

Sewage-tainted floodwaters threaten public health

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A hose carries the town water supply over the Ottauquechee River, replacing a water main running under the river which was washed away on Wednesday, Sept. 7, 2011 in Woodstock, Vt. Drinking water supplies in Vermont suffered damages in flooding from Tropical Storm Irene. Some communities remain under boil water orders and private well owners are being urged to have their tests for contaminants. (AP Photo/Toby Talbot)

(AP) -- Nasty floodwaters from the remnants of Lee and Irene - tainted with sewage and other toxins - threaten public health in parts of the Northeast by direct exposure or the contamination of private water wells,



officials said Thursday.

"We face a <u>public health emergency</u> because sewage treatment plants are underwater and no longer working," Pennsylvania Gov. Tom Corbett said as flooding from Lee's drenching rains inundated central and eastern Pennsylvania. "Flood water is toxic and polluted. If you don't have to be in it, keep out."

A dozen Vermont towns flooded by Irene were still on boil-water orders 12 days later, though officials reported no waterborne illness. Similar precautions have been taken throughout other storm-damaged states.

In Waterbury, the <u>municipal wastewater</u> plant was overwhelmed by flooding from Irene and <u>raw sewage</u> flowed into the Winooski River. The smell of sewage was still strong Thursday in the mud- and muck-stained driveway where Air Force Master Sgt. Joe Bishop, 35, was home on leave - after a tour in Iraq and three in Afghanistan - trying to salvage what he could from his elderly parents' home.

"I've been drinking bottled water," Bishop said, and cleaning up with jugs of water from a tanker truck positioned down the road by emergency officials. He said he's trying to clean his father's power tools and other items but with limited water, the task has been difficult.

"You can't pressure-wash anything," he said. He had no idea when his parents' water service would be restored.

Vermont's state health department, which regulates private water wells, urged residents to check their wells for bacteria with free testing kits it is distributing. If their water smells like gasoline or other <u>petroleum</u> <u>products</u>, officials said the wells would have to be further tested for toxic substances.



Floodwaters cause problems that bedevil water system operators, environmental regulators and homeowners alike: Municipal <u>sewage</u> <u>treatment plants</u> overflow and septic systems back up. A witches' brew of paints, pesticides, motor oil and other toxic substances washes out from basements and garages, swirling in floodwaters and soaking into yards and fields as waters recede.

"It's clearly one of the biggest concerns after any disaster, including flooding," said Dr. Harry Chen, Vermont's health commissioner. "You have to ask yourself, 'Is my water safe?'"

Chen said there haven't been any reports of illness in Vermont caused by unsafe drinking water. The Health Department would hear about them, he said, through routine contacts with hospital emergency rooms and pharmacies. Even a spike in pharmacy sales of anti-diarrheal medicines would prompt his department to investigate further, Chen said, and that hasn't happened.

Failed septic systems are a common cause of bacteria contaminating drinking water from wells. When floodwaters cause water tables to rise, septic tanks can become inundated, their contents floating to the surface. On Wednesday, the Vermont Agency of Natural Resources said septic tanks continued to be a threat since the storm hit Aug. 28.

Anyone seeing backed-up sewage on the ground "must take action," said Deb Markowitz, secretary of the agency. "Improperly treated wastewater is a risk to human health, both through direct exposure and by entering and contaminating water supplies."

New York City officials said any threat from Irene's backwash had passed, but upstate, 23 municipal water systems had boil-water orders for varying lengths of time. As some communities in New Jersey and Pennsylvania were taking similar precautions after Irene, the unrelenting



rains of Lee were expected to trigger more.

Officials in Maryland, Delaware and the District of Columbia, which were also hit hard by Irene, said drinking-water quality had not been compromised.

In addition to concerns about water-borne illness, residents of affected areas were being urged to avoid exposure to water and mud possibly polluted with household chemicals and paints.

"It's mind-boggling to think about what could possibly be in there," said Kim Greenwood, state scientist with the Vermont Natural Resources Council.

"Most Vermonters would never think I should pour my antifreeze in the brook, or my latex paint or my chain saw oil. The person who cares least about the environment would never dump this stuff in. But we've inadvertently dumped the worst from our households into (streams)."

Greenwood said that while the free tests kits will check for bacteria, residents with private wells might need a more extensive battery of tests to look for other contaminants.

In Woodstock, the privately owned Woodstock Aqueduct Co, which has provided water in the village since 1886, was under a boil-water order until Thursday, when it was lifted, said Eric Wegner, vice president and general manager.

Tests had earlier come back negative for bacteria, but Wegner said state officials were nervous because some water was coming into the system via a fire hose not rated for potable water.

The hose, he said, was installed when a water main passing under the



Ottauquechee River was ripped away by floodwaters. To keep the rest of his system properly pressurized, crews used the hose to connect hydrants on the two sides of the river.

More than 500 feet of cream-yellow fire hose snaked across the top of the bridge and up the road, replacing the 8-inch water main that normally runs unseen beneath the stream.

Wegner also had to contend with other issues, including a pump that blew because of an electrical short and fields turned into sodden mud flats surrounding his well houses.

After 10 straight 16- to 18-hour days, Wegner looked haggard as he recalled telling one local resident that he himself had been drinking the company's <u>water</u>.

"Yeah,' the resident observed. "But you don't look too good."

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