

### One Hospital: Many Areas, Many Surfaces, Many Infection Control Risks

#### C. difficile and Emerging Pathogen Risk Areas









#### **Procedural & Diagnostic Areas**









#### **Challenges**

- 1. Regular *C. difficile* and gastrointestinal pathogen exposure
- 2. High traffic from patients, staff and visitors
- 3. Lack of compliance with contact isolation protocols

#### Challenges

- Odor-sensitive patients and personnel
- 2. Immunocompromised patients with increased susceptibility to infection
- 3. Alcohol-sensitive surfaces and equipment



#### Challenges

- 1. Fast-paced environments
- 2. Regularly soiled/stained surfaces
- 3. Many types of surfaces and medical equipment

#### **Challenges**

- High volumes of visitors and nonclinical staff
- 2. Large, open spaces
- 3. Variety of hard and soft surfaces requiring cleaning and disinfection

#### **Specialty Areas**









# Lobbies & Reception Areas

#### **Common and Staff Areas**

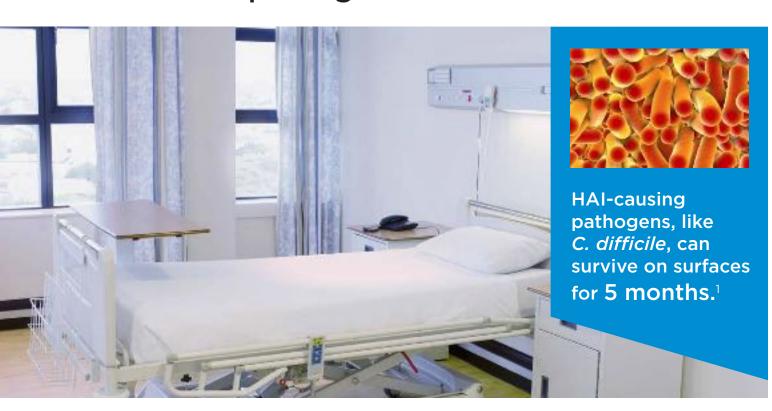






## Spotlight on *C. difficile* Isolation Rooms

## The patient has been discharged, but are there pathogens still around?





*C. difficile* caused nearly half a million infections in a year, resulting in 15,000 deaths.<sup>2</sup> <22%

A recent study reported less than 22% full compliance with contact isolation precautions in CDI patient rooms.<sup>3</sup>

### 2X

A patient admitted to a room whose prior occupant had an infection such as MRSA, *C. difficile* or ESBL-producing coliforms is twice as likely to acquire the same pathogen.<sup>4</sup>

## Recommended Product Solutions for Isolation Rooms

#### **Trusted Sporicidal Efficacy**

Sporicidal surface disinfectants from Clorox Healthcare are trusted by thousands of hospitals in the U.S. Our bleach solutions are engineered to maximize efficacy and minimize residue and surface damage.

#### For Daily and Discharge Cleaning, Use Sporicidal Disinfectants

#### Clorox Healthcare\* Fuzion\* Cleaner Disinfectant

Kills *C.difficile* spores in 2 minutes



- Kills 52 microorganisms including Norovirus in 1 minute
- Low residue formula even on clear plastics, stainless steel, vinvl and more
- Low odor to improve patient and staff experience

#### **Ordering Information**

Item No. 31479, 32 fl. oz. spray, 9/case

EPA Reg. No. 67619-30

#### Clorox Healthcare\* Bleach Germicidal Wipes

Kills C.difficile spores in 3 minutes



- Kills 58 microorganisms, including
   C. difficile spores, Norovirus , MRSA and
   VRE in 3 minutes or less
- Proven efficacy against outbreakcausing viruses
- Re-engineered formula leaves less residue behind

#### Ordering Information

Clinical Wipes (5"x6")
Item No. 30577, 150 ct. canister, 6/case
Multi-Purpose Wipes (6.75"x9")
Item No. 35309, 70 ct. canister, 6/case
Item No. 31424, 50 ct. carton, 6/case
Item No. 31469, 20 ct. soft pack, 24/case
Terminal Wipes (12"x12")
Item No. 30358, 110 ct. bucket, 2/case
Item No. 30359, 110 ct. refill, 2/case

EPA Reg. No. 67619-12

#### Clorox Healthcare\* Bleach Germicidal Cleaner

Kills *C.difficile* spores in 3 minutes



- Kills 50 microorganisms, including C. difficile spores, MRSA and VRE in 3 minutes or less
- Meets CDC and OSHA recommendations for 1:10 bleach solutions for disinfecting healthcare surfaces\*
- Reduces compliance risks and labor costs associated with dilutable disinfectants

#### **Ordering Information**

Item No. 68967, 22 fl. oz. spray, 8/case Item No. 68970, 32 fl. oz. spray, 6/case Item No. 68832, 32 fl. oz. pull-top, 6/case Item No. 68973, 64 fl. oz. refill, 6/case Item No. 68973, 128 fl. oz. refill, 4/case

EPA Reg. No. 56392-7

#### Clorox Healthcare Optimum-UV Enlight System

For enhanced decontamination, implement UV technology



#### Kills more than 30 HAI-causing pathogens in 5 minutes at 8 feet, including

- 4-log reduction of *C. difficile* spores
- Greater than 5-log reduction of over 20 pathogens, including MRSA, VRE and CRE

For more information, contact your Clorox Healthcare account manager or or visit www.cloroxhealthcare.com/UV

<sup>1.</sup> Kramer A, Schwebke I, Kampf G. How long do nosocomial pathogens persist on inanimate surfaces? A systematic review. BMC Infect Dis. 2006;6:130.

<sup>2.</sup> Lessa FC, Winston LG, McDonald LC; Emerging Infections Program C. difficile Surveillance Team. Burden of Clostridium difficile Infection in the United States. N Engl J Med. 2015;372(24):2368-2370.

3. Yanke E et al. Understanding the current state of infection prevention to prevent Clostridium difficile infection: A human factors and systems engineering approach. Am J

Infect Control. 2015; 43(3):241-247.

<sup>4.</sup> Mitchell BG et al. Risk of organism acquisition from prior room occupants: A systematic review and meta-analysis. J Hosp Infect. 2015; 91(3):211-217

## Spotlight on the Emergency Department

When you don't know what's coming through your doors, don't take any chances with cleaning and disinfection protocols.



137 million

ED visits have increased over the past 7 years and continue to remain high. In 2015, there were 137 million visits to the ED.<sup>2</sup> 66%

Up to  $^2/_3$  of ED procedures result in healthcare professional contact with blood or body fluids.<sup>3</sup>

10%

Among those presenting to US EDs with diarrhea and no vomiting, 10% had a *C. difficile* infection.<sup>4</sup>

## Recommended Product Solutions for the Emergency Department

#### **Fast Contact Times**

Clorox Healthcare® Hydrogen Peroxide Cleaner Disinfectant liquids and wipes are ideal for use in the Emergency Department. Fast contact times and excellent cleaning power give you more time to care for your patients in need. When *C. difficile* is a concern, trust bleach disinfectants including Clorox Healthcare® Bleach Germicidal Wipes and Fuzion® Cleaner Disinfectant.

#### For Between-Patient Cleaning

Clorox Healthcare Hydrogen Peroxide Cleaner Disinfectants

Kills more than 38 microorganisms in 1 minute or less



- 1-step product for efficient cleaning and disinfecting with less residue
- No added fragrances or harsh odors
- Liquid sanitizes soft surfaces in 30 seconds

#### **Ordering Information**

#### Multi-Purpose Wipes (6.75"x9")

Item No. 30824, 95 ct. canister, 6/case Item No. 31426, 50 ct. carton, 6/case Clinical Wipes (6.75"x5.75")
Item No. 30825, 155 ct. canister, 6/case Terminal Wipes (12"x11")

Item No. 30826, 185 ct. bucket, 2/case Item No. 30827, 185 ct. refill pouch, 2/case

#### Liquids

Item No. 30828, 32 fl. oz. spray, 9/case Item No. 31444, 32 fl. oz. pull-top, 6/case Item No. 30829, 128 fl. oz. refill, 4/case

EPA Reg. No. 67619-25 (Wipes) EPA Reg. No. 67619-24 (Liquids)

#### Clorox Healthcare\* Bleach Germicidal Wipes

Re-engineered to maximize efficacy, minimize residue



- Kills 58 microorganisms, including
   C. difficile spores, Norovirus , MRSA and
   VRE in 3 minutes or less
- Proven efficacy against outbreakcausing viruses
- Re-engineered formula leaves less residue behind

#### Ordering Information

#### Clinical Wipes (5"x6")

Item No. 30577, 150 ct. canister, 6/case Multi-Purpose Wipes (6.75"x9")
Item No. 35309, 70 ct. canister, 6/case Item No. 31424, 50 ct. carton, 6/case Item No. 31469, 20 ct. soft pack, 24/case Terminal Wipes (12"x12")

Item No. 30358, 110 ct. bucket, 2/case Item No. 30359, 110 ct. refill, 2/case

EPA Reg. No. 67619-12

#### Clorox Healthcare\* Fuzion\* Cleaner Disinfectant

Easy-to-use next-generation bleach disinfectant



- Kills C.difficile spores and 52 other microorganisms in 2 minutes or less
- Low residue formula even on clear plastics, stainless steel, vinyl and more
- **Low odor** to improve patient and staff experience

#### **Ordering Information**

Item No. 31479, 32 fl. oz. spray, 9/case

EPA Reg. No. 67619-30

Our products are scientifically tested on a variety of medical surfaces and equipment. For comprehensive information on the Clorox Healthcare Compatible™ program and current compatibility information, visit https://www.cloroxpro.com/resource-center/surface-compatibility/

<sup>1.</sup> Clorox Custom Research, Acute Care Departmental Quantitative Analysis of Clinical Staff (n=139), March 2018.

Rui P, Kang K. National Hospital Ambulatory Medical Care Survey: 2015 Emergency Department Summary Tables. https://www.cdc.gov/nchs/data/nhamcs/web\_tables/2015\_ed\_web\_tables.pdf" (Accessed 8/29/2018).

<sup>3.</sup> Liang SY, Theodoro DL, Schuur JD, Marschall J. Infection prevention in the emergency department. Ann Emerg Med. 2014;64(3):299-313.

<sup>4.</sup> Abrahamian FM, et al. Clostridium difficile infection among US emergency department patients with diarrhea and no vomiting. Annals of Emergency Medicine. 2017; 70 (1): 19-27e.4.

## Spotlight on the **Operating Room**

Cleaning the OR is a complex task involving multiple team members and many different types of surfaces and equipment.



157,500

There are an estimated 157,500 surgical site infections (SSI) that result from inpatient surgeries each year.2

\$21,000

An SSI costs hospitals, on average, \$20,785, but can increase to \$42,000 for infections caused by antibiotic-resistant bacteria, such as MRSA.3



An SSI can increase an average hospital stay from 7 to 11 days.4

2. Magill SS, et al. Multistate Point-Prevalance Survey of Health Care-Associated Infections, N Engl J Med. 2014; 370(13):1198-1208

#### **Recommended Product Solutions** for the Perioperative Suite

#### **Trusted Efficacy, Tough Cleaning Power and Fast Contact Times**

Clorox Healthcare® Hydrogen Peroxide Cleaner Disinfectant is ideal for use in the perioperative setting. Fast contact times and strong cleaning power can speed up turnover time, while excellent surface compatibility preserves surfaces without leaving behind heavy residue. To go above and beyond manual surface cleaning and disinfection, we recommend incorporating the Optimum UV Enlight® System.

#### For Between Procedure and Terminal Cleaning

#### Clorox Healthcare® Hydrogen Peroxide Cleaner Disinfectant Wipes

Kills MRSA, HIV-1, HBV and HCV in 1 minute



- Kills 38 microorganisms in 1 minute or less
- 1-step product for efficient cleaning and disinfecting with less
- No added fragrances or harsh odors

#### **Ordering Information**

#### Multi-Purpose Wipes (6.75"x9")

Item No. 30824, 95 ct. canister, 6/case Item No. 31426, 50 ct. carton, 6/case Clinical Wipes (6.75"x5.75")

Item No. 30825, 155 ct. canister, 6/case

Terminal Wipes (12"x11")

Item No. 30826, 185 ct. bucket, 2/case Item No. 30827, 185 ct. refill pouch, 2/case

EPA Reg. No. 67619-25

#### Clorox Healthcare\* Hydrogen Peroxide Cleaner Disinfectant

Kills bacteria on hard and soft surfaces



- Kills 40 microorganisms in 1 minute or less
- Sanitizes soft surfaces in 30 seconds
- No added fragrances or harsh odors

#### **Ordering Information**

Item No. 30828, 32 fl. oz. spray, 9/case Item No. 31444, 32 fl. oz. pull-top, 6/case Item No. 30829, 128 fl. oz. refill, 4/case

EPA Reg. No. 67619-24

#### Clorox Healthcare\* Optimum-UV Enlight® System

For enhanced decontamination, Implement UV technology



#### Kills more than 30 HAI-causing pathogens

in 5 minutes at 8 feet, including

- 4-log reduction of *C. difficile* spores
- Greater than 5-log reduction of over 20 pathogens, including MRSA, VRE and CRE

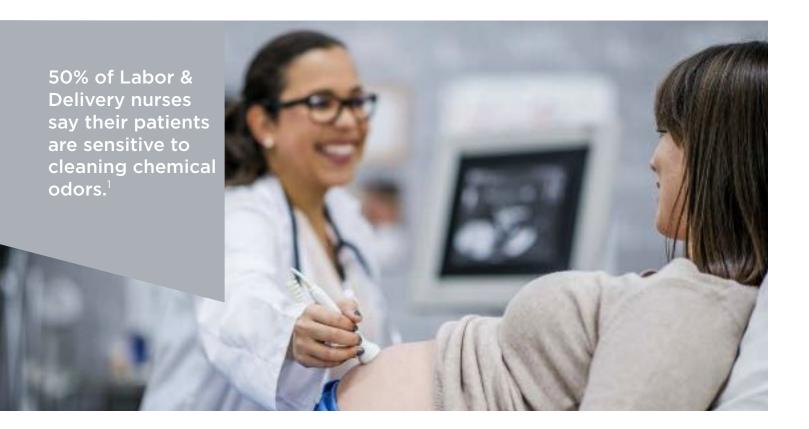
For more information, contact your Clorox Healthcare account manager or or visit www.cloroxhealthcare.com/UV

<sup>1.</sup> 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;93(3):358-364.

Zimlichman E, 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, et al. Strategies to prevent surgical site infections in acute care hospitals: 2014 update. Infect Control Hosp Epidemiol. 2014;35(6):605-627.

## Spotlight on the Labor & Delivery Unit

Maintaining a clean healthcare environment shouldn't get in the way of keeping new moms and babies happy and healthy.



91%

91% of Labor & Delivery nurses say blood stains are challenging to deal with.<sup>1</sup> 82%

82% of Labor & Delivery nurses say MRSA and HIV are top pathogens concerns.<sup>1</sup> 2.5X

Babies born < 32 weeks and cared for in a NICU were 2.5 times more likely to become colonized with MRSA.<sup>2</sup>

1. Clorox Custom Research, Acute Care Departmental Quantitative Analysis of Clinical Staff (n=139), March 2018.
2. Washam M, et al. Risk factors for methicillin-resistant Staphylococcus aureus colonization in the neonatal intensive care unit: A systematic review and meta-analysis. Am J Infect Control 2017;45(12):1388-1393

## Recommended Product Solutions for Labor and Delivery

#### **Low Odor, Great Aesthetics**

Clorox Healthcare® VersaSure™ Cleaner Disinfectant Wipes are a versatile alcohol-free quat solution with a low odor profile. These wipes are ideal for use in areas with the most odor-sensitive patients and personnel. For discharge cleaning and when *C. difficile* is a concern, trust bleach disinfectants including Clorox Healthcare® Bleach Germicidal Wipes and Fuzion® Cleaner Disinfectant.

#### For Daily Cleaning

#### Clorox Healthcare VersaSure™ Cleaner Disinfectant Wipes

#### Kills bacteria and viruses in 2 minutes



- 1-step cleaner disinfectant kills bacteria and fungus, including MRSA and TB. in 2 min
- Kills viruses, including mumps and measles viruses, in 30 seconds<sup>†</sup>
- **Alcohol-free quat formula** offers low odor and low residue

#### **Ordering Information**

#### Multi-Purpose Wipes (6.75"x8")

Item No. 31757, 85 ct. canister, 6/case Item No. 31760, 30 ct. pouch, 24/case Multi-Purpose Wipes (6"x5") Item No. 31758, 150 ct. canister, 6/case Terminal Wipes (12"x12") Item No. 31759, 110 ct. bucket, 2/case

Item No. 31761, 110 ct. refill, 2/case

<sup>†</sup>Contact time for Rotavirus is 2 minutes

EPA Reg. No. 67619-37

#### For Discharge Cleaning

#### Clorox Healthcare<sup>\*</sup> Bleach Germicidal Wipes

#### Recommended in equipment cleaning and care guides\*



- Kills 58 microorganisms, including
   C. difficile spores, Norovirus, MRSA and VRE in 3 minutes or less
- Proven efficacy against outbreakcausing viruses
- **Re-engineered formula** leaves less residue behind

#### Ordering Information

#### Clinical Wipes (5"x6")

Item No. 30577, 150 ct. canister, 6/case **Multi-Purpose Wipes (6.75"x9")**Item No. 35309, 70 ct. canister, 6/case

Item No. 31424, 50 ct. carton, 6/case Item No. 31469, 20 ct. soft pack, 24/case **Terminal Wipes (12"x12")** 

Item No. 30358, 110 ct. bucket, 2/case Item No. 30359, 110 ct. refill, 2/case

EPA Reg. No. 67619-12

#### Clorox Healthcare

#### Low odor, low residue next-generation bleach

Fuzion® Cleaner Disinfectant



- Kills C.difficile spores and 52 other microorganisms in 2 minutes or less
- Low residue formula even on clear plastics, stainless steel, vinyl and more
- Low odor to improve patient and staff experience

#### **Ordering Information**

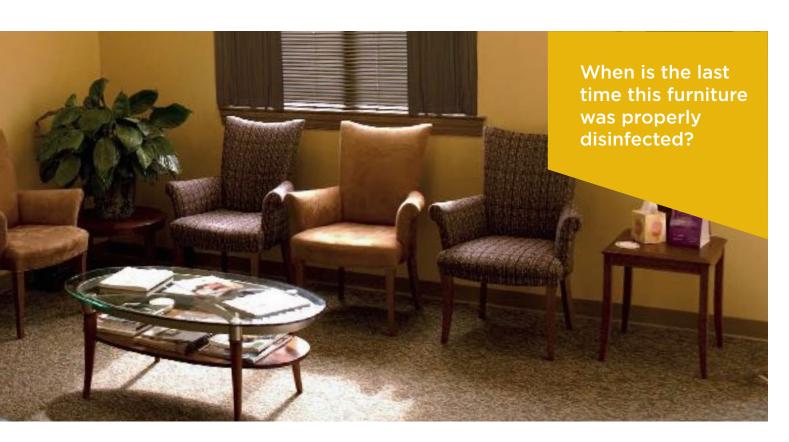
Item No. 31479, 32 fl. oz. spray, 9/case

EPA Reg. No. 67619-30

Our products are scientifically tested on a variety of medical surfaces and equipment. For comprehensive information on the Clorox Healthcare Compatible™ program and current compatibility information, visit https://www.cloroxpro.com/resource-center/surface-compatibility/

## Spotlight on Common and Staff Areas

Not all surfaces are treated equally when it comes to cleaning and disinfecting.



50 feet

A recent study showed that a virus can quickly spread within public restrooms and even surfaces 15-50 feet away from the restrooms.1

3 months

Enterococci and staphylococci can survive for up to 3 months after drying on common healthcare fabrics.<sup>2</sup>

50%

Almost 50% of professional cleaners experience spills of blood or feces every day.3

#### 1. Pivo T, et al. Movement of pathogens from public restroom to clinical areas in a hospital. Am J Infect Control. 2016;44(6):S44.

- Neely AN, Maley MP. Survival of enterococci and staphylococci on hospital fabrics and plastic. J Clin Microbiol. 2000;38(2):724-726.
- 3. Clorox Professional Products Company, Online national survey of 217 surface disinfection decision makers, December 2017

#### **Recommended Product Solutions** for Common & Staff Areas

Pathogen transmission risks are a facility-wide concern. Our healthcare disinfectants, professional cleaners and disinfectants and enhanced disinfection system are created to help keep surfaces clean and areas comfortable and odor free - from transport equipment to offices and breakrooms to restrooms. For C.difficile concerns in public restrooms and other staff and common areas, we recommend Clorox Healthcare® Fuzion® Cleaner Disinfectant.

**Clorox Commercial Solutions®** Clorox® Disinfecting Wipes

For everyday use in staff areas



- Clean and disinfect with one guick wipe
- Kills 22 viruses, including cold and flu viruses, in just 15 seconds
- Thick textured wipes are ideal for spills and dirt

#### **Ordering Information**

Item No. 15949, Fresh Scent Wipes, 7" x 8". 75 ct.. 6/cs. Item No. 15948. Lemon Scent Wipes. 7" x 8", 75 ct., 6/cs. Item No. 31547, Fresh Scent Wipes, 7" x 7", 700 ct. bucket, 1/cs. Item No. 31428, Fresh Scent Wipes. 7" x 7", 700 ct. refill, 1/cs.

EPA Reg. No. 67619-31

**Clorox Commercial Solutions®** Clorox® Disinfecting **Bio Stain & Odor Remover** 

> For bio stains on hard and soft surfaces



- EPA-registered to kill 19 pathogens found in bio soils in as little as 30
- Kills 99.9% of bacteria on soft
- Broad surface compatibility: Safe for use on common surfaces in your facility including upholstery, carpet, tile, grout, toilets and more!

#### **Ordering Information**

Item No. 31903, 32 fl. oz. spray, 9/case Item No. 31911, 32 fl. oz. pull-top, 6/case Item No. 31910, 128 fl. oz. refill, 4/case

EPA Reg. No. 67619-33

Clorox Healthcare\* **Fuzion** Cleaner Disinfectant

For *C. difficile* concerns in public restrooms



- Kills C.difficile spores and 52 other microorganisms in 2 minutes or less
- **Low odor -** Mild bleach odor disappears within 3-6 minutes
- Leaves little to no residue on surfaces

#### **Ordering Information**

Item No. 31479, 32 fl. oz. spray, 9/case

EPA Reg. No. 67619-30

#### Clorox® Total 360® System

For large areas and hard-to-reach surfaces



The Clorox\* Total 360\* System provides a disinfecting solution that treats commonly touched and rarely disinfected surfaces in healthcare facilities.

- Works up to 4X faster\*
- Reduces trigger fatigue<sup>†</sup>
- Uses 65% less solution\*

For more information, contact your Clorox Healthcare account manager or visit www.cloroxtotal360.com

<sup>\*</sup> versus a trigger sprayer per square foot

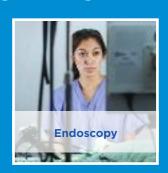
<sup>†</sup> versus a trigger sprave

### Partner with Clorox Healthcare to Eliminatethe Environment as a Source of Infection

#### C. difficile and Emerging Pathogen Risk Areas









#### Procedural & Diagnostic Areas







#### Challenges

- 1. Regular C. difficile and gastrointestinal pathogen exposure
- 2. High traffic from patients, staff and visitors
- 3. Lack of compliance with contact isolation protocols

#### **Recommended Clorox Healthcare® Solutions:**

Bleach Germicidal Wipes & Liquids; Fuzion®. For enhanced decontamination, add Optimum UV-Enlight® System.



#### Challenges

- 1. Odor-sensitive patients and personnel
- 2. Immunocompromised patients with increased susceptibility to infection
- 3. Alcohol-sensitive surfaces and equipment

#### **Recommended Clorox Healthcare® Solutions:**

VersaSure<sup>™</sup> Cleaner Disinfectant Wipes.





#### Challenges

- 1. Fast-paced environments
- 2. Regularly soiled/stained surfaces
- 3. Many types of surfaces and medical equipment

#### **Recommended Clorox Healthcare® Solutions:**

Hydrogen Peroxide Wipes & Liquids. For enhanced decontamination, add Optimum UV-Enlight® System.



#### Challenges

- 1. High volumes of visitors and non-clinical staff
- 2. Large, open spaces
- 3. Variety of hard and soft surfaces requiring cleaning and disinfection

#### **Recommended Clorox® Solutions:**

Disinfecting Wipes and/or Bio Stain & Odor Remover. For enhanced disinfection, add Total 360° System.







#### **Specialty Areas**











#### **Common and Staff Areas**







## Partner with Clorox Healthcare to Eliminate the Environment as a Source of Infection

More than 4,300\* U.S. hospitals trust Clorox Healthcare products to help protect their patients. Clorox Healthcare offers comprehensive solutions – including products, protocols and training – to help you prevent and stop the spread of infections in every part of your hospital, from the Emergency Department to the Operating Room to patient rooms, and beyond.

#### **Product Solutions**

#### **Manual Cleaning and Disinfection**



#### **Healthcare Cleaner-Disinfectants**

Ready-to-use cleaner-disinfectant wipes and liquids designed to kill pathogens on contaminated surfaces and equipment in patient care areas.



#### **Professional Cleaners and Disinfectants**

Professional cleaners and disinfectants created to keep non-patient care areas including waiting areas, staff offices, breakrooms and public restrooms clean, comfortable and odor-free.

#### **Enhanced Decontamination**



#### **UV Technology**

The Clorox Healthcare® Optimum-UV Enlight® System provides the power of ultraviolet technology for more comprehensive surface coverage in healthcare facilities.



#### **Electrostatic Technology**

The Clorox® Total 360® system offers superior electrostatic coverage with trusted Clorox Products for large and hard-to-reach surfaces.

#### **Training and Accessories**

Effective products are only part of a robust environment-focused infection prevention program. We also offer training tools and accessories to help with the product conversion process and enable compliant product usage.

Live inservicing and training sessions

Reference guides, videos and training posters

Brackets and stickers for wipes canisters and buckets

For more information contact your Clorox Healthcare account manager or call 800-234-7700 email: healthcare@clorox.com visit us: www.cloroxhealthcare.com

