



IPAC CANADA PRACTICE RECOMMENDATIONS

Toys in Healthcare Settings

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Toys referred to in this document include dolls, games, books, puzzles, cards, craft supplies, electronic equipment and teaching toys/dolls as well as those ordered/recommended for treatment purposes (e.g., therapeutic aids).

Patients, their siblings and families should have access to clean and safe play equipment and toys in healthcare settings. Toys can be a reservoir for potentially pathogenic microorganisms that can be present in saliva, respiratory secretions, faeces or other body fluids.¹⁻⁴ Healthcare providers must decide whether the benefits of an environment in which patients are free to interact with each other, share toys, and practice their social skills, outweigh the risks of infections that may be acquired.

Stakeholders: All HCWs who use toys as part of their duties and infection control professionals in settings where in-patient or out-patient care is provided and where toys, games or similar may be provided for patient use, including acute care facilities, rehabilitation facilities, and primary care offices/clinics

Infection Prevention and Control Practice Recommendations for Toys

1. Hand Hygiene⁵

- Before and after playing with toys/play equipment (e.g., playhouses/climbers), patients should be encouraged or assisted to clean their hands with alcohol-based hand rub (ABHR) or soap and water (when visibly soiled).
- Play areas should have access to both ABHR and a hand wash station supplied with liquid hand soap and paper towels in dispensers.
- Hand hygiene with ABHR must be supervised by designated support persons or staff (as applicable).

2. Toy Materials/Design

- Toys should be selected based on Health Canada's safety guidelines⁶ and regulations⁷, and be nonporous, smooth/non-textured and able to withstand rigorous mechanical cleaning and disinfection.
- Toys that are shared must be able to be cleaned and disinfected. Toys that are not able to be cleaned are to be dedicated to a single patient.

- Water-retaining bath toys should **not** be used
- Items that are not able to withstand cleaning and disinfection (e.g., puzzles, books, motorized compassion/companion pets⁸) should be avoided. Use should be based on organizational risk assessment. If these are used, hand hygiene is to be performed by patients before and after handling these items.
- Donated toys should:
 - Be new and in their original packaging
 - Have manufacturer or store tags if stuffed or made of fabric
 - Be donated to a single patient only and sent home with the patient on discharge or discarded after use
 - Meet the requirements of toy materials/design (as stated above)
 - Be checked against the [Health Canada recalled product list⁹](#) (as current) and discarded if recalled
- Bubbles: when used for play or other therapeutic purposes, each patient is to be provided with their own container of bubbles and wand and these are not to be shared. Patients are to be instructed not to blow bubbles; and rather to wave the wand through the air to make bubbles
- Craft Supplies:
 - Shared supplies (e.g., glue bottles, scissors) should be cleaned and disinfected between patients
 - Consumable supplies (e.g., beads, paper, and paint) should be dispensed to individual patients. Leftover items may be discarded
- Do not use food or other items that may pose a choking or other hazard (e.g., potting soil, Styrofoam peanuts, items that may be mistaken for food or that may support microbial growth)

3. Frequency and Responsibility for Toy Cleaning and Disinfection

- Toys from Home:
 - Designated support persons should be encouraged to bring a limited number of the patient's favourite toys from home. These toys are to be stored in a cleanable container, kept at the patient's bedside and labelled with the patient's name.
 - Toys brought from home are not to be shared and are to be cleaned and disinfected on a regular basis or when visibly soiled.
 - If a personal toy is visibly dirty, it should be the responsibility of the parents to ensure it gets cleaned and disinfected, taken home (and not brought back to the healthcare setting) if unable to be cleaned and disinfected, or discarded.
- Written procedures should state the frequency and method for cleaning and disinfection of the toys including:
 - Assigned responsibilities for cleaning and disinfecting toys
 - All toys belonging to the facility or organization should be cleaned and disinfected between users
 - Individuals responsible for cleaning and disinfecting unit/facility owned toys should receive training on orientation (e.g., prior to assigned tasks) and on an ongoing basis as required (e.g., following changes in the cleaning/disinfection protocol).

- Toys used or stored in individual patient rooms should be cleaned, at a minimum, when visibly soiled, once per week (routine cleaning) and when returned to general toy rotation.
- Mouthed toys should be cleaned and disinfected as soon as possible after use.
- When a patient is on Additional Precautions, toys should be dedicated and cleaned and disinfected more frequently. Frequency of cleaning and disinfection is to be informed by the type of Additional Precaution and or pathogen. Ensure that the product used for disinfection is appropriate to any known pathogens (e.g., *Clostridioides difficile*, if applicable)
- Playhouses/climbers: High-touch surfaces should be cleaned and disinfected daily when used, at a minimum. A thorough cleaning and disinfection of the entire playhouse/climber should be done according to a regular schedule based on frequency of use and when visibly soiled.
- Shared electronic games, video equipment and computers should be cleaned between users, as per manufacturer instructions. Computer keyboards should be either of the immersible type, have a keyboard cover or be made of a material that can be cleaned and disinfected. These should be wiped down prior to leaving the room (including the keyboard cover and all attachments). For a patient on Additional Precautions, items are to be assigned and terminally cleaned upon discharge or when precautions are discontinued.¹⁰
- Shared books, magazines, puzzles, cards and comics should be limited, and if provided, these should be refreshed on a regular basis and discarded when visibly soiled. These items should be dedicated to patients on Additional Precautions and discarded or given to the patient to take home afterwards if the items cannot be cleaned.
- Sensory tables should be cleaned and disinfected after emptying and prior to refilling.
 - Ideally patients are to be provided with their own sensory containers in place of communal sensory tables
 - If sand is used in sensory tables, this should be purchased as play sand and replaced weekly
 - Any water is used in sensory tables should be potable. Drain and replace water in sensory tables after each use
- Toys should be removed from general waiting rooms if an adequate process cannot be established to ensure their daily inspection, cleaning and disinfection.¹¹⁻¹³

4. Toy Storage

- Play area that are used by more than one patient should have an area for segregation of dirty toys (e.g., labelled/marked bin "used toys" into which parents/families/staff can place used/mouthed toys).
- Clean and disinfected toys should be stored in a manner that prevents contamination (e.g., dust and water splatter) and should be clearly marked as clean.
- Toy storage boxes/cupboards (including those from home) should be made of a material that is able to be cleaned and disinfected and should be emptied and cleaned and disinfected weekly and when visibly soiled.

5. Procedure for Toy Cleaning and Disinfection

- Toys should be inspected for damage, cracked or broken parts, each time the toy is cleaned and disinfected as these may compromise cleaning. Any toy that is found to be damaged, cracked or broken should be discarded.

- Toys should be cleaned according to the manufacturer’s instructions or local practices (e.g., in hot, soapy water) prior to being disinfected.¹⁴⁻¹⁶
- Disinfection options include:
 - Option 1: Use a dedicated commercial, NSF-approved dishwasher/cart washer that sanitizes using either hot water (e.g., 82°C for 10 seconds) or a chemical sanitizing agent (e.g., 100ppm chlorine, 200ppm quaternary ammonium).
 - Do not clean toys in dishwashers normally used to clean and sanitize dishes and utensils used for food service.¹⁷
 - Option 2: Clean toys manually prior to disinfection, or use a 1-step cleaner/disinfectant product. Products may include:
 - a. A hospital grade, low-level disinfectant approved by Health Canada (Drug Identification Number (DIN) available on the product):
 - Ensure manufacturer’s recommendations regarding dilution and contact time are met
 - Rinse with potable water and air dry
 - b. Alcohol (70%) (for small, minimally soiled toys): Wipe with alcohol swab(s), ensuring the toy surface remains wet with disinfectant for 10 minutes, and allow to air dry
 - c. 1:100 dilution of household bleach and water for 10 minutes
 - d. A food-grade sanitizer for toys that will be used for younger children or for patients that may ‘mouth’ toys. Follow manufacturer instructions for dilution, use and contact time
- Unless otherwise specified by the manufacturer, replace disinfectant solution after each use (i.e., only use alcohol or diluted bleach solution once before replacement)
- Phenolics must not be used for toys or equipment that come into contact with infants
- If a disinfectant is used, toys must be rinsed with potable water thoroughly after cleaning and disinfection
- Allow toys to air-dry, in a manner that prevents contamination, prior to storing

6. Auditing/Monitoring Compliance

- b. An audit process should be in place to monitor adherence to the policies to further minimize potential infection risk. Auditing may monitor process (e.g., observation of the cleaning and disinfection process) or outcome (e.g., using a fluorescent marker) to assess if cleaning was effective.

Glossary/Definitions:

As per the Canadian Standard Association (CSA):

“SHALL” is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the standard;

“SHOULD” is used to express a recommendation or that which is advised but not required; and

“MAY” is used to express an option or that which is permissible within the limits of the standard, an advisory or optional statement.

Designated Support Person: An individual the patient wants involved in their care and can include family members, close friends or other caregivers and are identified/designated by the patient or substitute decision

maker (SDM). [Reference: Horizon Health Network (NB): <https://horizonnb.ca/patients-visitors/designated-support-person/>]

Low-level disinfectants: Disinfectants suitable for processing non-invasive medical equipment (i.e., non-critical equipment) and some environmental surfaces, after thorough cleaning. Low-level disinfectants kill most vegetative bacteria (e.g., MRSA) and some fungi as well as enveloped (lipid) viruses (e.g., hepatitis B, C, hantavirus, and HIV). Low level disinfectants do not kill mycobacteria (e.g. TB) or bacterial spores (e.g., *C. difficile*). A low-level disinfectant has a drug identification number (DIN) from Health Canada indicating its approval for use in Canadian hospitals.

References:

1. West K, Nyquist AC, Blair T, Berg W, Spencer S. APIC Text of Infection Control and Epidemiology, 4th ed., 2014. Chapter 42, Pediatrics. p 42:1-19.
2. Well Beings: A Guide to Health in Child Care. 3rd edition ed. Grenier D, Leduc D, editors: Canadian Paediatric Society; 2008.
3. Schutze GE, Willoughby RE, Committee on Infectious Diseases. *Clostridium difficile* Infection in Infants and Children. Pediatrics. 2013 [cited 2022 Nov 22];131:196-200. Available from: <https://pubmed.ncbi.nlm.nih.gov/23277317/>
4. Sammons JS, Tultzis P, Zaoutis TE. *Clostridium difficile* Infection in Children. JAMA Pediatr. 2013 [cited 2022 Nov 22];167(6):567-573. Available from: <https://pubmed.ncbi.nlm.nih.gov/23460123/>
5. Ontario Agency for Health Protection and Promotion (Public Health Ontario), Provincial Infectious Diseases Advisory Committee. Best practices for hand hygiene in all health care settings [Internet]. 4th ed. Toronto, ON: Queen's Printer for Ontario; 2014 Jan [cited 2022 Nov 22]. Available from: https://www.publichealthontario.ca/-/media/documents/b/2014/bp-hand-hygiene.pdf?sc_lang=en
6. Government of Canada. Toy safety [Internet]. 2017 Nov [cited 2022 Nov 22]. Available from: <https://www.canada.ca/en/health-canada/services/toy-safety.html>
7. Smith L, Ross R, Weihrer S. Health Canada. Canadian safety requirements for children's toys [Internet]. 2013 Feb [cited 2022 Nov 20]. Available from: https://www.toyassociation.org/App_Themes/tia/pdfs/safety/TF13Seminar/HealthCanada.pdf
8. Bradwell HL, Johnson CW, Lee J, Winnington R, Thill Serge, Jones RB. Microbial contamination and efficacy of disinfection procedures of companion robots in care homes [Internet]. PLOS One. 2020 Aug [cited 2022 Nov 22]. Available from: <https://doi.org/10.1371/journal.pone.0237069>
9. Government of Canada. Recalls and safety alerts [Internet]. 2022 Oct [cited 2022 Nov 22]. Available from: <https://recalls-rappels.canada.ca/en>
10. IPAC Canada. Practice recommendations for infection prevention and control related to electronic (IT) devices in healthcare settings [Internet]. 2018 Jan [cited 2022 Nov 22]. Available from: https://ipac-canada.org/photos/custom/Members/pdf/Electronic%20Devices_Jan2018_final_d.pdf
11. Ontario Agency for Health Protection and Promotion (Public Health Ontario), Provincial Infectious Diseases Advisory Committee. Infection prevention and control for clinical office practice [Internet]. 1st Revision. Toronto, ON: Queen's Printer for Ontario; 2015 Apr [cited 2022 Nov 22]. Available from: https://www.publichealthontario.ca/-/media/documents/b/2013/bp-clinical-office-practice.pdf?sc_lang=en

12. Merriman E, Corwin P, Ikram R. Toys are a potential source of cross-infection in general practitioners' waiting rooms. *British Journal of General Practice*, 2002 Feb [cited 2022 Nov 22]; 52: 138-140. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1314220/pdf/11885823.pdf>
13. Moore DL. Canadian Paediatric Society position statement Infection prevention and control in paediatric office settings. *Paediatrics & Child Health*, 2018 Nov [cited 2022 Nov 22]; 23(8):e176–e190 Available from: <https://www.cps.ca/en/documents/position/infection-prevention-and-control-in-paediatric-office-settings>
14. Hale CM, Polder JA. *The ABC's of Safe and Healthy Child Care: A Handbook for Child Care Providers*. Atlanta, GA: Centers for Disease Control and Prevention; 1997 [cited 2022 Nov 22]. Available from: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwjX7pW94MX7AhUqkokEHbpGACQQFnoECBEQAQ&url=https%3A%2F%2Fstacks.cdc.gov%2Fview%2Fcdc%2F23148%2Fcdc_23148_DS1.pdf&usg=AOvVaw0WhnTGTHptKP0GMSBS5a7z
15. American Academy of Pediatrics. Children in out-of-home child care. In: Pickering LK, Baker CJ, Kimberlin DW, Long SS, eds. *Red Book: 2012 Report of the Committee on Infectious Diseases*. Elk Grove Village, IL: American Academy of Pediatrics; 2012: 150 – 151.
16. Ontario Agency for Health Protection and Promotion (Public Health Ontario), Provincial Infectious Diseases Advisory Committee. *Best practices for environmental cleaning for prevention and control of infections in all health care settings* [Internet]. 3rd ed. Toronto, ON: Queen's Printer for Ontario; 2018 Apr [cited 2022 Nov 22]. Available from: <https://www.publichealthontario.ca/-/media/documents/B/2018/bp-environmental-cleaning.pdf>
17. Health Protection and Promotion Act. Ontario Regulation 493/17 – Food Premises. 2020 Jan [cited 2022 Nov 22]. Available from: <https://www.ontario.ca/laws/regulation/170493>

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Appendix: Suggested frequency for toy cleaning and disinfection

Item	Frequency of cleaning and disinfection/laundry (as applicable)			
	Between Patient	Daily	Weekly	When visibly soiled
Motorized compassion/companion pets	X ⁸ (if able to withstand cleaning)		X ⁸ (if able to withstand cleaning)	Discard
Toys stored in individual patient rooms	x	x (if child is on additional precautions)	x	x
Toys in communal play areas	x (preferred)	x		
Playhouses/climbers in communal play areas		x		x
Shared electronics	x			
Water in sensory tables	x	x (after each use)		
Sand in sensory tables	x		x	
Puzzles, books, magazines in communal play or waiting areas*				x (discard)