

Facts About *Giardia* and Swimming Pools

What is *Giardia* and how can it affect me?

Giardia is a germ that causes diarrhea. It is found in the poop of a person who has been infected with *Giardia*. *Giardia* is protected by a tough outer shell, which allows it to survive for up to 45 minutes, even in properly chlorinated pools and water playgrounds. *Giardia* can make anyone sick and can cause prolonged diarrhea (lasting 2 weeks or more).

How is *Giardia* spread in pools?

Giardia is spread by swallowing water that has been contaminated with poop containing *Giardia*.

You share the water—and the germs in it—with every person who enters the pool. If one person infected with *Giardia* has diarrhea in the water, the water can be contaminated with tens of millions of *Giardia* germs. It only takes 10 or fewer germs to cause infection, which means that swallowing even a small amount of contaminated water can make you sick.

Giardia can also be spread by swallowing contaminated water in water playgrounds, hot tubs, lakes, rivers, springs, ponds, streams, and oceans.

How do I protect myself and those I care about?

Giardia can stay alive for almost an hour, even in properly chlorinated water. Therefore, it's critical to stop the germ from getting in the water in the first place and to make sure the water has the proper disinfectant level and pH.

All of us can take the following healthy swimming steps:

- Stay out of the water if you are sick with diarrhea.
- Use test strips to make sure the water has a proper free chlorine (amount available to kill germs) or bromine level and pH.
 - » Free chlorine level: at least 1 part per million (ppm) in pools and water playgrounds and at least 3 ppm in hot tubs.
 - » Bromine level: at least 3 ppm in pools and water playgrounds and at least 4 ppm in hot tubs.
 - » pH (affects how germs are killed or inactivated): 7.2–7.8.
 - » Most superstores, hardware stores, and pool supply stores sell test strips. Follow the manufacturer's directions to ensure proper use.
- Don't poop in the water.
- Don't swallow the water.
- Take kids on bathroom breaks or check diapers every hour.
 - » Change diapers away from the water to keep germs from getting in.



SWIMMERS AND PARENTS

For more information on

- Healthy Swimming, visit www.cdc.gov/healthywater/swimming/
- Diarrhea and Swimming, visit www.cdc.gov/healthywater/swimming/swimmers/rwi/diarrheal-illness.html
- *Giardia*, visit www.cdc.gov/parasites/giardia
- How to use pool and hot tub test strips, visit www.cdc.gov/healthywater/swimming/swimmers/pool-spa-test-strips.html

POOL OPERATORS

For guidelines and resources on how to prevent *Giardia* and other germs from spreading in recreational water, visit www.cdc.gov/mahc and www.cdc.gov/healthywater/swimming/audience-aquatics-staff.html.



**U.S. Department of
Health and Human Services**
Centers for Disease
Control and Prevention