

Research Community Hand Hygiene Guidelines

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

Scope: Hand decontamination has been shown to prevent the spread of infectious agents in clinical settings for over 150 years. The Centers for Disease Control and Prevention (CDC) issued a 2002 [Guideline on Hand Hygiene in Healthcare 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 animal care activities by using an alcohol-based hand rub (in the absence of visibly soiled or contaminated hands), or as an alternative to using an antimicrobial soap has been emphasized. In 2006 the World Health Organization published [Advanced Draft Guidelines on Hand Hygiene](#) provides a comprehensive review of scientific data to reduce transmission of pathogenic microorganisms to animals and animal care workers. The following guidelines are based on the current recommendations by the CDC, WHO, and the opinions of current experts.

Indications for Hand Antisepsis

Wash hands with antimicrobial soap and water following any of the given situations:

- When hands are visibly dirty or contaminated with proteinaceous material, blood, or other animal fluids.
- After direct 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.
- Before eating and after using a restroom, wash hands with soap (nonantimicrobial or antimicrobial) and water.
- When there is contact with a chemical agent such as formalin, wash hands with soap (non-antimicrobial or antimicrobial) and water.
- Periodic hand washing following frequent use of alcohol-based hand rub is recommended to prevent product buildup.

Indications for Alcohol-Based Hand Rub

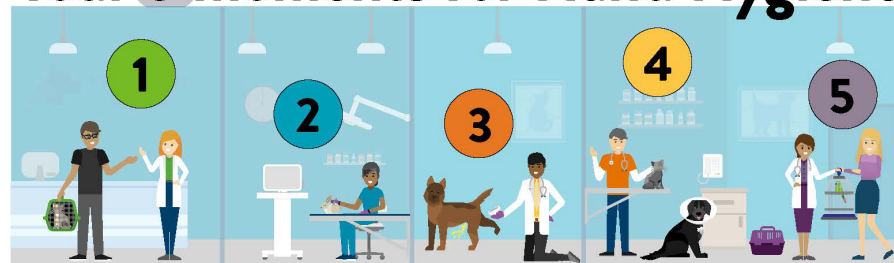
Use an alcohol-based hand rub for routinely decontaminating hands in the following situations:

- Before and after having direct contact with animals.
- Before inserting peripheral vascular catheters, or other invasive devices that do not require a surgical procedure.
- Before handling an invasive device (regardless of whether gloves are used) for animal care.
- After contact with an animal's intact skin (e.g., when taking a pulse or blood pressure, picking up an animal, etc.).

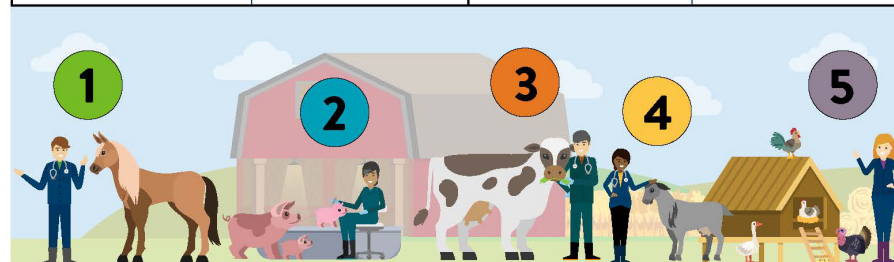


- When moving from a contaminated body site to a clean body site during animal care.
- Before putting on gloves and after removing gloves. This includes non-sterile gloves and sterile gloves worn for sterile procedures (e.g., central catheterization, urinary catheterization, etc.).
- If contact with body fluids or excretions, mucosal membranes, nonintact skin, and wound dressings,
- After contact with inanimate objects (including medical equipment) in the immediate vicinity of the animal.
- Before handling an animal's medication and preparing food.

Your 5 moments for Hand Hygiene



	Examples	When	Why
1 Before touching an animal	Restraining animal, clinical examination, handling animal	Clean your hands before touching an animal	To protect the animal against harmful germs carried on your hands
2 Before an aseptic/clean task	Wound care, injectable medication preparation, drawing blood, and IV catheter placement and manipulation	Clean your hands immediately before and after any aseptic or clean task	To protect the animal against harmful germs, including its own, from entering its body
3 After body fluid exposure	After contact with urine, feces, blood, saliva, and nasal discharge	Clean your hands immediately after an exposure to body fluids including after glove removal	To protect yourself, the environment, and other people and animals from harmful germs
4 After touching an animal	After clinical exams and treatments such as grooming, bandage changes, or administration of any medications or vaccinations	Clean your hands after touching an animal	To protect yourself, the environment, and other people and animals from harmful germs
5 After being in an animal's environment	When leaving an exam room, treatment room, barn, kennel or housing area	Clean your hands when leaving the animal's environment, even if the animal has not been touched	To protect yourself, the environment, and other people and animals from harmful germs





Hand Hygiene Technique: Handwashing with Antimicrobial Soap and Water

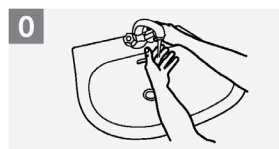
1. Wet hands with warm water.
2. Apply enough soap to cover all hand surfaces and rub hands together vigorously for at least 20 seconds, covering all surfaces of the hands and fingers.
3. Rinse hands with warm water and dry thoroughly with a disposable towel. Use towel to turn off the faucet if not automated.

How to Handwash?

WASH HANDS WHEN VISIBLY SOILED! OTHERWISE, USE HANDRUB



Duration of the entire procedure: 40-60 seconds



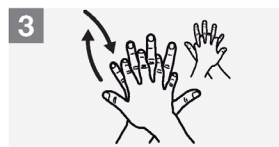
Wet hands with water;



Apply enough soap to cover all hand surfaces;



Rub hands palm to palm;



Right palm over left dorsum with interlaced fingers and vice versa;



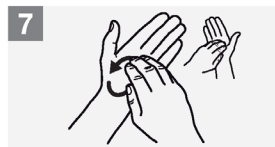
Palm to palm with fingers interlaced;



Backs of fingers to opposing palms with fingers interlocked;



Rotational rubbing of left thumb clasped in right palm and vice versa;



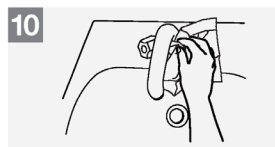
Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



Rinse hands with water;



Dry hands thoroughly with a single use towel;



Use towel to turn off faucet;



Your hands are now safe.



World Health Organization

Patient Safety
A World Alliance for Safer Health Care

SAVE LIVES
Clean Your Hands

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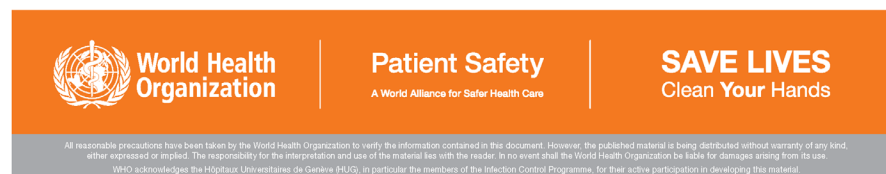
Hand Hygiene Technique: Using Alcohol-Based Hand Rub

1. Apply a palmful of the product and cover all surfaces of the hands.
2. Rub hands until hands are dry.

How to Handrub?

RUB HANDS FOR HAND HYGIENE! WASH HANDS WHEN VISIBLY SOILED

 **Duration of the entire procedure: 20-30 seconds**



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Use of Gloves

Gloves are worn for three important reasons:

1. 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](#).
2. To reduce the likelihood that microorganisms on a person's hands will be transmitted to animals during invasive or other animal care procedures that involve touching an animal's mucous membranes and non-intact skin.
3. To reduce the likelihood that hands of personnel contaminated with microorganisms from an animal or object can transmit these microorganisms to another animal. In this situation, gloves must be changed between animal contacts and hands washed after gloves are removed.

Important Factors to Consider when using Gloves

- The use of gloves does not replace the need for hand cleansing by either hand rubbing with an alcohol-based hand rub 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 animals is an infection control hazard.
- 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.
- Wear gloves when handling urine or feces for specimen collection, bag changes, cleaning cages, etc.
- Wear gloves when indicated by your animal facility, teaching area or research area
- Change gloves during animal care if moving from a contaminated body site to a clean body site.
- Remove gloves after caring for an animal or performing a task requiring use of gloves. Do not wear the same pair of gloves for the care of more than one animal, and do not wash gloves between uses with different animals.

Related Documents:

1. Hygiene Practices Around Animals. CDC, Updated Sept 14 2022. <https://www.cdc.gov/hygiene/animals.html>
2. Hand Hygiene Guidelines. School of Veterinary Medicine and Veterinary Medical Teaching Hospital. University of Wisconsin-Madison, 2011.
3. Hand Hygiene Evaluation Using Two Different Evaluation Tools and Hand Contamination of Veterinary Healthcare Workers in a Swiss Companion Animal Clinic. Kira Schmitt et. al. Veterinary Sciences, Nov 2021. <https://pubmed.ncbi.nlm.nih.gov/34822633/>