



# Health Alert Network

## Tri-County Health Department

Serving Adams, Arapahoe and Douglas Counties

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The pages that follow contain information critical to protecting the health of your patients and the citizens of Colorado.

## HAN UPDATE

Number of pages including cover: 5

Subject: **Update - Possible contamination of water supply at Water World**

Message ID: 6/29/2018 1:15:00 PM

Recipients: HAN Community Members.

From: TRI-COUNTY HEALTH DEPARTMENT

Adams, Arapahoe and Douglas County, Colorado

Recipient Instructions: **Tri-County Health Department is forwarding you the attached HAN. You may have already received this broadcast if you are on the CDPHE distribution list, however, we wanted to ensure you did not miss this important information. No response is required.**

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You have received this message based upon the information contained within our Health Alert Network Notification System. If you have a different or additional e-mail or fax address that you would like us to use, or if you have additional questions, call 720-200-1477.

### Categories of Health Alert Network Messages:

**Health Alert:** Conveys the highest level of importance; warrants immediate action or attention.

**Health Advisory:** Provides important information for a specific incident or situation; may not require immediate action.

**Health Update:** Provides updated information regarding an incident or situation; unlikely to require immediate action.

**Info Service/Public Health Brief:** Provides general information that is not necessarily considered to be of an emergent nature.

You may download a copy of this HAN from the TCHD website at  
<http://www.tchd.org/259/Health-Alert-Network>



**COLORADO**  
Department of Public  
Health & Environment

Dedicated to protecting and improving the health and environment of the people of Colorado

HEALTH ALERT NETWORK BROADCAST

MESSAGE ID:06292018 09:30

FROM: CO-CDPHE

SUBJECT: HAN Update - Possible contamination of water supply at Water World

RECIPIENTS: Local Public Health Agencies / IPs / Clinical Labs / EDs / ID Physicians

RECIPIENT INSTRUCTIONS: Local Public Health Agencies - Please forward to healthcare providers

## HEALTH UPDATE | Possible contamination of water supply at Water World | June 29, 2018

Health care providers: Please distribute widely in your office

### Key points

- Public health is investigating gastrointestinal illness among people who attended Water World on June 11, 12, or 13, 2018. As of June 28, 2018, two visitors have been diagnosed with cryptosporidiosis and one person has been diagnosed with giardiasis.
- Consider collecting stool specimens from patients who visited or worked at Water World on June 11, 12, or 13 AND have had diarrhea for at least two days, or bloody stool, or diarrhea plus fever.
- Advise people who have experienced gastrointestinal symptoms, especially diarrhea, after attending Water World on June 11, 12, or 13, to refrain from swimming until two weeks after their symptoms have resolved.
- Report symptomatic patients who visited or worked at Water World on June 11, 12, or 13 to the CDPHE Communicable Disease Branch: 303-692-2700 (after hours 303-370-9395).
- On June 29, 2018, public health is issuing messages to the public about healthy swimming and how to prevent the spread *Cryptosporidium* and *Giardia*.

### Background information

Tri-County Health Department (TCHD) and the Colorado Department of Public Health and Environment (CDPHE) continue to investigate a water contamination event at Water World that occurred on June 11, 12 and 13 (as described in the Health Advisory issued June 14, 2018); untreated water from a nearby pond might have contaminated swimming pools/water features and drinking fountains, and might have been used to make ice, drinks, and food at all concession stands on these dates.

People who visited Water World on Monday, June 11, Tuesday, June 12, or Wednesday, June 13 might have been exposed to contaminated water. The problem at Water World has been corrected, and public health is not aware of any ongoing risk.

Public health is investigating reports of gastrointestinal illness among Water World visitors and employees. As of June 28, 2018, there has been one case of giardiasis and two cases of cryptosporidiosis reported among people who visited Water World on June 11, 12 or 13, 2018. To date, no bacterial or viral pathogens attributable to Water World exposure have been detected among Water World visitors or employees.

Press releases issued by public health on Wednesday, June 13 and Friday, June 29 may result in patients contacting their health care provider or seeking health care.

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## Recommendations / guidance

### Guidance for health care providers

Pathogens transmitted through contaminated water include viruses (such as norovirus or less commonly hepatitis A), enteric bacteria (such as *Salmonella*, Shiga toxin-producing *E. coli*, *Shigella*, and *Campylobacter*), and parasites (such as *Cryptosporidium* and *Giardia*). Some of these pathogens have incubation periods of more than 30 days, so it is possible that patients could develop illness until approximately mid to late July.

- **Stool testing recommendations:** Public health recommends that health care providers consider collecting stool specimens from patients who visited or worked at Water World on June 11, 12, or 13 AND have had diarrhea for at least two days, or bloody stool, or diarrhea plus fever. Consider ordering a gastrointestinal PCR panel test, if available, as it will test for multiple viral, bacterial, and parasitic organisms. Otherwise, consider ordering bacterial cultures and ova and parasite tests (EIA, DFA, or O & P), depending on the patient's symptoms. Stool should be submitted to a clinical laboratory through normal laboratory testing procedures. Note: some clinical laboratories may not include *Cryptosporidium* in O & P tests and it may need to be ordered separately. Norovirus testing is no longer recommended due to the short incubation period (12-48 hours). Specific information about *Cryptosporidium* and *Giardia* testing can be found below.
  
- **Disease control recommendations**
  - Counsel patients who are ill with gastrointestinal symptoms to stay home from work (especially if they work in health care and are involved with direct patient care, or work as food handlers), child care, summer camps, or school and to not prepare food for others until at least 24 hours after diarrhea and/or vomiting have resolved.
  - Patients should also be advised NOT to swim in recreational water facilities while actively experiencing diarrhea.
  - Any patient diagnosed with *Cryptosporidium* or *Giardia* infection should not swim until two weeks after diarrhea has ceased to minimize risk of spreading disease at recreational water facilities. These organisms are relatively resistant to routine recreational water chlorination levels.
  - Sexual activity should be avoided when a person is symptomatic with diarrhea.
  - Good handwashing, especially after using the bathroom, is important.
  
- **Disease reporting**

- Report symptomatic patients who visited or worked at Water World on June 11, 12, or 13 to the CDPHE Communicable Disease Branch: 303-692-2700 (after hours 303-370-9395).
- ***Cryptosporidium* information:**
  - **Symptoms:** Profuse non-bloody, watery diarrhea, weight loss, stomach cramps, nausea, vomiting, and low-grade fever. Some persons may be asymptomatic but can still spread the infection to others.
  - **Incubation period and duration:** Symptoms begin two to 10 days after ingesting the parasite, with an average of seven days. Symptoms often wax and wane, but remit in fewer than 30 days in most immunocompetent people (average is 10 days). In persons with immunodeficiency, especially HIV infection, the disease may have a prolonged and fulminant clinical course.
  - **Diagnostic testing:** *Cryptosporidium* is more readily detected using PCR, EIA and DFA detection assays. Ova and parasite (O & P) can be performed but is less sensitive than the other assays. Some labs may not include *Cryptosporidium* in gastrointestinal illness panels or O & P tests so specific testing may need to be ordered.
  - **Treatment:** Immunocompetent persons do not generally require specific treatment as symptoms usually resolve in two to three weeks; however, Nitazoxanide can be used to treat patients over the age of one year. Among persons with HIV who have cryptosporidiosis, antiretroviral therapy can be effective in stopping symptoms and oocyst shedding; Nitazoxanide is not recommended for treatment in immunocompromised people.
  - **Transmission:** *Cryptosporidium* is transmitted through the fecal-oral route, via contaminated water, contaminated food, direct or indirect animal contact, and person-to-person. The infectious dose is very low (10 to 30 oocysts). Infectivity begins at the onset of symptoms and continues for several weeks after symptoms subside. Oocysts are relatively hardy and are resistant to concentrations of chlorine and other disinfectants commonly used for both drinking water and recreational water treatment. **It is important for people diagnosed with cryptosporidiosis to follow disease control recommendations, specifically to stay out of recreational water for two weeks following the resolution of diarrhea.**
- ***Giardia* information:**
  - **Symptoms:** Diarrhea, greasy stool, stomach pain, nausea, and gas. Asymptomatic infections can occur.
  - **Incubation period and duration:** Symptoms begin one to three weeks after ingesting the parasite, and symptoms may last two to six weeks or longer. Symptoms can wax and wane over several days or weeks.
  - **Diagnostic testing:** *Giardia* is more readily detected using PCR, EIA, and DFA detection assays. O & P testing can be performed but is less sensitive than the other assays. *Giardia* cysts are often excreted intermittently, so testing multiple stool collections (i.e., three stool specimens collected on separate days) increases sensitivity.

- **Treatment:** Patients are typically treated with metronidazole (Flagyl), but tinidazole, and nitazoxanide are also effective treatments.
  - **Transmission:** People become infected with *Giardia* by swallowing *Giardia* cysts found in contaminated food or water. Person-to-person (including through sexual contact) and animal-to-person transmission can occur. Cysts are shed in the stool of infected people. The cysts are instantly infectious once they leave the host.
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### For more information

For more information or for questions, contact the CDPHE Communicable Disease Branch: 303-692-2700.

Members of the public with questions about *Cryptosporidium*, *Giardia* or the Water World incident can call CO-HELP at 1-877-462-2911 (or 303-389-1687) or visit <https://www.colorado.gov/pacific/cdphe/water-world>

