

Laundry Department

GDIPC

Disinfectants & Antiseptics Supplies

Element : E-3

- **Sub- Element (8)**
- **Activities for auditing:**
 - ✓ **(D)** documentation
 - ✓ **(SI)** staff interview
 - ✓ **(O)** observation
- **Score (0-1-2-NA)**

Sub- Element (E - 3.1)

There is a written policies and procedures for linen management, (e.g., collection, transportation, sorting, washing, storing and dispensing). (D)

- **Laundry services play a critical role in a healthcare facility's infection prevention and control program.**
- **Contaminated textiles often contain large numbers of microorganisms from body substances; thus, it is important to ensure that pathogens are not transferred to patients or healthcare workers.**
- **Infection control practices need to be fully implemented for the hospital laundry to protect workers from exposure to potentially infectious materials during the collection, handling and sorting of soiled linen, which may be contaminated with blood and body fluids or other infectious material.**
- **There should be strict implementation of infection control standards for the laundering process to restore soiled linen to a usable condition.**

Review the policy, which should be:

- **Comprehensive:** it covers all aspects of infection control regarding linen management, including (but not limited to):
 - Personal Protective Equipment (PPE) and Hand Hygiene
 - Collecting Contaminated Textile/Linens
 - **Transportation of Contaminated Textile/Linens**
 - Sorting Soiled Linen
 - Laundering Process (washing i.e **different washing cycles in terms of temperatures, times and used chemicals.**
 - rinsing, drying)
 - Packaging and Storing
 - Delivery of Clean Linens
 - Needle/Sharps Injuries etc

- **Fully applicable**: all elements of the policy can be applied and comply with the hospital's scope of services
- **Based on scientific references** approved by MOH (GCC, CDC, WHO & APIC)
- **Signed from authorized personnel** (i.e., owner of the policy / hospital director or medical director / concerned department)
- **Approved by IC committee***
- **Valid** (updated within 2 - 3 years and when indicated)

Approval by IC committee is required for the infection control manual as a whole before distribution and also for individual policy after major changes

- **Cleaning:** A process that uses a cleaning agent and physical action, such as scrubbing or wiping, to remove visible soil, organic matter, and bioburden from a surface or object. This renders the surface of object safe to handle. The cleaning agent may be a wet or dry chemical. The specifics of a cleaning process are affected by factors associated with the item to be cleaned, e.g., chemical compatibility, wetness tolerance, surface topography and complexity ... etc.
- **Decontamination:** The use of physical or chemical means to remove, inactivate, or destroy blood borne pathogens on a surface or disinfecting the item to the point where it is no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use, or disposal.

- **Receiving area**
- : An area where soiled textiles are sorted, usually by textile category and sometimes by degree of soiling or color. Warning signs about the presence of contaminated textiles and the need to follow Universal Precautions must be posted in this area.
- **Washing (Processing) area:** An area where soiled textiles are washed and in which such equipment as washers, extractors, washer-extractors, continuous-batch washers and/or continuous processing systems is located.

- **Extraction area:** An area where excess water is removed from textiles after laundering, but before conditioning or drying.
- **Condition/Drying area:** An area where, after extraction, textiles are either conditioned (partly dried) or fully dried in a dryer or tumbler.
- **Folding area:** An area where textiles are folded.
- **Storage & Staging area:** An area for temporary storing and preparing textiles for delivery and having them wrapped and ready for transport to patient treatment units.

Sub- Element (E - 3.2)

Work flow is unidirectional from a soiled area to clean area with complete physical separation between them. (O,SI)

Observe different zones of the laundry and the flow of work:

- 1) Work flow should be unidirectional from soiled areas to clean areas (Receiving & Sorting > Washing & Extraction > Condition/Drying & Folding > Storage & Dispensing)
- 2) Soiled areas should be physically separated from clean areas (complete physical separation is required, i.e., using double doors washing machines or installing walls or partitions)

Functional separation/barrier: An activity or structure that separates one movement, action, or space from another

Sub- Element (E - 3.3)

Hand hygiene facilities and supplies are available & easily accessible. (0)

Observe hand hygiene facilities in different zones

of the laundry:

1. There are adequate hand washing facilities equipped with all required supplies (soap, water, paper towels etc)
2. Availability of Alcohol Based Hand Rub (ABHR) dispensers in all working areas and in personnel support areas.
3. Adequate refers to the availability of hand hygiene facility within or around the working area (i.e., personnel do not need to leave his working area to reach a hand hygiene facility of another area or zone)

NOTE:

- At least ONE dedicated hand washing sink is required in dirty or soiled area.
- For practicing hand hygiene in clean areas, it is preferable to use Alcohol Based Hand Rub (ABHR) dispensers (at least ONE)

Sub- Element (E - 3.4)

Dirty linen is separated from clean linen during collection & transport and linen carts used for clean and dirty linen are clearly identified. (0)

Observe the handling of clean and dirty linen and carts used for their collection & transport:

- Dirty linen should be separated from clean linen during collection & transportation to laundry (i.e., the laundry staff maintain functional separation of soiled from clean textiles in carts and/or vehicles at all times during the collection and transportation)
- Carts used for collection & transport of dirty linen are clearly identified from those used of clean linen i.e. appropriately labelled with clear signage.

Sub- Element (E – 3.5)

All workers who handle the soiled textiles follow Standard Precautions (i.e., handled as little as possible, practicing hand hygiene using appropriate PPE, leak-proof laundry bags and containers for collection). (O,SI)

Observe handling soiled textiles in both patient-care areas and laundry areas:

1) Personnel who handle soiled healthcare textiles apply Standard Precautions at all times:

- Soiled textiles are handled as little as possible in both patient-care areas and laundry areas (i.e., only as necessary to complete the defined task, and in such a way as to minimize microbial contamination of the environment and the personnel handling the textiles).
- Soiled textiles are not sorted or rinsed in patient-care areas.
- Appropriate PPE are used properly during handling soiled textiles in both patient-care areas and laundry areas

2) Check the availability of all required PPE in patient-care areas and the laundry areas.

3) Check the quality of the laundry bags or containers:

-The laundry bags or containers are leak-proof, not torn when loaded to capacity and can be closed securely to prevent textiles from falling out (i.e., laundry bags or containers functionally contain wet or soiled textiles and prevent contamination of the environment during collection, transportation and temporary storage prior to processing).

-Laundry bags or containers do not need to be color-coded or labeled, as hospital's laundry only receive soiled healthcare textiles, and all personnel should follow Standard Precautions when handling these textiles.

Ask personnel in both patient-care areas and laundry areas

about handling healthcare textiles:

- 1) What are the required precautions that should be followed during handling healthcare textiles (textiles from common patient-care areas / soiled textiles / contaminated laundry / linen from patients under isolation precautions ...etc.)?
- 2) What is the color-code of the laundry bags or containers used for collection and transport textiles from isolation rooms?

- How can healthcare textiles be classified?
- What are the approved specifications of the laundry bags or containers?
- What is the appropriate PPE that should be used during handling soiled textiles in patient-care areas and laundry areas

Answer:

Personnel should follow Standard Precautions when handling healthcare textiles at all times.

Laundry bags used for isolation rooms do not need to be color-coded or labeled

- **Standard Precautions:** The term incorporates Universal Precautions and Body Substance Precautions and includes a group of infection prevention practices that apply to **ALL** patients regardless of suspected or confirmed infection status in any setting where healthcare is delivered.

- **Universal Precautions:** An approach to infection prevention that considers all textile products being sent to the laundry as being contaminated. Special note: Under these circumstances, it is not necessary to identify the bags in which the textiles are transported in any special manner, because they will all be handled/launched the same way.

- **Contaminated:** The presence of blood or Other Potentially Infectious Material (OPIM) on an item or surface.
- **Contaminated laundry:** According to the Occupational Safety and Health Administration (OSHA), laundry that has been soiled with blood or Other Potentially Infectious Material (OPIM), or may contain sharps.
- **Soiled textile:** a textile product that has been used or worn and soiled by perspiration, body oils, or one of the many other items to which it may have been exposed.

Sub- Element (E – 3.6)

During high temperature washing cycle, water temperature is at a minimum of 71°C for 25 minutes (heat disinfection), and this is recorded. (D,O,SI)

Sub- Element (E – 3.7)

During low temperature washing cycle (22°C - 50°C), sodium hypochlorite is added as a chemical disinfectant during bleach wash cycle with residual bleach 50 - 150 ppm and is monitored.

(D,O,SI)

Review the following documents:

Documents that demonstrate proper application of these two sub-standards:

- 1) Records of high temperature washing cycles including monitoring and control of washing cycles (i.e., recording processed loads / selected washing cycles / temperatures and times)
- 2) Records of low temperature washing cycles including monitoring and control of used chemicals (i.e., chemical types / preparations method / effective concentrations and contact times)
- 3) **Planned Preventive Maintenance (PPM)** for washing machines with Quality check for different parameters of washing cycles
- 4) Interventions records for abnormal temperatures and failure situations.

Observe ongoing washing cycles:

- 1) For high temperature washing cycles: check the content of processed load / selected washing cycle / chosen temperature and time)
- 2) For low temperature washing cycles: check the type of chemical disinfectant used (i.e., sodium hypochlorite or activated oxygen-based chemicals) / preparations or dilution method / calculated concentrations and contact times
- 3) Check the availability of chemical disinfectant (s) for low temperature washing cycles (i.e., sodium hypochlorite or activated oxygen-based chemicals) / MSDS for chemical disinfectant(s) and the presence of measuring device(s) for dilution or preparation of liquid disinfectant(s)
- 4) See valid PPM stickers on washing machines (if applicable)

Ask laundry supervisor and/or responsible personnel:

- 1) How can you classify different healthcare textiles to choose appropriate washing cycle?
- 2) For textiles that withstand high temperature washing cycles: How can you adjust the washing cycle parameters (i.e., cycle phases, required temperature and time)?
- 3) For textiles that cannot withstand high temperature washing cycles: How can you adjust the washing cycle parameters (i.e., cycle phases, chemical disinfectant, preparation or dilution method, required concentration and contact time)?
- 4) What are the different phases and expected parameters of selected washing cycles?

NOTE:

If sodium hypochlorite is not appropriate for the fabrics or not recommended by manufacturer's, Chlorine alternatives (e.g., activated oxygen-based detergents) may be used to ensure adequate disinfection of laundry during low temperature washing cycle.

Laundry process:

If hot water laundry cycles are used, wash with detergent in water $\geq 71^{\circ}\text{C}$ for ≥ 25 minutes.

Adding proper amount of chlorine bleach to low temperature cycles (49°C - 60°C) for heat sensitive fabrics.

A total available chlorine residual of 50–150 ppm is usually achieved during the bleach cycle. Chlorine bleach becomes activated at water temperatures of (57.2°C – 62.7°C)

Infection Control Guidelines for Reprocessing of Linens in Healthcare Settings (Central Laundry)

December 2020 - V.1.0

Sub- Element (E – 3.8)

Routine inspection for blood and body fluid stains is conducted after washing. (O,SI)

Observe:

- 1) **The end product:** the washed textiles are properly processed without any stains or damage.
- 2) Ongoing inspection process of washed textiles during the visit time.
- 3) Availability of appropriate table with light source for routine inspection of processed textiles
- 4) The presence of textiles with blood or/and body fluid stains or damaged textiles that are segregated after processing to be re-washed, repaired or disposed.

Ask laundry supervisor and/or responsible personnel:

- How do you ensure that the processed textiles meet the approved requirements and expectations of the user?
- How do you manage processed textiles that fail to meet the approved requirements and expectations of the user (i.e., textiles with blood or/and body fluid stains or damaged textiles)?

NOTE:

- **Instead of direct questions, indirect ones or scenarios are advisable.**
- **Example: What are you going to do if the surgical ward returns 4 bed sheets after being delivered this morning because of blood and body fluid stains?**

THANK YOU