

### **Surveillance of Quality of Drinking Water**

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**Objective:** To study the status of bacteriological contamination of drinking water being supplied by the municipal corporation.

**Design:** Community based longitudinal study.

**Setting:** Department of Community Medicine and Microbiology of Government Medical College.

**Method:** 133 Hand pumps and 107 taps from which people were using water for drinking purposes were included in the study. Bacteriological quality of drinking water was checked by Mackie and Mc Cartney's method; calculating most probable number (MPN) by presumptive coliform count. Water samples with MPN > 3 were considered unfit for drinking purposes.

**Result:** The bacteriological analysis of water samples was carried out for two years from July 2002 to June 2004. It showed that 47.4% hand pumps and 15.9% taps were supplying contaminated water; the range was from 40-70% and 27.8-57.9% during pre-monsoon to post-monsoon, seasons of respective years.

**Conclusion:** The contamination of drinking water unfortunately appears to be a universal phenomenon in most of the developing countries. The authors conclude that there are two spheres, which needs to be strengthened. Firstly, the bacteriological quality of drinking water needs to be improved in general and special care is to be taken during pre-monsoon and monsoon periods. Secondly, regular campaigns may be carried out to inform the public about the importance of safe and potable water including methods for household disinfection of drinking water, during the pre-monsoon and monsoon periods when the incidence of contaminated water samples is highest in the region.