

**DOES MY WATER SYSTEM TEST FOR
CRYPTOSPORIDIUM?**

Contact your local public water system for more information. As mentioned earlier, public water systems are not mandated to conduct these tests.

**IF I AM NOTIFIED THAT
CRYPTOSPORIDIUM HAS BEEN FOUND
IN MY WATER, WHAT SHOULD I DO?**

Follow the instructions issued by your water system, health department, or the Arizona Department of Environmental Quality. If you have been instructed to boil water before drinking, bring the water to a full boil for three minutes (the high temperatures inactivate *Cryptosporidium* oocysts) and then cool. As mentioned earlier, people with illnesses that impair the immune system may want to take extra precautions, such as routinely boiling their water before consumption. Please consult your physician.

For more information, contact the Arizona Department of Environmental Quality Drinking Water Program at 1-800-234-5677, extension 4644. For information on Cryptosporidiosis, contact the Arizona Department of Health Services at 1-800-334-1540.



The Department of Environmental Quality shall preserve, protect and enhance the environment and the public health, and shall be a leader in the development of public policy to maintain and improve the quality of Arizona's air, land and water resources.

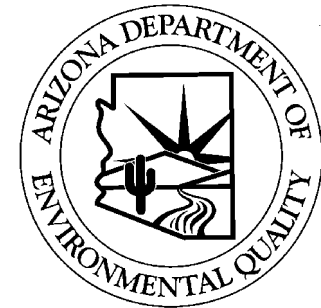
MARCH 1995/WQD/DW/PDOU/MRM

CRYPTOSPORIDIUM

(crip-toe-spor-id-e-um)

and

DRINKING WATER



Produced by the
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CRYPTOSPORIDIUM **(crip-toe-spor-id-e-um)** **AND DRINKING WATER**

WHAT IS *CRYPTOSPORIDIUM*?

Cryptosporidium parvum is an intestinal parasite that can cause diarrhea, nausea, cramps, and other symptoms. This illness is called "Cryptosporidiosis."

WHY THE CONCERN ABOUT *CRYPTOSPORIDIUM* IN DRINKING WATER?

Cryptosporidium was not known to cause disease in humans until 1976. Additionally, few people had heard of Cryptosporidiosis until 1993 when an outbreak occurred in Milwaukee, Wisconsin.

For most people, *Cryptosporidium* might cause temporary physical discomfort. However, Cryptosporidiosis can be life-threatening to people with AIDS/HIV or people who are undergoing chemotherapy. People with these illnesses or other illnesses that impair the immune system may want to take extra precautions, such as boiling water before consumption. Please consult your physician.

For more information about Cryptosporidiosis, read the Arizona Department of Health Services brochure on the topic or call ADHS at 1-800-334-1540.

HOW DOES *CRYPTOSPORIDIUM* GET INTO THE WATER?

The feces of a person or animal infected with *Cryptosporidium* oocysts (the egg-like form of the parasite that is in the infectious stage) get into raw or untreated water through sewage or rainwater runoff. As a result, these oocysts can be present in surface waters such as lakes and rivers that are used for drinking water.

Because microbes can be common in some untreated surface waters, the U.S. Environmental Protection Agency (EPA) requires public water systems to treat surface water to remove and/or inactivate the microbes.

Cryptosporidium can usually be removed from water through filtration, but the oocyst cannot generally be killed through chemical disinfection. These parasites are highly resistant to most disinfectants such as chlorine. Therefore, most water treatment plants must rely on physical removal of the oocysts. However, an ozone process can inactivate the oocysts but this process is relatively new in the U.S. It is also expensive and more research is needed on the process.



WHAT DOES THIS MEAN TO ME?

Drinking water provided by public water systems is not sterile. Water treatment plants are not 100 percent effective 100 percent of the time. To minimize risks to consumers, all surface water must be filtered, and the filtration systems in water treatment plants must work as effectively as possible.

DOES THE GOVERNMENT REGULATE *CRYPTOSPORIDIUM* IN DRINKING WATER?

Water systems are not required by EPA to specifically test for *Cryptosporidium*, although the federal agency is considering new regulations for the parasite. However, the reliability of the test to detect the oocysts and the inability to determine if oocysts can cause infection are areas of concern.

Additionally, there is a national effort underway to address issues surrounding *Cryptosporidium*.

HOW CAN OUR DRINKING WATER BE PROTECTED?

The best protection is to prevent contamination. This can be promoted through watershed protection and land use programs. Additionally, upgrading and operating water treatment plants so that they are as effective as possible will help protect our drinking water.