

Mattresses, Covers and Pillows

Best practice recommendations

Purpose

To describe the Infection Prevention and Control (IPC) best practices for evaluation, cleaning, maintenance, and repair of mattresses, covers, and pillows (including multi-client positioning pillows).

1 Application

- These instructions should be followed by all Alberta Health Services (AHS) staff, medical staff, volunteers, students and other persons acting on behalf of AHS.
- These recommendations apply to all loaned, rented, trialed, and purchased mattresses, covers, and pillows.

2 Recommendations

Mattresses, covers, and pillows may become contaminated if not cleaned and maintained effectively. Damaged surfaces cannot be effectively cleaned and allow microorganisms to pass from the inside to the outside surface.

2.1 Pre-Purchase evaluation

Involve appropriate personnel in the evaluation and purchase of new mattresses, covers, and pillows to ensure that the selected products are suitable for purchase e.g., compatible with current established cleaning and disinfection protocols and linen supplies, preventative maintenance schedules. Consultation should include:

- Contracting, Procurement and Supply Management (CPSM)
- IPC
- Workplace Health and Safety
- Linen and Environmental Services
- End-user department
- Facilities Maintenance and Engineering (FME).

Review the manufacturer's instructions for use to ensure they include:

- Validated cleaning instructions and
- Preventative maintenance
 - Manufacturer should provide organizational support, e.g., online training modules.

There should be a method to record date of acquisition and to track each mattress and pillow to maximize warranties and make plans for replacement.

Selection criteria:

To facilitate cleaning and drying, exterior surfaces are:

- Durable, water-repellent and quick drying.

- Seamless, if possible. Seams, if present, must be situated away from patient contact surfaces and edges of the mattress to prevent absorption of liquid into interior compartments. All seams must be tightly closed and sealed.
- Able to withstand frequent cleaning with AHS approved low-level disinfectants.

2.2 Cleaning and disinfection

- Mattresses, covers, and pillows are classified as **non-critical** medical devices.
- Clean and low-level disinfect according to the manufacturer's instructions for use and established Environmental Services protocols between patients and when visibly soiled.
 - Some mattress covers are removable for laundering.
- Clean and disinfect pillows at point-of-use. Do not send to laundry.
 - Remove damaged or stained pillows from service and report to the Unit Manager.
- Assess condition of mattress surfaces and inspect for damage.
 - Inspect mattress surfaces, covers, seams and zippers for proper function and damage including wear, tears, cracks, punctures, permanent odors and stains.
 - Report any damage, or permanent soiling on mattress surfaces to the Unit Manager and/or to FME according to site procedure.
 - FME or others trained to perform inspection should inspect the internal components of mattresses for signs of visible contamination. If evident, the extent of contamination is assessed to determine appropriate steps, i.e., replacement or repair.

2.3 Protection from damage

- Do not place any furniture or sharp objects on mattresses.
- Avoid damaging the mattress while handling sharps, e.g., needles.
- Protect the mattress with padding if care includes use of devices with sharps or protruding components, e.g., cutting instruments or patients with pins or nails such as Steinman pins and K-wires.

2.4 Maintenance

Maintain the integrity of mattresses, covers, and pillows to prevent contamination.

- Follow manufacturer's instructions for use.
- Remove damaged items from service.
- Develop a clear policy and procedure that establishes responsibility for reporting, removing, repairing or replacing of damaged items, e.g., Environmental Services or FME.
- Do not cover damaged items (e.g., with pillow/mattress protectors or tape).
- Follow manufacturer's instructions for use for handling and disposal of damaged mattresses, covers, and pillows, in accordance with local municipal codes/bylaws.

2.5 Repair

- Use only a Health Canada approved, licensed (i.e., Establishment Licensing), impermeable medical mattress repair product manufactured specifically for that purpose.
- Prior to selection and purchase of a repair system, evaluate the repair product’s plan/resources for staff training and skill assessment.
- Repairs are made by personnel trained to perform mattress repairs (e.g., Facilities Maintenance and Engineering) according to the manufacturer’s instructions for use.
- Follow the manufacturer’s instructions for use (for both the mattress and the repair system) regarding repair. Considerations may include:
 - Assessment of the size and number of damage points, e.g., small cut versus several tears or fractures.
 - The overall mattress condition such as age, general wear, integrity of the foam core, fluid penetration and texture.

3 Definitions

Cover (permanent or removable/laundryable) means a protective shell with a closure mechanism such as a zipper for a medical bed mattress that prevents blood and body fluids from entering the inside (inner core) of the mattress.

Low-level disinfectant means a substance, or mixture of substances, capable of destroying or irreversibly inactivating, at a minimum, vegetative bacteria.

Low-level disinfection means level of disinfection required when processing noncritical equipment/devices or some environmental surfaces. Low-level disinfectants kill most vegetative bacteria and some fungi as well as enveloped (lipid) viruses. Low-level disinfectants do not kill mycobacteria or bacterial spores.

Non-critical means a medical device which either touches only intact skin but not mucous membranes or does not directly touch the client.

Positioning pillow (wedge) means a device used to maintain a patient or body part in a specific position, e.g., limbs, torso, head or neck.

Water-repellent means surface that keeps liquid away from the material and prevents liquid from entering inside the material.

4 References

- 4.1 Alberta Health. 2019. Standards for the Reprocessing of Reusable Medical Devices and for the use of Single-use Medical Devices in all Health Care Facilities and Settings. Retrieved from <https://open.alberta.ca/publications/9781460145470>.
- 4.2 Alberta Health Services. 2013. Practice Support Document Protocol: Bed Cleaning (Discharge/ Transfer). Alberta Health Services Insite, Linen and Environmental Services Standards Guidelines and Protocols.
- 4.3 Heller M., Hicks D. 2014. US Healthcare Mattress Integrity. Sponsored White Paper. Calgary, AB: Surface Medical Inc. Retrieved from https://cdn.shopify.com/s/files/1/0210/9776/files/Mattress_Integrity_White_Paper_Mar2014.pdf
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- 4.6 United States Food and Drug Administration. 2017. Covers for Hospital Bed mattresses: Learn how to Keep Them Safe. Retrieved from <https://www.fda.gov/medical-devices/hospital-beds/covers-hospital-bed-mattresses-learn-how-keep-them-safe>
- 4.7 Wong H. DeGrood J. Louie R. Ward L. Pearce C., Louie T. 2015. Presentation Number 9-216. Terminal Cleaning Comparison of a Medical Surface Repair Patch on Hospital Mattresses. APIC 42nd Annual Educational Conference & International Meeting. Nashville, TN. Poster Abstracts/American Journal of Infection Control 43 (2015) S18-S73. Retrieved from [http://www.ajicjournal.org/article/S0196-6553\(15\)00401-0/abstract](http://www.ajicjournal.org/article/S0196-6553(15)00401-0/abstract).
- 4.8 Mattresses, Pillows and Covers, IPC Recommendations. Retrieved from [Mattresses, Pillows and Covers \(PowerPoint\)](#)

5 Version history

IPC Document no./ID <i>(file name)</i> if-hp-ipc-mattress-pillow-purchase-maint	Revision date <i>(YYYY-MM-DD)</i>	Revision Description/Comment <i>(Brief description of issue purpose, e.g., Issued for information, Minor change / Major change with applicable details)</i>
Version		
V5	2025-05-08	Minor change. BPR revised to reflect AHS Branding 2024 and IPC Visual Identity formatting updates.



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