	The Johns Hopkins Hospital Interdisciplinary Clinical Practice Manual Infection Control	<i>Policy Number</i>	IFC014	
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I. OBJECTIVES

- A. To provide clean and/ or disinfected patient care supplies, equipment and environment in order to minimize the risk of hospital-acquired infection through the use of such items.
- B. To define the appropriate method of cleaning and disinfection for patient care supplies and equipment. according to CDC guidelines and as supported by manufacturer's guidelines.
- C. To outline responsibility and frequency of cleaning and disinfection of patient care supplies and equipment.
- D. To define specific circumstances of environmental cleaning related to blood spills, norovirus and Clostridium difficile.


II. INDICATIONS FOR USE

- A. This policy will be used to specify requirements for cleaning and disinfection of reusable patient supplies and equipment prior to reuse.
- B. Note that this policy does not address routine environmental cleaning as provided by JHH Environmental Services (Housekeeping), specific procedures for sterilization of patient equipment, sterilization for prion associated disease, disinfection of dialysis equipment or endoscope reprocessing.

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III. DEFINITIONS

Sterilization	Destroys all microorganisms, including bacterial spores.
High Level Disinfection	Destroys all microorganisms except bacterial spores.
Intermediate Level Disinfection	Destroys vegetative bacteria, mycobacteria, most viruses, most fungi but not bacterial spores.
Low-Level Disinfection	Destroys vegetative bacteria, some fungi and viruses but not mycobacteria or spores
Cleaning	The process of removing organic and inorganic materials from objects and surfaces through the use of detergents. Thorough cleaning is essential prior to disinfection or sterilization.
Prion-Associated Disease	Transmissible pathogenic agents composed of a protein that causes neurodegenerative diseases such as Creutzfeld-Jacob disease; extremely resistant to inactivation by routine sterilization processes and disinfecting agents. Special precautions and procedures are required.
Contact Time	The amount of time the disinfectant has to be wet on the surface(s) to completely disinfect that object. See Appendix B.
Decontamination	The use of physical or chemical means to remove, inactivate or destroy microorganisms to the point that they are no longer capable of transmitting infection and the object or surface is safe to handle.
Germicide	General term for an agent that kills microorganisms, especially pathogenic organisms; includes antiseptics and disinfectants.
Antiseptic	A substance that prevents or arrests the growth or action of microorganisms. Used especially for preparations applied topically to living tissue. Not adequate for disinfecting environmental surfaces.
Disinfectant	A germicide that is used only on inanimate objects; not used on skin because it can injure skin and tissues.
Manufacturer's guideline	Specifies the compatibility of equipment with specific cleaning agents, disinfectants and sterilization methods. Also specifies contact times for disinfectants.
Spaulding Classification	Classification scheme for patient care items developed by Earle H. Spaulding which defines the method of disinfection and sterilization according to the risk of infection. Includes Critical (enters sterile tissue or vascular system), Semi-critical (contacts mucous membranes or non-intact skin) and Non-critical (contacts intact skin but not mucous membranes) items.
Disinfection	Thermal or chemical destruction of microorganisms. Less lethal than sterilization because it does not necessarily destroy bacterial spores.

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IV. RESPONSIBILITY

- A. JHH Employee
 1. Choose an appropriate agent from the approved list of cleaners and disinfectants. See Appendix B.
 2. Know and Follow the manufacturer's directions for all cleaners, disinfectants and equipment, assuring the appropriate contact time is used. See Appendix B.
 3. If the manufacturer recommends a chemical for cleaning and/or disinfection that is not on the list, report this information to the supervisor.
 4. See http://www.insidehopkinsmedicine.org/icpm/PASO15pt_care equip.pdf for instructions on cleaning patient care equipment.
- B. Supervisor/Department Management
 1. Determine the level of disinfection or sterilization for items according to Appendix A.
 2. Ensure that the item is compatible with the disinfection or sterilization process using manufacturer's guidelines or recommendations.
 3. Contact HEIC for written approval of an alternate process for disinfection or sterilization of an item that is not compatible with the processes outlined in Appendix A.
 4. Contact HEIC for written pre-use approval of new products.
 5. Monitor employee compliance with procedures and documentation.
 6. Provide Material Safety Data Sheet (MSDS) to employees as needed.
 7. Ensure employee compliance with this policy.
- C. Hospital Epidemiology and Infection Control (HEIC)
 1. Review Hospital policies and procedures and products utilized for cleaning and disinfection.
 2. Submit policies to Hospital Epidemiology and Infection Control Committee for review and approval.
 3. Provide training.
 4. Monitor use of Cidex® OPA on the daily and weekly logs during environmental rounds.
- D. Health, Safety and Environment (HSE)
 1. Consult on ventilation requirements for the use of Cidex® and Cidex® OPA.
 2. Consult on neutralization, disposal and spill clean-up of Cidex® and Cidex® OPA.
 3. Consult on personal protective equipment and reactions to cleaning and disinfection products.
 4. Provide training.
 5. Provide MSDS if necessary.
- E. Occupational Health
 1. Assess employee reactions/ allergies to cleaning and disinfection agents.
- F. Environmental Services (EVS)
 1. Provide routine environmental cleaning.
 2. Provide cleaning in special circumstances such as large blood spills, norovirus, Clostridium difficile, as requested by clinical units and/or HEIC.
 3. Maintain adequate supply of approved cleaning/ disinfection agents and related accessories such as buckets, cleaning cloths and mops.
- G. Central Stores
 1. Maintain adequate supply of cleaning/disinfection agents that are not routinely supplied by EVS.

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V. PROCEDURE

- A. Step One: Determine the appropriate level of disinfectant for the cleaning/disinfection based on the Spaulding Classification System. (See Appendix A and Appendix B)
1. Critical Items:
 - a. Critical items enter sterile tissue or the vascular system.
 - b. Critical items confer a high risk for infection if they are contaminated with any microorganism.
 - c. Critical items shall be sterilized before each use.
 - d. Meticulous cleaning shall precede the sterilization process.
 - e. Guidelines regarding concentration, contact time, temperature, pH and quality control shall be followed.
 - f. Manufacturer's guidelines regarding compatibility of the item with the selected sterilization process shall be followed.
 - g. HEIC shall be notified of any critical item that cannot undergo a sterilization process, and an alternate acceptable process shall be described in writing by HEIC.
 - h. Refer to departmental sterilization policies and procedures.
 2. Semicritical Items:
 - a. Semi critical Items contact mucous membranes or non-intact skin (endoscopes, respiratory therapy equipment)
 - b. Semi critical items minimally require high level disinfection using chemical disinfectants or pasteurization.
 - c. High level disinfection provides complete elimination of all microorganisms except for small numbers of bacterial spores in or on an instrument or item.
 - d. Some semicritical items with smooth hard surfaces, such as thermometers and hydrotherapy tanks, require only intermediate level disinfection.
 - e. Meticulous cleaning shall precede the disinfection process.
 - f. Manufacturer's guidelines regarding compatibility of items with specific disinfectants shall be followed.
 - g. Manufacturer's guidelines regarding concentration, contact time, temperature, shelf life, storage and quality control shall be followed.
 - h. HEIC shall be notified of any semicritical item that cannot undergo the specified high level disinfection process, and an alternate acceptable process shall be described in writing by HEIC.
 - i. After processing, items shall be dried and stored in a manner that protects them from recontamination.
 - j. Refer to departmental high level disinfection policies and procedures.
 3. Noncritical Items:
 - a. Noncritical Items come in contact with intact skin, not mucous membranes
 - b. Skin that is intact acts as a barrier against most microorganisms and therefore the devices coming into contact with skin that is intact need not be sterile.
 - c. Most of these items can be decontaminated in the units where they are used.
 - d. Non critical Items require low-level disinfection.
 - e. Manufacturer's guidelines regarding compatibility of items with specific disinfectants must be followed.

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- f. Manufacturer's guidelines regarding concentration, contact time, shelf life and storage shall be followed.
 - g. HEIC shall be notified of any noncritical item that cannot undergo the specified disinfection process, and an alternate acceptable process shall be described in writing by HEIC.
- B. Step Two: Select the appropriate product approved by the Hospital Epidemiology and Infection Control Committee for use at the Johns Hopkins Hospital from Appendix B.
1. Use of an agent that is not specified in Appendix B requires preapproval (in writing) from HEIC.
 2. Follow manufacturer's guidelines for selection of cleaning and disinfecting agents. Report to the supervisor or HEIC if the manufacturer of an item recommends a cleaning or disinfection agent that is not listed in Appendix B.
 3. Prior to disinfection, manually clean object using water with detergents or enzymatic cleaners.
 4. Keep the surface of the object wet for the specified contact time.
- C. Special Circumstances
1. Norovirus, Clostridium difficile and Blood Spills: See Appendix H
 2. Cleaning of Shared Play Equipment: See Appendix G

VI. DOCUMENTATION

- A. JHH employees working with Ortho-phthaldehyde (such as Cidex® OPA) or Gluteraldehyde (Cidex ®) shall maintain required daily and weekly documentation using JHH approved log forms.
- B. Evidence of annual competency evaluations of those responsible for reprocessing shall be maintained in the employee's record.

VII. EDUCATION AND COMMUNICATION

1. This policy will be distributed to all Interdisciplinary Clinical Practice Manual (ICPM) holders and will be available on the Intranet in the ICPM website. It will also be located on the HEIC Internet site (www.Hopkins-HEIC.org)
2. All employees performing cleaning and disinfection shall be trained on procedures of cleaning and disinfection during initial unit orientation.
3. HEIC and HSE shall be available for consultation upon request.

VIII. SUPPORTIVE INFORMATION

See Also:


The Johns Hopkins Hospital, Interdisciplinary Clinical Practice Manual

- [PAS015 Patient Care Equipment: Appropriate Use and Mangement Policy](#)
- [IFC032 Prion Associated Diseases](#)

The Johns Hopkins Hospital, Hospital Safety and Environmental Health: www.hopkinsmedicine.org/hse/

The Medical Nursing Service Standards of Care Manual

- [Endoscopy cleaning procedures, The Johns Hopkins Hospital, Medical Nursing Service,](#)

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Sponsor:

- Medical Care Evaluation Committee

Developer:

- Hospital Epidemiology and Infection Control Committee

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Vice President for Nursing & Patient Services

Vice President for Medical Affairs

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