

SANITATION FOR ALL



THE DRIVE TO 2015

SUSTAINABLE SANITATION: THE FIVE YEAR DRIVE TO 2015

sanitationdrive2015.org

Sanitation is vital for good health

Globally, diseases caused by inadequate sanitation and hygiene are making us all 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.

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

Every 30 seconds a child dies – that's two unnecessary child deaths per minute, almost 3,000 a day or 1 million young lives wasted per year.

Children under five are most vulnerable to the effects of insufficient sanitation and hygiene. According to the World Health Organization and UNICEF, improved sanitation could save the lives of 1 million children per year who would otherwise succumb to diarrhoeal diseases. Diarrhoea is closely linked to undernutrition, a condition that is associated with more than a third of all under-five deaths. Repeated diarrhoeal diseases and parasite infestations – themselves caused by inadequate sanitation and hygiene – lead to reduced absorption of nutrients, which contribute to malnutrition, thus continuing the cycle. Undernourished children, in turn, have weakened immune systems and are at a higher risk for developing pneumonia – which kills more children than any other disease. This chain reaction illustrates that hygiene and sanitation are fundamental for child survival and the health of the whole population.

Good sanitation and hygiene stop the spread of diseases

Improving the disposal of human excreta can reduce illness due to **diarrhoea** by 34 percent. When combined with hand washing this impact can be doubled. Such improvements save children's lives and improve the quality of their health, growth and development. In addition to lowering the rates of diarrhoea, improved excreta disposal and hand washing reduces parasitic infections, worm infestations and trachoma.

Worms affect an estimated 400 million school-aged children in the developing world. Infestation with **parasitic worms** (helminths) is a major health problem and children in countries which have low sanitation coverage commonly carry up to 1,000 hookworms, roundworms and whipworms at a time, which can cause anaemia and other debilitating conditions. Worldwide, soil-transmitted helminths infect more than one billion people due to a lack of adequate sanitation. Chronic hookworm infestations are associated with reduced physical growth and impaired intellectual development, and children suffering from intense infestations with whipworm miss twice as many school days as kids who are not infested. One hundred percent of roundworm, whipworm or hookworm cases are related to poor water, sanitation and hygiene.

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



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A lethal dose

Just **one gram** of faeces can contain more than 10 million viruses, 1 million bacteria, 1,000 parasite cysts and 100 parasite eggs and with more than 200 million tonnes of human waste going uncontained and untreated around the world each year the health of everyone is at risk. One of the reasons for this enormous risk is caused by the transfer of human excreta to the mouth. Pathogens in faeces can be transmitted in many ways: by hands, food, water, soil, animals, flies, etc. Proper sanitation and improved hygiene can build barriers to prevent the spread of these diseases.

Improved sanitation is vital to health for a number of reasons. Open defecation and inadequate sanitation creates a source from which communicable diseases can spread, placing society as whole at risk.

Diseases Associated with Poor Sanitation

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

Control of **cholera** is a major problem in several Asian countries as well as in Africa. From 2004 to 2008, over 830 000 cases were notified to WHO, representing a 24% increase in the number of cases reported for this most recent five-year period. Proper personal and food hygiene coupled with hygienic disposal of human excreta are effective interventions to prevent the spread of cholera.

Intestinal worms have an enormous impact on children's ability to learn. Worms are spread when children inadvertently ingest human faeces or food contaminated with faeces. This happens mainly when proper toilet and hand washing facilities are lacking. The positive effects on school attendance and achievement of providing such facilities have been proven.

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

What happens when sanitation is improved?

Where improved sanitation is provided along with better hygiene behaviours, real health benefits follow.

- **Lower mortality** or death due to diarrhoea -34% reduction through improved sanitation, which could be doubled if accompanied by hand washing with soap
- **Better nutrition**, reduced stunting and increased heights among children due to reduction in diarrhoeal disease and a condition called tropical enteropathy
- **Improved learning** and retention among school children due to reduction in worms and other sanitation related diseases

Sustainable Sanitation: the five year drive to 2015 is a global campaign to redouble efforts to reach the MDG targets – and then go beyond them to ensure Sanitation for All. Sanitation is a human right – help us turn the right into a reality. To find out more visit www.sanitationdrive2015.org

Main sources: WHO, UNICEF, LSHTM