

Hand Hygiene Antiseptic Agents in the Hospital Setting

General Principles for Hand Hygiene

- Clean your hands frequently. Learn and practice effective methods.
- Follow CDC, APIC, and JCAHO guidelines. Know when more rigorous hand hygiene practices are needed (e.g. surgical scrub).
- If visibly soiled, first wash hands with soap and water for at least 15 seconds before using handrubs.
- If your hands do not look visibly soiled, alcohol-based handrubs can be used.
- **Handwashing, not handrubs, should be used to clean hands contaminated by protozoa or bacterial spores such as *Clostridium difficile*, *Bacillus anthracis* (Anthrax).**
- Use moisturizing skin care products or barrier creams to prevent dermatitis. Use products that do not compromise the efficacy of the handrub.
- Gloves alone do not prevent the spread of microorganisms.

Alcohol-Based Antiseptic Products

Products with emollients improve acceptance and use.

- Gel** Good coverage; used in dispensers; no drip; comes in individual bottles; amount per application is measurable.
- Foam** Not subject to storage restrictions; difficult to measure amount per application.
- Rinse** Comes in dispensers and individual bottles; may splash or drip; measurable in amount per application.
- Wipe** Limited effectiveness; portable; single-use; convenient.

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

Effectiveness dependent upon formulation

Active Ingredient	Organism Rating ¹								Cost ³	Persistent Activity	General Compliance	Precautions
	Enveloped Viruses	Gram +	Gram -	Fungi	Non-Enveloped Viruses	Mycobacteria	Protozoa	Spores				
Ethyl Alcohol-based 60-95% ²	●	●	●	●	●	●	●	●	Moderate-High	Non-persistent	High	Flammable
Water-based chlorhexidine gluconate ²	●	●	●	●	●	●	●	●	Moderate	Persistent	High	Residual activity is cumulative resulting in improved effectiveness over repeated application.
Water-based povidone iodine ²	●	●	●	●	●	●	●	●	Low	Persistent	Moderate	Better tolerated than iodine, but may still cause irritation.

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

¹ Ratings based on the pending FDA final OTC hand hygiene active ingredient drug monograph, approved New Drug Applications (NDA) and other medical evidence-based literature.
² FDA has determined active ingredients to be safe and effective based on pending Health Care Antiseptic Drug Products monograph for OTC human use and (NDA) approval.
³ Cost determination based on cost per application, contact time, user compliance, and time required for staff use.

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

References

For detailed active ingredient information visit:
 U.S. Food and Drug Administration (FDA)
www.fda.gov/cder/offices/OTC/industry.htm
 Centers for Disease Control (CDC) Guidelines for Hand Hygiene 2002
www.cdc.gov/mmwr/preview/mmwrhtml/rr5116a1.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
 Guidelines for Hand Hygiene in Health Care Settings. October 25, 2002/51 (RR16); 1-44
 NYSDOH - www.nyhealth.gov
 B.C. Centre for Disease Control - www.bccdc.org
 ASHE - www.ashe.org/ashe/codes/handrub/
 APIC - www.apic.org//AM/Template.cfm?Section=Home
 National Association of State Fire Marshals - www.firemarshals.org/mission/catastrophic/docs/Burnst oHHS5-24FINAL.pdf

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.

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 FDA approval by FDA's Over-the-Counter Drug Review. The recommendations are not intended to apply to consumer use of the products discussed.