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

Agusa T., Inoue S., Kunito T., Minh T.B., Ha N.N., Tu N.P.C., Trang P.T.K., Iwata H., Viet P.H., Tuyen B.C., Tanabe S.

Center for Marine Environmental Studies (CMES), Ehime University, Matsuyama, Japan; Department of Legal Medicine, Shimane University, Faculty of Medicine, Izumo, Japan; Japan Food Hygiene Association, Tokyo, Japan; Department of Environmental Sciences, Faculty of Science, Shinshu University, Matsumoto, Japan; Center for Environmental Technology and Sustainable Development (CETASD), Hanoi National University, 334 Nguyen Trai Street, Thanh Xuan, Hanoi, Viet Nam; Department of Life Environmental Conservation, Faculty of Agriculture, Ehime University, Matsuyama, Japan; Research Institute for Biotechnology and Environment (RIBE), Nong Lam University, Thu Duc District, Ho Chi Minh City, Viet Nam

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 Author Keywords: Arsenic; Groundwater; Human; Mekong River Delta; Red River Delta; Vietnam 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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Correspondence Address: Tanabe, S.; Center for Marine Environmental Studies (CMES), Ehime University,

Matsuyama, Japan; email: shinsuke@agr.ehime-u.ac.jp

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Authors with affiliations:

- Agusa, T., Center for Marine Environmental Studies (CMES), Ehime University, Matsuyama, Japan, Department of Legal Medicine, Shimane University, Faculty of Medicine, Izumo, Japan
- Inoue, S., Japan Food Hygiene Association, Tokyo, Japan
- Kunito, T., Department of Environmental Sciences, Faculty of Science, Shinshu University, Matsumoto, Japan
- Minh, T.B., Center for Marine Environmental Studies (CMES), Ehime University, Matsuyama, Japan, Center for Environmental Technology and Sustainable Development (CETASD), Hanoi National University, 334 Nguyen Trai Street, Thanh Xuan, Hanoi, Viet Nam
- Ha, N.N., Center for Marine Environmental Studies (CMES), Ehime University, Matsuyama, Japan
- Tu, N.P.C., Department of Legal Medicine, Shimane University, Faculty of Medicine, Izumo, Japan
- Trang, P.T.K., Center for Environmental Technology and Sustainable Development (CETASD), Hanoi National University, 334
 Nguyen Trai Street, Thanh Xuan, Hanoi, Viet Nam
- Iwata, H., Center for Marine Environmental Studies (CMES), Ehime University, Matsuyama, Japan
- Viet, P.H., Center for Environmental Technology and Sustainable Development (CETASD), Hanoi National University, 334
 Nguyen Trai Street, Thanh Xuan, Hanoi, Viet Nam
- Tuyen, B.C., Department of Life Environmental Conservation, Faculty of Agriculture, Ehime University, Matsuyama, Japan
- Tanabe, S., Center for Marine Environmental Studies (CMES), Ehime University, Matsuyama, Japan, Research Institute for Biotechnology and Environment (RIBE), Nong Lam University, Thu Duc District, Ho Chi Minh City, Viet Nam

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