



**Medical Center**

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Applicability Logan Health & LHMC

## Hand Hygiene, IPC104

### PURPOSE

To reduce the transmission of pathogenic microorganisms and the incidence of health care associated infections (**HAI**) caused by these organisms.

This policy defines the standards required for hand hygiene practice within all Logan Health that must be adhered to by all employees to prevent the spread of infection.

This policy provides employees clear guidance on hand hygiene standards and actions they must take in order to prevent cross-infection due to contamination of their own hands.

### POLICY

1. Logan Health recognizes hand washing as the most important health procedure any individual can perform to prevent the spread of microbes.
2. All employees must achieve full compliance with the hand hygiene standards outlined in this policy and procedure.
  - A. Any employee not complying with the policy will have this drawn to their attention.
  - B. Managers are responsible for ensuring compliance with this policy.
3. Compliance with hand hygiene is monitored routinely throughout all Logan Health patient care areas by direct observation by peers as well as by patients. These observations are reported to each Logan Health Infection Prevention department in which compliance is assessed and reported back to leadership.

# PROCEDURE

1. **When to perform hand hygiene** - Patients are put at risk of developing an HAI when the health care workers caring for them have contaminated hands. The World Health Organization's "Five Moments of Hand Hygiene" provides framework for training, audit and feedback of hand hygiene practice and defines the critical moments when hand hygiene must be performed. Perform hand hygiene:
  - A. Immediately before each episode of direct patient contact/care, including clean/aseptic procedures
  - B. Immediately after each episode of direct patient contact/care
  - C. Immediately after contact with body fluids, mucous membranes and non-intact skin
  - D. Immediately after contact with objects and equipment in the immediate patient environment or other activities that could result in hands becoming contaminated
  - E. Immediately after the removal of gloves, including between the exchange of dirty to clean gloves.
  
2. In addition to these critical moments, there are situations/occasions where hand hygiene needs to be performed to reduce the risk to patients and health care workers. Examples of additional situations when hands must be decontaminated are:
  - A. Before starting work/after leaving a work area
  - B. Before preparing, handling or eating food
  - C. Before and after handling/administering medicines
  - D. After handling contaminated laundry and waste
  - E. After visiting the toilet
  - F. Before and after leaving isolation rooms/bays
  - G. After cleaning equipment or the environment
  - H. Personal contamination (e.g. blowing your nose, sneezing into your hand, after smoking)
  - I. After removing personal protective equipment
  
3. **Preparation for Hand Hygiene** - Hand hygiene involves both the preparation and physical process of decontamination. Hands and wrists need to be fully exposed to the hand hygiene product and therefore should be free from jewelry and long sleeved clothing. A number of small-scale observational studies have demonstrated that wearing rings and artificial nails is associated with increased carriage of micro-organisms..
  - A. Rings, wristwatches and other jewelry worn on the hands and wrists become contaminated during work activities. In addition they prevent thorough hand hygiene procedures.
  - B. Natural fingernails harbor microorganisms. Artificial nails and nail extensions harbor higher levels of micro-organisms than natural fingernails; these micro-organisms are not removed easily during hand hygiene

1. Standards required for all staff working in the patient care environment (employees who are direct patient caregivers, work in surgery, pharmacy, housekeeping or nutrition services, and staff working in non-patient areas handling specimens and/or contaminated items of equipment, including sterile processing.)
  - a. Fingernails are to be kept short, no longer than 1/4 inch long, clean and free from artificial nail enhancements.
  - b. Artificially enhanced nails are substances or devices applied to natural nails to enhance appearance or to extend the nails. They include but are not limited to nail polish, bonding, acrylic, gel, tips, wraps, tapes, nail art, and inlays.
  - c. Department Directors/Managers are responsible for ensuring their staff understand and adhere to this requirement and will follow disciplinary policy if not adhered to.
- C. **Choice of Cleansing Agent** - Effective hand washing with soap and water or the effective use of alcohol based hand rub/gel will remove transient microorganisms and render the hands socially clean.
  1. Choosing the method of hand decontamination will depend upon the assessment of what is appropriate for the episode of care, the availability of resources at or near the point of care, what is practically possible and, to some degree, personal preferences.
    - a. The use of preparations containing an antiseptic is required where prolonged reduction in microbial flora on the skin is necessary (e.g. surgery and some invasive procedures).
    - b. Alcohol hand rub/gel (with emollients) are to be used in place of soap and water if hands are **visibly clean**. However alcohol hand rub/gel is not effective against all microorganisms (e.g. some viruses such as Norovirus and spore-forming organisms such as *C. difficile*), does not remove dirt and organic material and may not be effective in some outbreak situations.
    - c. Soap and water is to be used when hands are **visibly soiled or potentially** contaminated with body fluids. Always use soap and water when caring for patients with vomiting or diarrheal illness, regardless of whether gloves have been worn or not.
- D. **Alcohol Hand Rubs & Religious Considerations** - According to some religions, alcohol use is prohibited or considered an offense. However, in general, despite alcohol prohibition in everyday life, most religions give priority to health principles to ensure patient safety. Consequently, no objection is raised against the use of alcohol-based products for environmental cleaning, disinfection or hand hygiene by any religion (World Health Organization, 2006; Allegranzi et al, 2009).
4. **Staff Hand Hygiene** - If a wedding band/ring is worn this should be cleaned as part of the handwashing process, including underneath to prevent build-up of micro-organisms and dead skin cells.

A. **Soap and water** hand washing technique (*non-antimicrobial*)

1. Wet hands with running water (warm water is the best).
2. Keep hands lower than elbows, hands and uniform away from sink.
3. Apply soap (3 – 5 ml) and thoroughly distribute over hands, lather well **using lots of friction** for a **minimum of 20 seconds** including fingers, fingertips, thumbs, palms, backs of hands and wrists.
4. Rinse hands under running water.
5. Dry hands with disposable towels.
6. Turn off faucet with disposable towels.
7. Bathroom doors should also be opened with disposable towels after hand hygiene is performed.

B. **Alcohol-based** hand sanitizer techniques

1. Apply product to palm of one hand (sufficient to keep hands wet for a **minimum 20 seconds**)
2. Thoroughly distribute over hands, **using lots of friction**, including fingers, fingertips, thumbs, palms, backs of hands and wrists **until hands are dry**.
3. Wash with soap and water every 10-15 uses to remove product buildup
4. Never wave hands or wipe with paper towels or cloth to dry.

C. **Hand hygiene prior to undertaking Aseptic Non-touch technique**

1. Standard Aseptic Non Touch Technique (ANTT) or Surgical ANTT procedure that **does NOT require maximal sterile barrier precautions** (e.g. Urinary Catheter insertion; Wound Care), use soap and water or alcohol hand gel following the steps outlined above.
2. Surgical ANTT requiring **maximal sterile barrier precautions** (e.g. Central Line Insertion) including surgical/operative procedures in theaters/suites, use a Logan Health approved aqueous antiseptic product (e.g. Chlorhexidine Gluconate; Povidone-iodine; Triclosan, alcohol based product) and a surgical scrub technique for preparing the hands, nails and forearms.

D. **Hand Care** - required to protect the hands from the adverse effects of hand decontamination practice. Damaged hands or dry skin leads to loss of a smooth skin surface, and increases the risk of skin colonization with resistant organisms such as Meticillin-resistant Staphylococcus aureus (MRSA).

1. It is essential that only approved soap and alcohol hand rub/gel products are used, and that staff carefully follow correct hand hygiene techniques.
2. Cuts and abrasions must be covered with a water-impermeable dressing, prior to clinical contact.
3. Staff with acute or chronic skin lesions/conditions/reactions or possible dermatitis must seek advice from the Occupational Health Department at

the time that they have the problem.

- a. Staff with skin lesions that cannot be adequately covered must not work until they have received advice from the Occupational Health Department.
4. Staff should regularly use moisturizer to maintain skin integrity.
  - a. The most effective use of moisturizer is before breaks and at the end of a shift, when it can be left on the hands for a greater period of time.
5. **Patient Hand Hygiene** - National guidelines indicate that it is important to educate patients and caregivers about the importance of hand hygiene, and inform them about the availability of hand hygiene facilities and their role in maintaining standards of healthcare workers hand hygiene.
  - A. Patients and visitors will be provided with information about the need for hand hygiene and how to keep their own hands clean.
    1. Information provided by Logan Health employee
    2. Signs posted at facility entrances and throughout patient units
    3. Supplies (masks, alcohol rub/gel) available at entrances, waiting areas and patient care areas.
    4. Other visual reminders and infographics are placed in key locations in order to raise awareness amongst employees, patients and visitors.
  - B. Patients will be offered the opportunity to clean their hands before meals; after using the toilet, commode or bedpan/urinal; and at other times as appropriate.
    1. To be tailored to patients needs and may include alcohol based hand rub/ gel, soap and water, wash cloths, and access to hand basins.

## REFERENCES

1. CDC Guidelines, "Guideline for Hand Hygiene in Healthcare Settings." Retrieved from <https://www.cdc.gov/handhygiene/providers/guideline.html>. October 2021
2. "Hand Hygiene". Haas, Janet, PhD, FAAN, CIC. APIC Text. Retrieved from <https://text.apic.org/toc/basic-principles-of-infection-prevention-practice/hand-hygiene>. October 2021.
3. World Health Organization. WHO Patient Safety. WHO guidelines on hand hygiene in health care. Geneva: World Health Organization; 2009.

## Approval Signatures

Step Description

Approver

Date

Final Admin Approval	Douglas Nelson: Physician [KS]	05/2022
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Policy Committee	Kelly Stimpson: Associate General Counsel	05/2022
Reviewer	Jeffrey Tjaden: PHYSICIAN	05/2022
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