Crypto outbreaks linked to swimming have doubled since 2014

Outbreaks of a parasitic infection linked to swimming pools and water playgrounds are increasingly being reported to CDC, with twice as many outbreaks in 2016 as in 2014.

At least 32 outbreaks caused by Cryptosporidium (also known as “Crypto”) linked to swimming pools or water playgrounds in the United States were reported in 2016, compared with 16 outbreaks in 2014, according to preliminary data published today in CDC’s Morbidity and Mortality Weekly Report. The parasite can spread when people swallow something that has come into contact with the feces (poop) of a sick person, such as pool water contaminated with diarrhea.

In comparison, 20 Crypto outbreaks linked to swimming were reported in 2011, 16 in 2012, and 13 in 2013. It is not clear whether the number of outbreaks has increased or whether better surveillance and laboratory methods are leading to better outbreak detection.

Crypto is the most common cause of diarrheal illness and outbreaks linked to swimming pools or water playgrounds because it is not easily killed by chlorine and can survive up to 10 days in properly treated water. Swallowing just a mouthful of water contaminated with Crypto can make otherwise healthy people sick for up to three weeks with watery diarrhea, stomach cramps, nausea, or vomiting, and can lead to dehydration.

“To help protect your family and friends from Crypto and other diarrhea-causing germs, do not swim or let your kids swim if sick with diarrhea,” said Michele Hlavsa, R.N., M.P.H., chief of CDC’s Healthy Swimming Program. “Protect yourself from getting sick by not swallowing the water in which you swim.”

Prevent the spread of germs in the pool and other recreational water

Standard levels of chlorine and other pool disinfectants kill most germs within a few minutes. However, Crypto is extremely hard to kill at standard levels of pool disinfectants. CDC recommends closing pools and treating the water with high levels of chlorine, called hyperchlorination when responding to a diarrheal incident in the water or a Crypto outbreak.

The best way to help protect yourself and others from germs that cause diarrhea is to follow these steps:

- Don’t swim or let your kids swim if sick with diarrhea.
- If diarrhea is caused by Crypto, wait until two weeks after diarrhea has stopped to go swimming.
- Don’t swallow the water in which you swim.
- Rinse off in the shower before getting in the water to help remove any germs on your body that could contaminate the water.
- Take kids on bathroom breaks often, and check diapers in a diaper-changing area and not right next to the pool.

Examples of large Crypto outbreaks in the United States

In 2016, Alabama, Arizona, Ohio, and other states investigated and controlled Crypto outbreaks linked to swimming pools or water playgrounds. Those outbreaks highlight the ongoing challenges that treated recreational water venues have with Crypto due to how difficult it is to kill and the small number of germs that can make people sick. Arizona identified 352 people sick with Crypto for July–October 2016, compared with no more than 62 cases for any one year in 2011–2015. Ohio identified 1,940 people sick with Crypto in 2016, compared with no more than 571 cases for any one year in 2012–2015.

Using CryptoNet for tracking cryptosporidiosis

CryptoNet, launched in 2010, is the first U.S. DNA fingerprinting–based tracking system for illness caused by a parasite. The system helps states detect and control outbreaks by identifying which types of Crypto are infecting people. For example, Arizona used CryptoNet in 2016 to confirm the spread of a particular type of Crypto in multiple swimming pools in the Phoenix area.

CDC is working to upgrade CryptoNet with more advanced DNA fingerprinting techniques. Examining the results combined with information on what patients were doing before they became sick will help CDC and its public health partners develop more effective strategies to stop the spread of Crypto.

Healthy and Safe Swimming Week

Healthy and Safe Swimming Week begins on May 22. CDC encourages swimmers to help protect themselves, family, and friends from Cryptosporidium and other germs in the water we swim in. For more information and other healthy and safe swimming steps, visit www.cdc.gov/healthywater/swimming.