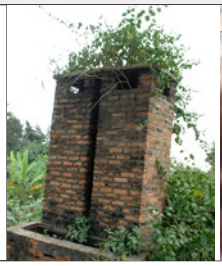
VISUAL FIELD GUIDE

Healthcare Waste

A GUIDE FOR QUICK IDENTIFICATION OF SERIOUS ENVIRONMENTAL AND BIOSAFETY CONCERNS IN WASTE MANAGEMENT AT SMALL HEALTHCARE FACILITIES

ATTENTION: Also use the Visual Field Guide for **Toilets/Latrines** when visiting a small health facility.

PROBLEMS: A **YES** answer to any of the following indicates an environmental or biosafety deficit in activity design or management. For USAID-funded activities, corrective action will be required. Notify the Chief of Party and the USAID Project Manager.

1. **Are needles and other sharps, bandages, clearly infectious medical waste, or incinerator ash disposed of in open ground or an unfenced/unlined burial pit?**	**YES** / NO
Issue 1: Allows insect and animal vectors to spread pathogens contained in waste, directly exposing wastepickers, health workers, and children at play to infectious agents. *Issue 2: Easily contaminates groundwater through seepage from unlined pits.* 	
2. **Is waste intended for burning or burial stored in the open, or in anything other than secure, tightly closed containers?**	**YES** / NO
See Issue 1 in Question 1. *Both photos depict improperly stored waste. The left photo shows "red bag" waste piled outside a clinic. The right photo shows medical waste stored in an open cage accessible to insect and animal vectors.*  	
3. **(If present) Is the incinerator clearly non-functional or damaged? Is it being used for waste storage?**	**YES** / NO
See Issue 1 in Question 1. *Both photos depict improper use of an incinerator. The left photo shows vines growing out of a non-functional incinerator. The right photo shows an incinerator burn chamber being used for waste storage.*  	
4. **Do waste handlers lack personal protective equipment (i.e., masks, thick gloves, safety glasses, aprons, and boots)? If present, does it show little sign of use?**	**YES** / NO
Issue: Significantly heightens infection risks for waste handlers.	

About the Visual Field Guide Series

Visual Field Guides are intended for use during field visits by USAID and implementing partner staff.

They are intended to ensure that the most common serious environmental deficits in activity design and management are quickly and easily identified for corrective action.

The field guides complement the more detailed guidance found in USAID's Environmental Guidelines: www.usaid.gov/environmental-procedures/sectoral-environmental-social-best-practices.

For the Visual Field Guides landing page, go to www.usaid.gov/environmental-procedures/sectoral-environmental-social-best-practices/visual-field-guides.

Disclaimer: This field guide was prepared by The Cadmus Group. Its contents are the sole responsibility of the authors and do not necessarily reflect the views of USAID or the United States Government.

USAID FROM THE AMERICAN PEOPLE

Checklist: Minimum Elements of an Effective Waste Management Program

The questions in this guide identify gaps in minimum good waste management practice.

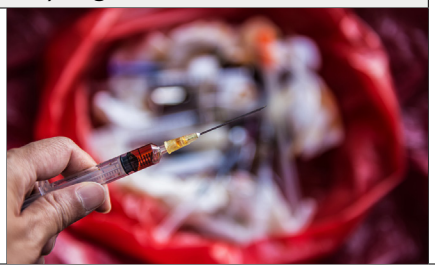
To the extent feasible during your field visit, ascertain whether these additional minimum elements of a basic waste management program are in place. If you cannot assess an element, leave it blank.

Waste Management Plan Is there a written waste management plan? *(View plan; ask several staff about plan contents.)*	YES NO
Staff Responsibilities Are staff responsibilities for waste management clearly assigned/understood? *(Ask several staff.)*	YES NO
Training Are staff trained in safe handling, storage, treatment, and disposal? *(View training records, ask several staff.)*	YES NO
Hygiene Does everyone who handles medical waste practice good hygiene? Are there wash stations with soap and water? *(Observe staff and wash stations, i.e., does soap show evidence of recent use?)*	YES NO
Vaccinations Are staff vaccinated against Hepatitis B and tetanus? *(View records.)*	YES NO
Waste Segmentation Is waste segmentation systematic? *(Building on Question 5, check that treatment areas have containers for sharps, "red bag" waste, and general waste; spot check to verify that red bag containers only contain infectious waste.)*	YES NO
Infectious Waste Is infectious waste disinfected prior to disposal by incineration, autoclaving, etc.? *(Talk to the incinerator/autoclave operator. Verify frequency of operation.)*	YES NO

5. Are there sharps (e.g., needles, scalpels) or obviously infectious waste (e.g., bandages, bloody gauze) in general waste containers? — YES / NO

Issue: Significantly heightens infection risks for waste handlers.

Because general waste is not disinfected, this can also increase infection risks for communities and wastepickers.



6. Does the burn or burial pit contain standing water? — YES / NO

Issue: Fosters the growth of pathogens contained in waste. Substantially increases the risk of groundwater contamination. Provides breeding habitat for insect disease vectors.

7. Are sharps containers absent? If present, can they easily leak or be punctured? — YES / NO

Issue: Significantly heightens infection risks for waste handlers.

POTENTIAL PROBLEMS: A **YES** answer to any of the following indicates that **an environmental or biosafety concern MAY exist; follow-up is required.** Notify the Chief of Party and the USAID Project Manager.

1. Does waste for burning contain more than 10 percent of plastics by volume? — YES / NO

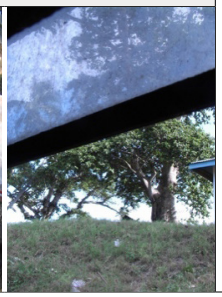
Issue: Can produce dangerous levels of airborne toxins.

PVC plastics produce highly dangerous furans and dioxins even in high-temperature incinerators.

2. Are waste storage and disposal areas closer than 20 meters to treatment areas, wards, kitchens, or canteens? — YES / NO

Issue: Increases the risk of pathogens contaminating food and treatment areas.

The left photo shows infectious waste stored in open pails under a tree. The right photo shows the same tree through the hospital kitchen's unscreened window 15 meters away.



3. Is there a shallow well, stream, or pond providing drinking water within 30 meters of a burn or burial pit? — YES / NO

Issue: Increases risk that burn/burial pit contaminates drinking water.