

DISPOSITION OF PATIENTS WITH CONTAGIOUS DISEASES

Purpose: This is written to provide general guidelines for the treatment of a patient with a known or suspected communicable disease.

NOTE: Healthcare provider must recognize that any patient that presents with one of the following may be potentially infectious, and must take the necessary precautions to avoid secondary exposure. These precautions include following this protocol.

- a skin rash
- open wounds
- blood or other body fluids
- a respiratory illness that produces cough and/or sputum

Exposure Defined:

An exposure is determined to be any breach of the skin by cut, needle stick, absorption or open wound, splash to the eyes, nose or mouth, inhaled, and any other parenteral route.

- Patients with known or suspected communicable diseases/conditions calling in advance to schedule an appointment must be placed in a private room or with another patient who has an active infection with the same organism.
- Front desk staff will immediately notify the back office staff of the patient's arrival and request patient remains at desk until the medical assistant or nurse arrives to escort to the exam room.
- Gloves must be worn when entering the patient's room. Gloves should be changed after handling material that may have high concentrations of organisms. Gloves must be removed before leaving the patient's room and hands washed with an antimicrobial soap. Caregivers must ensure that hands do not touch potentially contaminated environmental surfaces after glove removal.
- Hand-washing should be done upon entering and exiting the exam room. Discard all disposable waste materials which have or may have come in contact with the patient in the trash container designated for biohazard waste.
- A gown/mask should be worn if substantial contact with the patient or environmental surfaces is anticipated or if the patient is incontinent, has diarrhea, an ostomy site, or other drainage not contained by a dressing. The gown/mask should be removed prior to leaving the room and care taken to avoid touching surfaces after removing the gown/mask.
- Non-critical patient care equipment should be used only for a single patient. If sharing of common equipment is absolutely necessary, the equipment must be adequately cleaned and disinfected before using it for another patient.

CLEANING AND DISINFECTION

Cleaning and Disinfection after a potentially contagious patient must be done immediately. Contaminated non-reusable equipment should be placed in biohazard bags and disposed of. Contaminated reusable patient care equipment should be placed in biohazard bags and labeled for cleaning and disinfection according to manufacturer's instruction.



REPORTABLE DISEASES AND CONDITIONS

Title 17, California Code of Regulations (CCR), § 2500

It is the duty of every health care provider, knowing of or in attendance on a case or suspected case of any diseases or conditions listed below, to report to the local health officer for the jurisdiction where the patient resides. "Health care provider" encompasses physicians (surgeons, osteopaths, oriental medicine practitioners), veterinarians, podiatrists, physician assistants, registered nurses (nurse practitioners, nurse midwives, school nurses), infection control professionals, medical examiners/coroners, dentists, and chiropractors, as well as any other person with knowledge of a case or suspected case.

Urgency Reporting Requirements

☎ = Report **immediately** by telephone ☒ = Report **within 1 working day** of identification ⌚ = Report within **7 calendar days** from time of identification

REPORTABLE DISEASES

- ⌚ Acquired Immune Deficiency Syndrome (AIDS) ■
- ☒ **Amebiasis**
- ⌚ Anaplasmosis/Ehrlichiosis
- ☎ **Anthrax, human or animal +**
- ☒ **Babesiosis**
- ☎ **Botulism: infant, foodborne, or wound**
- ⌚ Brucellosis, animal; except infection due to *Brucella canis* +
- ☎ **Brucellosis, human +**
- ☒ **Campylobacteriosis**
- ⌚ Chancroid ■
- ☎ **Chickenpox (Varicella), only hospitalized and fatal cases, do not report cases of herpes zoster or shingles**
- ⌚ *Chlamydia trachomatis* infection, including lymphogranuloma venereum (LGV) ■
- ☎ **Cholera +**
- ☎ **Ciguatera Fish Poisoning**
- ⌚ Coccidioidomycosis
- ⌚ Creutzfeldt-Jakob Disease (CJD) and other Transmissible Spongiform Encephalopathies (TSE)
- ☒ **Cryptosporidiosis**
- ⌚ Cyclosporiasis
- ⌚ Cysticercosis or Taeniasis
- ☎ **Dengue**
- ☎ **Diphtheria +**
- ☎ **Domoic Acid (Amnesic Shellfish) Poisoning**
- ⌚ Ehrlichiosis/Anaplasmosis
- ☒ **Encephalitis, specify etiology: viral, bacterial, fungal or parasitic**
- ☎ ***Escherichia coli*, shiga toxin producing (STEC) including *E. coli* O157 +**
- ☒ **Foodborne Disease**
- ☎ **Foodborne Outbreak; 2 or more suspected cases from separate households with same assumed source**
- ⌚ Giardiasis
- ⌚ Gonococcal Infection ■
- ☒ ***Haemophilus influenzae*, invasive disease only, less than 15 years of age**
- ☎ **Hantavirus Infection**
- ☎ **Hemolytic Uremic Syndrome**
- ☒ **Hepatitis A, acute infection**
- ⌚ Hepatitis B, specify acute or chronic
- ⌚ Hepatitis C, specify acute or chronic
- ⌚ Hepatitis D (Delta), specify acute or chronic
- ⌚ Hepatitis E, acute infection
- ⌚ Human Immunodeficiency Virus (HIV) ■ (§2641-2643)
- ⌚ Influenza deaths, laboratory confirmed cases only, all ages ★
- ☎ **Influenza, novel strains, human**
- ⌚ Legionellosis
- ⌚ Leprosy (Hansen's Disease)
- ⌚ Leptospirosis
- ☒ **Listeriosis +**
- ⌚ Lyme Disease
- ☒ **Malaria +**
- ☎ **Measles (Rubeola)**
- ☒ **Meningitis, specify etiology: viral, bacterial, fungal, or parasitic**
- ☎ **Meningococcal Infection**
- ⌚ Mumps
- ☎ **Paralytic Shellfish Poisoning**
- ⌚ Pelvic Inflammatory Disease (PID) ■
- ☒ **Pertussis (Whooping Cough)**
- ☎ **Plague, human or animal +**
- ☒ **Poliovirus Infection**
- ☒ **Psittacosis**
- ☒ **Q Fever**
- ☎ **Rabies, human or animal**
- ☒ **Relapsing Fever**
- ⌚ Rickettsial Diseases (non-Rocky Mountain Spotted Fever), including Typhus and Typhus-like Illnesses
- ⌚ Rocky Mountain Spotted Fever
- ⌚ Rubella (German Measles)
- ⌚ Rubella Syndrome, Congenital
- ☒ **Salmonellosis, other than Typhoid Fever +**
- ☎ **SARS (Severe Acute Respiratory Syndrome)**
- ☎ **Scabies, atypical or crusted ★**
- ☎ **Scombroid Fish Poisoning**
- ☎ **Shiga Toxin, detected in feces**
- ☒ **Shigellosis**
- ☎ **Smallpox (Variola)**
- ☒ ***Staphylococcus aureus* Infection; deaths only or admission to an intensive care unit of a person who: has not had surgery or dialysis or been hospitalized, or resided in a long-term care facility in the past year, and did not have an indwelling catheter or percutaneous medical device at the time of culture.**
- ☎ **Streptococcal Infection, outbreaks of any type**
- ☒ **Streptococcal Infection, individual case in a food handler or dairy worker**
- ☒ **Streptococcal Infection, Invasive Group A, including Streptococcal Toxic Shock Syndrome and Necrotizing Fasciitis; do not report individual cases of pharyngitis or scarlet fever. ★**
- ⌚ *Streptococcus pneumoniae*, Invasive★
- ☒ **Syphilis ■**
- ⌚ Tetanus
- ⌚ Toxic Shock Syndrome
- ☒ **Trichinosis**
- ☒ **Tuberculosis + ■**
- ⌚ Tularemia, animal
- ☎ **Tularemia, human +**
- ☒ **Typhoid Fever, cases and carriers +**
- ☒ ***Vibrio* Infection +**
- ☎ **Viral Hemorrhagic Fevers, human or animal (e.g., Crimean-Congo, Ebola, Lassa and Marburg viruses)**
- ☒ **West Nile Virus (WNV) Infection**
- ☎ **Yellow Fever**
- ☒ **Yersiniosis**
- ☎ **OCCURRENCE OF ANY UNUSUAL DISEASE**
- ☎ **OUTBREAKS OF ANY DISEASE, including diseases not listed above. Specify if occurring in an institution and/or the open community.**

Reportable Non-Communicable Diseases or Conditions

- ⌚ Alzheimer's Disease and Related Conditions (CCR § 2802, § 2806, § 2810)
- ⌚ Disorders Characterized by Lapses of Consciousness (CCR § 2806, § 2810)
- ☒ **Pesticide-Related Illnesses (Health and Safety Code §105200)**

★ Reportable to the Los Angeles County Department of Public Health.
 + Bacterial isolates and malarial slides must be forwarded to Los Angeles County Public Health Laboratory for confirmation. Health care providers must still report all such cases separately. **Public Health Laboratory (562) 658-1300**
 ■ For questions regarding the reporting of HIV/AIDS, STDs or TB, contact the respective program:

HIV Epidemiology Program
(213) 351-8516

STD Program
(213) 744-3070

TB Control Program
(213) 745-0800

www.publichealth.lacounty.gov/hiv/index.htm

www.publichealth.lacounty.gov/std/index.htm

www.publichealth.lacounty.gov/tb/index.htm

To report a case or outbreak of any disease, contact the Communicable Disease Reporting System

Tel: (888) 397-3993 • Fax: (888) 397-3778

Guideline for Hand Hygiene in Health-Care Settings published in 2002.

Information can be obtained at www.cdc.gov/handhygiene.

So Why All the Fuss About Hand Hygiene? *Most common mode of transmission of pathogens is via hands!*

- Clean hands are the single most important factor in preventing the spread of pathogens and antibiotic resistance in healthcare settings.
- Hand hygiene reduces the incidence of healthcare associated infections.
- CDC estimates that each year nearly 2 million patients in the United States get an infection in hospitals, and about 90,000 of these patients die as a result of their infection.
- More widespread use of hand hygiene products that improve adherence to recommended hand hygiene practices will promote patient safety and prevent infections.

Evidence of Relationship Between Hand Hygiene and Healthcare-Associated Infections

- There is substantial evidence that hand hygiene reduces the incidence of infections.
- Semmelweis demonstrated that the mortality rate among mothers who delivered in the First Obstetrics Clinic at the General Hospital of Vienna was significantly lower when hospital staff cleaned their hands with an antiseptic agent than when they washed their hands with plain soap and water.
- In general, adherence of healthcare workers to recommended hand hygiene procedures has been poor.

Self-Reported Factors for Poor Adherence with Hand Hygiene

Adapted from Pittet D, *Infect Control Hosp Epidemiol* 2000;21:381-386.

- Healthcare workers have reported several factors that may negatively impact their adherence with recommended practices including; hand washing agents cause irritation and dryness, sinks are inconveniently located, lack of soap and paper towels, not enough time, understaffing or overcrowding, and patient needs taking priority.
- Lack of knowledge of guidelines/protocols, forgetfulness, and disagreement with the recommendations were also self-reported factors for poor adherence with hand hygiene.
- Perceived barriers to hand hygiene are linked to the institution and HCWs colleagues. Therefore, both institutional and small-group dynamics need to be considered when implementing a system change to secure and improve HCWs hand hygiene practice.

Definitions

Hand hygiene

- Performing hand washing, antiseptic hand wash, alcohol-based hand rub, surgical hand hygiene/antiseptics

Hand washing

- Washing hands with plain soap and water

Antiseptic hand wash

- Washing hands with water and soap or other detergents containing an antiseptic agent

Alcohol-based hand rub

- Rubbing hands with an alcohol-containing preparation

Surgical hand hygiene/antiseptics

- Hand washing or using an alcohol-based hand rub before operations by surgical personnel

Guideline for Hand Hygiene in Health-care Settings. *MMWR* 2002; vol. 51, no. RR-16.

Indications for Hand Hygiene

f When hands are visibly dirty, contaminated, or soiled, wash with non- antimicrobial or antimicrobial soap and water.

f If hands are not visibly soiled, use an alcohol-based handrub for routinely decontaminating hands.

Guideline for Hand Hygiene in Health-care Settings. *MMWR* 2002; vol. 51, no. RR-16.

Specific Indications for Hand Hygiene

Before:

- Patient contact
- Donning gloves when inserting a CVC
- Inserting urinary catheters, peripheral vascular catheters, or other invasive devices that don't require surgery

After:

- Contact with a patient's skin
- Contact with body fluids or excretions, non- intact skin, wound dressings
- Removing gloves

Guideline for Hand Hygiene in Health-care Settings. *MMWR* 2002; vol. 51, no. RR-16.

Selection of Hand Hygiene Agents: Factors to Consider

- When evaluating hand hygiene products for potential use in healthcare facilities, administrators or product selection committees should consider the relative efficacy of antiseptic agents against various pathogens and the acceptability of hand hygiene products by personnel.
 - Product acceptance can be affected by characteristics of the product such as its smell, consistency, color and the effect of skin irritation and dryness on hands.
 - Easy access to hand hygiene supplies is essential for acceptance and use of products.
 - Dispenser systems should function adequately and deliver an appropriate volume of product. Soap should not be added to a partially empty soap dispenser because of potential bacterial contamination of the soap.
- Guideline for Hand Hygiene in Health-care Settings. *MMWR 2002*; vol. 51, no. RR-16.

Efficacy of Hand Hygiene Preparations in Killing Bacteria

- Plain soap is good at reducing bacterial counts but antimicrobial soap is better, and alcohol-based handrubs are the best.

Effect of Alcohol-Based Handrubs on Skin Condition

- Alcohol-based hand rubs are less damaging to the skin than soap and water.
 - In the graph on the left the blue bar shows self-reported skin health scores for persons using soap and water, and persons using alcohol-based hand rubs are depicted by the orange bar. Self-reported studies indicate participants using soap and water reported a significant increase in dryness, cracking, and irritation after 2 weeks, whereas those that used the alcohol-based hand rub reported improvement in skin dryness.
 - Epidermal water content shows the same results as the self-reported scores, after 2 weeks of use, the skin water content decreased for those that used soap and water (resulting in dryer skin) as compared with those who used an alcohol-based hand rub.
- Boyce J, *Infect Control Hosp Epidemiol* 2000;21(7):438-441.

Time Spent Cleansing Hands:

one nurse per 8 hour shift

- The time required for nurses to leave a patient's bedside, go to a sink, and wash and dry their hands before attending the next patient is a deterrent to frequent hand washing or hand antisepsis.
 - More rapid access to hand hygiene materials could help improve adherence.
 - Alcohol-based hand rubs may be a better option than traditional hand washing with plain soap and water or antiseptic hand wash because they require less time, act faster, and irritate hands less often.
- Voss A and Widmer AF, *Infect Control Hosp Epidemiol* 1997;18:205-208.

Recommended Hand Hygiene Technique

- These recommendations will improve hand hygiene practices of HCWs and reduce transmission of pathogenic microorganisms to patients and personnel in healthcare settings.

Handrubs

- When decontaminating hands with an alcohol-based hand rub, apply product to palm of one hand and rub hands together, covering all surfaces of hands and fingers, until hands are dry.

Handwashing

- When washing hands with soap and water, wet hands first with water, apply the amount of soap recommended by the manufacturer, and rub hands together for at least 15 seconds, covering all surfaces of the hands and fingers. Rinse hands with water, dry thoroughly with a disposable towel, and use the towel to turn off the faucet.

Guideline for Hand Hygiene in Health-care Settings. *MMWR 2002*; vol. 51, no. RR-16.

Surgical Hand Hygiene/Antisepsis

- Surgical hand hygiene (or antisepsis) can be performed by using either an antimicrobial soap OR an alcohol-based hand rub with persistent activity.
 - When an antimicrobial soap is used, the hands and forearms should be scrubbed for the length of time recommended by the product's manufacturer, usually 2-6 minutes. Longer scrub times (e.g. 10 minutes) are usually not necessary.
 - When an alcohol-based hand rub with persistent activity is used, follow the manufacturer's instructions on the amount of product to use. Pre-wash hands and forearms with a non-antimicrobial soap and allow them to dry completely. After application of the alcohol-based product as recommended, allow hands and forearms to dry thoroughly before donning sterile gloves.
- Guideline for Hand Hygiene in Health-care Settings. *MMWR 2002*; vol. 51, no. RR-16.

Fingernails and Artificial Nails

- Nail length is important because even after careful hand washing, HCWs often harbor substantial numbers of potential pathogens in the subungual spaces.
- Numerous studies have documented that subungual areas of the hand harbor high concentrations of bacteria, most frequently coagulase-negative staphylococci, gram-negative rods (including *Pseudomonas* spp.), corynebacteria, and yeasts.
- Natural nail tips should be kept to ¼ inch in length.
- A growing body of evidence suggests that wearing artificial nails may contribute to transmission of certain healthcare-associated pathogens. Healthcare workers who wear artificial nails are more likely to harbor gram-negative pathogens on their fingertips than are those who have natural nails, both before and after handwashing. Therefore, artificial nails should not be worn when having direct contact with high risk patients.

Guideline for Hand Hygiene in Health-care Settings. *MMWR 2002*; vol. 51, no. RR-16.

Gloving

- Wearing gloves reduces the risk of healthcare workers acquiring infections from patients, prevents flora from being transmitted from healthcare workers to patients, and reduces contamination of the hands of healthcare workers by flora that can be transmitted from one patient to another.
- Gloves should be used when HCWs have contact with blood or other body fluids.
- Gloves should be removed after caring for a patient.
- The same pair of gloves should not be worn for the care of more than one patient.
- Gloves should not be washed or reused.

Guideline for Hand Hygiene in Health-care Settings. *MMWR 2002*; vol. 51, no. RR-16.

Education/Motivation Programs

- One strategy to promote improved hand hygiene behavior is to monitor healthcare worker adherence with recommended hand hygiene practices and to give feedback.
- Strategies to improve adherence to hand hygiene practices should be both multimodal (i.e. use several different methods or strategies) and multidisciplinary (i.e. involve several different areas of the institution, and types of HCWs). Patients and their families can be involved in reminding HCWs to wash their hands.

Guideline for Hand Hygiene in Health-care Settings. *MMWR 2002*; vol. 51, no. RR-16.

Administrative Measures to Improve Hand Hygiene

- Make improved hand hygiene an institutional priority and provide appropriate administrative support and financial resources.
- Several administrative measures may help improve hand hygiene adherence among personnel who work in areas where high workloads and high intensity of patient care are anticipated. These include placing alcohol-based handrubs at the entrance to patients' rooms, or at the bedside and providing healthcare workers with individual pocket-sized containers.

Guideline for Hand Hygiene in Health-care Settings. *MMWR 2002*; vol. 51, no. RR-16.

Alcohol and Flammability

- Alcohols are flammable
- Alcohol-based handrubs should be stored away from high temperatures or flames
- Application is key: Let It Dry!

Guideline for Hand Hygiene in Health-care Settings. *MMWR 2002*; vol. 51, no. RR-16.

Performance Indicators

- These performance indicators are recommended for measuring improvements in HCWs hand-hygiene adherence.
- Monitor and record adherence to hand hygiene by ward or service.
- Provide feedback to healthcare workers about their performance.
- Monitor the volume of alcohol-based hand rub used per 1,000 patient days.
- Monitor adherence to policies on wearing artificial nails.

Summary Alcohol-Based Hand rubs: What benefits do they provide?

- In summary, alcohol-based hand rubs provide several advantages compared with hand washing with soap and water, because they not only require less time, they also act faster. In addition, alcohol-based hand rubs are more effective for standard hand washing than soap, are more accessible than sinks, are the most efficacious agents for reducing the number of bacteria on the hands of healthcare workers, and can even provide improved skin condition.

PREVENTION IS PRIMARY!

Protect patients...protect healthcare personnel...promote quality healthcare!