

# Other Infections and Specialty Area Infection Prevention Considerations

ACH IP Course, 2022

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Infection Prevention Training for ACH  
Healthcare-Associated Infections Program  
Center for Health Care Quality  
California Department of Public Health



# Objectives

- Review activities necessary for continued COVID-19 prevention
- Review epidemiology, risk factors, and treatment of lice and scabies
- Discuss challenges and recommendations for infection prevention in specialty areas of acute care hospitals and other settings
- Discuss pathogens and diseases common in high-risk specialty areas

# COVID 19 IN ACUTE CARE AND CLINIC SETTINGS

## COVID-19 in Acute Care

**As the pandemic surge ebbs, it is imperative facilities maintain vigilance to avoid an outbreak behind their doors!**

- Screening and testing staff, patients, visitors per CDC and CDPH recommendations
  - Visitor restrictions
- Standard and Transmission-based precautions
  - Correct screening, cohorting, PPE, hand hygiene
  - Thorough environmental cleaning
- Vaccination as recommended for staff and patients

*The only way for the IP to keep up with **changing recommendations** is to consistently watch for updates from CDC and CDPH.*

***Your leadership, staff, patients, and visitors depend on it!***

# COVID 19 in Acute Care

## The IP often oversees surveillance in areas other than acute care in their facility

- Recommendations change frequently
  - Refer to All Facility Letters (AFLs)
  - State Public Health Officer Orders
  - Local Public Health Officer Orders – may be different than CDC and CDPH
  - CDC, and CDPH (Tuesday 8 a.m.) update calls as they occur
- If differences occur between guidance, go with the most stringent of any guidance

[All Facility Letters](#)

([www.cdph.ca.gov/Programs/CHCQ/LCP/Pages/LNCAFL.aspx](http://www.cdph.ca.gov/Programs/CHCQ/LCP/Pages/LNCAFL.aspx))

# COVID 19 in Clinic Settings

- Urgent care
- Emergency rooms
- Primary care clinics
- Prevention of exposure in high risk clinics (oncology, pediatric, geriatric)
  - Ensure source control by masking
  - Ensure adequate ventilation for the setting
    - Consider outdoor check in space if weather and building configuration permit

# LICE AND SCABIES

## Lice - *Pediculus humanus capitis*

- Adult head lice are roughly 2–3 mm long
- Head lice infest the head and neck and attach their eggs to the base of the hair shaft
- Lice move by crawling - they cannot hop or fly
- Head lice infestation (pediculosis) spread by close person-to-person means
  - Transmitted by direct (head to head) contact



Two lice viewed under an electron microscope  
Note the claws used to grasp onto individual hairs

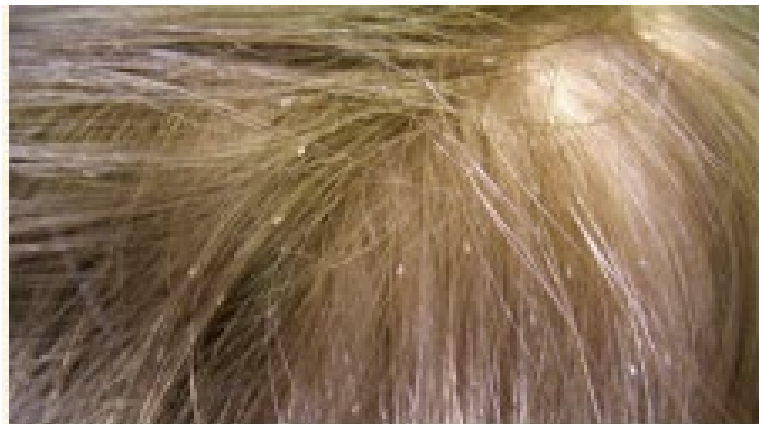
[CDC - Lice - Head Lice](https://www.cdc.gov/parasites/lice/head)

([www.cdc.gov/parasites/lice/head](https://www.cdc.gov/parasites/lice/head))



## Lice – Signs and Symptoms

- Can be asymptomatic, with a first infestation or when an infestation is light
- Pruritus is the most common symptom, caused by allergic reaction to louse bites
- May take 4–6 weeks for itching to appear the first time a person has head lice
- Other symptoms may include:
  - A tickling feeling or a sensation of something moving in the hair
  - Irritability and sleeplessness
  - Sores on the head caused by scratching, which can sometimes become infected with bacteria normally found on a person's skin



[CDC: How to examine for head lice](https://www.cdc.gov/parasites/resources/pdf/HeadLiceFlyer.pdf)

([www.cdc.gov/parasites/resources/pdf/HeadLiceFlyer.pdf](https://www.cdc.gov/parasites/resources/pdf/HeadLiceFlyer.pdf))

## Risk Factors and Transmission

- Not generally healthcare associated (HAI), but may be diagnosed in the emergency or pediatric departments
- In the US -most common among preschool- and elementary school-age children
- Not known to transmit disease
  - Secondary infections may occur due to scratching
- Not related to cleanliness of the person or the environment
- **Contact precautions** in healthcare settings to prevent transmission
  - Gowns and gloves for close patient care until treatment has been given and all nits removed
  - Patient may wear a hair bonnet when leaving the room to reduce potential contact with other persons

# Lice Treatment

- Treat an active infestation
- Follow the label directions of the lice treatment product carefully
- Do not use a combination shampoo/conditioner, or conditioner, before using lice medicine
- Do not re-wash the hair for 1–2 days after the lice medicine is rinsed or removed
- All household members and other close contacts should be checked for lice
  - Persons with evidence of an active lice should be treated
  - Prophylactic treatment should be considered for those with close contact with an active and infested individual
  - If in the same household, treat all at the same time

[CDC - Lice - Head Lice](http://www.cdc.gov/parasites/lice/head)  
(www.cdc.gov/parasites/lice/head)

## After Lice Treatment

- If a few live lice are still found 8–12 hours after treatment, but are moving more slowly than before, do not retreat
- Comb dead and any remaining live lice out of the hair using a fine-toothed nit comb
- After 8–12 hours of treatment, there are no dead lice or lice seem as active as before:
  - Some lice have become resistant to certain lice killing medications
  - Do not retreat without discussing with a health care provider
- Dogs, cats, and other pets do not play a role in the transmission of human lice
  - No special treatment is required

[CDC - Lice - Head Lice](https://www.cdc.gov/parasites/lice/head)

([www.cdc.gov/parasites/lice/head](https://www.cdc.gov/parasites/lice/head))

# Handling Clothing, Linens, Carpeting, and Furniture

- Machine wash and dry any clothing, bed linens, and other items that a lice infested person wore or used 2 days before treatment
  - Use a hot water (130°F) laundry cycle
  - Use high heat (antibacterial) drying cycle
  - Clothing and items that are not washable can be dry-cleaned, or sealed in a plastic bag and stored for 2 weeks
- A louse that has fallen onto carpeting or furniture rarely causes head lice infestation
  - No special cleaning or insecticide is needed
  - Regular vacuuming is only indicated treatment

## Typical Scabies

- Affects people with normal immunity
- Mildly contagious
- Takes 15–50 skin mites to cause an infection
- Usually presents in the finger webs
- More likely to cause infection from persons living in congregate settings, such as LTC or residential care



[CDPH Scabies Fact Sheet](#)

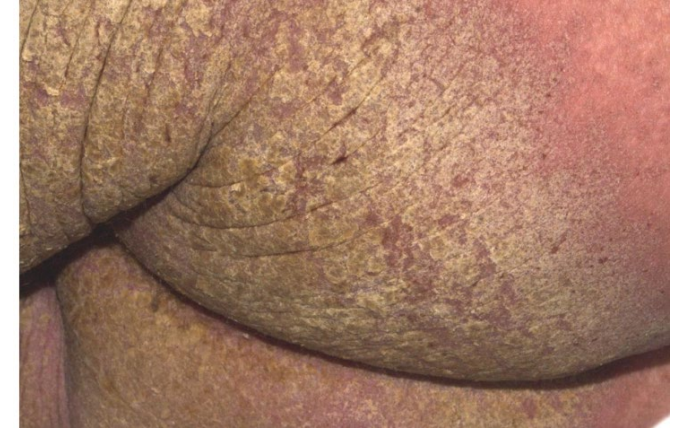
([cdph.ca.gov/Programs/CID/DCDC/Pages/Scabies](http://cdph.ca.gov/Programs/CID/DCDC/Pages/Scabies))

[CDC Scabies Fact Sheet](#) (PDF)

([cdc.gov/parasites/scabies/resources/scabies\\_fact\\_sheet.pdf](http://cdc.gov/parasites/scabies/resources/scabies_fact_sheet.pdf))

# Atypical “Crusted” Scabies

- Formerly ‘Norwegian’ scabies
- Extremely contagious
  - Millions of mites are present
- Thick, crusted lesions found on the skin surface
- Sometimes occurs with immune suppression
- Often misdiagnosed



crusted scabies. Photo © Dr Roderick Hay  
World Health Organization



Photo: Web.stanford.edu

[CDC Crusted Scabies Cases](https://www.cdc.gov/parasites/scabies/health_professionals/crusted.html)

([cdc.gov/parasites/scabies/health\\_professionals/crusted.html](https://www.cdc.gov/parasites/scabies/health_professionals/crusted.html))

# Scabies Detection

1. Prevent outbreaks through early identification
2. **Educate healthcare workers to recognize possible scabies**
  - Emergency room, clinic staff benefit from education
3. Test for scabies promptly
  - Skin scraping is the standard test
  - Done by physician (dermatologist) or trained healthcare provider
4. Initiate contact precautions until the diagnosis is confirmed, and is appropriately treated, or ruled out
5. Search for additional cases when scabies are suspected
  - Occur two weeks after the patient's admission
  - Don't overlook possibility of HCP to patient contact as a source!



# Scabies Treatment

- Refer to CDC and CDPH Guidance
- Treatment options
  - Permethrin cream 5%
  - Sulfur ointment
  - Ivermectin – oral – (resistance is increasing)
  - Lindane and Crotamiton lotions (not for children)
  - Benzyl benzoate 25% (with or without tea tree oil)
- Leave treatment on for recommended time
- Educate all close contacts of the need to be treated
- Scabies have become resistant to some treatments like ivermectin
  - If there is no improvement in symptoms, suspect resistance

[CDC Scabies Treatment](#)

([cdc.gov/parasites/scabies/treatment.html](https://cdc.gov/parasites/scabies/treatment.html))

## Patient Clothing and Belongings

- Clean bedding and clothing worn or used next to the skin by the patient, for 3 days before treatment, should be washed or dry cleaned, or bagged in a plastic bag
  - Send belongs home and teach the family to:
    - Machine wash and dry clothing using the hot water and hot dryer cycles or use dry-cleaner
    - Place items unable to be cleaned or laundered in a tightly closed plastic bag from several days to a week
- **Scabies mites generally do not survive more than 2 to 3 days away from skin**

[CDC Prevention of Scabies](https://www.cdc.gov/parasites/scabies/prevent.html)  
(cdc.gov/parasites/scabies/prevent.html)

## Possible Healthcare Worker Exposure to Scabies

Address questions such as: “Can scabies be taken home to the family?”

- Did the HCP handle the resident without PPE during close contact (bathing)?
- Did the HCP handle linen from the bed immediately after the resident left the bed without wearing gown and gloves?
  - If yes, then they should **monitor for symptoms**
- May not have symptoms for 4-6 weeks after infestation if they have never had scabies
- If previously infested, symptoms may occur within 48 hours after reinfestation

Staff may ask for a ‘prophylactic’ to keep them from contracting scabies

- No prophylactic is available
- Treatments like permethrine are insecticides
- Treatments can become toxic if used improperly

# Handling a Scabies Outbreak

- Develop scabies outbreak control plan if your facility does not have one
    - Pre-determine a scabies outbreak threshold
- Example:
- Two cases of typical scabies on one unit in a 2 week period
    - Verify these cases were not present on admission
  - One case of crusted scabies
- Document training of staff to recognize and report scabies signs and symptoms
  - Treat symptomatic cases and inform and educate close contacts
  - Report the outbreak to your facility's quality and/or regulatory department, CDPH licensing and certification (L&C), and local public health

[CDC Scabies in Institutional Settings](#)

([cdc.gov/parasites/scabies/health\\_professionals/institutions.html](http://cdc.gov/parasites/scabies/health_professionals/institutions.html))

# INFECTION PREVENTION IN SPECIALTY CARE AREAS

## Specialty Care Areas with Specific Risk Factors

- Pediatrics/PICU
- Newborn nursery/NICU
- ICU
- Burn ICU
- L&D/Postpartum
- Emergency department
- Ambulatory surgery
- Clinics owned by hospital systems
- Radiology
- Dialysis – inpatient and outpatient
- Oncology/bone marrow transplant/organ transplant
- Operating Rooms/Surgical services
- Central Sterile/SPD

## Pediatrics/PICU: Common Pediatric Diseases

- Hand, foot, and mouth disease
- Vaccine preventable diseases (VPD)
  - Measles, mumps, rubella
  - Chickenpox
  - Polio
  - Hepatitis
  - Diphtheria
  - Pertussis (whooping cough)
- Strep throat
- Respiratory viruses: rhinovirus, adenovirus, respiratory syncytial virus (RSV), coronaviruses, influenza, parainfluenza
- Gastroenteritis
- Ear infections

[CDC Children's Diseases](https://www.cdc.gov/parents/children/diseases_conditions.html)  
(cdc.gov/parents/children/diseases\_conditions.html)



# Vaccine-Preventable Diseases

The screenshot shows the CDC Vaccines website. At the top left is the CDC logo and the text "Centers for Disease Control and Prevention CDC 24/7: Saving Lives, Protecting People™". To the right is a search bar with "Search" text, a dropdown menu for "Vaccines site", and a magnifying glass icon. Below the search bar is a link for "Advanced Search". A blue banner across the top of the main content area reads "Advisory Committee on Immunization Practices (ACIP)". Below the banner are social media icons for Facebook, Twitter, LinkedIn, and YouTube. The main content area is divided into two columns. The left column features a carousel with a slide titled "2021-22 Seasonal Influenza Recommendations" and a background image of a person in a white lab coat. The right column has a light blue box with an information icon and the heading "COVID-19 Vaccination Recommendations", with links for "ACIP Recommendations" and "Clinical Considerations for Use of COVID-19 Vaccines". Below this is a yellow box titled "Next ACIP Meeting" with the date "February 4, 2022. 10:00am – 5:00pm ET. Virtual meeting, no registration required." and "February 23-24, 2022". It also states "This meeting is virtual. No registration is required to watch the webcasts." and includes a link for "Draft Agenda – February 23-24, 2022".

[CDC Advisory Committee on Immunization Practices  
\(cdc.gov/vaccines/acip/index.html\)](https://www.cdc.gov/vaccines/acip/index.html)



# Cystic fibrosis

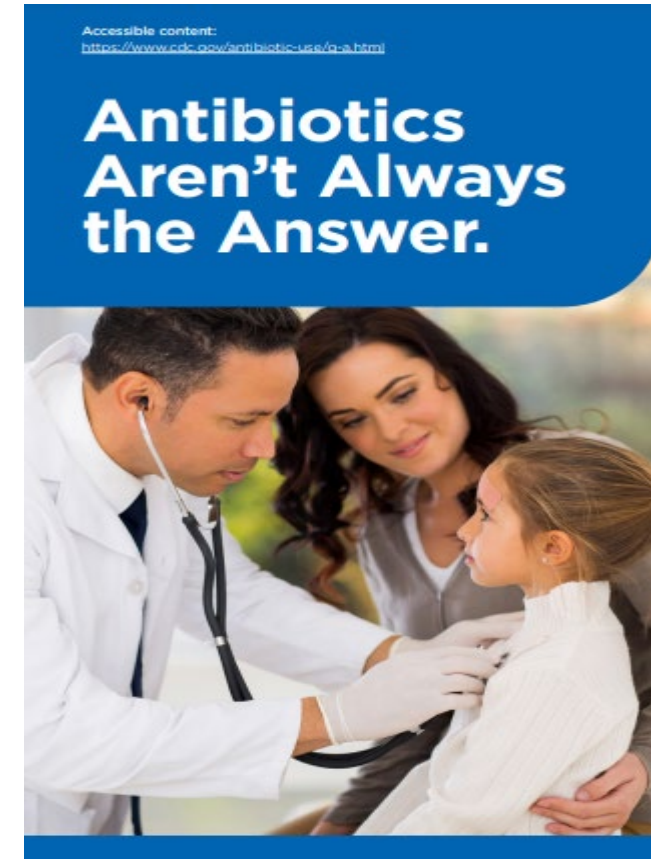
- Cystic fibrosis patients frequently become colonized with:
  - *Burkholderia cepacia*
  - *Pseudomonas aeruginosa*
  - *Staphylococcus aureus*
  - *Haemophilus influenzae*
- *Burkholderia cepacia* has been implicated in HAI
  - Transmission through contaminated medications, nasal sprays
  - Transmits through person to environment to susceptible persons

[B. Cepacia in healthcare settings](#)

([cdc.gov/hai/organisms/bcepacia.html](http://cdc.gov/hai/organisms/bcepacia.html))

# Antibiotic Stewardship in Pediatric Clinics

- Educate parents that antibiotics are not required for all infections
  - Viruses do not respond to antibiotics so will not reduce the length of illness
  - Will set the child up to develop resistant organisms in the future
- Alternative treatments may be palliative
  - Throat lozenges
  - Over the counter pain relievers or antipyretics



[CDC: Antibiotics Aren't Always the Answer](https://www.cdc.gov/antibiotic-use/pdfs/AntibioticsArentAlwaysTheAnswer-H.pdf) (PDF)  
(cdc.gov/antibiotic-use/pdfs/AntibioticsArentAlwaysTheAnswer-H.pdf)

## Newborn Nursery/NICU

- Administration of first dose of hepatitis B vaccine at birth – California mandate
- Transmission of disease during vaginal delivery
  - Prenatal screening for group B Streptococcus and maternal treatment prior to delivery
  - Potential perinatal transmission of herpes simplex 1 or 2
  - Prevention of ophthalmologic gonorrhea
    - Newborn administration of erythromycin or silver nitrate eyedrops
- Isolation of newborns or NICU babies for transmissible diseases
- Prevention of central line infections in NICU
  - Umbilical central lines
  - PICC lines

[CDC Neonatal Component NHSN](#)

([cdc.gov/nhsn/neonatal/index.html](http://cdc.gov/nhsn/neonatal/index.html))

[CDC Guideline for Prevention of Neonatal Infections \(PDF\)](#)

([cdc.gov/infectioncontrol/pdf/guidelines/NICU-saureus-h.pdf](http://cdc.gov/infectioncontrol/pdf/guidelines/NICU-saureus-h.pdf))





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## PERINATAL HEPATITIS B

[Immunization Home](#)

[Me and My Family](#)

[Health Care Providers](#)

[Disease Info and Reports](#)

[Laws and Regulations](#)

[Vacúnate Ya](#)

### Perinatal Hepatitis B Prevention Program

This program provides resources and technical support to local health departments for perinatal hepatitis B prevention and to provide surveillance for perinatal hepatitis B cases. Our goal is to prevent the perinatal transmission of hepatitis B by promoting the following:

- Prenatal testing of all pregnant women for hepatitis B infection and reporting cases to local health departments
- Appropriate immunoprophylaxis of infants born to hepatitis B surface antigen (HBsAg) positive women
- Post-vaccination serologic testing of exposed infants
- Screening and vaccination of close contacts

These measures are backed by California State Law which requires prenatal screening for hepatitis B surface antigen and reporting of hepatitis B infection by health care providers and laboratories to local health departments.

- [Reportable Diseases and Conditions](#)
- [Maternal screening Law \(PDF\)](#)

[CDPH Perinatal Hepatitis B Prevention Program](#)

([cdph.ca.gov/Programs/CID/DCDC/Pages/Immunization/Perinatal.aspx](http://cdph.ca.gov/Programs/CID/DCDC/Pages/Immunization/Perinatal.aspx))



# Labor and Delivery/Postpartum

- Perinatal screening for group B streptococcus, herpes simplex 1 or 2, hepatitis, sexually transmitted diseases
- Other diseases and viruses that cross the placental barrier
- Postpartum infections
  - Episiotomy site infection – (**not reportable** to CDPH)
  - Cesarean section SSI is **reportable** to CDPH
  - Endometritis

[CDC Perinatal Screening Program NHSN \(PDF\)](https://www.cdc.gov/nhsn/pdfs/pscmanual/pcsmanual_current.pdf)  
(cdc.gov/nhsn/pdfs/pscmanual/pcsmanual\_current.pdf)

## Intensive Care Unit (ICU)

- Prevention of ventilator related pneumonia (VAP): Consideration for removal as soon as possible, prevention of infection ventilator bundle adherence
  - Prevention of CLABSIs: Insertion practices, line handling, dressing changes, prevention of CLABSI bundle adherence
  - Prevention of CAUTIs: Removal of devices not needed, CAUTI prevention bundle adherence
  - Prevention of surgical site infections (SSIs): avoid shaving the area pre-operatively, skin disinfection pre-operatively, dressing changes, stopping antibiotics or avoiding their use, prevention adherence monitoring
- 
- Nasal decolonization for MRSA colonized patients
  - Wound care, prevention of pressure ulcers, dressing changes

# Burn ICU

- Loss of skin integrity
  - High risk for colonization or infected with MDROs
- Long term ventilator dependence with high risk of VAP
  - Unable to extubate
  - Loss of integrity of the respiratory tract
- Central lines
  - Administration of fluids and medications
  - Total Parental Nutrition (TPN) and lipids increase risk of CLABSI
- Antibiotics (possible resistance, or risk for CDI)
  - May be continued for weeks to months
- Multiple surgeries
  - Debridement of dying tissue

Merchant, et. al. (2015)

## Pediatric ICU (PICU)

- Bloodstream infections are the most common healthcare associated infection (HAI) in PICU
- Central nervous system, lower respiratory tract, GI tract associated with high mortality rates
  - Meningitis
  - Pneumonia
  - Bowel necrosis
- Care and risks are not the same as for adult ICU patients
- Most common bacteria are gram negative (89% of infections)

[CDC NHSN Pneumonia \(PedVAP\) Definitions](https://www.cdc.gov/nhsn/psc/pneu/index.html)

(cdc.gov/nhsn/psc/pneu/index.html)

(Mackenzie 2016)



# Emergency Department

- Meningitis – Bacterial or viral
  - *Neisseria meningitidis* exposure to HCP is an emergency
    - During intubation if PPE not worn
  - Viral meningitis is not transmissible and is not an exposure
- Trauma
  - Level 1 trauma - may perform surgery in the OR designated space of the ED
  - Potential exposures to communicable diseases through
    - Blood and body fluids
    - Vomiting, diarrhea
    - Coughing, respiratory secretions

(Liang, Reithman, and Fox, 2018)

# Cardiac Catheterization Laboratory

- High risk procedures performed
  - Brachial cut down
  - Femoral site access
- Peripheral IV and central lines
  - HCP must prevent accidental discontinuation of lines during procedures
- Risk of exposure to HCP
  - PPE worn to protect from blood exposure
- Procedure rooms should be treated as OR rooms
  - Aseptic technique and positive air flow
- Surgical gowns, masks, eye protection for HCP
- Hand hygiene is the most often missed opportunity for prevention of HAIs in this setting

Yohnke, et.al., 2018, AJIC

# Oncology or Bone Marrow Transplant Units

- Graft vs. Host Disease (GVHD)
  - Poor response to vaccines
- Low neutrophil count (<500)
  - No defense against any pathogen
- Strict adherence to hand hygiene, environmental cleaning, equipment cleaning
- Special air handling and positive pressure rooms
- Visitor restrictions
- Construction and renovation near areas where these patients are housed require strict infection prevention
  - Possible fungal diseases such as *Aspergillus*
- Water borne organisms such as *Legionella*

[CDC Guidelines for Preventing Opportunistic Infections Among Hematopoietic Stem Cell Transplant Recipients](https://www.cdc.gov/mmwr/preview/mmwrhtml/rr4910a1.htm)

([cdc.gov/mmwr/preview/mmwrhtml/rr4910a1.htm](https://www.cdc.gov/mmwr/preview/mmwrhtml/rr4910a1.htm))

# Solid Organ Transplant

- Includes skin, musculoskeletal transplants
- HIV, hepatitis B and C acquired through transplanted organs
  - Stricter testing of donated organs has lessened but may still be a risk
- Other donor-derived infections
- Immune suppression from drugs that prevent organ rejection
- Epstein-Barr virus
- Strict hand hygiene, environmental cleaning, equipment cleaning by HCP
- Visitor restriction
  - Screen for those with symptoms of illness
  - If symptomatic, visitor can return when healthy

[CDC Organ Transplantation](#)

([cdc.gov/infectioncontrol/guidelines/organ-transplant/index.html](http://cdc.gov/infectioncontrol/guidelines/organ-transplant/index.html))

# Perioperative Services

- Sterile technique for any invasive procedure
  - Draping
- Scrubbing before and between cases
- Glove changes as appropriate
- Surgical gown
- Procedure glove versus sterile gloves
- Masks are fluid resistant
- Eye protection
- Hair and shoe covers
  - Prevents hair from entering the surgical wound
  - Shoe covers are PPE – protect from blood and body fluids

## Perioperative Services (continued)

- Orthopedic surgeons may utilize special equipment
  - Attempt to reduce orthopedic SSIs
  - Powered Air Purifying Respirators (PAPRs)
  - Space suits
- Use of robotics (DaVinci) for procedures
  - Surgeon will doff their gown to use the robot
  - Must don a new gown if returning to the OR table
- Surgical tech responsible for instruments
- Circulating nurse responsible for documentation, acquiring supplies, traffic control, and other duties
  - Minimize number of door openings and entry during procedure

# Anesthesia Administration and Skin Prepping

- The anesthesiologist scrubs each hub before administering medication
  - Scrub the vial before withdrawing medication and allow to dry
  - Antibiotic is administered within an hour of incision
    - Too soon will not allow for tissue load of the antibiotic
- Clipping the skin before draping
  - Shaving will nick the skin which allows for bacteria
  - Hair that is loose can float and enter into the surgical wound
- Skin prep with appropriate disinfectant
  - Chlorhexidine gluconate (CHG) must dry for three minutes before incision can be made
  - Allowances in cases of trauma

(Munoz-Price, et al, 2019)

## Surgical Services – Pre-Op, OR PACU

- The IP observes for:
  - Trays opened and instruments left uncovered for long periods of time before the patient arrives
  - Open trays in the OR room left unattended and uncovered
- IV bags pre-spiked for more than one hour prior to infusion start
- Surgical techs must check the trays before the case starts
  - Checking wrap for holes, tears, torn tape
  - Checking outer tape and internal indicator for color change
    - Prevents accidentally using a tray that has not been sterilized
  - Checking for wet trays
  - Checking for damage or debris on the instruments
- Ordering a new instrument or pack if issues are found

(Branch and Amiri, 2020)



# Operating Rooms/Surgical Services

- SSI prevention
  - Skin prep per manufacturer instructions for use (IFU)
  - Using clippers and not razors to remove hair
  - Using the correct antiseptic for skin prep
    - Povidone iodine or chlorhexidine (CHG)
    - CHG cannot be used in mucous membranes
- Housekeepers must be specially trained to clean in this area
  - Process of clean to dirty
  - What can be cleaned, what cannot
  - Special equipment such as DaVinci robot – how to handle
  - Adhering to contact time of the disinfectant

(Bashaw and Keister, 2019)

# Geriatric Care Units

- Care of the aged
  - Unique set of infection prevention challenges
  - Immune system waning
  - Site and/or hearing loss
  - Safety issues
    - Fall prevention
  - Cognitive decline
  - Friable skin, susceptible to tears and bruising

(Christina, et al, 2021)

# Challenges in Geriatric Care

- Memory care
  - Unable to keep doors closed for isolation
  - Fall risks
  - Unable to keep a mask on during transportation
  - Accessing hand sanitizer inappropriately
- Confusion of the patient adds to potential risk for indwelling catheter
  - Pulling at IV catheters, central lines, urinary catheters
  - Pressure ulcers if unable to move

# Dialysis

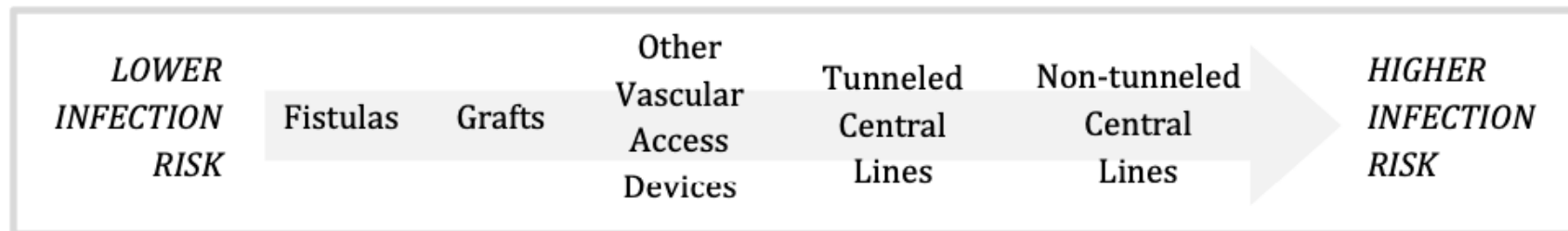
- Inpatient
  - Hepatitis B patients done last of the day
  - May be in room or performed in dialysis center
  - Checking for instrument cleaning schedule
  - Patients in isolation are dialyzed in their room
- Outpatient
  - Hepatitis B patients scheduled at the end of the day
  - Those with MDROs are dialyzed in isolation room or away from other patients
- Documentation of dialyser and machine maintenance
- Keeping staff safe from bloodborne pathogens
  - PPE requirements

[CDC Dialysis – Preventing Infections](https://www.cdc.gov/infectioncontrol/guidelines/dialysis/index.html)

([www.cdc.gov/infectioncontrol/guidelines/dialysis/index.html](https://www.cdc.gov/infectioncontrol/guidelines/dialysis/index.html))

## Dialysis and NHSN

- Inpatient settings: Report positive blood cultures within one calendar day after patient admission
- Outpatient dialysis: Report all positive blood cultures
  - Swelling, redness, pus at the insertion site
- Dialysis Event: Three types of dialysis events are reported by users
  - IV antimicrobial start
  - Positive blood culture
  - Pus, redness, or increased swelling at the vascular access site
- Risk of infection by type of vascular access



# OUTPATIENT SETTINGS – OVERSEEN BY THE HOSPITAL INFECTION PREVENTIONIST

# Types of Outpatient Clinics

- Infusion centers
  - Chemotherapy
- Rehabilitation
  - Pulmonary rehab
  - Physical, occupational, speech
- Primary care
- Urology
- Gynecology
- OB
- Pediatrics
- Wound care
  - Hyperbaric treatment
  - Debridement
- Radiology
  - Linear accelerator
  - Radioactive isotopes
- Dental clinics
- Plastic surgery
  - Procedures done in clinic that should be done in OR
- Eye clinics
- Audiology
- Endoscopy
- Ear, nose, and throat (ENT)
- Outpatient psychiatry
- Ambulatory surgery

# Common Infection Prevention Issues Found in Clinic Settings

- Reuse of single use vials
- Overfilled or improper sharps container usage
- Improper storage of equipment and supplies
- Expired medications, undated medications
- Expired equipment
- Improper cleaning and disinfection
  - Use of contracted housekeeping
  - Purchase of disinfectants by contracted company
- Use of furniture that cannot be disinfected
  - Upholstery, fabric
  - Damaged equipment with underlying exposed contents that cannot be cleaned



## Preventing Disease and Exposures in Clinic Settings

- Potential transmission of tuberculosis, influenza, and other respiratory exposures in waiting rooms
  - Methods use to prevent sick patients from exposing well patients
    - Pediatrics: Create a 'sick' waiting separate from 'well' patient waiting area
    - Adults: Instruct patients on respiratory etiquette and reminders with signs
      - Have tissues available
      - Hand sanitizer placed near check in area
    - Seat ill patients immediately into an exam room with the door closed
    - Create a separate waiting area or outdoors
- Hand hygiene reminders
- Respiratory etiquette reminders
- Influenza prevention strategies

## Ambulatory surgery

- Operating room is cleaned the same as surgery in an acute care hospital
- Procedures are not low risk
  - For patients who will not stay overnight
  - Skin prep as required
    - If requires a dry time, allows per manufacturer's guidelines
- Room turnover by housekeeping must be evaluated
  - Push to start cases quickly may lead to skipping step in OR room cleaning
- Instrument handling
  - Tray stays wrapped until room is ready
  - Instruments are rinsed after use and/or enzymatic detergent is used to prevent drying

[Hospital Based Ambulatory Surgery](#)

([ahrq.gov/news/newsroom/ambulatory-surgery.html](http://ahrq.gov/news/newsroom/ambulatory-surgery.html))

# Endoscopy

- High level disinfection requires highly trained staff to prevent disease transmission and exposure to themselves
- Transportation of scopes in a container that prevents spillage of blood or body fluids from procedure to reprocessing area
- PPE worn as appropriate
- Disposal of biohazardous waste
- Reprocessed scopes are stored to allow for drying of the channels
- Policy and procedure that if an endoscope wasn't used for 60 days or more, the scope is reprocessed immediately before the procedure

[Essential Elements of a Reprocessing Program for Flexible Endoscopes](https://www.cdc.gov/hicpac/recommendations/flexible-endoscope-reprocessing.html)  
([cdc.gov/hicpac/recommendations/flexible-endoscope-reprocessing.html](https://www.cdc.gov/hicpac/recommendations/flexible-endoscope-reprocessing.html))


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## HEALTHCARE-ASSOCIATED INFECTIONS PROGRAM

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[Me and My Family](#)
[HAI Prevention and Reporting](#)
[Antimicrobial Resistance](#)
[Antimicrobial Stewardship](#)
[Public Health Partners](#)
[California Health Alert Network \(CAHAN\) HAI/AR Advisories](#)

The Healthcare-Associated Infections (HAI) Program in the California Department of Public Health [Center for Health Care Quality](#) oversees the prevention, surveillance, and reporting of HAI and antimicrobial resistance (AR) in California's hospitals and other healthcare facilities. Unfortunately, infections acquired as a result of receiving health care remain a public health problem; most HAI are preventable by following infection prevention care practices. Since 2010, the HAI Program:

- Receives and publicly reports California hospital HAI data to provide hospital quality information to the public and prompt providers to take action to prevent infections;
- Follows up with hospitals that have high infection rates;
- Convenes statewide and regional HAI/AR prevention collaboratives to coordinate prevention efforts among facilities that commonly share patients;
- Assists local public health agencies to investigate unusual infection occurrences and outbreaks that occur in healthcare facilities.



[Me And My Family](#)



[HAI Prevention and Reporting](#)

[HAI Program website  
\(www.cdph.ca.gov/hai\)](http://www.cdph.ca.gov/hai)



## Resources

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## Questions?

For more information,  
please contact

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