



Dear Colleague:

Physician guests and observers with a potential for exposure to infectious agents or with a potential for transmitting infectious agents to others must be knowledgeable of YNHH's Infection Control, Standard Precautions, Bloodborne Pathogens Standards and TB Control (Airborne Precautions) and Policies and Procedures. While on YNHH premises, physician guests and observers must also be cognizant of YNHH Policies and Procedures regarding Safety and Security. The following information outlines all of this information and must be read.

Any questions concerning these policies should be directed to Occupational Health Services (tel. 688-2462) or to the Department of Quality Improvement Support Services, formerly Hospital Epidemiology (tel. 688-4634).

Please recognize that while we have a need to comply with regulatory agencies, Yale-New Haven Hospital's overriding concern is the protection of its patients and its health care team. Your cooperation and collaboration in this effort is very much appreciated.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Peter N. Herbert, M.D.', written in a cursive style.

Peter N. Herbert, M.D.  
Chief of Staff

## **YALE-NEW HAVEN HOSPITAL'S STANDARD (BLOODBORNE PATHOGENS) PRECAUTIONS POLICY**

Scope: For the purpose of this document, the definition of Health Care Worker (HCW) is any person with patient contact, including but not limited to: attending physicians, postdoctoral fellows, house staff, medical students, physician assistants, nurse-midwives, and their trainees. Similar policies govern the activities of hospital employees and other CDC-defined HCWs.

The Yale-New Haven Hospital Policy for Bloodborne Pathogens is in compliance with CDC/OSHA recommendations and mandates. The YNHH Infection Control Committee endorses the CDC/OSHA recommendations for the application of Standard Precautions (formerly referred to as Universal Precautions) to all patients, regardless of a patient's diagnosis, and to any materials or equipment contaminated by blood or body fluids during medical practice.

All HCWs should be aware of the documented routes of transmission of HIV, HBV, and HCV and protect themselves accordingly. Although nosocomial transmission of bloodborne pathogens is rare, Standard Precautions must be utilized in the care of ALL patients regardless of their diagnosis. This includes:

1. Hands should be cleansed before and after contact with all patients using antiseptic soap and water or an alcohol-based hand rub. If hands or other body surfaces come in contact with blood or body fluids, wash them immediately with antiseptic soap and water.
2. Gloves should be worn when contact is anticipated with blood or any body fluids except sweat. Gloves need not be worn in other ordinary patient care contact. Gloves should be discarded prior to leaving the patient's room and hands washed immediately after each patient encounter. Double gloving may reduce the risk of blood exposure when performing surgical procedures.
3. Gowns/aprons, masks, and eye protection are indicated when there is a risk of exposure to blood or body fluid through close contact, splashing, or aerosolization, such as in suctioning, endoscopy, surgery, delivery (vaginal or C-section) and catheterization.
4. Do not recap needles/syringes. Discard used, uncapped needles/syringes and sharps (scalpels, forceps, razors, trocars, etc.) in a puncture-resistant container specified for this purpose. Containers (sharps boxes) are located in all patient rooms and treatment rooms.
5. Eating, drinking, applying cosmetics, lip balm, or handling contact lenses is prohibited in clinical patient care areas.
6. When significant exposure to blood or body fluid occurs (e.g. needlestick, mucous membrane splash, or contact with non-intact skin), report the incident IMMEDIATELY to a hospital supervisor, and go to the YNHH Occupational Health Service located in suite 130 of the Grace Building for evaluation and recommendations for post-exposure prophylaxis and follow-up. If the exposure occurs after hours or on a weekend, go to the Yale-New Haven Hospital Emergency Department for evaluation. Bloodborne pathogen exposures should be evaluated immediately so that a decision can be made within 1-2 hours of exposure whether to administer antiretroviral and/or Hepatitis B prophylactic treatment. This includes those persons previously immunized with the Hepatitis B vaccine. A YNHH Supervisor's Report of Employee Accident/Injury (F1797) form should be completed for all significant exposures. YNHH Occupational Health Services should be notified of each incident REGARDLESS of the health care worker's usual source of medical care. Questions concerning reporting and follow-up can be directed to YNHH Occupational Health Services (688-2462). Post-exposure evaluation may include periodic blood testing.

In many cases, blood testing of the source patient is also indicated. If the source patient does not consent to such testing, Connecticut State law details a specific process for determining the patient's bloodborne pathogen infection

status. This process includes consultation with a review committee, which is appointed by the Chief of Staff. Questions concerning this procedure should be directed to the Chief of Staff's office or Legal Affairs.

7. Using the above criteria as guidelines, appropriate clinical judgment should be used when determining which protective barriers (i.e. personal protective equipment) are needed. Each area must establish its own standards for consistent use of OSHA-required protective barriers; these unit standards should be based on the health care worker's skills and the reasonable possibility of contact with the patient's blood or body fluids, non-intact skin, and mucous membranes.

#### BLOODBORNE PATHOGENS AND THE HEALTH CARE WORKER:

HIV(+) HCWs should be under the care of a personal physician for appropriate immunization, prophylaxis, and treatment as indicated. Health care providers who are sero-positive for a bloodborne pathogen (e.g. HIV, Hepatitis BsAg+) should report, in confidence, to a special standing committee chaired by the Chief of Staff of YNHH to receive assistance in determining their fitness to continue to safely provide patient care. The continuing safety of the immuno-compromised health care worker, who may be exposed to infectious disease(s), is among the factors that should be discussed. All medical information will be reviewed with the individual's responsible personal physician, and all proceedings and information will be handled in a strictly confidential manner. PPD testing of HIV(+) HCWs is the same as for other HCWs (see section on TB below).

Any potentially significant patient exposure to the blood of any HCW should be reported, in confidence, to Occupational Health Services, Department of Quality Improvement Support Services (Hospital Epidemiology), or the Chief of Staff for specific advice.

#### PRE-APPOINTMENT EVALUATION AND IMMUNIZATION STATUS:

Staff with direct patient contact should know their initial immunization or immune status with regard to:

- A. Measles, Rubella
- B. Hepatitis B
- C. Tuberculosis (PPD [Mantoux] skin test)
- D. Varicella (Chickenpox) [either by history, antibody titer, or vaccination]

Documentation of the above will be part of the MEDICAL STAFF OFFICE FILE. Employees of Yale-New Haven Hospital will have immunization status, past medical history, and PPD testing as part of their Occupational Health charts.

Varicella-zoster: HCWs without a known history of chickenpox/shingles, without a known positive serology for varicella-zoster antibody, or HCWs previously vaccinated for varicella should exclude themselves from direct care of patients with chickenpox or zoster infections until the patient's lesions have crusted over. Varivax<sup>R</sup>, a live attenuated vaccine for varicella zoster, is recommended for varicella-negative health care providers and is available free of charge at the YNHH Occupational Health Service.

If a non-immune or vaccinated healthcare worker has a significant exposure to varicella or zoster, he/she should contact Occupational Health Services or Hospital Epidemiology at once and follow the standard protocol(s) as instructed.

Influenza: All healthcare workers are strongly encouraged to receive annual immunization against influenza. Non-immunized healthcare workers with significant exposure to influenza should contact Occupational Health Services, their primary physician, or an ID specialist regarding recommendations for anti-viral prophylaxis.

Any healthcare worker who develops influenza should take a medical leave of absence from direct patient care until symptoms have completely resolved.

Measles/Rubella: All healthcare workers must prove immunity to measles and rubella or receive appropriate immunization. If a HCW who is non-immune or has an unknown immunization status is exposed to a patient with

measles or rubella, he/she should report that exposure to Occupational Health Services or Hospital Epidemiology immediately.

Hepatitis: All healthcare workers involved in direct patient care or with exposures to patient specimens must receive Hepatitis B vaccination, and/or have documentation of Hepatitis B surface antibody positivity, or have signed a vaccination declination form. Post-immunization testing is now recommended. The primary physician or YNHH Occupational Health Services may prescribe additional boosters for those who remain sero-negative following evaluation.

#### GUIDELINES AND STANDARDS FOR TUBERCULOSIS CONTROL:

All patients with suspected or confirmed active pulmonary TB should be placed on Airborne Precautions in negative pressure isolation rooms according to the policies outlined in the Infection Control Manual. HCWs must use an NIOSH-approved respirator until the patient is documented to be non-infectious and Airborne Precautions have been discontinued. Fit testing for use of such respirators is required. You may arrange for fit testing by calling 688-2462. Hospital Epidemiology must be notified of all confirmed TB cases (excluding those from Winchester Chest Clinic). All patients with documented pulmonary TB must be reported to State and Local Health Departments. Patients who fail to continue or complete therapy or are lost to follow-up must also be reported. Connecticut State Law requires notification of the local public health department prior to discharge so appropriate follow-up and treatment can be coordinated. The patient cannot be discharged from the hospital until this requirement is fulfilled (i.e. the local health department must have agreed to the discharge plan).

All HCWs should have PPD testing at least annually as recommended in the 1994 CDC Guidelines for the Prevention and Control of Tuberculosis in Healthcare Facilities. PPD results must be recorded as part of YNHH and Medical Staff required documentation. Healthcare workers who work in certain areas of the hospital may have an increased risk of contact with potentially infectious respiratory droplets and may require PPD testing more frequently as determined by YNHH Occupational Health Services and the Infection Control Committee (depending on the prevalence of TB patients encountered and overall staff PPD conversion rates).

PPD (Mantoux) testing may be done at any site convenient to the individual physician, but test results must be recorded and reported to the Medical Staff Office. Individuals without current PPD tests are not eligible for reappointment.

Healthcare workers with previously documented positive PPDs are not required to complete annual PPD testing. Such persons should be aware of the signs and symptoms of active TB and report such symptoms immediately to YNHH Occupational Health Services should they occur.

All HCWs with newly (or previously unknown) positive PPDs should be evaluated for active pulmonary TB with a chest x-ray and sputum examinations where appropriate. Any PPD skin test positive HCW with pulmonary symptoms (e.g. persistent cough, hemoptysis) must refrain from direct patient care until evaluation for pulmonary TB is complete. Results of this evaluation and/or decision for chemoprophylaxis or treatment must be reported to the Medical Staff Office.

Any HCW with active tuberculosis may NOT resume direct patient care until proven non-infectious by sputum examination and must demonstrate compliance with antituberculous therapy for the entire prescribed duration. HCWs with multi-drug resistant TB infections may require more extensive clinical assessment before returning to work.

#### OTHER INFECTION CONTROL POLICIES:

All other YNHH isolation policies and procedures, injury prevention, decontamination, and hazardous waste handling procedures are defined in the YNHH Infection Control Manual available on the clinical workstations (YNHH intranet) or at <http://info.med.yale.edu/ynhh/infection>.

Long natural nails and artificial nails have been linked to the transmission of organisms and infections to patients in healthcare settings. A Natural and Artificial Nail Policy is in effect at YNHH as of October 1, 2004. The policy applies to all persons in the healthcare setting who have any contact with patients, patient care equipment, supplies and medications, and those persons involved in the preparation of medication or food. The policy specifies that natural nails are to ¼ inch or less in length, clean and well manicured, and nail polish, if worn, must be of a single color and free of cracks and chips. Artificial nails, nail tips, nail jewelry/foreign bodies, rhinestones and nail sparkles are not permitted.

All HCWs with a potentially transmissible infectious disease (infectious diarrhea, acute respiratory illness, skin infections, etc.) are expected to exercise appropriate clinical judgment in excluding themselves from direct patient care for the duration of the potential transmission period. YNHH Occupational Health Services, the Department of Hospital Epidemiology, or the Student or Occupational Health Services of Yale University should be consulted for individual advice. The Department of Quality Improvement Support Services (Hospital Epidemiology), acting for the YNHH Infection Control Committee, has the ultimate responsibility for recommendations in such cases.

**REPORTABLE DISEASES:** The Department of Quality Improvement Support Services (Hospital Epidemiology) will assist physicians in the appropriate reporting of communicable diseases in patients at YNHH to the Local and State Health Departments. Please call 688-4634 for assistance. During non-business hours please leave a message with your name, phone number, the patient's name, unit number, ward or clinic and diagnosis.

### Hand Hygiene

The single most important thing you can do to protect yourself and your patients.

- ✕ Before and after each patient contact
- ✕ After removal of gloves

#### Alcohol based hand rub

- No sink, soap or paper towels needed
- Takes less time
- Better for your skin
  - Water is the major ingredient
  - Contains emollients

For visibly soiled hands or after exposure to blood or body fluids, use soap and water for 15 seconds to cleanse your hands.

*Set a good example for your colleagues and other healthcare workers!*



## Occupational Health and Facilities Safety Training

*All Health & Safety policies are located in the Hospital's Safety Manual*

YNHH On-Line Information

➤ SAFETY MANUAL

Human Resources (HR) Intranet: <http://hrweb.mis.ynhh.com>, click on the OHS button in the left-hand frame, click on "Safety" in the right-hand frame to go to the Safety Manual Table of Contents.

Clinical WorkStation: From the Clinical WorkStation homepage, click on the "S" in the Resources A-Z listing in the left-hand frame, scroll the listing in the right-hand frame to find "Safety Manual" and click on it to go to the Safety Manual Table of Contents.

**\*\* You must be using a Hospital computer to log onto the HR Intranet site. \*\***

Clinical WorkStation homepage: <http://info.med.yale.edu/medmenu/ynhh/ClinicalWorkStation>

### **EMERGENCY PREPAREDNESS**

#### A. TYPES OF DISASTERS

An Internal Disaster is an incident within the Hospital which compromises its structural integrity, results in injuries to staff and/or patients, or otherwise threatens the Hospital's ability to care for patients. YNHH internal disaster protocols include detailed instructions for the following:

- telephone interruption
- steam interruption
- water interruption
- electricity interruption
- major compressed gas interruption or leak
- fire, smoke or explosion
- major chemical spills
- radiation accidents
- biological accidents
- bomb threat

An External Disaster is an event within the community or region resulting in multiple casualties like fire, explosion, hurricane, transportation accident, or civil disorder.

#### B. LEVELS OF RESPONSE

There are three levels of response to a disaster. They include:

1. Disaster Alert is the normal operating mode for the Emergency Department. ED staff are aware of the number and status of patients in the ED and the staffing of the ED. A Disaster Alert may also be used to find individuals critical to running a disaster.
2. Level I Alert is activated when critically injured patients have arrived or are expected. These patients usually come from the same incident and require extensive medical or surgical care. There is no specific number of incoming patients associated with the Level I Alert - it is dependent on the acuity of the incoming patients and the current activity in the Emergency Department.
3. Level II Alert is designed to modify the Hospital's operations to accommodate an unexpected, acutely ill or injured patient volume that would otherwise overwhelm institutional resources. A Level II Alert is activated when a confirmed multiple casualty incident has occurred and the Hospital expects to receive severely injured patients. Again, there is no specific number of incoming patients associated with a Level II Alert. A Level II Alert is activated when the incoming patient load would or could compromise hospital resources, not just the Emergency Department. When a Level II Alert is activated a Plan D will be put into effect and the following announcement will be made over the paging system: "Attention all Hospital personnel, Plan D is now in effect". Three chimes precede this announcement.

**BE PREPARED TO ACT QUICKLY, CORRECTLY AND CALMLY:**

- Be familiar with the basic elements of the Hospital's Emergency Preparedness Plan found in the Safety Manual. This is a detailed emergency response plan that describes how to report emergencies, assigns responsibilities for coordinating and carrying out evacuations, reviews the level of response to a disaster, examines how we will deal with specific emergencies and reviews the Weather Contingency Plan.
- Know how to recognize and turn on emergency alarms.
- Know what to do in an emergency, including assisting patients, evacuation routes, where fire extinguishers, fire hoses and fire pull stations are located, how to use a fire extinguisher, the Hospital's emergency phone number (119), who to call, etc.

**FIRE SAFETY**

**Q. What Do You Do In the Event of a Fire in the Hospital?**

**A. Follow the R.A.C.E. Protocol:**

**R = Rescue anyone in immediate danger**

**A = Sound the Alarm - activate a pull station, phone "119" (the Hospital's Emergency Page Phone Number) to report**

**C = Close all doors, chutes, windows, etc. to confine the smoke/fire**

**E = Extinguish the fire by using a handheld fire extinguisher**

The overhead paging system will signal with a set of three chimes and announce "Order Number One, (the location - building and floor)" three times. NOTE: Normal overhead paging is suspended during the time of a fire emergency except for Code 5 or Code 7 emergencies (adult or pediatric respiratory or cardiac arrests).

Never open a door if it is hot to the touch. Keep fire doors closed and automatically closing fire doors, corridors and stairwells free of obstructions.

Patient evacuation is only performed in the event of a large, uncontrollable fire or other widespread disaster where patient care and the infrastructure of the building are compromised. Horizontal evacuation is performed - exit through a set of bi-swing, automatically closing fire doors to the safe area beyond the doors. In the event that further evacuation is necessary, evacuate to a lower floor by using the stairs (never a higher floor). House Staff, Nursing Staff and the New Haven Fire Department control patient evacuation with assistance from the Hospital's Emergency Response Team (ERT). Elevators cannot be used, except at the discretion of the New Haven Fire Department who take control of the fire situation upon arrival.

Every area and room of the Hospital contain smoke detectors and sprinklers. It is extremely unlikely that patient evacuation will need to be performed in the event of a fire.

There is no smoking in the Hospital. If you smoke, you need to do so in the smoking enclosure that is outside the main entrance to the Hospital. There is no smoking outside any of the entrance doors to the Hospital. All smoking materials are to be disposed of in the appropriate receptacle.

**Q. How Do You Use a Handheld Fire Extinguisher?**

**A. Follow P.A.S.S.:**

**P = Pull** the pin at the top of the extinguisher

**A = Aim** at the base of the fire

**S = Squeeze** the top handle to the bottom handle

**S = Sweep** the horn, hose or nozzle from side-to-side as you extinguish the flames

## USE THE RIGHT FIRE EXTINGUISHER FOR THE JOB

TYPE OF FIRE	DESCRIPTION	TYPE OF EXTINGUISHER	DESCRIPTION
<b>A</b>	Normal combustibles such as paper, wood, upholstery, cloth	A *	pressurized water  silver cylinder, gauge at top, hose
<b>B</b>	Flammable liquids such as grease, paints, and oil	BC *	carbon dioxide  red cylinder, horn or nozzle
<b>C</b>	electrical	BC	as above
<b>A, B, C</b>	as above	ABC	dry chemical  red cylinder, gauge at top, hose

\* Only pressurized water and carbon dioxide extinguishers are used on patient care units.

Only attempt to extinguish a fire that is no larger than a wastebasket. Always have one other person with you, use the entire contents of the fire extinguisher, and have an exit at your side or back. Even if you successfully extinguish the fire, all phases of the R.A.C.E. protocol must be followed to ensure that proper evaluation of the situation has taken place.

### ***MEDICAL WASTE***

The following items are **medical waste** and must be disposed of in leak-proof, biohazard containers or bags:

- **sharps**
- **items visibly dripping with blood or body fluids contaminated with blood**

Please refer to the Medical Waste chart found on the following page.



## MEDICAL WASTE CLASSIFICATION AND SEPARATION REFERENCE CHART

*The following items are **MEDICAL WASTE**:*

1. **SHARPS:** to be deposited into the designated needle disposal containers.  
**BLADES, GLASS SLIDES, GLASS TUBES**  
**NEEDLES- IV, HYPODERMIC, SPINAL, SUTURE**  
**LANCETS, PROBES, SAFETY PINS, SHEARS, SCRAPPERS, SCISSORS**  
  
 SYRINGES WITH OR WITHOUT NEEDLE, VACUTAINERS  
 GLASS MEDICATION VIALS
2. **VISIBLY DRIPPING WASTE BLOOD:** contain fluids where possible and deposit any items saturated with visibly dripping blood in regulated waste container.  
**INFECTIOUS WASTE CEREBROSPINAL AND PLEURAL FLUIDS:**  
 Void container of fluids where possible and deposit containers and/or sealed units in regulated waste containers.  
     **OR SPONGES, SUCTION TUBING & CANISTER LINERS,**  
     **OTHER SUCTION TUBING CONTAINING BLOOD, PLEUREVACS, HEMOVACS**  
     **BLOOD TRANSFUSION & PHERESIS FILTERS, TUBING & BAGS**  
     **HEMODIALYSIS & CVVH FILTERS & TUBING**  
     **1 LITER GLASS VACUUM BOTTLES (USED TO REMOVE ASCITES)**  
     **SPECIMEN CONTAINERS (MOSTLY FROM LABS)**
3. **ALL WASTE FROM BIOSAFETY LEVEL 4 AGENTS:** All waste from a person with biosafety level 4 disease, such as viral hemorrhagic fever.
4. **CULTURES AND STOCKS** of agents infectious to humans and associated biologicals including cultures from medical, clinical and hospital laboratories; culture dishes and devices used to transfer, inoculate, or mix cultures
5. **RESEARCH ANIMAL WASTE** which includes contaminated animal carcasses, waste blood, deposit animal bedding or animals that were intentionally exposed to infectious agents during research.
6. **PATHOLOGICAL WASTE** means any human tissue, organ or body part removed during surgery, autopsy or other medical procedure (waste to be segregated in corrugated boxes).
7. **CHEMOTHERAPY WASTE** IV bags containing less than 3% of antineoplastic agents can be deposited directly into medical waste containers. Any IV bag containing unused antineoplastic agents over 3% must be returned to Pharmacy for placement in special corrugated containers and disposed of as hazardous waste by incineration.

*The following items are **NOT MEDICAL WASTE** unless visibly dripping waste blood.*

*Dispose in ordinary waste containers:*

EMPTY SPECIMEN CONTAINERS  
**DRESSINGS, GAUZE, 3 X 4 PADS, ETC.**  
**CHUX, SWABS, SPLINTS**  
**MASKS, GLOVES, GOWNS**  
**TAPE, PADS, COTTON**  
**SUTURES- without attached needle**  
**RESPIRATORY SUCTION TUBING**  
**VENTILATOR TUBING**  
**FOLEY BAGS, FOLEY CATHETERS**  
**RED RUBBER CATHETERS**  
**BED PANS, EMESIS BASINS**  
**DIAPERS**  
**URINALS, TOILET HATS**  
**PERI (OB) PADS**  
     **SALEM SUMP (NG) TUBES**  
**IRRIGATION SETS, BULB SYRINGES**  
**PAPER TOWELS, TISSUES, CUPS**  
**PACKAGING MATERIALS**  
**CASTS, CAST PADDING**  
**PLASTIC MEDICATION VIALS**  
**PERITONEAL DIALYSIS BAGS & TUBING**

Remove all needles from tubing and if the tubing is NOT visibly dripping tubing in ordinary waste container

Empty fluid from all used/unused IV containers when possible, then place in ordinary waste container.

Place all glass IV fluid containers into glass-only containers  
 If you need a glass-only container, contact Environmental Services.

✓ *Page the Nursing Education specialist or Clinical Advisor, or phone Epidemiology at 8-4634 with questions concerning medical waste classification or separation.* ✓  
 ✓ *Phone Environmental Services at 8-6688 with questions about medical waste containers or pick-up schedule.* ✓

## HAZARD COMMUNICATION

To keep you informed about the hazards you may face at work, OSHA created the Hazard Communication Standard. This standard gives you the right to know about chemical hazards in your workplace.

### **You should:**

1. know what hazards you face on the job
2. know how to protect yourself, co-workers, patients, and visitors from these hazards
3. read labels and Material Safety Data Sheets (MSDS) and follow instructions and warnings
4. follow safety procedures on the job

### **Hazardous chemicals can create two types of hazards:**

1. **Physical and chemical hazards** usually result from improper use or storage of hazardous chemicals. These are chemicals that are:
  - flammable (catch fire easily)
  - explosive (causes a sudden release of pressure, gas and heat) and
  - reactive (burns, explodes, or releases toxic vapor if exposed to other chemicals, heat, air, or water).
2. **Health hazards**

### **At YNHH, Material Safety Data Sheets can be accessed on-line:**

#### **➡ MSDSdirect!**

**HR Intranet:** <http://hrweb.mis.ynhh.com>, click on the OHS button in the left-hand frame, click on "MSDS" in the right-hand frame to go to *MSDSdirect!*

**Clinical WorkStation:** From the Clinical WorkStation homepage, click on the "M" in the Resources A-Z listing in the left-hand frame, scroll the listing in the right-hand frame to find "Material Safety Data Sheets (MSDS) at YNHH" and click on go to *MSDSdirect!*

**\*\* You must be using a Hospital computer to log onto the HR Intranet site. \*\***

**Clinical WorkStation homepage:** <http://info.med.yale.edu/medmenu/ynhh/ClinicalWorkStation>

### **HAZARDOUS SPILL REPORTING**

#### **A. MERCURY SPILLS:**

1. Phone Environmental Services (8-6688) for proper clean up and disposal.
2. DO NOT ATTEMPT TO PICK UP MERCURY WITH YOUR HANDS.
3. DO NOT DISPOSE OF BROKEN THERMOMETERS OR OTHER GLASS ITEMS CONTAINING MERCURY INTO SHARPS CONTAINERS.

#### **B. CHEMOTHERAPY SPILLS:**

1. A chemotherapy spill requires immediate attention.
2. All patient care areas and the pharmacy in which antineoplastic agents are mixed or administered have a "Chemotherapy spill kit."
3. Follow proper procedures as outlined in the spill kit, Material Safety Data Sheet, Pharmacy and the department.
4. Report all contact incidents to OHS and complete a "Supervisor's Report of Employee Accident/Injury" (F-1797) or Incident Report.

#### **C. MAJOR CHEMICAL SPILLS:**

1. **Phone "119" to report the spill** - The Page Operator will sound the "Order Number One" and begin notification.
2. Remove patients and/or employees from immediate danger.
3. Evacuate the area, as needed, under the supervision of the most senior staff.

4. Follow department-specific instructions.

**D. RADIATION ACCIDENTS:**

1. **Phone "119" to report the spill / discovery of radioactive material** - The Page Operator will sound the "Order Number One" and begin notification.
2. Injured and possibly contaminated persons should be transported to the Emergency Department under the direction of the area supervisor.
3. Evacuate the area under the direction of the most senior staff upon consultation with Hospital, University, and/or City personnel.
4. Follow department-specific instructions.

**E. BIOLOGICAL ACCIDENT:**

1. **Phone Epidemiology and Infection Control (8-4634) for initial detection** - Epidemiology and Infection Control will notify Administration and others.
2. Assist with patient care as directed by area supervisor, Hospital Epidemiologist/designee, etc.
3. Use proper precautions as directed by Hospital Epidemiology and appropriate administrators.
4. Follow department-specific instructions.

**OXYGEN SAFETY**

**A. SAFE OXYGEN HANDLING AND STORAGE**

Oxygen gas is contained in traditional green, 30 lb. steel tanks or cylinders. As oxygen is a hazardous chemical, each tank MUST be labeled. All gases for medical use are contained in color-coded tanks; however ALWAYS READ THE LABEL and confirm that the tank you are going to use does contain oxygen.

Oxygen tanks that are considered "in use" (regulator attached) should be stored in a rack that is secured to a wall or carrier in an upright position with the regulator off. If an oxygen tank is empty or not in use it must be stored in the "Oxygen Tank Storage Cabinet" that is found in all patient care areas. Oxygen tanks should never be stored lying down. If the tank is stored with the regulator and/or flow meter attached, make sure both the regulator and flow meter are turned OFF. AN OXYGEN TANK MUST BE STORED WITH THE VALVE CLOSED.

**B. OXYGEN AND FIRE DANGER**

An intentional oxygen shut-off should only happen in the event of a major fire emergency or leak in the system. While oxygen itself is not flammable or explosive, it will feed a fire and cause it to burn hotter and faster. If you discover a fire in a patient room, shut off the oxygen at the wall (turn off the flow meter), if possible. If you are unable to do this, rescue the patient from the room (activate the "R.A.C.E." protocol), and call for the patient's nurse and a Respiratory Therapist.

**ONLY A RESPIRATORY THERAPIST AND/OR PLANT ENGINEERING PERSONNEL SHOULD SHUT OFF THE FLOOR OR ZONE OXYGEN AFTER ASSESSING THE CONSEQUENCES.** Patients requiring oxygen will need to be connected to portable oxygen. Emergency Oxygen Shut-off valve(s) are located on all floors, usually close to the entrance to the floor/unit; it is unit-specific. NEVER BLOCK ACCESS TO THE EMERGENCY OXYGEN SHUT-OFF VALVE. Some emergency oxygen shut-off valves turn the flow of oxygen off to the entire floor; others will only cause the oxygen to stop in certain areas or zones of a patient care area. Each emergency oxygen shut-off valve is marked with the area it services. **In the normal open position of the emergency oxygen shut-off valve the handle is parallel to the pipe.**

In the event of a Code 5 or Code 7 on a ventilated patient remember to **TURN THE VENTILATOR OFF BEFORE DEFIBRILLATING OR USING OTHER ELECTRICAL EQUIPMENT.** The ventilator will continue to supply concentrated oxygen into the area. Use of electrical equipment in this instance may cause a fire and potential bodily harm to the patient and others.

## **RADIATION SAFETY**

### **A. KEY SAFETY ELEMENTS**

Most healthcare workers receive no more radiation exposure than what occurs naturally in the environment. Employees who work in restricted areas are monitored to ensure safety (film badges). **“Time”**, **“distance”**, and **“shielding”** are key safety elements when working around radiation sources:

- **Minimize the time** spent in the patient’s room or near the patient who is being treated with radionuclide therapy.
- Maintain **at least 6 feet away** from the patient being treated with a radioactive implant when not providing direct patient care or when x-rays are being taken.
- **Wear appropriate shielding** such as a lead apron and thyroid collar when assisting with x-ray procedures.

### **B. MAIN SOURCES OF RADIATION IN A HEALTH CARE FACILITY**

**Sources of radiation in a health care facility include x-ray machines, therapeutic radiology equipment and radionuclides.** X-rays only generate radiation when making the image using a focused beam. They do not make patients or objects radioactive. In much larger doses, radiation is used to destroy tumors or other diseases. Radionuclides are radioactive materials may be implanted, swallowed, or injected. Unlike x-rays, the patient receiving radionuclide treatment does become radioactive. In most cases, diagnostic radionuclides present no significant danger to the patient and the radioactivity wears off quickly- usually in a day or so. In much larger doses, radionuclides are used to destroy tumors or other disease. A sealed implant is a small capsule containing radioactive material that is inserted into a patient. The patient is radioactive as long as the implant is in place.

### **C. PRECAUTIONS**

**Take special precautions when working around radiation, radioactive sources or near patients receiving radionuclide therapy to decrease exposure to radiation:**

- Do not enter a patient’s room labeled with the radiation caution sign unless you need to provide direct patient care and have been trained to do so.
- Wear disposal gloves when handling waste.
- Wash hands to remove traces of radioactivity after removing gloves and do not rub your eyes or face when working around radiation.
- Do not remove anything from the patient’s room as it may be contaminated with radioactivity.
- Do not eat, drink, smoke, or apply cosmetics around radioactive substances as radiation may enter the body through the eyes, nose or mouth.
- Dispose of contaminated material (gloves, uniforms, etc.) in appropriately marked containers.
- If you suspect a radiation leak, do not attempt to clean it up yourself. Always follow proper department procedures when dealing with a radiation leak. Mark off the area and notify the Radiation Safety Officer (8-2950). Further information may be found in the Hazardous Spill Reporting section of the Emergency Preparedness Plan found in the Safety Manual.
- If you work around radiation regularly, your radiation exposure will be monitored to ensure your safety.
- Unborn babies are especially sensitive to radiation. Notify your immediate supervisor if you are pregnant and have been assigned to care for a patient undergoing radionuclide therapy.
- Contact the Radiation Safety Officer if you have questions concerning radiation, radioactivity, and radioactive materials.
- Follow department-specific procedures and protocols when working around radiation and radioactivity.

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## **WORKPLACE VIOLENCE**

Workplace violence is a particular concern in health care facilities because a small percentage of patients or visitors may turn violent due to mental illness, drug or alcohol abuse, or emotional problems. Health care staff or their family or friends may also create violence resulting from stress, substance abuse, emotional problems, or troubled relationships. The availability of weapons heightens the danger. **To prevent workplace violence, all personnel must be able to recognize and deal with actions, attitudes, and situations with the potential for violence.**

- Be aware of the risk of violent behavior in the workplace.
- Know how to identify signs of potential violence.
- Be alert to danger signs that represent a change in attitude or behavior- know your patients' and co-workers' normal behaviors and reactions.
- Respond quickly and appropriately to possible danger signs.
- Take precautions to reduce the chance that you or a co-worker will become a victim of violence.

### **A. HOW TO PROTECT YOURSELF**

#### **Know what to do if violence seems likely and how to protect yourself:**

- learn progressive behavior control methods and safe methods of restraint application or escape; get help if you feel unsafe while dealing with anyone; excuse yourself from the scene
- know where alarms are located and how to use them
- report all incidents to your supervisor and YNHH Police (8-2500) immediately
- report poor lighting
- report unauthorized personnel
- lock up personal belongings
- don't carry (and show) a lot of cash
- don't wear a lot of jewelry
- prominently wear your ID card
- request a YNHH Police escort to your car
- use the "buddy system"; never walk alone
- be alert to overemotional patients, visitors and staff who make threats or show extreme anger
- be aware of any office or department specific security procedures

**Phone the YNHH Police Department at 8-2500 for further information on violence in the workplace.**