

# SANITATION AND DIARRHEAL DISEASE

PATH developed these messages for use by anyone interested in communicating the impact of sanitation—and often the lack of it—on the health and development of children and families around the world. These messages are comprehensive and not intended to be used all at once, but rather provide options for communicating to a variety of audiences and in relation to a variety of topics.

Millions of children's lives have been saved by protecting them against diarrheal disease, yet it remains a leading killer of children under five years of age worldwide. By raising awareness about integrated prevention and treatment solutions, we can save millions more. Sanitation is a key prevention tool for protecting communities from the viruses and bacteria that cause diarrheal disease and other illnesses. Despite global progress, sanitation gaps still place a great burden on low- and middle-income countries and their children, in particular. Awareness and advocacy can help ensure safe sanitation for all.

**PRIMARY RESOURCES:** Global costs and benefits of drinking-water supply and sanitation interventions to reach the MDG target and universal coverage. World Health Organization. 2012.

Water, sanitation, hygiene, waste and electricity services in health care facilities: progress on the fundamentals. 2023 Global Report. UNICEF and the World Health Organization. 2023.

Progress on household drinking water, sanitation and hygiene 2000–2022: Special focus on gender. UNICEF and the World Health Organization. 2023.

UNICEF data: Malnutrition. 2025.

"Water, sanitation and hygiene for the prevention of diarrhea." International Journal of Epidemiology. 2012. Water Under Fire. UNICEF. 2019.

## THE BURDEN

- Worldwide, nearly 2 billion people use facilities that lack basic water services and nearly 700 million use facilities with no toilets.
- Inadequate sanitation is responsible for more than half of diarrhea cases. UNICEF and the World Health Organization report that in 2023, 419 million people still practiced open defecation.
- The vast majority of people without access to appropriate, healthy sanitation live in sub-Saharan Africa, East Asia, and South Asia. Displaced populations in fragile context are the least likely to have even basic sanitation services. In fragile settings, children less than 15 years old are three times more likely to die from poor sanitation than from violence, according to UNICEF.

## THE CONSEQUENCES

- 1 Safe water, sanitation, and hygiene (WASH) are essential to good health. WASH interventions are critical for preventing the leading disease threats to child health – diarrheal disease and pneumonia – in addition to other deadly health problems.
- 2 According to UNICEF, nearly 150 million children less than five years old are stunted. Poor sanitation makes children vulnerable to repeated infections that are linked to stunting. With weakened systems, children cannot absorb nutrients essential to their development, leading to physical and cognitive shortfalls.
- 3 Poor sanitation, repeated diarrhea episodes, and malnutrition form a vicious cycle that not only harms children's health but also drains family budgets, pushing many into poverty.
- 4 Women and girls disproportionately carry the burden of inadequate sanitation. Without a safe and private place to go, many struggle to manage their menstrual cycles and are vulnerable to dangerous attacks.
- 5 Weather extremes such as drought and floods, which are increasing in frequency and severity due to climate change, put increased stress on sanitation systems. According to a study (Mellor et al, 2016), for every 1 degree Celsius increase in global temperature, we can expect a 7% increase in diarrheal cases.

## THE SOLUTIONS

- 1 We can overcome poor sanitation and its consequences. Better sanitation is estimated to reduce diarrhea risk by more than one-third. The World Health Organization estimates that every US \$1.00 invested in sanitation yields a return of US \$5.50 in reduced health costs and increased productivity.
- 2 "Improved sanitation" facilities ensure hygienic separation of human excreta from human contact, such as flush or pour/flush toilets, ventilation improved pit [VIP] latrines, or composting toilets. It also requires fecal sludge management to ensure sufficient community protection from contamination.
- 3 Given the time, expense, and logistical difficulties with installing sewers, especially in crowded urban environments, innovations in non-sewered sanitation (NSS) offer a promising pathway to improving access. Such systems can reduce pollution, save money and water, and generate resources such as water, fertilizer, or energy.
- 4 Strong political will for sanitation has translated into focused efforts. Since 2015, safe sanitation coverage has increased from 49% to 57%, according to UNICEF and the World Health Organization.
- 5 The Sustainable Development Goals aim to achieve adequate and equitable sanitation and hygiene for all and an end to open defecation by 2030, with special attention to the needs of women and girls and those in vulnerable situations. Achieving this goal will require a 5x increase in the rate of progress, necessitating strong advocacy and political will.
- 6 Healthcare facilities are a particularly important focal point for improving WASH given high potential for exposure of vulnerable populations like newborns and mothers. Following a global call to action by the United Nations Secretary-General, the World Health Assembly adopted a Resolution on WASH in healthcare facilities in 2019. UNICEF and the World Health Organization have outlined global goals and practical steps that stakeholders at all levels can take to meet these goals.