

# Human exposure to arsenic from groundwater in the Red River and Mekong River Deltas in Vietnam

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**Abstract:** Groundwater contamination by arsenic is a serious environmental problem in the world. Yet there have been few studies conducted in Southeast Asian countries. This article surveys arsenic contamination in groundwater and residents from Vietnam, and is based on our previous studies. Samples of groundwater (n = 118), human hair (n = 59), and urine (n = 100) were collected in the Red River and Mekong River Deltas during 2001-2004. Arsenic was detected in most of the groundwater samples, and its level ranged from

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**Index Keywords:** Arsenic concentration; Arsenic contamination; Arsenic levels; Arsenic speciation; Asian countries; Drinking water; Elevated concentrations; Environmental problems; Groundwater contamination; Human; Human exposures; Human hair; Human urine; Inorganic arsenic; Mekong River; Mekong River Delta; Positive correlations; Red River; Red River Delta; Study areas; Vietnam; Arsenic; Body fluids; Coastal zones; Groundwater; Groundwater pollution; Health risks; Hydrogeology; Potable water; Rivers; River pollution

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