

Research Hand Hygiene Guidelines

1.0 Purpose: This directive provides guidance for establishing the basic requirements for hand hygiene practices in the UW Madison animal research community, as well lab areas and animal facilities on and off campus.

2.0 Scope: Hand decontamination has been shown to prevent the spread of infectious agents in clinical settings for over 150 years. In October of 2002, the Centers for Disease Control and Prevention (CDC) issued a new Guideline on Hand Hygiene in Health-Care Settings, which examined the evidence in over 400 publications and provided 44 recommendations for hand hygiene practices. The need to decontaminate hands before and after engaging in direct patient care activities by using an alcohol-based hand rub (in the absence of visibly soiled or contaminated hands), or as an alternative by using an antimicrobial soap has been emphasized. In 2006, the World Health Organization published Advanced Draft Guidelines on Hand Hygiene containing specific recommendations to improve practices and reduce transmission of pathogenic microorganisms to patients and health care workers (HCW). The WHO Advanced Draft Guidelines on Hand Hygiene in Health Care provide a comprehensive review of scientific data on hand hygiene rationale and practices in health care. The UW-Environment Health & Safety hand hygiene guideline is based on the current recommendations by the CDC Guideline on Hand Hygiene in Health-Care Settings and WHO Advanced Draft Guidelines on Hand Hygiene in Health Care and opinions of current experts in the field of hospital infection control.

3.0 Related Documents:

- Boyce JM et al. Guideline for hand hygiene in health-care settings. Recommendations of the Healthcare Infection Control Practices Advisory Committee and the HICPAC/SHEA/APIC/IDSA Hand Hygiene Task Force. Society for Healthcare Epidemiology of America/Association for Professionals in Infection Control/Infectious Diseases Society of America. Morbidity and Mortality Weekly Report, 2002, 51(RR-16):1- 45.
- Kac G et al. Microbiological evaluation of two hand hygiene procedures achieved by healthcare workers during routine patient care: a randomized study. Journal of Hospital Infection, 2005, 60:32-39.
- WHO Guidelines on Hand Hygiene in Healthcare (Advanced Draft), Global Patient Safety Challenge 2005–2006: “Clean Care is Safer Care”. World Health Organization 2006.
- Personal communications with UW-Hospital and Clinics Infection Control, November 2008.

- Hand Hygiene Guidelines, School of Veterinary Medicine and Veterinary Medical Teaching Hospital, University of Wisconsin-Madison, 2011.

4.0 Definitions:

Alcohol-based hand rub. An alcohol-containing preparation (liquid, gel or foam) designed for application to the hands to reduce the growth of microorganisms. In the United States, preparations usually contain 60-95% ethanol or isopropanol.

Antimicrobial soap. Soap (detergent) containing an antiseptic agent at a concentration which is sufficient to reduce or inhibit the growth of microorganisms.

Antiseptic hand wash. Washing hands with antimicrobial soap and water.

Hand antiseptis. Refers to either antiseptic hand wash or antiseptic hand rub.

Hand hygiene. A general term referring to any action of hand cleansing.

Visibly soiled hands. Hands on which dirt, blood, proteinaceous material, or body fluids (e.g. fecal material or urine) are readily visible.

5.0 Indications for hand antiseptis

5.1 Wash hands with antimicrobial soap and water

5.1.1. When hands are visibly dirty or contaminated with proteinaceous material, blood, or other body fluids.

5.1.2. Following contact with animals, animal specimens, or environmental surfaces that may be contaminated with the following alcohol-resistant agents: bacteria that produce spores, parasites, non-enveloped viruses.

5.1.3. Before eating and after using a restroom, wash hands with soap (nonantimicrobial or antimicrobial) and water.

5.1.4. When there is contact with a chemical agent such as formalin, etc., wash hands with soap (non-antimicrobial or antimicrobial) and water.

5.1.5. Periodic hand washing following frequent use of alcohol-based sanitizers is recommended to prevent product buildup.

5.2 Use an alcohol-based hand rub for routinely decontaminating hands in all other situations described in items 5.2.1-5.2.9.

5.2.1. Decontaminate hands before and after having direct contact with animals

5.2.2. Decontaminate hands before inserting, peripheral vascular catheters, or other invasive devices that do not require a surgical procedure.

5.2.3. Decontaminate hands before handling an invasive device (regardless of whether or not gloves are used) for animal care.

5.2.4. Decontaminate hands after contact with an animal's intact skin (e.g., when taking a pulse or blood pressure, lifting a patient, etc.).

5.2.5. Decontaminate hands if moving from a contaminated-body site to a clean-body site during animal care.

5.2.6. Decontaminate hand before putting on gloves and after removing gloves. This includes sterile gloves worn for sterile procedures (eg – central catheterization, urinary catheterization, etc), and non-sterile gloves.

5.2.7. If contact with body fluids or excretions, mucous membranes, nonintact skin, and wound dressings, decontaminate hands even if hands are not visibly soiled.

5.2.8. Decontaminate hands after contact with inanimate objects (including medical equipment) in the immediate vicinity of the animal.

5.2.9. Decontaminate hands before handling animal's medication and preparing food.

5.3 Hand Hygiene Technique: Alcohol-Based Handrub

5.3.1 Apply a palmful of the product and cover all surfaces of the hands.

5.3.2 Rub hands until hands are dry



5.4 Hand Hygiene Technique: Handwashing with Antimicrobial Soap and Water

5.4.1 Wet hands with warm water.

5.4.2 Apply enough soap to cover all hand surfaces and rub hands together vigorously for at least 15 seconds, covering all surfaces of the hands and fingers.

5.4.3 Rinse hands with warm water and dry thoroughly with a disposable towel. Use towel to turn off the faucet if not automated.

5.5 Use of Gloves

Gloves are worn for three important reasons:

- Gloves are worn to provide a protective barrier and to prevent gross contamination of the hands when touching blood, body fluids, secretions, excretions, and non-intact skin; as mandated by the OSHA Bloodborne Pathogens Standard 1910.1030.
- Gloves are worn to reduce the likelihood that microorganisms present on the hands of personnel will be transmitted to patients during invasive or other patient-care procedures that involve touching a patient's mucous membranes and non-intact skin.
- Gloves are worn to reduce the likelihood that hands of personnel contaminated with microorganisms from a patient or object can transmit these microorganisms to another patient. In this situation, gloves must be changed between patient contacts and hands washed after gloves are removed.

5.5.1 The use of gloves does not replace the need for hand cleansing by either handrubbing with alcohol-based handrub or handwashing with an antiseptic soap. Gloves may have small, in-apparent defects or may be torn during use, and hands can become contaminated during removal of gloves. Failure to change gloves between patient contacts is an infection control hazard.

5.5.2 Wear gloves when it can be reasonably anticipated that contact with blood or other potentially infectious materials, mucous membranes, and non-intact skin will occur.

5.5.3 Wear gloves when handling urine or feces for specimen collection, bag changes, cleaning cages, etc..

5.5.4 Wear gloves when indicated by VMTH Disease Isolation Protocol, VMTH Nonhuman Primate Protocol, or other VMTH Protocol.

5.5.5 Change gloves during patient care if moving from a contaminated body site to a clean body site.

5.5.6 Remove gloves after caring for a patient or performing task requiring use of gloves. Do not wear the same pair of glove for the care of more than one patient, and do not wash gloves between uses with different patients.