A CUP OF HEALTH WITH CDC

Water: Keeping It Safe

National Drinking Water Week — May 2–8, 2010

Recorded: April 27, 2010; posted: April 29, 2010

[Announcer] This podcast is presented by the Centers for Disease Control and Prevention. CDC — safer, healthier people.

[Dr. Gaynes] Welcome to *A Cup of Health with CDC*, a weekly feature of the *MMWR*, the Morbidity and Mortality Weekly Report. I'm your host, Dr. Robert Gaynes.

We don't often pause to consider the value of a safe, reliable water supply. The U.S. enjoys one of the best public water systems in the world. It allows us to drink from virtually any public tap with a high assurance of safety.

Dr. Joan Brunkard is an epidemiologist with CDC's Waterborne Disease Prevention Branch. She's joining us today to discuss the importance of maintaining a high-quality public water system. Welcome to the show, Joan.

[Dr. Brunkard] Thanks, Bob. It's good to be here.

[Dr. Gaynes] Joan, what should people know about our water supply?

[Dr. Brunkard] Fortunately, we have a really good water supply and one of the safest water supplies in the world. But one of the concerns is really the age of our infrastructure. Many of the pipes that bring water to our homes and businesses and hospitals were laid down by our parents and grandparents and some of these are a hundred years old, and so, we really feel that we need to upgrade, maintain, and re-invest in our water infrastructure to keep it safe and reliable in providing all of the services that it does.

[Dr. Gaynes] Joan, how common are disease outbreaks related to contamination of our public water systems here in the United States?

[Dr. Brunkard] Not as common as they used to be before our major drinking water legislation and regulations. In the past 10 years though, we've had 100 drinking water-related outbreaks. These have ranged from just a few cases to over a thousand cases per outbreak.

[Dr. Gaynes] How did the U.S. get one of the safest public water supplies in the world?

[Dr. Brunkard] Well, it all started over a hundred years ago when we started chlorinating our public water supplies in 1908, and it's continued with our major water regulations from EPA and from actions that water utilities and public health agencies have taken to protect our water.

[Dr. Gaynes] How does public water become contaminated, then?

[Dr. Brunkard] It can become contaminated in multiple ways. Contamination of source waters, which usually aren't a problem for public water systems because of the treatment they go through, but there can be problems during treatment, for example if a filter stops working, and in the distribution system - the pipes that carry water to our homes, if there's a water main break, for example. We have approximately a quarter million water main breaks in the U.S. each year.

[Dr. Gaynes] What adverse health effects can result from contaminated water?

[Dr. Brunkard] There can be outbreaks of waterborne disease and these can be caused by parasites, viruses, bacteria, or chemicals. People can get sick with diarrhea, vomiting, respiratory illness, sometimes skin rashes, and in rare instances, neurological disorders.

[Dr. Gaynes] If a public water system becomes contaminated, what should people do?

[Dr. Brunkard] Well, they should certainly follow the guidance and recommendations from public officials, the water utility, or health departments. If it's just an issue where someone suspects there might be something wrong with their water, based on taste or odor or no pressure, they should call the water utility, just in case other people are having the same problems. And if you suspect a waterborne outbreak or that you have an illness related to water, you could call your health department.

[Dr. Gaynes] Joan, where can listeners get more information about keeping drinking water safe?

[Dr. Brunkard] They can go to our website: www.cdc.gov/healthywater, one word.

[Dr. Gaynes] Thanks, Joan. I've been talking today with CDC's Dr. Joan Brunkard about the importance of maintaining a high-quality public water system.

Remember, contaminated water can lead to health problems, such as diarrhea or respiratory illness. It's essential that we maintain and improve our water system infrastructure so that we can continue to enjoy safe water.

Until next time, be well. This is Dr. Robert Gaynes for *A Cup of Health with CDC.*

[Announcer] For the most accurate health information, visit www.cdc.gov or call 1-800-CDC-INFO, 24/7.