GENERAL SAFETY TRAINING

VA Portland Health Care System RESEARCH AND DEVELOPMENT SERVICE

Once you have completed all of the sections, there will be a short test to submit.

Introduction

- The VA Police Service is responsible for the protection of patients, visitors and employees, and the protection of property and the maintenance of law and order on VA property.
- Although the VA Police are the primary law enforcement officers on VA property, the Portland Police Department will also provide assistance in responding to crimes or emergencies when requested by the VA police.
- By the end of this section you should know the responsibilities of the VA Police and to know your role in the event of a critical incident.

What We Do

- Respond to emergencies
- Enhance the safety of patients and employees
- Enforce parking regulations
- Assist in crime prevention
- Provide safe escort services
- Emergency door unlock procedures
- Assist with motorists

How Would You Respond to a Threat?

- A threat can come in many forms
- Remain calm and try to attract the attention of a coworker
- Maintain a safe space (buffer zone) between yourself and the threatening person
- Speak to the person in a soft voice
- Contact Police Services, Ext. 51911 as soon as you are able to
- Do not respond aggressively

Responding to an Active Shooter/Active Threat

- An Active Shooter/Active Threat is an individual actively attempting to kill people in a populated area, typically with the use of a firearm, but potentially with another weapon (e.g., knife, explosives).
- When confronted with an Active Threat, employees must choose a response appropriate to the situation.
- The incident may be very fluid and require moving from one response to another as the situation unfolds.

Response to an Active Threat: Evacuation

- Unlike a fire situation, evacuation may not always be the best option for a particular active threat incident.
- Evacuation is the best choice when there is clear access to a safe and rapid escape route.
- Evacuation may also be the best choice for people in the immediate area of an attack that is underway.

Response to an Active Threat: Evade (1 of 2)

- In this context, "Evade" equates to "Shelter-In-Place", and would be the best choice if you are not able to leave the area.
- When possible, choose a location with a lockable door, no windows (or windows that can be completely covered), and furniture that could be used as a barricade.
- Take a moment to look around your work area and pre-identify a good shelter-in-place location.

Response to an Active Threat: Evade (2 of 2)

If you are unable to leave the building, secure your area:

- Lock and barricade doors
- Turn off lights
- Close blinds, block windows
- Turn off computer monitors and silence cell phones
- Take cover behind adequate protection (e.g., concrete walls, thick desks, or filing cabinets)
- Keep occupants quiet and calm
- Consider risks carefully before leaving area. Remember that the shooter will not stop until engaged by an outside force.

Response to an Active Threat: Engage

- Staff should only take action against an armed suspect as an absolute last resort when their life is in immediate danger.
- The VA understands that, in some circumstances, attempts to evacuate or evade may not be safe or successful and, if confronted by an attacker, the only option remaining is to engage by any means possible.

Introduction

The following slides will provide the information needed when dealing with a fire emergency. These topics include:

- Review of the **R-A-C-E** procedure
- How to use a fire extinguisher

R-A-C-E Procedure

There are four basic steps to remember in a fire emergency. The acronym "R-A-C-E" is an easy way to remember them.

R stands for **RESCUE**

First, take care of anyone who is unable to leave the area of danger.

A stands for ALARM

Get help by pulling the fire alarm and phoning *20 for emergency response.

C stands for CONFINE or CONTAIN

Close all doors to keep fire and smoke from spreading.

E stands for EXTINGUISH and/or EVACUATE

You can put out a small fire, <u>if</u> you have direct access to a clear exit route. Sometimes the best action is to leave building. Both "E's" may be needed.

Fire Extinguishers

- Fire extinguishers at VAPORHCS are "ABC" type. This means that they can be used on any kind of fire.
- Fire extinguishers and fire alarm pull boxes are found in corridors throughout VAPORHCS.

Using a Fire Extinguisher (P-A-S-S)

P is for PULL the pin
A is for AIM the nozzle at the base of the fire
S is for SQUEEZE the handle
S is for SWEEP the nozzle from side to side

- Not all locations have this style of fire extinguisher. The basic mode of operation is the same, but some details may be different.
- Be sure to pre-locate the fire extinguisher in your work area

Preparing for an Emergency

The following slides provide a short review of essential information in case of an internal or external disaster.

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Where to Find the Plan

The Research Service Emergency Preparedness Plan can be accessed from the Research & Development web page, under VAPORHCS Policies:

https://www.va.gov/PORTLANDRESEARCH/piservices/rd_forms.asp#policies

 It is also located in a yellow binder in common areas (break rooms, printer rooms).

What's the purpose of the plan?

The Plan tells us the following:

- Who is in charge in an emergency. If the usual leader is not available, it tells who should take over the leadership.
- What communication systems should be used
- How an orderly evacuation of the work area should be carried out and where the staff should meet after an evacuation

What's in the Plan?

Specific kinds of emergencies are discussed in the plan:

- Bomb threat
- Earthquake
- Fire
- Hazardous material spills
- Medical emergency
- Radioactive material contamination
- Utility failure such as power outage or water loss

Earthquake (1 of 2)

The Medical Center is located in a known earthquake hazard area. To prepare before an earthquake hits:

- Secure or move hazardous items that could fall on you during a quake.
- Identify a safe area in your workplace where you can protect yourself during a quake.
 - Choose a place away from windows, under a desk or other heavy furniture, or in a corridor away from falling hazards.

Earthquake (2 of 2)

If a quake hits:

- Stay in your safe area until shaking stops. Be aware that if you run outside during a quake, you may be struck by falling debris.
- After shaking stops, rescue yourself and others, if possible. Evacuate the building and move to a clear area.
- Do not re-enter building unless given an "all safe" signal.

INJURIES

Where to go if an injury is an emergency

- For any <u>life-threatening emergency</u>, work-related or not, all employees (WOC and VA-paid) should go directly to the VA Emergency Department (ED) to receive stabilizing care. If medical transport is required, dial *22.
- Note that <u>blood-borne pathogen exposure</u> is considered an emergency requiring immediate stabilizing care. All employees should go directly to VA Employee Health for treatment during the day, or to the VA ED after hours.

INJURIES

Where to go if an injury is not an emergency

- All employees (WOC or VA-paid) may go to an urgent care facility, a non-VA ED (e.g. OHSU), or may be seen by their own provider.
- If any employee wishes to visit VA Employee Health first, nurses there will triage the injury and provide basic first aid. If further care is necessary, they may then escort the employee to an emergency room.
 - If the injury is work-related, VA Employee Health can also offer any employee two free visits to the third-party VA employee health provider, Concentra.

EMPLOYEE HEALTH

Portland VA Employee Health Contact Information

- Employee Health is located in Building 101, Room 127.
- Business hours are 6:30 am to 3:00 pm on regular work days.
- The VA Emergency Department (ED) is located at the main entrance of Building 100.
 - All blood-borne pathogen exposures, occurring during work hours, should be seen at Employee Health.
 - After-hours exposures should be seen at the ED.

EMPLOYEE HEALTH

Vaccinations and Tests

The following services are provided to all employees (VA-paid and WOC) by Employee Health:

- Flu Shots
- Immunization and titers for Hepatitis B virus (recommended for all VA employees)
- Quantiferon Gold Tb test upon hire and if exposed
- Immunization and titers for Measles, Mumps, Rubella and Varicella
- Tetanus, diphtheria, and pertussis (Tdap) immunization

What are Hazardous Materials?

- Liquid or solid materials that represent health hazards upon direct or indirect contact. These include potentially infectious materials, radioactive materials, or toxic and corrosive chemicals that may irritate or damage the skin, eyes, lungs or other organs.
- Chemicals can also have physical hazards: flammable or combustible, explosive, unstable or able to oxidize or react with water.
- Certain compressed gasses can also be defined as health and/or physical hazards.

Eating and Drinking Policy

- No eating or drinking is allowed in areas where any hazardous material is used or stored.
- No eating or drinking is allowed in laboratory spaces.
- Eating and drinking is allowed in office spaces adjacent to a lab if separated by walls.
- Eating and drinking is allowed in hallways outside of laboratory spaces.

Personal Protective Equipment (PPE)

Due to the hazards of working in a laboratory, OSHA requires certain PPE be worn. Examples include:

- Lab coat and no open-toed shoes.
- Appropriate disposable gloves (e.g. nitrile gloves for formalin or infectious materials)
- Face shield, goggles, and cryogenic gloves for liquid nitrogen
- Ear protection when using a sonicator
- For PPE questions or to request an assessment, please call a Safety Specialist at Ext. 55241.

Use of audio devices in laboratory areas (1 of 2)

Lab staff who use audio devices with earbuds or headphones should conduct a risk assessment before using these devices while working. Consider the following points:

• The health and safety of the wearer and others in the area must not be compromised. If you cannot hear fire alarms, calls for help, etc., then the audio devices should not be used. Also, they should not be used if you are transporting hazardous substances from one location to another, as collisions at corners or in doorways becomes more likely if hearing is impaired.

Use of audio devices in laboratory areas (2 of 2)

- Consider using a single ear piece, as this will help maintain awareness of what is happening around you.
- Devices that fit inside the ear (e.g. ear buds) have the potential to transfer hazardous substances to the ear canal if touched or adjusted when your hands are contaminated. When working with hazardous materials, wearers should consider using a headphone that sits flat outside the ear.
- Be aware of dangling cords when using hazardous substances, or when working with open tubes. Entangled cords could cause a spill. Consider using wireless devices.

Introduction

All employees in a healthcare setting need to understand basic principles of infection control. The topics covered in this section are:

- Blood-borne pathogen exposure control
- Tuberculosis (TB) review
- Biocontainment of biological and biohazardous wastes

Blood-borne Pathogens

Research staff are at risk for occupational exposure to bloodborne pathogens through contact with blood or body fluids. Common blood-borne pathogens are:

- Hepatitis B virus (HBV)
- Hepatitis C virus (HCV)
- Human Immunodeficiency Virus (HIV)
 - The VA population has a higher incidence of Hepatitis B and C than the general population so this risk is very real.
 - The VAPORHCS also provides care for a significant proportion of Oregon's HIV population.

Exposure Can Happen

Exposures can occur with blood or other potentially infectious material by:

- Accidental injuries with needles (needle sticks) or sharps
- Cuts or skin abrasions
- Contact with mucous membranes of eyes, mouth, or nose
- Touching a contaminated surface and then touching open skin, mouth, eyes, or nose

Reduce Your Risk of Infection

Observe the following standard precautions at all times:

- Assume all blood and body fluids are infectious.
- Wear gloves, gowns/lab coats, and masks whenever working with blood and body fluids.
- Wash your hands immediately if they become contaminated with blood or body fluids.
- Practice routine handwashing for 10-15 seconds after glove removal when working with blood or body fluids.
- Take the appropriate precautions to prevent injury when disposing of used needles or sharps

Engineering and Work Practice Controls

- Immediately after use, dispose of any needles or "sharps" into approved sharps container without recapping, breaking, shearing, or manipulating.
- Sharps containers are to be discarded by Facilities
 Management Service (FMS) when near the fill line.
- Never place hands or fingers in sharps box.
- Use mechanical means to pick up broken glass.
- Keep sharp container closed when not in use.

If Exposed...

- Puncture Wound
 - Immediately wash area with soap and water.
 - Cover wound with sterile dressing and seek care.
- Eye/Mucous Membrane Splash
 - Immediately rinse/flush area with water for several minutes, then seek care.
- Seek care within two hours at either Employee Health or, after hours, at the VA Emergency Department.
- Report ALL exposures to your supervisor.

Tuberculosis (TB) Review

TB is a disease that is spread person-to-person through the air. The symptoms may include all or some of the following:

- Feeling sick, lethargic
- Cough, sometimes with blood
- Poor appetite
- Weight loss
- Night sweats
- Fever

TB Diagnosis

The Quantiferon Gold TB test is the first step in diagnosis. A positive TB test means that the person has been exposed to TB in the past.

- All new employees are required to get a TB test when hired to determine if they have ever been exposed to TB
- Employees working in high-risk areas or who have been exposed must get a TB test once a year
- Visit Employee Health to receive information about TB tests

Biocontainment of Biological and Biohazardous Wastes

• The universal biohazard symbol:



- Personnel should recognize this sign and know what it means
- The sign should be present on all containers holding biological materials or wastes, such as:
 - Shipping or transportation boxes
 - Refrigerators and freezers
 - Waste bins or bags
 - Biological waste also is often indicated by red bags or containers labeled with this sign.

Transportation

- Transport of hazardous biological materials between labs or buildings requires the use of a secondary, non-breakable container held stable within an outer container.
- The container should be labeled with the universal biohazard sign.

Spills

- Quarantine the area from additional personnel traffic
- Disinfectant the spill area and discard cleaning materials as biohazardous waste.
- If assistance is required, dial *20.
- Never walk away from a solid or liquid spill, either hazardous or non-hazardous, in any research or nonresearch area!

Introduction

Chemical safety depends on the basic knowledge and understanding of hazardous chemical reagents and materials located in your work area. This section on basic chemical safety will cover the following:

- Chemical Hygiene Plan
- Chemical Hazards
- Labeling
- Safety Data Sheets (SDS)
- Spill Response
- Chemical Disposal

Chemical Hygiene Plan

- OSHA (Occupational Safety and Health Administration) requires each lab to have a chemical hygiene plan for the safety and health of employees.
- Each research group is required to have a copy of this plan in their laboratory.
- The chemical hygiene plan covers lab safety requirements such as chemical safety and storage, employee exposure and personal protective equipment (PPE).

Chemical Hazards

Chemical hazards can harm a person by:

- Irritation or burning (e.g., to skin, eyes, or lungs)
- Acting as a poison or toxin
- Acting as a carcinogen (inducing or causing cancer)
- Causing an allergic reaction
- Causing mutations or DNA damage

Toxic materials can enter the body by:

- Absorption through the skin or mucous membranes
- Inhalation
- Ingestion (eating or drinking)

Labeling

Proper labeling represents the safest way to identify hazardous materials. All chemical containers should have labels that show:

- The name of the chemical
- Identification of any hazard (e.g., poison, irritant, corrosive)
- If chemical reagents and materials are transferred from the original bottle to another storage container, this secondary container must be labeled with the same hazard information.

Safety Data Sheets (SDS) (1 of 2)

SDS is an acronym that stands for Safety Data Sheet. The SDS describes the hazards, if any, associated with every chemical reagent or material. The information on these sheets, provided by the manufacturer, includes:

- Hazards associated with the product
- Safety precautions, including:
 - proper and safe use
 - proper storage
 - proper disposal

SDS for hazardous chemicals and products used in your work area should be available for review by all personnel.

Safety Data Sheets (SDS) (2 of 2)

Each lab must maintain an SDS inventory for all hazardous compounds, using the VA-provided online SDS database system.

Call Ext. 55241 for access and instructions on how to use the database.

Be sure you know how to access SDS forms for the chemicals and reagents you use, as you may need to consult these in emergency situations.

 Locating SDS forms through manufacturer's website is also acceptable

Hazardous Chemical Spills (1 of 2)

- If a hazardous chemical is spilled, it is always advisable to call the Energy Center (dial *20) for help.
- You may clean up a hazardous chemical spill yourself, but only if the following are all true:
 - The material is <u>not</u> hazardous or explosive
 - The spill is small in quantity (a few milliliters or grams)
 - And the employee has been trained in proper cleanup procedures, including proper PPE to use.
- Any assistance needed with non-hazardous spills can be directed to housekeeping.

Hazardous Chemical Spills (2 of 2)

If there is a major hazardous materials spill use **R-I-N-S-E**

R stands for **RESCUE**

• Provide assistance to individuals in trouble

I stands for INCIDENT COMMAND

• Take control of the incident

N stands for NOTIFY

• Contact the Energy Center (*20) and your supervisor

S stands for SUPPRESS (or Confine)

- Prevent additional spread of the hazardous material
 - Spill kits are available in every hallway to assist with suppression

E stands for **EVACUATE**

- Notify personnel in the laboratory and adjoining areas
- Incident command is relieved when spill response team arrives

Chemical Disposal

It is VA policy not to put waste chemicals down the drain. There are exceptions, but these must be approved by regulators and Industrial Hygiene.

When you have chemicals that need disposal, please call Ext. 51722 for pick up.

Introduction

The following information is for personnel who do not use or supervise the use of radioactive materials, but who may work in or have access to areas in which radioactive material is used or stored.

Universal radiation warning sign

The presence of radioactive material is indicated by this symbol:



On a door, the sign indicates the presence of radioactive material in the room; on a sink, it means radioactive material is disposed down that sink; on a refrigerator, it means there is radioactive material stored in that refrigerator; on a container, it means there is radioactive material in that container; on a hood, it means radioactive material is used in that hood.

Where Radioactive Materials Are Stored

There are three areas in VAPORHCS where radioactive material is used or stored:

- The Nuclear Medicine Clinic on the second floor of the main hospital (Bldg. 100)
- The Research laboratories
 - Each lab area that uses radioactive material has the radiation symbol on its door
- A storage module in back of the loading dock behind Bldg. 100 where the Radiation Safety Officer (RSO) stores low level radioactive waste

Security Precautions

- Radioactive material is to be secured (locked up) or "in attendance" at all times.
- In the secured research areas, a room storing radioactive material may be left unattended for a few minutes. However, if you are going to be gone longer than 20 minutes, you must lock the room.

Security Concerns (1 of 2)

If suspicious activity is noted in or near any room posted as using radioactive material, do the following:

- Ask the unauthorized person to identify himself or herself and their purpose for being in the area.
- Watch them closely while they are in the area, and note identifying information (e.g. gender, approximate height, weight, clothing colors).
- If the individual leaves the area, do not follow them, but report the incident immediately to the VA Police (Ext. 51911).

Security Concerns (2 of 2)

If the suspicious person makes threats or appears to have any potential for violence:

- Avoid confrontation.
- Do not attempt to restrain or detain the person, and comply with any demand to access the room.
- Leave the area as soon as possible and do not follow the individual.
- Call VA Police immediately (Ext. 51911) and report identifying information about the individual.

Discarding Radioactive Material

No material or containers labeled with the radiation symbol are to be discarded in the regular trash

- Packages, containers, and other receptacles with a radiation symbol label are to be metered to insure they contain no radioactivity
- Only then, is the label then to be removed or defaced prior to disposal
- Contact the RSO for disposal
 - FMS employees are not to empty waste cans or pick up bags or boxes labeled with the radiation symbol.

Receiving Radioactive Deliveries

- All radioactive material is to be initially delivered to the Nuclear Medicine Clinic, Bldg. 100, Rm. 2D159. If you receive a delivery during normal hours, call the RSO.
- After normal hours and on weekends and holidays, call the Energy Center at *20 and ask to have the RSO paged or called.
- In either circumstance, you must ensure that the package is secured.

Potentially Contaminated Surplus Equipment

The following steps are to be used to turn in equipment or items which may contain radioactive sources, or may be contaminated with radioactive material (such as items marked with the radiation symbol or used with radioactive materials):

- All such equipment or items must be pre-approved for turn-in by the RSO
- Personnel assigned to these equipment or items are responsible for informing the RSO before they are turned in.

Contact Information

- For radiation safety concerns or questions, contact the Radiation Safety Officer (RSO) at Ext. 54483.
- For after hours and on weekends and holidays needs, call the Energy Center at *20 and ask to have the RSO called or paged.

POST TEST

You have now completed the General Safety training.

Click here to take the Post-Test