Healthy Swimming Behaviors: Preventing Cryptosporidium while enjoying the warmer weather.

Although chlorine and other disinfectants are an effective way to kill germs found in recreational water, they do not work instantly.

Despite the use of disinfectants, many people have become sick with recreational water illnesses (RWIs), which are caused by germs spread by swallowing, breathing in mists or aerosols of, or having contact with contaminated water from swimming pools, hot tubs/spas, lakes, rivers, or oceans.

RWIs include gastrointestinal, skin, ear, respiratory, eye, neurologic, and wound infections. The most commonly reported RWI is diarrhea, caused by germs like Cryptosporidium ("Crypto") and E. coli 0157:H7.

In the past two decades, there has been an increase in the number of RWI outbreaks. Remember, chlorine and other disinfectants don’t kill germs instantly. Additionally, the mixing of chlorine with urine and sweat uses up the chlorine in the pool, which would otherwise kill germs.

Prevention: We all share the water we swim in, and each of us needs to do our part to help keep ourselves, our families, and our friends healthy.

You can help prevent the spread of germs that cause RWIs by learning more about: Swimmer Protection.

To help protect yourself and other swimmers from germs, here are a few easy and effective steps all swimmers can take each time we swim:

- Keep the pee, poop, sweat, and dirt out of the water!
- Every hour—everyone out!
- Stay out of the water if you have diarrhea.
- Take kids on bathroom breaks.
- Shower before you get in the water.
- Check diapers, and change them in a bathroom or changing area NOT poolside—keep germs away from the pool.
- Reapply sunscreen.
- Drink plenty of fluids.
- Don’t pee or poop in the water.
- Don’t swallow the water.

Pools: Proper free chlorine level (1–3 mg/L or parts per million [ppm]) and pH (7.2–7.8) maximize germ-killing power.

Hot tubs/spas: Proper disinfectant level (chlorine [2–4 parts per million or ppm] or bromine [4–6 ppm] and pH [7.2–7.8]) maximize germ-killing power.

More info on next page.
Facts About Crypto and Swimming Pools

What Is Crypto and how can it affect me?
“Crypto” (krip-TOE), short for Cryptosporidium, is a germ that causes diarrhea. This germ is found in the fecal matter of a person who has been infected by Crypto. It has a tough outer shell that allows it to survive for a long time in the environment. It can survive for days even in properly chlorinated pools. Crypto is one of the most common causes of recreational water illness (disease caused by germs spread through pool water) in the United States and can cause prolonged diarrhea (for 1–2 weeks). It can make anyone sick, but certain groups of people are more likely to become seriously ill when infected with Crypto:

- Young children
- Pregnant women
- Individuals with weakened immune systems

How Is Crypto spread in pools?
Crypto is spread by swallowing water that has been contaminated with fecal matter containing Crypto. You share the water—and the germs in it—with every person who enters the pool. If one person infected with Crypto has diarrhea in the water, the water can be contaminated with tens or hundreds of millions of germs. Swallowing even a small amount of pool water that has been contaminated with the Crypto germ can make you sick. Crypto can also be spread by swallowing contaminated water from water parks, interactive fountains, water play areas, hot tubs, lakes, rivers, springs, ponds, streams, and oceans.

How do I protect myself, my family, and other swimmers?
Take action! Because Crypto can stay alive for days even in well-maintained pools, stopping the germ from getting there in the first place is essential.

Three Steps for All Swimmers
- Don’t swim when you have diarrhea. You can spread germs in the water and make other people sick.
- Don’t swallow the pool water. Avoid getting water in your mouth.
- Practice good hygiene. Shower with soap before swimming and wash your hands after using the toilet or changing diapers. Germs on your body end up in the water.

Three Steps for Parents of Young Kids
- Take your kids on bathroom breaks or check diapers often. Waiting to hear “I have to go” may mean that it’s too late.
- Change diapers in a bathroom or a diaper-changing area and not at poolside. Germs can spread in and around the pool.
- Wash your child thoroughly (especially the rear end) with soap and water before they go swimming. Invisible amounts of fecal matter can end up in the pool.

SWIMMERS AND PARENTS
For more information about Crypto, visit [www.cdc.gov/crypto](http://www.cdc.gov/crypto)

POOL OPERATORS
For more information on preventing illness and injury at the pool, visit [www.cdc.gov/healthyswimming](http://www.cdc.gov/healthyswimming)

For guidelines and resources on how to prevent Crypto and other germs from contaminating the water, visit [www.cdc.gov/healthywater/swimming/audience-aquatics-staff.html](http://www.cdc.gov/healthywater/swimming/audience-aquatics-staff.html)

www.cdc.gov/healthywater/swimming/rw/illnesses/cryptosporidium.html
Public health surveillance

The health department regularly conducts health surveillance. This core function is only possible through collaborative efforts.

Timely reporting by providers ensures the ability to rapidly investigate cases and implement control measures to mitigate disease spread. We value your critical partnership!

Surveillance is done through data collection in:
- Merlin: reporting system/electronic labs
- ESSENCE-FL: Emergency Department visits
- Florida Poison Information Center Network
- ILINet - Sentinel Provider Influenza Program
- Reports from community providers

Surveillance in Flagler County:

How can you help?

Call us at 386-437-8263 if:
- You have a cluster of illnesses with a common connection
- You notice an increase incidence of non-reportable illnesses
- You want to know the best types of screening tests used for diagnosing Pertussis, Measles, Lyme, Chikungunya or others
- You would like more information on public health surveillance systems and how to be part of them

Trending topics: Canine influenza

What is it? Dog flu is a contagious respiratory disease in dogs; the new influenza A H3N2 strain identified appears to have been introduced from Asia into the U.S. Midwest region. It was first identified in Korea in 2007. This virus has not been identified in Florida dogs to date. In 2004 a different canine influenza strain (H3N8) was identified in Florida greyhounds by University of Florida researchers.

How does it spread? This H3N2 strain infects dogs through aerosolized respiratory secretions and contaminated objects. It causes respiratory illness in 75-80% infected dogs; mortality is less than 10%. It can also infect cats.

Which dogs are at risk? Dogs in common areas like dog parks and kennels are at highest exposure risk.

What can be done? Although there is currently no vaccine for this new strain, there is a canine vaccine for H3N8. H3N8 is considered to be endemic to Florida. Keep sick pets separate from other pets and consult with a veterinarian regarding treatment recommendations.

Does it infect humans? Neither strain above has been associated with human illness, but it is always a good idea for pet owners to routinely practice good hand hygiene, especially if they or their pets are ill.
Measles: Identification and Management of Suspected Cases

(Version 1.0, February, 13 2015 – Please note this interim guidance is subject to change.)

Do You Suspect Measles?

- Febrile rash illness, AND
- Risk factors for measles (history of international travel, contact with travelers or links to a known outbreak or case, or no or unknown vaccine or immunity).
- Note that one dose of measles vaccine is about 93% effective at preventing measles

Minimize Risk of Transmission

- Measles is a highly infectious airborne illness.
- Identify febrile rash illnesses prior to, or immediately upon, arrival to expedite evaluation in a private room and minimize patient exposures.
  - Have the patient avoid the waiting room (use a side/back entrance).
  - Have the patient wear a surgical mask.
  - Conduct patient evaluation in a room that can be left vacant for at least 2 hours after the patient’s visit.

Does the patient meet the measles clinical case definition?

An illness with BOTH a generalized descending maculopapular rash AND a fever (at least 101°F) during the illness.

AND at least one of the following:

- Cough
- Coryza
- Conjunctivitis
- Koplik spots (may not be present).

Manage as clinically indicated

Consider differential diagnoses:
- human parvovirus B19, enterovirus, HIV, adenovirus or arbovirus infection, roseola infantum, scarlet fever, drug reaction, Kawasaki disease, rubella.

Call Immediately

Call the County Health Department 24/7 (www.floridahealth.gov/CHDEpiContact) or Bureau of Epidemiology (850-245-4401)

Laboratory Testing

- Nasopharyngeal (NP) or oropharyngeal (OP) swab* in universal viral transport media for measles RT-PCR
- Urine* in a sterile cup for measles RT-PCR**
- Serum for measles specific IgG and IgM***

* Preferred specimens
**Measles RT-PCR is not available at commercial laboratories and is available at the Bureau of Public Health Laboratories, after prior authorization by the County Health Department.
*** Serum specimens should be collected ≥72 hours after rash onset in a vaccinated patient. A negative measles IgM does NOT exclude measles, RT-PCR is preferred.

Suspect Case Management

- Isolate patient immediately
- Exclude from childcare/school/workplace for at least 4 days after the onset of rash.
- Reassess isolation based on diagnosis.
- Provide supportive treatment and treatment of complications.

Immunization is the key to prevention

- Review the measles vaccination/immunity status of patients and staff at your practice.
- See Centers for Disease Control and Prevention vaccination recommendations http://www.cdc.gov/vaccines

Further Questions?

Contact your County Health Department 24/7 (www.floridahealth.gov/CHDEpiContact) or Bureau of Epidemiology (850-245-4401).

www.cdc.gov/measles