



Transcript: Module 4- Develop and implement an incremental improvement plan

Welcome to Module 4 of sanitation safety planning. My name is Kate Medicott, and I will be your guide in this module to “develop and implement an incremental improvement plan”.

Remember that in module 3 we identified the highest priority risks? Now, in Module 4, it is time to select new control measures that address those risks at the most effective places in the system. This process helps ensure that funding and improvement efforts target the highest risks with the greatest urgency.

In module 4 we will:

- Consider options to control the identified risks.
- Develop an incremental improvement plan and then
- implement the improvement plan.

The main output is an implementation plan that should ensure the protection of all exposure groups along the sanitation chain.

From module 3, the SSP team will have a comprehensive list of hazards and hazardous events ranked according to their level of risks.

Step 4.1 encourages the team to consider options to control the prioritized hazardous events and reduce risk.

Improvement options fall into the following categories:

- Regulatory measures.
 - Technical control measures.
 - Management and operational controls.
- and
- Behavior change measures.

I will explain each of them.

Regulatory measures are mechanisms to regulate the sanitation service chain. These include legislation, regulation, standards and guidelines. Areas that may require legislation and regulation are presented in the WHO Guidelines in chapter 4. For instance, for toilets, there may be technical standards for toilet containment and superstructure. Also, for containment there may be a register of onsite facilities and licensing to regulate fecal sludge emptying service providers.

Technical control measures, also called technology upgrades, refer to the construction or refurbishment of sanitation infrastructure. Examples include constructing or repairing toilets in households or other settings, construction of fecal sludge treatment plant and transfer stations or new wastewater treatment plant or process elements.

Management and operational control measures refer to methods, procedures and routines to carry out specific activities to effectively control risks. They include how people are organized and trained to carry out their work. Examples include development and adherence to Standard Operation Procedures (SOP), training on service delivery, vector-control programs, and operational measures such as for reuse, crop restrictions and withholding times.

Another important improvement option is behavior change measures. Behavior change measures refer to programs designed to foster health protective behaviors at the levels of the individual, the household, the community and workers involved in service delivery. Depending on the specific situation, desired user behaviors may include:

- Abandoning open defecation and adopting safe sanitation facilities.



- Ensuring the regular emptying of onsite facilities.
- Connecting to a sewerage system where available and paying the service charges.
- Wearing Personal Protective Equipment.

Different approaches are used for behavior change. These include items, such as:

- Information, education and communication-based (IEC) messaging approaches.
- Community-based approaches.
- Social and commercial-marketing approaches.
- and Approaches based on psychological and social theories

Chapter 5 of the 2018 WHO guidelines offers an entire chapter on this topic.

Sanitation systems should provide a series of barriers against different types of or hazards. It is always recommended to take a multi-barrier approach.

Every time, when considering improvement options, we need to think about all types of measures in each step of the sanitation system.

For instance, at the toilet step, we might propose the installation of flush toilets. However, this must be accompanied by other non-technical measures, for instance, the training of masons for correct installation, a program to encourage correct use and maintenance of the toilet, and technical standards on design and location.

At the containment – storage and treatment step, we might think about ensuring properly functioning septic tanks. We should also be able to monitor, so building a data base of on-site sanitation infrastructure is important. Furthermore, a program to encourage the remediation of un-sealed or leaking tanks and well as guidelines on periodic inspection of onsite systems by authorities to drive remediation should implemented.

While considering improvement options at the conveyance step, we could think about installing fecal sludge transfer stations, establishing a call center for septic tank emptying, developing a consumer protection program and licensing emptying service providers.

Likewise, while developing improvement options for treatment, we might consider the construction of a fecal sludge treatment plant, with standard operating procedures for operation and maintenance. To keep workers safe, an internal awareness raising program could be implemented, as well as the developing standards for effluent and sludge from treatment facility.

For reuse, to protect farmers we might construct an additional treatment of dried sludge, while to protect the health of produce consumers we could train farmers on crop selection and start a household food safety program. From the regulatory perspective, standards for products made sludge could be developed.

Now, when selecting control options take into account the:

- Potential for improving existing controls;
- Cost of the control option;
- Technical effectiveness;
- Acceptability and reliability of the control in relation to local cultural habits;
- Responsibility for implementing, managing and monitoring the proposed new controls;
- Potential for the control measure will work under different climate change scenarios.

In step 4.2, once the most appropriate control measures for each risk have been identified, the team records the planned new and improved controls in an improvement plan.

Chapter 4 of the 2018 WHO Guidelines offers interesting information about planning sanitation systems. It indicates that to formulate inclusive, equitable and practical solutions, it is essential to understand the existing mix of sanitation systems, and to plan how that mix should change over time as progress is made.



The outcome of this approach is the incremental and context specific improvement of the sanitation system. Interventions can be targeted and sequenced to maximize their positive impacts on public health.

This figure is an example of how technology targets can be visualized, showing phasing out of unsafe sanitation systems to achieve universal access to safe systems over time.

The time frame to achieve sanitation targets typically falls well beyond the normal time horizons of electoral cycles or externally funded projects of 3 to 5 years. Sanitation planning, therefore, should be institutionalized and integrated into government planning, budgeting and financing systems.

While preparing the incremental improvement plan you should:

- Prioritize improvements based on hazards with the highest risks.
- Identify the person or agency responsible and the timeline.
- Ensure coordination
- And The SSP team may also choose to select and implement more affordable interim control measures until sufficient funds for more expensive options are available.
- The incremental improvement plan should allow for adaptive management processes suitable to respond to emergent and unforeseen conditions. For instance, this may include incorporating an emergency management plan for specific climate-related hazards.

Step 4.3 is the actual implementation of the improvement plan, which requires major coordination and implementation efforts.

Ideally, part of the funds should be secured up-front to ensure that immediate actions are taken. However, many activities will require commitment from the responsible organizations rather than special funding. This is the case with regulatory and management control measures, as local ordinances and guidelines can be prepared within the daily work of the authorities involved. For behavior change measures targeting the general population, coordination is needed for community mobilization and awareness-raising campaigns.

Great! So, we have now completed Module 4 of the SSP methodology. You have learnt how to:

- Consider options to control identified risks.
- Use selected options to develop an incremental improvement plan and
- Implement the improvement plan.

I recommend downloading the WHO Guidelines and learn more about improvement options each step of the sanitation system in chapter 3, regulatory measures in chapter 4, as well as behavioral change measures in chapter 5. Also, you should carefully read module 4 of your SSP manual.

In the following lecture, we will continue with the Sanitation Safety Planning methodology, in particular Module 5: Monitor control measures and verify performance.

Thanks for watching!