EPA lowers allowable arsenic levels in drinking water

By Keith Mulvihill

NEW YORK, Jan 18 (Reuters Health) - After much political wrangling, the Environmental Protection Agency (EPA) has announced the reduction of the maximum allowable levels of arsenic in drinking water to 10 parts per billion (ppb), down from the current level of 50 ppb.

The new level will allow for the protection of 13 million Americans from cancer and other health problems, the agency reports in a press release.

"When we turn on our taps, Americans expect the water that comes out to be clean and safe. Access to clean, safe water is fundamental to our quality of life," President Clinton said in an accompanying statement.

While all community water systems are required to follow the new standard, the EPA estimates that approximately 5%, or 3,000, community water systems serving 13 million people exceed the new 10 ppb standard. These systems will need to take some kind of corrective action.

Long-term exposure to low concentrations of arsenic in drinking water can lead to skin, bladder, lung and prostate cancer, according to EPA. Other effects include cardiovascular disease, diabetes and anemia, as well as reproductive effects.

Arsenic occurs naturally in rocks, soil, water and air. Scientists say that most water sources in the United States contain levels less than 5 ppb, but the EPA cautions that "there may be hot spots with...higher than the predicted occurrence."

Specifically, the agency points to "Western states, parts of the Midwest, and New England" as regions that could potentially exceed the new standard.

Industries such as water utilities and mining operations would bear the brunt of the costs to monitor for arsenic and clean up the water to safe levels.

The EPA notes that the water bills for people living in communities requiring corrective action could have annual cost increases up to $60 per household. In addition "financial and technical assistance is available to help small systems address the costs of this rule, primarily through the drinking water state revolving fund provided under the Clinton-Gore administration that has provided $3.6 billion to drinking water systems since 1997," according to the EPA.

LARGE STUDY SPURS ACTION

In 1999, the National Academy of Sciences released a report entitled "Arsenic in Drinking Water" and announced that the EPA "should develop a stricter standard for allowable levels of arsenic in the nation's drinking water as soon as possible."

The NAS based their recommendations after reviewing numerous studies including several based on populations outside the US.

"There have been observed increased risks of fatal cancer in populations in Taiwan, Chile and Argentina, that have consumed amounts of arsenic in drinking water that are less than 10 times higher than those permitted under the current standard of 50 ppb here in the United States," Dr. Michael Kosnett told Reuters Health in October. Kosnett conducts research at the University of Colorado Health Sciences Center and is a member of the NAS committee that produced the arsenic report.

"The well-established approach to public health protection that has been taken by the EPA and other public health agencies is to establish standards that provide a margin of

safety between drinking water standards and levels associated with fatal outcomes," Kosnett said.

ARE YOU AT RISK?

Erik Olsen, a lawyer with the Natural Resources Defense Council, a nonprofit environmental and public health advocacy group based in New York City, recommends that people call their local health department for the name of state-certified laboratories, or they can call the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

The Environmental Quality Institute (EQI) at the University of North Carolina at Asheville also offers a service to all people in the United States who want their drinking water tested for arsenic.

For $12, EQI will send you a water sample bottle and instructions. "Then you mail the sample back to the lab," Dr. Richard Maas, research director at EQI told Reuters Health last October. "In a few weeks you get the result." The analysis will explain the risks, if any, that your drinking water poses.

"Our goal in this project is to both...help define the problem of arsenic in the United States, and also to provide the US public with a cheap and convenient way to test their water," Maas said in an interview with Reuters Health.

"We know that tens of millions of Americans are consuming water with harmful levels of arsenic," according to information coming from the EPA, Maas said. "What we don't know is where the worst problems are and we know almost nothing about the exposure of people on private wells."

For more information on how to test your water, go to the EQI Web site, www.unca.edu/eqi.