

Environmental Cleaning Program Improvement Toolkit: A Practical Guide for Implementing the Best Practices for Environmental Cleaning in Healthcare Facilities in Resource-Limited Settings

MAIN INSTRUCTIONS GUIDE



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I. Key terms and definitions

Environmental cleaning: cleaning and disinfection (when needed according to risk level) of environmental surfaces (e.g., bed rails, mattresses, call buttons, chairs) and surfaces of noncritical patient care equipment (e.g., IV poles, stethoscopes)

Environmental surfaces: furnishings, fixtures, finishes and other surfaces, such as bed rails, door handles, overbed tables, chairs and floors, within the built environment of healthcare facilities

Noncritical patient care equipment: equipment, such as stethoscopes, blood pressure cuffs and bedpans, that comes into contact with intact skin

Patient care areas: any area where patient care is directly (e.g., examination room) and indirectly (e.g., medication preparation area, care staging area) provided and the surrounding healthcare environment (e.g., patient toilets)

All healthcare facilities: include all public and privately-operated settings where healthcare is provided, ranging from outpatient clinics and health posts to acute care hospitals

Acute healthcare facilities: settings that treat sudden, often unexpected, urgent or emergent episodes of injury and illness that can lead to death or disability without rapid intervention. The term acute care encompasses a range of clinical health care functions, including emergency medicine, trauma care, pre-hospital emergency care, acute care surgery, critical care, urgent care and short-term inpatient stabilization.

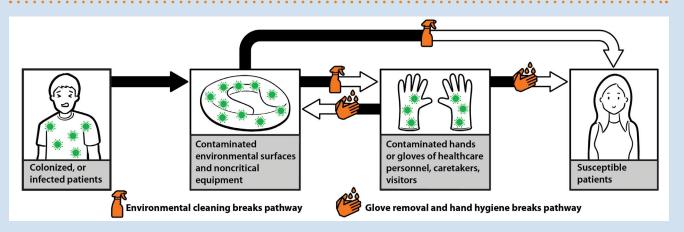
II. Introduction

Healthcare-associated infections (HAI) are a significant burden globally, with millions of patients affected each year. While limited data exists to-date in low- and middle-income countries, the data that is available indicates that HAI rates are approximately twice as high as in high-income countries (15 out of every 100 patients versus 7 out of every 100 patients). Furthermore, rates of infections within certain patient populations are significantly higher in resource-limited settings, including surgical patients, patients in intensive-care units (ICU) and neonatal units.

An environment with heavy microbial contamination can play a role in the transmission of HAIs in healthcare settings (Figure 1). Colonized or infected patients can contaminate the environment with germs, and healthcare providers, caretakers or visitors can also contaminate the environment with their germs or the germs of patients they are caring for, primarily via their hands. These germs from the environment or from hands or gloves of healthcare providers, caretakers or visitors can be transferred to susceptible patients. Figure 1 shows these pathways and how, in addition to hand hygiene, environmental cleaning can break these transmission pathways, making it a fundamental intervention for infection prevention and control (IPC).

¹ Allegranzi B, Begheri Nejad S, Combescure C, Graafmans W, Attar H, Donaldson L, Pittet D. 2011. Burden of endemic health-care-associated infection in developing countries: systematic review and meta-analysis. The Lancet; 377:9761

Figure 1. Contact transmission pathway showing role of environmental surfaces, role of environmental cleaning, and hand hygiene in breaking the chain of transmission



A colonized or infected patient can contaminate environmental surfaces and non-critical patient care equipment. Microorganisms from these contaminated environmental surfaces and non-critical equipment can be transferred to a susceptible patient in two ways. The first way is if the susceptible patient makes contact with the contaminated surfaces directly (e.g., touches the contaminated surfaces). The second way is if healthcare personnel, caretakers or visitors make contact with the contaminated surfaces and then transfer the microorganisms to the susceptible patient. Contaminated hands or gloves of healthcare personnel, caretakers or visitors can also contaminate environmental surfaces. The combination of proper hand hygiene and environmental cleaning can prevent transfer of microorganisms to healthcare personnel, caretakers, visitors and to susceptible patients.

Environmental cleaning is part of IPC standard and transmission-based precautions and should be implemented within the framework of the facility IPC program. It also requires water, sanitation and hygiene (WASH) infrastructure and services, so planning should include WASH personnel.

Implementing environmental cleaning activities and programs should make use of best practices and use a multimodal approach to ensure that activities are effective, sustainable and can be improved over time using stepwise quality improvement strategies.

A. Environmental cleaning as an IPC intervention

Environmental cleaning, as an IPC intervention, involves cleaning and disinfection (when indicated, based on risk level) of **environmental surfaces** (e.g., bed rails, mattresses) and surfaces of noncritical patient care equipment (e.g., IV poles, stethoscopes) in **patient care areas**, based on risk of pathogen transmission, as well as key program elements to support successful implementation (e.g., leadership support, training, monitoring, and feedback mechanisms).

Environmental cleaning is needed in all healthcare facilities to create a clean and hygienic environment and prevent infections. It is particularly important in facilities where the risk of HAIs is highest; typically, in acute healthcare facilities (especially in intensive care units, burn units and hematology/oncology units) and those where invasive procedures and a range of inpatient services are offered (e.g., dialysis centers, ambulatory surgery centers).

B. Scope of environmental cleaning as an IPC intervention

Environmental cleaning as an IPC intervention focuses on **patient care areas**. Other areas inside (e.g., office, administrative areas) and outside of the healthcare facility (e.g., facility grounds) should still be cleaned regularly to maintain an aesthetically appealing and visually clean environment in the overall healthcare setting, but they are generally outside of the scope of environmental cleaning as an IPC intervention.

C. Best practices for environmental cleaning

The <u>Best Practices for Environmental Cleaning in Healthcare Facilities in Resource-Limited Settings</u> were published by the Centers for Disease Control and Prevention (CDC) and the Infection Control Africa Network (ICAN) in November of 2019, in collaboration with both international experts and practitioners working on environmental cleaning and infection control in resource-limited settings. The best practices address environmental cleaning as an IPC intervention, including:

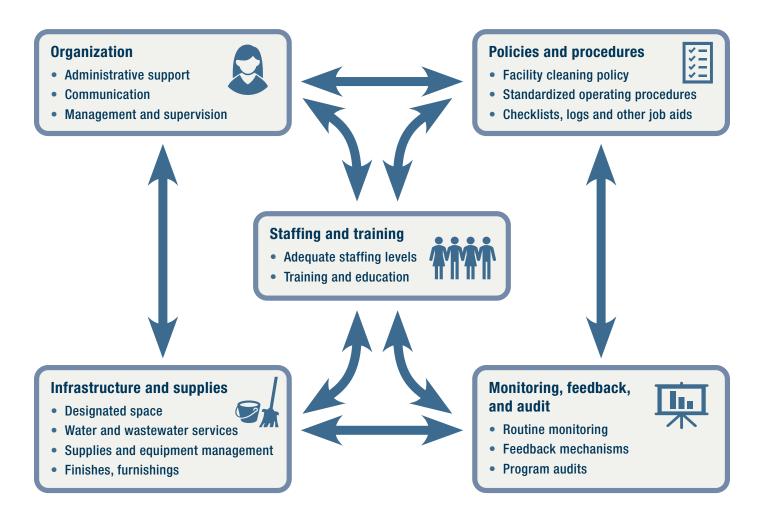
- developing and managing effective environmental cleaning programs
- selecting and managing environmental cleaning supplies and equipment
- implementing standard operating procedures (SOPs) for environmental cleaning in patient care areas based on risk-level

The <u>Best Practices for Environmental Cleaning in Healthcare Facilities in Resource-Limited Settings</u> document is linked throughout this guide and available at: https://www.icanetwork.co.za/icanguideline2019/.

D. Implementing effective environmental cleaning

Effective environmental cleaning practices are enabled through developing and implementing a strong environmental cleaning program. An environmental cleaning program as described in the best practices is a structured set of elements or interventions which facilitate implementation of environmental cleaning at a facility level.

Regardless of the type of facility, the five key elements of effective environmental cleaning programs are the same. These elements are all related and interdependent, as shown below.



III. Overview of Environmental Cleaning Program Improvement Toolkit

This toolkit is a sister document to the <u>Best Practices for Environmental Cleaning in Healthcare Facilities in Resource-Limited Settings</u> and aims to allow translation of the defined best practices into practical and achievable stepwise actions for healthcare facilities in resource-limited settings.

The toolkit addresses facility-based environmental cleaning as defined within the best practices. Therefore, the following aspects are **outside of the scope of the toolkit**:

- reprocessing of semi-critical and critical medical devices
- waste management
- cleaning procedures outside of patient care areas, such as offices and administrative areas
- cleaning of the environment external to the facility buildings, such as facility grounds and common areas

A. Purpose of the toolkit

The purpose of this toolkit is to provide a standardized process for assessing environmental cleaning programs against the defined best practices, prioritizing needed actions and activities to make program improvements towards best practices, and assisting in systematically implementing program improvements over time.

B. Target audience of the toolkit

The toolkit should be used by any personnel at a healthcare facility who have a role in the development, management or oversight of environmental cleaning services (internal or contracted) for the healthcare facility. In fact, the toolkit requires a team effort, and therefore, multiple people will use the toolkit.

The members of this team will differ by healthcare facility, but the primary audience and champion of the toolkit will generally be full- or part-time cleaning managers and other staff who provide oversight of environmental cleaning program development and implementation, such as members of existing IPC teams or IPC committees. Individuals responsible for healthcare epidemiology, and therefore involved in measurement of the infection and antimicrobial resistance outcomes that environmental cleaning is intended to help prevent, are an important secondary audience of the toolkit.

The toolkit is intended to be used by an internal, facility-led team; however, in some settings it may benefit from having the support of an external partner or an external consultant, who may have more dedicated time or resources to support the implementation of the steps laid out in the toolkit. That said, facility-based staff participation and facility leadership support are critical to ensure the successful implementation and ongoing support of the toolkit (see the Readiness to use the toolkit section below for prerequisites).

C. Facility types that should use the toolkit

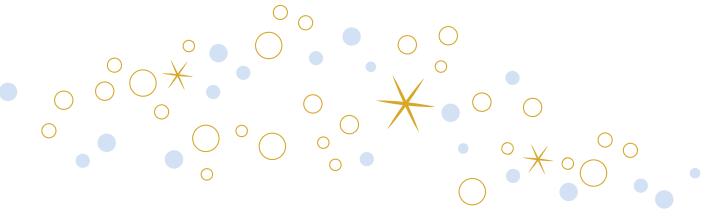
The toolkit guides implementation of environmental cleaning programs according to best practices, and therefore can be used at all healthcare facilities. However, the full suite of toolkit resources is most applicable for facilities that offer acute care services, where comprehensive environmental cleaning programs are needed. Small primary care and outpatient clinics may find the part of the toolkit that focuses on building and maintaining a Basic program most relevant and achievable for these settings (see the Basic program section below for description).

D. Readiness to use the toolkit

Before deciding to use the toolkit to improve environmental cleaning at your facility, several prerequisites are recommended to ensure that the process can be completed. For example, unless resources are available to implement program improvements, limited opportunity exists to improve cleaning in your facility in a sustainable manner. All these prerequisites should be in place to be ready to use the toolkit.

Prerequisites to using the Toolkit:

- 1. Facility-based IPC staff: Environmental cleaning must be implemented within the context of an overall IPC program where it can be linked to infection and antimicrobial resistance outcomes; while the day-to-day management of cleaning activities often requires a dedicated person/team, there are key oversight and leadership roles by IPC staff needed as well as their technical inputs in the toolkit process. The following are the facility IPC staff recommended to implement the toolkit process:
 - » Primary care facilities: IPC link person (min: 1 person)
 - » Secondary care facilities: IPC focal point with dedicated time for IPC activities (min: 1 person)
 - » Tertiary care facilities: multidisciplinary IPC team (min: 2-3 persons)
- 2. Toolkit Champion: Facility staff person* (e.g., member of IPC team) willing to lead the toolkit process
 - » Time commitment: 50–75% of time 2 to 4-weeks and then a percentage of time (e.g., 10%) dependent on actions to be taken for up to 6–8 months to support implementation of prioritized action plan
 - *Large facilities will likely need both a project lead and deputy lead (2 staff persons), given the time required at certain stages in the process.
- **3.** Facility leadership support: Human, material and financial resources will be required to complete the toolkit process:
 - » Multiple staff at the facility (team ~5 persons) will need to dedicate time to the assessment and follow-up activities.
 - » Material resources such as access to a laptop for data entry, analysis and reporting and access to a printer/printing services for data collection forms and tools will be needed at a minimum to implement the toolkit process.
 - » Additional materials and physical and financial resources will likely be identified as needs during the implementation of the toolkit process, based on the baseline assessment and subsequent action plan (e.g., approval for allocation of designated physical space in the facility for storage of cleaning supplies and equipment, procurement of additional cleaning supplies and equipment, supporting refresher trainings for cleaning staff).
 - > While these resources will not be known prior to implementation of the toolkit, it is important that leadership expresses willingness to identify resources as needed to support the improvement process.
- **4.** *Ministry of Health (MoH) approval* (as required in your country): In some settings, higher level approvals may be required prior to embarking on assessment and quality improvement of facility-level environmental cleaning programs. Regardless of any formal approvals that may be needed, the best practices should always be implemented alongside country-level policy on healthcare environmental cleaning. The best practices and the accompanying toolkit are supplementary to country-specific guidance and do not supersede it.



E. Navigating the toolkit guide

This document has been designed to guide facilities through the step-by-step process of implementing the toolkit. Throughout the document you can find highlighted boxes to summarize the key tools and activities that help guide each step of the process. Read these highlighted boxes carefully. Below are examples of the types of symbols seen within the highlighted boxes found at the end of each section of this instructions document and the information that can be found within them.



Templates and Tools:

This symbol and box will include a list of all the templates and tools that can be referenced and/or used to implement that specific section of the toolkit process.

- They are organized by type (either Tool or Template) and numbered by section and sub-section (Ex. Section A, Subsection 1 tools would be referenced as A1).
- Templates are intended to be modified by users of the toolkit for their context, whereas tools include structured content to guide implementation of each section of the toolkit process.



Summary of steps:

This symbol will represent the summary of actions for each section.

 Refer to this to keep a checklist of items that need to be completed for this section of the toolkit to be implemented.



Estimated time for this activity:

This symbol will show the estimated time for each section of the toolkit process.

This box is important to keep in mind to ensure that timelines are met during implementation
of the toolkit.



Note:

A box with this symbol shows an item or detail to note that may require special consideration.



F. Structure of the toolkit process

The overall structure for this toolkit builds upon successful implementation frameworks used in IPC and WASH. Examples of these frameworks are highlighted below.



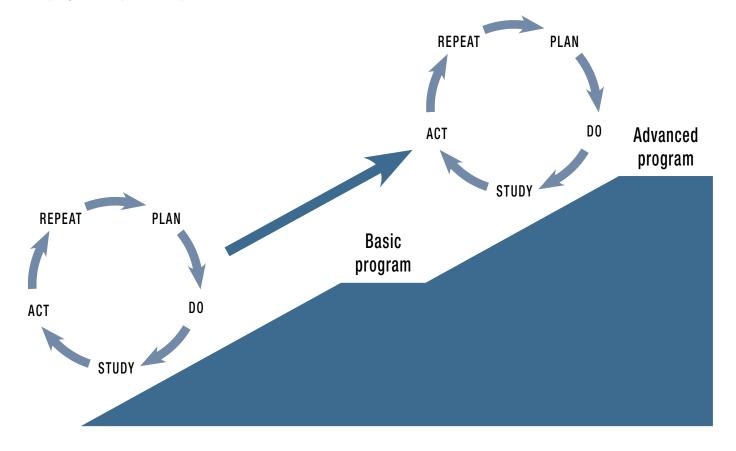
The following are related implementation tools from World Health Organization (WHO) that utilize a similar approach for incremental quality improvements:

- 5-step implementation cycle for IPC within "Improving infection prevention and control at the health facility: interim practical manual supporting implementation of the WHO guidelines on core components of infection prevention and control programmes" (https://apps.who.int/iris/handle/10665/279788)
- 5-step implementation framework within "Water and sanitation for health facility improvement tool (WASH FIT) (who.int)" (https://www.who.int/publications/i/item/9789240043237)

The frameworks highlighted in the above toolbox draw on the well-established model used for **continuous quality improvement activities**, using the cyclic Plan-Do-Study-Act-Repeat concept. The toolkit is structured similarly, allowing stepwise progress over time towards best practices.

As shown in the figure below, there are two major milestones in the toolkit process:

- 1. The first milestone is reaching the **Basic program**, which is essentially the *minimum requirements* for an environmental cleaning program.
- The second and final milestone is reaching an Advanced program, which is an environmental cleaning program that
 corresponds to the defined CDC/ICAN best practices. Even at the advanced program level, there is always room for
 continuous quality improvement through periodic use of the toolkit as well as through other quality management
 programs at your facility.



1. Basic program

A Basic program is the minimum that is needed for environmental cleaning at a facility level. It includes the foundational components within the five key program elements described in the best practices (e.g., organization, staffing, procedures).

For primary care facilities, the Basic program is generally adequate to enable effective environmental cleaning.

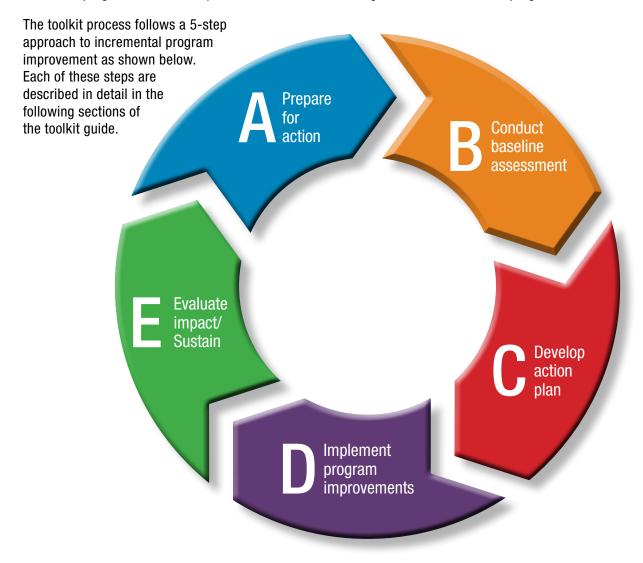
For **secondary and tertiary care facilities**, the Basic program provides the foundation upon which to build to reach the full best practices for cleaning program implementation over time.

The Basic program elements correspond closely to cleaning-related indicators within other global resources from WHO, including:

- Minimum requirements for infection prevention and control programmes (https://www.who.int/publications/i/ item/9789241516945)
- WASH FIT assessment form (updated February 2022) | WASH in Health Care Facilities (washinhcf.org) (https://washinhcf.org/resource/wash-fit-assessment-form-excel/)

2. Advanced program

An Advanced program includes all the elements described within the best practices, including those beyond the scope of a Basic program such as comprehensive routine monitoring activities and external program audits.



G. Tips for using the toolkit in the context of an acute respiratory infection epidemic or pandemic

The toolkit has been successfully implemented in different settings over the course of the COVID-19 pandemic. At different steps in the toolkit process, project teams have pivoted between virtual meetings and in-person meetings, depending on local epidemiology. All the meetings proposed within each step of the toolkit are feasible for virtual format, except for the walk-through risk assessment in Step A and the baseline assessment in Step B (in particular, Part B of the assessment). These in-person activities may generally be conducted by one member of the project team, with support from ward-based staff, to minimize risk and disruption to the ward(s) where the toolkit activities are being carried out.

When implementing the toolkit in settings with widespread community transmission, the following general acute respiratory infection prevention strategies should be employed whenever in-person activities (e.g., project team meetings, walkthrough assessment in selected ward/unit for the toolkit) occur:

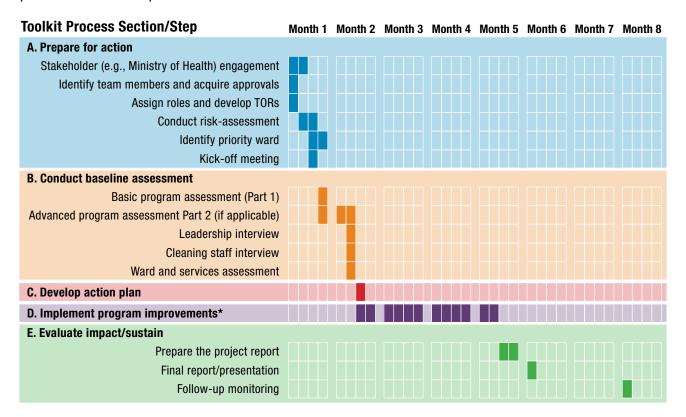
- ensure the use of well-fitting masks
- maintain physical distance (keep at least a 1-meter distance from others)
- hold meetings in well-ventilated areas, with windows open, or in outdoor areas, if possible
- perform frequent hand hygiene

Another helpful strategy to consider is the use of instant messaging platforms (e.g., WhatsApp) to facilitate informal communication and in some cases replace the need for in-person meetings (e.g., during the implementation phase).

H. Anticipated time required to complete the toolkit process

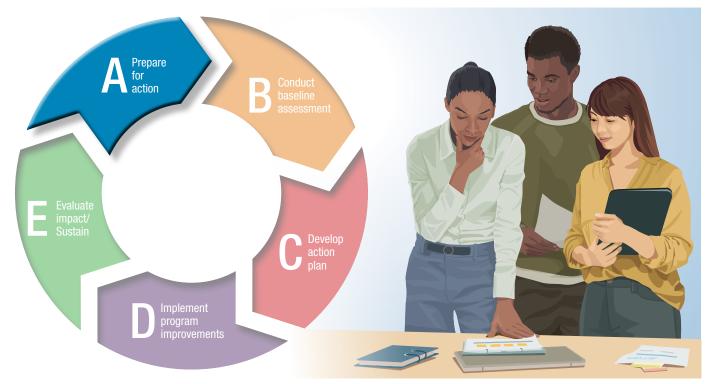
The amount of time required to complete the entire toolkit process depends on several factors, such as type or size of healthcare facility, the specific actions prioritized for improvement and the amount of time needed to make those improvements. The time required is comparable to other quality improvement initiatives that your facility may already have experience with. The toolkit process could take anywhere from 3–9 months, depending on these and other variables; an example timeline is included below for reference.

Sample timeline for toolkit process



IV. The Toolkit Process

A. Prepare for Action



The key activities to prepare for use of the toolkit are as follows:



1. Assemble the project team

Multiple stakeholders are needed throughout the toolkit implementation process. A core project team is needed at every step of the toolkit process; however, additional stakeholders will be needed intermittently throughout the toolkit process. The most appropriate staff will depend on the specifics of your facility, but generally the core project team should include:

- The team leader (Toolkit Champion)
- A representative from the IPC team (if a large facility (e.g., more than 250 beds). Two representatives from the IPC team may be needed: one person to serve as Deputy Team Lead, and one additional staff)
- A representative from the nursing department
- 1–2 representatives from the selected priority ward(s)—to be determined after risk assessment

Additional stakeholders will be needed intermittently for the toolkit implementation process at key decision points or to validate specific outputs from the core project team. The most appropriate staff will also be dependent on the specifics of your facility, but needed additional personnel may include:

- A representative from facility administration
- A representative from the external cleaning company)—as applicable
- A representative from facilities management (e.g., WASH)
- A representative from the quality improvement or quality management team

Overview of the Toolkit Champion and Deputy Team Lead Roles:

Toolkit Champion: If your facility already has a staff member who is responsible for directly managing and overseeing environmental cleaning activities on a day-to-day basis, this person is best suited to champion the toolkit implementation process. If this position does not exist, then the selected person should:

- Have knowledge of the facility IPC activities: typically, a staff person who is already a member of the facility IPC or hygiene committee should be selected for this role.
- Be an experienced staff member: ideally, with leadership and management experience. During the toolkit
 implementation process, they will need to communicate regularly with the IPC committee, as well as with
 facility leadership, administration and department or ward supervisors (e.g., nurse in-charge, laboratory
 manager); therefore, this person should be a high level of seniority.
- Have a good understanding of the facility organizational and management structure and the services provided at the facility.

Deputy Team Lead: The deputy team lead will play an important role in the detailed task management and oversight of the toolkit implementation process. While the toolkit champion may be a senior staff person with many other responsibilities, the deputy team lead should be able to dedicate time on an ongoing basis to manage the team and activities. Therefore, this role should generally not be allocated to the existing IPC team lead or focal point, who already has many activities for which they are responsible.



Note: For small health facilities (e.g., primary care, outpatient), the project team will likely be much smaller, and may only require:

- A team leader (Toolkit Champion)
- A representative from facilities management (e.g., WASH, engineering)
- A representative from facility administration (e.g., nurse in-charge)

During preparation, documenting and agreeing upon the specific roles and responsibilities of all stakeholders involved is important to ensure accountability, prevent lapses of key activities and maintain active engagement throughout both the toolkit implementation process (see tools box below).

Once the core team members are identified, hold a planning meeting to develop a schedule of activities (i.e., timeline) for the toolkit implementation and assign key roles and team members for each activity or step.



Section A Templates:

https://www.cdc.gov/hai/pdfs/resource-limited/environmental-cleaning-section-Atemplates-508.docx

- A1-1 Sample terms of reference (TOR) for project team
- A1-2 Sample agenda for the planning meeting
- A1-3 Sample timeline for the toolkit process





Summary of steps:

- 1. Identify team members.
- 2. Assign roles and develop TORs.
- 3. Hold a planning meeting to review TORs and develop a timeline for the toolkit implementation process.



Estimated time for this activity:

- 1-week
- Recruitment of team members, in addition to seeking supervisor approval for participation, may take time in practice.
- The TORs and timeline for the toolkit process may also require facility administration/ leadership validation.

2. Perform a risk assessment

A risk-based approach has been developed for determining environmental cleaning strategies by type of patient care area (e.g., required frequency of routine cleaning), which uses the risk of pathogen transmission via environmental contamination based on three criteria defined below in the box below. This risk-based approach is described in detail in the Best Practices for Environmental Cleaning in Healthcare Facilities in Resource-Limited Settings.

Risk-Based Criteria for Environmental Cleaning:

- 1. Probability of contamination: Heavily contaminated surfaces and items require more frequent and thorough environmental cleaning than moderately contaminated surfaces, which in turn require more frequent and rigorous environmental cleaning than lightly or non-contaminated surfaces and items.
- 2. Vulnerability of patients to infection: Surfaces and items in care areas containing vulnerable patients (e.g., immunosuppressed) require more frequent and rigorous environmental cleaning than surfaces and items in areas with less vulnerable patients.
- 3. Potential for exposure to pathogens: High-touch surfaces (e.g., bed rails) require more frequent and rigorous environmental cleaning than low-touch surfaces (e.g., walls).

These three elements combine to determine low, moderate, and high risk—more frequent and rigorous (via different product or process) environmental cleaning is required in areas with high risk. Risk determines cleaning frequency, product, and process in routine, and contingency cleaning schedules for all patient care areas.



Note: This risk framework addresses pathogens, and by extension HAIs, potentially transmitted via environmental contamination. Pathogens transmitted via other pathways (e.g., airborne) are not addressed within this risk framework. Therefore, this does not approximate HAI risk level in general within your facility. Instead, it allows identification of where effective environmental cleaning is most important to prevent HAIs transmitted via contact with contaminated environmental surfaces and non-critical equipment (i.e., fomites).

Assigning risk-levels based on the environmental transmission pathway can also help prioritize where to focus environmental cleaning improvement efforts and, therefore, may help in selecting a priority ward for the toolkit implementation process.

If your facility does not already have these risk-levels established, consider performing a facility-wide risk assessment to categorize wards and services into higher and lower-risk areas; this will help prioritize where to focus improvement efforts over time and can guide selecting a priority ward. Generally, you should start by making improvements in higher-risk areas, where the risk of HAIs is highest. For facilities with limited resources, making stepwise improvements, based on risk-level, is the most realistic and sustainable strategy for program improvement.

Generally, the core project team can complete this assessment as a table-top exercise; however, it may be useful to subsequently conduct a more detailed walk-through risk assessment of identified high-risk wards/units to select a single priority ward for the toolkit implementation process. Make sure to include ward leadership or in-charge staff from the identified high-risk wards in the walk-through risk assessment to ensure awareness and agreement on the risk designations.



Section A Tools:

https://www.cdc.gov/hai/pdfs/resource-limited/environmental-cleaning-section-A-508.pdf

- A2-1 Risk assessment categories and scoring instructions
- A2-2 Example risk categorization table



Summary of steps:

- 1. Identify any additional stakeholders needed for the risk assessment exercise.
- 2. Review the risk assessment tool with the core project team.
- 3. Perform the table-top risk assessment exercise.
- 4. Categorize wards/services/departments into risk levels.
- 5. Record and validate risk categorization among all stakeholders.
- 6. Conduct a walk-through risk assessment of identified high-risk wards/units.



Estimated time for this activity:

- · 2 days to 2 weeks
- The complexity of this exercise increases with the number and range of services available at the facility:
 - » Small primary healthcare facilities can conduct this exercise in 1–2 days.
 - » Tertiary healthcare facilities including large-bed hospitals will take more time to complete the walk-through assessment and record the risk categorization for all services.

3. Identify the priority ward

The toolkit covers all the five key elements of effective environmental cleaning programs. These elements address the cleaning program needs at the overall facility level; however, they can be applied progressively on a ward by ward basis to allow stepwise implementation.

Select a priority ward(s) for implementation of the toolkit, based on the risk assessment as well as other facility level factors as needed. Other factors that may help select a priority ward include:

- Rates of HAIs from ongoing surveillance
- Recent HAI outbreaks
- Other quality improvement initiatives (e.g., efforts to improve hand hygiene)
- Priority patient populations at the facility or district level (e.g., maternal and neonatal populations)
- Related government initiatives which may provide synergies and/or direct support

Once the relevant stakeholders have been engaged to validate the selection of the priority ward for the toolkit implementation, identify additional team members from the priority ward (e.g., formalize TORs, timeline) and hold a kick-off meeting to formally launch the project.

Note that the final selection of the priority ward for the toolkit could happen either beforehand or during the kick-off meeting, depending on local preferences and protocols. If this decision should take place during the kick-off meeting, make sure to invite representatives from the high-risk wards where the walkthrough assessment was performed to present those results; this will help ensure that the criteria for selection is clear and the process is equitable.



Note: If you are in a small, primary care facility with limited inpatient services, it may be feasible to implement the toolkit at a facility level, rather than just selecting one ward. Remember that there will still be relatively higher and lower risk areas even within a small facility; prioritize activities and interventions in your higher risk areas (e.g., maternity ward), when needed.



Section A Templates:

https://www.cdc.gov/hai/pdfs/resource-limited/environmental-cleaning-section-A-templates-508.docx

A3-1 Sample agenda for kick-off meeting



Summary of steps:

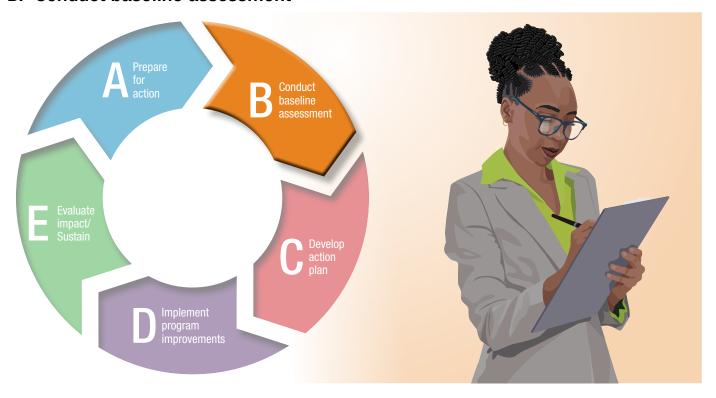
- 1. Convene the project team and additional stakeholders as needed to discuss and determine the priority ward for the toolkit process.
- 2. Document the rationale for the decision and validate the choice of priority ward with other stakeholders as appropriate, including facility administration/leadership.
- 3. Engage the selected ward, review and refine the timeline for the toolkit implementation process as needed, and develop and validate the TOR for the ward-level focal point.
- 4. Hold a kick-off meeting with appropriate stakeholders to officially launch the project. (Steps 1–3 can be completed during the kick-off meeting.)



Estimated time for this activity:

- Up to 1 week
- Selection of the priority ward(s) may take several days in order to seek input from relevant stakeholders, and validation by facility administration may also take time.

B. Conduct baseline assessment



The baseline assessment is divided into two main sections, which will assess your ward(s) against two defined levels of cleaning program development, Basic and Advanced.

Overview of Part 1 and Part 2 of the baseline assessment:

Part 1: Basic program assessment

- Part 1 allows assessment of the cleaning program against the basic program elements.
- The user answers *all* questions in Part 1. If any questions are no, Part 2 is not used, and the user is directed to Basic program tools to address that/those elements.
- Generally, primary care and outpatient facilities only complete Part 1.

Part 2: Advanced program assessment

- Part 2 allows assessment of the cleaning program against the complete best practices and is only appropriate for programs with a fully functional Basic program in place.
- Part 2 is only completed if all questions in Part 1 are answered yes.
- Generally, only secondary and tertiary care facilities providing acute care will complete Part 2 after completing Part 1.

Part 1: Basic program assessment

Part 1 is completed by the project team during 1–2 roundtable session(s) facilitated by the team leader. These sessions should be attended by all members of the project team (core project team and additional stakeholders) to assign responsibility for sections of the assessment and review answers as well as associated documents.

During the roundtable session(s):

- Review the entire list of questions and complete the assessment.
 - » If additional information is needed to answer the questions, assign individual team members responsibility for every question as needed.
 - Ensure that team members consult the specific instructions and guidance for their assigned questions. They may need to collect more information to develop action plan activities and/or to answer more in-depth questions during Part 2.
- Review the answers provided to all questions, in addition to any supporting documents, to help with preparing for next steps.
- Ensure that all responses in Part 1 are filled in entirely—including recording any comments or details which may be needed for the next steps.



Section B Tools

https://www.cdc.gov/hai/pdfs/resource-limited/environmental-cleaning-section-B-508.pdf B1 Baseline Assessment—Part 1



Summary of steps:

- 1. Convene roundtable session with project team to review Part 1 and complete assessment.
- 2. If needed, assign questions to team members. Team members collect information to answer their assigned questions.
- 3. Convene second roundtable session (if needed) with project team to fill in Part 1.
- 4. Make plan for next steps:
 - » If all questions yes, continue to Part 2: Advanced program assessment below.
 - » If any questions 'no', move to Develop action plan section.



Estimated time for this activity:

- 1-day to 1 week
- Some of the answers to Part 1 may be known immediately, whereas others may require confirming with other staff and locating supporting documents.
- One week should be enough time between roundtable sessions to retrieve the needed information while not allowing the process to stall or lose momentum.

Part 2: Advanced program assessment

Part 2 of the assessment is more detailed than Part 1 and has **multiple sub-sections**, each of which has a specific methodology and recommended team member involvement (see table below). Copies of the **Best Practices for Environmental Cleaning in Healthcare Facilities in Resource-Limited Settings** should be available for team members to refer to for their assigned questions. Each question indicates the section of the best practices that should be consulted prior to answering the question.

Similar to the process for completing Part 1, completing this section of the assessment can be organized via 1–2 roundtable sessions. Each roundtable session may require a half-day of dedicated time and may be best organized outside of core working hours (e.g., the weekend) to ensure that all team members can attend.

During the first roundtable session (note that this can be conducted within the same session as the roundtable for Part 1 of the assessment, if time allows):

- Review the entire list of questions, associated sub-section/tool (e.g., cleaning staff questionnaire) and assign
 individual team members responsibility for every question.
 - » The table below can be used to help assign sub-sections/tools of the assessment to specific team members; however, the project team can decide whatever approach works best for them. Generally, it may be easiest to keep the same team members responsible for the same sections as were assigned during Part 1 of the assessment.
 - Where the main assessment document indicates that a separate data collection tool is needed to answer the question, review the tools and ensure the methodology is understood during this first session.

During the second roundtable session:

- Review the answers provided to all questions, in addition to any supporting documents and the data collection tools, to help with preparing for next steps.
- Ensure that all questions and columns in Part 2 are filled in entirely—including recording any comments or details which may be needed for the development of the action plan.

Sub-section methodology/tool	Best Practices for Environmental Cleaning in Healthcare Facilities in Resource-Limited Settings Cleaning Program element/sub-element assessed	Responsible project team members (suggested)
Leadership interview	Organizational elements (2.1) • Administrative support • Communication	Team leader, Facility administration representative
Document review list (e.g., policy, SOPs, service contract, staff rosters, IPC reports, training records)	Some indicators from all program elements	Team leader, IPC team represen- tative, nursing department representative
Cleaning staff questionnaire	Organizational elements (2.1) • Management and supervision	Team leader, IPC team representative
	Staffing elements (2.2) Training Staffing levels	

Continued on the next page >

Sub-section methodology/tool	Best Practices for Environmental Cleaning in Healthcare Facilities in Resource-Limited Settings Cleaning Program element/sub-element assessed	Responsible project team members (suggested)
Ward and services assessment	Organizational elements (2.1) • Management and supervision Staffing elements (2.2) • Training • Staffing levels Supporting infrastructure and supply elements (2.3) • Designated space (housekeeping areas, decontamination areas) • Supplies and equipment management • Water and wastewater services • Finishes, furnishings Policy and procedures (2.4) • SOPs • Checklists, logs and job aids	IPC team representative, facilities management representative, priority ward representative



Section B Tools

https://www.cdc.gov/hai/pdfs/resource-limited/environmental-cleaning-section-B-508.pdf

B2-1 Baseline Assessment—Part 2

Data collection tools to accompany Baseline Assessment—Part 2

- » B2-2 Leadership Interview Guide and Document Review List
- » B2-3 Cleaning staff questionnaire
- » B2-4 Ward and services assessment tool



Summary of steps:

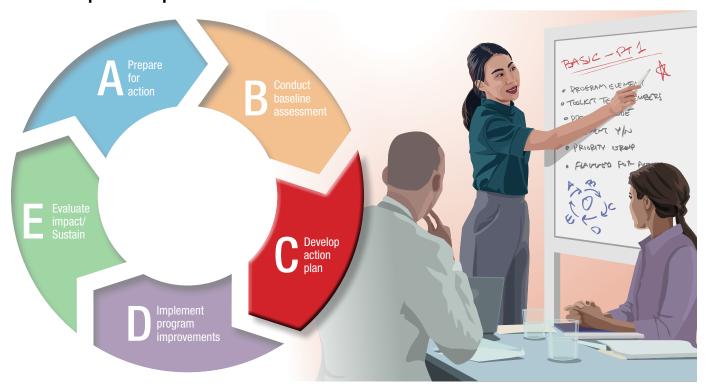
- 1. Review Part 2 with the project team and assign sub-sections (roundtable 1).
- 2. Team members complete sub-sections for priority ward(s).
- 3. Convene roundtable to review data from sub-sections and fill in Part 2.
- 4. Make a plan for next steps; move to Develop action plan section.



Estimated time for this activity:

- 1–2 weeks
- Completing all sub-sections of Part 2 will take planning and coordination with other stakeholders at the facility.
- Up to two weeks should be enough time to collect and record all the data to complete the baseline assessment.

C. Develop action plan



The improvement process really starts once you have Identified the specific, feasible actions needed to make program improvements, along with clear timelines and individuals responsible for delivering on those actions.

In settings with limited resources, efficiently prioritizing the actions that are both most needed and most feasible (i.e., achievable) is important. Sometimes that is a balancing act.

Adding to this challenge is the fact that relationships and dependencies also exist between many of the actions needed to make program improvements. So, selecting the right actions and completing them in the right order are both very important steps.

The process of prioritization allows actions to be implemented progressively over time and built upon in such a way that supports continuous and sustainable program improvements. Use the **Recommended Actions Guide tool** to help identify which actions it may make sense to take first, based on relationships and dependencies where they exist.

The key activities to develop an action plan are:



These three activities can generally be completed during one roundtable session (e.g., a half-day retreat) with participation from all members of the core project team. In some settings, additional stakeholders (e.g., facility administration) may also need to participate in these activities. In cases where people outside of the core project team will be requested to perform specific actions, this may require an additional day to determine whether they are willing and able to assist with the activity.

1. Record program deficits

Review the baseline assessment (Part 1 and Part 2, if applicable) and record the question codes onto the Baseline Assessment Answer Key sheet. This sheet will:

- serve as a record of program assessments
- allow comparison between subsequent assessments
- document the needed improvements to program elements

The baseline assessment answer key sheet records program elements that are in place (where the answer was 'yes' on the baseline assessment), records program deficits (where the answer was 'no' on the baseline assessment), allows the program deficits to be classified according to the recommended priority group number and finally, allows determination of key deficits to address. A screen shot of the answer key is provided here:

Program Element Category	Toolkit Team Member(s) Conducting Assessment (fill in for each program element category)	Program Element Code	Element in Place (answer = yes) Mark with an X	Element Missing (answer = no) Mark with an X	Priority Group # (1–4) - for Missing Elements (refer to Priority Groups table below)	Flagged for Action Plan (suggested maximum: 5–10 elements)
Organizational		01				
		02				
		О3				
		04				

2. Prioritize program improvements

The classification of program deficits into categories can help determine where to broadly prioritize program improvement efforts. The grouping provided on the **Recommended Actions Guide** corresponds with a suggested order of actions.

Generally, program elements in Group 1 include the highest priority actions that are foundational and/or are prerequisites to other program improvement efforts and, therefore, may be prioritized before those in Group 2, etc. However, in practice, program elements may be prioritized from different groups based on opportunity and feasibility. For example, at the basic program level, there may be opportunity to develop a structured training curriculum for cleaning staff (Group 3) before being able to address the need for consistent water access to the priority ward (Group 2).

The amount of time and resources needed to make program improvements will depend on your setting. Additionally, the required time and resources needed is highly variable between program elements.

To ensure that limited resources are used as efficiently as possible, make a short list of the highest priority program improvements (e.g., top 5 or 10) and then proceed below.

3. Fill in the action plan

Using the agreed upon prioritized program improvements, write the specific actions to be taken for each program area into the **Action Plan Template**. The **Recommended Actions Guide** can provide some ideas for the specific actions that need to happen to address each identified deficit.



Note: Some actions that are needed in your facility may not be included in the **Recommended Actions Guide**, and some actions listed on the guide may not be applicable in your setting.

The project team should discuss and plan for the best way forward within your setting.

Each action written into the **Action Plan Template** should be as specific as possible. The action plan is not complete unless the **specific actions**, **person responsible**, **resources needed**, **and target date** have been filled in for each prioritized program element (see screen shot below).

Program
Element
Code
(fill in
program
elements
flagged for
action)

Action(s) to Take (fill in as many actions as required for each program element code; number the actions) Person
Responsible
(select one
person as the
overall
responsible, even
if several
involved)

Resources
e Needed
(be as specific as possible)

Target Due Date Completion Date (include the date action will be fully completed) Status at Follow-up
Monitoring
(report on the program
element overall: what, if
any, additional inputs are
needed? Have new gaps or
needs been identified?)

Select actions that are achievable within a limited timeframe so that the team has the dedicated time required to complete the activities. The expectations for the total amount of time needed by the team to complete the toolkit process should have been discussed with your leadership prior to starting the process, and it's important to meet those expectations. Remember that there will be competing priorities for staff time, and it is easier to make improvements using the momentum you've built through the toolkit process steps!



Note: Importantly, when you choose actions to take to make progress towards your selected program improvements, choose actions that are achievable within a reasonable timeframe *(recommended time is 3–6 months)*. Actions that take longer than that will be difficult to track and difficult to achieve when many competing priorities exist at your facility.

Remember, the toolkit process is iterative, meaning that it should be used on a reoccurring basis to make durable and sustainable program improvements over time. Focusing on achievable and time-limited actions allows the improvements to keep moving in the right direction.

In addition to the **Action Plan Template**, update the overall project timeline with all the individual actions to allow close tracking. Some teams may find it more helpful to develop individualized action plans or work plans to help guide their activities.

Once the action plan is complete, you're now ready to make your program improvements!



Section C Templates

https://www.cdc.gov/hai/pdfs/resource-limited/environmental-cleaning-section-C-templates-508.docx

- C1-1 Baseline Assessment Answer Key—Part 1 (Basic Program)
- C1-2 Baseline Assessment Answer Key—Part 2 (Advanced Program)
- C3-1 Action Plan Template



Section C Tools:

https://www.cdc.gov/hai/pdfs/resource-limited/environmental-cleaning-section-C-508.pdf

- C2-1 Recommended Actions Guide—Basic Program
- C2-2 Recommended Actions Guide—Advanced Program



Summary of steps:

- 1. Record your answers from the baseline assessment into the answer key sheet.
- 2. Categorize the program deficits into categories from the actions guide.
- 3. Select your priority program improvements for implementation; emphasize addressing 'group 1' deficits.
- 4. Fill in the action plan with the specific activities, using the actions guide as applicable.
- 5. Assign one person to each action/activity, and make sure there is a due date.
- 6. Move to <u>Implement program improvements</u> section to find all the tools and templates you will need to implement your prioritized actions

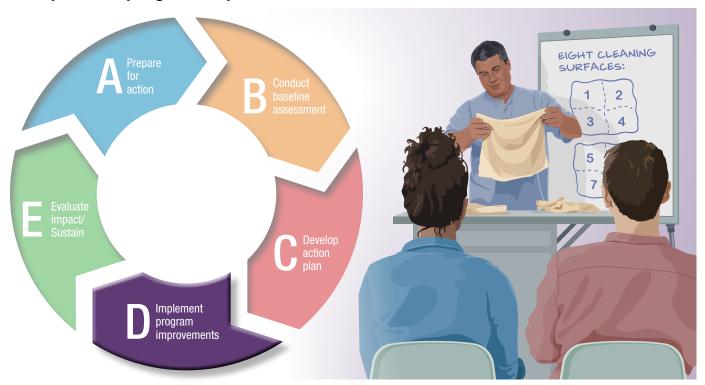


Estimated time for this activity:

- 1–2 days
- Recording data from the baseline assessment and filling in the prioritized action plan can generally be completed during one roundtable session with participation from all members of the core project team.
- In cases where people outside of the project team will be requested to perform specific
 actions, this may require an additional day to determine whether they are willing and able to
 assist with the activity.



D. Implement program improvements



Executing your prioritized action plan will take coordination and teamwork, so frequent check-ins (e.g., via WhatsApp group) with the core project team to seek input and support are important. The core project team may be able to complete most of the actions themselves. For example, the core project team can use the Program Improvement Tools to draft needed SOPs and plan training activities. However, other actions will be dependent on other personnel at the facility and/or require resource mobilization that is partly or entirely outside of their control.

The <u>Program Improvement Tools</u> are available upon request for you to use and adapt to support the implementation of your action plan in the priority ward. The types of tools available range from samples, templates, and resource calculators to data collection instruments, and generally these have elements that are specific to the basic and advanced program level.

All the tools correspond to a recommended action or activity, which you may have prioritized within your action plan; however, not every action or activity requires the use of a tool, and in some cases, you may use existing resources outside of the scope of this toolkit.

The code for the suggested tool or external resource is included in the **Recommended Actions Guide**.

During the program improvement period, meet/communicate with the project team on a regular basis (e.g., bi-weekly) to review progress, plan upcoming activities, and **update the action plan** and project timeline, if needed. These meetings can use a hybrid or in-person/virtual format as well as instant messaging (e.g., WhatsApp group) platforms.

Some examples of key questions to ask during these check-in meetings include:

- Are there any additional actions needed which we may have overlooked when creating the action plan?
 - » If so, they can be added to the action plan under **Specific Action**.
- Are there any additional resources needed to accomplish the action/activity that are not currently included in the action plan, for example, human resources?
 - » If so, they can be added to the list of **Resources Needed** for that specific action/activity.

- Is the target date realistic for achieving the action/activity?
 - » While actions can take longer than anticipated during the planning phase, asking this question to the person responsible along with why is important to identify roadblocks where the team lead or other project team members may be able to help. These questions may also reveal overlooked actions that may need to be completed prior to completing the action being reviewed.
 - » The target date is a goal and does not need to be updated during these weekly meetings; the **Completion Date** column captures when the action is completed.

Program Element Code (fill in program elements flagged for action)	Action(s) to Take (fill in as many actions as required for each program element code; number the actions)	Person Responsible (select one person as the overall responsible, even if several involved)	Resources Needed (be as specific as possible)	Target Due Date	Completion Date (include the date action will be fully	Status at Follow-up Monitoring (report on the program element overall: what, if any, additional inputs are needed? Have new gaps or needs been identified?)
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A standing weekly meeting also provides an opportunity to invite other stakeholders to meetings for engagement on specific activities, as appropriate. However, keep in mind that you can also attend other standing meetings, for example the standing IPC committee meeting, to engage people outside of the project team on key activities.



Note: Some teams may also find it more productive and feasible with conflicting work schedules to plan for longer, less frequent meetings of the core team to work on key activities (e.g., developing new SOPs) such as dedicated half- or full-day retreats.

The project team should discuss and plan for the best way forward within your setting.

As outlined in the Recommended Actions Guide, several examples of needed engagement outside of the project team during implementation are provided below:

- The IPC committee and/or facility leadership could be invited to review the draft terms of reference for the cleaning program focal point and decide how to reassign an existing staff person to this role or determine whether a new hire may be possible.
- The leadership staff from the priority ward could be invited to review and provide input on the draft SOPs for environmental cleaning tasks for that area.
- The procurement department could be invited to discuss environmental cleaning supply and equipment needs in the priority ward.

After the project team has completed the prioritized actions within the action plan, including validating materials with facility leadership and other stakeholders as needed (e.g., MOH staff), the next phase should be to ensure that the improvements can be sustained.



Section D Templates

 See the list of program improvement tools in <u>Program Improvement Tools</u> section; these are available upon request to <u>iicp@cdc.gov</u>



Summary of steps:

- 1. Ensure that each team member has access to the tools (either print copy or electronic) for the specific activities to which they were assigned in the action plan.
- 2. Set up a reoccurring meeting slot, for example, weekly for 1–2 hrs, to review progress, facilitate meetings with stakeholders outside of the project team, and validate documents after they are drafted.
- 3. After all the specific activities in the action plan are completed, have a final meeting to ensure that nothing was missed and make a plan for next steps.
- 4. Move to the <u>Evaluate impact and sustain it</u> section to consider the actions that will be needed to ensure that your improvements are sustained!

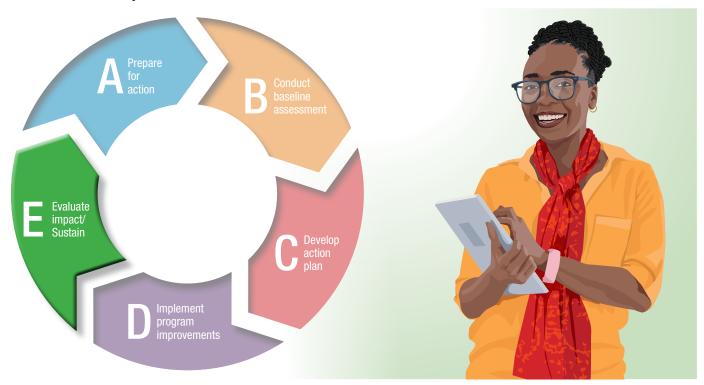


Estimated time for this activity:

- 1 to 3-months
- Completing the specific activities and actions within your prioritized action plan may take several weeks to months.
- Generally, it's not advised to take more than 3-months in the toolkit process for implementation of program improvements before moving to the next phase to focus on sustaining the improvements made.



E. Evaluate impact and sustain it



Making improvements to your cleaning program using the toolkit is a major accomplishment. Every improvement made allows your cleaning program to move closer to <u>Best Practices for Environmental Cleaning in Healthcare Facilities in Resource-Limited Settings</u> and is an important step to improve patient and staff safety in your facility!

Evaluating and reporting the **outputs and impacts** of the toolkit process will allow you to track changes over time, make the 'business case' to senior leadership and management about the cost-benefit or cost-effectiveness of improving cleaning activities and elevate the status of environmental cleaning as a key IPC intervention among all staff at the facility.

After the action plan is completed (3–6 months after starting the toolkit process), compile all the specific actions and outputs (i.e., deliverables), such as the development of standardized procedures or a monitoring plan, into a brief report or presentation to management or senior leadership. See the Final Report Template in the box below for a report or presentation outline.

After another 3-months (about 6–9 months after starting the toolkit process), monitor the status of the outputs of the toolkit process by revisiting the action plan to see if the activities are being sustained. This will allow you to identify any immediate issues and take remedial measures so that the improvements can be sustained.

Review each of the specific actions with the team and fill in the last column of the action plan, highlighted below, with an update on the status and any additional action to be performed. It's important to verify the status of the action or activity via a walk-through assessment of the priority ward, and you may also need to talk to staff on that ward or IPC staff.

Program Element Code (fill in program elements flagged for action)	Action(s) to Take (fill in as many actions as required for each program element code; number the actions)	Person Responsible (select one person as the overall responsible, even if several involved)	Resources Needed (be as specific as possible)	Target Due Date	Completion Date (include the date action will be fully completed)	Status at Follow-up Monitoring (report on the program element overall: what, if any, additional inputs are needed? Have new gaps or needs been identified?)
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For facilities where routine monitoring of cleaning activities was operational prior to the implementation of the toolkit, it may also be possible to evaluate impact by comparing monitoring data from pre- and post-implementation of the toolkit process to determine potential improvements to cleaning practices or cleanliness.

To make sustainable and continuous quality improvements to your cleaning program, it's important to periodically repeat the toolkit process cycle. After a defined time interval such as one year, you can start the toolkit process over again at Prepare for Action section. This can either be completed in the same ward or in another priority ward. Note that if using the toolkit in the same ward again, you may be able to move directly to Step B.

The most important step of the toolkit process is to sustain the improvements made. The Recommended Actions Guide will help you prioritize actions that will provide the best opportunity for sustainability. For both program levels, this is all about institutionalizing the cleaning program. At the basic program level, the highest priority is to appoint a dedicated focal point for the cleaning program to help sustain all the other improvement areas. For advanced programs, the emphasis should be to build the management, communication and coordination structures to create a strong institutional framework for the cleaning program.



Section E Templates

https://www.cdc.gov/hai/pdfs/resource-limited/environmental-cleaning-section-E-templates-508.docx

• E1 Final Report Template



Summary of steps:

- 1. After the action plan is completed, compile all the major outputs into the Final Report/ Presentation Template.
- Work with facility management and the IPC committee to plan for a final meeting to share the outputs from the toolkit process, including other facility and ward leadership and staff from the priority ward.
- 3. Approximately 3-months after the completion of the action plan, conduct a ward assessment to review the status of the specific actions from the action plan and identify any deficiencies that may need to be addressed. These should be documented on the action plan under the **Status at follow-up monitoring** column, and steps should be taken to address them as soon as possible.
- 4. For facilities at the advanced program level, work with the IPC committee to review routine monitoring data from the cleaning program to look for trends.
- 5. After a defined time interval (e.g., 1-year), move to the <u>Prepare for Action</u> section and keep building upon your work to make sustainable and continuous improvements to your cleaning program!



Estimated time for this activity:

• 1–2 weeks

V. Toolkit Process Tools

Tool File Name

Section A: Prepare for Action

Section A Templates

- A1-1: Sample TORs for the toolkit project team
- A1-2: Sample agenda for the planning meeting
- A1-3: Sample timeline for the toolkit implementation process
- A3-1: Sample agenda for the kick-off meeting

Section A Tools

- A2-1: Risk assessment instructions
- A2-2: Example risk classification table
- Section B: Conduct Baseline Assessment

Section B: Conduct baseline assessment

Section B Tools

- B1: Baseline Assessment—Part 1 (Basic Program)
- B2-1: Baseline Assessment—Part 2 (Advanced Program)
- B2-2: Leadership interview and document review guide
- B2-3: Cleaning staff questionnaire
- B2-4: Ward and services assessment tool

Section C: Develop Action Plan

Section C Templates

- C1-1: Baseline assessment answer key—Part 1 (basic program)
- C1-2: Baseline assessment answer key—Part 2 (advanced program)
- C3-1: Action Plan Template

Section C Tools

- C2-1: Recommended actions guide—Basic program
- C2-2: Recommended actions guide—Advanced program

Section D: Implement Program Improvements

See list on next page

Section E: Evaluate Impact/Sustain

E1:Final report template

VI. Program Improvement Tools

Note, these tools are available upon request to iicp@cdc.gov.

Each of these tools are referenced for specific activities in the Recommended Actions Guides (Process Tools C2-1, C2-2)

Program element	Tool name/description	Tool file name/code
Organizational	Sample job description for Cleaning Program Manager/Focal Point	SamplePD_FocalPoint
(Code O)	Sample position description for Cleaning Supervisor	SamplePD_Supervisor
	Sample cleaning program organization chart	SampleOrgChart
	Sample budget for basic cleaning program (in example ward or outpatient setting)	SampleMinBudget
Staffing	Sample position description for Cleaning Staff	SamplePD_Cleaner
(Code S)	Staffing needs calculator (ward level)	StaffCalc
	Sample training outline for stop-gap training	MinTrainingOutline
	Knowledge Check for stop-gap training	KnowledgeCheck
	Recommended competencies for cleaning staff and supervisors	SampleCompetencies
	Sample training curriculum for formal training	SampleFullTrainingOutline
Multiple—	Template for developing a job description (generic)	Template_PD
organizational and staffing	Sample budget for formal training program	TrainingBudget
Policy and	Sample facility cleaning policy	SamplePolicy
procedures (Code P)	Template for developing a facility cleaning policy	TemplatePolicy
(Oute 1)	Sample cleaning schedules	SampleCleanSchedule
	Sample Blood or Body Fluid Spill Cleaning SOP	SampleSOP_Blood
	Routine cleaning—General inpatient	SampleSOP_RoutineGen
	Routine cleaning—ICU/NICU	SampleSOP_RoutinelCU
	Routine cleaning—Labor and delivery ward	SampleSOP_RoutineMat
	Routine cleaning—COVID isolation ward	SampleSOP_RoutineTBP
	Terminal cleaning—General inpatient	SampleSOP_TerminalGen
	Terminal cleaning—ICU/NICU	SampleSOP_TermICU
	Terminal cleaning—Labor and delivery ward	SampleSOP_TermMat
	Terminal cleaning—COVID isolation ward	SampleSOP_TermTBP
	Sample SOP for reprocessing of noncritical equipment (1–2 common examples)	SampleSOP_CareEquip
	Sample SOP for preparing common cleaning and disinfectant products	SampleSOP_Chem
	Sample SOP for reprocessing cleaning supplies and equipment	SampleSOP_CleanEquip
	Sample visual job aid for preparing chlorine-based disinfectant	SampleAid_Chem
	Sample checklist for high-touch surfaces	SampleChecklist
	Sample cleaning log	SampleLog

Continued on the next page >

Program element	Tool name/description	Tool file name/code
Infrastructure	List of essential cleaning supplies and equipment	SampleEquipList
and supplies (Code BE)	Supply needs calculator	SupplyCalc
(Gode BL)	Checklist for inspecting essential cleaning supplies and equipment	TemplateInspect_Equip
	Example SDS for common cleaning and disinfectant products	SampleSDS
	Common WASH problems and sample solutions table	WASHTool
	Example schematic of an environmental cleaning services area	Schema_ServicesArea
	Example schematic of a sluice area	Schema_SluiceArea
Monitoring	Sample performance observation checklist	SamplePerformance_Assess
(Code M)	Sample visual assessment checklist	SampleVisual_Assess
	Sample environmental marking checklist	SampleFluor_Assess
	Sample summary/aggregate report	SampleMonitor_Report
	Sample monitoring plan	SampleMonitor_Plan
	Sample auditing forms	SampleProgramAudit

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