



USGS Studies Private Well Water Quality

Fifteen percent of all Americans rely on drinking water from private wells, water not regulated by the federal Safe Drinking Water Act. To determine if there is reason for concern about possible contaminants, the U.S. Geological Survey (USGS) sampled approximately 2,100 private wells in 48 states between 1991 and 2004 and found that the most predominant contaminants of potential health concern were inorganic ones such as radon and arsenic. These inorganic pollutants were derived from the geologic strata that the aquifers flow through.

Nitrate was the most common inorganic contaminant derived from human-made sources and was most often found in wells located near intensively farmed land. Radon was found at high concentrations in the Northeast, the Appalachians and in central Colorado. Other contaminants that turned up in private wells were human-made organics including insecticides, herbicides, solvents, and gasoline.

About half of the wells were found to exceed the recommended ranges for total dissolved solids, pH, iron and manganese, while total coliform bacteria were present in one-third of a subset of 400 wells.

Private well owners are responsible for testing their own well water and should be encouraged to contact their local and state health agencies for guidance on well siting, testing options and water treatment devices.

Read more about this study at http://water.usgs.gov/nawqa/studies/domestic_wells/.