

2/7/86

Chemicals in area water could cause illness: Experts

By ROBERT L. SCHEIER
Staff Writer

WILKES-BARRE — Wyoming Valley's water doesn't have unusually high levels of possible cancer-causing chemicals called trihalomethanes, according to experts.

But the levels could pose a hazard, even if you just shower or bathe in the water and don't drink it, they said.

The question surfaced Wednesday in a report on ABC-TV's Good Morning America that a sample of Scranton water showed levels of chloroform that exceeded federal standards. Chloroform is one of the four substances known as trihalomethanes.

Since then, Pennsylvania Gas and Water Co. (PG&W) spokesmen said Scranton water meets federal standards, and that water piped to Wyoming Valley customers also meets the standard for trihalomethanes.

The federal government calls for no more than 100 parts per billion of trihalomethanes in drinking water, based on four quarterly samples per year.

Wyoming Valley-area water showed annual averages of 50 parts per billion or under, and none of the quarterly samples showed more than 77 parts per billion, according to figures released Thursday by PG&W.

"It's typical to have that range of 50 and above," said Richard Bruner, a toxicologist with the federal Environmental Protection Agency (EPA) in Philadelphia. "It's not unusual."

But the federal standard isn't strict enough, some experts said Wednesday and Thursday, and the trihalomethanes pose a risk that can only be eliminated by spending more for filtration or other water purification systems.

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The Times Leader

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Trihalomethanes are a group of four chemicals formed when chlorine, which is used to disinfect water, mixes with organic material in the water.

"We started chlorinating water in the 1920s, and we didn't find trihalomethanes until the mid 1970s," said Richard Stump, the laboratory director of Suburban Water Testing Laboratories in Temple.

"It's kind of like a two-edged sword," said Stump, 33, of Laureldale. "You really do have a cancer risk in drinking chlorinated water, but it's a much better risk than getting the diseases you would get from drinking the water without the chlorine in there."

Stump said experts calculate that 50 parts per billion of trihalomethane in drinking water cause one more case of cancer in every 20,000 people, assuming they all drank two quarts of water per day during their lifetimes and have an otherwise average risk of getting cancer.

But potential cancer-causing substances such as trihalomethanes are also easily absorbed through the skin and the respiratory system, said Gene Rosov, the president of WaterTest Corp. in Manchester, N.H.

That means baths or showers could pose a risk for some persons whose health is already under stress, he said, or for children who have a high ratio of skin area to body weight.

I. would be concerned

about finding any levels of trihalomethanes in any water sample where the water was being used to bathe an infant, to bathe children, for showers for people in a stressed condition," he said.

Bruner, the EPA toxicologist, agreed. He said trihalomethanes are quick to turn from a liquid to a vapor.

"When you take a shower you inhale a lot of it, even if it's in very low concentration," he said. "There's no doubt many volatile hazardous substances like chloroform present a greater hazard by inhalation and skin absorption than by ingestion."

Bruner said environmental officials and water companies are caught in a bind, because the surface water supplies that most need chlorination are the ones highest in the organic substances that combine with chlorine to form trihalomethanes.

In PG&W's service area, chlorine levels in the water were increased in the wake of an outbreak of the intestinal disease giardiasis which sickened more than 440 people in 1983-84.

Rosov said problems with providing clean water go back to the days when water supplies were far from cities or industries. As the land was developed around those supplies, he said, utilities found it harder to keep providing clean water at a low price.

The answer, he said, is for consumers to be ready to pay more for clean water, either through community filtration systems or filter systems for their homes.