “*Crypto*,” short for *Cryptosporidium*, [causes diarrhea](#) and spreads through recreational water via the fecal-to-oral route. Yes, that’s a revolting image, but an awareness of how *Crypto* spreads can go a long way toward preventing outbreaks that can put a serious dent in your summer fun.

*Crypto* is not present in every pool, but according to CDC data, the number of US *Crypto* outbreaks in aquatic venues [doubled between 2014 and 2016](#).

### A Challenge for Chlorine



Although chlorine destroys most disease-causing germs in treated recreational waters within minutes, *Crypto* presents a unique challenge. The issue is that in its infectious life stage, the parasite is protected from chemical disinfectants by a hard outer shell, known as an “oocyst.” Thanks to that resistant shell, *Crypto* can survive for days in a properly chlorinated pool.<sup>1</sup>

Destroying *Crypto* oocysts with chlorine requires hyperchlorination (also known as superchlorination)—a process in which the chlorine level of water is raised for a sufficient period of time (hours) during which the aquatic facility is closed to

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<sup>1</sup> A properly chlorinated pool is one in which a minimum of 1 mg/L “free” chlorine is maintained.

patrons. Hyperchlorination procedures can be found in the [CDC's Fecal Incident Response Guide, "What do you do when you find poop in the water?"](#). Some pool owners choose to hyperchlorinate weekly as a preventive measure. Oocysts also may be controlled by [optimizing pool water filtration](#) or by adding secondary treatment in the form of ultraviolet radiation or ozonation.

#### *Four Ways to Outsmart Crypto*

1. ***Don't Enter the Water if You Are Sick with Diarrhea:*** To avoid contaminating aquatic facilities with *Crypto*, CDC recommends not swimming when you are experiencing diarrhea or for at least two weeks after diarrhea ends, especially if you have been diagnosed with *Crypto*. Based on our recent Water Quality and Health Council survey, which found that 25 percent of respondents would swim within *one hour* of having diarrhea, this recommendation needs to “go viral.”
2. ***Shower First:*** Showering is needed to remove swimmer perspiration, oils and cosmetics that deplete chlorine and form irritating byproducts. With regard to *Crypto* and other illnesses spread via the fecal-to-oral route, however, a soap shower is needed to remove the trace fecal matter ([about 0.14 g](#)) on each person's bottom. Children under the age of five, who have poor hygiene, *really* need this, but do parents realize it? Our survey found that about half of adult swimmers don't even rinse themselves off in the shower before swimming.
3. ***Avoid Swallowing the Water:*** This could be difficult, but minimizing the amount of water swallowed helps reduce the risk of ingesting *Crypto*, developing diarrhea, and further spreading the parasite. Let children know that as cool and sparkling as it may look, pool water, like bath water, is not for drinking. Approximately 60 percent of adults who responded to our survey admitted they swallow water while swimming.
4. ***Check and Change Swim Diapers:*** Swim diapers may not provide the perfect seal around a child's bottom, but a well-fitted diaper kept securely in place is a helpful hygiene measure. Parents and caregivers can check diapers every hour or so to be sure “full” diapers are not being immersed in the pool, effectively creating a “fecal tea bag.” Change diapers only in designated areas away from the pool. Thorough hand washing after using the bathroom or handling diapers is essential, no matter the venue.

*Crypto* is now the leading cause of reported recreational water outbreaks. It is our hope that by highlighting the stark facts about this nasty parasite, future outbreaks will be avoided. Summer is too short to miss out on the fun of enjoying recreational water facilities.

*Chris Wiant, M.P.H, Ph.D., is president and CEO of the Caring for Colorado Foundation. He is also chair of the Water Quality & Health Council and a member of the National Drinking Water Advisory Council.*

*Ralph Morris, M.D., M.P.H., is a Physician and Preventive Medicine and Public Health official living in Bemidji, MN.*