

## **Global Efforts Needed to Keep Water Arsenic-free**

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NEW YORK (Reuters Health) - A US Geological Survey (USGS) scientist urges policymakers, drinking water managers and scientists from around the world to work together to cope with arsenic contamination of drinking water, which is becoming an increasing problem as the world's population rises and available clean water dwindles.

In India and Bangladesh, notes D. Kirk Nordstrom of the USGS in Boulder, Colorado, 36 million people could be at risk from arsenic-contaminated water, which produces debilitating skin abnormalities and can cause cancer.

The contamination can occur naturally as minerals from rocks and soil dissolve over time, leaching arsenic into groundwater. Industrial run-off is another arsenic source.

Writing in the June 28th issue of the journal *Nature*, Nordstrom notes that experts estimate 43% of the world's population does not have adequate sanitation and 22% lack clean drinking water. And the increasing demand for safe drinking water means that surface water--from lakes, rivers or streams--isn't enough in some regions, he says. "This has led to an increased dependence on ground-water resources in many parts of the world," Nordstrom adds.

The key to minimizing risk from consuming arsenic-contaminated drinking water, according to Nordstrom, "is to incorporate hydrogeological, geochemical and microbiological expertise into the decision-making process of water managers, remediation specialists and policymakers.

"The geologic and ground-water conditions that promote high arsenic concentrations are known," he explains, "and can help identify high-risk areas."

Nordstrom concludes, "In the search for adequate water supplies and in the absence of adequate information, it is prudent to test selected wells before opening the tap to hundreds, thousands, or more, of users."

SOURCE: *Science* 2002;296.