

Hospital Disinfectants for General Disinfection of Environmental Surfaces

General Principles for Cleaning and Disinfecting Environmental Surfaces^a

- Select products that meet your specific needs.
- Clean surfaces before disinfecting.
- Prepare solutions in a clean container.
- Follow recommended dilution instructions.
- Change reusable mopheads and cleaning cloths with each solution change.
- Check label for any special storage or disposal instructions.
- Make sufficient fresh cleaning solution for daily cleaning. Discard any remaining solution and dry container after use.

^aSurfaces include floors, walls, and tabletops
CDC, www.cdc.gov/ncidod/dhqp/gl_environmentinfection.html, 2003

A disinfectant product must be registered by the New York State Department of Environmental Conservation (DEC) before it can be legally used in New York State.

Only products labeled for use in hospitals are approved hospital disinfectants.

To find out if a product is registered in New York State, please go to: www.dec.state.ny.us/website/dshmdata/pesticid/pestprod.pdf;

Cornell University's NYS product database pmep.cce.cornell.edu/pims/index.html;
or, call DEC's Pesticide Product Registration Section at 518-402-8768.

Disclaimer

The information in the documentation is based on the present state of our knowledge. It shows without liability on our part the uses to which the listed agent can be put when used in correct dilution and contact time. This chart should not be construed to legalize product claims that are not allowed by an EPA or DEC approval. The recommendations are not intended to apply to consumer use of the products discussed.

READ THE LABEL FIRST. ALWAYS FOLLOW INSTRUCTIONS FOR PRODUCT USE.

Effectiveness dependent upon formulation

Active Ingredient	Organism Rating ¹								Action (in minutes)	Cost ²	Precautions
	Enveloped Viruses	Gram+	Gram -	Fungi	Non-Enveloped Viruses	Mycobacteria	Protozoa	Spores ³			
Ethyl Alcohol-based 60-95%	●	●	●	●	●	●	●	●	Rapid 0.5 - 2.0	Moderate-High	Do not use on large areas; can dry/irritate skin/eyes; respiratory irritant; flammable; may damage rubber and certain plastics.
Chlorine-Based 4% - 6%	●	●	●	●	●	●	●	●	Rapid 0.5 - 2.0	Low	Can burn skin and eyes; respiratory irritant; can bleach; corrosive to metals and floor finishes.
Iodine-based 0.5% - 5%	●	●	●	●	●	●	●	●	Medium 5 - 10	Low	Use fresh; corrosive to some rubber and plastics; can stain; can leave residue.
Phenols 0.2% - 3%	●	●	●	●	●	●	●	●	Medium 5 - 10	Moderate	Can burn skin and eyes; respiratory irritant; corrosive to some rubber and plastics; can leave residue.
Quaternary Ammonium Compounds 2%	●	●	●	●	●	●	●	●	Medium 5 - 10	Low	Can leave gummy residue; soap, anionic cleaners and hard water reduce effectiveness; not effective on some gram negative organisms.
Hydrogen Peroxide 3% or less	●	●	●	●	●	●	●	●	Slow 10 - 20	Low-Moderate	Can irritate skin and eyes; can bleach.

Key
 ● Good Activity ● Fair Activity ● Poor/No Activity

1 Ratings based on EPA Antimicrobial Chemical/Registration Indexes*, UC Davis (ehs.ucdavis.edu/sftyntet/sn-51.cfm) and other medical evidence-based literature.
 2 Cost determination based on cost per application and contact time.
 3 None of the above active ingredients are considered sporicidal.

Comments and Questions Contact the New York State Department of Health at patientsafety@health.state.ny.us

References

Environmental Protection Agency (EPA) Antimicrobial Chemical/Registration Number Indexes
<http://www.epa.gov/oppad001/chemregindex.htm>
 Healthcare Infection Control Practices (HICPAC)
www.cdc.gov/ncidod/dhqp/hicpac.html
 Health Canada 2003
 World Health Organization (WHO)
www.who.int/patientsafety/events/05/HH_en.pdf

Joint Commission on Accreditation of Healthcare Organizations (JCAHO) - www.jointcommission.org
 CDC - www.cdc.gov/mmwr/preview/mmwrhtml/rr5116a1.htm
 B.C. Centre for Disease Control - www.bccdc.org
 APIC - www.apic.org//AM/Template.cfm?Section=Home
 NYSDOH - www.nyhealth.gov

Viruses

Enveloped Viruses

Herpes simplex, Human Immunodeficiency Virus, Hepatitis C, Cytomegalovirus, Measles, Mumps, Rubella, Influenza, Respiratory syncytial, Hantavirus, Varicella zoster, Coronavirus

Note: Hepatitis B not strictly enveloped but has same disinfectant sensitivity.

Non-Enveloped Viruses

Hepatitis A, Coxsackie, Polio, Rhinovirus, Human Papilloma Virus, Adenovirus, Rotavirus, Hepatitis E, Parvo virus.