



Healthy Environments for Children Alliance

A world-wide alliance to reduce environmental risks to children's health that arise from the settings where they live, learn, play, and sometimes work by providing knowledge, increasing political will, mobilizing resources, and catalyzing intense and urgent action.

Issue Brief Series: Water and Sanitation

Water and sanitation are essential to achieving and maintaining good public health, reducing poverty and supporting child growth and development. "...Once we can secure access to clean water and to adequate sanitation facilities for all people...a huge battle against all kinds of diseases will be won," maintains the World Health Organization's Director-General Dr Lee.

Yet, over one billion people do not have access to safe water supplies and 2.6 billion people lack access to adequate sanitation. 1.6 million children under age five die every year from diarrheal diseases, with an estimated 88% of those deaths attributed to unsafe water supply, inadequate sanitation or poor hygiene. Other water and sanitation-related diseases include Hepatitis A, Hepatitis E, cholera, typhoid, trachoma, schistosomiasis and intestinal worms.

Provision of safe water could reduce incidence of diarrheal disease by an estimated 21% while improved sanitation could reduce diarrheal disease by 37.5%. Simple hand washing could save up to 1 million lives every year. Financial resources, technical resources and political will are three ingredients required to achieve these goals.

Water scarcity creates the need to walk long distances for water, requiring a large proportion of the day to be spent on this task, which is usually done by women and children. The time children spend fetching water is time that could be used learning in school or helping at home.

Access to both improved water supply and sanitation lags behind in the poorest communities, traditionally in rural areas and increasingly, given rapid urbanization, in urban and peri-urban slums. 81% of those who lack access to sanitation and 86% of those who lack access to clean water are in rural areas. The poor suffer disproportionately from malnutrition and other health problems, which are exacerbated by a lack of water and sanitation.

Natural disasters make access to water and sanitation even more complex, with droughts amplifying water scarcity, increasing need and time for water fetching, and adding to the difficulties of maintaining good hygiene. Floods often result in increased contamination of drinking water, especially because of wastewater emptying into water sources.



... a Global Concern

- In Asia, an average of only 48% of families use sanitary means of excreta disposal.
- 16% of deaths in children under five in the Eastern Mediterranean region are due to diarrheal disease.
- Only 53% of the sub-Saharan population is served with sanitation services. One-third of the global diarrheal disease burden occurs in this region.
- In the Western Pacific, diarrheal disease is the fourth leading cause of death of children under five years of age.
- In 2002, 25% of the Latin America and Caribbean population had no access to improved sanitation services, and 11% lacked access to an improved drinking water source.
- In the European region, an estimated 2 million people do not have access to improved water sources. An estimated 13.5 thousand children under fourteen years die annually from diarrheal disease.

Acting to safeguard children's environments can save millions of lives, reduce disease and provide a safer, healthier world for our children's future.

See the *Healthy Environments for Children Alliance Framework for Action*

Children's Vulnerability to Unsafe Water and Inadequate Sanitation

Behavioral: Behaviors typical of children, such as the hand-to-mouth behavior of infants and toddlers, put them at risk for ingestion of germs and other contaminants. Children are more likely to come into contact with excreta because they play and explore close to the ground. Children need to be taught healthy behaviors, such as hand-washing. They can be fearful of latrines because of their small size, the darkness or the smell, and must be encouraged to use such sanitation facilities.

Physiological: Relative to their weight, children drink more than adults. A six-month-old child drinks seven times more water per pound than an average adult. Thus, relative to their body weight, children's exposure to microbiological contamination in water is greater than that of adults. Children's physiological abilities to counter certain toxins are different from that of adults, often making them more vulnerable to the toxins.

Developmental: Children are particularly vulnerable to environmental contaminants because of rapid physiological development. They also do not readily recognize risks and do not take precautionary action to avoid exposure.

Actions at Every Level Make a Difference

Disease caused by poor quality drinking water and lack of sanitation is preventable. National and local governments, community organizations, educators, media, city planners, engineers, health professionals, parents, family members and children themselves can work together to prevent water-related diseases. The importance of access to water and sanitation is recognized by the international community. Access to a reliable safe water supply is a human right as defined in the General Comment on the Right to Water and the Declaration on the Rights of the Child. In agreeing to the Millennium Development Goals, governments pledged to halve the number of people without clean water and adequate sanitation by 2015. The decade of 2005-2015 has been declared by the United Nations as the Decade of Water for Health. Both national and local governments can strive to fulfil these commitments by investing in water and sanitation infrastructure, setting and enforcing water quality requirements and standards, and by promoting inexpensive and effective solutions like household water treatment and safe storage.

- Use and encourage personal, household and food hygiene.
- Use adequate sanitation facilities and safe drinking water. If safe drinking water is not readily accessible, employ household treatment through filtration, chemical or solar disinfection, or boiling.
- Store treated water safely in a container with a narrow opening and, preferably, with a tap to avoid recontamination.
- Teach children about the importance of hand washing.
- Encourage breastfeeding, which is particularly important in areas with unsafe water where bottles cannot be sterilized, and formula milk cannot be safely mixed.

At Home

At School

- Provide safe drinking water to children, together with adequate and separate sanitation facilities for boys and girls.
- Teach, model and provide access to good hygiene practices, such as hand washing.

In the community

- Continued progress towards providing everyone with access to piped water supplies will radically reduce childhood illness.
- Advocate for the provision and maintenance of water and sanitation facilities, emphasizing local management, such as shortening the distance between water supply and households and protecting source water from pollution.
- Educate the general population about the benefits of safe water, proper sanitation and good hygiene.
- Create partnerships between health, media, and education, particularly targeting women, to promote hand washing with soap before food preparation and after dealing with feces.
- Track and assess progress on water and sanitation infrastructure as well as diarrheal and other water, sanitation and hygiene related disease incidence.