



A CUP OF HEALTH WITH CDC

Safe Drinking Water

Surveillance for Waterborne Disease and Outbreaks Associated with Drinking Water and Water not Intended for Drinking

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

[Matthew Reynolds] Welcome to *A Cup of Health with CDC*, a weekly broadcast of the MMWR, the Morbidity and Mortality Weekly Report. I'm your host, Matthew Reynolds.

When you turn on the tap in your kitchen or take a drink from a sports bottle after a jog, do you ever stop to think about where the water you drink comes from? This is a question worth asking: nearly three thousand Americans got sick from their drinking water between 2003 and 2004. The water we drink comes from many different sources and the process of providing safe drinking water is complex.

We will have a chance to learn more about this today in talking with Dr. Jennifer Liang, of CDC's Division of Parasitic Diseases. Dr. Liang and her colleagues recently published a report on waterborne disease outbreaks in the United States from 2003 to 2004.

Welcome to the show, Dr. Liang.

[Dr. Liang] Thank you Matthew. It's a pleasure to be here.

[Matthew Reynolds] Dr. Liang, I'm used to turning on the tap and assuming that the water comes out is safe to drink. Where does drinking water come from?

[Dr. Liang] Drinking water can come from two sources. The first being surface water. Surface water refers to lakes, rivers, or reservoirs. Drinking water can also come from

underground water sources, also referred to as groundwater. And those waters are water supply wells or springs.

[Matthew Reynolds] How does water become contaminated?

[Dr. Liang] Contamination of water can occur at any point in the water supply route, beginning from where the water is treated to when you turn on the tap. So contamination can occur at the water processing plant or if your water source is a private water well, contamination can occur at that point. Contamination can also occur once the water reaches your house as a result of problems with water pipes or other defects. The water supply can also be contaminated with bacteria, such as Legionella, or chemicals which can be leached from pipes, such as lead or lead solder.

[Matthew Reynolds] What sorts of symptoms or illnesses are caused by drinking contaminated water? And can this cause a serious illness?

[Dr. Liang] Contaminated drinking water can cause symptoms or illnesses which can include diarrhea or other gastrointestinal illnesses, sometimes even respiratory infections or chemical burns, depending upon the contaminant in the water. And regarding serious illness, that depends upon the person. The general population probably will get ill, but not as serious an illness compared to young children or elderly people or even those who are immunocompromised.

[Matthew Reynolds] I know my water comes from the county water department or at least they send me a bill for water. Can I find out about my water, whether it's okay or not? Does the water department have that kind of information?

[Dr. Liang] Yes, you can find out more about your drinking water, and I'll be giving you a website, so if you want to grab a pen and paper, I'll give that website in a minute. But you can find out more information by contacting your water department. They can provide water quality reports to their customers, or even online you can find a

Consumer Confidence Report, or a CCR, and that website is:
www.epa.gov/safewater.dwinform.htm.

[Matthew Reynolds] I have friends who get their drinking water from a well in their yard. They don't have access to a city or county water system. Are there things they should do to make sure it's safe?

[Dr. Liang] Yes, there are things that people can do to check their well water to make sure that it's safe for drinking. Information is available from your local health department on how to maintain or treat your well, also from the EPA, and from other organizations. The EPA has a Safe Drinking Water Hotline, so if your listeners have that pen handy, the number is 1.800.426.4791, and they also have a publication called "Drinking Water from Household Wells". There are also steps that people can take to protect their well and the quality of the water that they're drinking. This includes inspecting their wells periodically for cracks and damage, and this can be done through routine maintenance by themselves or by a qualified water well contractor. It's also important for them to maintain records of the maintenance that's been done- service, repairs, disinfection that they use, or chemicals that they use to treat their water. Also you want to avoid mixing or using toxic chemicals, pesticides, fertilizers, degreasers, or fuels near the well because that could potentially cause contamination of the drinking water. And you also want to ensure that your septic systems are properly installed, pumped, and inspected routinely and that septic systems, including drain fields, are located away from the water supply.

[Matthew Reynolds] Like a lot of people, I drink bottled water when I'm away from home. Is bottled water safe to drink?

[Dr. Liang] Bottled water is generally safe to drink and is regulated by the FDA, but bottled water is not foolproof and can become contaminated at the bottling plant, or where you buy your water from or even at home. You can learn more about

commercially bottled water, if your listeners can grab their pens, the EPA has information on their website at: www.epa.gov/safewater/faq/faq.html#bw.

[Matthew Reynolds] Thank you for taking the time to talk with us today, Dr. Liang.

[Dr. Liang] You're welcome. Thank you for inviting me.

[Matthew Reynolds] That's it for this week's show. Don't forget to join us next week. Until then, be well. This is Matthew Reynolds for *A Cup of Health with CDC*.

[Announcer] To access the most accurate and relevant health information that affects you, your family and your community, please visit www.cdc.gov.