How do Cryptosporidium oocysts get into drinking water?

Cryptosporidium parasites get into surface water sources, such as rivers and lakes, from the stool (feces) of infected animals or people. Public water systems that get their water from these surface water sources can contain Cryptosporidium oocysts (the egg-like form of the parasite).

Does the treatment process remove the oocysts?

Filtration treatment will usually remove Cryptosporidium oocysts. Chlorine disinfection by itself is not effective. All Virginia public water systems that use surface water sources provide filtration treatment. In addition, in an effort to reduce health risks associated with Cryptosporidium, the Environmental Protection Agency (EPA) has promulgated the Long Term 2 Enhanced Surface Water Treatment Rule (LT2). LT2 requires that all water systems that obtain their water from surface water sources must monitor the raw (source) water for Cryptosporidium oocysts or indicator organisms. Monitoring results will indicate whether systems will be required to provide additional treatment to achieve effective Cryptosporidium reduction.

What does it mean if Cryptosporidium oocysts are present in drinking water?

Public health officials believe that the presence of a few oocysts in drinking water does not pose a threat to people with healthy immune systems. It takes an unusual combination of events to lead to a situation where the drinking water would be considered unhealthy. A change in the source water (such as an increase in the number of organisms or increase in turbidity) and a failure of the treatment system would have to occur at the same time for the drinking water to be considered unhealthy.

How will public health officials decide that water is not safe to drink?

Public health officials evaluate all public water systems regularly. This involves looking at several measurements of water quality, including the source water and filtered water turbidity (cloudiness of the water). All treatment plants are routinely inspected for performance, operations, and maintenance. The evaluation of the treatment process is used to determine if the treatment process has failed.

What will public health officials recommend if water isn’t safe?

Bringing water to a rolling boil for one minute will kill most organisms, including Cryptosporidium.

How can I get more information about cryptosporidiosis?

- If you have concerns about cryptosporidiosis, contact your health care provider.
- Call your local health department. A directory of local health departments is located at http://www.vdh.virginia.gov/local-health-districts/.
- Visit the Centers for Disease Control and Prevention website at http://www.cdc.gov/parasites/crypto/.

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