

Q&A

“Sanitation prevents disease and promotes human dignity and well-being, making it the perfect expression of WHO’s definition of health, as expressed in its constitution, as “A state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity. . . The guidelines recognize that safe sanitation systems underpin the mission of WHO, its strategic priorities and the core mission of ministries of health globally.”

WHO Director-General, Dr Tedros Adhanom Ghebreyesus, 1 October 2018

What is the purpose of the guidelines? The purpose of these guidelines is to promote safe sanitation systems and practices to improve health. Sanitation is a fundamental foundation of human health and development and underpins the core mission of WHO and ministries of health worldwide. WHO’s Sanitation and Health Guidelines are essential to securing health and wellbeing for everyone, everywhere.

What is the status of sanitation globally? Worldwide, 2.3 billion people lack basic sanitation (with almost half forced to defecate in the open). They are among the 4.5 billion without access to safely managed sanitation services – in other words a toilet connected to a sewer or pit or septic tank that treats human waste and prevents exposure to disease. The sustainable development goals challenge all countries to ensure universal access to sanitation by 2030 www.washdata.org.

Why are the guidelines needed? Progress on sanitation has been too slow and evidence shows that impact of health from sanitation interventions can be greatly improved. Until now, there is a lack of authoritative health-based guidance on sanitation. These guidelines provide evidence-based recommendations and implementation guidance on how to maximize the health impact of sanitation and articulate roles and responsibilities of the health sector in securing sanitation-related health gains.

What are the guidelines main recommendations? The new guideline set out four principal recommendation summarized as:

- Sanitation interventions should ensure entire communities have access to toilets that safely contain excreta.
- The full sanitation system should undergo local health risk assessments to protect individuals and communities from exposure to excreta – whether this be from unsafe toilets, leaking storage or inadequate treatment.
- Sanitation should be integrated into regular local government-led planning and service provision to avert the higher costs associated with retrofitting sanitation and to ensure sustainability.
- The health sector should invest more and play a coordinating role in sanitation planning to protect public health.

The recommendations are supported by more detailed sub recommendations, implementation guidance and technical resources.

Who are the guidelines for? The main audience for the guidelines is national and local authorities responsible for the safety of sanitation systems and services, including policy makers, planners, implementers and those responsible for the development, implementation and monitoring of standards and regulations. This includes health authorities and, since sanitation is often managed outside the health sector, other agencies with responsibilities for sanitation.

How were the guidelines developed? The guidelines were developed according to the procedures described in the WHO handbook for guidelines development. They are based on a comprehensive review of more than 1000 studies on all sanitation related health outcomes. Evidence-based recommendation and implementation guidance was distilled by more than 70 experts and end users from all regions of the world.

What's new about these guidelines? These guidelines are the first-ever comprehensive guidelines on sanitation and health. In addition to recommendations and good practice actions, they provide comprehensive advice on maximizing the health impact of sanitation interventions. The guidelines include an unprecedented summary of the current evidence on the links between sanitation and health, provide evidence-informed recommendations, and offer guidance for international, national and local sanitation policies and programme actions. The guidelines also articulate and support the role of health authorities in sanitation policy and programming to help ensure that health risks are identified and managed effectively.

How does sanitation affect health? Safe sanitation is essential for health, from preventing infection to improving and maintaining mental and social well-being. The lack of safe sanitation systems leads to infection and disease, including; diarrhoea, neglected tropical diseases such as soil-transmitted helminth infections, schistosomiasis and trachoma as well as vector-borne diseases such as West Nile Virus, lymphatic filariasis and Japanese Encephalitis. Unsanitary conditions have been linked with stunting through several mechanisms including repeated diarrhoea, helminth infections and environmental enteric dysfunction. The lack of safe sanitation systems contributes to the emergence and spread of antimicrobial resistance. The guidelines include an updated F-diagram to advance conceptual understanding of how unsafe sanitation contributes to the transmission of excreta related disease.

Figure 1.1 The health impact of unsafe sanitation



How can government and their partners implement the recommendations? The guidelines provide detailed information on the system needed to enable safe sanitation services delivery. This includes guidance on roles and responsibilities and national and local governance functions (such as target setting, legislation, policy, planning, capacity development and monitoring). Guidance also covers community engagement and behaviour change as well as supply of customer and public services.

How do the guidelines define safe sanitation? Sanitation is defined as access to and use of facilities and services for the safe disposal of human urine and faeces. A safe sanitation system is a system designed and used to separate human excreta from human contact at all steps of the sanitation service chain from toilets and safe containment-storage/treatment onsite or conveyance, transport, treatment (in-situ or offsite) and final disposal or end use. Safe sanitation systems must all be consistent with human rights. The selection of sanitation technologies at each step of the chain is highly context specific. The guidelines set out design and operation and maintenance criteria needed at each step to achieve a safe system in any context.

What does the evidence tell us about the link between sanitation and health? The evidence reviewed in the process of developing the guidelines suggests that safe sanitation is associated with improvements in health, including positive impacts on infectious diseases, nutrition and well-being. In general, the quality of the evidence is low, as is common for environmental health research due to the paucity of randomized controlled trials and the inability to blind most environmental interventions. The evidence is also characterized by considerable heterogeneity, with some studies showing little or no effect on health outcomes. Sub-optimal effects can also be expected from shortcomings in how sanitation interventions are implemented (i.e. problems with delivery of sanitation interventions, sometimes even leading to implementation failure).

What is the recommended research agenda set out by the guidelines? There is need for further research on the links between sanitation and health, and on the operation of the sanitation service chain and optimal methods for implementation. Research gaps include strategies for encouraging governments to prioritize, encourage and monitor sanitation; creating an enabling environment; improving coverage and securing correct, consistent, sustained use; estimating health impacts from sanitation interventions; improving methods for assessing presence of and exposure to sanitation-related pathogens in the environment; preventing the discharge of faecal pathogens into the environment along all steps of the sanitation service chain; exploring alternative designs and services, including safe emptying and management of on-site sanitation; ensuring that proposed sanitation interventions are culturally-appropriate, respect human rights and reflect human dignity; mitigating occupational exposures; reducing adverse ecological effects; elaborating the links between sanitation and animals and their impact on human health; and investigating the issues around sanitation and gender.

What change is expected as a result of the guidelines? The guidelines are expected to support equitable and significant progress towards the achievement of the sustainable development goals target on sanitation, and consequent improvements in the health and wellbeing of people everywhere. Additionally, they are expected to reinvigorate the role of the health sector in safeguarding public health through preventive interventions.