



The Healthcare Laundry Accreditation Council

Accreditation  
Standards  
*for*  
Processing  
Reusable Textiles  
for Use in  
Healthcare Facilities

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## **Introduction and Background**

The Healthcare Laundry Accreditation Council (HLAC) is a non-profit organization formed for the purpose of inspecting and accrediting laundries processing healthcare textiles for hospitals, nursing homes, and other healthcare facilities. HLAC's mission is to publish high standards for processing healthcare textiles in laundries, and to provide an inspection and accreditation process that recognizes those laundries that meet these high standards.

These Accreditation Standards have been developed for textile maintenance operators who wish to follow recommended procedures for handling, processing, and delivering clean textiles for use in healthcare facilities. These Standards incorporate federal requirements and guidelines on the subject, the recommendations of several national organizations having a relationship with healthcare textile processing, and the best practices of professional service providers.

## Terminology

The Accreditation Standards are restricted to only two types of requirements: those required by HLAC for accreditation and those required by the Federal government (also required for accreditation).

When the requirement is for accreditation only, the term used is “shall.”

When the requirement is a Federal mandate, the term used is “must.”

The term “may” is used for a course of action that is permissible to meet the requirement.

The terms “provider,” “laundry,” or “company” refer to the organization that processes and delivers healthcare textiles. “User” or “customer” refers to the healthcare facility customer, and, ultimately, the end-user of the textiles (healthcare workers and patients).

These Accreditation Standards do not include surgical textiles. Providers who process reusable surgical textiles should refer to the Association for the Advancement of Medical Instrumentation’s (AAMI) publication *Processing of Reusable Surgical Textiles for Use in Health Care Facilities*, ANSI/AAMI ST65:2000.

## Terms Used

**Blood** – human blood, human blood components, and products made from human blood.

**Cart** – something that is used to transport clean or soiled textiles. Also known as a hamper or container.

**Customer Owned Goods** – a term is used to distinguish textiles that are the property of the healthcare facility from those that are rented or leased.

**Contaminated Laundry** – laundry which has been soiled with blood or other potentially infectious materials or may contain sharps.

**Germicide** – a term used interchangeably with disinfectant.

**Handwashing facilities** – a facility providing an adequate supply of running potable water, soap and single use towels or hot air drying machines.

**Hospital disinfectant** – an EPA regulatory term denoting a chemical germicide with demonstrated potency against three representative hospital bacterial pathogens: *Pseudomonas aeruginosa*, *Staphylococcus aureus*, and *Salmonella choleraesuis*.

**Laundry** – an organization that processes and delivers healthcare textiles. Also known as a “provider” or a “company.”

**Other Potentially Infectious Materials** – for the purposes of this standard, a term referring to: (1) The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids; or (2) Any unfixed tissue or organ [other than intact skin] from a human [living or dead].

**Par level** – an adequate supply of healthcare textiles for a facility, typically required for a 24-hour period.

**Provider personnel** - the workforce of a laundry facility.

**Personal Protective Equipment** - specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes (e.g., uniforms, pants, shirts or blouses) not intended to function as protection against a hazard are not considered to be personal protective equipment.

**Soiled sorting department** - the work area within the laundry facility where textiles are sorted by provider personnel, and usually sorted by item type, and by customer.

**Soiled healthcare textiles** - textiles that have been exposed for patient use, whether actually used or not, are assumed to be soiled, and therefore also contaminated.

**Standard Precautions** - an infection control approach designed to reduce the risk of transmission of microorganisms from both recognized and unrecognized sources of infection in hospitals. Standard Precautions apply to blood; all body fluids, secretions, and excretions except sweat, regardless of whether or not they contain visible blood; nonintact skin; and mucous membranes.

**Tuberculocidal** - an indication of disinfectant potency. A tuberculocidal chemical is capable of inactivating *Mycobacterium tuberculosis*, a bacterium with a high intrinsic level of resistance to disinfectant activity.

**Universal Precautions** - an approach to infection control required by OSHA. According to the concept of Universal Precautions, all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens.

**User** - the healthcare facility customer and ultimately the end-user of the textiles (i.e., healthcare workers and patients).

### ***Abbreviations***

**AAMI** - Association for the Advancement of Medical Instrumentation

**AIA** - American Institute of Architects

**ANSI** - American National Standards Institute

**APIC** - Association for Professionals in Infection Control and Epidemiology

**ARTA** - American Reusable Textiles Association

**ASHES** - American Society for Healthcare Environmental Services

**BBP** - bloodborne pathogen

**CDC** - U.S. Centers for Disease Control and Prevention

**CFR** - Code of Federal Regulations

**COG** - Customer owned goods

**EIC** - Guidelines for Environmental Infection Control in Health-Care Facilities

**EPA** - U.S. Environmental Protection Agency

**H2E** - Hospitals for a Healthy Environment

**HBV** - hepatitis B virus

**HICPAC** - Healthcare Infection Control Practices Advisory Committee

**HIV** - human immunodeficiency virus

**HLAC** - Healthcare Laundry Accreditation Council

**IAHTM** - International Association for Hospital Textile Management

**IPM** - integrated pest management

**MSDS** - material safety data sheets

**NAILM** - National Association of Institutional Linen Management

**OPIM** - other potentially infectious materials

**OSHA** - U.S. Occupational Safety and Health Administrations

**PM** - preventive maintenance

**PPE** - personal protective equipment

**TRSA** - Textile Rental Services Association of America

**USC** - United States Code

## Part I. Basic Considerations

### 1. Textile Control Procedures

Textile products used in healthcare facilities shall be of a quality to ensure patient comfort and textile durability. Textile quality shall be defined per the contract between the provider and the customer. Defined quality standards shall keep mending and patching to a minimum. An inventory management system shall maintain established par schedules as agreed per the contract.

#### 1.1 Textile Specifications

The provider shall have written textile specifications that meet customer needs and ensure consistent delivery. For customer-owned goods (“COG”) the customer may set these specifications in cooperation with the provider. These specifications shall be reviewed, at a minimum, annually by all affected parties.

#### 1.2 Textile Maintenance: repair and replacement

**1.2.1** Each plant shall have a documented grading system outlining the grading standards for the healthcare textiles being processed, and it shall be accessible where workers may refer to it. These standards shall outline which defects may be repaired, which defects require replacement, and the point at which previously repaired textiles should be discarded.

**1.2.2** Plants processing COG textiles shall comply with pre-established textile maintenance standards as specified by each customer.

**1.2.3** The provider shall ensure that all personnel having responsibility for making repair and replacement decisions understand and comply with the grading standards.

**1.2.4** The provider shall maintain written training documentation on grading standards and repair and replacement policy including the date, time, topic, trainer, and proof of attendance.

#### 1.3 Inventory Management

**1.3.1** The provider shall use an inventory management system that ensures an adequate supply of clean textiles to meet the user’s needs. The provider and user shall jointly determine the par level for the facility.

**1.3.2** The user/customer shall conduct a linen inventory at least annually, with provider personnel involved, to ensure that par levels are being maintained and to adjust par levels as needed to meet changing textile use demands in the customer’s facility (does not apply to COG).

## 2. Facilities

**2.1** The laundry facility's physical layout and maintenance procedures shall ensure efficiency, minimize environmental contamination, and protect the material- and hygienic integrity of the processed textiles.

### 2.2 Design guidelines

**2.2.1** If the laundry facility is sited within a healthcare facility (e.g., a hospital), the physical layout and utilities infrastructure shall be in accordance with the provisions of the edition of the American Institute of Architects (AIA) guidelines in effect at the time of facility construction or renovation. [AIA 7.23 B1, B2]

**2.2.2** The essential facility design consideration shall have a functional separation of areas that receive, store, or process soiled textiles from areas that process, handle, or store clean textiles.

**2.2.2.1** The soiled textiles area must be functionally separated from the clean textiles processing area. Functional separation may be obtained by any one or more of the following methods:

- a. physical barrier;
- b. negative air pressure in the soiled textiles area; and/or
- c. positive air flow from the clean textiles area through the soiled textiles area with venting directly to the outside. [AIA 7.23 B1, B2]

**2.2.2.2** If storage of clean, unwrapped textiles is indicated, these items must be stored in clean areas with the following specifications:

- a. free of vermin;
- b. devoid of lint;
- c. temperatures ranging from 68°–78°F;
- d. properly ventilated to prevent accumulation of dust and lint (i.e., positive air exchange rate of 6–10 per hour);
- e. positive air pressure relative to adjacent spaces; and
- f. no drains or hot water pipes placed in this area.

**2.2.2.3** Shelves for storing clean textiles shall be placed as per the ANSI/AAMI Standards: [ANSI/AAMI ST65:2000 9.6.2]

- a. Shelves will be approximately 1–2 inches from the wall for accessible cleaning;
- b. The bottom shelf shall be 6–8 inches from the floor; and
- c. The top shelf shall be 12–18 inches below the ceiling.

- 2.2.3** Warning signs about the presence of contaminated textiles and the need to follow Universal (or Standard) Precautions must be posted in work areas where potentially contaminated textiles are stored or sorted prior to processing.
- 2.2.4** Traffic patterns shall be planned and posted to minimize the potential for contaminating clean textiles. Traffic in all areas of the facility shall be limited to authorized personnel only as outlined in the provider's policies and procedures.
- 2.2.5** Handwashing facilities must be located in all areas where soiled or contaminated textiles are handled. Hand hygiene resources (i.e., handwashing facilities or antiseptic handcleaner/cleaner dispensers) must be available in or around all work areas and in personnel support areas. [OSHA 29 CFR 1910.1030 §d.2.iii, iv; HICPAC Hand Hygiene guideline: 1 A-N]
- 2.2.6** Emergency eyewash/shower equipment must be available with unobstructed access (i.e., requiring no more than 10 seconds to reach) for immediate emergency use in all areas where soiled healthcare textiles are being processed, chemicals are used and/or stored, or where there is a potential for contact with blood or other potentially infectious material. [ANSI Z358.1-1998; OSHA 29 CFR 1910.1030 § d.2.i, ii]

### **2.3** Maintenance guidelines

- 2.3.1** Maintenance of equipment and spaces in a laundry facility processing healthcare textiles shall follow documented company policies and procedures, with emphasis in two areas:
- 2.3.1.1** Soiled healthcare textiles must be kept functionally separated from clean textiles at all times.
- 2.3.1.2** Upon completion of processing, clean textiles shall be maintained as clean until delivered to the user's storage area. (Also see Part II, Section 5.)
- 2.3.2** The physical environment (e.g., floors, walls, ceilings, vents, working surfaces, and installed equipment) shall receive scheduled cleaning appropriate for the surface. The cleaning schedule shall be maintained on a current basis and posted for inspection.
- 2.3.2.1** Environmental surfaces (e.g., floors, walls, ceilings, vents, and equipment) shall be subjected to periodic blow-down processes to minimize the build-up of dust and lint.
- 2.3.2.2** Working surfaces (e.g., counters, bench tops, and table tops) must be kept clean of visible soil, dust, and lint through use of a detergent/cleaner and water. [OSHA: 29.CFR 1910.1030 § d.4.ii; CDC/HICPAC: EIC E.I.E.2]

- 2.3.2.3** Working surfaces that become contaminated with blood or other potentially infectious material (OPIM) must be decontaminated, cleaned, and disinfected. Use EPA-registered hospital disinfectants labeled tuberculocidal or registered germicides on the EPA Lists D and E (i.e., products with specific label claims for HIV or hepatitis B virus [HBV] and follow label instructions. [EPA: 7 USC § 136 et seq; OSHA: 29 CFR 1910.1030 § d.4.ii.A; CDC/HICPAC: EIC E.I.A, II.A-D]
- 2.3.2.4** When disinfecting working surfaces that may be contaminated with patient body substances other than blood or OPIM, use an EPA-registered hospital disinfectant in accordance with the manufacturer's instructions.
- 2.3.2.5** Contaminated work surfaces shall be decontaminated with an EPA registered disinfectant after completion of procedures; immediately or as soon as feasible when surfaces are visibly contaminated or after any spill of blood or other potentially infectious materials; and at the end of the work shift if the surface may have become contaminated since the last cleaning. [CDC/HICPAC: EIC E.IA; EPA: 7 USC § 139 et seq]
- 2.3.3** Pest control program. The laundry shall have a documented and implemented Integrated Pest Management (IPM) program.
- 2.4** Environmental Monitoring Procedures
- 2.4.1** Systems and procedures shall be in place to ensure that the facility's use of air, water, chemicals, and other materials is in compliance with federal, state, and local regulations. Efforts to adopt H2E (Hospitals for a Healthy Environment) environmental recommendations are encouraged.
- 2.4.2** Using methodology stated in local, state, and federal regulations, environmental monitoring results shall be properly documented.

### 3. Contingency Planning

**3.1** Contingency planning provides for uninterrupted operations and services in the event of any occurrence potentially leading to serious disruption of facility operations. Such disruption may include, but is not limited to loss of utilities, medical emergencies, natural and/or man-made disasters, fire, inclement weather, work stoppage, or major accidents. The contingency plan shall include the following components: plant and transportation contingency protocol, call chain, and a list of backup facilities.

#### 3.2 Plant Contingency Protocol

**3.2.1** A written protocol shall provide a step-by-step procedure in the event of an emergency, and shall be available to every supervisor who may be responsible for execution of the protocol.

**3.2.2** Workers shall be familiar with the major elements of the plant contingency protocol in advance of emergencies.

#### 3.3 Contingency Call Chain

**3.3.1** The call chain shall be written, complete, current, and available to all supervisory personnel, so that timely and accurate contact can be made in case of an emergency. The call chain shall be maintained by a designated person, who is responsible for updating and distributing the revised list when personnel changes occur.

#### 3.4 Backup Facility Agreements

**3.4.1** The operator shall have written agreements in place with one or more alternate *laundry facilities*, detailing when and how these facilities will process textiles in an emergency.

**3.4.2** The operator shall have written agreements in place with one or more alternate *transportation providers* detailing the response time and services provided.

**3.4.3** The operator shall have written agreements in place with one or more alternate *textile suppliers* detailing the services and delivery times provided (does not apply to COG).

#### **4. Personnel and Hiring Procedures**

- 4.1** All provider personnel shall be qualified for their positions through education, training, or level of prior experience. These qualifications shall be documented in employee files. New employees shall work under the close supervision of qualified employees until they have achieved qualified status.
- 4.2** The provider shall follow documented company hiring policies and procedures. These policies and procedures may include background checks and drug testing as part of the hiring process.

#### **5. Occupational Safety and Hygiene**

**5.1 OSHA Required Practices: Bloodborne Pathogen (BBP) Standard. Universal (Standard) Precautions program to prevent contact with blood or OPIM must be implemented.**

[OSHA: 29 CFR 1910.1030]

- 5.1.1 Exposure Control Plan. The provider must develop an Exposure Control Plan (ECP) that contains but is not limited to the following:**
- 5.1.1.1 Schedule for compliance (i.e., when each part of the plan is accomplished in the facility).**
  - 5.1.1.2 Procedure for evaluating the circumstances surrounding exposure incidents.**
  - 5.1.1.3 Employers shall develop an Exposure Determination Plan (EDP). The EDP shall contain 1) a list of all job classifications in which all employees in those job classifications have occupational exposure, 2) a list of job classifications in which some employees have occupational exposure and 3) a list of all tasks and procedures that are performed by employees in a job classification where exposure may exist.**
  - 5.1.1.4 The Plan is accessible to all employees.**
  - 5.1.1.5 The Plan is reviewed and updated at least annually.** [OSHA: 29 CFR 1910.1030 (c) (1) (2)]
- 5.1.2 Develop a hepatitis B vaccination program.**
- 5.1.2.1 Records must reflect the offering and the acceptance OR documented refusal of the employee.**
  - 5.1.2.2 Records must reflect a standing process for postexposure management for blood and/or OPIM.** [OSHA: 29 CFR 1910.1030 (f)]

## 5.2 General occupational safety.

- 5.2.1** Provider personnel shall adhere to good work practices to minimize or eliminate exposures to blood and OPIM. This includes the use of personal protective equipment (PPE) when handling contaminated and soiled textiles, the safe operation of equipment, documentation of OSHA Lock-Out Tag-Out requirements, hazard communications, safe transportation and the proper handling of textiles.
- 5.2.2** Provider personnel shall handle chemicals safely in accordance with Material Safety Data Sheets (MSDS) in the laundry facility.
- 5.2.3** Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is a reasonable likelihood of occupation exposure to BBP. [OSHA: 29 CFR 1910.1030 (d) (2) (A) (ix)]
- 5.2.4** The provider shall have policies and procedures addressing the health status of laundry workers, such as, but not limited to, illness, open wounds or sores, and skin injuries, to prevent contamination of healthcare textiles.

## 5.3 Hand hygiene

- 5.3.1** **Provider personnel must practice hand hygiene after glove removal, after restroom use, before eating, and when hands become inadvertently contaminated with blood or other body substances.** [HICPAC: Hand Hygiene guideline: 1 A-N.]
- 5.3.2** Employees responsible for packing, wrapping, storing, or transporting clean textiles shall maintain proper hand hygiene at all times. [HICPAC: Hand Hygiene guideline: 1 A-N.]

## 5.4 Clothing, uniforms, and personal protective equipment (PPE)

- 5.4.1** All personnel shall wear dry garments without visible soil or dirt in accordance with the company's policies. For safety reasons, loose or dangling jewelry shall not be worn. Hair coverings shall be used where deemed appropriate and/or within written company policy.
- 5.4.2** **The provider must supply the PPE to personnel in the workplace. Contaminated disposable PPE (e.g., gloves) must be discarded into appropriately labeled (e.g., biohazard) waste containers.** Reusable PPE (e.g., cloth aprons or overalls) shall be routinely laundered as per company policy and when soiled or contaminated.
- 5.4.3** Employees who handle clean or soiled healthcare textiles shall change work garments daily, and whenever their garment becomes soiled.
- 5.4.4** If a garment is penetrated by blood or other potentially infectious materials, the garment(s) shall be removed immediately or as soon as feasible and be laundered by the employer. All PPE shall be removed prior to leaving the work area. [OSHA: 29 CFR 1910.1030 (d) (iii)]
- 5.4.5** Employees responsible for packing, wrapping, storing, or transporting clean textiles shall always be in attire free of visible soil and dirt.

## 6. Training

**6.1** All provider personnel shall receive safety training in all aspects of laundry operations applicable to their respective position(s).

**6.1.1** Training options include, but are not limited to, the following: 1) in-plant (in-service) training sessions, facilitated by a person experienced in the topic; and 2) formal external training programs including classes, workshops and seminars.

**6.2 Training and educational programs must be provided to all personnel with reasonably anticipated potential exposure to blood or other possibly infectious materials.**

**6.2.1** Training topics relevant to Bloodborne Pathogens Exposure Control include but are not limited to: 1) personal hygiene and proper handwashing/hand hygiene techniques; 2) use of PPE including but not limited to, gloves, gowns, laboratory coats and masks; 3) engineering controls and work practices to minimize the risk of exposure to blood or other potentially infectious materials; 4) orientation on the provider's exposure control program; and 5) post-exposure procedures, including immediate action, treatment, follow-up, and record keeping.

**6.2.2 All vehicle drivers must meet all requirements of the state/federal Department of Transportation (DOT) in which services are provided. In addition, drivers who carry and handle healthcare textiles must receive Bloodborne Pathogens Exposure Control training.**

**6.2.3** Plant employees shall receive the company's standard training for safe operation of equipment and correct handling of textiles, including the need to keep textiles clean.

**6.3 Training Documentation**

**6.3.1 All training must be documented in writing and kept on file.** It is recommended that training records be kept on file for as long as an employee is employed. The documentation shall include but is not limited to: 1) dates and times of training; 2) topic; 3) trainer's name, signature and qualifications; 4) copies of printed training materials; and 5) certificates or signature proof of trainees' attendance.

**6.3.2** Documentation of on-line or web-based training is also acceptable.

**6.3.3** Documentation shall also include validation that the training objectives and a minimum level of competency were achieved.

## 7. Quality Control and Process Monitoring

- 7.1** Quality Control. The entire processing cycle shall have documented quality control procedures to ensure the cleanliness and serviceability of the textiles. These procedures may include requirements to rewash, repair, or replace textiles as necessary to maintain quality standards.
- 7.2** Quality Assurance
- 7.2.1** The provider shall have written policies and procedures covering all areas of responsibility relating to services provided to the user.
- 7.2.2** The provider shall maintain records of any problems experienced and mutually agreed-upon solutions. A customer call log may be used for this purpose.
- 7.2.3** The provider and user shall periodically review the entire service program, and make adjustments as necessary and appropriate. This may be accomplished through monthly reports or regularly scheduled meetings with user personnel. Adjustments should be documented and filed for future use or reference.
- 7.3** Process Monitoring. Process monitoring verifies that the on-going laundry operation is producing clean textiles that will meet customer expectations and needs.
- 7.3.1** Written procedures shall describe in detail the process monitoring “check lists.” Process monitoring check lists shall include, but are not limited to, the following:
- 7.3.1.1** Supplies. Verify that laundry chemicals are appropriate for the equipment in accordance with the equipment manufacturer, textile classifications, and water temperatures being used. **Every chemical used must have a MSDS on file, and an appropriate label on every container into which it is placed in accordance with OSHA Hazard Communications Standard.** [OSHA: 29 CFR 1910.1200]
- 7.3.1.2** Water. Incoming water shall be tested on a regular basis for hardness, alkalinity (active and total), iron content, and pH. At a minimum, testing shall take place once per month or more often during periods of abnormal water conditions. The laundry washing formulas may require adjustment based on these factors.
- 7.3.1.3** Load size shall follow the equipment manufacturer’s recommendations. Each load shall be weighed using a calibrated scale. The scale shall be inspected and calibrated by an outside auditor on a scheduled basis, but at a minimum annually, and the results made available to the customer upon request.

- 7.3.1.4** Equipment. All laundry equipment shall be included in the company's Preventive Maintenance (PM) program, and checked on a regular basis as defined by the manufacturer for proper operation. Typically a chemical titration and service report from the facilities' chemical suppliers' technician will have all this information. Some automatic equipment dispensers can also record the chemical injection amounts and times by classification.
  - 7.3.1.5** Finished products. The quality of finished products shall be maintained as pre-defined by the customer, and shall be sufficient to meet the needs of the customer. A variety of process monitors may be used to indicate how the laundry process has performed. These may include rewash rates, color transfer, pH spot tests, residual chlorine spot tests, and laundry test pieces. At a minimum, monthly titrations shall validate that the chemistry of the wash is correct, according to the formula for each major classification of soil.
- 7.4** Counting and billing accuracy. The provider shall have reliable and accurate procedures to weigh and/or count textiles, and have accurate billing procedures based on these weights or counts. The customer shall have previously agreed in writing to these procedures.

## **8. Customer Service**

### **8.1** Contact with customers

- 8.1.1** On a periodic basis, but no less than once per year, authorized provider representative(s) shall visit customers' healthcare facilities, for the purpose of conducting a walk-through of all areas where healthcare textiles are used, collected, transported or stored. They shall meet with facility representatives to determine the textile products used, expected textile usage, and their service expectations.
  - 8.1.2** Provider shall maintain a written list of all customer contacts.
  - 8.1.3** Provider shall maintain a written log of issues or problems with users, including names of personnel involved, and the resolution.
- 8.2** Visits to laundry facility. Providers shall make their plants available to customers and prospective customers for inspection.

## Part II. The Textile Processing Cycle

### 1. Handling, Collection and Transportation of Soiled Healthcare Textiles

- 1.1** All healthcare textiles must be handled and collected in accordance with OSHA regulations and federal guidelines, thereby minimizing potential exposure of patients, hospital personnel, or laundry personnel to bloodborne pathogens or other infectious agents. [OSHA: 29 CFR 1910.1030 § (d) (4) (iv); CDC/HICPAC EIC EIII]
- 1.2** All soiled healthcare textiles must be assumed to be contaminated, and Universal Precautions (an OSHA term) must apply at all times to all personnel who handle soiled textiles. Standard Precautions (a CDC term) may apply as determined by either the customer or the provider.
- 1.3** Handling soiled textiles at the points of generation and/or collection:
- 1.3.1** The collection of soiled textiles begins at the point (or points) of collection designated in writing by the customer.
- 1.3.2** Soiled textiles shall be collected and handled only as necessary to complete the defined tasks, and in such a way as to minimize microbial contamination of the air and the personnel handling the textiles. **Soiled textiles must not be sorted or rinsed in patient-care areas.** [OSHA: 29 CFR 1910.1030 (d) (4) (iv) (A) (1)]
- 1.4** Containment of soiled textiles:
- 1.4.1** Universal (or Standard) Precautions shall be followed during containment of soiled or contaminated textiles.
- 1.4.2** **The collection bags or containers must functionally contain wet or soiled textiles, preventing contamination of the environment during collection, transportation and storage prior to processing. The containers must not tear when loaded to capacity, be leak-proof, and be capable of being closed securely to prevent textiles from falling out.**
- 1.4.3** **The bags or other containers must be specially color-coded or labeled.** If only soiled healthcare textiles are coming into the laundry, and all personnel are following Universal (or Standard) Precautions when handling these textiles, the bags do not need to be color-coded or labeled. [OSHA: 29CFR1910.1030 (d)(4)(iv)(A)(2)]
- 1.5** **Medical waste. The provider must have a written plan with the user detailing the procedures to follow when medical waste is found among soiled healthcare textiles. The plan must be in accordance with state medical waste regulations.**
- 1.6** The service provider shall follow the customer's policy for returning items found among healthcare textiles that contain personal patient information.
- 1.7** **Functional Separation of Clean from Soiled Textiles. The provider must maintain functional separation of clean from soiled textiles in carts and/or vehicles at all times during collection and transportation of soiled textiles.**
- 1.8** Observe Universal (or Standard) Precautions while moving, loading, and unloading soiled textiles.

## **2. Sorting**

- 2.1** Soiled sorting area: The physical environment must comply with any applicable local, state, or federal regulations as per statements in Part I, Section 2.2 of this Accreditation Standard.
- 2.2** The physical environment in the soiled sorting area shall be cleaned and disinfected as indicated in Part I, Section 2.3, Subsection 2.3.2 of this Accreditation Standard.
- 2.3** All personnel who handle soiled healthcare textiles must follow Universal (or Standard) Precautions to prevent contact with blood or other potentially infectious or hazardous materials. Under Universal (or Standard) Precautions, all soiled healthcare textiles coming into a laundry are treated as contaminated.
- 2.4** Soiled textiles shall be sorted into appropriate wash loads by classification such as color, type of fabric, soil type or soil load, and/or type of goods (e.g., diapers, sheets, or patient gowns) for each laundry formula used.
- 2.5** Sharps Policy. The provider shall maintain a written sharps policy that includes, at a minimum:
- 2.5.1** Appropriate sharps safety containers (closable, puncture resistant, leakproof on sides and bottom, and labeled or color-coded) in accordance with OSHA standards shall be located near soil handling or sorting stations for collection and proper disposal of sharps. [OSHA: 29 CFR 1910.1030 (g) (1) (i)]
- 2.5.2** Any worker who is injured by a sharp shall follow OSHA's policy on sharps injury documentation, post-exposure evaluation and follow-up. [OSHA: 29 CFR 1910.1030 (f) (3)]

### **3. Washing, Extraction and Drying**

**3.1** The wash process shall ensure that healthcare textiles become hygienically clean.

#### **3.2** Equipment Considerations

Three basic types of washing equipment are used in the processing of healthcare textiles: Washers, Washer/Extractors, and Continuous Batch Washers. Depending on the equipment in use at the facility, modifications in these requirements and other factors affecting the process shall be necessary to assure that agreed-upon quality standards are consistently met. If modifications are indicated, the laundry facility shall document these modifications, date them, and revise as needed as equipment needs change.

#### **3.3** The Wash Process

**3.3.1** The load size (weight) for each classification of soil shall be established by the facility and shall be recorded for each load processed.

**3.3.2** The wash cycle shall comply with all applicable state and local requirements for healthcare textile processing.

**3.3.2.1** Each classification shall have established standards for the following factors:

- a. Cycle time: Pre-wash, wash, rinse, and final rinse times.
- b. Water levels/usage: Total water usage and/or water levels.
- c. Temperature: Wash cycle, bleach cycle, and rinse cycle temperatures.
- d. Chemical usage: Chemical types and usage levels for each step in the wash process.

**3.3.2.2** Quality Assurance. Each classification shall be evaluated and/or tested to assure that items a-d meet the established standards.

#### **3.4** Extraction and Drying

The provider shall extract or dry the clean healthcare textiles in a manner that preserves the integrity of the textile merchandise, minimizes microbial growth after washing, and prepares the textiles for efficient ironing or folding. Damp textiles shall not be left in machines overnight.

[CDC/HICPAC: EIC G.II, III]

## 4. Finishing

The finishing process of ironing or folding textiles shall ensure that the merchandise is maintained in the same clean state that it emerged from washing. The ironing or folding procedures shall meet the needs and expectations of the user. If any textiles become soiled in this process, they shall be rewashed, as outlined above.

### 4.1 Equipment Considerations

**4.1.1** Ironing equipment shall be maintained in good operating condition so that it adequately irons, dries and folds the textiles without excessive heat, pressure, or mechanical damage. The equipment shall maintain a temperature of at least 300 degrees on the ironer chests.

**4.1.2** Dry folding equipment shall be in good operating condition, as to properly fold the textiles without damage.

## 5. Packaging and Storage

Packaging and storage of healthcare merchandise shall preserve the textiles in a clean state for delivery to the customer as outlined in the service agreement.

**5.1** The textiles may be wrapped into fluid-resistant bundles, or placed bundled but unwrapped into fluid-resistant covered carts or hampers. The wrapping material may be plastic or other suitable material, and shall be securely closed during transport to the customer.

**5.2** During packaging, textiles shall be handled as little as possible to prevent soiling or contamination.

**5.3** If unwrapped merchandise is placed into carts or hampers and covered, the container shall remain covered at all times until delivered to the user's textiles storage room or other designated location in the healthcare facility. **If the cart does not have a solid bottom, it must be lined with heavy plastic or impervious paper before placing clean textiles inside.**

**5.4** Bundled and wrapped textiles may be stored in open racks in the laundry, on the trucks, or at the user's facility, provided the integrity of bundled and wrapped textiles is not compromised.

**5.5** Unwrapped clean textiles may be stored in rooms designed as whose specifications are given in Part I Section 2.2 Subsections 2.2.2.2 and 2.2.2.3 of this Accreditation Standard.

**5.5.1** A schedule of cleaning, including floor and shelves, shall be in writing.

**5.5.2** Storage room shall only be accessible to appropriate personnel.

**5.5.3** Only clean linens shall be stored in this area and signage posted as "Linen storage room."

**5.5.4** Door shall remain closed at all times.

**5.6** If any textiles become soiled during packaging and storage, they shall be reprocessed in accordance with previously stated processing guidelines.

## **6. Delivery of Cleaned Healthcare Textiles**

- 6.1** Functional separation of clean from soiled textiles shall be maintained during transportation by:
- 6.1.1** Bagging soiled textiles in fluid-resistant containers
  - 6.1.2** Anchoring soiled textiles in the vehicle, so that they do not spill from their containers.
  - 6.1.3** Training personnel regarding proper bagging and placement of textiles in the transporting truck.
  - 6.1.4** Ensuring that all employees with this responsibility follow Universal (or Standard) Precautions at all times.
- 6.2** Textile containment issues:
- 6.2.1** Clean and soiled textiles shall not be stored in the same container.
  - 6.2.2** Containers used for the collection of soiled textiles may be returned for use for clean textiles, if allowed by state regulations, after cleaning in accordance with the provider's policies and procedures.
- 6.3** Vehicle considerations:
- 6.3.1** Clean and soiled textiles may be transported in the same vehicle, provided proper and effective functional separation of clean from soil is maintained at all times. Separation may be accomplished by the use of physical barriers, and/or space separation sufficient to protect clean textiles from contact with soiled textiles.
  - 6.3.2** The interior of the vehicle's cargo trailer used to transport healthcare textiles shall be cleaned on a regular basis as per company policy, or whenever visibly soiled.
  - 6.3.3** Vehicles used to transport healthcare textiles shall have waterless antibacterial hand cleaner on board for the purpose of hand hygiene. If visible soil is apparent, drivers shall use utility gloves to minimize contact with the soil. Handwashing with soap and water is required at the earliest opportunity upon removal of the utility gloves.
- 6.4** Proper Use of Carts:
- 6.4.1** When the cart contains clean textiles, the textiles shall be wrapped inside the cart, or if unwrapped, the cart shall be lined with plastic or heavy paper and securely covered.
  - 6.4.2** If a cart used to transport clean textiles appears soiled, it shall be cleaned as outlined in Part II Section 6 Subsection 6.4.5 of this Accreditation Standard.
  - 6.4.3** Any time a cart has transported soiled textiles, it must be cleaned before any next use, whether to transport clean or soiled textiles. Reusable textile cover materials, such as liners, must be washed before the next use.

- 6.4.4** Carts shall be maintained in good working order, with wheels free from strings or other debris that impairs functioning or collects dirt.
- 6.4.5** Containers and covers used to collect or transport soiled textiles shall be properly cleaned. Proper cleaning may include:
  - 6.4.5.1** Steam cleaning.
  - 6.4.5.2** Cleaning with an EPA registered detergent/disinfectant.
  - 6.4.5.3** Reusable textile covers may be washed and dried.

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