This fact sheet will help you understand the importance of communicating with the public about chronic contaminants – both regulated and unregulated. It also describes effective strategies for getting your message out.

**What Are Chronic Contaminants?**
Drinking water contaminants that can cause health effects after continuous long-term exposure at levels greater than the maximum contaminant level (MCL) are considered “chronic” contaminants. Examples of chronic drinking water contaminants regulated by EPA include inorganic contaminants like arsenic, cadmium, and copper; organic contaminants such as pesticides and industrial chemicals; and radiological contaminants like radium and uranium.

In contrast, “acute” contaminants can cause short-term health effects within hours or days of exposure. Microbes such as *E. coli* and *Cryptosporidium* are examples of contaminants that can cause an acute health risk. Some chronic-type contaminants can also fall in this category if they are present at high enough concentrations to cause immediate health effects. For example, nitrate levels over the MCL can cause “blue-baby” syndrome in children less than 6 months.

**What Do My Customers Want To Know About Chronic Contaminants?**
Your customers are likely to wonder:
- What types of chronic contaminants are in my drinking water?
- How do they get into my drinking water?
- Should I be concerned?
- What are the health effects?
- What is EPA’s standard for these contaminants?
- What is my drinking water utility doing to reduce or remove these contaminants?

EPA’s Web site has extensive information on each regulated contaminant and has several fact sheets on chronic contaminants that you can print out or order for your customers. For more information on the contaminants that are currently regulated by EPA, go to the EPA Web site at http://www.epa.gov/safewater/contaminants/.

**Why Should I Talk To My Customers About Chronic Contaminants?**
It is important that the public understands that there are no immediate health risks from consuming drinking water containing a regulated chronic contaminant at levels below the MCL. Customers should be aware that chronic contaminant levels exceeding the MCL could cause cancer, liver or kidney problems, reproductive difficulties, or other health effects. In addition, sensitive groups of people, such as the young, elderly, pregnant women, and cancer patients may be more susceptible to adverse health effects at any level of exposure.

Every communication with the public provides an opportunity to:
- Build the public’s trust;
- Develop closer ties to your community;
- Explain your utility’s commitment to delivering safe drinking water;
- Prepare the public for future communication about health risks; and
- Gain support for investment in their water system.

**How Are Chronic Contaminants Regulated?**
In 1974, Congress passed the Safe Drinking Water Act (SDWA) to give EPA the authority to set standards to ensure the safety of drinking water provided by public water systems. The SDWA, which was amended in 1986 and 1996, directs EPA to establish non-enforceable health goals called maximum contaminant level goals (MCLGs) which reflect the level at which no adverse health effects are expected from a particular contaminant. Once an MCLG is established, EPA sets enforceable standards for contaminants called maximum contaminant levels (MCLs). MCLs are set as close as possible to the health goals as well as considering cost, benefits, and the ability of public water systems to detect and remove contaminants using appropriate treatment technologies. When there is no reliable method to measure a contaminant that is economically and technically feasible, EPA develops a treatment technique requirement rather than an MCL. EPA continues to assess the occurrence of unregulated contaminants through the Unregulated Contaminant Monitoring Regulation (UCMR). Information about the UCMR can be found at http://www.epa.gov/safewater/ucmr/.
What Are Some Best Practices For Effective Communication About Chronic Contaminants?

If you expect that your public water system will exceed EPA’s standard for a contaminant or that the costs of compliance may require public funding, communicate early and often. The most effective communication efforts follow these simple steps:

- Provide simple, straightforward, and consistent messages;
- Describe potential adverse health effects and populations at risk;
- Describe actions you are taking to correct the situation and when you anticipate it will be resolved;
- Describe actions the consumer can take such as using alternate water supplies and when to seek medical help;
- Provide links to useful information resources such as EPA’s Web site;
- Use graphics, photographs, maps, charts, and drawings to illustrate your messages;
- Assume that consumers will only read the top half of the notice or what can be read in ten seconds;
- Display important elements in bold and/or large type in the top half of the notice;
- Communicate in multiple languages to meet the needs of your non-English speaking consumers; and
- Include contact information for further information in all communications.

Where Can I Learn More About Chronic Contaminants and Communication?

To learn more about chronic contaminants, visit EPA’s Safe Drinking Water Web site at http://www.epa.gov/safewater or call the Safe Drinking Water Hotline at 1-800-426-4791.

A useful primer on health risk communication can be found at http://www.atsdr.cdc.gov/risk/riskprimer/.