



INFECTION PREVENTION FUNDAMENTALS

Jordan Jones, Regional Manager
Spartan Chemical Company

INTRODUCTION



Jordan Jones
Regional Manager

ABOUT SPARTAN

- **Founded in 1956** – Family-owned and operated.
- **Industry Leader** – Specializes in sustainable cleaning and sanitation solutions.
- **Global Reach** – 500+ U.S. distributors and 53 international partners spanning five continents.
- **Diverse Markets Served** – Healthcare, education, food service, hospitality, building services, and more.
- **EPA Recognized** – Named Safer Choice Partner of the Year in 2024 for environmental commitment.

PREVENTION

WHY INFECTION PREVENTION MATTERS

- Healthcare-associated infections (HAIs) remain a major risk
- Environmental surfaces play a key role in transmission
- Effective prevention relies on:
 - Proper cleaning practices
 - Correct disinfectant use
 - Consistent compliance

UNDERSTANDING REGULATION AND DOCUMENTATION



The Centers for Disease Control (CDC) – Guidance on Infection Prevention Practices

- Does not regulate any cleaning and disinfection products.
- Primary role in this area is to provide guidance on how & where to use other registered & regulated tools.
- Publish information about emerging or ongoing health issues
- Provide guidelines on how to clean, disinfect and validate the processes for specific types of facilities.



The Environmental Protection Agency (EPA) – Disinfectants (registration, labeling, claims)

- Oversees all aspects of testing, registering, labeling, and marketing of surface sanitizers, disinfectants, and sterilizers.
- Includes guides on what is allowed on the label and the information that is used on the related marketing materials.
- EPA uses its own safety language key words; they are listed here from safest to most harmful: Caution, Warning, Danger, and Danger Poison.

Food and Drug Administration (FDA) – Medical devices and Antimicrobial Products for Skin

- Responsible for protecting the public health by ensuring the safety, efficacy, and security of human and veterinary drugs, biological products, and medical devices
- Ensuring the safety of our nation's food supply, cosmetics, and products that emit radiation.
- Oversees all aspects of testing, registering, labeling, and marketing of skin contact products making antimicrobial claims.



DISINFECTION LABELS

A Disinfectant is only as good as its label says it is!

- EPA registration number identifies approved products
- Label defines:
 - Approved uses
 - Contact time
 - Safety requirements

If it's not on the label → it should not be done

Spartan

HALT[®] 5

One-Step⁴ Disinfectant - Cleaner - Sanitizer - Virucide* - Deodorizer

**KEEP OUT OF REACH OF CHILDREN
DANGER PELIGRO**

See back panel for additional precautionary statements.

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 first 5 minutes, then continue rinsing eye.

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

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For general information on product use, etc., call the National Pesticides Information Center at 1-800-858-7378. You may also contact the poison control center at 1-800-222-1222 for emergency medical treatment information.

EPA Reg. No. 6836-363-5741 EPA Est. No. 5741-OH-1

Sold by: Spartan Chemical Company, Inc.
1110 Spartan Drive, Maumee, Ohio 43537 USA
1-800-537-8990 / www.spartanchemical.com / For medical emergencies, call: 888-314-6171

NET CONTENTS: 1 U.S. Gallon / 3.79 Liters

ACTIVE INGREDIENTS:
Dioctyl dimethyl ammonium chloride4.03%
Alkyl (67%C12, 25%C14, 7%C16, 1%C18) dimethyl benzyl ammonium chloride..... 2.69%
OTHER INGREDIENTS:93.28%
TOTAL:100.00%

FOR INSTITUTIONAL AND INDUSTRIAL USE

7 53727 71246 5

#102904

DISINFECTION

WHAT MAKES A DISINFECTANT EFFECTIVE

- Must be tested against specific organisms
- Performance depends on:
 - Surface condition (clean vs dirty)
 - Contact time
 - Proper dilution
- “One-step” products combine cleaning + disinfecting

DEFINITIONS

KNOWING THE DIFFERENCE

CLEANING = removes dirt and reduces germs

Refers to the removal of dirt and impurities, including germs from surfaces. Cleaning alone does not kill the germs. But by removing the germs it decreases their number and therefore any risk of spreading infection (*Source CDC.gov*).

SANITIZING = reduces germs to safe levels

Reduction of pathogens to a safe and acceptable level.

A Sanitizer claim is for 99.9% of the claimed organism

DISINFECTING = kills specific organisms

Works by using chemicals, for example, EPA-registered disinfectants, to kill germs on surfaces. This process does not necessarily clean dirty surfaces or remove germs. But killing germs remaining on a surface after cleaning further reduces any risk of spreading infection (*Source CDC.gov*)

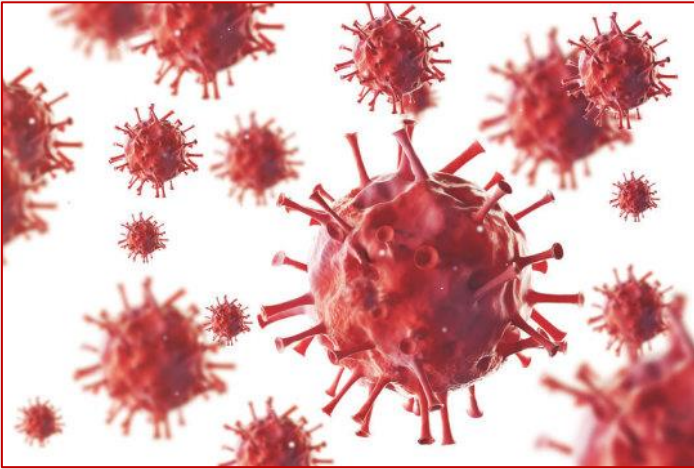
Disinfection is 100% kill of the claimed organism.

STERILIZATION = eliminates all microorganisms

100% kill of ALL organisms on a surface

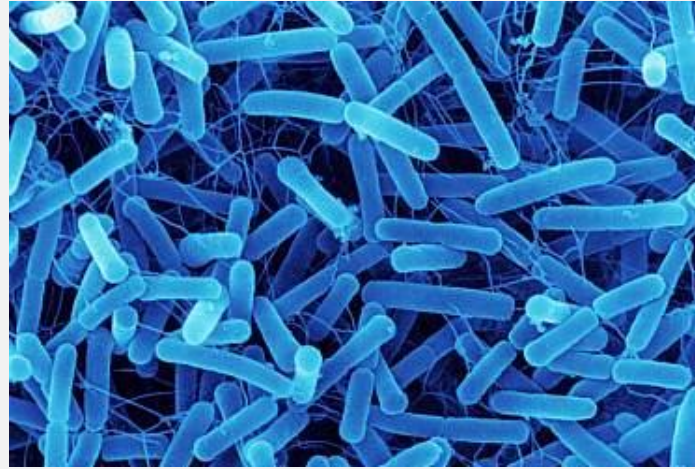
WHAT ARE WE TRYING TO KILL?

MICROORGANISMS OF CONCERN



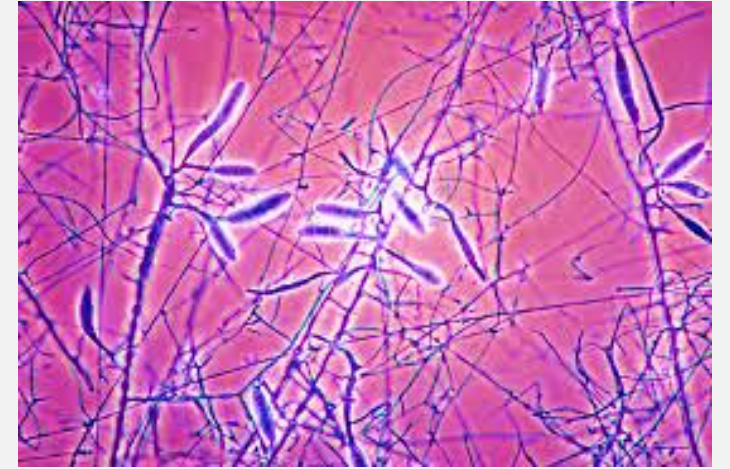
VIRUSES

Influenza, Norovirus, HIV.



BACTERIA

MRSA, E. coli, TB.



FUNGI

Dermatophytes.

→ Different organisms require different control strategies

RISKS

HOW INFECTIONS SPREAD IN ENVIRONMENTS

- High-touch surfaces are key transmission points
- Risk increases with:
 - More people
 - Less frequent cleaning
 - Improper technique

CONSIDERATIONS

ENVIRONMENT MATTERS

COMMUNITY ENVIRONMENT

- High traffic
- Unlimited amount of people using objects in a room
- Limited cleaning time/little time for a disinfectant to work properly



CONTROLLED ENVIRONMENT

- Fewer surface contacts
- High frequency + structured cleaning
- Time allotment for proper dwell time



→ Recontamination happens quickly in high-traffic spaces

DISINFECTION

HOW DISINFECTANTS WORK

- Break down cell membranes
- Denature proteins
- Disrupt microbial function

→ Effectiveness improves when surfaces are pre-cleaned

CONSIDERATIONS

CHOOSING THE RIGHT APPROACH

- ✓ Type of organism
- ✓ Surface type
- ✓ Contact time available
- ✓ Safety and compatibility
- ✓ Frequency of cleaning

CONTROLLED ENVIRONMENT

DISINFECTANT OPTIONS



HOSPITALS



LONG-TERM CARE



AMBULATORY CARE



SURGERY CENTERS

CONTROLLED ENVIRONMENT

LEVELS OF DISINFECTION



Low-level

- Routine surfaces
- Hospital-grade disinfecting
- Blood borne pathogen clean-up
(kills HBV, HCV, HIV-1) – kills most microorganisms, but not TB



Intermediate

- Specialized pathogen control
(TB and stronger)



High-level

- Specialized use
- Kills some spores, including C. diff

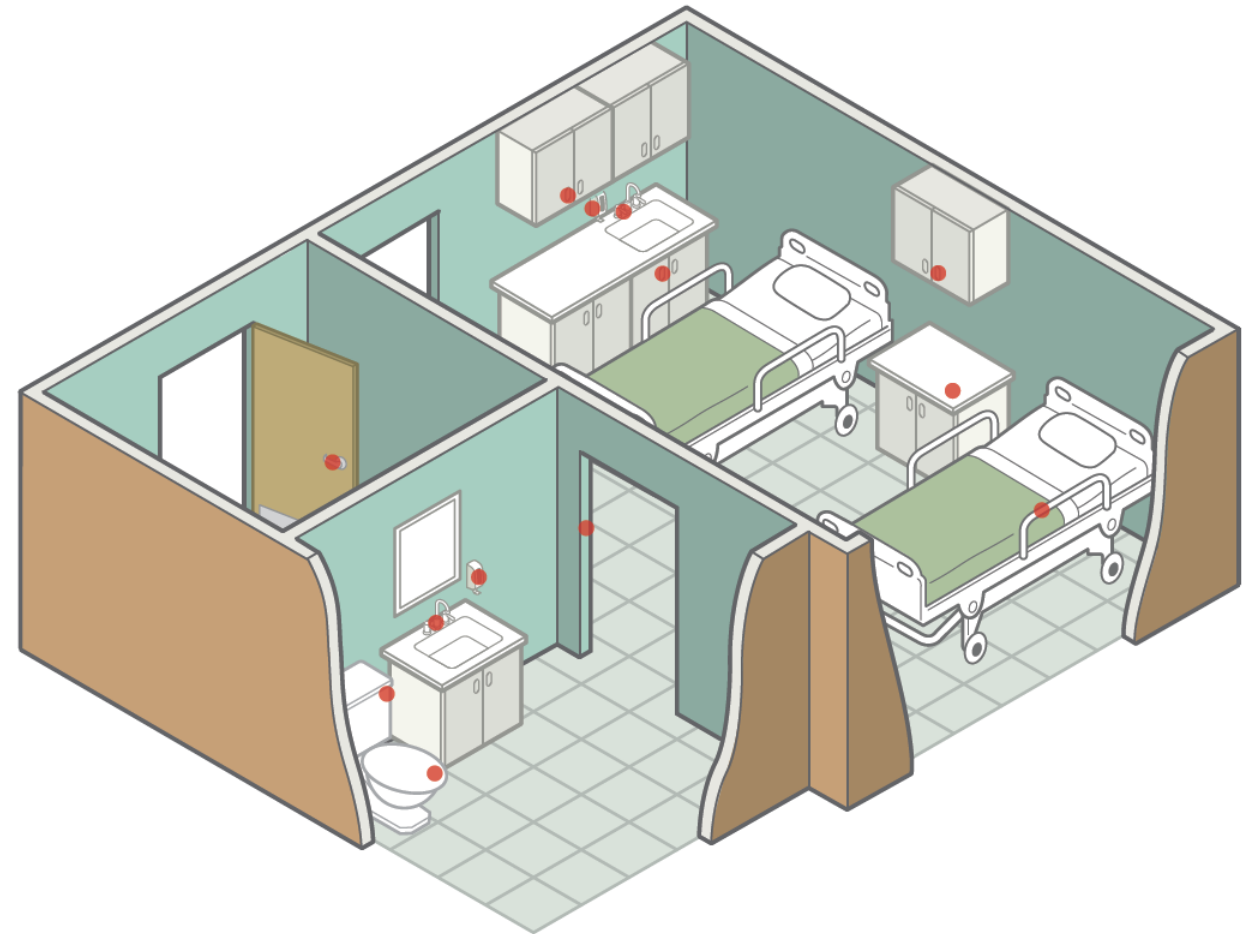


CRITICAL TOUCH POINTS

Focus on:

- Bed rails
- Door handles
- Equipment
- Bathroom fixtures
- Shared devices

→ These surfaces drive transmission risk



• Critical touch points

DISINFECTION

MULTI-DRUG-RESISTANT ORGANISMS (MDROS)

- Highly resistant bacteria (e.g., MRSA, CRE)
- Spread primarily through contact
- Clinical Features:
 - Highly drug-resistant bacteria “super bugs”
 - Plasmid is easily transferable to other bacteria

DISINFECTION

PREVENTING MDRO SPREAD

- Hand hygiene
- Surface disinfection
- Equipment control
- Isolation protocols

CRITICAL ASPECTS

KEY ELEMENTS OF AN EFFECTIVE PROGRAM

- **PEOPLE** – Training and accountability
- **PROCESSES** – standardized procedures
- **PRODUCTS** – appropriate selection
- **VALIDATION** – monitoring and compliance



ASSESS YOUR NEEDS

Your Spartan team will work with you to establish and document your cleaning and sanitation goals.



CREATE YOUR PROGRAM

Your Spartan team will then put together a complete program that focuses on cleaning and disinfecting your entire facility.



TRAIN YOUR STAFF

Training of your environmental services / infection prevention staff is paramount to the success of the program. Your Spartan team will implement a CleanCheck® training program to fit your operations inclusive of cleaning for health, laundry/linen management, and food service cleaning and sanitation.

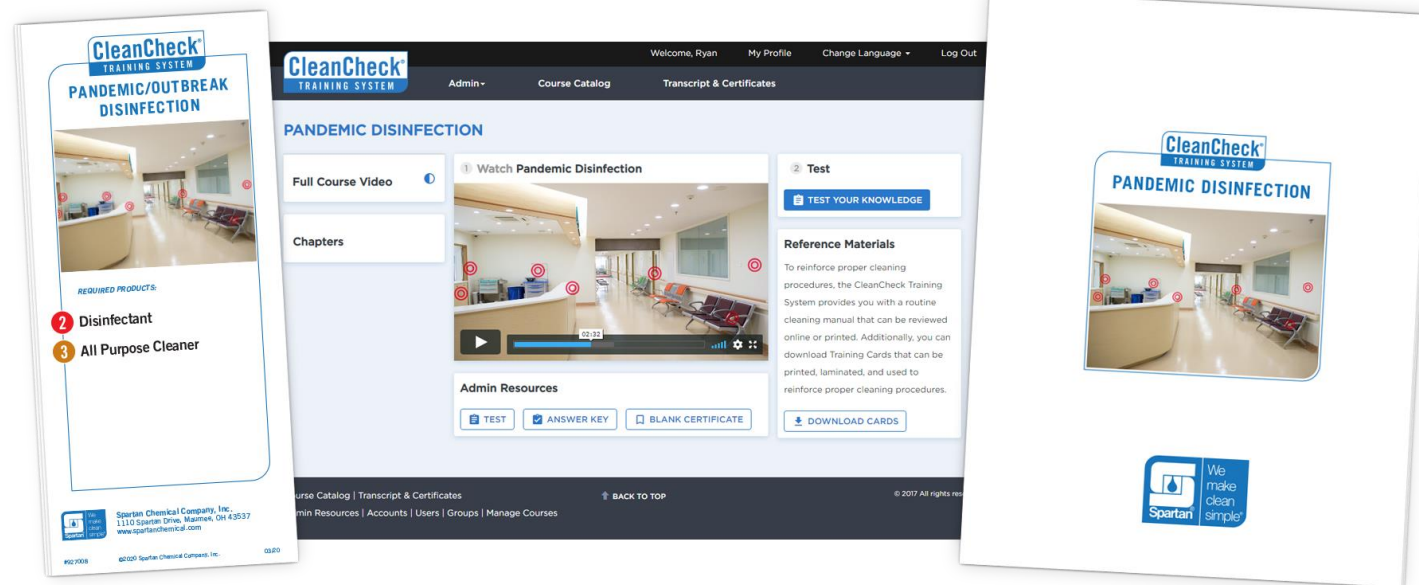


TRACK/VERIFY PROGRESS AND IDENTIFY AREAS OF CONCERN

Using the quality assurance tool in CompuClean, your EVS specialists/supervisors will be able to measure, validate, document, and manage your cleaning effectiveness, ensuring a safe environment for residents, visitors, and staff.

TRAINING CLEANCHECK® TRAINING SYSTEM

While hand hygiene is the first line of defense against the spread of harmful bacteria such as SARS-CoV-2, disinfection of high touch surfaces helps reduce the risk of personnel coming in contact with a contaminated surface.



learn more about CleanCheck® Training System:



TRAINING – MANAGE – VALIDATE

HealthCheck®

Helping you manage for a healthy environment

At every healthcare facility, the safety and recovery of each patient is the top priority.

At the same time, this level of care and concern must be extended to the staff and visitors by always maintaining a clean, pathogen-free environment.

HealthCheck has been specifically designed to address these priorities by integrating world-class products, tools and resources into a dedicated program that will help streamline your cleaning operations to ensure safer, cleaner facilities.



KEY TAKEAWAYS

- Cleaning and disinfection are not interchangeable
- Process matters more than product along
- High-touch surfaces drive infection risk
- Consistency is critical to prevention

FOR MORE INFORMATION



206.850.2847



jjones@spartanchemical.com



spartanchemical.com

