October 2009

VA San Diego Healthcare System

This document contains information on topic areas that VA, VHA, Joint Commission and VASDHS have determined to be "mandatory" for all employees during fiscal year 2010.

Topics on Safety and Environment of Care

- Whom do we Serve?
- Bloodborne Pathogens – Infection Control
- Fire Safety
- SBAR for Team Communication
- Disclosing Adverse Events
- Life Safety Training
- Emergency Preparedness
- Back and Computer Safety
- No Smoking Policy
- Radiation Safety
- Hazardous Materials and MSDS
- Medical Waste Management
- Utilities
- VA Police
- Equipment and Electrical Safety
- Compliance Awareness

After reading these materials print and complete the certificate. Submit the certificate to your Supervisor or Service Training Coordinator who will ensure that your training record is correctly documented. Failure to do so may result in the Director being notified of your non-compliance.

For more information visit the Employee Training site on SharePoint:
http://vaww.sandiego.portal.va.gov/sites/education/training

Whom Do We Serve?

Eligibility for most Veterans' health care benefits is based solely on active military service in the Army, Navy, Air Force, Marines, or Coast Guard (or Merchant Marines during WW II), as long as the Veteran was honorably discharged. There are also other categories of eligibility:

- reservists and National Guard members who were called to active duty by a Federal Executive Order may qualify for VA health care benefits; and
- returning service members, including Reservists and National Guard members, who served on active duty in a theater of combat operations have special eligibility for hospital care, medical services, and nursing home care for two to five years following discharge from active duty.

Remember that health care eligibility is not just for those who served in combat. Other groups may be eligible for some health benefits. Also, Veteran's health care facilities are not just for men. VA offers full–service health care to women Veterans as well.

Generally, a service–connected disability is one that was incurred or aggravated while on active duty in the military. Veterans may be eligible for additional benefits related to their service connected condition, but Veteran's health care is not just for service–connected injuries or medical conditions.

Bloodborne Pathogens – Infection Control

Grace Kirkland, RN (858) 642-3379 or Deborah Haist, RN (858) 642-7877

Infection Control

The goal of the Infection Control (IC) Program is to protect patients, employees, volunteers and visitors from healthcare associated infections. The primary reference for IC Policies and Standards is the IC Manual. Manuals are available in most clinical areas. On-line Manuals can be found on the VASDHS Intranet.

VASDHS participates in national initiatives to decrease healthcare associated infections complete information is available on line.

- **http://www.ihi.org/IHI/Programs/Campaign/**.
- MRSA (methicillin-resistant Staphylococcus aureus) Initiative

Hand Hygiene

Hand Hygiene is the single most important infection control measure! All health care workers in direct patient contact areas must:

- Use an alcohol-based hand sanitizer OR antibacterial soap and water to routinely disinfect hands before and after having direct patient contact.
- If hands are NOT visibly dirty, use an alcohol-based hand sanitizer to routinely disinfect hands.

Two occasions require hand washing with soap, running water and friction for ~15 seconds:

1. When visibly soiled/contaminated
2. When caring for a patient with Clostridium difficile associated disease (CDAD). C. difficile can be spread by spores which cannot be eradicated with alcohol hand sanitizers.

When to Perform Hand Hygiene

- Before patient contact
- After patient contact
- Before performing clean and aseptic procedures
- After removal of gloves
- Whenever hands are contaminated
- Before donning sterile gloves
- Before eating

All health care workers who provide direct, hands-on care to patients may NOT wear artificial fingernails, nail wraps, or extenders; this includes non-supervisory and supervisory personnel who regularly or occasionally provide direct, hands-on care to patients.

Bloodborne Pathogens Defined

Pathogens are germs that can cause disease. Bloodborne pathogens are viruses such as Hepatitis B or C and HIV that can potentially be spread to others through exchange of body fluids. This can include:

Body Fluids:

- Blood
- Semen
- Vaginal secretions
- Urine
- Non-fixed (hardened and preserved) tissues and other body fluids

Potential Routes of Exposure:

- Sticking yourself with a dirty needle
- Punctures or cuts from dirty sharps or blades
- Direct contact of infected blood or body fluids with broken skin
- Touching dirty surfaces (like furniture, faucets and equipment)
- Splashing infected fluids in your eyes, nose, and mouth.

Patient care activities:

- Starting IV lines
- Giving injections (shots)
- Collecting blood specimens
- Doing anything that cuts through the skin
- Suturing (sewing-up)
- Suctioning

Non-patient care activities:

- Handling dirty linens
- Emptying sharps containers
- Handling bio-hazardous waste
- Processing/handling laboratory specimens
- Environmental cleaning
- Repairing patient care equipment

Symptoms of New Infection - Viral bloodborne pathogen infections usually present with symptoms similar to the flu:

- Fever
- Headache
- Body ache
- Fatigue
- GI Upset

New onset of symptoms after an exposure could be an indication of newly acquired infection Standard Precautions (Previously Known as Universal Precautions). All blood and body fluids have the potential to transmit viruses. Therefore, all patients must be treated as if they are infectious. Handle all patients using Standard Precautions.

Despite taking precautions, accidental sharps injuries may occur. Report STAT by calling the Needlestick hot-line 347-1789 (7/24/365). First dose kits for HIV prophylaxis are available in the Operating Room for staff injured during off tour cases. The injured staff member may take the first dose, finish the case and then initiate further follow up notification without delaying the potential advantage of HIV prophylaxis.

Personal Protective Equipment (PPE)

- All PPE (gowns, gloves, masks, shoe covers) must be removed immediately before leaving the patient treatment area…that means
  - Operating Room
  - Cardiac Cath Lab, GI, EP labs
  - Isolation rooms
  - Laboratory
- If it's warm, wet and not yours wear gloves! (and other appropriate PPE)
- One-way valve masks should always be used for CPR

OSHA prohibits healthcare workers (HCW) from eating and drinking in patient care areas or any area where blood or body fluids are handled. This includes exam, treatment, procedure, and patient rooms, labs, EMS areas and nursing stations. Follow the label on the door to identify room function!

Biohazardous Waste Management

VISN 22 follows the California State Medical Waste Management Program. The following items are treated as biohazardous waste:

- Suction canisters
- Laboratory and OR waste
- Sharps
- Items containing visible liquid blood
- Un-drained urine drainage bags
- Specimens including non-fixed tissues

All biohazardous containers must have:

- A red bag liner
- An attached lid
- Be appropriately labeled
- Be foot operated if outside of a designated biohazard waste storage area

Blood/Body Fluid Spill Management

- Cover small spills with a paper towel
- Use Isolyser 13,000 to solidify spills
- Spray with an approved germicide
- Use gloved hands to clean up the spill
- Small spills may be sprayed with a germicide and wiped off with paper towels

Tuberculosis Control Program

Patients with TB often present with common symptoms including:

- Fever
- Cough (lasting more than 2-3 weeks)
- Night sweats
- Unexplained weight loss
- Loss of appetite
- Coughing up blood

Transmission Based Precautions

In addition to Standard Precautions, further measures are taken when patients are suspected of having organisms that could be spread in ways other than in blood or body fluids.

Airborne Infection Isolation (Previously Respiratory)

- Designed to prevent infection by germs that are spread by inhaling them after they are breathed out by an infected patient
- Diseases requiring Airborne Isolation are TB, chickenpox, diphtheria
- Requirements: Private room with negative air pressure, N95 respirators

Contact Precautions

- Designed to prevent transmission of organisms that are spread by contact with infected patients or contaminated items
- Examples of diseases requiring Contact Precautions are , multiple resistant organisms , e.g., MRSA (colonize or infected), VRE, non-contained large draining wounds, and lice or scabies
- Requirements: Private room when indicated, gloves when entering the room and gowns and masks for direct patient care

Special Contact Precautions

- Clostridium difficile infection (CDI)
- Soap & water hand wash indicated (alcohol hand sanitizer ineffective for C.dif spores.
- Use bleach-containing disinfectant for equipment & environmental cleaning

Droplet

- Used to prevent the spread of germs contained in large airborne droplets.
- Examples of diseases requiring droplet precautions are pneumonia caused by resistant organisms, influenza, meningitis, or measles.
- Specifications: Private room, gowns and gloves, surgical-grade masks and other PPE as indicated.

Combined Categories

- Multiple isolation categories may be used for patients with infections that may be spread by both air and contact
- Examples of diseases: smallpox, viral hemorrhagic fevers, patients with TB infection plus resistant wound infections
- Specifications: Private room with negative air pressure, gowns, surgical grade mask, gloves

Employee/Occupational Health, First Floor, West Room 1211

- Know which childhood diseases you have had & get immunized!
- Report all exposures immediately to your supervisor and go to employee health
- Document all exposures through the ASIST
- Participate in TB screening program
- Complete all vaccinations as appropriate

HIV Program
Coordinator, Gary Pfeffer, NP (858) 552-8585 ext 2792

HIV Testing

- HIV testing requires written, informed consent
- All testing results are confidential
- You cannot be tested for HIV without your consent
- Pre- and post-test counseling is provided by the HIV Program Coordinators

Hepatitis B Vaccination

- May prevent infection if you are contaminated with blood or body fluids
- Is recommended for all employees that could be exposed to blood or body fluids
- Is available through Employee/Occupational Health Services to at risk employees free of charge

Life (Fire) Safety

Safety Officer, (858) 642-3434

Every day Americans experience the horror of fire. Each year more than 4,000 Americans die and approximately 25,000 are injured in fires. The majority of fire-related deaths (75%) are caused by inhalation of the toxic gases produced by fires.

The Nature of Fire

- **Fire is FAST!**
  There is little time. In less than 30 seconds a small flame can turn into a major fire.
- **Fire is HOT!**
  Heat is more threatening than flames. A fire's heat alone can kill. Room temperatures in a fire can be 100 degrees at floor level and rise to 600 degrees at eye level. Inhaling this super hot air will scorch your lungs. This heat can melt clothes to your body.
- **Fire is DARK!**
  Fire isn't bright, it is pitch black. Fire starts bright, but quickly produces black smoke and complete darkness.
- **Fire is DEADLY!**
  Smoke and toxic gases kill more people than flames. Fire uses up the oxygen you need and produces smoke and poisonous gases that kill.

R.A.C.E.

To protect staff and patients, immediate actions are needed by staff in the event of a fire. When you discover a fire, activate the RACE plan.

R is for RESCUE

- There is always a risk in a fire rescue. Evaluate the risk and determine if you can rescue the person in danger without becoming a victim yourself.
- Never enter a room where there is fire to rescue someone without first letting other staff members know.
- Never yell "fire." Always use the term Code Red

Heat and smoke collect at the top of the room. Keep low and get your victim on the floor as soon as possible. If the victim is in the fire, get him or her out of it quickly in order to stop further burns. Remove the person from the room and close the door behind you.

A is for ALARM
The most common factor in hospital fires with multiple deaths is a delay in activating the fire alarm system. If you suspect that there is a fire, do not delay; Pull the fire alarm.

Several events take place when the fire alarm is activated. Fire doors will automatically shut helping to isolate the fire. Fans will shut down in the building ventilation system. This helps prevent smoke from spreading throughout the building. The alarm alerts all employees to implement RACE.

Work as a team. One person may pull the fire alarm while the other person can attempt a rescue. Fire alarm pull boxes are located throughout the building. They are located in visible well traveled areas such as corridors and near nurses' stations. They can also be found in hazardous areas such as kitchens and mechanical rooms. Take note of them as you are working so that in the back of your mind, you will know where they are located.

C is for CONTAIN
Contain the fire by closing doors and windows. During a fire, closing doors and windows is a critical function. This simple action will help to limit the spread of smoke and protect other spaces from the deadly effects. Closing doors gives you time.

E is for EXTINGUISH
Extinguish the fire if:

- Everyone is safe
- The fire alarm has been activated
- The fire is small and contained
- You are trained
- It is safe to do so

Most important; protect yourself. Always make sure you have a way out. Never let the fire get between you and the exit.

Fire Extinguishers

A portable fire extinguisher can save lives and property by putting out a small fire until the Fire Department arrives. Portable extinguishers are not designed to fight large or spreading fires. However, even against small fires, they are useful only under certain conditions:

The location of the extinguisher must be known beforehand.

The proper type of extinguisher must be used for the fire that is to be extinguished.

- Class "A" Fires: Common combustible are burning, such as wood, paper, cloth
- Class "B" Fires: Flammable liquids. These are fires involving gasoline, oil, acetone, alcohol, paint, gases
- Class "C" Fires: Electrical fires
- Class "K" Fires: Kitchen. These are fires involving grease in commercial cooking equipment.
- The operator must know how to use the extinguisher.
- The extinguisher must be in working order, fully charged.

Where are Fire Extinguishers located?
Fire extinguishers are located throughout the building. They are placed in visible, well traveled locations. Generally, you will find them spaced throughout the corridors. Also you will find them in certain hazardous locations such as labs, mechanical rooms and kitchen areas.

As you pass by a fire extinguisher in areas where you work, you should make a mental note of where it is located. This will help you to quickly obtain a fire extinguisher when it is needed. In almost all areas of VASDHS there are dry-chemical ABC extinguisher can be recognized by the symbols on the side. This type of extinguisher is located on all patient wards and throughout the healthcare system and can be used on all types of fires, including fires in industrial areas.

You should know how to use an extinguisher before attempting to do so. Remember that the fire is doubling in size about every minute. Time wasted on trying to figure out how to use the

extinguisher will allow the fire to grow beyond your control. To use the extinguisher, just remember PASS.

P. Pull the pin. The pin keeps the extinguisher from being accidentally discharged. Twisting it as you pull it out will help to break the seal.
A. Aim for the base of the fire. Aim at the front of the base of the fire. The pressure of the agent as it is expelled can cause the fire to flare up. If you aim for the front, it will push the fire away from you.
S. Squeeze the handle. Squeeze it hard and all the way down otherwise the valve will not open all the way.
S. Sweep back and forth across the fire pushing it back until it goes out. Fire

SBAR for Team Communication

Use SBAR steps to communicate to coworkers or supervisors on issues, problems or opportunities for improvement.

Situation – What is happening? Why is this communication important? State your name, unit and the nature of the problem. Be accurate and concise.

Background – Explain circumstances and put the situation into context for the reader/listener. Admission diagnosis and date of admission; pertinent medical history and a brief synopsis of treatment to date.

Assessment – What do you think the problem is? What changes to prior assessments have recently occurred?

Recommendation – What would you do to correct the problem? What actions should be taken? Are additional tests required? Or a change in treatment?

Disclosing Adverse Events

Providers have an obligation to disclose adverse events to patients who have been harmed in the course of their care, including cases where the harm may not be obvious or severe, or where the harm may only be evident in the future. Openly discussing the fact that an adverse event has occurred demonstrates respect for the patient, professionalism, and a commitment to improving care.

- ❑ Adverse events should be communicated in a timely manner
- ❑ Prior to disclosure of adverse events, consult with the Risk Manager, x2882
- ❑ The attending physician is responsible for communicating information about the adverse event
- ❑ Disclosure of an adverse event needs to occur in an appropriate setting and be done face-to-face
- ❑ Provide preliminary factual information to the extent it is known
- ❑ Express concern for the patient's welfare
- ❑ Reassure the patient that steps are being taken to investigate the situation, remedy any injury, and prevent further harm
- ❑ Disclosure must not include an admission of fault, blame or liability
- ❑ CPRS progress note "Disclosure of Adverse Event"

I'm Sorry ≠ I'm Guilty. For more information see MCM 11-61

Life Support Awareness Training

According to recent statistics sudden cardiac arrest is rapidly becoming the leading cause of death in America. Once the heart ceases to function, a healthy human brain may survive without oxygen for up to 4 minutes without suffering any permanent damage. Unfortunately, a typical EMS response may take 6, 8 or even 10 minutes.

Before you start any rescue efforts, you must remember to check the victim for responsiveness. Shout "Are you okay?" to see if there is any response. If the victim is someone you know, call out his name.

If there is no response, and you are on hospital property, immediately dial 3-3-3-3 (Code Blue) and tell the operator the location of the victim. If you are off of hospital property, dial 9-1-1. It is critical to remember that calling for help may be the most important step you can take to save a life.

What NOT to do:

- DO NOT leave the victim alone.
- DO NOT try to make the victim drink water.
- DO NOT throw water on the victim's face.
- DO NOT prompt the victim into a sitting position.
- DO NOT try to revive the victim by slapping his face.

If someone besides you is present, they should call for help immediately (3-3-3-3 or 9-1-1). If you're alone with the victim and have CPR training, call for help prior to starting CPR.
When 3-3-3-3 is called, a Code Blue team of specially trained doctors, nurses, and pharmacists report to the location you provide to perform advanced cardiac life support (ACLS). Remember to stay with the victim to answer any questions the Code Blue team may have.

VASDHS ensures that automatic external defibrillators (AEDs) are placed in easily accessible, high traffic areas. Employees who received life support training will also be trained to use automatic external defibrillators.

Emergency Preparedness

Many lives are disrupted and shattered every year by disasters both natural and manmade. In 2004 there were 67 Federal Disaster Declarations for storms, tornadoes, tidal surges, landslides, wildfires and earthquakes.

Hospitals frequently experience confusion and chaos at the onset of a disaster. This chaos can be minimized if the response has structure and focus.

Evacuation

Evacuation from a patient care environment is a serious matter. When to evacuate patients is a difficult question. A guideline is that patients, staff, and visitors should be evacuated when their present location is more dangerous than the hazards of the evacuation process and the relocation site.

The nature of the disaster and the extent of damage will dictate the exact evacuation procedures.

Horizontal evacuation involves relocation to a safer area on the same floor usually to the other side of the fire doors.
Vertical evacuation means relocation to a lower floor and possibly complete building evacuation.

DO NOT evacuate up because fires spread upwards. The goal is to move towards a ground exit.

Priorities for moving patients

With horizontal or vertical evacuation, there are priorities for moving patients. They are:

- Persons in imminent danger: Move patients from immediate danger, if it can be done quickly and safely without risking the life of the rescuer. Once the patient is out of immediate danger, evacuate further according to the priorities listed.
- Ambulatory: Gather all the ambulatory patients and appoint staff member to lead them to the safest part of the same floor. If possible, and time permits, have capable patients put their shoes on, retrieve personal items such as eyeglasses and dentures.

  If a vertical evacuation is planned, and time permits, have patients carry a blanket for themselves and another patient. Lead the patients towards an exit if instructed to leave the floor. At no time should patients be left unattended.

- Wheelchair: Use wheelchairs to relocate non-ambulatory patients to a safe location. Wheelchairs may be taken back to the area to assist other patients.
- Bedridden patients may be placed on a blanket and dragged out of the immediate danger area. If there is a large amount of smoke in the area or a hazardous material spill, cover the patient's face with a wet towel. Keep close to the floor.
- Patients requiring extensive life support and numbers of personnel: It is a natural impulse during normal operations to run to the patient that requires massive life saving interventions. However, during an emergency evacuation keep in mind the greatest good for the greatest number. Therefore, patients that require multiple staff members and life support measures to evacuate should be taken last. The patients with the best chances of survival should be evacuated first. Evacuation Checklist

Send a runner to check the evacuation route. You don't want to get to the bottom of a stairwell with patients only to discover that the exit is blocked.

The priority for moving patients from the outside evacuation site to a new destination is reversed. The first patients to leave via ambulance, bus, or van for the new destination are:

1. Patients that require massive life support
2. Stretcher and helpless patients
3. Wheelchair patients
4. Ambulatory patients

Back and Computer Safety

Back Safety

About 80% of on-the-job injuries are back injuries. Statistics show that about 5 out of 6 people will suffer a back injury sometime in their life. OSHA considers back injuries as the nation's #1 workplace safety problem. Awareness of back safety is essential to help prevent injury.

The 4 Most Common Types of Back Injury

- Muscle spasms caused by tightened or stretched muscles
- Back strain from muscles becoming inflamed from over-exertion
- Back sprain as tissue is torn away
- Herniated disc sometimes called a ruptured or slipped disc

Three Leading Causes of Back Injury

- The reach and lift injury
- The twist and lift injury
- Cumulative trauma from moving, sitting, and standing incorrectly day after day.

Ways to Prevent Back Injury

- Good general health
- Proper weight (too much abdominal weight places extra stress on back muscles)
- Proper diet and fluid intake
- Good posture (includes standing, sitting and sleeping correctly)
- Proper footwear
- Proper use of equipment
- Proper lifting technique

How to Lift Properly

1. Start the lift by putting your feet close to the object. Get a firm footing.
2. Center your body over your feet
3. Squat down bending your knees. Keep you back straight or slightly arched.
4. Let your legs to do the lifting, not your back.
5. Grasp the load securely with your hands, and pull the load close to you.
6. Smoothly lift straight up.
7. Never twist your body while lifting.
8. If you must turn, turn with your feet, not your body.
9. Never jerk and twist!
10. Keep you head up, as if looking straight ahead, not down.
11. When moving patients be sure to use appropriate lifting assist devices.

Setting the Load Down

1. Position yourself where you want to set the load.
2. Squat down. Let your legs do the work, not your back.
3. Do not twist, keep your head up.
4. Once the load is where you want it, release your grip.
5. Never release your grip on a load until it is secure.

Alternatives to lifting; Using a hand truck or pushcart:

Remember:

- It is easier and safer to push than to pull.
- Stay close to the load, try not to lean over.
- Use both hands to control the hand truck or pushcart.
- Use tie down straps to secure the load.
- Avoid stairs and inclines.

Preventing Computer Related Injuries

Millions of workers spend most of their day sitting at a computer. Our bodies were not designed to sit all day while our hands work rapidly over a keyboard. As a result, each year, approximately 600,000 people experience repetitive strain injury (RSI). RSI is damage to soft tissues from prolonged/repeated activity. RSI can be caused by not only work but leisure activities, such as, playing the piano, mastering video games, and surfing the web. Protect yourself by using good practices at work (and at home).

Your Workstation

Your ability to customize your work area may be limited if the area is used by many people. Make the necessary modification through adjustable equipment.

- To avoid neck strain the top line of the monitor display should be no higher then the level of your eyes.
- If glare occurs on the screen, reposition the monitor or use a glare blocker.
- Don't stare at the monitor for long periods, blink often to prevent dry, irritated eyes.
- The keyboard should be in a low position.
- Your forearms should be parallel to the floor.
- Keep your elbows at your sides.
- Keep your forearms and wrists in a straight line.
- Do not rest your wrists on the wrist pad if this causes your wrist to bend as you type.
- Keep your shoulders relaxed.
- The mouse should be beside and on the same level as the keyboard.
- Put your feet flat on the floor, or on a wide foot rest.
- Sit back in the chair to support your lower back.

Work Habits

- Any prolonged activity can produce injury.
- Alternate activities.
- Notice how you sit and if you need to straighten up.
- Keep your head and neck in line with your spine.
- Avoid leaning your head forward as you work.
- Do not grasp the telephone between your shoulder and ear.
- Use good body mechanics as you work. Avoid reaching or twisting as you lift or move.
- **Move!** Prolonged sitting can cause fatigue and soreness.

People often ignore symptoms. The early warning signs are: soreness, tingling, numbness, stiffness, weakness and fatigue, Notify your supervisor if a problem occurs. You may need to see your healthcare provider and work with the ergonomics officer to promote comfort and safety in your workplace design.

No Smoking Policy

Network 22 complies with the Surgeon General's campaign to achieve a smoke free environment. This applies to personnel, volunteers, patients and visitors.

- Smoking is confined to special designated outside areas
- Signs at each entrance to the facility will state "Smoking Prohibited Except in Designated Areas."
- Staff should remind anyone smoking in non-designated areas of the policy and request them to stop immediately. If the person continues smoking after being requested to stop, notify Police and Security.
- Staff may NOT smoke at their desk, in the restrooms, or any other area not approved and posted as a smoking area.

Radiation Safety

What is Ionizing Radiation?

Ionizing radiation is energy traveling through space. It can be found in the air that we breathe the food we eat, the materials we use to build our homes, etc. Ionizing radiation has always been present on Earth and no place is totally radiation free. Besides being used as a valuable scientific tool, ionizing radiation is also used in medicine to diagnose and treat some illnesses. There are some hazards associated with the use of radiation, just like when working with heat or electricity.

How can I identify radiation?

The universal symbol for radiation is ☢. Employees that are required to work with radioactive materials (RAM and RGDs) receive specialized training provided by Radiation Safety staff. Since many employees are not authorized to handle RAM or RGDs, they must avoid all contact with these items. RAM and RGDs will be tagged or labeled with this symbol. Ionizing radiation is an intrinsic property of RAM. RAM emits ionizing radiation in the form of particles and/or electromagnetic waves until its atoms reach a stable state, which for some isotopes can take thousands of years. RGDs produce ionizing radiation (i.e. x-rays) artificially. When they are turned off they are harmless.

Three sources of radiation

Radioactive implants (temporarily placed in tissue or body cavity)
Radiopharmaceuticals (for therapeutic and diagnostic use)
External beam (X-ray machines, fluoroscopy)

Will I be exposed to too much radiation?

An average person living in the United States receives an annual dose of 360 mrem (units of radiation exposure) from natural and man made sources. A typical chest x-ray delivers an average dose of about 10 mrem. The annual regulatory dose limit for members of the general public is 100 mrem. Non-radiation workers and visitors receive no significant dose from facility operations.

What rules should I follow?

If you are required to work in the vicinity of RAM or RGDs, make sure to follow these rules and read room postings carefully.

- Announce yourself and state your purpose when entering a radiation use area.
- Make sure to contact the Principal Investigator or area supervisor if no one is present.
- Ask personnel about which areas to avoid.
- Do not handle anything labeled with the radiation symbol.
- Call Radiation Safety if you have any questions or concerns (see numbers below).

What should I do if there is an emergency?

If there is a personal injury or other emergency, follow standard procedures and disregard any concern about radiation exposure. The risk of receiving a dangerous exposure to ionizing radiation is very small. If you require assistance during regular hours, please call extensions 1059, 7215 or 3911. After hours, contact Trouble Desk at extension 3301.

Hazardous Materials

OSHA requires that your facility have a written Hazard Communications Program to alert you to hazardous chemicals present in your work area. Hazardous materials (HazMats) are chemical substances that can threaten the environment or your health if released or misused. A chemical's harmful effect can accumulate slowly over time. Chemicals are used in all aspects of life including industry, agriculture, medicine, research, and consumer goods.

There are three ways that a chemical can get into your body:

- Inhalation or breathing it in
- Absorption or through your skin
- Ingestion of through your mouth

Hazmats can be explosive, flammable and combustible, poisonous or radioactive.
Procedures for responding to spills vary according to the type of material: Small spills can be dealt with at the service level when appropriate equipment is available and employees have been trained in its use. If a hazardous waste spill occurs requiring clean-up that is beyond an employee's training and/or equipment, the employee shall report the spill to EH&S by means of a call to the Facilities Management Service (FMS) trouble desk at extension 3301 and any other entity required by policy. No employee shall clean up a spill unless they have been specifically trained to do so. (See relevant policies listed below for specifics of spill clean up and reporting.)

Spills involving chemicals that are classified as hazardous waste, which pose possible health effects to patients or employees with exposure, or damage to the environment if not controlled, should be cleaned up immediately and reported to the Supervisor and EH&S.

"Small" or "minor" spills (spills one gallon or less in volume) that occur within the Service areas of responsibility will be cleaned up using the nearest spill kit by Service staff trained in handling the chemical.

"Large" or "major" spills (spills greater than one gallon in volume or of an otherwise threatening nature) will require initiation of the Emergency Spill Response Plan. EH&S will determine if the San Diego HAZMAT Team needs to be contacted.

The following spill clean-up measures apply:

SPILL CLEAN –UP PROCEDURES	EMERGENCY SPILL RESPONSE
Isolate the spill, and notify the Supervisor	**S** Secure Area
Refer to MSDS, use the spill kit & PPE	**P** Protect Persons
Collect and place all contaminated waste in bag	**I** Inform Supervisor and EH&S
Label bag – date, chemical name, spill location, and contact information	**L** Leave clean-up of large spills to professionals

Material Safety Data Sheets (MSDS)

MSDS are designed to provide both workers and emergency personnel with the proper procedures for handling or working with a particular substance. MSDS include information such as:

- physical data (melting point, boiling point, flash points)
- toxicity
- health effects
- first aid
- reactivity
- storage
- disposal
- protective equipment
- spill procedures

Accidental Spills

It is extremely important to use caution when dealing with spills. Use the acronym **C.L.E.A.N.**

- **Confirm** that required protective equipment is in use and contain the spill
- **Leave** the area and close the door, restrict access if in a hall
- **Ensure** those exposed are given emergency medical care and enact spill procedures
- **Access** the MSDS and check clean-up procedures/precautions
- **Notify** the Supervisor and Safety Manager

If you are exposed to any type of chemical, you must be evaluated by Employee Health or the Emergency Department. You can prevent exposure by using personal protective equipment (PPE) like gloves, aprons, goggles, masks and respirators. If you are exposed, flush the area with copious amounts of water. Have someone check the MSDS for care or containment instructions. Report all exposure to your Supervisor and fill out an incident report. Following policies and procedures when handling haz-mats can reduce your exposure risks. Know the location of your MSDS Manual.

Medical Waste Management

There are serious repercussions to violations of the Waste Regulations. Some states have even succeeded in getting criminal convictions against polluters (i.e. individuals within a company or institution). The handling of waste must be taken seriously. Not only because fines can be levied but also because we need to live in the same environment that is being polluted. Simply put, it is the right thing to do.

Removing trash from buildings and disposing of the trash is no longer a simple task. Removing trash in barrels and dumping it in predetermined burial sites is no longer adequate in our environmentally conscious society. Buried chemicals from previous decades are now poisoning the water that some communities are drinking. The air in some areas is becoming so polluted that homes are being abandoned. Beach cities are finding used medical waste washed up on their shores. Trash disposal has become a major topic on city council meeting agendas, public debates on television, and political platforms.

Joint Commission of American Hospitals Organizations has established certain standards for waste materials for health care institutions. All states have regulatory agencies with written codes on the handling of hazardous waste. The Federal Government has strict guidelines governed by the Federal Environmental Protection Agency and other agencies. These regulations define standards for containment, storage, removal and disposition of waste materials. Proper compliance is primarily the responsibility of supervisory personnel; however, protecting the public and the environment should be a matter of personal concern for everyone.

Before you throw IT away ask yourself?

- **Can IT be recycled or used again?**
- **Does IT have Protected Health Information (PHI) or sensitive information that must remain confidential?**
- **Is IT contaminated with blood or body fluids?**
- **Is IT hazardous?**

Waste Streams: "Know Where to Throw"

What? = IT	*Examples*	*Where? Or Who?*
Trash	Office, kitchen and canteen refuse; non-recyclable plastics, package materials	Normal Trash bins
Recycled Materials	White & mixed paper, beverage containers	Blue bins and Special Containers
Items that can be Reused	Toner cartridges, electronics	Call Responsible Service
Confidential Documents with PHI	Paper Only	Locked totes or shredders

What? = IT	*Examples*	*Where? Or Who?*
Computer Storage Devices	Diskettes, hard-drives, CPUs	Call ITS x4767 or deliver to BB104
Bio-Hazardous Materials	Blood, laboratory waste, infectious waste, pathology waste	Red bags
Sharps	Empty syringes and ampoules	Red, Sharps containers
Universal Waste	Batteries, electronics, fluorescent light bulbs	Contact Waste Manager x3281 or x1052
Sewer	Saline, dextrose, urine, feces	Toilets and Drains
Trace Chemotherapy	Empty syringes, gowns, gloves, pads, chux	Yellow bags
Bulk Chemotherapy	Vials or IVs with ANY amount of liquid	Yellow bins
Waste Pharmaceuticals	Unused, expired or partially used medicine	Black bins
Hazardous Waste and Empty Medical Waste Containers	Corrosive, Ignitable, Reactive, Toxic	Contact Waste Manager x3281 or x1052
Radiation		Contact Radiation Safety Officer x1059 or x7215

Can't find the answer to your question? or Require a special bin in your area? Call our Waste Manager at x3281 or x1052 or visit: http://vaww.docushare.visn22.med.va.gov/dsweb/View/Collection-5757

Utilities

We use major utilities everyday and don't think about their convenience until the utility is disrupted: No natural gas to heat the home or cook, no electricity to turn on the lights or keep food cold, no water to drink or bathe in, no water to flush the toilet.

In the healthcare setting the loss of those and other utilities can be equally disruptive and affect patient care and safety. For example the loss of oxygen, nitrous oxide, medical gas, the vacuum system, steam and sewage.

A major outage of a utility system is defined as a loss of utilities causing use of back up sources. For example:

- Failure of incoming power causing emergency generators to be engaged
- Loss of water for drinking, cooking, and to support the fire suppression system requiring that water be transported and rationed and fire watches be instituted
- Loss of cooling systems in a heat wave requiring fans to maintain air circulation
- Loss of sewer systems requiring use of plastic bags inserted in toilets and rental of portable toilets.

Services or units experiencing what appears to be a utility failure should report the failure to Facilities Management / Engineering Service.

Equipment and Electrical Safety

Electricity can shock, burn or kill you! You never know when contact with electricity will be fatal, but you can count on it hurting. Electrocutions rank FOURTH (9%) in causes of industrial deaths. Healthcare facilities are loaded with complex electrical equipment not only for patient care, diagnosis, and treatment; but for clinical and administrative support. Equipment safety requires the cooperation of ALL personnel in every office and department.

Electrical Safety

Electricity flows through water almost as easily as it travels through the wire that brings electricity to your home or office. Your body is 70% water. So, if you touch electricity, it will flow through you,

and you will be badly hurt. The strength of the electric current and the length of time you are in contact with it, determines the injury. The results of electric shock include:

- Temporary nerve injuries such as numbness and tingling
- Loss of consciousness, amnesia, and coma
- Respiratory arrest (breathing stops)
- Heart rhythm problems
- Sudden death (heart stops)
- Burns
- Kidney injuries
- Blood clotting
- Injuries such as broken bones from falls associated with the shock

In the hospital setting we use a three-wire (ground) system. Electricity is carried into the hospital via a hot line and is carried back to the power source via a neutral line (2-wire system). The third line, the ground, directs any electrical leakage into the earth (the ground).
Proper grounding is vital for making electrical equipment safe to use.

Electrical Safety in Patient Care areas

Electricity is one of the most serious hazards to which patients are exposed. It is not possible to determine the incidence of fatal and non-fatal hospital electrical accidents but estimates vary from 1200-1500 per year.

The intensive and special care areas, operating rooms and catheterization labs place the patient at greater electrical risk then most other areas in the hospital. Patients in these areas have a greatest number of machines. And there are more electrical conductors such as damp dressings, CVP lines, pacemakers, indwelling catheters, along with fluid or blood on the floor, bed or equipment.

Electric shock can be lethal when the heart is a component of the circuit.
When the body is dry the resistance (anything that slows down the flow of electricity) to electricity is greatest. With the addition of sweat, wet bandages, wet beds, and lotion the resistance is reduced.

- Do not ignore a tingling perception of shock from a piece of equipment.
- Never use “cheaters” (converts 3-prong to 2-prong plug)
- Avoid using extension cords
- Put rubber gloves over pacer terminals
- Wear rubber gloves when working with the pulse generator (pacemaker)
- Turn off equipment before unplugging to prevent arching
- Never plug, unplug equipment, or turn-on a light while your hand or other part of your body is in contact with water, steam pipes, or plumbing fixtures.
- Do not touch equipment and the patient at the same time. Either touch the equipment or touch the patient but NOT both. If a problem exists, electricity will travel through you and shock the patient.

Medical equipment is maintained by Biomedical Engineering. Inspection tags are located on each piece of equipment with the inspection date and the next inspection due date. Make certain that all equipment has been checked and is within inspection and service date(s).

Each employee has a responsibility to make certain that the equipment operates correctly, that wires are not frayed, and that plugs are intact.

Any questionable equipment should be taken out of service, tagged as broken, a work order entered, and the unit returned to Biomedical Engineering for inspection and repair.

Disconnect any electrical/medical device that:

- Throws sparks
- Blows a fuse
- Gives even the slightest shock

Safe Medical Devices Act

Under the Safe Medical Devices Act (SMDA) health care facilities must report serious or potentially serious device-related injuries or illness of patients and/or employees to the manufacturer of the device, and if death is involved, the Federal Food and Drug Administration must be notified. The Act is intended to serve as an early warning system. All employees who are involved with patient care, review patient care records, repair devices or provide device preventative maintenance have a duty under the Act to report device-related incidents.

Anything that is not a drug is considered a device. Examples include, but are not limited to: anesthesia machines, pacemakers, heart valves, sutures, surgical sponges, wheelchairs, hospital beds or gurneys, catheters, infusion pumps, ventilators, dialysis machines and artificial joints.

Device-Related Incident

When a device-related incident occurs, employees should:

- Save the device, packaging and all related parts, and note the device's clinical engineering number or serial number
- Place a "Defective Do Not Use" tag on the device and remove it from use
- Notify the patient's physician or refer the visitor to ED or the employee to Employee Health
- Notify the department most appropriate to handle the device (i.e. medical instrumentation, biomedical engineering x7488)
- Generate a work order for investigation and repair
- Telephone Risk Management immediately
- Complete an incident report within 24 hours

The official report must be filed with the manufacturer and/or the FDA within 10 workings day so prompt reporting to Risk Management is essential.

VA Police

ID Badges

Each employee, WOC, volunteer and work-study student will wear an ID badge while in official capacity. Vendors and contractors should also have an ID badge. The ID badge should be worn with the photograph and name visible. Stop and question people who are in staff areas that are not wearing an appropriate ID badge.

In these days of national threats we can not be too careful. We must be aware of who is in our facilities. When you go home for the day, take you ID Badge with you. If a disaster occurs, natural or man-made, you may not be permitted back on VA grounds without your ID Badge. It will do no good to say it's up in my office or in my locker in Building XYZ.

Vehicle Permits

All privately owned vehicles and motorcycles operated on VA grounds by employees must be registered with VA Police.

Vehicle Accidents

All accidents involving motor vehicles operated on VA grounds whether with other vehicles, pedestrians, or Government property, will be reported immediately to Police and Security.

Control of Contraband

All persons entering the VA grounds and buildings have implied consent to the inspection of all packages, luggage, and contents in their possession, including vehicles.

Contraband includes:

- Firearms, ammunition, mace type products or weapons of any type
- Illicit drugs or drug taking devices
- Intoxicating beverages
- Flammable liquids

Compliance and Business Integrity

CBI HelpLine: 1-866-842-4357 or **http://vaww.vhaco.va.gov/cbi**

Fraud Prevention

This training program relates to the prevention of fraud in the VHA healthcare system. Healthcare fraud is a crime. It is committed when dishonest providers or consumers intentionally submit or make someone else submit false claims.

Examples of healthcare fraud are:

- Billing for services not actually performed
- Falsifying a patient's diagnosis to justify tests, surgeries or other procedures that are not medically necessary
- Billing for a more costly service than the one actually performed
- Accepting kickbacks for patient referrals

Some patients commit fraud by:

- Filing claims for services or medications not received
- Using someone else's coverage or insurance card

VHA Bills Private Sector Insurance

In 1999 VHA began billing private insurance companies reasonable charges for services rendered to veteran patients. That same year the VHA Compliance Program was established to make sure that VHA's business operations follow all laws, regulations and policies.

Documentation is the provider's record of care (the patient's chart). Improper documentation or lack of documentation can lead to coding and billing errors.
Coding is the process that converts documented descriptions of medical, surgical, diagnostic services and care into numeric codes before writing the bill. The wrong code means the wrong price goes on the bill. The computerized patient record system (CPRS) is where all patient encounters are documented.

Billing is putting the cost on the bill and sending it to the right person. When the cost is wrong or when the bill is sent to the wrong person it can lead to wrong payments by the veteran or their insurance company.

List of Excluded Individuals and Entities (LEIE) is a list kept by the government of those people or companies who have defrauded the government in the past. These people or companies are not allowed to be employed by or contract with the VA or other agencies.

Registration is the process of receiving patients and their demographic information. Incorrect registration data can lead to incorrect billing, ineligible care, and not being able to contact the patient with important information.

Self-Referrals are referrals that financially benefit the referring physician. Employees are not allowed to refer patients to themselves outside of the VHA and collect payments from VHA or the patient.

An Effective CBI Program has Seven Elements

1. **Compliance Officer and Committee.** Each VA Desert Pacific Healthcare Network facility has its own Compliance Officer and a Compliance Committee who oversee the program.
2. **Standards, Rules, and Policies.** VHA, VA Desert Pacific Healthcare Network, and each facility have a set of policies, procedures, laws, and other documents to guide business practices. These include standards of conduct for each employee and compliance program policies.
3. **Education and Training.** Compliance programs must have an educational plan for training all employees.
4. **Open Lines of Communications.** Compliance programs must have a way to accept complaints, questions, and requests for information about compliance, the program or violations. Our program has a national toll free CBI HelpLine available to all employees.

5. **Auditing and Monitoring.** The CBI Program must monitor and audit business practices to make certain the rules and regulations are being followed. Each facility also checks employees against the List of Excluded Individuals and Entities (LEIE).
6. **Enforcement and Discipline.** CBI Programs ensure that laws are enforced and recommend actions if these regulations are broken. Most recommendations are to provide additional training to the involved employee.
7. **Investigation and Remediation.** CBI Programs investigate complaints and make certain that errors are corrected. Complaints are sent to the Compliance Office from the CBI HelpLine and are received from employees who call the office.

Employee Roles and Responsibilities

Internal Reporting

Employees should know the process of reporting potential compliance failures. The chain of command is:
1. Your Supervisor
2. A higher level manager
3. Your Compliance Officer
4. The CBI Help Line (1-866-842-4357)

Education and Training

Employees should understand the specific laws, rules, policies, and regulations that affect their jobs with VHA and our Network. This includes employee conduct and responsibilities.

Use Your Compliance Officer

Employees should know the compliance officer at their facility and his or her role. The Compliance Officer is there to answer your questions, provide training, and help the facility avoid errors.

Anonymous vs. Confidential

Information provided to the CBI HelpLine cannot remain confidential or we would not be able to check things out. You can remain anonymous. That means we will not use your name as the source of the information which led to a compliance inquiry.
Even if people figure out that you called the CBI HelpLine, you are protected. It is illegal for anyone to take action against you for reporting your concerns. If you think you are being retaliated against for calling the CBI HelpLine, you need to report that, too. You also might want to discuss this with your Union representative.

VA San Diego Healthcare System

Certificate of Completion

This certifies that

_____

(Fill in your name)

Has successfully completed mandatory training for fiscal year 2010 by reading the required document titled

FY 2010 Safety and Environment of Care

On _____

(Fill in the date)

*Signed certification by participant:*_____

Your Signature

To receive credit, please give this completed certificate to
your VA Service Training Coordinator or the VASDHS Education Service