Orientation for Nursing Faculty
MedStar Good Samaritan Hospital

Part II: 2014 to 2015 Safety Information
Part II
Safety Information

The following pages contain Safety Information that instructors are required to review with all students prior to the student’s first clinical day on a nursing unit. Instructors and each student must sign the Signature page acknowledging that they have reviewed all the following Safety Information.

BASIC BACK SAFETY RULES

• Keep your back straight, bend your knees.
• Move with control, avoid using jerky movements.
• Pivot turn; avoid bending and twisting your body at the same time.
• Keep the load close to your body.
• Always plan ahead before moving.
• Explain to the patient what you’re doing.
• Encourage the patient to help you, move patient towards their strongest extremities when possible.
• Ask for help when appropriate.
• Use proper equipment.
• Keep a wide base of support.
• Use own body weight/momentum.
• Take enough time.
• Check for danger/surroundings.
• Work as a team/communicate [Listen + Speak = Communication].
• When using a draw sheet, hold it close to the patient’s body.
• Elevate bed to proper height.

• Stretch frequently.

• The literature supports the notion that people involved in a regular exercise routine have a significantly decreased incidence of back injury.

• Also, for one who has had a prior back injury, a regular exercise routine correlates with better functional capacity.

Electrical Safety

Facilities and/or clinical engineering personnel (x7799) must inspect electrical equipment before being used within the hospital.

**ELECTRICAL SAFETY TIPS:**

a. Check equipment before using  
b. Make sure outlet has no cracks or burn marks  
c. Check to see there are no exposed wires  
d. Three prong plugs should be used on all cords  
e. Extension cords are prohibited

Common Electrical Hazards in the Hospital Environment:

• Faulty lamp socket  
• Use of cheaters  
• Frayed power cords  
• Broken/cracked plugs  
• Cords across pathways  
• Missing/damaged ground pins  
• Liquids spilled in electrical equipment

Electrically Sensitive Patients:

• Patients with pacemakers (external) or catheters in the heart (i.e. Swan Ganz) are sensitive to very small amounts of electrical current which if it travels through the catheter to the heart can cause severe damage and even death.  
• **Precautions:** Pacer and catheter connections must be secure and waterproof; operator must never touch the pacer/catheter and electrical equipment at the same time, keep area dry.

Faulty or Malfunctioning Equipment:

• Unplug the device if you are able.
• Do not continue to use it.
• Label the equipment as defective.
• Notify the supervisor.
• Notify engineering.

Electrical Fires:
• Dial “11” - Code Red - to report fire to hospital operator and proceed according to hospital fire policy.

Precautions for the Safe Use of Electrical Equipment:
• Inspect all equipment prior to use for integrity of plug, cord and connections.
• Always use a three way plug, never use a cheater.
• Never disconnect a plug from a wall socket by yanking on the cord.
• Never touch a metal device and electrical equipment at the same time.
• Never place containers of liquids on electrical equipment.
• Never use extension cords.
• Never handle electrical equipment with wet hands.
• Never allow patients with external pacemakers to use their own personal electrical devices in the hospital (i.e. radio, electrical razors, etc.).

General Guidelines for Electrical Safety

Grounding:
• The purpose of a ground pin is to provide an easy path to ground for electrical leakage, diverting the leakage from flowing through a patient or equipment operator.
• Cheaters: The use of a cheater apparatus bypasses this system so a pathway is not provided for electrical leakage. Cheaters put the patient or equipment operator in danger of receiving an electrical shock; therefore, they are absolutely contraindicated in a hospital setting.

Electrical Shock—Severity of Shock Dependent Upon:
• Amount of electricity – the greater the amount, the greater the shock.
Path of flow – small amounts of electricity can be fatal if it passes through the heart
Fire Safety

THE HOSPITAL CODE FOR FIRE IS “CODE RED”

Fire safety starts with you. Report fire safety hazards to Safety (x4214). The hospital’s basic fire plan is **RACE**.

- **R** = Rescue anyone in immediate danger
- **A** = Activate the alarm and dial 11 to report fire
- **C** = Confine the fire by closing doors and windows
- **E** = Extinguish fire

Know the location of fire alarm pull stations, fire exits, and fire extinguishers in your area. To use an extinguisher, remember the acronym **PASS**.

- **P** = Pull pin
- **A** = Aim nozzle (at the base of fire)
- **S** = Squeeze handle
- **S** = Sweep from side-to-side

A Fire Evacuation Plan and a list of Bell Codes are located at all major intersections in the hospital.

**General Guidelines for Fire Safety:**

The Fire Signal:
Each area in the hospital has its bell code. When you hear the fire alarm sound, go to the nearest fire box and look up the bell code on the alarm list hanging next to the alarm box. EXAMPLE: 2-1-3 would ring 2, pause, 1, pause, 3, long pause. The sequence is repeated four times.

**Coded Announcement:**
The page operator will announce “CODE RED” followed by the location. This is the code message for a fire or a fire drill.

**When You Hear the Fire Signal:**
- Remain calm.
- Members of the fire brigade respond to fire locations with extinguisher.
- Use the stairs.
- Stay alert for further instructions or the all clear signal: “CODE RED – ALL CLEAR.”
- Don’t report to the fire location unless you are assigned.
- Don’t use the elevators until the “all clear” signal has been given by the operator.

**Patient Evacuation Procedure:**
**FIRST:** Move those closest to danger.
**NEXT:** Move the helpless patients (they may be lowered to the floor onto a blanket and pulled along the floor, head first).
**NEXT:** Move the wheelchair patients.
**NEXT:** Move the walking patients. Every patient should take a blanket.
Limited evacuation should proceed laterally on the same floor (3 East to 3 West).

As a last resort, patients will be evacuated vertically downward via stairwells, not elevators.

IF YOU DISCOVER A FIRE or if a fire occurs in your work area:

- Stay calm, DO NOT shout “FIRE.”
- **R** – remove ANY PATIENT IN DANGER.
- **A** – Pull the nearest fire alarm and direct someone to dial “1-1” on a telephone and tell the operator the location of the fire, type, extent and their name [EXAMPLE: “This is Ms. Jones, there is a bed on fire in room 313 West”].
- **C** – CLOSE the windows and doors to contain the fire. A wet blanket under the door will keep smoke out. Disconnect any gas, oxygen or electrical appliances in the area.
- **E** – Fight the fire with the appropriate fire extinguisher.

When relieved by the fire brigade, report to your assigned location. On receiving the “all clear” signal, return to your assigned duties.

Fire Brigade:
The brigade consists of one member from each nursing unit as designated by the nurse in charge. During normal hours, they will be assisted by Maintenance.

Duties:
- Report to the located fire with one fire extinguisher.
- Assist as needed.
- If necessary, act as messenger to take evacuation message to specified nursing areas.

Remain at fire location until you are instructed to leave or the “all clear” sounds.

**Hazardous Materials**

**HAZARDOUS MATERIALS: CODE ORANGE**

*What You Need to Know ...*

- Every chemical container must be labeled.
- Material Safety Data Sheets (MSDS) are fact sheets that describe the hazards of chemicals used on your unit. MSDS are located on your unit and you should know location of this information.
- Do not use any chemical in a container that is not labeled.
- The Facility Safety Officer maintains a master list of chemicals used within the facility.
- Report spills to the Nursing Supervisor and dial x4300.
The Safety Committee has developed a Hazardous Substance Program in compliance with OSHA Standards. It is a yellow booklet called “You Have a Right to Know about Hazardous Substances in Your Workplace”. All employees are required to have education on potential hazardous material found in the hospital. This includes infectious materials, radioactive materials, sharps, flammable liquids, gases, and chemical health hazards.

MATERIAL SAFETY DATA SHEETS

Material Safety Data Sheets (MSDS) for chemicals used in the hospital are available at all times in most departments, the Emergency Room and Security. If you need to review a data sheet, contact the supervisor, the Safety director, or the Security Office.

LABELS

The products which we use labeled in accordance with the Right to Know Law. They contain an identification of any hazardous components and an appropriate hazard warning. Some of the products use are consumer products and may not indicate the hazards of their use. When in doubt, see the list and Material Safety Data Sheet (MSDS).

Ask questions if you are unsure of any safety precaution.
   Eat and drink only in authorized areas.
   Practice safe work habits at all times.

Infection Control

Proper Handwashing is the number one way to prevent the spread of infection.

A. Hand washing:
   1. Use antiseptic soap
   2. Scrub with friction for 15 seconds
   3. Rinse with your fingers pointed downward
   4. Dry hands well

B. Alcohol gels – use unless hands are visibly soiled. Gel has been shown superior in removing organisms.

Remember ... Always change gloves between patients. Always wash your hands after removing gloves. You may also use alcohol gel, which is located in patient rooms and nursing units for hand washing. Personal protective equipment must be worn for any contact with blood or body fluids. Contact your supervisor for the location of personal protective items.
General Guidelines for Healthcare Workers

- **Consider blood/body fluids of all/patients potentially infected.**
- Use appropriate barrier precautions to prevent exposure when contact with blood or body fluid is anticipated.
- Use isolation procedures based on CDC guidelines for known or suspected infectious patients.

**Wash Hands**
- Hand washing is the most important measure in controlling the transmission of microorganisms and infection.
- Wash hands before and after contact with patients.
- Wash hands immediately and thoroughly if contaminated accidentally with blood, body fluids or contaminated items.
- Wash hands after removing gown and gloves and before leaving patient's room.

**Use Gloves**
Gloves are to be worn when……
- Touching blood, body fluids, mucous membranes or broken skin areas.
- Handling items soiled with blood or body fluids.
- Emptying urinary drainage bags, hemovacs, etc.
- Suctioning patients.
- Handling blood samples or blood soiled items, blood and body fluids.
- Performing venipuncture or other vascular access procedures and invasive procedures including assisting with same.
- **Gloves are to changed and hands washed after contact with each patient or contaminated item.**

**Use Protective Eye Protection Gear**
- Use during procedure that is likely to generate splashed or aerosolization of blood or other body fluids (e.g. dialysis).

**Dispose of Properly**
- Blood and body fluid waste containers, as well as all disposable contaminated materials (trash), are red bagged for incineration.
- Suction fluids, excretions, or blood can be poured down a drain connected to a sanitary sewer.
- Needles are not to be recapped, bent or broken by hand, but placed in a puncture resistant container after use. Any sharp item (e.g. scalpel, razor, etc.) that has been contaminated or used is placed in the same box.

**Other:**
- Linen which is soiled with blood or body fluids is to be bagged as usual.
- **Spill Kits** may be used for blood/body fluid spills.
- **Bleach** is kept in janitor's closet on each wing as a germicide for cleaning contaminated surfaces. Dilute 1:10 solution.
Specimens are to be placed in plastic puncture proof sealable bags. “Special handling sticker” is used for specimen from known infectious patient.

CPR – vent easy airways or ambu bag is to be used for CPR ventilation. Renal Dialysis has own guidelines specifically established for dialysis patients.

Infection Prevention

INFECTION PREVENTION & CONTROL SUMMARY MUST HAVES

Infection Prevention and Control is both a process and a program that targets preventing the transmission of illness or infections in the health-care setting. Infections that are not present or incubating at the time of admission to the health care facility are called hospital-acquired infections. Some of these infections may include:

- Antibiotic Resistant Infections (MRSA, VRE, and other gram negative organisms)
- Respiratory infections such as Tuberculosis, Influenza
- Foodborne illness
- Bloodborne Pathogens (Hepatitis B, Hepatitis C, HIV)

DEVICE RELATED INFECTIONS:
- Foley catheter related urinary tract infections
- Central line associated bloodstream infections
- Ventilator associated Pneumonia

PROCEDURE RELATED INFECTIONS:
- Postoperative infections (surgical site infections)

INFECTION PREVENTION BASICS

Good Samaritan Hospital requires 100% compliance with the following:

HAND HYGIENE IS THE SINGLE MOST EFFECTIVE METHOD TO PREVENT TRANSMISSION OF INFECTIONS. (CDC - Centers for Disease Control and Prevention)

3 Components of Hand Hygiene Program:
1. **Use soap and water** – wet hands with warm water, apply soap, scrub for 15 seconds, rinse, use towel to turn off faucet
2. **Alcohol Hand Gel** – apply to dry hands with no visible contamination, rub until dry
3. **Hospital Approved Hand Lotion** – personal hand lotions containers become contaminated with bacteria during use, only hospital approved lotions are tested for compatibility with latex gloves and Chlorhexidine Gluconate (CHG) – a skin antiseptic

When to use hand hygiene (either soap/water or alcohol hand gel):
- Before and After entering a patient room
Before and after using gloves
Before doing an invasive procedure (inserting an IV catheter, drawing blood)

When to wash your hands with soap and water:
- Whenever they look or feel dirty
- After using the bathroom
- Before and after eating
- After coughing or sneezing into your hands

### STANDARD PRECAUTIONS
Use when caring for all patients – use personal protective equipment to prevent exposure to blood and body fluids or the nonintact skin of a patient.

Personal Protective Equipment: gloves, gowns, masks, eye protection (goggles or face shields)

### TRANSMISSION BASED PRECAUTIONS (ISOLATION)

Three Categories:

**CONTACT** – Use for all antibiotic resistant bacteria and Clostridium difficile cases with diarrhea

- All staff and visitors must use gloves and a gown upon entering the patient room

**DROPLET** – Use for suspected meningitis, influenza, mumps, german measles, whooping cough

- All staff and visitors must use a surgical mask upon entering the patient room

**AIRBORNE** – Use for suspected tuberculosis, chicken pox, measles, smallpox, avian flu

- All staff and visitors must use the N95 mask for TB isolation, smallpox, and avian flu
- The door to the patient room must remain closed with HEPA filter or NAP room

### OCCUPATIONAL HEALTH REQUIREMENTS FOR HEALTH CARE WORKERS:

OSHA and COMAR (Maryland State Law) require the following records be kept up to date by all health care workers:

**Annual TB screening** (PPD skin test or for a know positive PPD-a negative Chest x-ray)
**Fit testing** for the N95 respirator (for TB isolation) – needs to be done annually for those who work in “Airborne Isolation Rooms”.

* **Hepatitis B Vaccination** (documentation of 3 doses or a positive antibody blood test)
* **Immunity to Measles, Mumps, and Chickenpox** (documentation of MMRV vaccine or positive antibody blood test)

*Healthcare workers who are nonimmune should be revaccinated to prevent unnecessary exposure and transmission to patients.*
CONTACT TASKS:
Determine what procedures/tasks are potential exposures to Blood and Body Fluids

ENGINEERING AND WORK PRACTICE CONTROLS:
Standard Precautions/Hand Hygiene
Proper use of safety engineered needles and sharps
Proper disposal of all contaminated needles/sharps
No eating, drinking, smoking, cosmetics, handling contact lenses in work areas
Proper storage and transport of lab specimens
Biohazard labels and red bags are used to identify contaminated waste

PERSONAL PROTECTIVE EQUIPMENT:
Use the appropriate barrier precautions (gloves, gowns, masks, eye protection)
PRESCRIPTION EYEGLASSES ARE NOT CONSIDERED ADEQUATE PROTECTION – YOU MUST USE THE EYE PROTECTION PROVIDED

HOUSEKEEPING:
Dispose of contaminated waste in appropriate containers with a red bag
Ensure contaminated equipment is cleaned properly before reuse

HEPATITIS B VACCINATION PROGRAM:
Required to complete all 3 doses and provide documentation or sign a declination form

POST EXPOSURE EVALUATION AND TREATMENT:
Flush the site immediately with water
Immediately contact the nursing supervisor to report the exposure
Medical evaluations are provided by the ER medical staff
Source patient testing will be coordinated by the hospital and confidential counseling will be provided.
Follow-up care should be provided by your physician or a referral if needed
TUBERCULOSIS EXPOSURE CONTROL PLAN

HEALTHCARE WORKER ROLE:
Early identification and isolation of patients suspected TB (respiratory precautions – HEPA filtered room or negative air pressure room)

Prompt and appropriate treatment per CDC and health department recommendations.

Maintain isolation precautions until the patient is no longer considered infectious.

Use proper respiratory protection (N95) whenever you are required to enter a TB isolation room. (Need to be fit tested)

Remain compliant with annual TB screening and any exposure follow-up if indicated.

Note: Both the BBP and TB Exposure Control Plans can be found in the Infection Control Manual on the
<table>
<thead>
<tr>
<th>Infection/Organism</th>
<th>Isolation Category</th>
<th>Notification</th>
<th>First Priority</th>
<th>Second Priority</th>
<th>Third Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clostridium Difficile</td>
<td>Contact</td>
<td>Lab reports to InInfec Control</td>
<td>Private room (close pt bed)</td>
<td>Cohort with same organism only</td>
<td>Admit to EPC</td>
</tr>
<tr>
<td>MRSA</td>
<td>Contact</td>
<td>Lab reports to InInfec Control</td>
<td>Private room (close pt bed)</td>
<td>Cohort with same organism only</td>
<td>Admit to EPC</td>
</tr>
<tr>
<td>VRE</td>
<td>Contact</td>
<td>Lab reports to InInfec Control</td>
<td>Private room (close pt bed)</td>
<td>Cohort with same organism only</td>
<td>Admit to EPC</td>
</tr>
<tr>
<td>Other highly resistant organisms (ORO) per lab: Acinetobacter, Anaerogenes xylosidans, Enterobacter, E Coli (ESBL), Klebsiella (ESBL), Pseudomonas</td>
<td>Contact</td>
<td>Lab reports to InInfec Control</td>
<td>Private room (close pt bed)</td>
<td>Cohort with same organism only</td>
<td>Admit to EPC</td>
</tr>
<tr>
<td>Herpes Zoster (shingles)</td>
<td>Contact</td>
<td>Nsg notifies InInfec Control (voice mail x4337)</td>
<td>Private room (close pt bed)</td>
<td>Cohort with same organism only</td>
<td>Admit to EPC</td>
</tr>
<tr>
<td>Lice (Pediculosis)</td>
<td>Contact</td>
<td>Nsg notifies InInfec Control (voice mail x4337)</td>
<td>Private room (close pt bed)</td>
<td>Cohort with same organism only</td>
<td>Admit to EPC</td>
</tr>
<tr>
<td>Scabies</td>
<td>Contact</td>
<td>Nsg notifies InInfec Control (voice mail x4337)</td>
<td>Private room (close pt bed)</td>
<td>Cohort with same organism only</td>
<td>Admit to EPC</td>
</tr>
<tr>
<td>RO Meningitis</td>
<td>Droplet</td>
<td>Nsg notifies InInfec Control (voice mail x4337)</td>
<td>Private room (close pt bed)</td>
<td>Cohort with same organism only</td>
<td>Admit to EPC</td>
</tr>
<tr>
<td>(meningococcal only needs to continue precautions until 24h post treatment with Rocapin)</td>
<td></td>
<td>Lab reports to InInfec Control</td>
<td>Private room (close pt bed)</td>
<td>Cohort with same organism only</td>
<td>Admit to EPC</td>
</tr>
<tr>
<td>RO Pulmonary TB</td>
<td>Airborne</td>
<td>Nsg notifies InInfec Control (voice mail x4337)</td>
<td>Private room with Negative Pressure or HEPA filter</td>
<td>Private room with Negative Pressure or HEPA filter</td>
<td>Admit to EPC</td>
</tr>
<tr>
<td>RO SARS/Avian Influenza</td>
<td>Airborne &amp; Contact</td>
<td>Nsg contacts InInfec Control for instructions ASAP</td>
<td>Private room with Negative Pressure or HEPA filter</td>
<td>Private room with Negative Pressure or HEPA filter</td>
<td>Admit to EPC</td>
</tr>
<tr>
<td>(Black Death, Plague, Smallpox)</td>
<td>Airborne &amp; Contact</td>
<td>Nsg contacts InInfec Control for instructions ASAP</td>
<td>Private room with Negative Pressure or HEPA filter</td>
<td>Private room with Negative Pressure or HEPA filter</td>
<td>Admit to EPC</td>
</tr>
<tr>
<td>Possible Bioterrorism Agent</td>
<td>Airborne &amp; Contact until verified by lab results</td>
<td>Nsg contacts InInfec Control for instructions ASAP</td>
<td>Private room with Negative Pressure or HEPA filter</td>
<td>Private room with Negative Pressure or HEPA filter</td>
<td>Admit to EPC</td>
</tr>
<tr>
<td>Other infections that are not communicable to person: Aspergillus, Legionella, Viral Meningitis (lab confirmed), West Nile Virus</td>
<td>Standard precautions</td>
<td>Lab reports to InInfec Control</td>
<td>Regular Room Assignment</td>
<td>Regular Room Assignment</td>
<td>Regular Room Assignment</td>
</tr>
</tbody>
</table>
MRSA (Methicillin Resistant Staphylococcus Aureus)

What is MRSA?

*Staphylococcus* species, including *S. aureus*, populate the skin, mucous membranes, and upper respiratory, intestinal, and genitourinary tracts. Methicillin-resistance is due not to a genetic mutation but rather to acquiring DNA from another bacterium — a process called transformation. This DNA incorporates itself into the original DNA. The mutated strain is resistant to methicillin, penicillin, cephalosporins, and often to aminoglycosides, erythromycin, clindamycin, and tetracycline.

*Staphylococcus aureus* with penicillin resistance was first noted in 1948, with the emergence of MRSA in 1961. A few cases of vancomycin-resistance have been noted in recent years, which emphasizes the need to prevent cross transmission of other resistant organisms.

Nursing home populations have become high-risk environments for the MRSA colonization of residents. Approximately 30-60% of patients who are colonized with MRSA will develop an infection requiring treatment.

It is estimated that up to 20% of healthcare workers become transient carriers with MRSA colonization of the nose and/or hands. Since there are no symptoms the healthcare worker is not usually aware of the organism.

Where is MRSA found?

MRSA can be found on the skin, in the nose, and in blood, urine, and stool.

What is the difference between colonization and infection?

Colonization means that MRSA is present on or in the body without causing illness. Infection means that MRSA invades the body or site with pathogenic organisms that reproduce causing disease and tissue damage.

What places patients at higher risk for acquiring MRSA?

- Exposure in the healthcare setting (healthcare workers/other patients)
- Prolonged use of invasive devices (central venous, urinary, endotracheal catheters)
- Dialysis
- Injecting drug use
- Burn unit exposure
- Diabetes
- Chronic skin conditions
- Immunosuppression
- Prolonged exposure to broad spectrum antimicrobials

Is MRSA treatable?

Yes. Although MRSA is resistant to many antibiotics and often difficult to treat, a few antibiotics can still successfully cure MRSA infections. A physician will generally treat an infected patient with Vancomycin for at least 7-10 days until clinical improvement is noted or negative cultures are obtained. Patients who are only colonized with MRSA usually do not need treatment, but physicians have used mupirocin ointment in the nares alone or in combination with an oral antibiotic to attempt to eradicate MRSA.

Can MRSA spread?

Yes. MRSA can spread among other patients, who are often very sick with weak immune systems that may not be able to fight off infections. MRSA is almost always spread by physical contact, and not through the air. **CONTACT PRECAUTIONS** are used to prevent the spread of MRSA from patient to patient.

**Proper handwashing** in addition to using an **antimicrobial handwash** product (such as an alcohol gel or foam) is the most effective means to interrupt transmission from patient to patient via the healthcare workers hands (horizontal transmission).
What are the transmission precautions used for MRSA?

Recommended procedures are:

- Place patient in a private room, or cohort with another patient with MRSA
- Identify precautions with a CONTACT precautions sign placed on the door to alert staff and visitors
- Limit patient movement from the room unless necessary
- Equipment should be dedicated to the room or cleaned with disinfectant before use with another patient (including stethoscopes)
- Gloves (sometimes gowns and masks) are used when appropriate (personal protective equipment) by all staff and visitors
- Handwashing with an antiseptic solution (use the waterless alcohol foam after routine handwashing) immediately after removing gloves is mandatory for all staff and visitors

How long does a patient with MRSA have to be isolated?

Current guidelines indicate there must be three negative cultures from the original site of infection before precautions can be discontinued. Most patients do not spend enough time in an acute care hospital for this testing to be completed.

Many patients will remain colonized with MRSA even after treatment and will remain asymptomatic. These patients will need to be placed on precautions if they are readmitted to the hospital in the future to prevent transmission to other patients.

Check the isolation indicator at the top of the patient order screen in SMS to see if the patient has been identified in the past with MRSA and needs to be placed on CONTACT precautions.

References:

DHMH Guidelines - 2000
CDC/NFID web site
CDC/NFID videoconference – October 1999
Nursing Management – June 1999
Steris Corporation - 2001
What are the transmission precautions used for VRE?

Recommended procedures are:

- Place patient in a private room, or cohort with another patient with VRE.
- Identify precautions with a CONTACT precautions sign placed on the door to alert staff and visitors.
- Limit patient movement from the room unless necessary.
- Equipment should be dedicated to the room or cleaned with disinfectant before use with another patient (including stethoscopes).
- Gloves (sometimes gowns and masks) are used when appropriate (personal protective equipment) by all staff and visitors.
- Handwashing with an antiseptic solution (use the waterless alcohol foam after routine handwashing) immediately after removing gloves is mandatory for all staff and visitors.

How long does a patient with VRE have to be isolated?

Current guidelines indicate there must be three negative cultures from the original site of infection before precautions can be discontinued. Most patients do not spend enough time in an acute care hospital for this testing to be completed.

Many patients will remain colonized with VRE even after treatment and will remain asymptomatic. These patients will need to be placed on precautions if they are readmitted to the hospital in the future to prevent transmission to other patients.

Check the isolation indicator at the top of the patient order screen in SMS to see if the patient has been identified in the past with VRE and needs to be placed on CONTACT precautions.

References:

DHMH Guidelines - 2000
CDC/NFID web site
CDC/NFID videoconference – October 1999
Nursing Management – June 1999
Steris Corporation - 2001
ANTIMICROBIAL RESISTANCE/ Healthcare Worker Information

C-difficile (Clostridium difficile)

What is C-difficile?

*Clostridium species* is a bacteria does not typically colonize the intestine of healthy adults. Hospitalized patients are colonized by contact with the organism, which has become the most common cause of nosocomial infectious diarrhea.

CDAD (Clostridium difficile-associated diarrhea) is associated with factors that increase exposure to certain antibiotics: clindamycin, ampicillin, amoxicillin, and the cephalosporins (either oral or intravenous). Procedures such as chemotherapy, abdominal surgery or GI manipulation often incorporate the use of antibiotics. The normal flora of the intestine is disrupted which allows the C-difficile to multiply in large numbers and produce two harmful toxins, A and B.

The stools may vary from watery green to grossly bloody and are usually accompanied by abdominal cramps, fever, and leukocytosis (high WBC count). The onset of symptoms may be as long as 8 weeks after antibiotic administration. However, not all patients experience diarrhea in addition to other symptoms in milder cases.

Where is C-difficile found?

C-difficile can be found mainly in the intestinal tract.

What is the difference between colonization and infection?

Colonization means that C-difficile is present on or in the body without causing illness. Infection means that C-difficile invades the body or site with pathogenic organisms that reproduce causing disease and tissue damage.

What places patients at higher risk for acquiring C-difficile?

- Prolonged hospital stay
- Exposure in the healthcare setting
- Chemotherapy
- Critical illness, severe underlying disease, or immunosuppression
- Gastrointestinal procedures
- Patients over 50 years old
- Use of enemas, stool softeners, and GI stimulants
- Prolonged exposure to antimicrobials such as: Clindamycin, ampicillin, amoxicillin, the cephalosporins.

C-difficile is known to survive well in the environment by forming spores, the vegetative state of bacteria, which can survive for months on surfaces. The microbe can also flourish on healthcare workers hands, the most likely way to transmit the organism.

Is C-difficile treatable?

Yes. A physician may choose to stop all antibiotics for a mild case and wait until the normal bacteria repopulate and replace the C-difficile strain. If an antibiotic is needed an alternative will be used that is less likely to imbalance the bowel flora. Current practice is to start with Flagyl and then Vancomycin if this treatment fails. Vancomycin use should be avoided if at all possible due to increasing incidents of vancomycin resistant enterococcus. The physician should also discontinue any antidiarrheals.

Can C-difficile spread?

Yes. C-difficile can spread among other patients, who are often very sick with weak immune systems that may not be able to fight off infections. C-difficile is almost always spread by physical contact, and not through the air. CONTACT precautions are used to prevent the spread of C-difficile from patient to patient.
**Proper handwashing** using soap and water instead of alcohol based hand rubs is the most effective means to remove spores formed by C-difficile and interrupt transmission from patient to patient via the healthcare workers hands (horizontal transmission).

**What are the transmission precautions used for C-difficile?**

Recommended procedures are:

- Place patient in a private room, or cohort with another patient with C-difficile
- Identify precautions with a **CONTACT precautions** sign placed on the door to alert staff and visitors
- Limit patient movement from the room unless necessary
- Equipment should be dedicated to the room or cleaned with disinfectant before use with another patient (including stethoscopes)
- Gloves (sometimes gowns and masks) are used when appropriate (personal protective equipment) by all staff and visitors
- Handwashing with soap and water immediately after removing gloves is mandatory for all staff and visitors

**How long does a patient with C-difficile have to be isolated?**

Current guidelines indicate there must be evidence that the diarrhea has subsided before precautions can be discontinued.

Some patients will remain colonized with C-difficile even after treatment and will remain asymptomatic. A patient who complains of abdominal pain and fever with a prior history of C-difficile should be retested even if diarrhea is not present. These patients will need to be placed on **CONTACT precautions** if they are readmitted to the hospital in the future to prevent transmission to other patients.

**References:**

DHMH Guidelines - 2000
CDC/NFID web site
CDC/NFID videoconference – October 1999
Nursing Management – June 1999
Steris Corporation - 2001
Other Resistant Organisms with multiple antibiotic resistance

What are these organisms?

Other resistant organisms have in recent years shown increasing resistance to antibiotic treatments. There are several categories of organisms that have emerged as highly resistant strains of common bacteria such as:

ESBL producers
Escherichia coli
Klebsiella pneumoniae
Klebsiella oxytoca

Other Highly Resistant Gram Negative Organisms
Acinetobacter species
Aeromonas xylosoxidans
Enterobacter cloacae
M. morganii
Pseudomonas aeruginosa
Proteus mirabilis

Multiple antimicrobial-resistant strains of bacteria have a mechanism acquired resistance and can flourish in the presence of this antimicrobial. The mechanism for acquiring this gene is unknown- strains susceptible to vancomycin die out.

Resistant strains of gram-negative organisms developed first to penicillin and ampicillin, followed by aminoglycosides (gentamicin) by 1979. The more frequent use of vancomycin to treat these resistant enterococcus species is felt to have caused strains of vancomycin resistant organisms, first identified in 1986.

While there are many types or “species” of Acinetobacter and all can cause human disease, Acinetobacter baumannii accounts for about 80% of reported infections. Outbreaks of Acinetobacter infections typically occur in intensive care units and healthcare settings housing very ill patients. Acinetobacter infections rarely occur outside of healthcare settings.

Where are ORO found?

These bacteria can be found mainly in urine and stool, but also may infect wounds and occasionally sputum. Acinetobacter is a group of bacteria commonly found in soil and water. It can also be found on the skin of healthy people, especially healthcare personnel.

What is the difference between colonization and infection?

Colonization means that an ORO is present on or in the body without causing illness. Infection means that ORO invades the body or site with pathogenic organisms that reproduce causing disease and tissue damage.

What places patients at higher risk for acquiring ORO?

- Prolonged hospital stay
- Indwelling urinary catheters or central venous catheters
- Critical illness, severe underlying disease, or immunosuppression
- Liver transplantation
- Prolonged exposure to broad spectrum antimicrobials

ORO is known to survive well in the environment and on the hands of caregivers. Other studies have shown ORO survived on inanimate surfaces such as bedrails, countertops, door handles, patient gowns, bed linens, and stethoscopes for weeks.
Are ORO treatable?

Yes. Although VRE is resistant to many antibiotics and often difficult to treat, a few antibiotics may be available for physicians to treat patients selectively based on clinical symptoms. A physician may choose to stop all antibiotics and wait until the normal bacteria repopulate and replace the VRE strain. Patients who are only colonized with VRE usually do not need treatment.

Can ORO spread?

Yes. ORO can spread among other patients, who are often very sick with weak immune systems that may not be able to fight off infections. VRE is almost always spread by physical contact, and not through the air. CONTACT precautions are used to prevent the spread of VRE from patient to patient.

Proper handwashing in addition to using an antimicrobial handwash product (such as an alcohol gel or foam) is the most effective means to interrupt transmission from patient to patient via the healthcare workers hands (horizontal transmission).

What are the transmission precautions used for ORO?

Recommended procedures are:

- Place patient in a private room, or cohort with another patient with ORO
- Identify precautions with a CONTACT precautions sign placed on the door to alert staff and visitors
- Limit patient movement from the room unless necessary
- Equipment should be dedicated to the room or cleaned with disinfectant before use with another patient (including stethoscopes)
- Gloves (sometimes gowns and masks) are used when appropriate (personal protective equipment) by all staff and visitors
- Handwashing with an antiseptic solution (use the waterless alcohol foam after routine handwashing) immediately after removing gloves is mandatory for all staff and visitors

How long does a patient with ORO have to be isolated?

Current guidelines indicate there must be three negative cultures from the original site of infection before precautions can be discontinued. Most patients do not spend enough time in an acute care hospital for this testing to be completed.

Many patients will remain colonized with VRE even after treatment and will remain asymptomatic. These patients will need to be placed on precautions if they are readmitted to the hospital in the future to prevent transmission to other patients.

Check the isolation indicator at the top of the patient order screen in SMS to see if the patient has been identified in the past with VRE and needs to be placed on CONTACT precautions.

References:

DHMH Guidelines - 2000
CDC/NFID web site
CDC/NFID videoconference – October 1999
Nursing Management – June 1999
Steris Corporation - 2001
# STANDARD ADMINISTRATION TIMES

<table>
<thead>
<tr>
<th>FREQUENCY</th>
<th>ADMINISTRATION TIME(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM</td>
<td>1000</td>
</tr>
<tr>
<td>DAILY/Q DAY</td>
<td>1000</td>
</tr>
<tr>
<td>BID</td>
<td>1000 – 2200</td>
</tr>
<tr>
<td>AM &amp; PM</td>
<td>1000 – 2200</td>
</tr>
<tr>
<td>AC</td>
<td>0700 – 1100 -1700</td>
</tr>
<tr>
<td>PC</td>
<td>0900 -1300 - 1800</td>
</tr>
<tr>
<td>Q 3 HOURS</td>
<td>0600 – 0900 -1200 -1500 etc</td>
</tr>
<tr>
<td>Q 4 HOURS</td>
<td>0600 -1000 -1400 -1800 etc.</td>
</tr>
<tr>
<td>Q 6 HOURS</td>
<td>0600 – 1200 -1800 -2400</td>
</tr>
<tr>
<td>4 TIMES DAILY</td>
<td>0600 -1200 – 1800 - 2400</td>
</tr>
<tr>
<td>Q 8 HOURS</td>
<td>0600 -1400 – 2200</td>
</tr>
<tr>
<td>T I D</td>
<td>0600 – 1400 -2200</td>
</tr>
<tr>
<td>Q 12 HOURS</td>
<td>1000 -2200</td>
</tr>
<tr>
<td>Q HS, Q PM, or EVERY NIGHT</td>
<td>2200</td>
</tr>
</tbody>
</table>

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### MEDICATIONS

<table>
<thead>
<tr>
<th>MEDICATIONS</th>
<th>FREQUENCY</th>
<th>ADMINISTRATION TIME (S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-lipemics (Statins)</td>
<td>Daily</td>
<td>2200</td>
</tr>
<tr>
<td>(ex. pravastin (Pravachol) or atorvastatin (Lipitor))</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diuretics</td>
<td>Daily</td>
<td>1000</td>
</tr>
<tr>
<td>ex. furosemide (Lasix)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(bumetanide (Bumex))</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diuretics</td>
<td>Twice Daily</td>
<td>0800 - 1700</td>
</tr>
<tr>
<td>Esomeprazole (Nexium)</td>
<td>Before breakfast</td>
<td></td>
</tr>
<tr>
<td>(one hour before meals)</td>
<td></td>
<td>0600</td>
</tr>
<tr>
<td>Alendronate (Fosamax)</td>
<td>Before Breakfast</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>0600</td>
</tr>
<tr>
<td>Oral Hypoglycemics</td>
<td>Daily</td>
<td>0800</td>
</tr>
<tr>
<td>Ex. glipizide, glipizide XL, glyburide, metformin, glimepiride, rosiglitazone, pioglitazone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Levothyroxine (Synthroid)</td>
<td>Before breakfast (take ½ - 1 hour before)</td>
<td>0600</td>
</tr>
<tr>
<td>Warfarin (Coumadin)</td>
<td>Daily</td>
<td>1800</td>
</tr>
</tbody>
</table>
MedStar Good Samaritan Hospital
ANTIBIOTIC DOSE SCHEDULING CHART

USE TO PLACE MEDS ON THE STANDARD HOSPITAL SCHEDULE

Standard Schedules:

| q day or q 24 hours: 10 a.m. |  |
|------------------------------|--|--|
| If the schedule is DAILY (Q Day or Q 24 hours) and the TIME is: | 3 a.m. – 11:59 p.m. |
| 12Mid – 2:59 a.m. | Give first dose Now and second dose at 10 a.m. today |
|  |
| Give first dose Now and second dose at 10 a.m. tomorrow |

| q 12 hours: 10 a.m. and 10 p.m. |  |
|------------------------------|--|--|
| If the schedule is EVERY 12 HRS and the TIME is: |  |
| 12Mid – 5:59 a.m. | 6 a.m. – 5:59 p.m. | 6 p.m. – 11:59 p.m. |
| Give first dose Now and repeat at 10:00 a.m. | Give first dose Now and repeat at 10:00 p.m. | Give first dose Now and repeat at 10:00 a.m. |

| q 8 hours: 6 a.m. – 2 p.m. – 10 p.m. |  |
|------------------------------|--|--|
| If the schedule is EVERY 8 HRS and the TIME is: | 6 p.m. – 11:59 p.m. |
| 12 mid – 1:59 a.m. |  |
| 2 a.m. – 9:59 a.m. | 10 a.m. – 5:59 p.m. |
| Give first dose Now and repeat at 6:00 a.m. | Give first dose Now and repeat at 10:00 p.m. |
| Give first dose Now and repeat at 10:00 a.m. |

| q 6 hours: 6 a.m. – 12n – 6 p.m. – 12 a.m. |  |
|------------------------------|--|--|
| If the schedule is EVERY 6 HRS: |  |
| 12 mid – 2:59 a.m. | 3 a.m. – 8:59 a.m. | 9 a.m. – 2:59 p.m. | 3 p.m. – 8:59 p.m. | 9 p.m. – 11:59 p.m. |
| Give first dose Now and repeat at 6:00 a.m. | Give first dose Now and repeat at 12 noon | Give first dose Now and repeat at 6 p.m. | Give first dose Now and repeat at 12 midnight | Give first dose Now and repeat at 6:00 a.m. |

| q 4 hrs: 2 a.m. – 6 a.m. – 10 a.m. – 2 p.m. – 6 p.m. – 10 p.m. |  |
|------------------------------|--|--|
| If the schedule is EVERY | 8 p.m. – 11:59 p.m. |
| 4 a.m. – 7:59 a.m. | 8 a.m. – 11:59 a.m. | 12n – 3:59 p.m. | 4 p.m. – 7:59 p.m. | 8 p.m. – 11:59 p.m. |
4 HRS and the TIME is: 12mid – 3:59 a.m.

<table>
<thead>
<tr>
<th>Time</th>
<th>Dosage Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Give first dose Now and repeat at 6:00 a.m.</td>
<td>Give first dose Now and repeat at 10:00 a.m.</td>
</tr>
<tr>
<td>Give first dose Now and repeat at 2:00 p.m.</td>
<td>Give first dose Now and repeat at 6:00 p.m.</td>
</tr>
<tr>
<td>Give first dose Now and repeat at 10 p.m.</td>
<td>Give first dose Now and repeat at 2:00 a.m.</td>
</tr>
</tbody>
</table>

For Tobramycin, Amikacin, Gentamicin, Vancomycin, the first dose should be given ASAP and at

**If no prior dose given, give 1st dose ASAP.**

*prescribed* intervals thereafter.
<table>
<thead>
<tr>
<th>Medication</th>
<th>Expiration</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abatacept (Orencia)</td>
<td>24 hours</td>
<td></td>
</tr>
<tr>
<td>Acyclovir (Zovirax)</td>
<td>24 hours</td>
<td>Do Not Refrigerate</td>
</tr>
<tr>
<td>Amiodarone (Cordarone)</td>
<td>24 hours</td>
<td>Should be freshly prepared</td>
</tr>
<tr>
<td>Amphotericin-B Injectable</td>
<td>Should be freshly prepared</td>
<td></td>
</tr>
<tr>
<td>Fungizone Abecet</td>
<td>48 hours</td>
<td></td>
</tr>
<tr>
<td>Bactrim Injectable</td>
<td>4 hours</td>
<td>Do Not Refrigerate</td>
</tr>
<tr>
<td>Caspofungin</td>
<td>48 hours</td>
<td>Pharmacy will call</td>
</tr>
<tr>
<td>Chlorothiazide (Diuril)</td>
<td>24 hours</td>
<td>Do Not Refrigerate</td>
</tr>
<tr>
<td>Colistimethate</td>
<td>24 hours</td>
<td></td>
</tr>
<tr>
<td>Cyclosporin</td>
<td>24 hours</td>
<td></td>
</tr>
<tr>
<td>Daptomycin (Cubicin)</td>
<td>48 hours</td>
<td></td>
</tr>
<tr>
<td>Dolasetron (Anzemet)</td>
<td>24 hours</td>
<td></td>
</tr>
<tr>
<td>Enalaprilat (Vasotec)</td>
<td>24 hours</td>
<td></td>
</tr>
<tr>
<td>Ferrlecit</td>
<td>24 hours</td>
<td></td>
</tr>
<tr>
<td>Immune Globulin</td>
<td>24 hours</td>
<td>Pharmacy will call</td>
</tr>
<tr>
<td>Leucovorin</td>
<td>24 hours</td>
<td></td>
</tr>
<tr>
<td>Levetiracetam (Keppra)</td>
<td>24 hours</td>
<td>Do Not Refrigerate</td>
</tr>
<tr>
<td>Levothyroxine (Synthroid)</td>
<td>2 hours</td>
<td>Pharmacy will call</td>
</tr>
<tr>
<td>Micafungin</td>
<td>24 hours</td>
<td></td>
</tr>
<tr>
<td>Meropenem</td>
<td>24 hours in NSS/6 hours in D5W</td>
<td></td>
</tr>
<tr>
<td>Ondansetron (Zofran)</td>
<td>24 hours</td>
<td></td>
</tr>
<tr>
<td>Pantoprazole (Protonix)</td>
<td>24 hours</td>
<td></td>
</tr>
<tr>
<td>Phenytoin (Dilatin)</td>
<td>4 hours</td>
<td>Do Not Refrigerate</td>
</tr>
<tr>
<td>Phytonadione (Vit K)</td>
<td>Should be freshly prepared</td>
<td></td>
</tr>
<tr>
<td>Rifampicin (Rifampin)</td>
<td>4 hours D5W</td>
<td>Do Not Refrigerate</td>
</tr>
<tr>
<td></td>
<td>24 hours NSS</td>
<td>Do Not Refrigerate</td>
</tr>
<tr>
<td>Tigecycline (Tygacil)</td>
<td>24 hours</td>
<td></td>
</tr>
<tr>
<td>Valproate Sodium</td>
<td>24 hours</td>
<td>Do Not Refrigerate</td>
</tr>
<tr>
<td>Ganciclovir</td>
<td>12 hours in vial 12 days in bag 24 hours @ 25° C/ 5 days</td>
<td>Do Not Refrigerate</td>
</tr>
</tbody>
</table>
Note: Medications will be prepared by pharmacy and delivered to the unit just before the standard administration times.
## Addendum A: List of Prohibited Dangerous Abbreviations (effective 1/04)

<table>
<thead>
<tr>
<th>DO NOT USE: Dangerous Abbreviation</th>
<th>Potential Problem</th>
<th>USE: Preferred Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>U (for unit)</td>
<td>Mistaken as “0” (zero), “4” (four), or “cc”</td>
<td>Write &quot;unit&quot;</td>
</tr>
<tr>
<td>IU (for international unit)</td>
<td>Mistaken as “IV” (intravenous) or “10” (ten)</td>
<td>Write &quot;international unit&quot;</td>
</tr>
<tr>
<td>µg</td>
<td>Mistaken for “mg” (milligram) resulting in a thousand-fold dosing overdose.</td>
<td>Write &quot;mcg&quot; or &quot;microgram&quot;</td>
</tr>
<tr>
<td>cc (cubic centimeter)</td>
<td>Mistaken for “U” (units) or “0” (zero)</td>
<td>Write &quot;ml&quot; for milliliters</td>
</tr>
<tr>
<td>Q.D. or q.d.</td>
<td>Mistaken for “q.d.” and “q.d.” when the “.” (period) is mistaken as an “I” or an “O”.</td>
<td>Write “daily” or “every day”</td>
</tr>
<tr>
<td>Q.I.D. or q.i.d.</td>
<td>Mistaken for “QOD” and “QD” when the “I” is mistaken as an “0” or a “.” (period)</td>
<td>Write “Four times daily”</td>
</tr>
<tr>
<td>Q.O.D. or q.o.d.</td>
<td>Mistaken for “q.d.” and “q.d.” when the “O” is mistaken as an “1” or a “.” (period)</td>
<td>Write “every other day”</td>
</tr>
<tr>
<td>T.I.W.</td>
<td>Mistaken for “tid” (three times a day) or “twice weekly” resulting in an overdose.</td>
<td>Write “3 times weekly” or “three times a week”</td>
</tr>
<tr>
<td>MS or MS04</td>
<td>Mistaken for “magnesium sulfate”</td>
<td>Write “morphine sulfate”</td>
</tr>
<tr>
<td>MgS04</td>
<td>Mistaken for “morphine sulfate”</td>
<td>Write “magnesium sulfate”</td>
</tr>
<tr>
<td>A.S., A.D., A.U. (Latin abbreviation for left, right, or both ears)</td>
<td>Mistaken for each other (e.g., AS for OS, AD for OD, AU for OU, etc.)</td>
<td>Write: “left ear,” “right ear” or “both ears,”</td>
</tr>
<tr>
<td>O.S., O.D., O.U. (Latin abbreviation for left, right, or both eyes)</td>
<td>Mistaken for each other (e.g., AS for OS, AD for OD, AU for OU, etc.)</td>
<td>Write: “left eye,” “right eye,” or “both eyes”</td>
</tr>
<tr>
<td>‘Trailing’ zero</td>
<td>Decimal point is missed.</td>
<td>NEVER write a zero by itself after a decimal point (“X.0” mg)</td>
</tr>
<tr>
<td>Lack of ‘Leading’ zero</td>
<td>Decimal point is missed.</td>
<td>ALWAYS write a zero by itself before a decimal point (“0 X” mg)</td>
</tr>
<tr>
<td>Any Drug Name Abbreviation</td>
<td>May be misinterpreted or confused with another abbreviation.</td>
<td>Write-out the full drug name</td>
</tr>
</tbody>
</table>
Hazardous Pharmaceutical Waste FAQ

1. Why do we need to implement a Hazardous Pharmaceutical Waste program at our hospital?
   • The Resource Conservation Recovery Act (RCRA) requires training for all workers who handle or come in contact with hazardous waste.
   • 2002 U.S. Geological Survey (USGS) Report found pharmaceuticals such as endocrine disruptors, hormones, and antibiotics in US waters.
   • Some pharmaceuticals that we administer are regulated by the EPA as “hazardous Waste” and must be managed by the RCRA rules.
   • These rules apply for generators, transporters, or owners of treatment, storage, and disposal facilities. Hospitals are GENERATORS of hazardous pharmaceutical waste.
   ☼ It’s the right thing to do – It’s better for the environment!

2. What is the definition of hazardous waste?
   • Impacts human health and the environment when discarded.

3. What happens if we don’t comply?
   • The hospital will be fined for non compliance.

4. Define satellite and central storage area as it relates to the management of pharmaceutical waste.
   • A satellite is collection area near the point of generation of hazardous waste. It is the black box/container in the med room or nursing station area.
   • Central Storage Area: the area hazardous waste is taken prior to transport off-site for disposal.

5. When are pharmaceuticals regulated?
   • If they are listed on an EPA list
   • If they exhibit any of the 4 characteristics of hazardous waste: (1) Ignitable/flammable; (2) Corrosive; (3) Reactive; (4) Toxic
   • Some examples are: nicotine/nicotine patches, warfarin, Mitomycin, Selenium sulfide, human insulins, and paclitaxel.

6. What is my role?
   • Proper collection: Choose the right container. For those drugs marked with a black box or EPA sticker, place them in the black box/container located on your unit. Needles and other infectious materials do NOT go into the black boxes!
   • Proper Storage of Containers: The black boxes/containers must be kept in a secure area with limited access. The lids must be closed when you are not adding waste.
   • Labeling Containers Properly: All boxes/containers must be marked with a “Hazardous Waste” sticker. The sticker should be on the container. Do NOT put a date on the container.
• Communicate to your supervisor/manager if things change or are not working.

7. How will I know what drugs to place in the black container?
   • You will see a “black” rectangle on the package
   OR
   • A sticker with a symbol that says “EPA” on a black background with white lettering on insulin bottles or IV bags.

8. What goes in the black containers?
   • Unused medication
   • Empty containers which held the medications
   • Unit dose packaging for some medications such as warfarin

9. Are there any precautions I need to take before placing medications or empty containers in the black box?
   • Make sure tops are on containers of liquids.

10. What do I do when the container is full?
    • Call environmental service for a replacement. They will transport the box to the central storage area.

11. Who do I contact if I have questions?
    • Facility Hazardous Waste Program Coordinator: Robert Drexler @ extension 4214
    • Nursing: Clinical Specialist or Education Specialist for your unit
    • Inpatient Pharmacy: extension 3950
    • EMSI: Shobhana Sharma (301-309-0475) or ssharma@enviroexperts.net
<table>
<thead>
<tr>
<th>Type of Waste</th>
<th>Description of Waste</th>
<th>Disposal Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infectious Waste</td>
<td>Materials not exposed to chemo but saturated with blood or bodily fluids (i.e., could get a drop out by squeezing or flicking) Containers of blood products or other potentially infectious materials.</td>
<td>1. Autoclaved on premises and sent to landfill or 2. Sent to an offsite medical waste incinerator</td>
</tr>
<tr>
<td>Trace Chemo and Combined</td>
<td>Absorbent materials not saturated with blood or bodily fluids should be disposed of as ordinary trash.</td>
<td></td>
</tr>
<tr>
<td>EPA Regulated Pharmaceutical Waste</td>
<td>EMPTY chemo-containers (IV bags, tubing, vials, syringes, zip lock bags). EMPTY = Less than 3% of the contents remain IV sets that have held chemo and remain attached to catheter or other bodily material. Gloves, gowns, Ziploc bags, other paraphernalia used to administer chemo but NOT VISIBLY CONTAMINATED with chemo (i.e., no known droplet or spill).</td>
<td>Sent to medical waste incinerator</td>
</tr>
<tr>
<td>Ordinary Trash</td>
<td>Specified chemo bags/syringes/vials that are NOT EMPTY and have NO CATHETER attached. Paraphernalia (e.g., gloves, gowns, etc.) THAT HAVE BEEN VISIBLY CONTAMINATED with specified chemo. Materials used to clear clean up of specified chemo spills. (BAGGED) Nicotine Patches (BAGGED in small bag) Warfarin (tablet &amp; unit dose packaging). Insulin vials. Naloxone P. U &amp; D listed drugs. NO NEEDLES</td>
<td>Sent to hazardous waste incinerizer</td>
</tr>
<tr>
<td>Sharps</td>
<td>Materials not exposed to chemo and not saturated with blood or bodily fluids (i.e., could not get a drop out by squeezing or flicking). Examples: Non-chemo IV bags Packaging Food Waste</td>
<td>Sent to municipal landfill</td>
</tr>
</tbody>
</table>

All sharp objects that have not been exposed to chemo: Lancets Needles/Syringes Scalpels Scissors Broken glass/Vials Specimen containers (blood) - glass
Hand Off Communication for Patients Going To Tests, Procedures and Appointments

Please complete the information below at the time of admission and modify as needed prior to the patient going off the unit for tests/procedures. The form is to be sent with the patient as a communication tool and will help to increase the safety of our patients throughout the facility. This is a required National Patient Safety Goal. Place form as the 1st page of the patient's chart.

Allergies: ______________________________

Code Status: ____________________________ NPO or Diet Status: ____________________________

Isolation: ______________________________

Precautions: ____________________________

Orientation/Communication: ______________

Mobility: ________________________________

IV Access/Fluids: _________________________

Oxygen Needed: _________________________

Tubes/Drain/Wounds: ____________________

Diabetic/Insulin/Fingersticks: _____________

Special Meds/Preps Given/Needed: _____________

How does the patient transport/transfer? __________________________

Special needs or history: __________________________

________________________

Hand Off Communication for Patients Going To Tests, Procedures and Appointments

18-12019 (1,007)
The Joint Commission National Patient Safety Goals
(2014)

The purpose of the National Patient Safety Goals is to improve patient safety. The goals focus on problems in health care safety and how to solve them.

**Goal 1 Improve the accuracy of patient identification.**
- Use at least two patient identifiers when providing care, treatment or services.
- Eliminate transfusion errors related to patient misidentification.
  TIP: (Use patient ID Band for NAME & BIRTH DATE)
- Label all containers used for blood and other specimens in the presence of the patient.

**Goal 2 Improve the effectiveness of communication among caregivers.**
- Report critical results of tests and diagnostic procedures on a timely basis.
- When receiving a critical result of a test, verify the critical result of the test by having the person receiving the information record and "read-back" the complete test result.
- Evaluate the timeliness of reporting & receipt by the responsible licensed caregiver, of critical result of tests.
  TIP: Clinicians who receive verbal/telephone critical results of tests or diagnostic procedures should always read back the critical result. Critical test results should be repeated to the physician within 30 minutes of the receipt of the result by the clinician. (Utilize the Critical Results Documentation Forms on your unit.)

**Goal 3 Improve the safety of using medications.**
- Label all medications, medication containers (ex. syringes, med. cups, basins), or other solutions on & off the sterile field.
  TIP: (Secondary medication containers (syringes, basins, etc.) containers must always be appropriately labeled.) Label and draw-up or label and pour one medication at a time.
- Reduce the likelihood of patient harm associated with the use of anticoagulation therapy
  TIP: (Take extra care with patients who take medicines to thin their blood—refer to the Anticoagulation Protocols.)
  TIP: Educate family/patients/staff on importance of follow-up, compliance, drug-food interactions and adverse drug reactions.
- Maintain and communicate accurate patient medication information.
  - Obtain information on the medications the patient is currently taking when he or she is admitted to the hospital or is seen in an outpatient setting.
  - Compare the medication information the patient brought to the hospital with the medications ordered for the patient by the hospital in order to identify and resolve discrepancies.
  - Provide the patient (or family as needed) with written information on the medications the patient should be taking when he or she is discharged from the hospital or at the end of an outpatient encounter.
  - Explain the importance of managing medication information to the patient when he or she is discharged from the hospital or at the end of an outpatient encounter.
  Note: Examples include instructing the patient to give a list to his or her primary care physician; to update the information when medications are discontinued, doses are changed, or new medications (including over-the-counter products) are added; and to carry medication information at all times in the event of
emergency situations.

**TIP:** (Accurately complete our “Medication/Allergy History Database” form for all patients)

**Goal 7** Reduce the risk of health care-associated infections.
- Comply with current Centers for Disease Control and Prevention (CDC) hand hygiene guidelines.
- Implement evidence based practices to prevent healthcare associated infections due to multiple drug-resistant organisms in hospitals (MRSA, C-Diff and VRE)
- Implement evidence based practices to prevent central line bloodstream infections
- Implement best practices for preventing surgical site infections.
- Implement evidence-based practices to prevent indwelling catheter-associated urinary tract infections (CAUTI).
  **TIP:** (Hand gel when entering & leaving patient room. Soap & Water if hands visibly soiled or patient has C. dif)
  **TIP:** Use Central Line Catheter Checklists.
  **TIP:** Patient should receive prophylactic antibiotic within one hour prior to incision.
- Educate family/patients as needed, who are infected or colonized with multi-drug resistant organisms about health care associated infection strategies.
  **TIP:** Insert indwelling urinary catheters according to established evidence-based guidelines that address the following:
  - Limiting use and duration to situations necessary for patient care
  - Using aseptic techniques for site preparation, equipment, and supplies

**Goal 15** The organization identifies safety risks inherent in its patient population.
- The organization identifies patients at risk for suicide (being treated for emotional or behavioral disorders).
  **TIP:** (Utilize our Suicide Prevention Policy to protect at risk patients)

**Universal Protocol**
- Conduct a pre-procedure verification process to ensure correct patient, correct site, and correct procedure.
- Mark the procedure site. This must be performed by the licensed practitioner who will perform the intended surgical or non-surgical invasive procedure.
- A **time-out** is performed immediately prior to starting procedures.
  - Confirmation of the correct patient
  - Confirmation of the correct side and site are marked
  - Agreement on the procedure
  **TIP:** A time-out must also be completed for patients undergoing nerve blocks.
  **TIP:** These items must also be available for the procedure. Use of a standardized list is **acceptable**:
  - Relevant documentation: consent. History and physical, nursing assessment, pre-anesthesia assessment, etc.
  - Relevant imaging studies and lab results, are properly labeled and displayed
  - The need to administer antibiotics
  - Safety precautions pertinent to the patient