

Polluted water is affecting not only biodiversity but also the public health severely [1]. People in the developing countries are deprived of safe drinking water due to lack of awareness about personal hygiene. Thus, immediate intervention is required at the level of water supply before public distribution, or at household level. WHO recommends water sanitation and hygiene (WASH), is critical in achieving health [2] under programme Millennium Development Goals (MDG) up to 2015 for sustainable access to safe drinking water. According to a WHO 2007 report, around 1.1 billion people are lacking availability of safe drinking water and more than 400 children are dying every year owing to waterborne diseases. According to WHO reports, death of 1.6 million children is due to diarrhea under the age of 5 years [3]. Various neurological diseases also have been reported along with the malnutrition and arthritis because of waterborne pathogens. Government is investing huge resources in providing clean water to public. There are various causes which are responsible for poor water supply in public system such as poor distribution system, poor maintenance of water pipe and ineffective sanitization technique in overall making safe drinking water [4]. Drinking water reliability is much in doubt today because of presence of various dangerous pathogens also [5] and thus needs urgent attention against various waterborne pathogens and some heavy metal contaminants present. The most severely effects had been observed in many developing countries such as Bangladesh [6], India [7] and China [8]. In India, specially in Assam rural area, water supply from well is reported to be contaminated with heavy metals [9], while in Rajasthan water is contaminated with pesticide [10], contamination of Fluoride in Haryana [11], and water is contaminated with Arsenic contamination in west Bengal [12] and recently, there is additional report of pharmaceutical contamination in drinking water [13]. According to Fawell [14], every country must follow strict guidelines issued by WHO, in order to supply safe drinking water, under safe limit. Many survey and reports shows [15] that despite of various guidelines, only few country has been successful in providing safe drinking water to >50% population. According to the Global Annual Assessment of



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22. Majumdar KK, Guha Mazumder DN (2012) Effect of drinking arsenic-contaminated water in children. Indian J Public Health 56: 223-226.

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