

Most frequent diseases related to poor water supply and sanitation

The Challenge:

Access to adequate water supply is not only a fundamental need and human right. Access to water supply also has considerable health and economic benefits to households and individuals.

On the other hand, the lack of access to adequate water contributes to deaths and illness, especially in children. Thus, the improvement of access to water is a crucial element in the reduction of under-five mortality and morbidity, particularly in poor urban areas.

Access to water also means that the considerable amount of time women and children spend for fetching water could be spent more effectively on other tasks, improving their economic productivity, a key component in poverty alleviation efforts.

WHO estimates the economic gains per \$1 invested in water supply and sanitation to range from \$5 to \$28 depending on the level of services offered and the region. Major benefits are gained from less time spent being ill; significant savings could be made in health sector and patient costs due to reductions in the prevalence of diarrhoeal diseases and the value of prevented deaths.

Most frequent diseases related to poor water supply and sanitation:

- **Diarrhoea.** About 4 billion cases of diarrhoea per year cause 2.2 million deaths, mostly among children under five.
- **Intestinal worms** infect about 10% of the population of the developing world and, depending upon the severity of the infection, lead to malnutrition, anaemia or retarded growth, and deminished school performance.
- **Trachoma.** About 6 million people are blind from trachoma, a disease caused by the lack of water combined with poor hygiene

practices. Studies found that providing adequate water supply could reduce the infection rate by 25%.

- Schistosomiasis. About 200 million people are infected with schistosomiasis, of whom 20 million suffer severe consequences. Studies found that adequate water supply and sanitation could reduce infection rate by 77%.
- Cholera is a world-wide problem, especially in emergency situations, that can be prevented by access to safe drinking water, sanitation and good hygiene behaviours

Principal transmission routes of disease

Waterbased disease transmission by drinking contaminated water is responsible for significant outbreaks of faecal-oral diseases such as cholera and typhoid and include diarrhoea, viral hepatitis A, cholera, dysentery and dracunculiasis.

Water-washed disease occurs when there is a lack of sufficient quantity for washing and personal hygiene, which facilitates, among others, the spread of skin and eye infections e.g. trachoma).

Diarrhoea is the most important public health problem affected by water and sanitation and can be both waterborne and water-washed. Hygiene promotion which includes the simple act of washing hands with soap and water can prevent one third of diarrhoeal disease and is therefore

key in the prevention of waterborne diseases.
New challenges

During the last decade, new problems that are driven by environmental concerns and socio-economic aspects have emerged. Expanding agriculture and manufacturing business not only increasingly use water but also contribute to pollution of valuable sources of surface and groundwater.

Thus, the overextraction of water has led to a reduced water table in parts of the world. Problems of contamination of water supplies with naturally occurring inorganic arsenic, in particular in Bangladesh and other parts of South Asia, or fluoride in a number of countries, including China and India, have affected the safety of water supplies.

For more details on the water environment and its problems and challenges, please visit the UNICEF Water , Environment and Sanitation website at <http://www.unicef.org/programme/wes/>

Sitio Web (URL): <http://www.childinfo.org/areas/water/>

Autor(es): UNICEF Statistics