

URGENT, (HIGHLIGHTS OF ARTICLE IN TODAY'S NEWS.)

AP Probe Finds Drugs in Drinking Water

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(March 9)- A vast array of pharmaceuticals – including antibiotics, anti-convulsants, mood stabilizers and sex hormones- have been found in the drinking water supplies of at least 41 million Americans, an Associated Press investigation shows.

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For several decades, federal environmental officials and nonprofit watchdog environmental groups have focused on regulated contaminants – pesticides, lead, PCBs- which are present in higher concentrations and clearly pose a health risk.

However, some experts say medication may pose a unique danger because, unlike most pollutants, they were crafted to act on the human body.

But at a conference last summer, Mary Buzby – director of environmental technology for drug maker Merck & CO. Inc. – said: “there’s no doubt about it, pharmaceuticals are being detected in the environment and there is genuine concern that these compounds, in the small concentrations that they’re at, could be causing impacts to human health or to aquatic organisms.”

Even users of bottled water and home filtration systems don’t necessarily avoid exposure. Bottlers, some of which simply repackage tap water, do not typically treat or test for pharmaceuticals, according to the industry’s main trade group. The same goes for the makers of home filtration systems.

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One technology, reverse osmosis, removes virtually all pharmaceutical contaminants but is very expensive for large-scale use and leaves several gallons of polluted water for every one that is made drinkable.

Recent laboratory research has found that small amounts of medication have affected human embryonic kidney cells, human blood cells, and human breast cancer cells. The cancer cells proliferated too quickly, the kidney cells grew too slowly; and the blood cells showed biological activity associated with inflammation.

The federal government doesn’t require any testing and hasn’t set safety limits for drugs in water. Of the 62 major water providers contacted, the drinking water for only 28 was tested. Among the 34 that haven’t: Houston, Chicago, Miami, Baltimore, Phoenix, Boston, and New York City’s Department of Environmental Protection, which delivers water to 9 million people.

There’s growing concern in the scientific community, meanwhile, that certain drugs – or combinations of drugs- may harm humans over decades because water, unlike most specific foods, is consumed in sizable amounts everyday.

The AP’s investigation also indicates that watersheds, the natural sources of most of the nation’s water supply, also are contaminated. Tests were conducted in the watersheds of 35 of the 62 major providers surveyed by the AP, and pharmaceuticals were detected in 28.

In several cases, officials at municipal or regional water providers told the AP that pharmaceuticals had not been detected, but the AP obtained the results of tests conducted by independent researchers that showed otherwise. For example, water department officials in New Orleans said their water had not been tested for pharmaceuticals, but a Tulane University researcher and his students have published a study that found the pain reliever naproxen, the sex hormone estrone, and the anti-cholesterol drug byproduct clofibrac acid in treated drinking water.