

Developing an Introduction Strategy For Needle Removers

Use of a needle remover is one approach for managing sharps waste on site. To introduce and use needle removers in a safe and sustainable manner, it is critical for programs to develop a strategy for introduction of these devices. Although strategies for needle removers will vary for each program or country, the core components are detailed below:

1. Stakeholder Buy-In

Involve all medical waste stakeholders (from policymakers to health workers and waste handlers) in determining the feasibility and appropriateness of using needle removers.

Compare trade-offs with other on-site medical waste strategies.

- Discuss the potential benefits of needle removers:
 - Prevents reuse of syringes.
 - Immediately contains sharps and reduces possibility of harm to waste handler and community since needles are disposed of on site, in a protected sharps pit or barrel.
 - Reduces the number of safety boxes needed.
- Discuss the requirements for successful use of needle removers:
 - Health workers, waste handlers, and supervisors require training.
 - Needle removers require maintenance.
 - A needle pit or barrel is required for final disposal.
 - Device choice requires careful consideration as quality and cost vary.

2. Optimal Settings

Determine the settings where needle removers will provide the most advantages.

- Typically, needle removers are best used in remote sites where syringe destruction is not immediate.
- Needle removal will improve safety in situations where syringes will be extensively handled, such as during transport to a final destruction site.
- Needle removal is advantageous in situations where disabling or defanging is required, such as where syringes will be shredded, disinfected and recycled as waste plastic or then sent to a land fill.
- Hospitals are not an ideal setting for needle removers. However, if no on-site disposal system is available, some hospitals may benefit from needle removers. If used in hospitals, a plan must be in place to ensure that used syringes will not be batched for later needle removal.

Characteristics of optimal situations for needle removers are detailed in the following chart:

Site Characteristics	Where Needle-Remover Use is Optimal	Where Needle-Remover Use is Not Recommended
Point of Injection	<ul style="list-style-type: none"> ▪ Static injection points. ▪ Where a needle remover is always available at each injection site. 	<ul style="list-style-type: none"> ▪ Where injection providers collect batches of used syringes prior to needle removal or disposal.
Disposal Options	<ul style="list-style-type: none"> ▪ No incinerator on site or where incineration is not allowed. ▪ Where community or animals have access to medical waste disposal site (no secure area). ▪ Where syringes need to be defanged for transport, recycling, or autoclaving. 	<ul style="list-style-type: none"> ▪ Incinerator on site. ▪ No needle pit or barrel available.
Supplies	<ul style="list-style-type: none"> ▪ Inconsistent supply of safety boxes. 	<ul style="list-style-type: none"> ▪ Not enough needle removers to have one at each injection site.
Unsafe Practices	<ul style="list-style-type: none"> ▪ Poor or no medical waste segregation practiced. ▪ Poor compliance with use of safety boxes. ▪ Reuse of syringes before final disposal. 	<ul style="list-style-type: none"> ▪ Incorrect use of needle removers observed after repeated supervision visits.

3. Needle Disposal Solution

Determine what type of needle disposal solutions (needle pit or barrels) will be implemented and identify funds to support construction/installment.

- A needle pit or needle barrel must be installed on site for final disposal of needles before needle removers are introduced.

4. Detailed Introduction Plan

Develop a detailed plan for where needle removers will be used and who will be responsible for each component of the system: training, supervision, use, cleaning, maintenance, and disposal.

- It is critical that all staff involved with needle removers are trained on proper use and routine maintenance.
- In facilities where there is a high turnover rate for staff, a strong training and supervision system must be in place. If there is no such system, needle removers may not be appropriate in the facility.
- If needle removers will be used in large facilities such as hospitals, draft detailed plans for each facility (including which wards will use the devices and defined roles and responsibilities).