Best practice recommendations

Purpose
To provide Infection Prevention and Control (IPC) guidance for selecting furniture and other non-medical items intended for use in patient areas.

Application
- This recommendation should be followed by all Alberta Health Services (AHS) staff, medical staff, volunteers, students and other persons acting on the behalf of AHS (e.g., consultants such as architects and interior designers).
- This recommendation applies to all facility supplied furnishings and other non-medical items including donations.

Recommendations
1. Expert consultation by end-users or purchasers
   1.1 Consult Furnishings and Equipment Planning or Space Management teams in Capital Management for all new and replacement furniture to confirm furniture is commercial-grade and meets AHS requirements including Alberta fire code and safety standards.
   - Purchase or use of residential grade furnishings represents a safety risk related to fire rating requirements and IPC recommendations for cleaning and disinfection.
   - Some exceptions exist e.g. supportive living areas may accept a patient's personal furniture to personalize the patient's room.
     - Furniture is inspected and confirmed to be safe for use before it is accepted into the facility e.g., clean and intact; free of bed bugs or other pests; TV, electronics and appliances meet safety standards. Staff are obligated to reject items that are soiled or in disrepair.
   - Engage the Space Management team for any changes in the use of space (adding staff or changing functionality of a room) or if any infrastructure is affected such as walls/electrical/data/ or Heating Ventilation Air Conditioning (HVAC) by completing a Construction Renovation and Space Request. Requests can be submitted through Insite: Home→ Our Teams / Departments→ Capital Management→ Capital Management Forms→ Construction Renovation and Space Request.
   - Engage the Furniture and Equipment Planning team for any furniture requests that do not fall under the Space Management description such as new or replacement seating or desks of any quantity, foundation purchases or patient areas by emailing equipmentplanningprojects@ahs.ca to obtain a Furnishing Planner Request Form.

2. IPC guiding principles
   2.1 Furniture and other non-medical items in patient areas are regularly cleaned and disinfected to prevent the spread of germs. Refer to IPC Principles for Environmental Cleaning and Disinfection and AHS Cleaning Expectations Frequency Table for further detail.
2.2 Evaluate furniture and other non-medical items prior to purchase to minimize risk of infection and to optimize value.

- Review manufacturer’s cleaning, disinfection and rinsing instructions
  - Lack of rinsing may leave residue and contribute to soiling, reduced durability and wear.
  - Manufacturers require a water wipe or rinse after disinfection. Typical regular maintenance includes cleaning with a soapy cloth followed by a rinse with water. Non-compliance voids manufacturer warranty, diminishes longevity, and may promote the spread of pathogenic organisms.

- Determine if the item can be cleaned and maintained by Environmental Services staff with existing resources e.g., disinfectant provided by AHS and according to current protocols.

- Consider how any non-compliance to manufacturer’s instructions may impact warranty, longevity, and cleaning or disinfection effectiveness.

2.3 Consider cost in relation to the item lifespan. Lower cost items may not be durable. The initial cost is a relatively small portion of the life-cycle cost of the item. (Refer to Appendix A: Hippopotamus Syndrome of Life-Cycle Costs).

2.4 Evaluate artwork prior to purchase. (Refer to Appendix B: Sample IPC Risk Assessment Matrix for Artwork).

2.5 Do not accept donations of used furniture and other non-medical items for use in patient care areas.

2.6 Discard, repair or replace damaged items e.g. torn fabrics or scratched, chipped finishes. These items cannot be cleaned effectively and may support the growth of microorganisms.

2.7 Report any questions or concerns about cleaner or disinfectant compatibility, safety or durability for Furnishing and Equipment Planners team by emailing equipmentplanningprojects@albertahealthservices.ca.

3. IPC evaluation criteria (Refer to Appendix C for Sample Furniture Selection Criteria Checklist)

3.1 Select surfaces that are:
- easy to clean, maintain and repair;
- non-absorptive;
- non-porous;
- fluid-resistant;
- smooth with no crevices, rough textures, folds or seams;
- durable enough to withstand repeated cleaning and disinfection with AHS provided products;
- resistant to breakage, punctures or tears, stains, damage and wear.

3.2 Do not select surfaces that are difficult to clean such as:
- carpet;
- cork boards;
- paper and natural fibre products.
- woven fabrics and fabric-covered products may harbor microorganisms:
  - Assess these products to confirm they are smooth, solid and impermeable to moisture.
- wood and wood-based products with veneers or painted surfaces:
  - wood finishes may become damaged or wear with repeated cleaning resulting in a surface that cannot be effectively cleaned.
3.3 Use of materials with claims of antimicrobial properties should be considered carefully on a case-by-case basis as there is limited evidence that use of such materials reduces hospital-acquired infections.

- Consult with IPC for assistance in evaluating antimicrobial materials.
  - To assist in evaluating new materials, refer to Canadian Standards Association (CSA) Express Document EXP06-2015 Evaluating emerging technologies for infection prevention and control.
- Base decisions for furniture or item surface selection on a risk assessment of the space and a review of literature on the materials being considered, including:
  - Products registered with United States Environmental Protection Agency and Health Canada Pest Management Regulatory Agency, e.g., Metallic Copper.

4.1 Decision-making

- Choose the most appropriate furniture or non-medical items for the space and intended purpose by weighing the benefits and risks associated with the surfaces, fabrics, finishes, and cleaning, disinfection or rinsing instructions and potential non-compliance to manufacturer’s instructions for use.
- Consult with IPC about any concerns prior to purchase and prior to decisions on major purchases.
Definitions

Artwork means a work of art, such as a wall hanging, painting or sculpture.

Capital Management means the department responsible for facilities-related resources and includes the Furnishings and Equipment Planning and Space Management teams. These teams provide expertise for selecting furnishings within commercial and healthcare facilities conforming to the required national codes and standards.

Commercial-grade means furniture and non-medical items graded using industry standards to meet fire safety standards and other applicable manufacturing, installation and operational standards.

Donation means a (supposedly) free gift which can take the form of a donation of an item, or a non-repayable grant with which to purchase the item.

Furniture and other non-medical items means objects in the patient area or healthcare environment that are located in patient areas or patient environment and/or accessible to patients and are not medical devices i.e. used to diagnose or treat a patient.

Examples of furniture include

- Non-patient beds provided by AHS e.g. beds used by family members
- Desks and ergonomic accessories
- Seating, including built-in benching
- Over bed tables
- Bedside tables
- Storage cabinets
- Window treatments e.g. window coverings

Examples of non-medical items include

- Step stools
- Garbage cans
- Paper towel and toilet paper dispensers
- Carts and trolleys
- Lamps
- Televisions, and accessories e.g. remote control

Examples of excluded items include

- Consumables or disposable items
- Office furniture and supplies not accessible or used by patients
- Items which are an integral part of the building e.g. doors and windows

Patient means anyone who receives or has requested care or services from AHS including residents, inmates, and clients.

Patient area means anywhere in a healthcare facility, e.g. acute care, continuing care, supportive living, respite care, where a patient may be or where direct care is provided including charting or desk areas, waiting rooms, patient lounges and common areas.
Selection of Furniture and other Non-Medical Items for Patient Areas

References


Appendix A: Hippopotamus Syndrome of Life-Cycle Costs

The Hippopotamus Syndrome of Life-Cycle Costs


Note: The World Health Organization includes furniture and non-medical items within the definition of Healthcare Technology.
Appendix B: Sample IPC Risk Assessment Matrix for Artworks, IPC Healthcare Facility Design Recommendations, Preventative Measures for Construction, Renovation and Maintenance Activities

The Infection Prevention and Control program supports the art experience in healthcare facilities. A risk assessment should be conducted before art is chosen to ensure the materials and finishes are safe for the healthcare environment and the planned location of the artwork is appropriate. There must be a written plan for regular cleaning and maintenance.

<table>
<thead>
<tr>
<th>Proposed installation space</th>
<th>Art Medium</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Easy to clean and disinfect</td>
</tr>
<tr>
<td>Administration and non-clinical offices</td>
<td>✓</td>
</tr>
<tr>
<td>Public space (artwork is placed out of reach)</td>
<td>✓</td>
</tr>
<tr>
<td>Public space (artwork is placed within reach)</td>
<td>✓</td>
</tr>
<tr>
<td>Clinical area</td>
<td>✓</td>
</tr>
<tr>
<td>Point-of-care</td>
<td>Consult with IPC and ES</td>
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</table>

Key:
- ✓ Does not require IPC, ES or FME approval
- X Not recommended

Legend:
- FME: Facilities Maintenance and Engineering
- ES: Environmental Services
- IPC: Infection Prevention and Control

Assumptions
- Water features, open fish tanks, tapestries and materials that promote growth of bacteria and fungi shall not be installed.
- Materials that require regular vacuuming should not be installed.
- Cleaning is done with soap and water. Disinfection is achieved using an AHS provided disinfectant.

Definitions
- Public spaces are defined as spaces where patients rarely/sometimes spend time (e.g., executive offices, elevator foyers, food courts, front of house spaces, parking lots, and staff meeting rooms).
- Clinical areas are defined as spaces where patients usually/often spend time (e.g., clinic waiting rooms, nursing unit hallways, interview or consult rooms, physician offices where patients are seen, patient lounges and nourishment areas, nursing stations).
- Point-of-care spaces are defined as areas where patients received examinations, diagnostics or treatment (e.g., in patient rooms, clinic exam rooms, procedure rooms, diagnostic imaging rooms).
Appendix C: Sample Furniture Selection Checklist that may be used by end-users or purchasers to guide selection

### Request and Product Information

<table>
<thead>
<tr>
<th>Type of Request</th>
<th>Purchase</th>
<th>Request Priority</th>
<th>Routine</th>
<th>Urgent</th>
<th>Date Started</th>
<th>Date Completed</th>
<th>Requesting Manager and Department</th>
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<td>ICP Consultant Review</td>
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### Criteria

<table>
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<th>Yes</th>
<th>No</th>
<th>N/A</th>
<th>Criteria</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td>Is the furniture commercial-grade?</td>
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<td>Are the manufacturer’s instructions compatible with AHS cleaning protocols and disinfectants?</td>
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<td>Is the surface/furniture easy to clean, maintain and repair e.g. non-porous, water-impermeable and smooth with no crevices, rough textures or seams?</td>
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<td>Does the furniture have movable parts, complex design or detailing making it difficult to clean?</td>
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<td></td>
<td>Is the surface/furniture durable enough to withstand repeated cleaning and disinfection and wear e.g. resistant to breakage, punctures, and tears?</td>
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<td>Are sufficient internal operational resources in place to meet manufacturer’s instructions for cleaning and disinfection of the item?</td>
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<td>Does the product have antibacterial claims? If so:</td>
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<td>Has a risk assessment of the space been completed?</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Has a review of the literature been completed?</td>
<td></td>
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### Additional Recommendations

For more information contact
ipcsurvstdadmin@ahs.ca
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