The “Dirty” on Disinfectants & OSMH EVS Roadshow

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Soldiers’ MEMORIAL HOSPITAL Orillia

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What is the EVS Road Show?

- Our “show” consists of coming with one of our own EVS workers, Kathy and looking at your cleaning/disinfectant products, and housekeeping cart, making sure you’re not creating extra work with the wrong products/supplies etc and offering any suggestions.
- We then have whoever does your cleaning, clean somewhere (usually a resident bathroom that is already due to be cleaned) and then we offer any tips/tricks to make cleaning easier and more effective.
- We then plant “glo germ” in that same area and have them clean again using the tips and tricks we gave them.
- We then evaluate how well they cleaned (with the blue light to show any missed glo-germ) and discuss findings.
- We have power points and audit sheets we leave with you as well as a certification of completion to anyone who was present (or for the home as a whole).

Our visits are always different. We have come in place of a staff meeting for the EVS team, using a simulation room. We have gone into resident rooms and bathrooms with a couple EVS workers, their manager and their IPAC lead. We have used a common area bathroom. We are able to adjust our “show” for whatever works best for your needs.

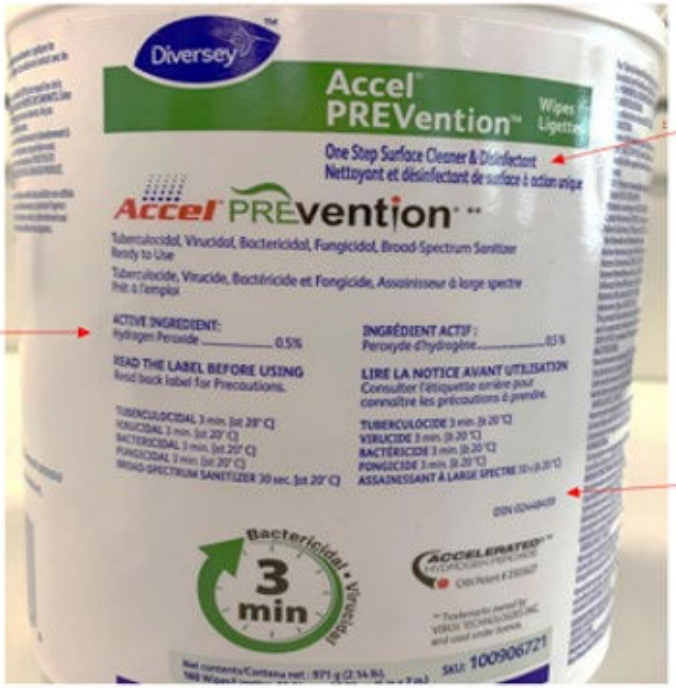
Disinfectants

Disinfection: The inactivation of disease-producing microorganisms. Disinfection does not destroy bacterial spores. Medical equipment/devices must be cleaned thoroughly before effective disinfection can take place.

- Most environmental surfaces will be adequately cleaned with soap and water or a one-step cleaner/disinfectant, depending on the nature of the surface and the type and degree of contamination.
- A variety of products can be used to achieve effective cleaning. The process and products used for cleaning and disinfection of surfaces and medical equipment must be compatible with the surfaces/equipment.
- It is important to follow the manufacturer's instructions when using cleaning agents. Cleaning products used in the health care setting:
  - Must be approved by infection prevention and control, occupational health and safety, and environmental services.
  - Must have a drug identification number (DIN) from Health Canada if it contains a disinfectant.
  - Must be used according to the manufacturers' recommendations (e.g., for dilution, temperature, water hardness, contact time, etc.).
  - Must be used according to the product's safety data sheet.

How to read a product label

Each disinfectant contains an **active ingredient** that inactivates microorganisms and achieves disinfection.



For a product that is a **cleaner and disinfectant**, a **one-step product** can be used to clean and disinfect the surface with one wipe. If it is a **two-step product**, the surface needs to be wiped first to clean then wiped again to disinfect. If a product is **NOT** a cleaner and disinfectant, a separate cleaner is required to clean the surface before disinfection.

Drug Identification Number (DIN) is an 8-digit number that confirms that the disinfectant is approved for use by Health Canada.

https://wdgpublichealth.ca/sites/default/files/how_to_read_a_disinfectant_product_label_-_fact_sheet.pdf

Some products are effective against harder-to-kill pathogens, such as **Norovirus.**

For a product to be considered a **low level disinfectant** it must be effective against these three pathogens:

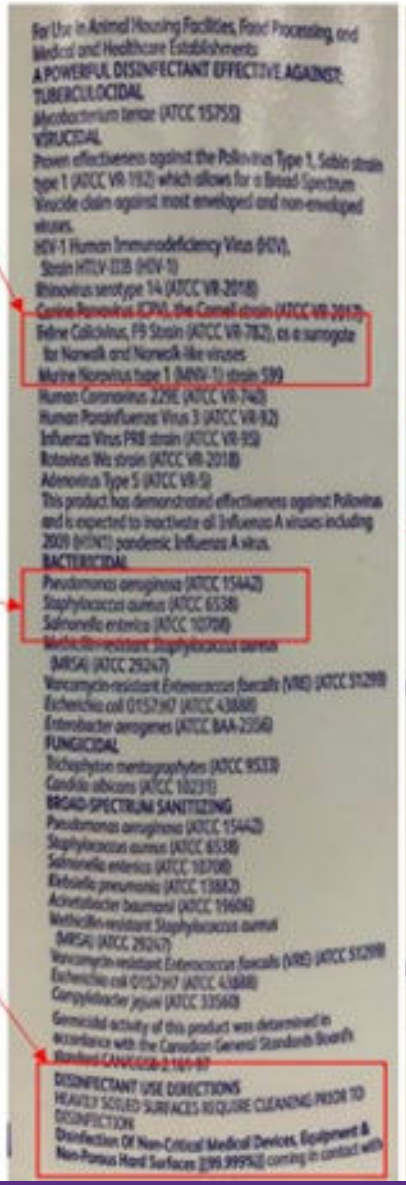
- *Pseudomonas*
- *Staphylococcus*
- *Salmonella*

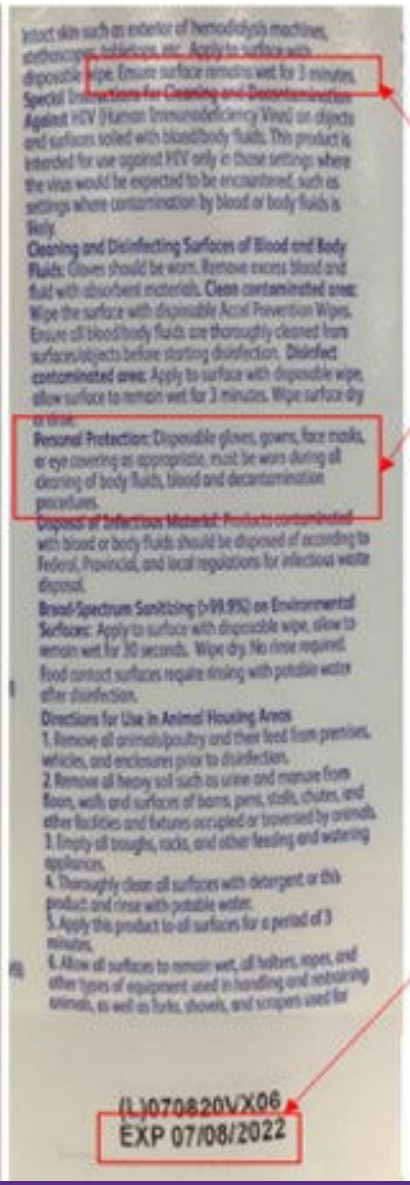
Low level disinfectants are effective against COVID-19.

Directions for Use

*** Read and follow the product label**

Disinfectants may have different directions for each type of surface it is used on. The directions for use may differ depending on the reasons for use (e.g. routine disinfection, disinfection after blood/body fluid spill)





Contact Time is the amount of time that a disinfectant takes to inactivate microorganisms. For a disinfectant to be effective, the surface must remain wet with the disinfectant for the full duration of the contact time.

Some disinfectants may require **Personal Protective Equipment (PPE)** to be worn to ensure that the user is protected against harmful effects of the disinfectant.

Disinfectants that are past their **expiry date** must not be used as the product effectiveness is unknown past this date.

https://wdgpublichealth.ca/sites/default/files/how_to_read_a_disinfectant_product_label_-_fact_sheet.pdf

Contact Time

The time that a disinfectant must be in contact with a surface or device to ensure that appropriate disinfection has occurred. For most disinfectants, the surface should remain wet for the required contact time. If the product dries (Dry Time) before required contact time, the surface needs to be wiped until it remains wet for required time.

*will sometimes be referred to as “dwell time” or “wet time”.

https://www.youtube.com/watch?v=TczwjuERwTo

https://www.publichealthontario.ca/-/media/Documents/B/2018/bp-environmental-cleaning.pdf?rev=5dfe8f638f01400ea2640910902d789d&sc_lang=en

No “Double Dipping”

- When cleaning with a cloth and a disinfectant solution, soak the cloth in the solution and then clean the surface/equipment from a clean to dirty direction.
- Discard the cloth into a separate container for disposal or laundering and use a fresh cloth to continue.
- Do not repeatedly immerse or dip (“double-dip”) a used cloth back into the clean solution as it will contaminate the solution.

https://www.publichealthontario.ca/-/media/Documents/B/2018/bp-environmental-cleaning.pdf?rev=5dfe8f638f01400ea264091090 2d789d&sc_lang=en

Common Disinfectants

- Ideally, facilities should select a single hospital disinfectant that meets all or most of the facilities cleaning and disinfection requirements.
- It might be tempting to mix cleaning products to make sure your facility is germ-free -- but don't. Mixing some cleaners and disinfectants (like chlorine bleach and ammonia) can be harmful, even deadly. Others can irritate your eyes, nose, or throat and cause breathing problems.

Hospital disinfectants commonly used in all health care settings include:

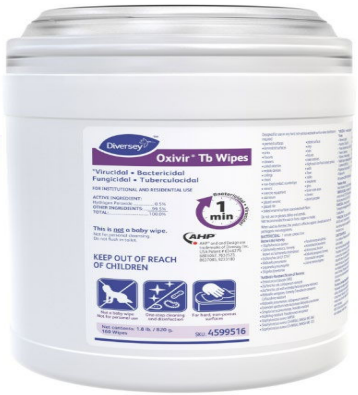
- Alcohol (ethyl or isopropyl)
- Improved hydrogen peroxide
- Iodophors
- Phenolics
- Quaternary ammonium compounds
- Sodium hypochlorite (bleach)

https://www.publichealthontario.ca/-/media/Documents/B/2018/bp-environmental-cleaning.pdf?rev=5dfe8f638f01400ea2640910902d789d&sc_lang=en

Oxivir TB

*Virucide, Bactericide, Tuberculocide, Fungicide, Sanitizer

ACTIVE INGREDIENT:
Hydrogen Peroxide 0.5%
OTHER INGREDIENTS:... 99.5%
TOTAL:..... 100.0%



Diversey™

Oxivir® Tb

Hospital Grade Disinfectant

Efficacy Data:
When used as directed, Oxivir® Tb is highly effective against a wide variety of pathogenic micro-organisms including bacteria, antibiotic resistant bacteria, viruses, fungi and Tb.

Viruses (1 minute contact time):
- Hepatitis B Virus (HBV)
- Hepatitis C Virus (HCV)
- Herpes Simplex Virus, Type 1 (HSV-1) (ATCC VR-733)
- Herpes Simplex Virus, Type 2 (HSV-2) (ATCC VR-734)
- HIV-1 (AIDS Virus), Strain HTLV-IIIB (HIV-1)
- Human Coronavirus (ATCC VR-740)
- Influenza A/Hong Kong (ATCC VR-544)
- Norovirus (Feline Calicivirus, ATCC VR -782 as the surrogate)
- Poliovirus Type 1, Strain Brunhilde (ATCC VR-1000)
- Rotavirus WA (Aquired from University of Ottawa)
- Adenovirus type 8 (ATCC VR-1368)
- Rhinovirus Type 37, Strain 151-1 (ATCC VR-1147) – liquid only
- Rhinovirus Type 14, (ATCC VR-284) – wipes only
- H1N1 Influenza A (Swine Flu) – wipes only

Veterinary viruses (1 minute contact time):
- Avian influenza A (H3N2) (ATCC VR-2072)
- Feline Calicivirus, Strain F9 (ATCC VR-782

Bacteria (1 minute contact time):
- Pseudomonas aeruginosa (ATCC 15442)
- Salmonella enterica (ATCC 10708)-formerly known as Salmonella choleraesuis
- Staphylococcus aureus (ATCC 6538)
- Acinetobacter baumannii (ATCC 19606)
- Escherichia coli O157:H7 (ATCC 35150)
- Klebsiella pneumoniae, (ATCC 4352)
- Escherichia coli with extended beta-lactamase resistance (ESBL), (ATCC BAA-196)
- Shigella Dysenteriae (ATCC 11835)

Antibiotic- Resistant Bacteria (1 minute contact time):
- Enterococcus faecalis (ATCC 51575) (Resistant to Vancomycin [VRE])
- Staphylococcus aureus (ATCC 33592) (Resistant to Methicillin [MRSA])
- Staphylococcus aureus (CA-MRSA), (NARSA NRS 384)(Genotype USA300).Community Associated Methicillin Resistant
- Staphylococcus aureus (CA-MRSA), (NARSA NRS 123)(Genotype USA400). Community Associated Methicillin Resistant

Fungi (10 minute contact time):
- Trichophyton mentagrophytes (ATCC 9533)) - the fungus which causes Athlete's Foot

Tb (5 minute contact time):
- Mycobacterium bovis (Tb) (OT 451C150)

https://www.appa.org/wp-content/uploads/2020/06/OXIVIR-TB_V1_PSS_NZ.pdf

Sporicidal Disinfectant

- **Sporicide:** An environmental (low-level) disinfectant capable of inactivating bacterial spores on environmental surfaces and items
- Disinfection is not sporicidal
- Bacterial species have different coping mechanisms with selective harsh environmental conditions.
- One of the most common coping mechanisms for bacteria is forming spores to protect themselves against ecological degrading agents.
- Bacterial spores are the most dormant form of bacteria since they exhibit minimal metabolism and respiration, as well as reduced enzyme production.
- Many health care facility approved disinfectants are hydrogen peroxide based but in order to be sporicidal, they must be at least 4.5% improved hydrogen peroxide
- Cdiff is an example of a bacteria that requires a Sporicidal agent to kill

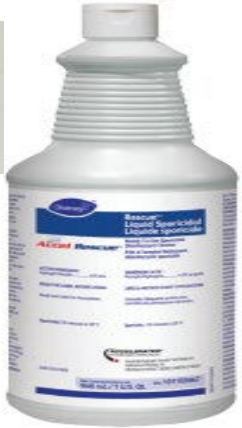
https://www.publichealthontario.ca/-/media/Documents/B/2018/bp-environmental-cleaning.pdf?rev=5dfe8f638f01400ea2640910902d789d&sc_lang=en

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC358146/pdf/cmr00047-0007.pdf

Accel Rescue™ Sporicidal Solution

Ready To Use Sporicidal Disinfectant Cleaner

Active ingredient:
Hydrogen Peroxide .....4.5% w/w



Format	Pack Size	SKU
RTU	12 x 1 L / 1.06 U.S. Qt. Bottles	101103667

- Sporicidal 10 minutes
- Virucidal 1 minute
- Bactericidal 1 minute
- Fungicidal 1 minute

		Organism	Contact Time
Spores		*Clostridium difficile*	10 minutes
Spores		*Clostridium sporogenes*	10 minutes
Spores		*Bacillus subtilis*	10 minutes
Virus	Non-Enveloped	*Poliovirus*	1 minute
Bacteria	Gram-Negative	*Pseudomonas aeruginosa*	1 minute
Bacteria	Gram-Negative	*Salmonella enterica (choleraesuis)*	1 minute
Bacteria	Gram-Positive	*Staphylococcus aureus*	1 minute
Fungi		*Trichophyton interdigitale*	1 minute
		DIN Number	02447606
		Use Solution Stability	2 years

https://app.salsify.com/catalogs/067e8a21-c2f7-4e09-b2d8-9e24766c5636/products/101103667

QUESTIONS?

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References

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