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# Objectives

- Understand the basic principles of infection prevention and control
- Incorporate bloodborne pathogen and aerosol transmissible diseases exposure prevention strategies to your workflow
- Define Multi-Drug Resistant Organism; Identify 2 MDROs in hospital setting
- Identify the elements of Central Line Associated Bloodstream Infection (CLABSI) Prevention Bundle
- Identify the elements of Surgical Site Infection (SSI) Prevention Bundle
- Identify the elements of Catheter Associated Urinary Tract Infection (CAUTI) Prevention Bundle
- Describe three measures to prevent breast milk exposure
- Access Infection Prevention & Control Policies and Procedures online

# 2014 National Patient Safety Goals

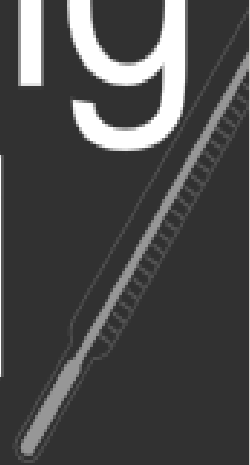
- There are five infection prevention-related Joint Commission National Patient Safety Goals:
  - *NPSG.07.01.01*
    - Use hand cleaning guidelines from Centers for Disease Control & Prevention (CDC) or World Health Organization (WHO)
  - *NPSG.07.03.01*
    - Use proven guidelines to prevent infections that are difficult to treat (Multi-Drug Resistant Organisms referred to as MDROs)
  - *NPSG.07.04.01*
    - Use proven guidelines to prevent infection of the blood from central lines
  - *NPSG.07.05.01*
    - Use proven guidelines to prevent infection after surgery
  - *NPSG.07.06.01*
    - Use proven guidelines to prevent infections of the urinary tract that are caused by catheters

# Preventing Hospital Acquired Infections

Please click to start video



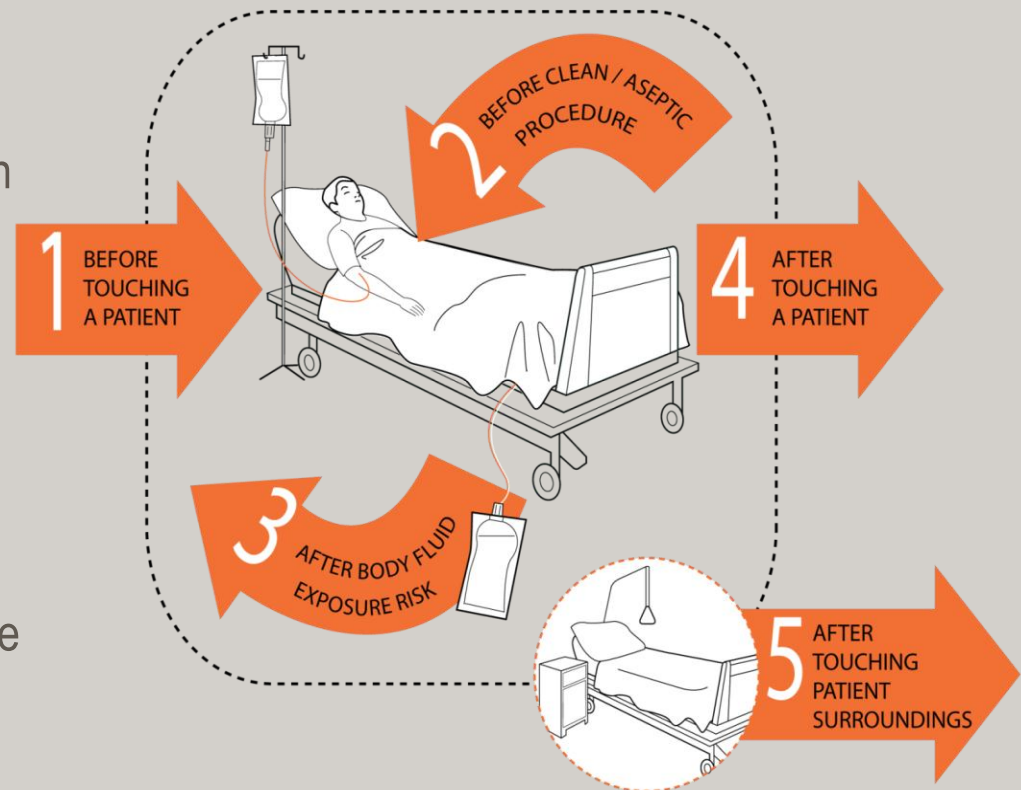
Partnering  
to Heal



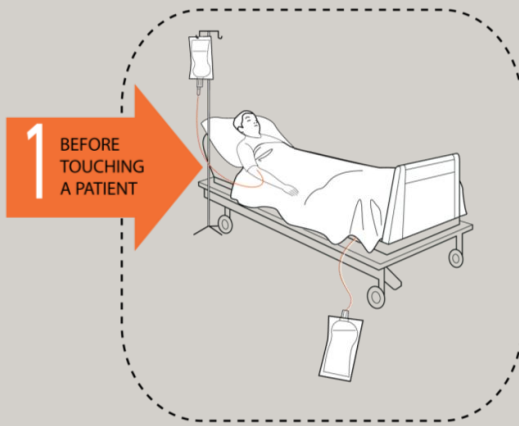
# Preventing Hospital Acquired Infections

- Hand hygiene is the **single most important** strategy to prevent the spread of germs and fight healthcare acquired infections.
- World Health Organization has identified five critical moments when hand hygiene is indicated to protect the patient, healthcare worker, patient zone (patient's immediate surroundings) and hospital environment.
- Hand hygiene must be performed where you are delivering care (at the point of care).

## The 5 Moments for Hand Hygiene are...



# Preventing Healthcare Acquired Infections



*Clean your hands before or when entering the patient zone and before touching the patient*

*For example, clean you hands before:*

- shaking hands, stroking a child's forehead
- helping a patient to move around
- applying oxygen mask
- taking pulse, blood pressure, chest auscultation, abdominal palpation, recording ECG

*Clean your hands before performing a clean/aseptic task*

*Examples of clean/aseptic task:*

- suctioning
- instilling eye drops
- skin lesion care, wound dressing
- catheter insertion, subcutaneous injection
- opening a vascular access system or a draining system
- Food preparation, medication preparation & administration

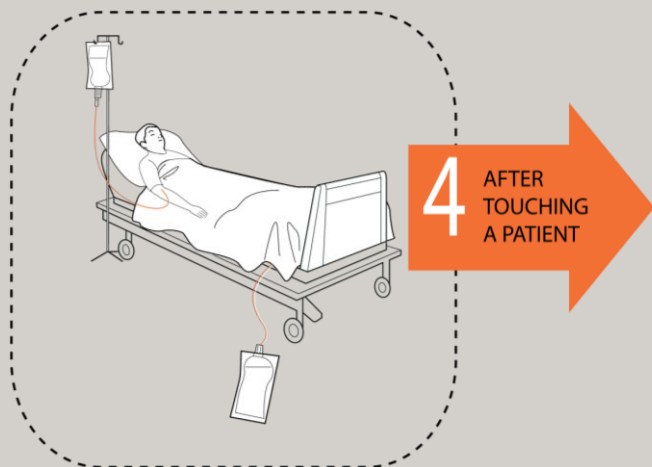


# Preventing Healthcare Acquired Infections

*Clean your hands after performing your task and after glove removal*

**Examples of body fluid exposure risk:**

- subcutaneous injection, IV insertion
- skin lesion care, wound dressing
- drawing and manipulating any fluid sample, opening a draining system
- endotracheal tube insertion and removal
- clearing up urine, feces, vomit
- handling waste (incontinence pads, gauze soaked with blood)



**Examples of direct patient contact:**

- providing bed bath
- helping a patient get out of bed or ambulate
- applying oxygen mask
- taking vital signs, chest auscultation
- performing physical assessment

*Clean your hands when you leave the patient zone*



# Preventing Healthcare Acquired Infections

Examples of situations having in contact with patient surroundings:

- touching the door knob or cubicle curtain
- setting up bedside table for meals
- cleaning patient care equipment and medical devices (IV pumps, IV poles, vital signs machine, iStat, glucometer, stethoscope)
- holding a bed rail, telephone or call button



**5** AFTER  
TOUCHING  
PATIENT  
SURROUNDINGS

# Preventing Healthcare Acquired Infections

- ❖ Key things to remember when performing hand hygiene are appropriate **technique** and **time duration**.
  - Use hospital approved alcohol based hand rub
  - Apply friction when rubbing your hands **for at least 15 seconds**

## How to handrub



Apply a palmful of the product in a cupped hand, covering all 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;



Once dry, your hands are safe.

## Alcohol Based Hand Rub

Alcohol based hand rub is more effective and accessible than soap & water so you are encouraged to use alcohol based hand rub for:

- Routine decontamination of hands
- When hands are not visibly soiled
- Before and after wearing PPEs
- If you accidentally use your hands to cover your sneeze/cough

# Preventing Healthcare Acquired Infections

- Apply friction when rubbing your hands
- Wash your hands for **at least** 15 seconds using friction rub
  - » Singing “Happy Birthday” twice is equivalent to 15 seconds

## When should you clean your hands with soap and water?

Clean your hands with soap and water

- Before and after your shift
- Before and after eating/drinking
- Before and after using the bathroom
- When hands feel sticky after several uses of degermer
- When your hands are visibly soiled
- After taking care of patient with suspected or confirmed C. difficile, Norovirus or infectious diarrhea

*Do not forget to use paper towel when turning off the faucet*

## How to handwash



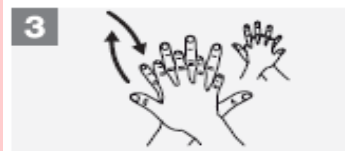
Wet hands with water;



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;



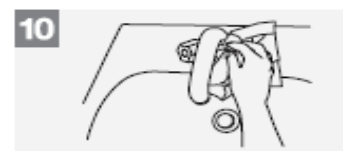
Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



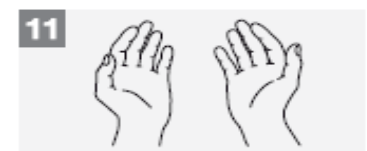
Rinse hands with water;



Dry hands thoroughly with a single use towel;



Use towel to turn off faucet;



Your hands are now safe.

# Preventing Healthcare Acquired Infections

## LPCH Hand Hygiene Policy

- Natural nails shall be kept clean and neatly trimmed
- Artificial/acrylic/gel nails, overlays, tips, nail wraps and/or any type of nail accessory are ***not allowed*** to be worn by employees with direct patient care
- Hand, wrist, or arm jewelry and watches are not allowed during contact with patients, except for one plain band
- Use hospital approved hand hygiene products (degermer, soap, lotion)
- If you develop sensitivity to LPCH hand hygiene products
  - ❖ *Report to your manager/supervisor as soon as possible*
  - ❖ *You may be directed to go to Occupational Health Services for evaluation*



# Preventing Healthcare Acquired Infections

## Bloodborne Pathogen

Bloodborne pathogen is an organism which may be present in human blood, body fluids and other potentially infectious materials (OPIMs) that can cause disease in humans.

**BBPs may be present in the following:**

**Blood  
Semen  
Vaginal secretions  
Cerebrospinal fluid  
Synovial fluid  
Pleural fluid  
Pericardial fluid  
Peritoneal fluid  
Amniotic fluid  
Saliva  
Breast milk  
Vomit**

**Healthcare workers are at risk for acquiring BBPs that can be transmitted via contact with blood and body fluids.**

**Examples of BBPs are:**

**Hepatitis B virus (HBV)  
Hepatitis C virus (HCV)  
Human Immunodeficiency Virus (HIV)**

# Blood-borne Pathogen Exposure Control Plan

- Standard Precautions

- Consider all patients as potentially infectious
- Consider all blood, body fluids potentially infectious
- Wear appropriate Personal Protective Equipment (PPEs) when handling or anticipating exposure to blood, body fluids or OPIMs

- Engineering Controls

- Sharps Safety



- Sharps containers and waste receptacles are appropriately labeled with biohazard sign
    - Sharps containers are changed out when  $\frac{3}{4}$  full
    - Proper handling of sharps- no needle recapping unless absolutely necessary
    - Activate sharps safety device prior to disposal
    - Immediately dispose of sharps after use

- Use of Needleless System and Needleless Devices

- Use of needleless IV tubing connectors and luer lock syringes and connectors



# BBP Exposure Control Plan continued...

- Employee Hepatitis B Vaccination

- Healthcare workers are highly encouraged to get vaccinated
- Hepatitis B vaccine is offered to all employees free of charge upon hire and anytime you decide to get vaccinated



- Work Practice Controls

- Perform excellent hand hygiene to protect yourself, your patient and the hospital environment
- Do not eat or drink in patient care areas and in areas where patient care supplies are stored
  - Covered drinks are only allowed in designated patient care unit Hydration Station
- Do not handle contact lenses, or apply cosmetics in patient care areas or areas where patient care supplies are stored
- Store and dispose of infectious waste appropriately

# BBP Exposure Control Plan continued...

- Use of Personal Protective Equipment (PPE)
  - Wear PPEs whenever there is a potential or anticipated exposure to blood or body fluids
  - PPEs include but are not limited to gown, gloves, mask, face shield, goggles, shoe covers, PAPR
  - **Key things to remember when wearing PPEs to protect yourself**

- ❖ *Wear PPEs appropriately and follow manufacturer's instructions for use*
- ❖ *Remove and dispose of PPEs before leaving your work area or patient zone*
- ❖ *Remove and change PPEs*

*when they are soiled, torn, damaged or become contaminated*

***Please remember most PPEs are designed for single use only***





# BBP ECP continued...

- Environmental and Equipment Cleaning and Disinfection
  - It is crucial to clean & disinfect patient care equipment in between patients to prevent cross contamination
  - Examples of patient care equipment :BP machine, glucometer, iStat, stethoscope, thermometer, toys
  - Routine cleaning and disinfection of patient care areas and hospital environment is also important to prevent the spread of microorganisms
- ❖ ***Remember the “back to basics” approach... if you TOUCH IT, you MOVE IT, you CLEAN IT !!!***
- Post Exposure Medical Evaluation and Treatment
  - Splashing/spraying and needle stick injuries are the most common ways of healthcare worker exposure to BBPs
  - If you ever get exposed to BBPs or sustained a needle stick injury you must report the exposure incident to your Manager/Supervisor immediately
  - You may be directed to go to Occupational Health Services (OHS) or Emergency Department for prompt medical evaluation, treatment and follow up
  - Treatment, Post-Exposure Prophylaxis (PEP) and follow up may vary and will depend on the severity of HCW exposure and health status of source patient

# How to Access Bloodborne Pathogen Standard & Exposure Control Plan?

- OSHA Bloodborne Pathogen Standard is accessible online at

[https://www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_id=10051&p\\_table=STANDARDS](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_id=10051&p_table=STANDARDS)

- The LPCH Bloodborne Pathogen Exposure Control Plan is available on the intranet under Safety Manual Policy

<https://intranet.lpch.org/formsPoliciesReferences/policies/hospitalWide/safety/bloodbornePathogenExposureControl.html>

# Preventing Healthcare Acquired Infections

There are several ways you can do to help prevent the spread of Multi-Drug Resistant Organisms (MDROs)

- Appropriate and judicious use of antibiotics
  - Avoid use of broad spectrum antimicrobials and/or prompt de-escalation of broad spectrum antimicrobial once microbiology culture results are available
  - Use of antimicrobial agent that targets the specific organism of concern
  - Implement Antibiotic Stewardship Program (ASP)
    - The goal of ASP is to promote appropriate use of antimicrobial agents to optimize clinical outcomes while minimizing potentially harmful unintended consequences
    - LPCH has a list of approved antimicrobial agents based on the most current antibiogram
    - Use of listed restricted antibiotics requires Infectious Disease physician consultation and approval prior to use
- ❖ *Your role is to verify correct antibiotics being used on your patient, check microbiology results and report results to physician accordingly so that timely initiation, de-escalation or discontinuation of antimicrobial treatment can be implemented*
- Excellent hand hygiene
  - Healthcare workers hands are vehicles for organism transmission so meticulous hand hygiene is crucial in preventing MDROs and prevention of healthcare acquired infections

# Preventing Healthcare Acquired Infections

- Proper cleaning and disinfection of patient care equipment
  - Dirty and unclean patient care equipment can be a reservoir for microorganisms
  - can be a vehicle for transmission of MDROs



- Proper cleaning and disinfection of patient care environment
  - Contaminated surfaces and hospital environment can be a reservoir for microorganisms to grow

- Strict adherence to Transmission Based Isolation Precautions are instituted
  - Use Contact Isolation Precautions for MRSA, VRE, CRE, and ESBL producing organisms
  - Use Contact Plus Isolation Precautions to prevent the spread of C. difficile, norovirus and infectious diarrhea
- Educate patients and visitors about MDRO and how to prevent transmission
  - It is important that your patients, their family members and visitors understand the diagnosis, infection transmission prevention and to comply with our isolation protocols
- Document proper isolation and education provided in the medical record
  - Documentation serves as a proof of care provided to the patient and family members and is a very helpful tool during exposure investigation and regulatory agency surveys

# Preventing Healthcare Acquired Infections

## California Law: SB 1058

Effective January 1, 2009 California law requires MRSA Active Surveillance Testing for certain patient population. MRSA screening should be performed within 24 hours of hospital admission.



### *Criteria for MRSA Screening*

- Patients discharged from Acute Care Hospital within 30 days of readmission
- Patients admitted to Intensive Care Unit (ICU)
- Patients transferred from Skilled Nursing Facility (SNF)
- Patients receiving inpatient hemodialysis

# Preventing Healthcare Acquired Infections

## Other Requirements of SB 1058

- Patients shall be notified by healthcare provider of positive MRSA result as soon as possible
- Physician must document patient notification in patient's medical record
- Patients shall receive a verbal and written instruction regarding prevention of MRSA transmission
- At LPCH, the attending nurse is also responsible in providing patient and family education about MRSA and how to prevent MRSA transmission
- Education provided must be documented in patient medical record

# Preventing Healthcare Acquired Infections

## Transmission Based Isolation Precautions is observed across LPCH

- They are additional precautionary measures implemented when caring for patients with suspected or confirmed communicable diseases and MDROs
  - Isolation signs are displayed outside of the patient's room and
    - Are in English & Spanish and includes graphics for ease of use
    - Applies to all employees and medical providers
    - Applies to families and visitors
- Multi-drug resistant organism (MDRO)
  - Is an organism that is resistant to commonly used antibiotics
  - Certain drug regimen will not work if organism is multiply resistant
- Examples of MDROs are:

<b>MRSA</b>	Methicillin Resistant Staphylococcus Aureus
<b>VRE</b>	Vancomycin Resistant Enterococcus
<b>ESBL</b>	Extended Spectrum Beta Lactamase producing bacteria
<b>CRE</b>	Carbapenem-Resistant Enterobacteriaceae

# LPCH Isolation Signs

## PRECAUTIONS CONTACT



Before going in room, talk to the nurse.  
Antes de entrar en la habitacion, hable con el enfermero.



**IN** Before Entering  
Antes De Entrar

- Clean hands before putting on gown and gloves.
- Wear gown and gloves for all contact with patient or anything in the room.
- Lávase las manos antes de ponerse la bata y los guantes.
- Use la bata y los guantes cuando este con el paciente en su habitacion.

**OUT** Before Exiting  
Antes De Salir

- Remove gown and gloves in room, leave room, clean hands.
- Lávase las manos al dejar la habitacion y sacse la bata, la mascara y los guantes.

## PRECAUTIONS CONTACT+PLUS



Before going in room, talk to the nurse.  
Antes de entrar en la habitacion, hable con el enfermero.



**IN** Before Entering  
Antes De Entrar

- Clean hands before putting on gown and gloves.
- Wear gown and gloves for all contact with patient or anything in the room.
- Lávase las manos antes de ponerse la bata y los guantes.
- Use la bata y los guantes cuando este con el paciente en su habitacion.

**OUT** Before Exiting  
Antes De Salir

- Wash hands with soap and water after taking off gown and gloves.
- Lávase las manos con agua y jabon despues de quitarse la bata y los guantes.



# LPCH Isolation Signage

## PRECAUTIONS DROPLET/CONTACT



Before going in room, talk to the nurse.  
Antes de entrar en la habitacion, hable con el enfermero.



### IN Before Entering Antes De Entrar

- Clean hands before putting on gown, mask, and gloves.
- Must wear mask, gown, and gloves.
- Debe usar mascara, bata y guantes.
- Lave las manos antes de ponerse la bata, la mascara y los guantes.

### OUT Before Exiting Antes De Salir

- Remove gown and gloves in room, leave room, remove mask, clean hands.
- Lave las manos al dejar la habitacion y sacse la bata, la mascara y los guantes.

## PRECAUTIONS AIRBORNE/CONTACT



Before going in room, talk to the nurse.  
Antes de entrar en la habitacion, hable con el enfermero.



### IN Before Entering Antes De Entrar

- Clean hands before putting on gown, mask, and gloves.
- Must wear mask, gown, and gloves.
- Debe usar mascara, bata y guantes.
- Lave las manos antes de ponerse la bata, la mascara y los guantes.

### OUT Before Exiting Antes De Salir

- Remove gown and gloves in room, leave room, remove mask, clean hands.
- Lave las manos al dejar la habitacion y sacse la bata, la mascara y los guantes.

# Preventing Healthcare Acquired Infections

## Airborne Transmissible Diseases (ATDs)

- The California Occupational Health & Safety Division adopted the Aerosol Transmissible Diseases Standard in August 2009.
- What is an ATD?
  - An **ATD** is a disease or pathogen that is transmitted by aerosols
  - Aerosols are gaseous suspension of fine solid or liquid particles
  - These pathogens can come with secretions from upper and lower respiratory tract of a person
  - Some ATDs are vaccine preventable such as measles, varicella and seasonal influenza
  - ATDs can be transmitted in two ways: airborne and droplet

*Identifying some of the ATDs seen in the hospital setting and how they are transmitted will protect you from occupational exposure as well as prevent and/or minimize ATD transmission among healthcare workers, patients and visitors. The next slides show examples of ATDs and how they are transmitted. Do remember that it is essential to wear appropriate PPEs during direct contact and when providing care to patients with suspected or confirmed ATDs to protect yourself.*

# Airborne Transmissible Diseases (ATDs)

AIRBORNE	DROPLET
Airborne ATDs are very tiny particles (droplet nuclei) that can remain suspended in the air and may travel long distances on air currents	Droplet ATDs are large particles that may drop quickly to ground or surfaces and do not travel very far
Requires use of N95 mask or Powered Air Purifying Respirator (PAPR). You need to be fit tested and pass fit testing before you can wear an N95 mask. You need to be trained how to use a PAPR and learn how to properly inspect it before you can use a PAPR.	Requires use of regular surgical mask for patient contact and patient care
Wearing of PAPR or N95 is required when entering the room of a patient on Airborne Isolation Precautions or within an hour of patient discharge & when changing air filters of AIIR	
Post blue-colored Airborne/Contact Isolation Sign	Post green-colored Droplet Isolation Sign

# Airborne Transmissible Diseases (ATDs)

AIRBORNE ATD	Signs/Symptoms
Varicella	Fever, body malaise, vesicular rash
Pulmonary Tuberculosis	<p>Unexplained weight loss, night sweats, fever, prolonged cough, bloody respiratory secretions.</p> <p>Please bear in mind that pediatric patients may not usually present with classic signs &amp; symptoms of tuberculosis. Obtaining a history of possible TB exposure and recent travel to areas with high TB incidence is important.</p>
DROPLET ATD	Signs/Symptoms
Bacterial Meningitis	Fever, intense headache, stiff neck, confusion. Pediatric patients may present with irritability, ALOC, seizures, nausea and vomiting.
Influenza	High fever, body aches, cough, runny nose, nausea & vomiting, diarrhea in children.

# ATD Exposure Control Plan (ATD ECP)

- Screening Patients for ATDs
  - Patients presenting with respiratory symptoms should be offered to wear a mask
  - Patients with suspected or confirmed ATDs should be placed in a private room or AIIR
    - In the outpatient setting patient must be roomed promptly or situated away from other patients
  - Patients with suspected or confirmed ATDs should be transported in an enclosed tent
- Engineering Controls
  - Routine quality and maintenance of air handling system in the facility is performed by the Engineering Department
  - Maintenance and testing of negative pressure rooms and booths in Laboratories
- Standard Precautions and Transmission Based Isolation Precautions
  - Observe standard precautions at all times, droplet and airborne isolation precautions as indicated
  - Also observe respiratory etiquette/hygiene
    - Cover your cough
    - use tissue to clean respiratory secretions and perform good hand hygiene
- Personnel training and education
  - CAATD standard requires employers to provide employees with
    - New hire training, annual mandatory training and whenever there is a new information available
    - Respiratory training- fit testing, PAPR training
- Patient and family education
  - It is important that patients and family understand the diagnosis, ways to prevent transmission of ATDs and follow isolation protocols

# ATD Exposure Prevention continued...

- Wearing of PAPR or it's equivalent is required when performing high hazard procedures or when you are present in the room while HHP is being done. Examples of HHP are:
  - Sputum induction
  - Bronchoscopy
  - Intubation
  - Open suctioning, tracheostomy suctioning
  - Administration of aerosolized pentamidine
  - Laboratory procedures/specimen processing
  - Autopsy
  - Any other clinical, surgical or laboratory procedures that may cause aerosolization
- Healthcare worker surveillance and management
  - Annual screening for tuberculosis by Occupational Health Services
- Employee Vaccination
  - ❖ **Getting vaccinated is your best protection against ATDs**
  - Some vaccine preventable ATDs are Influenza, MMR, Tdap, and Varicella
  - Your blood antibody titers will be checked upon hire to check for immunity to certain ATDs
  - Healthcare workers are highly encouraged to get vaccinated
  - Healthcare worker flu vaccination is mandated by Santa Clara County Public Health Dept.
  - These vaccines are offered to all employees free of charge upon hire and whenever you decide to get vaccinated
- Steps to take when you get exposed to ATDs
  - ❖ **Report exposure incident to your Manager or Supervisor immediately**
  - ❖ **You may be asked to report to Occupational Health Services for post exposure medical evaluation, post exposure prophylaxis and follow up.**



# How to Access ATD Standard and ECP?

The CA Aerosol Transmissible Diseases Standard is accessible online at <https://www.dir.ca.gov/title8/5199.html>

LPCH ATD Exposure Control Plan is available on the intranet.  
Visit Infection prevention & Control website at

<https://intranet.lpch.org/formsPoliciesReferences/procedures/hospitalWide/infectionControl/ATDExposureControlPlanProcedure.html>

# Preventing Hospital Acquired Infections

- Hospital Acquired Infections or HAIs are serious infections that patients get while receiving medical or surgical treatment in a healthcare facility like LPCH.
- According to CDC HAIs affect 5-10% of hospitalized patients in US every year, approximately 1.7M HAIs and accounting for approximately 99,000 deaths annually.
- All HAIs are not reimbursed to the reporting facility by the Centers for Medicare and Medicaid (CMS).
- California Department of Public Health mandates all acute care facilities to report all HAIs to CDC via National Healthcare Safety Network.
- Quality outcome measures are publicly posted for consumers to see and is used as a guide to make informed decision when choosing a healthcare plan.
- LPCH is geared towards prevention and elimination of Healthcare Acquired Conditions (HACs) which includes CLABSIs, SSIs, CAUTIs, and VAPs.
- The Mission Zero initiative was established in 2011 and implemented in support of HAC and HAI reduction and elimination within LPCH.
- We have adopted the Solutions for patient Safety (SPS) infection prevention bundles to support our Patient Care Services in eliminating HAIs.
- Bundle is a set of evidence based practices that when implemented together yield better outcomes than when implemented individually.



# Central Line Associated Bloodstream Infection (CLABSI) Prevention

National Patient  
Safety Goal  
07.04.01

A CLABSI is a serious infection that occurs when germs enter the bloodstream through a central line. A central line is a catheter placed in a large vein in the neck, chest or groin that terminates close to the heart. A central line is used to deliver parenteral medications, parenteral nutrition, blood transfusion or used to collect blood for medical tests. Healthcare providers can take the following steps to help prevent CLABSIs:

- Training and education
  - Staff education on aseptic technique, central line insertion practices and maintenance are key important points in preventing CLABSI
- Daily review of central line necessity and prompt removal of unnecessary lines
  - Central lines must only be placed as indicated for patient treatment
  - Remove central line and/or unnecessary lines when longer medically necessary for patient treatment
- Hand hygiene
  - Performing hand hygiene prior to accessing a central line is critical to prevent introduction of organisms to the catheter site and bloodstream
- Proper skin antisepsis of the insertion site
  - Use of chlorhexidine gluconate (CHG) skin prep prior to insertion and at dressing change
  - **Best practice adopted by LPCH:** Use of 2% CHG cloth for daily skin cleansing of patients with central lines
- Catheter site dressing regimen
  - Use sterile, transparent semipermeable dressing to cover catheter site
  - Dressing change every 7 days and PRN (when soiled, torn or damaged)
  - Dressing change every 48 hours if sterile gauze is used
- *Best practice hospital wide: daily central line bundle rounds is performed to ensure compliance with all elements of CLABSI prevention bundle*

# Preventing Healthcare Acquired Infections

## More on CLABSI Prevention...

- Central line insertion practices
  - Avoid femoral site for central line placement due to proximity to perineal area
  - Use of maximal barrier protection during central line insertion or exchange
    - Includes sterile gloves and drape, mask, gown, cap
  - Use of CHG impregnated sponge to protect catheter entry site from bacterial colonization
- Proper disinfection of catheter hub or access port prior to central line access
  - 15 seconds scrubbing of hub with alcohol or antiseptic and
  - Allowing it to air dry prior to accessing the central line
  - PICU implemented use of alcohol impregnated port protectors to protect access ports at all times
- Use of catheter securement device
  - to stabilize the catheter
  - prevent catheter migration/dislodgement
  - avoid disruption around catheter entry site

# Preventing Surgical Site Infections

National Patient  
Safety Goal  
07.05.01

Surgical Site Infection (SSI) Prevention is another important goal. The following elements are essential in preventing SSIs:

- Proper skin antisepsis pre-operatively
  - Use of chlorhexidine gluconate (CHG) preoperatively unless contraindicated
    - Night before surgery
    - Morning of surgery
- Appropriate use of prophylactic antibiotics
  - 60 minutes prior to incision (120 minutes for Vancomycin and fluoroquinolones)
  - Right medication, right dose, right time
- Use of (CHG) for skin preparation prior to skin incision
- Appropriate hair removal
  - Use clipper if hair removal is absolutely necessary, never use razor
- Controlled postoperative serum glucose (post cardiac surgery)
- Immediate postoperative normothermia (post colorectal surgery)
- VTE (Venous Thromboembolism Prophylaxis)
- Post operative wound dressing maintenance
- Excellent hand hygiene
- Patient and family education

# SSI Prevention continued...

- Other factors to consider in preventing SSIs
  - Treating remote infections prior to surgery
    - To prevent seeding of infection from one body site to another
  - Surgical attire and use PPEs
    - Proper dress code especially in the semi restricted and restricted areas of the surgical suite is important
  - Cleaning and disinfection of medical devices
    - Proper cleaning and disinfection of medical devices and instruments in between patients is critical in preventing cross contamination
  - Cleaning and disinfection of the environment
    - Dirty environment and surfaces is a reservoir for microorganisms
    - Proper technique and appropriate amount and dwell time of disinfectants should be followed to kill organisms
  - Traffic in surgical suite
    - Limit visitors and traffic in the surgical suite to essential purposes only especially during surgical procedure and when sterile packages are open
    - Important to maintain adequate ventilation & humidity within the surgical suite

# Preventing Healthcare Acquired Infections

National Patient  
Safety Goal  
07.06.01

## Best practices must be implemented to prevent Catheter Associated Urinary Tract Infection (CAUTI)

- Avoid unnecessary use of urinary catheters
  - Use indwelling catheters only when medically necessary
  - Remove indwelling catheter 24 hours after surgery;
- Review urinary catheter necessity daily and remove promptly
  - Review and document indication on a daily basis
  - Remove catheter when no longer needed for patient treatment
- Insert urinary catheters using aseptic technique
- Maintain urinary catheters based on recommended guidelines
  - Maintain a sterile, continuously closed drainage system
  - Keep catheter properly secured
  - Keep collection bag below the level of the bladder at all times
  - Maintain unobstructed urine flow
  - Empty collection bag regularly
    - » Carefully drain urine making sure draining spigot does not come in contact with collecting container

# CAUTI Prevention continued...

- Excellent hand hygiene
- Daily baths, meticulous perineal care daily and as needed
- *Protect your patient, avoid the following practices:*
  - Irrigating catheters, except in cases of catheter obstruction
  - Disconnecting the catheter from the drainage tubing
  - Replacing catheters routinely (in absence of obstruction or infection)
  - Replacing the collection system
    - If absolutely necessary, use aseptic technique

# Preventing Healthcare Acquired Infections

## Ventilator Associated Pneumonia (VAP) Prevention

- Hand hygiene and standard precautions
- Elevation of head of bed to reduce risk of aspiration of secretions
  - Unless otherwise contraindicated
- Daily evaluation of sedation medications and readiness to wean from ventilator
- PUD (Peptic Ulcer Disease) prophylaxis
- Oral hygiene every 4 hours and as needed
- Ventilator and endotracheal tube care
  - Use of closed suctioning (inline)
  - Minimize ventilator circuit disconnections
  - Use of heated wire ventilator circuits to decrease condensation
  - Assess and drain condensation Q4 hours, prior to repositioning patient and as needed
  - Use of separate suction tubing and canisters for oral and ET tube suctioning
  - Ventilator circuit change Q30 days or machine malfunction or soiled

# Preventing Hospital Acquired Infections

## Breast Milk Safety

- Always take extra precautions when handling breast milk to prevent errors in preparing, labeling and administration of breast milk. Please follow steps below when handling breast milk:
  - ✓ *milk storage container is properly labeled with patient's name, MRN, DOB, date and mother's initials*
  - ✓ *patient identifiers prior to administration*
  - ✓ *breast milk identifiers prior to administration*
- **Immediately** give breast milk to correct patient/mother after scanning
  - » **NEVER leave breast milk bottle unattended**
- **Discard** remaining breast milk after 7 days
- **Follow** policy on breast milk storage and thawing
- **Remember** Breast milk is not just a food it is a body fluid
- **Report** breast milk exposure to Manager or Supervisor immediately
- **Notify** Infection Prevention & Control Department
- **Initiate** patient exposure investigation



# Infection Prevention & Control

Policies and procedures available online

<https://intranet.lpch.org/formsPoliciesReferences/infectionControl.html>

## Contact Information

- During business hours please contact

Priya 650-497-2685

Tracey 650-725-0075

Mary Grace 650-736-2354

Please page **On Call ID Fellow** *after business hours, weekends and holidays*

In Order to Change Culture

We Must

----Be the Change ---

We Wish to See

**Please remind our staff**

**Clean Spaces = Healthy People**

