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/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 influenzae**
   - 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.
<table>
<thead>
<tr>
<th>Clinical Syndrome or Condition</th>
<th>Potential Pathogens</th>
<th>Empiric Precautions (plus Standard Precautions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute diarrhea with a likely infectious cause in an incontinent or diapered patient</td>
<td>Enteric pathogens</td>
<td>Contact Precautions</td>
</tr>
<tr>
<td>Diarrhea in an adult with a history of recent antibiotic use</td>
<td><em>Clostridium difficile</em></td>
<td>Special Contact Precautions - private room or if confirmed cohort with same</td>
</tr>
</tbody>
</table>
| Meningitis | • *Neisseria Meningitidis*  
• Enteroviruses | • Droplet - mask and face protection  
• Contact for infants and children |
| • Petchial/echymotic rash with fever  
• Vesicular rash  
• Maculopapular rash with coryza and fever | • *Neisseria meningitidis*  
• *Varicella/Smallpox*  
• *Rubeola* (measles) | • 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 | • *Mycobacterium tuberculosis*  
• 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 | *Mycobacterium tuberculosis* | Airborne Infection Isolation |
| Paroxysmal or severe persistent cough in period of pertussis activity | Bordetella pertussis | Droplet Precautions |
| • 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 | • Respiratory syncytial or parainfluenza virus  
• SARS  
• Influenza | • 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 | *Staphylococcus aureus*, *Group A Streptococcus* | Contact |
# Discontinuing Transmission-Based Precautions

<table>
<thead>
<tr>
<th>Organism</th>
<th>Isolation Type</th>
<th>Discontinue isolation when:</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRSA</td>
<td>Contact</td>
<td>▪ Last MRSA positive culture was more than 6 months ago</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ 1 negative culture set from nares, draining wound and original site (except blood, CSF or healed wound)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Off antibiotics x 1 wk before culture obtained</td>
</tr>
<tr>
<td>VRE</td>
<td>Contact</td>
<td>▪ Last VRE positive culture was more than 6 months ago</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ 1 negative culture set from rectum and original site (except blood, CSF or healed wound)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Off antibiotics x 1 wk before culture obtained</td>
</tr>
<tr>
<td>Other drug-resistant organism (MDRO)</td>
<td>Contact</td>
<td>▪ Last MDRO positive culture was more than 6 months ago</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ 1 negative culture from original (non-sterile) site, rectal swab or other site as appropriate (contact Infection Prevention and Control office for additional information)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Off antibiotics x 1 wk before culture obtained</td>
</tr>
<tr>
<td>R/O C. difficile</td>
<td>Special Contact</td>
<td>▪ Stool specimen negative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ No other indication of C. difficile</td>
</tr>
<tr>
<td>C. difficile (confirmed)</td>
<td>Special Contact</td>
<td>▪ Patient should remain on Special Contact Precautions for the duration of their admission.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Contact Infection Prevention and Control to discontinue Special Contact Precautions if the patient has an extended admission, has completed treatment for C. difficile and is asymptomatic.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Testing additional stool specimens is not required</td>
</tr>
<tr>
<td>Scabies/lice</td>
<td>Contact</td>
<td>▪ 24 hours after successful treatment</td>
</tr>
<tr>
<td>Uncontained Draining Wound</td>
<td>Contact</td>
<td>▪ Negative for multi-drug resistant organism</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Drainage contained</td>
</tr>
<tr>
<td>R/O Tuberculosis</td>
<td>Airborne</td>
<td>▪ 3 sputum specimens, collected <em>at least 8 hours apart</em>, with one being a first morning specimen, all smear negative for acid-fast bacillus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Consult with Infectious Disease and/or Pulmonology</td>
</tr>
<tr>
<td>Tuberculosis (confirmed)</td>
<td>Airborne</td>
<td>▪ Multi-drug therapy x 6 wks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ 3 sputum specimens, 3 consecutive mornings, all negative smears for acid-fast bacillus</td>
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<tr>
<td></td>
<td></td>
<td>▪ Resolution of any cough with improvement in chest x-ray.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Consult with Infectious Disease and/or Pulmonology</td>
</tr>
<tr>
<td>Varicella Zoster</td>
<td>Airborne + Contact</td>
<td>▪ Treated with anti-viral</td>
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<tr>
<td></td>
<td></td>
<td>▪ Lesions dry</td>
</tr>
<tr>
<td>Influenza</td>
<td>Droplet</td>
<td>▪ 5 days after diagnosis or no longer infectious</td>
</tr>
<tr>
<td>Meningitis</td>
<td>Droplet</td>
<td>▪ No isolation for viral (aseptic) meningitis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ For bacterial, patient treated with appropriate antibiotic for at least 24 hours</td>
</tr>
</tbody>
</table>
# ARIZONA LABORATORY REPORTING REQUIREMENTS

- **Arboviruses**
  - *Bacillus anthracis*
  - *Bordetella pertussis*
  - *Brucella spp.*
  - *Burkholderia mallei and B. pseudomallei*
  - *Campylobacter spp.*
  - *Chlamydia trachomatis*
  - *Clostridium botulinum toxin (botulinum)*
  - *Coccioides spp., by culture or serology*
  - *Coxiella burnetii*
  - *Cryptosporidium spp.*
  - *Cyclospora spp.*
  - *Dengue virus*
  - *Emerging or exotic disease agent*
  - *Entamoeba histolytica*
  - *Escherichia coli O157:H7*
  - *Escherichia coli, Shiga-toxin producing*
  - *Franciscella tularensis*
  - *Haemophilus influenzae, type b, isolated from a normally sterile site*
  - *Haemophilus influenzae, other, isolated from a normally sterile site*
  - *Haemophilus influenzae, type b, isolated from a normally sterile site*
  - *Haemophilus influenzae, other, isolated from a normally sterile site*
  - *Hepatitis A virus (anti-HAV-IgM serology)*
  - *Hepatitis B virus (anti-Hepatitis B core-IgM serologies, Hepatitis B surface or envelope antigen serologies, or detection of viral nucleic acid)*
  - *Hepatitis C virus*
  - *Hepatitis D virus*
  - *Hepatitis E virus (anti-HEV-IgM serologies)*
  - *HIV (by culture, antigen, antibodies to the virus, or detection of viral nucleic acid)*
  - *HIV—any test result for an infant (by culture, antigen, antibodies to the virus, or detection of viral nucleic acid)*
  - *Influenza virus*
  - *Legionella spp. (culture or DFA)*
  - *Listeria spp., isolated from a normally sterile site*
  - *Malaria virus and anti-malaria-IgM serologies*
  - *Methicillin-resistant *Staphylococcus aureus*, isolated from a normally sterile site*
  - *Mumps virus and anti-mumps-IgM serologies*
  - *Mycobacterium tuberculosis complex and its drug sensitivity pattern*
  - *Neisseria gonorrhoeae*
  - *Neisseria meningitidis, isolated from a normally sterile site*
  - *Neurotropic*
  - *Plasmodium spp.*
  - *Respiratory syncytial virus*
  - *Rubella virus and anti-rubella-IgM serologies*
  - *Salmonella spp.*
  - *SARS-associated coronavirus*
  - *Shigella spp.*
  - *Streptococcus Group A, isolated from a normally sterile site*
  - *Streptococcus Group B, isolated from a normally sterile site in an infant younger than 90 days of age*
  - *Streptococcus pneumoniae and its drug sensitivity pattern, isolated from a normally sterile site*
  - *Treponema pallidum (syphilis)*
  - *Trichomonas vaginalis (trichomoniasis)*
  - *Vancomycin-resistant or Vancomycin-intermediate *Staphylococcus aureus* *
  - *Vancomycin-resistant *Staphylococcus epidermidis*
  - *Vibrio spp.*
  - *Viral hemorrhagic fever agent*
  - *West Nile virus*
  - *Yersinia spp. (other than Y. pestis)*
  - *Yersinia pestis (plague)*

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1. Submit a report immediately after receiving one specimen for detection of the agent. Report receipt of subsequent specimens within five working days after receipt.
2. Submit a report within 24 hours after obtaining a positive test result.
3. Submit a report within five working days after obtaining a positive test result or a test result specified on this page.
4. Submit an isolate of the organism for each positive culture to the Arizona State Laboratory at least once each week, as applicable.
5. For each positive test result, submit a specimens to the Arizona State Laboratory within 24 hours after obtaining the positive test result.
6. 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.
7. Submit a report only when an initial positive result is obtained for an individual.
8. 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**
- **A.A.C. R9-6-204**
- **Effective 04/01/2008**