



SANITATION FOR ALL

Making the right a reality

Sanitation is vital for good health

Globally, diseases caused by exposure to our faeces are making us sick. Diarrhoea is not the only health effect of poor hygiene and sanitation – cholera, dysentery, worms, trachoma, pneumonia and malnutrition, to name just a few, could also be reduced through improved sanitation and hygiene.

More than 800,000 children under age 5 die every year due to diarrhoeal diseases.¹ Diarrhoea is caused when the pathogens present in our faeces end up in our stomachs. This happens when we do not wash our hands after using a latrine or toilet, or before we prepare and eat food. Pathogens can also be transmitted by food, water, soil, animals and flies.

Diarrhoea, the second leading cause of deaths in children under age 5 in developing countries, is primarily due to poor hygiene and sanitation.¹

Proper sanitation and improved hygiene can build barriers to prevent the spread of these diseases. Open defecation and inadequate sanitation creates a source from which communicable diseases can spread, placing society as a whole at risk.

Diarrhoea is the second biggest killer of children under 5 in the world, despite intensive international efforts to reduce the number of deaths it causes.² Oral rehydration therapy (ORT) has more than halved the global toll of acute watery diarrhoea during the past 20 years. The remaining deaths are increasingly due to persistent and bloody diarrhoea, which does not respond to ORT. For these, the best cure is prevention – through better hygiene and sanitation.

Diarrhoea is closely linked to undernutrition, a condition that is associated with more than a third of all deaths among children under age 5.³ Repeated episodes of diarrhoea and parasite infections lead to reduced absorption of nutrients. This contributes to malnutrition, thus continuing the cycle of ill health. For example, undernourished children have weakened immune systems and are at a higher risk for developing pneumonia, which kills more children under age 5 than any other disease.⁴ This chain reaction illustrates that hygiene and sanitation are fundamental for child survival and the health of the whole population. Ending open defecation is the first step in breaking this cycle.

Control of **cholera** is a major problem in several Asian countries, as well as in Africa. From 2004–2008, the World Health Organization received notifications of more than 830,000 cases, representing a 24 per cent increase in cases reported for this most recent five-year period. Proper personal and food hygiene, coupled with hygienic disposal of human excreta, is an effective intervention to prevent the spread of cholera.

Intestinal worms affect an estimated 400 million school-aged children in the developing world.⁵ Worms are spread when children inadvertently ingest human faeces or food contaminated with faeces. This happens mainly when proper latrines or toilets and hand-washing facilities are

1 United Nations Children's Fund, *Pneumonia and Diarrhoea: Tackling the deadliest diseases for the world's poorest children*, UNICEF, New York, 2012, p. 8.

2 World Health Organization, 'Diarrhoeal Disease', www.who.int/mediacentre/factsheets/fs330/en/index.html, 17 July 2012.

3 World Health Organization, 'Children: Reducing mortality', www.who.int/mediacentre/factsheets/fs178/en/index.html, accessed 17 July 2012.

4 United Nations Children's Fund, *Pneumonia and Diarrhoea: Tackling the deadliest diseases for the world's poorest children*, UNICEF, New York, 2012, p. 7.

5 United Nations Children's Fund, 'Water, Sanitation and Hygiene', www.unicef.org/media/media_45481.html, accessed 17 July 2012.

lacking. Chronic hookworm infections are associated with reduced physical growth and impaired intellectual development. Worms have an enormous impact on children's ability to learn. Children suffering from intense whipworm infections miss twice as many school days as their worm-free.⁶

Trachoma occurs worldwide, most often in poor rural communities in developing countries. Around 6 million people are blind due to trachoma, and more than 150 million are in need of treatment.⁷ Simple prevention includes improving sanitation and encouraging children to wash their face with clean water.

Polio is another faecal-oral disease; for centuries, the only line of defence we had was improved sanitation. Since the development of effective vaccines in the 1950s, the importance of sanitation in controlling polio is often forgotten.

Good sanitation and hygiene stop the spread of diseases

One hundred per cent of roundworm, whipworm and hookworm cases are related to poor water, sanitation and hygiene.⁸ Improving the disposal of human excreta can reduce illness due to diarrhoea. When combined with hand washing, this impact can be doubled.

It is very difficult, however, to properly dispose excreta when it is spread over a large area, and hand washing is more difficult in the bush. Sanitation improvements save children's lives and improve their health, growth and development. In addition to lowering the rates of diarrhoea, improved excreta disposal and hand washing reduces parasitic infections, worm infections and trachoma.

What happens when we stop open defecation and improve sanitation?

- **Lower mortality** (rates of death) due to diarrhoea – a 34 per cent reduction through improved sanitation, which could be doubled if accompanied by hand washing with soap.⁹
- **Better nutrition**, reduced stunting and increased height among children, due to the reduction in diarrhoea and other life-threatening diseases.
- **Improved learning** and retention among school children due to reduction in worms and other sanitation related diseases.

Take action!

Take action for sanitation by kick-starting your own Sanitation Drive to 2015 campaign. Big or small – sanitation for all! Visit www.sanitationdrive2015.org for more information.

⁶ WHO 2005, 'Report of the Third Global Meeting of the Partners for Parasite Control: Deworming for Health and Development', Geneva 2005, p.15

⁷ World Health Organization, 'Water Related Diseases: Trachoma', www.who.int/water_sanitation_health/diseases/trachoma/en, accessed 17 July 2012.

⁸ Bethony, Jeffrey, et al., 'Soil-Transmitted Helminth Infections: Ascariasis, trichuriasis, and hookworm', *The Lancet*, vol. 367, no. 9521, 6 May 2006, pp. 1521–1532.

⁹ CHERG 2010. Sandy Cairncross, Caroline Hunt, Sophie Boisson, Kristof Bostoen, Val Curtis, Isaac CH Fung, and Wolf-Peter Schmidt. Water, sanitation and hygiene for the prevention of diarrhoea. *Int. J. Epidemiol.* 2010 39: i193-i205.



About us: The Sanitation Drive to 2015 builds on the United Nations resolution endorsed by all Members States in 2010 – calling for redoubled efforts to meet the MDG target to halve the number of people living without sustainable access to basic sanitation. UN-Water, which includes 30 United Nations entities and 22 partners, is coordinating the work. Civil society groups around the globe have pledged their support.

www.sanitationdrive2015.org