Conclusions
6 Conclusions

Assessment of virological safety of water is an important concern for the consumers as well as public health authorities worldwide, developing countries representing the major sufferers from enteric diseases.

- As our first attempt to address this issue, we first standardized the requisite technologies for (1) the rapid and efficient concentration of viruses from water and (2) detection of four of the most important enteric viruses, i.e., HAV, HEV, entero and Rota viruses.

- Based on a year-round study involving concentration of 40 litres of drinking water from 662 samples, it may be concluded that water supply to Pune city is reasonably safe as only 2 samples showed the presence of enteric viruses.

- In contrast, the Mutha river flowing through the city is heavily and alarmingly contaminated with all the 4 viruses under investigation. The degree of contamination has significantly increased during last 7 years.

- The study documents that out of the 8 point of use water purification units available in the Indian market, only 2 complied with USEPA (United States Environmental Protection Agency) standards.

- There is an urgent need for setting up virologic standards for domestic water purifiers and strict evaluation of such purifiers both by the manufacturers as well as regulatory authorities.

- A similar multi-site study involving villages, small cities and the Metros must be carried out to truly understand the quality of water and design adequate purification / disinfection protocols, if needed.