

## Study: Dirty tap water puts pregnant women at risk

WASHINGTON (AP) — Millions of Americans have been drinking tap water contaminated with chemical byproducts from chlorine that are far more than what studies suggest may be safe for pregnant women, two environmental groups say in a new study.

Chlorine is commonly used to disinfect drinking water. When it is added to water that contains organic matter such as runoff from farms or lawns, however, it can form compounds such as chloroform that can cause illness.

The study released Tuesday by the Environmental Working Group and Public Interest Research Groups identified areas that may have increased health risks including miscarriage, neural tube defects and reduced fetal growth from women drinking chlorination byproducts.

"By failing to clean up rivers and reservoirs that provide drinking water for hundreds of millions of Americans, EPA and the Congress have forced water utilities to chlorinate water that is contaminated with animal waste, sewage, fertilizer, algae and sediment," the report says.

Jane Houlihan, EWG's research director, said the report also shows how that cleanup failure has "a direct impact on human health." Pregnant women need to drink plenty of water, she said, but they can reduce their exposure to potential risks through simple measures such as home filters and purchasing bottled water.

One expert on environmental health cautioned that the link between the byproducts and pregnancy risks is suggestive, not conclusive.

Still, if the pregnancy studies are proved, millions could be at risk, said Dr. Robert Morris, an environmental epidemiologist at Tufts University School of Medicine in Boston.

"That body of literature isn't necessarily conclusive but people ought to be aware of it," Morris said. "It's pretty clear that some of these compounds can be pretty bad actors. The fact that these levels are as high as they are is certainly something to be concerned about."

The environmental groups combed water quality records in 29 states and the District of Columbia and matched them with various research into birth defects and miscarriages conducted by state and federal agencies and universities.

The groups said the places statistically most at risk due to chlorination byproducts were those that are populous, lacked buffers from urban sprawl and were downstream from agricultural sites. But women in small towns generally face twice the risk from drinking high levels of the byproducts, Houlihan said.

Matching high rates doesn't prove the environmental risk caused the health problems, however. Also, the results are limited because, among other reasons, such health records do not exist in some states.

The Environmental Protection Agency already has decided that some chlorination byproducts pose health risks and instituted stricter standards on Jan. 1 for seven of them: five haloacetic acids, bromate and chlorite. The agency also began requiring a reduction by one-fifth of the allowable level for trihalomethanes, another chemical produced by adding chlorine to dirty water.

EPA studies showed that reducing the level of trihalomethanes might mean 2,332 fewer cases of bladder cancer per year, down from its estimate of up to 9,300 annual cases caused by trihalomethanes.

While the environmental groups said the majority of water suppliers were meeting the current and future drinking water health standards, they also found that since 1995 more than 11 million people in 1,044 communities were being served water contaminated with chlorination byproducts for 12 months in a row at levels above the new legal limit.

To reduce the risks, the groups said, the federal government should provide billions of dollars more for cleaning up sources of contaminated water and providing more buffer areas that can filter potential contaminants from farmland and urban areas.