

AWWA urges science to address pharmaceuticals

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(WASHINGTON, DC) – To responsibly address the issue of pharmaceutical compounds in drinking water, scientists must know at what concentration these substances impact human health, not simply whether they can be detected, a leading expert today told a U.S. Senate subcommittee.

Testifying on behalf of the American Water Works Association (AWWA), Shane Snyder, research and development project manager for Southern Nevada Water Authority, stressed that advanced analytical methods allow scientists to detect substances that would have been impossible to find only a few years ago.

The April 15 hearing before the Senate Environment and Public Works Subcommittee on Transportation, Safety, Infrastructure Security, and Water Quality, was scheduled following recent media reports about trace levels of pharmaceutical compounds in drinking water. Snyder has served as principal investigator for many research projects related to the trace-level detection, removal, and toxicology of pharmaceuticals in water supplies.

“I can tell you with absolute certainty that, if we regulate contaminants based upon detection rather than health effects, we are embarking on a futile journey without end,” Snyder said.

Pharmaceutical compounds should instead be considered within the framework of the U.S. Environmental Protection Agency’s (EPA) Contaminant Candidate List process, Snyder said. That process identifies candidates for new drinking water standards through a science-driven process given the public confidence that the regulations they pay for are necessary, reasonable, and protect public health. Similarly, EPA’s Unregulated Contaminant Monitoring Rule provides a framework for decisions concerning testing and reporting to customers about contaminants that are not currently regulated.

Snyder referred to research he has conducted that found the highest concentration of any pharmaceutical compound detected in U.S. drinking waters to be approximately 5 million times lower than one would take in a medical dose. He described that amount as roughly equivalent to one-half of an inch in the distance between the earth and the moon, or in terms of time, approximately one second in approximately 750 years.

Snyder's testimony suggested a number of other actions to address the issue, including:

- Work among EPA, states, utilities and others to develop policies that minimize contamination of source waters by pharmaceutical products and other contaminants.
- Encouragement of pharmaceutical take-back programs that reduce flushing of unused medications. Snyder noted that these programs are likely to only address a small part of the concern, however, since pharmaceutical compounds pass through humans and into the wastewater stream.
- Support for increasing EPA's drinking water health effects research budget to levels at least equivalent to the air pollution health effects research budget.

“To date, no peer reviewed published research has found ill effects on humans from pharmaceuticals in the environment at the trace levels we have seen in drinking water,” Snyder said. “However, drinking water providers would like to see more research on this matter, so that we can either take appropriate action to address an actual health risk if there is one, or reassure the public that there is not one.”

AWWA's complete testimony is available at the Subcommittee [website](#).