

# On Vacation? Read This Before Jumping in the Hotel Pool

It's almost summertime and as the temperatures rise, many people head to pools for some much-needed relief.

That relief may come at a cost, however. If not managed properly, public pools, hot tubs, and water play areas are ideal breeding grounds for micro-organisms, according to the U.S. Centers for Disease Control and Prevention (CDC). They also [reported](#) that one in three swimming-related disease outbreaks could be traced back to hotel pools.

Public water facilities may host a number of germs that cause recreational water illnesses (RWI), says Dr. Naresh Kumar, an environmental health expert at the University of Miami Health System. These can include cryptosporidium, shigella, legionella, E. coli, giardia, and norovirus. "It is important to remember that chlorine doesn't instantly kill these pathogens," he says. "So, even if a pool is treated that doesn't mean it is germ-free."

## **A persistent parasite**

The CDC reports that a parasite called cryptosporidium (or crypto for short) can survive in chlorinated water for days. It is found in human and animal excrement and is spread by drinking contaminated water. It is responsible for "58 percent of outbreaks where a germ was identified linked to pools, hot tubs, and water playgrounds and 89 percent of the illnesses."

The most common symptom that infected people have is one to two weeks of watery

diarrhea. Otherwise healthy adults generally recover without treatment but in infants, crypto is the second highest cause of diarrhea-related deaths.

### **More doesn't mean better**

You may assume that adding more chlorine might do a better job of killing RWI-causing organisms but that is not necessarily the case. A study performed by some of Dr. Kumar's students affirmed the presence of bacteria in chlorinated pools. They took samples from local public pools and were surprised to see the most bacteria growth in a sample from a pool where the chlorine smell was particularly strong.

Also, according to Dr. Kumar, most chlorinated pools and hot tubs have their own set of health risks, especially if they are indoors. "Chlorine can produce a noxious layer of gas above the water," he explains. "This gas can cause flare up airway disease, such as asthma."

### **Tips for healthy swimming**

If you've read this far, you may be wary of public pools. The good news is that if you follow these tips, you help protect yourself and others from these health concerns.

- If you are already sick, especially if you are experiencing diarrhea and/or food poisoning, stay out of the water. Even better, stay out of the pool for two weeks while recovering.
- Make sure you rinse off BEFORE you get into the water. This makes a huge difference in spreading disease. The least amount of bacteria growth in pools was found when more people showered before they entered the pool, according to Dr. Kumar's work. Rinse off again, when you're done swimming for the day. An extra rinse helps remove chlorine and germs.
- Take regular bathroom breaks, and if you have children in diapers, check

and change them every hour.

- Check the facility's inspection reports and ask how often they drain their pool. Is pool water run through filters and a chlorinator? The children's pools in particular had a substantially higher bacteria count, according to the UM-led research. If the pool has a particularly strong chlorine odor, mention this to the pool supervisor.
- If you notice rusted or broken filters or dirty pool walls, be wary. These might mean improperly maintained water. Report these problems to pool management.
- Buy testing strips to check the water's chlorine and pH levels.
- Don't pee in the pool. When a lot of people pee in the pool, the ammonia in urine mixes with chlorine and creates chloramine. Chloramine causes respiratory irritation, red eyes and skin rashes. Additionally, higher levels of ammonia in a pool make the chlorine less effective.
- If you have a deep cut or skin infection, stay out of the water. It's easy for other germs in the water to get into your wound.
- Take caution to not swallow pool water accidentally. If you do, rinse your mouth right after coming out of the pool water.
- Protect your eyes, ears and feet with goggles, [disinfecting eardrops](#) and pool shoes.

If available, swim in salt water pools. Many hotels and other public places are moving away from chlorine-treated pools and hot tubs. "Saltwater pools are much better for your health, given that salt is a natural disinfectant," says Dr. Kumar.

*Natasha Bright is a contributing writer for the UMiami Health News Blog. Her writing has also been featured on the Huffington Post and Scary Mommy websites.*