

Infection Prevention and Control for the Medical Staff

We depend upon you, as a member of the medical staff, to understand and practice CHN's evidence-based policies to prevent healthcare-associated infections (HAI's).

Joint Commission National Patient Safety Goal #7

1. Comply with the current Centers for Disease Control and Prevention (CDC) hand hygiene guidelines and meet CHN goals for compliance with hand hygiene.
2. Implement evidence-based practices to prevent HAI's due to multidrug-resistant organisms including staff, physician and patient education and compliance with evidence-based isolation guidelines (e.g., Contact Precautions).
3. Implement evidence-based practices to prevent central line-associated bloodstream infections including the use of a catheter insertion checklist, removal of non-essential catheters and a standardized protocol for central venous catheter insertion.
4. Implement evidence-based practices for preventing surgical site infections including education for staff, physicians, patients, and their families about surgical site infection prevention and implement policies and practices aimed at reducing the risk of surgical site infections (e.g., SCIP measures)

Evidence Based “Bundles”

Carondelet has care bundles in place to minimize and prevent some common healthcare acquired infections. These include the:

- Ventilator-Associated Pneumonia Reduction Bundle
- Central Line Bundle
- Surgical Care Improvement Project
- Catheter Associated UTI Bundle including a protocol for foley catheter removal

Standard Precautions

Any patient could have an undiagnosed communicable disease. Standard Precautions are used for all patients all of the time and include:

- **Hand Hygiene before and after contact** with the patient or the patient's environment, even if you have worn gloves.
 - “Gel In, Gel Out” with alcohol-based sanitizer: Pump once and then rub on your palms, backs of hands, between fingers and on thumbs until dry.
 - If your hands are visibly soiled, use soap and water. Lather fingers and hands up to your wrists for 15 seconds, then rinse well. When ***Clostridium difficile*** is confirmed or suspected, use soap and water for hand hygiene to remove spores.
- Use of Personal Protective Equipment (PPE) any time you anticipate contact with blood or body fluids. PPE includes gowns, gloves, goggles, face shields, masks and N95 respirators.
- Cleaning/Disinfection of the environment and equipment (e.g., stethoscopes)
- Respiratory Etiquette (covering your/your patient's cough)
- Sharps Safety
- Safe Injection Practices (**one syringe, one needle, used one time only**)
- Use of masks when accessing spinal or epidural spaces via lumbar puncture (e.g., **myelogram, spinal or epidural anesthesia**).

Transmission-Based Precautions (Isolation)

In accordance with CDC recommendations, wear PPE, as indicated on the isolation sign, anytime you enter an isolation room, even if you do not plan to examine the patient or touch anything. There are three types of transmission-based precautions:

- 1. Contact Precautions** is used for infection/colonization that is transmitted by direct or indirect contact such as **Multi-drug resistant organisms** (MRSA, VRE and other antibiotic resistant bacteria), infectious diarrhea such as *Norovirus*, *Respiratory Syncytial Virus*, uncontained draining wounds, scabies or lice
 - *Clostridium difficile* requires “Special Contact” Precautions and soap and water for hand hygiene to remove the spores.
 - Wear a disposable gown and gloves when entering a Contact/Special Contact Isolation room
 - A patient with a history of a multi-drug resistant infection or colonization is isolated until cleared with negative cultures - see below.
- 2. Airborne Infection Isolation (All)** is used if you know or suspect the patient has a communicable disease that is transmitted through small droplets that travel on normal air currents including *Mycobacterium tuberculosis*, active disseminated *Varicella zoster* (shingles), *Rubeola* (measles), Severe Acute Respiratory Syndrome (SARS) and Avian Influenza
 - Wear a disposable N95 respirator in an airborne isolation room. Contact Occupational Health **if you have not been fit-tested** for the most appropriate size respirator. Dispose of the respirator after use.
- 3. Droplet Precautions** are used when you know or suspect an infection that is transmitted through heavy droplets that are released through coughing, sneezing, talking, suctioning including influenza, and bacterial meningitis caused by *Neisseria meningitidis* or *Haemophilus influenza*
 - Wear a disposable paper surgical mask in a droplet isolation room.

Protective Precautions

Some physicians place patients in neutropenic or reverse isolation, usually based on white blood cell count. Placing and removing this precaution should be by physician order. A “Protective Precaution” sign is available instructing no fresh fruit, vegetables, flowers, or sick visitors. Any other needs should be specified in the physician order.

Active Surveillance Cultures for MRSA

All intensive care admissions have a MRSA surveillance culture as part of the admission protocol. We also obtain nares surveillance cultures for MRSA on high risk populations including patients who have frequent hospitalizations, reside in care homes, prisons and skilled nursing facilities or are homeless, are on dialysis, have a history of IV drug abuse, have draining wounds, and/or live with someone who has MRSA.

Reference the Infection Prevention and Control Transmission-Based Precaution Policy found on the Carondelet Intranet (CAROL) for more information.

Exposures

Notify Infection Prevention and Control immediately if you or others were exposed to a patient with a communicable disease. Infection Prevention and Control works closely with Occupational Health, the Lab and the Health Department to confirm or rule out exposures, and to conduct follow-up with all staff, physicians or patients who may have been exposed. Report any sharps injury or body fluid splash to Occupational Health.

Reportable Diseases

See enclosed chart for diseases that must be reported to the Health Department. Please alert Infection Prevention and Control if any of your patients have a communicable disease that requires reporting within 24 hours.

Immunizations

Annual influenza vaccination is strongly encouraged for all physicians and Carondelet associates since a person can be communicable 1-2 days before symptoms of the flu begin. Free flu vaccines are administered through Occupational Health beginning in October of each year. Occupational Health also provides Hepatitis B, Measles, Mumps, Rubella and Varicella vaccines, as well as annual TB skin testing.

Infection Prevention and Control Contact Information

St. Joseph's Hospital	Office:	873-6574
	Mobile:	349-4111
St. Mary's Hospital and Holy Cross Hospital:	Office:	872-1433
	Mobile:	349-3504
Tucson Heart Hospital	Office:	696-2510
	Mobile:	404-5525 or 696-2345

After hours, contact the Clinical Supervisor or use the mobile number's above to reach the Infection Preventionist on call.

Additional information can be found on the intranet and in the Infection Control manual.

Clinical Syndromes Warranting Additional Empiric Precautions to Prevent Transmission of Epidemiologically Important Pathogens Pending Confirmation of Diagnosis

Clinical Syndrome or Condition	Potential Pathogens	Empiric Precautions (plus Standard Precautions)
Acute diarrhea with a likely infectious cause in an incontinent or diapered patient	Enteric pathogens	Contact Precautions
Diarrhea in an adult with a history of recent antibiotic use	<i>Clostridium difficile</i>	Special Contact Precautions - private room or if confirmed cohort with same
Meningitis	<ul style="list-style-type: none"> • <i>Neisseria Meningitidis</i> • Enteroviruses 	<ul style="list-style-type: none"> • Droplet - mask and face protection • Contact for infants and children
<ul style="list-style-type: none"> • Petchial/ecchymotic rash with fever • Vesicular rash • Maculopapular rash with coryza and fever 	<ul style="list-style-type: none"> • Neisseria meningitidis • <i>Varicella</i>/Smallpox • <i>Rubeola</i> (measles) 	<ul style="list-style-type: none"> • Droplet • Airborne & Contact • Airborne Infection Isolation
Cough/fever/upper lobe pulmonary infiltrate in an HIV-negative patient or a patient at low risk for HIV infection	<ul style="list-style-type: none"> • <i>Mycobacterium tuberculosis</i> • Possible SARS (Severe Acute Respiratory Syndrome) • Avian Flu 	Airborne Infection Isolation; Add Contact plus eye protection if history of SARS/Avian Flu exposure, travel
Cough/fever/pulmonary infiltrate in any lung location in an HIV-infected patient or a patient at high risk for HIV infection	<i>Mycobacterium tuberculosis</i>	Airborne Infection Isolation
Paroxysmal or severe persistent cough in period of pertussis activity	<i>Bordetella pertussis</i>	Droplet Precautions
<ul style="list-style-type: none"> • Bronchiolitis and croup, in infants and young children • Fever >100.5, travel history, atypical pneumonia on chest x-ray • Fever >100.5, headache, myalgia, cough, fatigue 	<ul style="list-style-type: none"> • Respiratory syncytial or parainfluenza virus • SARS • Influenza 	<ul style="list-style-type: none"> • Contact plus Droplet • Airborne & Contact with eye shield • Droplet
History of infection or colonization with multi-drug resistant organisms	Resistant bacteria	Contact
Skin, wound, or urinary tract infection in a patient with a recent hospital or nursing home stay in a facility where multi-drug resistant organisms are prevalent	Resistant bacteria	Contact
Abscess or draining wound that cannot be covered/contained	<i>Staphylococcus aureus</i> , <i>Group A Streptococcus</i>	Contact

Discontinuing Transmission-Based Precautions

Organism	Isolation Type	Discontinue isolation when:
MRSA	Contact	<ul style="list-style-type: none"> Last MRSA positive culture was more than 6 months ago 1 negative culture set from nares, draining wound and original site (except blood, CSF or healed wound) Off antibiotics x 1 wk before culture obtained
VRE	Contact	<ul style="list-style-type: none"> Last VRE positive culture was more than 6 months ago 1 negative culture set from rectum and original site (except blood, CSF or healed wound) Off antibiotics x 1 wk before culture obtained
Other drug-resistant organism (MDRO)	Contact	<ul style="list-style-type: none"> Last MDRO positive culture was more than 6 months ago 1 negative culture from original (non-sterile) site, rectal swab or other site as appropriate (contact Infection Prevention and Control office for additional information) Off antibiotics x 1 wk before culture obtained
R/O <i>C. difficile</i>	Special Contact	<ul style="list-style-type: none"> Stool specimen negative No other indication of <i>C. difficile</i>
<i>C. difficile</i> (confirmed)	Special Contact	<ul style="list-style-type: none"> Patient should remain on Special Contact Precautions for the duration of their admission. Contact Infection Prevention and Control to discontinue Special Contact Precautions if the patient has an extended admission, has completed treatment for <i>C. difficile</i> and is asymptomatic. Testing additional stool specimens is not required
Scabies/lice	Contact	<ul style="list-style-type: none"> 24 hours after successful treatment
Uncontained Draining Wound	Contact	<ul style="list-style-type: none"> Negative for multi-drug resistant organism Drainage contained
R/O Tuberculosis	Airborne	<ul style="list-style-type: none"> 3 sputum specimens, collected <u>at least 8 hours apart</u>, with one being a first morning specimen, all smear negative for acid-fast bacillus Consult with Infectious Disease and/or Pulmonology
Tuberculosis (confirmed)	Airborne	<ul style="list-style-type: none"> Multi-drug therapy x 6 wks 3 sputum specimens, 3 consecutive mornings, all negative smears for acid-fast bacillus Resolution of any cough with improvement in chest x-ray. Consult with Infectious Disease and/or Pulmonology
Varicella Zoster	Airborne + Contact	<ul style="list-style-type: none"> Treated with anti-viral Lesions dry
Influenza	Droplet	<ul style="list-style-type: none"> 5 days after diagnosis or no longer infectious
Meningitis	Droplet	<ul style="list-style-type: none"> No isolation for viral (aseptic) meningitis For bacterial, patient treated with appropriate antibiotic for at least 24 hours

Reports should be sent to:
 Arizona Department of Health Services
 Infectious Disease Epidemiology
 150 North 18th Avenue, Suite 140
 Phoenix, AZ 85007
 602-364-3676 or 602-364-3199 (fax)

ARIZONA LABORATORY REPORTING REQUIREMENTS

Isolates should be sent to:
 Arizona State Laboratory
 250 North 17th Avenue
 Phoenix, AZ 85007

③	Arboviruses	☒+	<i>Haemophilus influenzae</i> , other, isolated from a normally sterile site	☒	<i>Plasmodium</i> spp.
☒+☒+☒+	<i>Bacillus anthracis</i>	☒	Hantavirus	☒	Respiratory syncytial virus
☒+☒+	<i>Bordetella pertussis</i>	☒ ¹	Hepatitis A virus (anti-HAV-IgM serologies)	☒+	Rubella virus and anti-rubella-IgM serologies
③+☒+	<i>Brucella</i> spp.	☒ ¹	Hepatitis B virus (anti-Hepatitis B core-IgM serologies, Hepatitis B surface or envelope antigen serologies, or detection of viral nucleic acid)	③+☒+	<i>Salmonella</i> spp.
③+☒+	<i>Burkholderia mallei</i> and <i>B. pseudomallei</i>	☒ ¹	Hepatitis C virus	☒	SARS-associated corona virus
☒	<i>Campylobacter</i> spp.	☒ ¹	Hepatitis D virus	③+☒+	<i>Shigella</i> spp.
☒	CD ₄ -T-lymphocyte count of fewer than 200 per microliter of whole blood or CD ₄ -T-lymphocyte percentage of total lymphocytes of less than 14%	☒ ¹ +☒	Hepatitis E virus (anti-HEV-IgM serologies)	☒	<i>Streptococcus</i> Group A, isolated from a normally sterile site
☒	<i>Chlamydia trachomatis</i>	☒	HIV (by culture, antigen, antibodies to the virus, or detection of viral nucleic acid)	☒	<i>Streptococcus</i> Group B, isolated from a normally sterile site in an infant younger than 90 days of age
☒+☒	<i>Clostridium botulinum</i> toxin (botulism)	☒	HIV—any test result for an infant (by culture, antigen, antibodies to the virus, or detection of viral nucleic acid)	☒+☒+	<i>Streptococcus pneumoniae</i> and its drug sensitivity pattern, isolated from a normally sterile site
☒	<i>Coccidioides</i> spp., by culture or serologies	☒	Influenza virus	☒	<i>Treponema pallidum</i> (syphilis)
③	<i>Coxiella burnetii</i>	☒+☒+	<i>Legionella</i> spp. (culture or DFA)	☒	<i>Trypanosoma cruzi</i> (Chagas disease)
☒	<i>Cryptosporidium</i> spp.	③+☒+	<i>Listeria</i> spp., isolated from a normally sterile site	③+☒+	Vancomycin-resistant or Vancomycin-intermediate <i>Staphylococcus aureus</i>
③	<i>Cyclospora</i> spp.	☒+	Measles virus and anti-measles-IgM serologies	③+☒+	Vancomycin resistant <i>Staphylococcus epidermidis</i>
☒	Dengue virus	☒ ²	Methicillin-resistant <i>Staphylococcus aureus</i> , isolated from a normally sterile site	☒+☒+	Variola virus (smallpox)
☒+☒	Emerging or exotic disease agent	③+☒+	Mumps virus and anti-mumps-IgM serologies	③+☒+	<i>Vibrio</i> spp.
☒	<i>Entamoeba histolytica</i>	☒+☒ ³	<i>Mycobacterium tuberculosis</i> complex and its drug sensitivity pattern	☒+☒+	Viral hemorrhagic fever agent
③	<i>Escherichia coli</i> O157:H7	☒	<i>Neisseria gonorrhoeae</i>	☒	West Nile virus
③+☒+	<i>Escherichia coli</i> , Shiga-toxin producing	☒+☒+	<i>Neisseria meningitidis</i> , isolated from a normally sterile site	③+☒+	<i>Yersinia</i> spp. (other than <i>Y. pestis</i>)
☒+☒+☒+	<i>Francisella tularensis</i>	☒	Norovirus	☒+☒+☒+	<i>Yersinia pestis</i> (plague)
☒+☒+	<i>Haemophilus influenzae</i> , type b, isolated from a normally sterile site				

☒ Submit a report immediately after receiving one specimen for detection of the agent. Report receipt of subsequent specimens within five working days after receipt.

☒+ Submit a report within 24 hours after obtaining a positive test result.

③ Submit a report within one working day after obtaining a positive test result.

☒ Submit a report within five working days after obtaining a positive test result or a test result specified on this page.

☒+ Submit an isolate of the organism for each positive culture to the Arizona State Laboratory at least once each week, as applicable.

+ For each positive test result, submit a specimen to the Arizona State Laboratory within 24 hours after obtaining the positive test result.

¹ When reporting a positive result for any of the specified tests, report the results of all other tests performed for the subject as part of the disease panel.

² Submit a report only when an initial positive result is obtained for an individual.

³ Submit an isolate of the organism only when an initial positive result is obtained for an individual, when a change in resistance pattern is detected, or when a positive result is obtained ≥ 12 months after the initial positive result is obtained for an individual.

www.azdhs.gov/phs/oids/lab_rpt.htm

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