



Transcript: Introduction to Sanitation Safety Planning

Welcome to our first lecture of our Sanitation Safety Planning online training course.

My name is Kate Medicott and I will be one of your guides, as you acquire the skills, knowledge and resources to initiate, implement and sustain Sanitation Safety Planning Processes in your localities.

This first session is an introduction to Sanitation Safety Planning, in which we will learn about:

- Safe sanitation systems;
- the significance of sanitation for human health;
- the WHO Guidelines on Sanitation and Health and their recommendations,
- and the definition of Sanitation Safety Planning, its methodology and benefits.

Let's start with the definition of safe sanitation systems:

Safe sanitation systems are arrangements of technologies and practices designed and used to separate human excreta from human contact at all steps of the sanitation chain, from toilet, containment/storage-treatment, conveyance, treatment and end use or disposal. To be safe, a sanitation system must fulfil minimum requirements of design, construction, operation and maintenance at each step of the chain. Also, a safe sanitation system is embedded in an implementation framework for safe service delivery that ensures effective planning, delivery, maintenance, regulation and monitoring.

Safe sanitation is essential for health – that includes preventing infectious diseases and also improving and maintaining mental and social well-being.

Unsafe sanitation systems contribute directly to transmission of diseases, including:

- Fecal-oral infections, like diarrhea and cholera.
- Helminth, or intestinal worm, infections and
- Vector-borne diseases.

Unsafe sanitation indirect impacts caused by repeated infections. For instance, unsanitary conditions have been linked with stunted growth, malnutrition and impaired cognitive functions.

Lack of access to suitable sanitation facilities is also a major cause of fear, anxiety, and shame associated with open defecation or shared sanitation.

To understand sanitation's impact on health, we need to understand the pathways through which sanitation influences health.

We need to consider the intervention, which includes both: technologies and behavioral change activities. As well as implementation, which includes policy, regulation, finance, and service delivery.

These influence health via multiple intermediate outcomes.

An important intermediate outcome is access to, uptake and sustained use of sanitation interventions, both technologies or behaviors. These are assumed to reduce environmental fecal load, which in turn reduces human exposure to fecal pathogens. Ultimately, this is expected to lead to improved health outcomes and social well-being.

To understand how effective sanitation interventions have been in protecting health, the WHO commissioned studies that reviewed existing evidence. Evidence confirms that sanitation has a positive impact on infectious diseases and well-being. Overall, greater access to sanitation is associated with significant lower risk of diarrhea and other infections. However, many sanitation interventions have shown lower than expected health outcomes, leading to a concern on the quality of the implementation – in particular that interventions are not succeeding to fully interrupt transmission pathways.

There are several reasons including:

- many interventions don't reach levels of toilet access and use in the community that are high enough to remove pathogens from the environment. In fact, according to the studies, disease reduction will not be detected unless the coverage of sanitation at community level is very high, and
- many sanitation systems are of low quality and do not effectively contain excreta meaning they contaminate the environment where people are exposed to untreated waste.



In response, in 2018 WHO published its Guidelines on Sanitation and Health, which are an authoritative health-based guidance on maximizing the health impact of sanitation investments.

The overall purpose of these guidelines is to ensure that sanitation systems are designed and managed safely to protect human health.

The guidelines:

- summarize the evidence on the links between sanitation and health,
- provide evidence-informed recommendations,
- offer guidance to international, national and local sanitation policy makers and practitioners.
- And present a number of tools and resources to ensure that sanitation interventions protect health.

Based on the comprehensive evidence review, 4 main recommendations were derived for action by national and local authorities:

The first one is to ensure universal access and use of toilets that safely contain excreta. This recommendation urges governments to prioritize the elimination of open defecation, and universal access to toilets, while planning for equitable progress. It also indicates that authorities need to strive to cover entire communities with a minimum standard of safe toilet and safe containment – using shared and public toilet if necessary to ensure everyone has access - and use demand side and supply side approaches concurrently.

The second recommendation is about Safe Sanitation Service Chains – this is where the major health improvement is achieved. Safety must be ensured along the entire sanitation service chain, which means we need to safely plan and design all the steps of the chain: toilet, containment/storage-treatment, conveyance, treatment and end use and disposal. The recommendation emphasizes technologies should be context specific and respond to local physical, social and institutional conditions.

Incremental improvements should be based on risk assessment and management approaches, such as Sanitation Safety Planning.

The third recommendation indicates that, to increase efficiency and health impact, sanitation should be provided and managed as part of a package of locally delivered services and broader development programs and policies such as housing, urban planning and coordination with water supply drainage, solid waste and management planning.

The fourth recommendation outlines the key functions by the health sector to ensure safe sanitation to protect public health.

So, what can we do as local practitioners to implement these recommendations? We need to ensure that we maximize the health benefit of sanitation interventions. This means that we need to ensure that:

- Systems and services are selected to respond to the local context.
- That investments and system management are based on local level risk assessments along the entire sanitation chain.
- With this, we need to ensure that incremental improvements are based on local level risk assessment
- so users, local communities, sanitation workers, consumers and farmers are protected.

How can we do that? We can do it by applying Sanitation Safety Planning or SSP!

SSP is the WHO recommended approach for local level risk assessment and management for sanitation systems.

It presents a step-by-step methodology to assist in the implementation of risk assessment and management for the entire sanitation service chain.

SSP ensures that the system is managed to meet the health objectives.

Originally, the Sanitation Safety Planning manual was published in 2015 to assist with the implementation of the 2006 WHO guidelines on safe use of wastewater, excreta and greywater.

In the 2022 edition, the principles of SSP have been adopted more widely aligned with the Guidelines on sanitation and Health and updated to incorporate climate risks and adaptation of the sanitation system.

Sanitation Safety Planning:

- Helps maximizing health benefits of sanitation interventions.
- Guides operators to prioritize risk management efforts to where it will have the most health impact.
- Sets a plan for incremental improvements at each step of the sanitation service chain
- Targets investments to the highest health risk.



•Coordinates efforts of the many stakeholders along the sanitation service chain.
Most importantly, sanitation safety planning brings the focus onto the fundamental purpose of sanitation – to protect health”.

In total, the SSP methodology consists of 6 modules:

- In Module 1 we define the SSP area and SSP priorities as well as the membership of the team.
- In Module 2 we prepare a complete description of the sanitation system.
- In Module 3 we identify hazards, hazardous events and carry out a health risk assessment, including the effect of climate-change.
- In module 4 we select improvement measures that address the highest risks. We use selected options to develop and implement an incremental improvement plan.
- In Module 5 we prepare a monitoring and verification plan.
- Finally, in Module 6, we develop supporting programs and evaluate the effectiveness of our SSP.

Carrying out the sanitation safety planning process will result in two products:

- Prioritized, incremental improvement plan.
- Operational monitoring plan for regular monitoring and periodic verification

In summary:

- SSP is the WHO recommended approach for local risk assessment and management for sanitation systems.
- SSP helps maximizing health benefits and minimizing health risks.
- SSP guides while prioritizing and targeting risk management efforts to where it will have the most impact.
- SSP can be used to coordinate efforts of the many stakeholders along the sanitation service chain, maximizing the health benefits and stimulating policy dialogue.

In this first lecture you have learnt about:

- Safe sanitation systems
- The significance of sanitation for human health.
- The WHO Guidelines on Sanitation and Health and its recommendations.
- And the definition of Sanitation Safety Planning, its methodology and benefits.

I recommend downloading the WHO Guidelines on Sanitation and Health to learn more about sanitation in chapter 1 and the recommendations and good practice actions in chapter 2.

You should also download the SSP manual and read the introduction.

In the following lecture, we will start implementing the Sanitation Safety Planning methodology, in specific Module 1: prepare for SSP.

Thanks for watching!