



Operating Room Supplement

Clorox Healthcare Disinfection Tool Kit for the Operating Room, Pre-Operative & PACU Areas



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Perioperative Environment Challenging Environments-1



Operating Room

Operating Rooms, Pre-Operative Areas and Post-Anesthesia Care Units (PACU): Challenging Environments



Just like in patient rooms, effective cleaning and disinfecting of a hospital's pre-operative (pre-op) areas, operating rooms (OR) and post-anesthesia care units (PACU) are critical to help prevent the spread of infection before, during and after surgery, particularly among vulnerable patients.

While many of the same environmental infection risks apply in the pre-op areas, OR and PACU, the nature of these complex and fast-moving environments make effective cleaning and disinfecting particularly challenging.

- ▶ First, because of busy scheduling, **hospital ORs are usually subjected to fast turnaround times**. Typical turnaround times for the OR can range from 20 to 30 minutes depending on the procedure, but more complex procedures, especially those that require additional equipment may require longer turnaround times. **Speed can lead to mistakes and improper cleaning.**
- ▶ Second, **the OR has many high-touch surfaces, such as those on specialized equipment, that are unique to this healthcare environment**. Some of these surfaces may require the use of specific cleaning and disinfecting products and may require trained and skilled personnel to perform cleaning and disinfection tasks to ensure that equipment is properly functioning and settings properly configured as well as handle any necessary equipment repairs.
- ▶ Finally, members of the clinical and environmental services (EVS) teams may have responsibilities for specific surfaces and equipment, creating **the potential in the OR for confusion with regards to “who cleans what.”**

Perioperative Environment Challenging Environments-2



Operating Room

Operating Rooms, Pre-Operative Areas and Post-Anesthesia Care Units (PACU) Challenging Environments

The outcomes: Surface are missed or cleaned improperly

One outcome associated with the challenges of cleaning and disinfecting the OR is that surfaces and equipment are not thoroughly cleaned or missed altogether, leaving behind potentially infectious microorganisms.

From the peer-reviewed literature:

- ▶ A 2011 study showed that of 946 surfaces in 71 operating rooms in six acute care hospitals, only 25% of the surfaces had been cleaned following a terminal cleaning of the OR.¹
- ▶ Another study demonstrated that 15% of surfaces sampled in 43 ORs were positive for pathogens including *Pseudomonas* species, *Enterobacter aerogenes*, *Staphylococcus aureus*, *Enterococcus* species, *Acinetobacter* species, *Klebsiella pneumoniae*, and *Escherichia coli*.²
- ▶ A review of hospital cleaning practices showed that confusion between clinical staff and EVS regarding who is supposed to clean which items can result in items being missed.³

Equipment missed	Responsible personnel
Anesthesia cart and equipment (e.g., IV pole)	Clinical or anesthesia tech
Anesthesia machine	Clinical or anesthesia tech
Patient monitors	Clinical
OR bed and table straps	EVS

1. Jefferson J, Whelan R, Dick B, Carling P. A novel technique for identifying opportunities to improve environmental hygiene in the operating room. AORN J. 2011 Mar;93(3):358-64.
2. Munoz-Price LS, Birnbach DJ, Lubarsky DA, Arheart KL, Fajardo-Aquino Y et al. Decreasing operating room environmental pathogen contamination through improved cleaning practice. Infect Control Hosp Epidemiol. 2012 Sep;33(9):897-904.
3. Dancer SJ. Hospital cleaning in the 21st century. Eur J Clin Microbiol Infect Dis. 2011 Dec;30(12):1473-81.



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Perioperative Environment Challenging Environments-3



Operating Room

Operating Rooms, Pre-Operative Areas and Post-Anesthesia Care Units (PACU) Challenging Environments

Solutions: Optimized practices and products can help

Optimized Practices:

Training, feedback and monitoring can help to improve compliance with cleaning and disinfection protocols and improve the effectiveness of cleaning and disinfecting practices. A 2012 study that used UV fluorescent markers to monitor which surfaces were cleaned and microbiology methods to measure surface contamination demonstrated an increase in cleaning compliance rates and a reduction in pathogen contamination on surfaces.¹ Other helpful tools can include ATP measurement and checklists.

Optimized Products:

Ready-to-use cleaning and disinfecting products that remove the need and time to prepare fresh solutions on a regular basis can also help. A quality improvement project conducted in three operating rooms evaluated the impact of a ready-to-use hydrogen peroxide cleaner disinfectant (Clorox Healthcare® Hydrogen Peroxide Cleaner Disinfectant) used to clean in between cases on cleaning efficacy and compliance with protocols. Compliance with protocols was measured using fluorescent markers and cleaning efficacy reported based on ATP monitoring.

The study showed that:

- ▶ **Compliance with cleaning protocols was consistently high between 84—87%. —** as measured by the surfaces from which fluorescent dye.
- ▶ **Cleaning efficacy across all sites ranged between 84—96%,** as measured by relative light units (RLU).
- ▶ Using RODAC plates, bacterial sampling and culturing of 5 sites with RLU values >1000 RLU, and 5 sites with RLU values <1000 showed that no bacteria were recovered, regardless of the initial RLU value.²

The study authors concluded that the ready-to-use formulation of hydrogen peroxide was effective in the operating room and should be considered an option for between-case cleaning and disinfection in this setting.

1. Munoz-Price LS, Birnbach DJ, Lubarsky DA, Arheart KL, Fajardo-Aquino Y et al. Decreasing operating room environmental pathogen contamination through improved cleaning practice. Infect Control Hosp Epidemiol. 2012 Sep;33(9):897-904.

2. Wiemken TL, Curran DR, Kelley RR, Pacholski EB, Carrico RM et al. Am J Infect Control. 2014; 42:1004-5.



Common Pathogens in the Operating Room



Operating Room

There are an estimated **110,800 surgical site infections (SSI)** that result from **inpatient surgeries each year.**¹ The Centers for Medicare and Medicaid Services (CMS) require many hospitals to report infections following colon surgeries and abdominal hysterectomies.²

Surgical site infections can be costly. An SSI costs a hospital, on average, \$20,785, but these costs can increase to \$42,000 for infections caused by antibiotic-resistant bacteria such as methicillin-resistant *Staphylococcus aureus*.³ The length of hospital stay for a patient with an SSI can increase from 7—11 days.⁴

The table below shows the five most common microorganisms associated with surgical site infections in the United States between 2011—2014⁵ as well as how long these organisms can survive on surfaces.

Rank	Microorganism	Number (%) of Infections ⁵	Environmental Persistence
1	<i>Staphylococcus aureus</i>	30,902 (20.7%)	7 days to 7 months ⁶
2	<i>Escherichia coli</i>	20,429 (13.7%)	1.5 hours to 16 months ⁶
3	Coagulase-negative staphylococci	11,799 (7.9%)	6 weeks to >12 weeks ⁷
4	<i>Enterococcus faecalis</i>	11,156 (7.5%)	5 day—4 months ⁶
5	<i>Pseudomonas aeruginosa</i>	8,458 (5.7%)	6 hours—16 months ⁶

1. Magill SS, O'Leary E, Janelle SJ, Thompson DL, Dumyati G et al. Changes in Prevalence of Health Care–Associated Infections in U.S. Hospitals. *N Engl J Med*. 2018 Nov ;379(18):1732–44.
2. Centers for Disease Control and Prevention. Operational Guidance for Reporting Surgical Site Infection (SSI) Data to CDC's NHSN for the Purpose of Fulfilling CMS's Hospital Inpatient Quality Reporting (IQR) Program Requirements [December 2018] Available: <https://www.cdc.gov/nhsn/pdfs/cms/ssi/Final-ACH-SSI-Guidance.pdf> Accessed December 31, 2018.
3. Zimlichman E, Henderson D, Tamir O, Franz C, Song P et al. Healthcare-Associated Infections: A meta analysis of costs and financial impact on the US healthcare system. *JAMA Intern Med*. 2013;173(22):2039-2046.
4. Anderson DJ, Podgorny K, Berrios-Torres SI, Bratzler DW, Dellinger EP et al. Strategies to prevent surgical site infections in acute care hospitals: 2014 update. *Infect Control Hosp Epidemiol*. 2014;35(6):605-627.
5. Weiner LM, Webb AK, Limbago B, Dudeck MA, Patel J et al. Antimicrobial-Resistant Pathogens Associated with Healthcare-Associated Infections: Summary of Data Reported to the National Healthcare Safety Network at the Centers for Disease Control and Prevention, 2011-2014. *Infect Control Hosp Epidemiol*. 2016 Nov;37(11):1288-1301.
6. Kramer A, Schwebke I, Kampf G. How long do nosocomial pathogens persist on inanimate surfaces? A systematic review. *BMC Infect Dis*. 2006;6:130.
7. Neeley AN, Maley MP. Survival of Enterococci and Staphylococci on Hospital Fabrics and Plastic. *J Clin Microbiol*. 2000; 38(2):724–726.



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Operating Rooms: AORN Guidelines for Environmental Cleaning-1



Operating Room

Guidelines for Environmental Cleaning:

The Association for periOperative Registered Nurses (AORN): 2016.

AORN guidelines for environmental cleaning (2016) outlines a series of recommendations for cleaning and disinfecting in the perioperative setting, operating rooms and post-anesthesia care units. The guidelines were developed following a comprehensive review of the literature and represent best practices that can be implemented in these settings.

The guidelines emphasize the importance of forming a multidisciplinary team to establish facility protocols and the need for collaboration between team members to carry out protocols. Some highlights of the guidelines include but are not limited to the following:

Multidisciplinary teams, sometimes in collaboration with the infection prevention committee, should:

- ▶ Select cleaning chemicals, materials, tools and equipment.
- ▶ Establish cleaning frequencies for high-touch objects and surfaces.
- ▶ Determine when enhanced environmental cleaning procedures should be implemented.
- ▶ Designate personnel responsible for cleaning perioperative areas and equipment.

To provide the patient with a safe environment, prior to surgery:

- ▶ The perioperative nurse should inspect the OR and activate steps to implement necessary cleaning and disinfecting processes.
- ▶ At the beginning of the day, all horizontal surfaces should be damp dusted from top to bottom with clean cloths moistened with an EPA-registered hospital disinfectant.
- ▶ Surfaces should be cleaned first to remove soil using either a one-step cleaner disinfectant (which contains a detergent) or a detergent. The surface should then be disinfected.
- ▶ Disinfectants should be applied and reapplied as per manufacturer's instructions to achieve the dwell time (contact time) required to kill microorganisms.
- ▶ Floors should be considered contaminated at all times and should be mopped with damp or wet mops.
- ▶ Reusable cleaning materials should be changed after each use. Disposable cleaning materials should be discarded after each use.



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Operating Rooms: AORN Guidelines for Environmental Cleaning-2



Operating Room

Turnover cleaning — After the patient is transferred, a clean environment should be reestablished.

- ▶ Pre-operative and post-operative patient care areas, operating and procedure rooms should be cleaned after each patient.
- ▶ Reusable noncritical, nonporous surfaces should be cleaned according to manufacturer instructions.
- ▶ High touch objects and surfaces, and equipment used during surgical or invasive procedures should be cleaned after each patient.

Terminal cleaning — Perioperative areas should be terminally cleaned and disinfected.

- ▶ Perioperative and sterile processing areas should be terminally cleaned daily when in use. If not in use, the team should decide frequency of cleaning.
- ▶ Floors should be disinfected, moving from clean to dirty and from the perimeter inwards. The center of the floor will likely be the most dirty area of the OR.
- ▶ All exposed surfaces of equipment and items, including wheels and casters of mobile equipment, should be cleaned and disinfected.

Take precautionary measures to reduce pathogen transmission when cleaning.

- ▶ Follow standard precautions when handling blood, bodily fluids or other potentially infectious materials.
- ▶ Wear personal protective equipment (PPE) per facility protocol when handling contaminated items or cleaning contaminated surfaces.
- ▶ Hand hygiene must be performed as soon as PPE is removed or if hands become soiled.
- ▶ Clean and disinfect in a methodical pattern to limit the transmission of pathogens

Operating Rooms: AORN Guidelines for Environmental Cleaning-3



Operating Room

Cleaning Products

- ▶ Ensure the selected EPA-registered disinfectant is bactericidal, tuberculocidal and virucidal with specific claims and instructions for HIV and HBV.
- ▶ Do not use high-level disinfectants or liquid chemical sterilants on OR environmental surfaces or noncritical devices.
- ▶ Avoid cleaning and disinfecting procedures within ORs that produce a mist, aerosol or dust (i.e., spray bottles).
- ▶ Alcohol is flammable and must be used with caution in surgical settings. Do not use alcohol on large surface areas in the OR.

Policies and Procedures

The development and regular review and updating of policies and procedures for environmental cleaning and disinfecting perioperative and post-operative areas is recommended. Policies and procedures must also include training, education and competency verification, as well as reviews of environmental cleaning-related issues.

These general principles on cleaning and disinfection apply to all areas of the perioperative department including pre-operative areas, the operating room and the PACU.

Reference: Association of Perioperative Nurses (AORN). Guideline for Environmental Cleaning. 2016. Available: <https://www.aorn.org/guidelines/guideline-implementation-topics/aseptic-technique/environmental-cleaning> Accessed December 31, 2018.



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Cleaning and Disinfecting in the OR, Pre-Op and PACU Key Points for EVS Personnel



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Based on guidelines produced by the Association of periOperative Registered Nurses (AORN), the Association for Professionals in Infection Control and Epidemiology (APIC) and the Association for the Healthcare Environment (AHE), key points for EVS personnel to know about when and how to clean the OR at specific times during the day can be summarized.

BEFORE FIRST PROCEDURE / START OF DAY CLEANING

- ▶ Nursing staff should damp dust all horizontal/level surfaces and equipment in the OR using a clean, lint-free or microfiber cloth moistened with an EPA-registered healthcare disinfectant.
- ▶ Clean and disinfect equipment from outside areas prior to bringing into the OR.

BETWEEN PROCEDURES / TURNOVER CLEANING

- ▶ Wear the appropriate PPE including gloves per facility protocol.
- ▶ Clean to remove visible or gross soil before disinfecting.
- ▶ Disinfect equipment in the room. Clean from high to low, and from clean to dirty.
- ▶ Use a new wipe for each piece of equipment. You may need to use more than one wipe on large equipment such as the OR table.
- ▶ Keep the surface visibly wet for the full contact time
- ▶ Clean and disinfect the floor in the immediate patient area if soiled
- ▶ Allow all surfaces to dry before they come in contact with the next patient.

END OF DAY / TERMINAL CLEANING

- ▶ Start cleaning after the last surgical case of the day.
- ▶ Follow the procedures for cleaning between cases.
- ▶ See Responsibility Grid for additional items/surfaces to be cleaned and disinfected.
- ▶ Move standing equipment to clean and disinfect the entire operating room floor.
- ▶ Clean and disinfect the walls and ceiling, if necessary; clean and disinfect the floor per protocol.
- ▶ Clean casters and wheels on portable equipment.
- ▶ Disassemble, clean and disinfect, and dry all cleaning equipment before reuse and storage.
- ▶ **Note:** Clean and disinfect sinks and eye wash station per facility protocol.

Pre-operative and PACU areas should be cleaned and disinfected between patients and at the end of the day following many of the same principles outlined above for between procedure cleaning.



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Cleaning and Disinfecting Responsibilities in the OR



Operating Room

Clearly Define Cleaning and Disinfection Responsibilities

Operating rooms contain many different types of surfaces and equipment which require cleaning and disinfection. Work as a team to ensure there is an owner for each surface or piece of equipment. A sample responsibility grid shown below and is a useful tool that operating room teams can use to clearly define cleaning and disinfection responsibilities.

Item	Between Procedures	Terminal	Responsibility
Anesthesia machine, cart, IV pump & pole	✓	✓	Anesthesia Tech
Back table	✓	✓	EVS
Cabinet doors	As needed	✓	EVS
Chairs, stools, step stools	✓	✓	EVS
Computer (including keyboard, mouse, screens)	✓	✓	EVS
Electronic communication devices (e.g., cell phone, pager)	✓	N/A	Device Owner/User
Equipment & booms	✓	✓	Facility to determine
Floors	✓	✓	EVS
High-touch surfaces (e.g., door handle or push plates, light switches, telephone, etc.).	✓	✓	EVS
Linen hamper	As needed	✓	EVS
Mayo & ring stands	✓	✓	EVS
OR light & handle	✓	✓	EVS
OR table including controls, mattress, side rails, table straps, positioning and transfer devices, attachments	✓	✓	EVS
Patient monitors	✓	✓	EVS
Radiology equipment	As needed	✓	Facility to determine
Regulators (e.g., suction, medical gasses)	✓	✓	EVS
Scrub sinks	As needed	✓	EVS
Sterile processing areas & department	As needed	✓	EVS
Supply carts	As needed	✓	EVS
Vents/grills for return air	As needed	✓	EVS
Walls & ceilings	Spot clean as needed	As needed and thoroughly per facility routine	EVS
Waste receptacles & kick buckets	✓	✓	EVS
Wheels, casters	As needed	✓	EVS
Offices, lounge, locker rooms	Nightly		EVS

**N
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- ▶ Nursing staff to damp dust all horizontal/level surfaces before first case of the day.
- ▶ Follow manufacturer instructions for use (IFU) when cleaning and disinfecting equipment.
- ▶ For floors, clean and disinfect using a new mop head each time between cases. For terminal cleaning, clean and disinfect floors using a wet vacuum or single-use mop.
- ▶ At the end of each shift, clean and disinfect cleaning tools, equipment and EVS cart.



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Cleaning and Disinfecting Responsibilities in Pre-Operative Areas and the PACU



Operating Room

Clearly Define Cleaning and Disinfection Responsibilities

Pre-operative and PACU areas contain many different types of surfaces and equipment which move to and from the OR and require regular cleaning and disinfection.

Work as a team to ensure there is an owner for each surface or piece of equipment. A sample responsibility grid shown below and is a useful tool that operating room teams can use to clearly define cleaning and disinfection responsibilities.

Item	Between Procedures	Terminal	Responsibility
Bed/Gurney, including side rails	✓	✓	EVS
Call Light	✓	✓	EVS
Fixed Equipment (e.g., suction, medical gas regulators)	✓	✓	EVS
Floors	Only if soiled	✓	EVS
High-touch surfaces (e.g., door handle or push plates, light switches, telephone)	✓	✓	EVS
Mobile Equipment (e.g., vital signs machine, glucometer, warming equipment)	✓	✓	Nursing
Overbed table	✓	✓	EVS
Patient monitors	✓	✓	EVS
Television remote	✓	✓	EVS
Transport equipment (e.g., wheelchairs, gurneys)	N/A	✓	Transporters
Walls	✓	Spot clean as needed	EVS

N	▶ Follow manufacturer instructions for use (IFU) when cleaning and disinfecting equipment.
O	
T	▶ For floors, clean only if soiled between patients. Mop nightly.
E	▶ At the end of each shift, clean and disinfect cleaning tools, equipment and EVS cart.
S	



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Operating Room: Between Procedures Cleaning Checklist



Operating Room

Consider developing a checklist of OR environmental surfaces staff should clean and disinfect during the between procedure cleaning process that best fits the facility's layout and policies. An example checklist is presented below.

Operating Room Cleaning Checklist: Between Procedures

Name: _____ Date: _____ Room Number: _____ Staff Initials: _____

After Every Case		
Cleaned	Not Applicable	Surface/ Piece of Equipment
		Anesthesia machine, cart, IV pump & pole
		Back table
		Chairs, stools, step stools
		Computer (including keyboard, mouse, screens)
		Electronic communication devices (e.g., cell phone, pager)
		Equipment & booms
		Floors
		Mayo & ring stands
		OR light & handle
		OR table including controls, mattress, side rails, table straps, attachments
		Positioning and transfer devices
		Patient monitors
		Regulators (e.g., suction, medical gases)
		Waste receptacles & kick buckets
		High-touch surfaces (e.g., door handle or push plates, light switches, telephone etc.)
Only If Items Are Soiled		
		Cabinet doors
		Linen hamper
		Radiology equipment
		Scrub sinks
		Supply carts
		Vents/grills for return air
		Walls & ceilings
		Wheels & casters



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Operating Room: Terminal Cleaning Checklist



Operating Room

Consider developing a checklist of OR environmental surfaces staff should clean and disinfect when conducting terminal cleaning that best fits the facility's layout and policies. An example checklist is presented below. Note: Items not cleaned daily should be part of a scheduled (weekly, monthly) clean (i.e., offices, lounges, locker rooms)

Operating Room Cleaning Checklist: Terminal

Name: _____ Date: _____ Room Number: _____ Staff Initials: _____

Each Day Room Is Used			
Cleaned	Not Applicable	Item	Comments
		Anesthesia machine, cart, IV pump & pole	
		Back table	
		Cabinet doors	
		Chairs, stools, step stools	
		Computer (inc. keyboard, mouse, screen)	
		Equipment & booms	
		Floors	
		High-touch surfaces (e.g., door handle or push plates, light switches, telephone).	
		Linen hamper	
		Mayo & ring stands	
		OR light & handle	
		OR table including controls, mattress, side rails, table straps, positioning and transfer devices, attachments	
		Patient monitors	
		Positioning and transfer devices	
		Radiology equipment	
		Regulators (e.g., suction, medical gasses)	
		Scrub sinks	
		Sterile processing areas & department	
		Supply carts	
		Vents/grills for return air	
		Walls & ceilings	
		Waste receptacles & kick buckets	
		Wheels, casters	

Please comment on any areas not referenced above:

This operating room looks clean and ready for use. Employee signature: _____



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Pre-Operative and PACU Areas: Between Patient Cleaning Checklist



Operating Room

Consider developing a checklist of pre-operative and PACU environmental surfaces staff should clean and disinfect between patients that best fits the facility's layout and policies. An example checklist is presented below.

Pre-Operative and PACU Areas Checklist: Between Patients

Name: _____ Date: _____ Room Number: _____ Staff Initials: _____

After Every Patient			
Cleaned	Not Applicable	Item	Comments
		Bed/Gurney, including side rails	
		Call Light	
		Fixed Equipment (e.g., suction, medical gas regulators,)	
		Mobile Equipment (e.g., vital signs machine, glucometer, warming equipment)	
		Overbed table	
		Patient monitors	
		Television remote	
		Transport equipment (e.g., wheelchairs, gurneys)	
		High-touch surfaces (e.g., door handle or push plates, light switches, telephone)	
Only If Items Are Soiled			
		Floors	
		Walls	

Please comment on any areas not referenced above:

This area looks clean and ready for use.

Employee signature: _____



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Pre-Operative and PACU Areas: Terminal Cleaning Checklist



Operating Room

Consider developing a checklist of pre-operative and PACU environmental surfaces staff should clean and disinfect between patients that best fits the facility's layout and policies. Note: Items not cleaned daily should be part of a scheduled (weekly, monthly) clean (i.e., offices, lounges, locker rooms).

An example checklist is presented below.

Pre-Operative and PACU Areas Checklist: Terminal

Name: _____ Date: _____ Room Number: _____ Staff Initials: _____

Each Day Area Is Used			
Cleaned	Not Applicable	Item	Comments
		Bed/Gurney including side rails	
		Call Light	
		Chairs, stools, step stools	
		Computer accessories (e.g., keyboard, mouse, touch screen)	
		Fixed Equipment (e.g., suction, medical gas regulators,)	
		Floors	
		Linen Receptacles	
		Mobile Equipment (e.g., vital signs machine, glucometer, warming equipment)	
		Overbed table	
		Patient monitors	
		Storage cabinets, supply carts	
		Telephones and mobile communication devices	
		Television remote	
		Transport equipment (e.g., wheelchairs, gurneys)	
		Trash Receptacles	
		High-touch surfaces (e.g., door handle or push plates, light switches, telephone)	

Please comment on any areas not referenced above:

This area looks clean and ready for use. Employee signature: _____



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Product Recommendations for Pre-Operative and PACU Areas



Products & Safety

Ready-to-use hydrogen peroxide or alcohol-free quaternary ammonium (“quat”) based cleaner disinfectants offer broad spectrum disinfection efficacy, fast contact times and strong cleaning power against blood and other soils.

We recommend the following Clorox Healthcare products for use in perioperative settings.*

Between-Patient and Nightly Cleaning & Disinfection Using Hydrogen Peroxide

WHERE: Cleaning and Disinfecting Pre-Op & PACU Areas

WHAT:

Hydrogen Peroxide Cleaner Disinfectants (Non-Sporicidal)



VersaSure® Alcohol-Free Cleaner Disinfectant Wipes (Non-Sporicidal)



* When treating patients with *Clostridium difficile* infections, we recommend using sporicidal bleach-based surface disinfectants such as Clorox Healthcare® Bleach Germicidal Wipes.



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Product Recommendations for the Operating Room



Products & Safety

Ready-to-use hydrogen peroxide or alcohol-free quaternary ammonium (“quat”) based cleaner disinfectants offer broad spectrum disinfection efficacy, fast contact times and strong cleaning power against blood and other soils.

We recommend the following Clorox Healthcare products for use in the operating room.*

Some facilities also include enhanced decontamination systems such as ultraviolet decontamination systems or electrostatic spraying systems as part of their terminal cleaning process. For more information on these systems, please contact your account manager.

Between Procedures and Terminal Cleaning Using Hydrogen Peroxide Cleaner Disinfectant Wipes and Liquids

WHERE: Cleaning and Disinfecting the OR

WHAT:

Hydrogen Peroxide Cleaner Disinfectants (Non-Sporicidal)



VersaSure® Alcohol-Free Cleaner Disinfectant Wipes (Non-Sporicidal)



* When treating patients with *Clostridium difficile* infections, we recommend using sporicidal bleach-based surface disinfectants such as Clorox Healthcare® Bleach Germicidal Wipes.



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Technical Information

Clorox Healthcare® Hydrogen Peroxide Cleaner Disinfectant Wipes



Products & Safety

OVERVIEW

Clorox Healthcare® Hydrogen Peroxide Cleaner Disinfectant Wipes are engineered as ready-to-use cleaner-disinfectant wipes for healthcare facilities. They are compatible with a wide range of common healthcare surfaces and have a low residue and odor profile.

These EPA-registered disinfectant wipes contain hydrogen peroxide and other ingredients to kill most bacteria and viruses on a variety of hard, nonporous healthcare surfaces in 1 minute.

INGREDIENT INFORMATION

Active ingredient: Hydrogen Peroxide.. 1.4%
Other ingredients:..... 98.6%
Total (not including weight of wipe):... 100.0%

AVAILABLE FORMATS




Clorox Healthcare® Hydrogen Peroxide Cleaner Disinfectant Wipes are available in multiple sizes and formats to accomplish different disinfecting jobs.

At a Glance Clorox Healthcare® Hydrogen Peroxide Cleaner Disinfectant Wipes

EPA Registration Number	67619-25
Product Classification	Pre-moistened wipes
Dilution	Ready to use
Disinfectant Type	1-step cleaner-disinfectant
Active Ingredient Chemistry	Hydrogen Peroxide
Odor	Cleaning Agent
Shelf Life	Expiration date listed on each package: month, day, year
Toxicity Signal Word	CAUTION
HMIS Rating	0-0-0-A

PPE Required

Follow your facility's protocols

		Designed For	Item #	Quantity	Shelf Life
Clinical Surface Wipes (6.75" x 5.75")		Daily Disinfection Small high-touch surfaces Medical equipment	30825	155 ct. canister, 6/case	24 months
Multi-Purpose Wipes (6.75" x 9")		Daily Disinfection Medical equipment	30824	95 ct. canister, 6/case	24 months
			31426	50 ct. singles, 6/case	24 months
Terminal Wipes (12" x 11")		Terminal Disinfection Large areas	30826	185 ct. bucket, 2/case	24 months
			30827	185 ct. refill, 2/case	24 months



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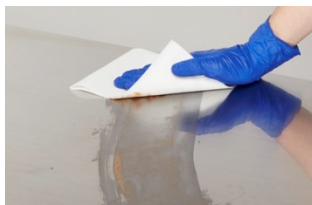
Technical Information

Clorox Healthcare® Hydrogen Peroxide Cleaner Disinfectant Wipes



Products & Safety

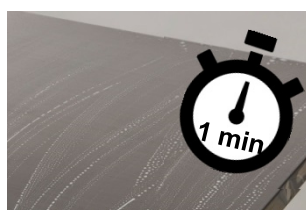
DISINFECTION DIRECTION FOR USE*



1. Put ON PPE.
REMOVE gross,
visible soil*



2. **WIPE** surface
with wipe until
thoroughly wet.



3. To **DISINFECT**,
keep surface
visibly wet for 1
minute†



4. **POLISH** surfaces
to remove residue
if visible.

Special Instructions for Use Against HIV-1, HBV and HCV:

This product kills HIV-1, HBV and HCV on pre-cleaned hard, nonporous surfaces/objects previously soiled with blood/body fluids in health care settings or other settings in which there is an expected likelihood of soiling of inanimate surfaces/objects with blood or body fluids, and in which the surfaces/objects likely to be soiled with blood or body fluids can be associated with the potential for transmission of Human Immunodeficiency Virus (HIV-1) (associated with AIDS), Human Hepatitis B (HBV) and Human Hepatitis C (HCV).

Special Instructions for Using This Product to Clean and Decontaminate Against HIV-1, HBV and HCV on Surfaces/Objects Soiled with Blood/Body Fluids:

Personal Protection: When handling items soiled with blood or body fluids, use disposable impervious gloves, gowns, masks and eye coverings.

Cleaning Procedure: Blood and other body fluids must be thoroughly cleaned from surfaces and other objects before applying this product.

Contact Time: Allow surfaces to remain wet for HBV, HCV and HIV-1 for 30 seconds. The contact times for other bacteria, viruses, and fungi may differ. See product label for contact times.

Disposal of Infectious Materials: Use disposable impervious gloves, gowns, masks and eye coverings. Blood and other body fluids must be autoclaved and disposed of according to local regulations for infectious waste disposal.

This product is not to be used as a terminal sterilant/high-level disinfectant on any surface or instrument that (1) is introduced directly into the human body, either into or in contact with the bloodstream or normally sterile areas of the body, or (2) contacts intact mucous membranes, but which does not ordinarily penetrate the blood barrier or otherwise enter normally sterile areas of the body. This product may be used to preclean or decontaminate critical or semi-critical medical devices prior to sterilization or high-level disinfection.

* See product label for complete instructions. This is a one-step product. Precleaning is required only if blood, vomit, fecal matter or other soil is visible.

† Standard contact Time is 30 seconds or 1 minute for all bacteria and viruses except: Norovirus (3 minutes); *Mycobacterium bovis* (TB (5 minutes). *Candida albicans* and *Trichophyton mentagrophytes* have a 5-minute contact time.



Use products as directed. Clorox Healthcare recommendations. Your facility's protocol may vary.
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Clorox Healthcare® Hydrogen Peroxide Cleaner Disinfectant Wipes



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DISINFECTION EFFICACY CLAIMS FOR WIPES

Organisms:	Organisms:
Bacteria — 30 sec contact time	Viruses — 30 sec contact time
Carbapenem-Resistant <i>Klebsiella pneumoniae</i>	Bovine viral diarrhea Virus (surrogate for Hepatitis C Virus)*
<i>Enterobacter aerogenes</i>	Cytomegalovirus
<i>Escherichia coli</i> New Delhi Metallo-Beta Lactamase-1 (NDM-1)	Duck Hepatitis B Virus (surrogate for human Hepatitis B virus)*
<i>Escherichia coli</i> O157:H7	Herpes simplex virus type 1
Extended Spectrum Beta Lactamase producing <i>Escherichia coli</i> (ESBL producing <i>E. coli</i>)	Herpes simplex virus type 2
Extended Spectrum Beta Lactamase producing <i>Klebsiella pneumoniae</i> (ESBL producing <i>Klebsiella pneumoniae</i>)	Human Coronavirus
<i>Klebsiella oxytoca</i>	Human Immunodeficiency Virus type 1 (HIV-1)*
<i>Klebsiella pneumoniae</i> New Delhi Metallo-Beta Lactamase-1 (NDM-1)	Influenza A virus (H3N2)
Multidrug Resistant <i>Enterococcus faecium</i>	Influenza A virus (2009 H1N1)
Multidrug Resistant <i>Klebsiella pneumoniae</i>	Influenza B virus
Carbapenem-Resistant <i>Klebsiella pneumoniae</i>	Respiratory syncytial virus (RSV)
<i>Pseudomonas aeruginosa</i>	Viruses — 1 min contact time
<i>Salmonella enterica</i>	Avian Influenza A virus (H5N1)
<i>Stenotrophomonas maltophilia</i>	Rhinovirus (type 37)
Penicillin-Resistant <i>Streptococcus pneumoniae</i>	Rotavirus
<i>Streptococcus pyogenes</i>	Viruses — 3 min contact time
Vancomycin-Resistant <i>Enterococcus faecalis</i> (VRE)	Norovirus†
Bacteria — 1 min contact time	TB — 5 min contact time
<i>Acinetobacter baumannii</i>	<i>Mycobacterium bovis</i> (TB)
<i>Campylobacter jejuni</i>	Fungi — 5 min contact time
Community Acquired Methicillin-Resistant <i>Staphylococcus aureus</i> (CA-MRSA)	<i>Candida albicans</i>
Linezolid-Resistant <i>Staphylococcus aureus</i>	<i>Candida auris</i>
Methicillin-Resistant <i>Staphylococcus aureus</i> (MRSA) (ATCC 33591)	<i>Trichophyton mentagrophytes</i> (Athlet's Foot Fungus)
Methicillin-Resistant <i>Staphylococcus aureus</i> (MRSA) (ATCC 33592)	TOTAL: 43 CLAIMS
<i>Staphylococcus aureus</i>	

* Bloodborne pathogens

† Obtained via Feline calicivirus surrogate

Based on EPA Master Labels as of November 2019.
Use as directed on hard, nonporous surfaces.



Use products as directed. Clorox Healthcare recommendations. Your facility's protocol may vary.
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Technical Information



Clorox Healthcare® Hydrogen Peroxide Cleaner Disinfectant Wipes

Products & Safety

SAFETY INFORMATION

Reference the Safety Data Sheet (SDS) sheet for complete product safety information.

EPA Label Statements

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

FIRST AID: IF IN EYES: Hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice. Have the product container or label with you when calling a poison control center or doctor, or when going for treatment.

PHYSICAL AND CHEMICAL HAZARDS: The product contains no substances, which at their given concentration, are considered to be hazardous to health.

National Fire Protection Association (NFPA) Ratings

Health Hazard: 0

Flammability: 0

Instability: 0

Physical and Chemical Hazards: None

Questions?
Call (800) 234-7700

Hazardous Materials Identification System (HMIS) Ratings

Health Hazard: 0

Flammability: 0

Physical Hazard: 0

Personal Protection: A



Use products as directed. Clorox Healthcare recommendations. Your facility's protocol may vary.
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Technical Information

Clorox Healthcare® Hydrogen Peroxide Cleaner Disinfectant



Products & Safety

OVERVIEW

Clorox Healthcare® Hydrogen Peroxide Cleaner Disinfectant liquids and spray are engineered as ready-to-use cleaner-disinfectants for healthcare facilities. They are compatible with a wide range of common healthcare surfaces and have a low residue profile.

These EPA-registered disinfectant liquid contains hydrogen peroxide and other ingredients to kill most bacteria and viruses on a variety of hard, nonporous healthcare surfaces with contact times of 1 minute.

INGREDIENT INFORMATION




Active ingredient: Hydrogen Peroxide.. 1.4%
Other ingredients:..... 98.6%
Total: 100.0%

AVAILABLE FORMATS

Clorox Healthcare® Hydrogen Peroxide Cleaner Disinfectant is available in multiple sizes and formats to accomplish different disinfecting jobs.

At a Glance Clorox Healthcare® Hydrogen Peroxide Cleaner Disinfectant

EPA Registration Number	67619-24
Product Classification	Trigger Spray Pull-Top
Dilution	Ready to use
Disinfectant Type	1-step cleaner-disinfectant
Active Ingredient Chemistry	Hydrogen Peroxide
Odor	Cleaning Agent
Shelf Life	Expiration date listed on each package: month, day, year
Toxicity Signal Word	CAUTION
HMIS Rating	0-0-0-A
PPE Required	Follow your facility's protocols

	Designed For	Item #	Quantity	Shelf Life
Trigger Spray 	Convenient application Enable quick and easy surface coverage	30828	32 oz. spray, bottle, 6/case	24 months
Pull-Top 	Minimizing aerosolization Leverage for larger surfaces or areas where sprays are not preferred	31444	32 oz. pull-top bottle, 6/case	24 months
Refill 	Easy refilling Minimize packaging waste and meet the needs of heavy users.	30829	128 oz. jug refill, 4/case	24 months



Use products as directed. Clorox Healthcare recommendations. Your facility's protocol may vary.
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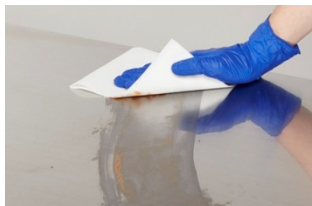
Clorox Healthcare® Hydrogen Peroxide Cleaner Disinfectant



Products & Safety

DISINFECTION DIRECTION FOR USE*

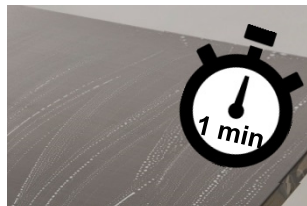
TRIGGER SPRAY (on hard, nonporous surfaces)



1. Put ON PPE.
REMOVE
gross, visible
soil*



2. **SPRAY** 6-8"
from surface
until surface is
thoroughly wet.



3. To **DISINFECT**,
keep surface
visibly wet for 1
minute†



4. **POLISH** surfaces
to remove residue
if visible.

Special Instructions for Use Against HIV-1, HBV and HCV:

This product kills HIV-1, HBV and HCV on precleaned hard, nonporous surfaces/objects previously soiled with blood/body fluids in health care settings or other settings in which there is an expected likelihood of soiling of inanimate surfaces/objects with blood or body fluids, and in which the surfaces/objects likely to be soiled with blood or body fluids can be associated with the potential for transmission of Human Immunodeficiency Virus (HIV-1) (associated with AIDS), Human Hepatitis B (HBV) and Human Hepatitis C (HCV).

Special Instructions for Using This Product to Clean and Decontaminate Against HIV-1, HBV and HCV on Surfaces/Objects Soiled with Blood/Body Fluids:

Personal Protection: When handling items soiled with blood or body fluids, use disposable impervious gloves, gowns, masks and eye coverings.

Cleaning Procedure: Blood and other body fluids must be thoroughly cleaned from surfaces and other objects before applying this product.

Contact Time: Allow surfaces to remain wet for HBV, HCV and HIV-1 for 30 seconds. The contact times for other bacteria, viruses, and fungi may differ. See product label for contact times.

Disposal of Infectious Materials: Use disposable impervious gloves, gowns, masks and eye coverings. Blood and other body fluids must be autoclaved and disposed of according to local regulations for infectious waste disposal.

This product is not to be used as a terminal sterilant/high-level disinfectant on any surface or instrument that (1) is introduced directly into the human body, either into or in contact with the bloodstream or normally sterile areas of the body, or (2) contacts intact mucous membranes, but which does not ordinarily penetrate the blood barrier or otherwise enter normally sterile areas of the body. This product may be used to pre-clean or decontaminate critical or semi-critical medical devices prior to sterilization or high-level disinfection.

* See product label for complete instructions. This is a one-step product. Precleaning is required only if blood, vomit, fecal matter or other soil is visible.

† Standard contact time is 30 seconds for all bacteria and viruses except: 1 minute: Community-acquired Methicillin-resistant *Staphylococcus aureus* (CA-MRSA), Methicillin-resistant *Staphylococcus aureus* (MRSA), *Staphylococcus aureus*, Rhinovirus, Rotavirus, Norovirus. 4 minutes: *Mycobacterium bovis* (Tuberculosis)



Use products as directed. Clorox Healthcare recommendations. Your facility's protocol may vary.
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Technical Information

Clorox Healthcare® Hydrogen Peroxide Cleaner Disinfectant



Products & Safety

DISINFECTION DIRECTION FOR USE*

TRIGGER SPRAY (on hard, nonporous surfaces)



1. Extend privacy curtain to fully expose grab area. Hold bottle 6"– 8" from surface of fabric.
2. Starting at a height approximately 6 feet from the floor, spray uniformly down the grab area of the curtain until reaching a height approximately 3 feet from the floor.*
3. Repeat steps 1–2 on reverse side of curtain.
4. Allow fabric to air dry. Bacteria will be killed in 30 seconds.

Soft Surfaces: Clorox Healthcare® Hydrogen Peroxide Cleaner Disinfectant is EPA-approved to kill *Enterobacter aerogenes* and *Staphylococcus aureus* (Gram-negative and Gram-positive bacteria respectively) — on soft surfaces **in 30 seconds**.

See product label for complete instructions.

* Ensure the fabric of the entire grab area has been sprayed so that it is wet, but do not saturate. Typically this can be accomplished with approximately 9 sprays, using 3 sprays per foot of curtain.

Allow sprayed soft surfaces to air dry before use.



Use products as directed. Clorox Healthcare recommendations. Your facility's protocol may vary.
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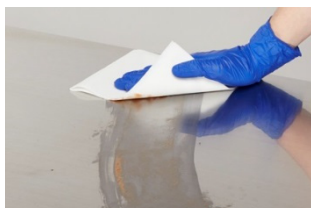
Clorox Healthcare® Hydrogen Peroxide Cleaner Disinfectant



Products & Safety

DISINFECTION DIRECTION FOR USE*

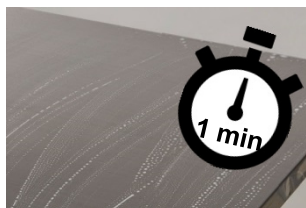
PULL-TOP



1. Put ON PPE.
REMOVE
gross, visible
soil*



2. **APPLY** directly
onto surface
until surface is
thoroughly wet.



3. To **DISINFECT**,
keep surface
visibly wet for 1
minute†



4. **POLISH** surfaces
to remove residue
if visible.

Special Instructions for Use Against HIV-1, HBV and HCV.

This product kills HIV-1, HBV and HCV on precleaned hard, nonporous surfaces/objects previously soiled with blood/body fluids in health care settings or other settings in which there is an expected likelihood of soiling of inanimate surfaces/objects with blood or body fluids, and in which the surfaces/objects likely to be soiled with blood or body fluids can be associated with the potential for transmission of Human Immunodeficiency Virus (HIV-1) (associated with AIDS), Human Hepatitis B (HBV) and Human Hepatitis C (HCV).

Special Instructions for Using This Product to Clean and Decontaminate Against HIV-1, HBV and HCV on Surfaces/Objects Soiled with Blood/Body Fluids:

Personal Protection: When handling items soiled with blood or body fluids, use disposable impervious gloves, gowns, masks and eye coverings.

Cleaning Procedure: Blood and other body fluids must be thoroughly cleaned from surfaces and other objects before applying this product.

Contact Time: Allow surfaces to remain wet for HBV, HCV and HIV-1 for 30 seconds. The contact times for other bacteria, viruses, and fungi may differ. See product label for contact times.

Disposal of Infectious Materials: Use disposable impervious gloves, gowns, masks and eye coverings. Blood and other body fluids must be autoclaved and disposed of according to local regulations for infectious waste disposal.

This product is not to be used as a terminal sterilant/high-level disinfectant on any surface or instrument that (1) is introduced directly into the human body, either into or in contact with the bloodstream or normally sterile areas of the body, or (2) contacts intact mucous membranes, but which does not ordinarily penetrate the blood barrier or otherwise enter normally sterile areas of the body. This product may be used to preclean or decontaminate critical or semicritical medical devices prior to sterilization or high-level disinfection.

*See product label for complete instructions.

† Standard contact time is 30 seconds for all bacteria and viruses except: 1 minute: *Staphylococcus aureus* (*S. aureus*), Community-acquired Methicillin-resistant *S. aureus* (CA-MRSA USA300), Methicillin-resistant *S. aureus* (MRSA), Linezolid-resistant *S. aureus*, Avian influenza A virus H5N1, Rhinovirus, Rotavirus, Norovirus (obtained via surrogate testing using Feline calicivirus). 4 minutes: *Mycobacterium bovis* (TB)



Use products as directed. Clorox Healthcare recommendations. Your facility's protocol may vary.
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Clorox Healthcare® Hydrogen Peroxide Cleaner Disinfectant



Products & Safety

DISINFECTION EFFICACY CLAIMS FOR LIQUIDS & SPRAY

Bacteria	<i>Acinetobacter baumannii</i>	30 sec	Viruses	Avian Influenza A strain H5N1	30 sec
	<i>Campylobacter jejuni</i>	30 sec		Cytomegalovirus	30 sec
	<i>Enterobacter aerogenes</i>	30 sec		Hepatitis B Virus (HBV) [†]	30 sec
	Vancomycin-resistant <i>Enterococcus faecalis</i> (VRE)	30 sec		Hepatitis C Virus (HCV) [†]	30 sec
	Multidrug-resistant <i>Enterococcus faecium</i>	30 sec		Herpes Simplex Virus (HSV-1)	30 sec
	<i>Escherichia coli</i>	30 sec		Herpes Simplex Virus (HSV-2)	30 sec
	<i>Escherichia coli</i> O157:H7	30 sec		Human Coronavirus	30 sec
	ESBL-producing <i>Escherichia coli</i>	30 sec		Human Immunodeficiency Virus Type 1 (HIV-1)	30 sec
	<i>Escherichia coli</i> NDM-1	30 sec		Influenza A Virus	30 sec
	<i>Klebsiella oxytoca</i>	30 sec		Influenza A Virus (H1N1)	30 sec
	Carbapenem-resistant <i>Klebsiella pneumoniae</i>	30 sec		Influenza B Virus	30 sec
	ESBL-producing <i>Klebsiella pneumoniae</i>	30 sec		Norovirus [†]	1 min
	Multidrug-resistant <i>Klebsiella pneumoniae</i>	30 sec		Respiratory Syncytial Virus (RSV)	30 sec
	<i>Klebsiella pneumoniae</i> NDM-1	30 sec		Rhinovirus	1 min
	<i>Mycobacterium bovis</i> (TB)	4 min		Rotavirus	1 min
	<i>Pseudomonas aeruginosa</i>	30 sec	Fungi	<i>Candida albicans</i>	3 min
	<i>Salmonella enterica</i> (tested as <i>Salmonella choleraesuis</i>)	30 sec		<i>Trichophyton mentagrophytes</i> (Athlete's Foot Fungus)	3 min
	<i>Staphylococcus aureus</i>	1 min			
	Linezolid-resistant <i>Staphylococcus aureus</i> (LRSA)	1 min	TOTALS: 43 Claims		
	Methicillin-resistant <i>Staphylococcus aureus</i> (MRSA) (ATCC 33592)	1 min			
	Methicillin-resistant <i>Staphylococcus aureus</i> (MRSA) (ATCC 33591)	1 min			
	Community-acquired Methicillin-resistant <i>Staphylococcus aureus</i> (CA-MRSA) (USA 300)	1 min			
	<i>Staphylococcus epidermidis</i> (Coagulase-negative staphylococci)	1 min			
	<i>Stenotrophomonas maltophilia</i>	30 sec			
	Penicillin-resistant <i>Streptococcus pneumoniae</i> (PRSP)	30 sec			
	<i>Streptococcus pyogenes</i>	30 sec			

* Obtained via surrogate

† Obtained via Feline calicivirus surrogate

Based on EPA Master Labels as of November 2019.

Use as directed on hard, nonporous surfaces.



Use products as directed. Clorox Healthcare recommendations. Your facility's protocol may vary.
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Technical Information



Clorox Healthcare® Hydrogen Peroxide Cleaner Disinfectant

Products & Safety

SAFETY INFORMATION

Reference the Safety Data Sheet (SDS) sheet for complete product safety information.

EPA Label Statements

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

FIRST AID: IF IN EYES: Hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice. Have the product container or label with you when calling a poison control center or doctor, or when going for treatment.

PHYSICAL AND CHEMICAL HAZARDS: The product contains no substances which at their given concentration, are considered to be hazardous to health.

National Fire Protection Association (NFPA) Ratings

Health Hazard: 0

Flammability: 0

Instability: 0

Physical and Chemical Hazards: None

Questions?
Call (800) 234-7700

Hazardous Materials Identification System (HMIS) Ratings

Health Hazard: 0

Flammability: 0

Physical Hazard: 0

Personal Protection: A



Use products as directed. Clorox Healthcare recommendations. Your facility's protocol may vary.
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Technical Information

Clorox Healthcare® VersaSure® Cleaner Disinfectant Wipes



Products & Safety

OVERVIEW

Clorox Healthcare® VersaSure® Wipes are engineered as a ready-to-use cleaner disinfectant system for healthcare facilities.

These EPA-registered wipes contain quaternary ammonium and other ingredients to kill TB and other healthcare-relevant pathogens in 2 minutes or less on a variety of hard, nonporous healthcare surfaces.

INGREDIENT INFORMATION

Active ingredient:

n-Alkyl Dimethyl Benzyl Ammonium

Chloride - 0.25%




n-Alkyl Dimethyl Ethyl Benzyl Ammonium

Chloride - 0.25%

AVAILABLE FORMATS

Clorox Healthcare® VersaSure® Cleaner Disinfectant Wipes are available in multiple sizes and formats to accomplish different disinfecting jobs.

At a Glance Clorox Healthcare® VersaSure® Cleaner Disinfectant Wipes	
EPA Registration Number	67619-37
Product Classification	Pre-moistened wipes
Dilution	Ready to use
Disinfectant Type	1-step Cleaner disinfectant
Active Ingredient Chemistry	Quaternary ammonium
Odor	Fragranced
Shelf Life	Expiration date listed on each package: month, day, year
Toxicity Signal Word	Caution
HMIS Rating	2-0-0-X
PPE Required	Follow your facility's protocols

		Designed for	Item #	Quantity	Shelf life
Multi-Purpose Wipes (6.75"x8")		<ul style="list-style-type: none"> Daily disinfection Patient room surfaces Medical equipment 	31757	85 ct. canister, 6/case	24 months
			31760	30 ct. soft pack, 24/case	24 months
Clinical Wipes (6"x5")		<ul style="list-style-type: none"> Daily disinfection Patient room surfaces Medical equipment 	31758	150 ct. canister, 6/case	24 months
Terminal Wipes (12"x12")		<ul style="list-style-type: none"> Discharge disinfection Large areas 	31759	110 ct. bucket, 2/case	24 months
			31761	110 ct. refill, 2/case	24 months



Use products as directed. Clorox Healthcare recommendations. Your facility's protocol may vary.
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Technical Information

Clorox Healthcare® VersaSure® Cleaner Disinfectant Wipes



Products & Safety

DISINFECTION EFFICACY CLAIMS FOR WIPES

Effective against:			Effective against:		
Bacteria	Multidrug-resistant <i>Acinetobacter baumannii</i>	2 min	Viruses	Avian Influenza A strain H5N1	30 sec
	<i>Bordetella pertussis</i>	2 min		Cytomegalovirus	30 sec
	<i>Burkholderia cepacia</i>	2 min		Hepatitis B Virus (HBV) [†]	30 sec
	<i>Campylobacter jejuni</i>	2 min		Hepatitis C Virus (HCV) [†]	30 sec
	<i>Enterobacter aerogenes</i>	2 min		Herpes Simplex Virus (HSV-1)	30 sec
	Vancomycin-resistant <i>Enterococcus faecalis</i> (VRE)	2 min		Herpes Simplex Virus (HSV-2)	30 sec
	Multidrug-resistant <i>Enterococcus faecium</i>	2 min		Human Immunodeficiency Virus Type 1 (HIV-1)	30 sec
	<i>Escherichia coli</i>	2 min		Influenza A Virus	30 sec
	Carbapenem-resistant <i>Escherichia coli</i>	2 min		Influenza A Virus (H1N1)	30 sec
	<i>Escherichia coli</i> O157:H7	2 min		Measles Virus	30 sec
	<i>Klebsiella pneumoniae</i>	2 min		Middle East Respiratory Syndrome Coronavirus (MERS-CoV)	30 sec
	Carbapenem-resistant <i>Klebsiella pneumoniae</i>	2 min		Mumps Virus	30 sec
	Multidrug-resistant <i>Klebsiella pneumoniae</i>	2 min		Norovirus [‡]	5 min
	<i>Legionella pneumophila</i>	2 min		Respiratory Syncytial Virus (RSV)	30 sec
	<i>Mycobacterium bovis</i> (TB)	2 min	Fungi	Rotavirus	2 min
	<i>Pseudomonas aeruginosa</i>	2 min		<i>Candida albicans</i>	2 min
	<i>Salmonella enterica</i> (tested as <i>Salmonella choleraesuis</i>)	2 min	TOTALS: 45 Claims		
	<i>Serratia marcescens</i>	2 min			
	<i>Shigella dysenteriae</i>	2 min			
	<i>Staphylococcus aureus</i>	2 min			
	Linezolid-resistant <i>Staphylococcus aureus</i> (LRSA)	2 min			
	Methicillin-resistant <i>Staphylococcus aureus</i> (MRSA) (ATCC 33592)	2 min			
	Community-acquired Methicillin-resistant <i>Staphylococcus aureus</i> (CA-MRSA) (USA 300)*	2 min			
	Community-acquired Methicillin-resistant <i>Staphylococcus aureus</i> (CA-MRSA) (USA 400)*	2 min			
	Vancomycin-resistant <i>Staphylococcus aureus</i> (VRSA)	2 min			
	Vancomycin intermediate-resistant <i>Staphylococcus aureus</i> (VISA)	2 min			
	<i>Staphylococcus epidermidis</i> (Coagulase-negative staphylococci)	2 min			
	Penicillin-resistant <i>Streptococcus pneumoniae</i> (PRSP)	2 min			
	<i>Streptococcus pyogenes</i>	2 min			

* US 300 and US 400 strain

[†] Obtained via surrogate

[‡] Obtained via Feline calicivirus surrogate Based on EPA Master Labels as of November 2019.

Use as directed on hard, nonporous surfaces.



Use products as directed. Clorox Healthcare recommendations. Your facility's protocol may vary.
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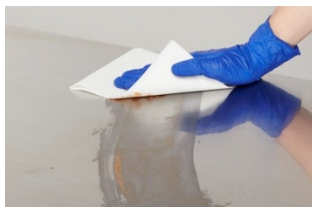
Technical Information

Clorox Healthcare® VersaSure® Cleaner Disinfectant Wipes



Products & Safety

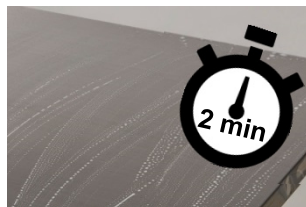
DISINFECTION DIRECTIONS FOR USE



1. Put ON PPE.
REMOVE gross,
visible soil*



2. **WIPE** surface
with wipe until
thoroughly wet.



3. To **DISINFECT**,
keep surface
visibly wet for 2
minutes



4. **POLISH** surfaces
to remove residue
if visible.

Special Instructions for Using This Product to Clean and Decontaminate Against HIV-1, HBV and HCV on Surfaces/Objects Soiled with Blood/Body Fluids:

- **Personal Protection:** When handling items soiled with blood or body fluids, use disposable impervious gloves, gowns, masks and eye coverings.
- **Cleaning Procedure:** Blood and other body fluids must be thoroughly cleaned from surfaces and other objects before applying this product.
- **Contact Time:** Allow surfaces to remain wet for 1 minute, let air dry. For all other organisms, see directions for contact times.
- **Disposal of Infectious Materials:** Use disposable impervious gloves, gowns, masks and eye coverings.
Blood and other body fluids must be autoclaved and disposed of according to local regulations for infectious waste disposal.

This product is not to be used as a terminal sterilant/high-level disinfectant on any surface or instrument that (1) is introduced directly into the human body, either into or in contact with the bloodstream or normally sterile areas of the body, or (2) contacts intact mucous membranes, but which does not ordinarily penetrate the blood barrier or otherwise enter normally sterile areas of the body. This product may be used to preclean or decontaminate critical or semicritical medical devices prior to sterilization or high-level disinfection.

* This is a one-step product. Precleaning is required only if blood, vomit, fecal matter or other soil is visible, or in advance of disinfecting. Use product as directed. For unfamiliar surfaces, test in a small, inconspicuous area first. Consult medical equipment warranty information and equipment care and cleaning guides prior to selecting and using any surface disinfectant.



Use products as directed. Clorox Healthcare recommendations. Your facility's protocol may vary.
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Technical Information



Clorox Healthcare® VersaSure® Cleaner Disinfectant Wipes

Products & Safety

SAFETY INFORMATION

Reference the Safety Data Sheet (SDS) sheet for complete product safety information.

EPA Label Statements

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

CAUTION: Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

FIRST AID: IF ON SKIN: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control center or doctor for treatment advice.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. Have the product container or label with you when calling a poison control center or doctor or when going for treatment. You may also contact: 1-800-446-1014 for emergency medical treatment information.

PHYSICAL AND CHEMICAL HAZARDS: Keep product and empty container away from heat and sources of ignition.

National Fire Protection Association (NFPA) Ratings

Health Hazard: 2

Flammability: 0

Instability: 0

Physical and Chemical Hazards: none

Hazardous Materials Identification System (HMIS) Ratings

Health Hazard: 2

Flammability: 0

Physical Hazard: 0

Personal Protection: X



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