Tomah Health
TOGETHER IN CARE

Required Provider Education: Infection Prevention & Control

I. Handwashing Essentials

A. Entry into and immediately before leaving patient's room.
B. Before invasive procedure.
C. When moving from a dirty area to a clean one on the same patient (i.e.: dressing changes or multiple wounds).
D. Before gloving and after removing gloves- (a "hot spot" for surveyors).
E. After contact with blood/body fluids.
F. Alcohol gel/foam can be used as long as the hands are not visibly contaminated or as long as the patient being cared for does not have Clostridium difficile, candida auris, norovirus or other infectious diarrheal illness (alcohol-containing product is not as effective, and hands should be washed with soap and water).
G. If staff see you approaching a patient without sanitizing your hands, they are tasked with reminding you by heading toward the hand gel dispenser while saying "Let's all gel up".
H. We do quarterly hand hygiene audits, and hope to be able to provide more provider data. Traditionally provider compliance has been lower than others have, but the sample sizes have been small.

II. Isolation Precautions

A. **Contact Precautions** – Gown and gloves upon room entry; mask if pathogen is in respiratory tract. Ex: MRSA pneumonia and patient is actively coughing. Mask if pathogen can be transmitted via aerosolization.
B. **Contact Plus Precautions**—Gown and gloves upon room entry. For C-*diff*, norovirus and candida auris use shoe covers if floors are contaminated. Room will be cleaned with bleach which is effective on spores.
C. **Droplet Precautions** – Mask and goggles. Transmission via large particle droplets requires close contact between source and recipient persons since droplets do not remain suspended in the air and generally travel only short distances, usually 3 feet or less. Ex: influenza, meningitis.
D. **Airborne Precautions** – Respirator (PAPR or CAPR) or N95/P100 or equivalent, required. Ex: TB, chicken pox, measles, disseminated shingles, SARS-Cov-2 with aerosolizing procedures or oxygen delivery >6 liters.

III. Multi-Drug Resistant Organism Precautions

A. The following are Multi-Drug Resistant Organisms (MDRO).

1. **MRSA** – Staphylococcus aureus resistant to Oxacillin.
2. **VISA/VRSA** – Staphylococcus aureus showing intermediate sensitivity or resistance to Vancomycin
3. **VRE**- Enterococcus faecium or Enterococcus faecalis that is resistant to Vancomycin.
4. **DRSP** -Strep pneumo resistant to Penicillins and cephalosporin's
5. **Gram negative organisms -** Intermediate or Resistant to Amikacin, Gentamicin and Tobramycin.
6. Any organism, Resistant or Intermediate, to all antibiotics being reported out.
7. **Extended spectrum beta lactamase producing organisms** (**ESBL**s). These are members of the Enterobacteriaceae class that show intermediate sensitivity or resistance to 3rd generation cephalosporins (ceftriaxone, cefotaxime, ceftazidime).
8. **Klebsiella pneumo** Intermediate or resistant to Imipenem.
9. **Carbapenem Resistant Enterobacteriaceae (CRE) and Klebsiella pneumo resistant to Carbapenems (KPC).**

B. Patients found to be actively infected or colonized with any of these organisms will be placed in **Contact Isolation** on the admission then tagged for isolation with future admissions.

C. Isolation rooms of patients infected or colonized with MDROs will harbor the MDRO on surfaces and equipment throughout the patient's room. Strictly adhere to Contact Isolation Precautions and don gown and gloves before entering the patient's room regardless of whether or not any patient contact will be made. Many MDROs have the ability to live on surfaces: a. MRSA - 7 days to > 12 months.

- VRE - 5 days to > 46 months.
- Clostridium difficile (spores) - > 5 months.
- Pseudomonas – 6 hours to 16 months.
- Klebsiella – 2 hours to > 30 months.

D. Once culture and sensitivity reports are received, re-evaluate antibiotic choice and use. Discontinue/change antibiotics if prudent to reduce the potential development of antibiotic resistance. Pharmacy is very active in this process.

IV. Clostridium Difficile (C. *diff.)*

A. Carried asymptomatically by 3% of adults, and 20-30% of hospitalized patients will become infected.

B. These bacteria produce spores, which require special precautions as follows:

1. Patients who have C. *diff*. infection are placed into Contact Plus Isolation until 48 hours after last loose stool. If a patient is admitted for suspicion of c-diff, precautions will be maintained until result is known, or if no stool in 24 hours, precautions can be discontinued.
2. All hand hygiene should be done with soap and water, as alcohol products are not as effective for removal of spores from hands.
3. Use disinfectant wipes with bleach to disinfect common provider equipment after caring for C.*diff*. infected patients.

Lab analysis will only be performed on unformed stool.

****** ***Formed stool specimens for analysis will be rejected by the lab.*** ******

V. Surgical Site Infections (SSI)

****Please notify Infection Prevention is you suspect a patient has an SSI. IP will investigate. Notification can be by email to deptinfectionprevention@tomahhealth.org, by calling 8455 or by the clarity system.***

A. Use antibiotics preoperatively when indicated for patients in accordance with SCIP and literature (SHEA/CDC/IDSA) recommendations.

B. When prophylaxing patients, it is important to keep the following in mind:

1. Antibiotics need to be dosed by weight to ensure adequate tissue levels to afford protective effects.
2. **Surgeries > 3 hours** in duration may need re-dosing to ensure adequate antimicrobial levels throughout the duration of the surgery.
3. Begin antibiotic infusion prior to the incision, but within 60 minutes of incision.
4. The antibiotic should not be continued past **24 hours** in most cases**.**

C. All surgical patients should receive a chlorhexidine shower or cloths prior to surgery.

D. **Diabetic patients** should have glucose levels monitored so that they ideally do not exceed 200mg/dL in the 24-hour period prior to surgery and for 48 hours after surgery.

Surgical Site Infections (SSI) ***continued…***

E. All surgical personnel should don fresh scrubs at the beginning of the day and when coming back into the hospital building from the outside during the course of the day.
F. All surgical hats/caps should cover all of the wearer's hair and ears/beard.
G. Surgical hand antisepsis should be done in strict accordance with the manufacturer's guidelines.
H. Appropriate hair removal (no razors).
I. **ChloraPrep is the preferred prep**. Betadine is inactivated in the presence of blood and proteins.
J. It is an FDA requirement to let any skin prep containing alcohol to dry for 3 minutes to eliminate fire risk, ensure surgical drape adherence, and allow for maximum microbial killing.
K. Avoid bringing items from other areas inside the restricted area that are not crucial for the procedure being done (lab coats, briefcases, etc.). If cell phones are necessary, they must be wiped with a disinfectant upon entry to the OR.
L. Minimize traffic flow and keep the OR doors closed as much as possible during the surgery.

VI. Catheter Associated Urinary Tract Infection (CAUTI)

A. Urinary catheters should only be inserted for reasons based on medical necessity. Rationale should be documented – reasons are as follows:
   1. Patient has acute urinary retention or bladder obstruction.
   2. Accurate measurement of urinary output is needed for critically ill patient.
   3. Perioperative use for select surgical procedures.
   4. To allow for healing of open sacral or perineal wound in incontinent patient.
   5. Comfort care for end of life.
   6. Patient will have prolonged period of immobility

B. **Inappropriate** reasons for urinary catheters include:
   1. For nursing staff convenience when caring for incontinent patient or patient with difficult mobility.
   2. To obtain urine for testing when patient is continent (most cases).
   3. For a prolonged period postoperatively, unless the surgery involved structural repair of urethra or contiguous structures; prolonged effects of epidural anesthesia.

Catheter Associated Urinary Tract Infection (CAUTI) *continued…*

C. Consider alternatives to insertion of indwelling catheter when possible:
   1. Use of external catheter (available for male and female patients).
   2. Intermittent catheterization, bladder scanning.
   3. Attends - which can be weighed to obtain accurate output.

D. All indwelling catheters should be assessed for medical necessity and necessity documented daily. Remove catheter promptly when no longer needed. The risk for CAUTI increases approximately 3- 7% each day of catheter use.

E. Our foley catheter utilization ratio is well below the national average for an acute care unit. Lower utilization means lower risk of CAUTIs.

VII. Catheter Associated Bloodstream Infection (CLABSI)

A. TOMAH HEALTH Central Line Insertion best practice guidelines have shown to reduce CLABSIs, these include adherence to the following:

1. **Hand hygiene** before donning sterile gloves.
2. **Avoid use of femoral vein** for non-tunneled catheters. Any use of the femoral vein requires valid medical reasons documented on the checklist.
3. **Use of chlorhexidine** containing solution for skin antisepsis unless working with an infant< 2 months of age.
4. Daily review and documentation of medical necessity of central line, with prompt removal when no longer needed.
5. Replacement of line ASAP when inserted in an emergent situation where sterility could have been compromised.
6. Sterile gloves, gown, mask and cap to be worn at time of insertion/patient to be masked.

Catheter Associated Bloodstream Infection (CLABSI) *continued…*

7. A checklist for all central line insertions is required to be completed at time of insertion to ensure that insertions are performed in accordance with best practice guidelines.
    a. The only exception are central lines placed in the OR, which do not require a separate checklist to be completed as long as the OR documentation for the patient specifies that there was compliance with each item on the central line checklist.
        1. If this is not evident in the OR documentation, then a central line checklist needs to be completed.
    b. The checklists have been attached to the central line kit to increase compliance.
        1. These are audited monthly.

VIII. Antimicrobial Stewardship

A. Increasing use of antibiotics has led to the development of multidrug resistant organisms (MDROs). Studies of antimicrobial use have found that up to 50% may be inappropriate (includes wrong dose or duration). The CDC's campaign "Get Smart about Antibiotics" raises awareness to this issue.

B. Consider the following scenarios:

1. **S**hortest Course Necessary
2. **M**ost appropriate dose for the patient's condition
3. **A**void treating syndromes not caused by infections (i.e. viral)
4. **R**estrict therapy to the narrowest spectrum to cover the infection
5. **T**reat true infection, not colonization

C. Cold Care Kits, COVID Care Kits and Sinus Kits are available to give to outpatients to support, "While we can't give you an antibiotic, we can help you manage your symptoms" discussions.

D. Patient handouts are available from the CDC to assist you in educating patients.

E. We plan to look at individual prescribing habits and give you your results.

IX. Influenza Prevention

A. Influenza vaccination offered annually **for all healthcare workers**, regardless of direct patient contact or not.

B. Disinfect stethoscopes after each use with alcohol swab or disinfectant wipe. Disinfect any other personal equipment used with disinfectant wipe. Large size alcohol wipes are available at most bedsides.

C. Place a mask on anyone suspicious of flu-like or SARS-CoV like illnesses when in common areas with others or move the patient to a private location or separate from other people by three or more feet away (6 feet for COVID symptoms).

D. Encourage everyone to practice respiratory hygiene – coughs and sneezes should be done in the sleeve, if possible. If hands become contaminated in the process, they should be cleaned with alcohol gel/foam or soap and water.

X. Practice reminders

A. Instruments no longer can be rinsed in a sink that is used for hand washing. Please do not place instruments in the sink if that has been your practice. Staff will wipe them of any debris in the room, place in a rigid container and take to the soiled utility room for rinsing. They will be treated with a foam to prevent drying and transported to CS for reprocessing.

B. Please note that if you are ordering a GI panel on an inpatient, contact precautions will be in place until results come back.

1. GI panels/C-Diff should not be performed on formed or hard stool. Samples will be rejected by the lab.
2. If you suspect a patient has C-Diff on admission, please obtain the sample prior to day 3 of admission.
    a. If the stool sample is positive and reported to NHSN anything prior to day 3 of admission is not considered a transmission by Tomah Health, anything after day 3 will appear to be a transmission by Tomah Health.

Please remember to wear eyewear and masks to protect yourself!
Wear mask and eye protection for lumbar punctures, paracentesis, thoracentesis, codes and any situation that would result in a splash into the mouth or eyes.

Visit Infection Prevention departmental page on HealthConnect for videos, education, additional information and resource links.

Infection Prevention can be reached by:
Phone: Extension 8455 or from outside Tomah Health at 608-377-8455.
Email at deptofinfectionprevention@tomahhealth.org

THANK YOU
