ANNUAL SAFETY

ANNUAL SAFETY BRIEF

- Lab General
- Fire Safety
- Electrical Safety
- Biological Hazards
- Biological Safety Cabinets
- Compressed Gases
- Radiation Safety
- Chemical Hazards
- Chemical Hygiene
- HAZCOM
- TB Exposure
- Lab/Regulated waste Disposal
- Hazardous Waste reduction
- Accident Reporting
- Internal/External Disaster Preparedness
- Evacuation Plan
- Latex Precaution
- Shipping Infectious Substances
- Lab Ergonomics
- Formaldehyde Program
- Noise Exposure

Lab General

- Personal Safety
  - Safe environment for patients as well as personnel
  - Report hazards and accidents to supervisors
  - Follow policies and procedures
  - Recommend improvements to provide a safer environment

Lab General

- Personal Safety
  - No Smoking
    - Designated areas only
  - Eating and Drinking
    - Prohibited in work areas
    - Food and beverage not allowed in laboratory refrigerators or freezers
  - Application of cosmetics
    - Application of cosmetic/lip balm or contacts are prohibited in the work area.
  - Hair/beard jewelry
    - Hair/beards must be neat and can not come in contact with contaminated materials or equipment. Do not wear jewelry that can be caught in equipment or hang in infectious material

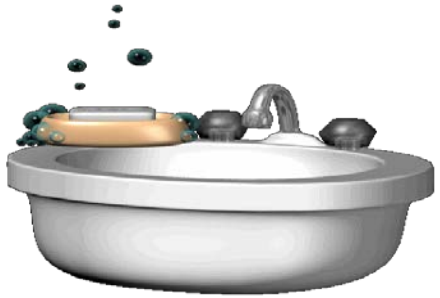
Lab General

- Personal Safety
  - Specimens
    - Are potentially infectious.
    - Handle appropriately
    - Place specimens in containers that prevents leakage during collection, handling, processing, storage transport or shipping.

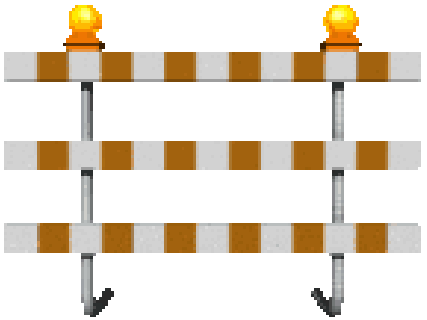
Lab General

- Protective Wear
  - Full Face Shield
  - Clothing (Lab coat)
  - Shoes
  - Gloves
  - Respirators

Lab General

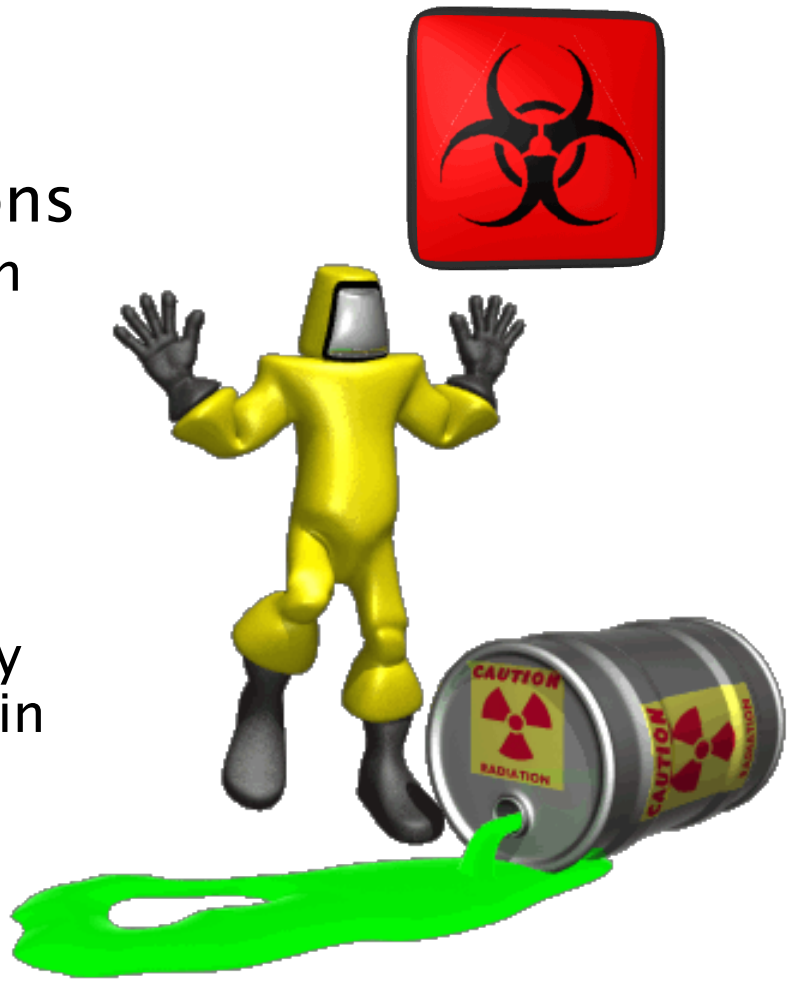


- Frequent Hand Washing
  - Wash all surfaces of hands and wrists for at least 20 seconds
  - Rinse, blot dry w/paper towels
  - Turn off faucet with paper towels
- NO Mouth Pipetting
- Aisles and Exits
  - Do Not Block Aisles and Exits
  - Do not cover or block Fire extinguishers/alarms, safety showers/eyewash stations



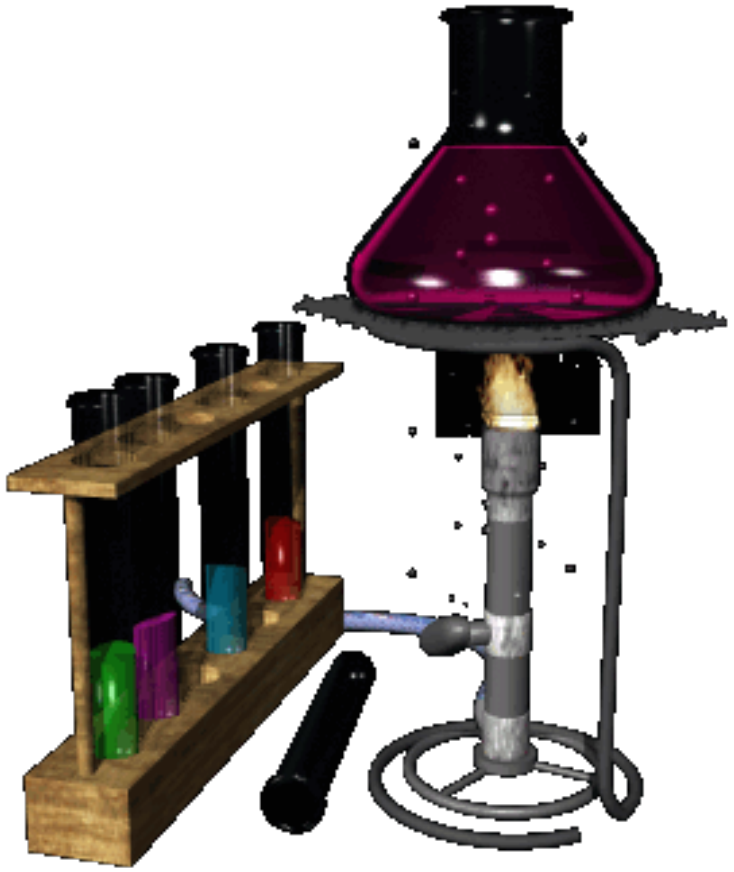
Lab General

- Standard /Universal Precautions
  - Memorandum IC-001, “Precaution for infection Control”
- House keeping
  - Accidental spills clean up immediately with approved disinfectant
  - All Blood/Body fluid, Microbiology and tissue waste must be placed in Red Biohazard Bags



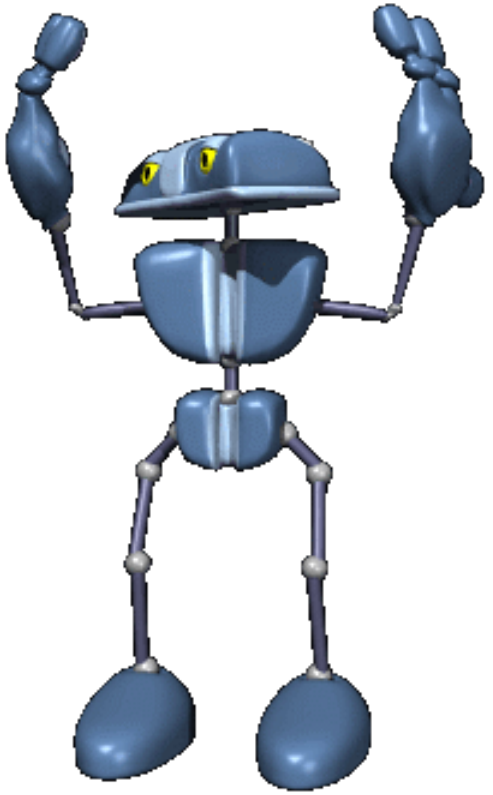
Lab General

- Laboratory Equipment
  - Glassware
    - Do not use if broken or chipped
    - Don't leave pipettes in bottle/flask/breaker
    - Hot glassware-handle with protective gloves
    - Handle broken glassware with mechanical devices



Lab General

- Laboratory Equipment
  - Centrifuges
    - Never operate with cover open
    - Specimens must have lids
    - If breakage occurs–allow aerosols to settle before cleaning
    - Maintain rotor balance when centrifuging sample.

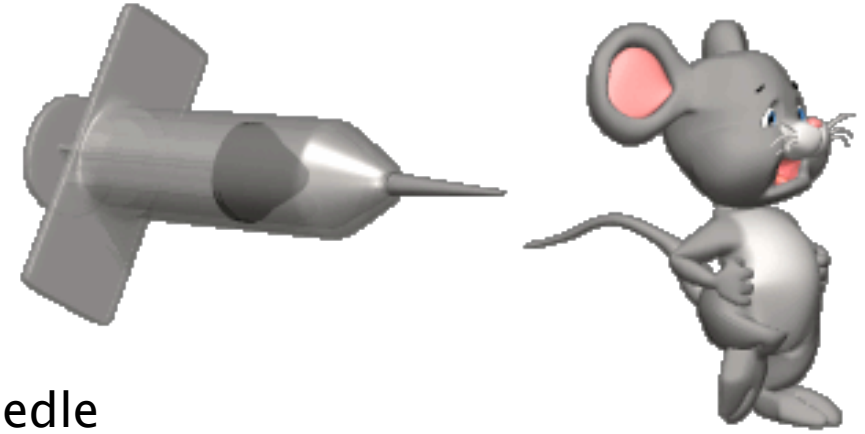


Lab General

- Laboratory Equipment
  - Autoclaves
    - Do not open until temp and pressure have returned to ambient
    - Use insulated water repellent gloves and aprons when loading and unloading autoclave

Lab General

- Contaminated Needle Disposal
  - Do not
    - Cut
    - Bend
    - Break
    - Detach from syringe or needle holders (except for blood transfer devices)
    - Manipulated by hand in any way
  - Dispose syringes/holders with needles.
  - Lancets and other blood letting devices are to be used once and appropriately discarded



Lab General

- Emergency Equipment
  - Emergency Showers
    - Located in:
      - Histology
      - Microbiology
  - Eye Wash Stations
    - Located in:
      - Histology
      - Chemistry
      - Morgue
      - Microbiology
      - Hematology
    - Flush eyes for 15 minutes or longer
  - Eye Wash Bottles
    - Located in:
      - Central Accessioning
      - Blood Bank
      - Special Chemistry

Lab General

- Warning Signs
  - Must be posted in areas of hazardous substances
    - Areas
    - Storage cabinets
    - Refrigerators
    - Shipping containers
  - Technical areas are considered a “Moderate Risk”
    - No visitors may enter the work area
    - Must have approval of the Chief pathologist and Clinical Lab Manager

FIRE SAFETY

- Fire Emergency Plan
  - Notify everyone in immediate area by saying "CODE RED"

  - R.A.C.E.
    - Rescue
      - Remove those in immediate danger
    - Alarm
      - Pull the nearest fire alarm
      - Call 3333 give exact location of the fire
    - Contain
      - Confine by closing doors
    - Extinguish/Evacuate
      - Extinguish with fire extinguisher if possible, if not evacuate
      - Assist others
      - Do not use elevators

FIRE SAFETY

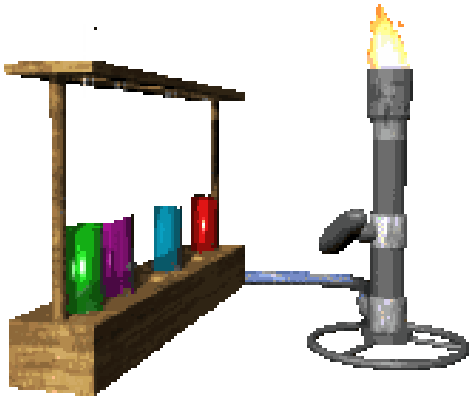
- Fire Alarm
  - When alarm sounds
    - Listen for location, location will be announced as an overhead page.
    - Close door if fire in in the main Hospital building or the Research building
    - If fire is in the immediate area or if smoke is sighted. Evacuate
    - Evacuation routes are posted in each section/Supervisor will be responsible for assuring everyone has been evacuated
    - If the Fire is located in a different fire zone (East side) Be alert to the possibility that the fire may spread to our area. BE PREPARED TO EVACUATE.

FIRE SAFETY

- Fire Drill (Quarterly/Each Shift)
  - When alarm sounds, Code RED is announced or condition warrants
    - Follow the fire drill procedures
    - Certain personnel will be allowed to stay (determined by supervisor)
    - Section supervisor or designee will assure that all personnel have evacuated

FIRE SAFETY

- Fire Prevention
  - Flammable mixture and open flames don't mix.
  - Flammables must be properly contained. No more than a gallon may be out in a section.
  - Use carriers when transporting.
  - Items must be 18" from ceiling.



FIRE SAFETY

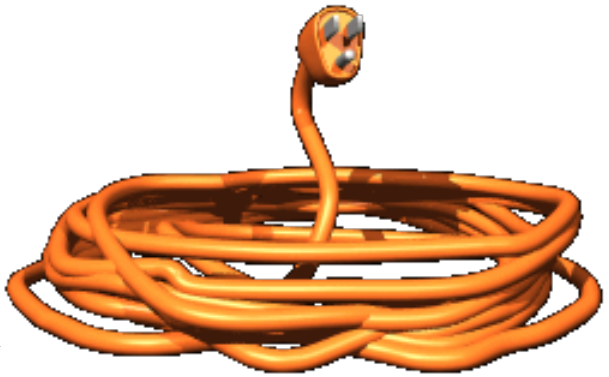
- Fire Prevention Training
  - RACE
    - Rescue
    - Alarm
    - Contain
    - Extinguish/Evacuate
  - PASS
    - Pull Pin
    - Aim
    - Squeeze
    - Sweep

ELECTRICAL SAFETY

- All Electrical shocks (including small tingles) must be reported.
  - Power off/Unplug instrument.
  - Do not try to use or repair
  - Instruments must be repaired by qualified personnel
  - Building electrical will be repaired by the Engineering Department

ELECTRICAL SAFETY

- Extension cords
  - Will be avoided if possible
  - Should be temporary, non-repetitive situations.
  - Should have same size wiring as the instrument/Appliance.
  - Should not be in the path of a walkway
  - Must be in good condition and have proper grounding wires.



BIOLOGICAL HAZARDS

- Disposal Containers
  - Sharps containers
    - Needles, scalpels or other rigid sharp items that may cause a puncture wound or cut
    - All sharps whether contaminated or not should be placed in Sharps container
  - Rigid-Sided leak proof infectious waste receptacles
    - Used for collection of broken glass, tubes of blood, liquid specimens and cultured media
  - Infectious waste bags.
    - Should be double bagged and used for waste with no risk of puncturing the outer layer of the bag.

BIOLOGICAL HAZARDS

- Disposal Containers
  - All containers for incineration are colored RED and have the Biohazard symbol on the container
- Glassware
  - Glassware that is to be reuse, must be steam sterilized (autoclaved).
- Hand washing and use of alcohol hand sanitizer should be done frequently throughout the day.

BIOLOGICAL HAZARDS

- No open specimens in the centrifuge, must be capped to prevent aerosol droplets.
- Clean work areas.
- Grossly contaminated specimens will not be processed-notify delivery person, contact physician
- Dispose sample cups and containers in the infectious waste containers.

BIOLOGICAL SAFETY CABINETS

- Process any suspicious pathogenic patient specimens (Mycobacterium) in the Biological Safety Cabinet.
  - During the processing of TB/Fungus, allow no other person in the room – Lock the door
  - Disinfect work area with Tuberculocidal disinfectant
  - UV germicidal lights will be left on overnight after use of hood.
  - Centrifuge of mycobacteria, must have double containment.

COMPRESSED GASES

- General
  - Cylinders must be secured in an upright position
  - Valve safety covers will be left on until tanks are secured and regulators attached.
  - Valve safety covers will be replace when regulators are remove and during transport.
  - Hand trucks will be used to transport cylinders.
  - Do not oil or grease regulators
  - Do not attempt to repair or force tank valves open.

COMPRESSED GASES

- Pressure Regulator and Valves
  - Do not interchange valves.
  - Threads should be clean and tightly fitted, do not lubricate the valves.
  - Use proper size wrench to tighten.
  - Open valves slowly.
  - Do not force frozen valves.

COMPRESSED GASES

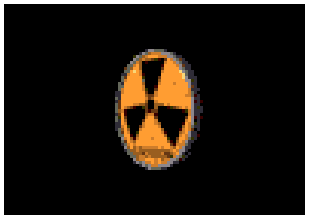
- Acceptance and Return of Cylinders
  - Cylinder lacking permanent ID will not be accepted.
  - New Tanks should be marked as “FULL” upon receipt
  - Empty tanks must be label “EMPTY”, secured upright with cap replaced.

RADIATION SAFETY

- Operational Checks performed by Blood Bank
  - Leak test every 6 months by Medical Center Radiation Safety Officer
  - Measurement of dose determination checked annually be BB Supervisor
  - Area is monitored weekly for irradiation leak with a Geiger counter by BB Personnel

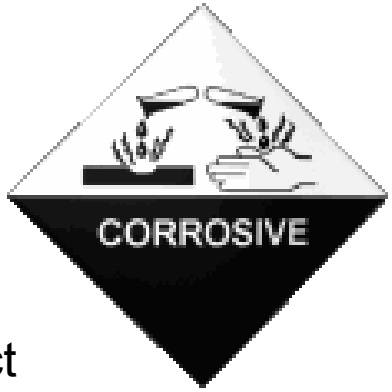
RADIATION SAFETY

- Blood Irradiator
  - A pocket dosimeter is not required to be worn when working with the blood irradiator; however one maybe requested from the Hospital Radiation Safety Officer if an employee would like to wear one or is pregnant
  - Door to irradiator room must be kept locked with alarm armed 24/7
  - Room is under camera surveillance by VA police
  - When irradiator is in use the RED RADIATION light must be turned on.
  - Any malfunction needs to be reported to the Hospital Radiation Safety Officer Immediately (ext 3440/page 13-224)
  - The Wanrad-2 Gamma Radiation Alarm will sound an alarm if readings are >5mR/hr-Notify Hospital Radiation Safety Officer Immediately!



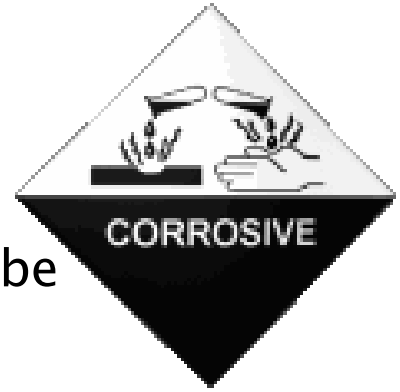
CHEMICAL HAZARDS

- **Corrosives**-Acids, Anhydrides, Alkalis, Dehydrating agent, Oxidizing agents
  - Can damage equipment
  - Storage
  - May cause burns on skin, mouth or eyes
    - Store in approve containers
    - Store in cool dry place, well ventilated, away from direct sunlight
    - Segregate acids form bases
    - Never store above eye level
    - Working quantities may be stored under sinks, bulk storage in approved acid cabinets
    - Carriers must be use when handling bottles of acid greater then 500mls



CHEMICAL HAZARDS

- **Corrosives**
  - Handling
    - Use a shield barrier or work in a sink (spill can be controlled).
    - Wear a protective apron, gloves and eyewear.
    - Do not sniff reagents.
    - Diluting Acid into water like you ought to!
    - Must use carriers for containers with more than 500ml.



CHEMICAL HAZARDS

- **Toxic Substances**-Poisons, Irritants, Asphyxiates
  - Do not react with human tissue
  - They may be sensitizers that produce cytotoxic effect resulting in skin irritation or illicit an allergic reaction.
- Storage
  - Store in cool dry place, well ventilated, away from direct sunlight and any fire hazards
  - Segregate toxic chemicals form acids and oxidizing agents
  - Containers should be sealed as tightly as possible.

CHEMICAL HAZARDS

- **Toxic Substances**
  - Handling
    - Wear protective apron, glove, and eyewear
    - Use fume hoods
    - Wash glassware, work area and hands thoroughly
    - Exposure to the sensitizer formaldehyde is monitored as least annually by the Medical Center's Safety Manager.

CHEMICAL HAZARDS

- **Carcinogen Substances**
  - Chemicals capable of causing cancer. (will be discussed in later section)

CHEMICAL HAZARDS

- **Ignitable**
  - Chemicals that can burn, combustible/flammable
  - Handling
    - Use approved metal can for volumes of 1 quart or more.
    - Glass containers use a protective carrier for transport.
    - Eliminate all sources of ignition from the flammable area.

CHEMICAL HAZARDS

- **Explosives**

  - Reactive an unstable substances that readily undergo violent chemical change

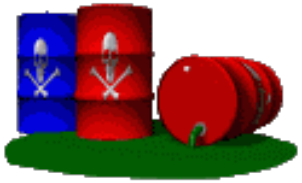
- **Cryogenics**

  - Fluids(liquefied gases) or solids characterized by extreme low temperatures such as Dry ice
  - Handling
    - Handle in well ventilated area, can cause light headedness and extreme cases, asphyxiation.
    - Use insulated gloves to prevent contact burns.
    - Protective eyewear must be worn when breaking up chunks of solid ice or ice pellets.

CHEMICAL HAZARDS

- **Accident and spills**
  - Eye contact
    - Promptly flush eyes with water for a prolonged period (15 minutes) and seek medical attention.
  - Ingestion
    - Follow SDS instruction on case of ingestion and seek medical attention
  - Skin contact
    - Promptly flush the affected area with water and remove any contaminated clothing. Use the safety shower when contact is extensive. Seek medical attention

CHEMICAL HAZARDS



- **Accident and spills**
  - Clean-Up
    - Promptly clean up small spills using the appropriate Spill Clean-Up Kit located in:
      - Histology
      - Urinalysis
      - Microbiology
      - Hematology
    - Hazardous chemicals should be contained using the think CLEAN plan:
      - **C**ontain
      - **L**eave
      - **E**mergency (eye wash,shower, medical)
      - **A**ccess the SDS
      - **N**otify a supervisor
    - Large spills (gallon or more), the Hospital Safety Manager must be called to clean up the spill

CHEMICAL HYGIENE PLAN

- Your Responsibility
  - Planning and conducting each procedure in accordance with the chemical hygiene procedures detailed in sectional written procedures
  - Develop good personal chemical hygiene habits
  - Promptly reporting accidents and spills that result in chemical exposure to VA patients or personnel.

CHEMICAL HYGIENE PLAN

- Standard Operating Procedure
  - General precautions for handling all laboratory chemical should be adopted.
  - Minimize exposure
  - Assume any mixture is hazardous and toxic

CHEMICAL HYGIENE PLAN

- **Chemical Inventory**
  - Conducted bi-annually by section supervisor
  - Chemicals used, produced, or stored must be identified.
  - Defined policies and procedures for specific handling requirements.
    - Any chemicals classified as hazardous by Dept. of Transportation, EPA, chemicals displaying a 2 or greater in any section of the National Fire Protection Association diamond, Potential Carcinogens or reproductive toxicity

CHEMICAL HYGIENE PLAN

- **Manufacturer, Importer or Distributor Labeling:**
  - Required for all hazardous chemicals according to Hazard Communication Standards (HCS)
  - Use the United Nations Globally Harmonized System of Classification and Labeling of Chemicals, otherwise known as GHS.
  - Labels are required to have:
    - **Product Identifier:** is how the hazardous chemical is identified. This can be (but is not limited to) the chemical name, code number or batch number.
    - **Supplier Identification:** name, address and telephone number of the chemical manufacturer, importer, or other responsible party.

CHEMICAL HYGIENE PLAN

- **Manufacturer, Importer or Distributor Labeling:**
  - Labels are required to have:
    - **Signal Word:** are used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label. There are only two words used as signal words, "Danger" and "Warning". "Danger" is used for the more severe hazards, while "Warning" is used for less severe hazards.
    - **Hazard Statement(s):** describe the nature of the hazard(s) of a chemical, including, where appropriate, the degree of hazard.
    - **Precautionary Statement(s):** describe recommended measures that should be taken to minimize or prevent adverse effects resulting from exposure to the hazardous chemical or improper storage or handling. There are four types of precautionary statements: prevention (to minimize exposure); response (in case of accidental spillage or exposure emergency response, and first-aid); storage; and disposal.

CHEMICAL HYGIENE PLAN

- **Manufacturer, Importer or Distributor Labeling:**
  - Labels are required to have:
    - **Pictogram(s):** are graphic symbols used to communicate specific information about the hazards of a chemical. Each pictogram consists of a different symbol on a white background within a red square set on a point (ie a red diamond).
    - **Supplementary Information**: (Not required) The label producer may provide additional instructions or information that it deems helpful.

Note: The GHS standard rating system is opposite the NFPA rating system. In GHS, lower numbers indicate more severe hazards. While in NFPA, lower numbers indicate less severe hazards.

CHEMICAL HYGIENE PLAN

- **Manufacturer, Importer or Distributor Labeling:**
  - There are nine pictograms, but HCS requires eight of these pictograms, the exception being the environmental pictogram as environmental hazards are not within OSHA's Jurisdiction. The hazard pictograms and their corresponding hazards are shown below.

HCS Pictograms and Hazards

Health Hazard	Flame	Exclamation Mark
		
• Carcinogen • Mutagenicity • Reproductive Toxicity • Respiratory Sensitizer • Target Organ Toxicity • Aspiration Toxicity	• Flammables • Pyrophorics • Self-Heating • Emits Flammable Gas • Self-Reactives • Organic Peroxides	• Irritant (skin and eye) • Skin Sensitizer • Acute Toxicity (harmful) • Narcotic Effects • Respiratory Tract Irritant • Hazardous to Ozone Layer (Non-Mandatory)

CHEMICAL HYGIENE PLAN

- **Manufacturer, Importer or Distributor Labeling:**
  - The hazard pictograms and their corresponding hazards are shown below.

Gas Cylinder	Corrosion	Exploding Bomb
		
• Gases Under Pressure	• Skin Corrosion/ Burns • Eye Damage • Corrosive to Metals	• Explosives • Self-Reactives • Organic Peroxides
Flame Over Circle	**Environment (Non-Mandatory)**	**Skull and Crossbones**
		
• Oxidizers	• Aquatic Toxicity	• Acute Toxicity (fatal or toxic)

CHEMICAL HYGIENE PLAN

This diagram shows which pictograms represent physical hazards, health hazards or environmental hazard.

CHEMICAL HYGIENE PLAN

- **Manufacturer, Importer or Distributor Labeling:**
  - Sample label is shown below.

SAMPLE LABEL

CODE _____
Product Name_____

Product Identifier

Company Name_____
Street Address_____
City_____ State_____
Postal Code_____Country_____
Emergency Phone Number_____

Supplier Identification

Hazard Pictograms

Signal Word
Danger

Keep container tightly closed. Store in a cool, well-ventilated place that is locked.
Keep away from heat/sparks/open flame. No smoking.
Only use non-sparking tools.
Use explosion-proof electrical equipment.
Take precautionary measures against static discharge.
Ground and bond container and receiving equipment.
Do not breathe vapors.
Wear protective gloves.
Do not eat, drink or smoke when using this product.
Wash hands thoroughly after handling.
Dispose of in accordance with local, regional, national, international regulations as specified.

In Case of Fire: use dry chemical (BC) or Carbon Dioxide (CO_2) fire extinguisher to extinguish.

First Aid
If exposed call Poison Center.
If on skin (or hair): Take off immediately any contaminated clothing. Rinse skin with water.

Precautionary Statements

Highly flammable liquid and vapor.
May cause liver and kidney damage.

Hazard Statements

Supplemental Information

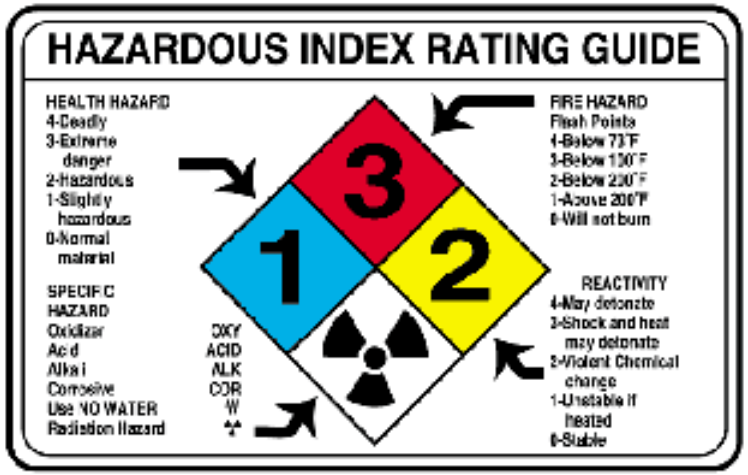
Directions for Use

_____
_____
_____

Fill weight:_____ Lot Number:_____
Gross weight:_____ Fill Date:_____
Expiration Date:_____

CHEMICAL HYGIENE PLAN

- **Secondary/Workplace Labeling**
  - Required for all hazardous chemicals according to Hazard Communication Standard
  - Label using the National Fire Protection Association (NFPA) Diamond
  - General numbering classification
    - Zero (0)–Minimal
    - One (1)–Slightly Hazardous
    - Two (2)–Hazardous
    - Three (3)–Extreme Danger
    - Four (4)–Deadly



**Note: The NFPA rating system is opposite the GHS standard rating system. In GHS, lower numbers indicate more severe hazards. While in NFPA, lower numbers indicate less severe hazards.

CHEMICAL HYGIENE PLAN

- Per the HCS, Safety Data Sheet (SDS) for hazardous chemical will provide the following information
  - **Section 1, Identification** includes product identifier; manufacturer or distributor name, address, phone number; recommended use; restrictions on use.
  - **Section 2, Hazardous Identification** includes all hazards regarding the chemical; required label elements.
  - **Section 3, Composition/information on ingredients** includes information on chemical ingredients; trade secret claims.
  - **Section 4, First-aid measures** includes important symptoms/effects, acute, delayed; required treatment.
  - **Section 5, Fire-fighting measures** lists suitable extinguishing techniques, equipment; chemical hazards from fire.

CHEMICAL HYGIENE PLAN

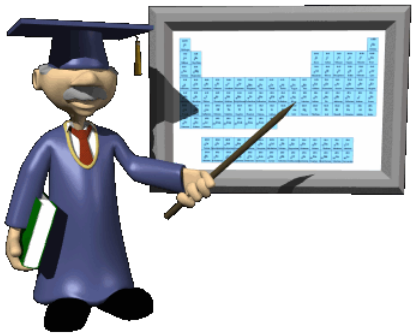
- Per the HCS, Safety Data Sheet (SDS) for hazardous chemical will provide the following information
  - **Section 6, Accidental release measures** lists emergency procedures; protective equipment; proper methods of containment and cleanup.
  - **Section 7, Handling and storage** lists precautions for safe handling and storage, including incompatibilities.
  - **Section 8, Exposure controls/personal protection lists** OSHA's Permissible Exposure Limits (PELs); Threshold Limit Values (TLVs); appropriate engineering controls; personal protective equipment (PPE).
  - **Section 9, Physical and Chemical properties** lists the chemical's characteristics.

CHEMICAL HYGIENE PLAN

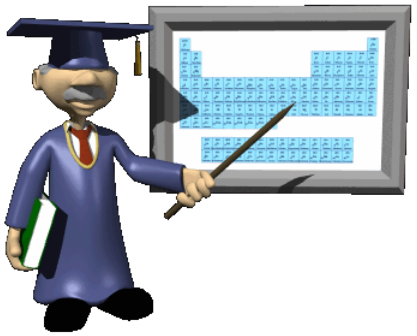
- Per the HCS, Safety Data Sheet (SDS) for hazardous chemical will provide the following information
  - **Section 10, Stability and reactivity** lists chemical stability and possibility of hazardous reactions.
  - **Section 11, Toxicological information** includes routes of exposure; related symptoms, acute and chronic effects; numerical measures of toxicity.
  - **Section 12, Ecological information***
  - **Section 13, Disposal considerations***
  - **Section 14, Transport information***
  - **Section 15, Regulatory information***
  - **Section 16, Other information**, includes the date of preparation or last revision.
  - ***Note**: Sections 12-15 may be included in the SDS, but are not required by OSHA.

CHEMICAL HYGIENE PLAN

- Training–What everyone should be able to do!
  - Locate the potentially hazardous chemicals in your workplace.
  - Recognize the chemical labeling and it's meaning
  - Locate the SDS book in the workplace.
  - Locate the health hazard, physical hazard, environmental protection and special protection sections of the SDS and explain their use.



CHEMICAL HYGIENE PLAN



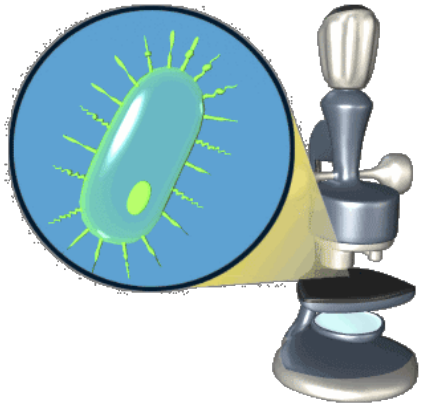
- Training–What everyone should be able to do!
  - Identify the Laboratory Chemical Hygiene Officer by name and title.
  - Discuss the major components of the facilities standard labeling system.
  - Identify the protective clothing for the area and demonstrate its use.
  - Demonstrate emergency procedures in the event of a hazardous chemical spill.

TUBERCULOSIS EXPOSURE CONTROL PLAN

- Goal is to aid in minimizing/eliminating the transmission of TB
  - PPD Skin test on new employees
  - Patient with suspected or confirmed active TB will be placed in Airborne Precautions.
    - Room with negative air pressure
    - The patient's door must be kept closed.
    - You must wear fit tested particulate respirators (Training and fit testing done by Medical Center's Safety Manager)

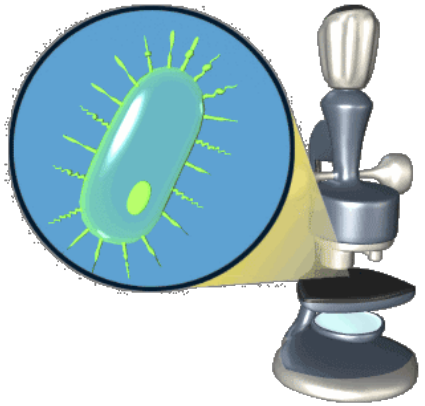
TUBERCULOSIS EXPOSURE CONTROL PLAN

- Minimizing/eliminating the transmission of TB
  - TB Testing in microbiology will be performed in a Biosafety Class III hood.
    - Negative pressured room
    - Must wear disposable gowns and gloves while processing, handling, and evaluating potential infectious TB specimens.
    - You must use the aerosol-proof containers when centrifuging specimens.



TUBERCULOSIS EXPOSURE CONTROL PLAN

- Minimizing/eliminating the transmission of TB
  - Pathologist/residents must handle unfixed tissues in the Biosafety Class II hood
    - Glove and disposable gowns are required during the processing and handling of these specimens
    - Everyone in morgue must wear fit tested particulate respirator masks during an autopsy of suspect patient, and clean up after.
    - Fit tested particulate respirator masks must be worn whenever the Stryker saw is used and for 5 air exchanges following the use (5-10minutes)



TUBERCULOSIS EXPOSURE CONTROL PLAN

- Minimizing/eliminating the transmission of TB
  - Responsibility of Health Care worker
    - Seek medical evaluation of a PPD test conversion occurs.
    - If symptoms develop that may be due to TB, see medical evaluation.
      - You must receive appropriate evaluation
      - Receive therapy if required
      - Prevent the transmission of TB to patients and other health care workers.

LABORATORY WASTE DISPOSAL

- Lab responsibility
  - Identify waste and give special handling for transport or disposal.
  - Four broad categories of hazardous waste
    - Chemical
      - Follow guidelines in MSDS
      - Xylene store for recycling
      - Formaldehyde neutralize prior to disposal
    - Infectious
      - Cultures, blood products, contaminated waste etc.
    - Radioactive
    - Physical
      - Managing and disposal of discarded sharps

LABORATORY WASTE DISPOSAL

- Regulated waste defined by Dept of Labor
  - Liquid or semi solid or other potentially infectious materials (OPIM)
  - Items contaminated with blood or OPIM (able to drip)
  - Items that are caked with dried blood or OPIM that may flake off
  - Contaminated sharps
  - Pathological and Microbiological wastes containing blood or OPIM

LABORATORY WASTE DISPOSAL

- Regulated waste –Put into red bags
  - OSHA/City of Omaha Regulated waste is disposed as infectious waste.
  - All regulated waste will be placed in red disposal bags or sharps containers.

LABORATORY WASTE REDUCTION

- The purpose of the hazardous waste program is to maintain a comprehensive control over the production, handling , transporting, storage, disposal and monitoring of all waste originating in the clinical laboratory to ensure that the health of exposed employees and the surrounding environment is properly maintain.

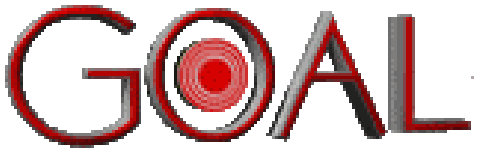
LABORATORY WASTE REDUCTION

- We generate all sorts of waste and we need to be aware of how to reduce and properly dispose of the waste.

LABORATORY WASTE REDUCTION

- Lab waste divided into these groups
  - Hazardous chemical waste
  - Infectious waste
  - Radioactive waste
  - Hazardous physical waste
  - Non-hazardous waste

LABORATORY WASTE REDUCTION



- Minimization of waste hazards
  - Buy smaller quantities, reusable items, recycling, substitution of less hazardous materials
- Waste segregation
  - Hazardous waste separated from non-hazardous waste
- Waste handling
  - Handle waste with care, your safety is a prime concern.

Accident Reporting

- Duty hours 0730-1600 notify supervisor of any occupational injury or accident.
  - The supervisor will notify Employee Health Secretary or Employee Health Nurse
  - If you need to be examined a “Report of Employee Treatment form will be initiated by supervisor
  - Take this form to the Admitting/ER
  - A CA17 form should be completed if you are restricted to “Light Duty”.

Accident Reporting

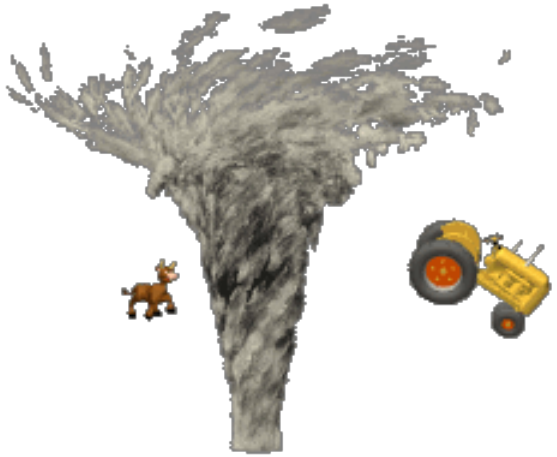
- Non-Duty hours/weekends
  - You should go directly to to Admitting/ER
  - After being examined a “Report of Employee Treatment form will be initiated by physician/PA/Health Nurse
  - The form is then submitted to supervisor when employee returns to work area

Accident Reporting

- All Accidents must be recorded in the Automated Safety Incident Surveillance Tracking System (ASISTS) in VISTA
- Lab supervisor is responsible for reviewing with you the corrective action planned or taken

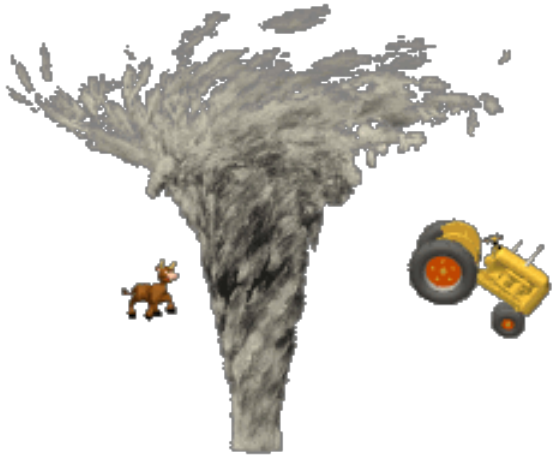
INTERNAL AND EXTERNAL DISASTER PREPAREDNESS

- In the event of a disaster we need to assist members of the medical staff in carrying out their responsibilities-care and treatment of casualties



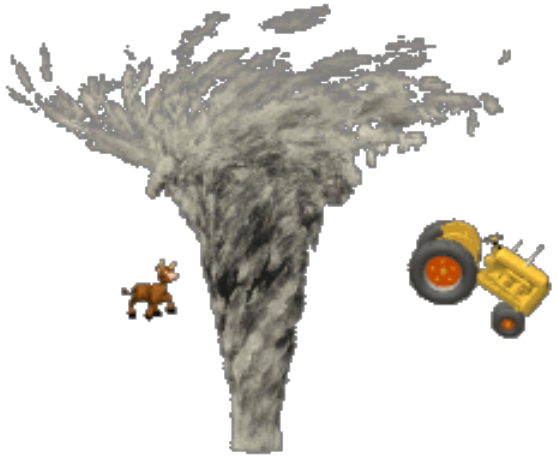
INTERNAL AND EXTERNAL DISASTER PREPAREDNESS

- Clinical Lab Manager
  - Will assume responsibilities for overall coordination of laboratory activities.
  - Assesses staffing needs



INTERNAL AND EXTERNAL DISASTER PREPAREDNESS

- Blood Bank Lead Tech
  - Notifies Red Cross of disaster and obtain current blood and blood component inventory
  - Assesses staffing needs



INTERNAL AND EXTERNAL DISASTER PREPAREDNESS

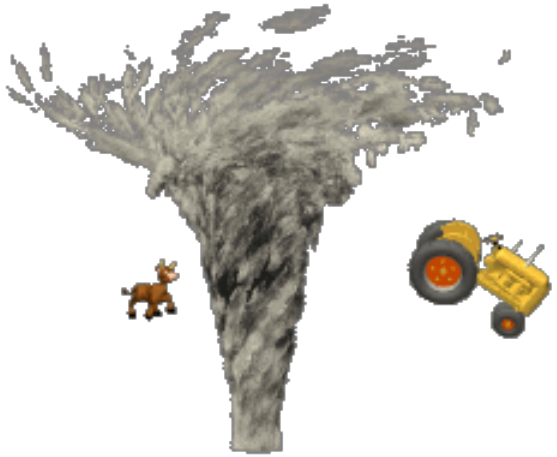
- Phlebotomy Lead
  - Dispatches two phlebotomists to triage area
  - Recalls staff if necessary
    - Act as runners for the Blood Bank and lab specimens
    - Answer and route phone calls
    - Assign staff to Central Accessioning Area to receive specimens
  - Responsible for proper receipt of specimen and disposition. Communicates with triage area (Collection and Identification of patients)

INTERNAL AND EXTERNAL DISASTER PREPAREDNESS

- Laboratory Supervisor
  - Recalls staff accordingly
- Morgue Contract Service/Lab Personnel
  - Receives bodies and personal belongings
  - Maintain record of all deceased
  - Records receipt and release of bodies from morgue

INTERNAL AND EXTERNAL DISASTER PREPAREDNESS

- Pathologists/Resident pathologist on call
  - Assures that adequate pathology staff is available for consultation by lab staff and Medical Center clinicians



INTERNAL AND EXTERNAL DISASTER PREPAREDNESS

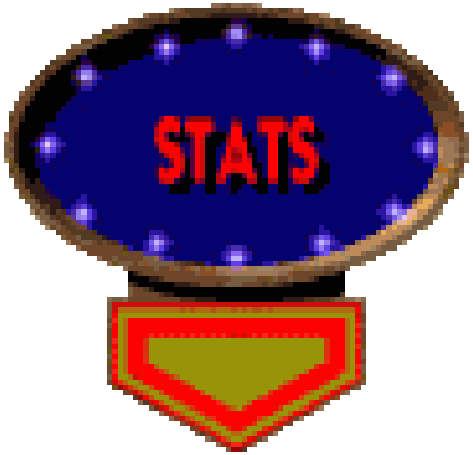
- Lab Orders
  - Non-computer generated requisition forms if VISTA is disabled
    - Patient location
    - Patient Identification same as the Emergency Medical Tags supplied by triage personnel

INTERNAL AND EXTERNAL DISASTER PREPAREDNESS

- Patient specimens
  - Properly labeled with Emergency Medical Tag Information
  - Patient's name (if available)
  - Initials of person who obtained the specimen.
  - Date and time drawn

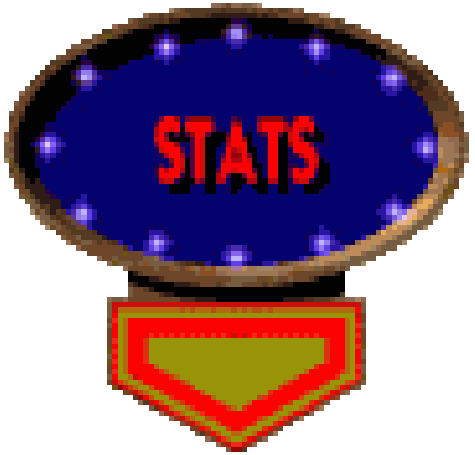
INTERNAL AND EXTERNAL DISASTER PREPAREDNESS

- Patient Reports
  - Results of all STAT request will be called to the location listed on the requisition form.



INTERNAL AND EXTERNAL DISASTER PREPAREDNESS

- VISTA Results Entry
  - Volume allows and adequate information entered into VISTA (Patient Info)
  - Lab will order request sent on the non-computer generated requisition forms.
  - Results will be entered into the system as they are available.



EVACUATION PLAN

- In an Emergency we may have to Evacuate
- Each section has a fire evacuation route posted
- You are responsible for knowing the alternate routes

EVACUATION PLAN

- Simple evacuation
  - Remove yourself and others persons from immediate area of danger
  - Priorities for moving patients/staff/visitors
    - First-persons in imminent danger
    - Second-wheelchair and walking persons

EVACUATION PLAN

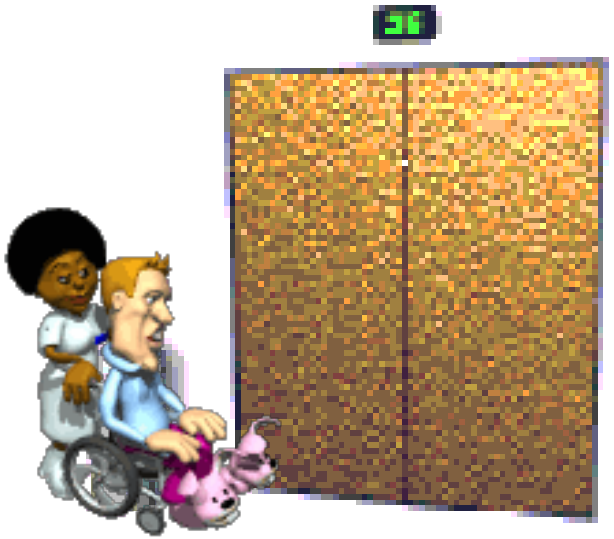
- Total evacuation
  - Lateral or vertical movement of all patients, visitors and employees from a wing or entire facility to outside grounds.
    - Blankets, beds, mattresses, litters, and any other means for removing non-ambulatory patients.

EVACUATION PLAN

- Total evacuation
  - All rooms, including bathrooms
    - Will be search upon completion of evacuation by Lab Safety Officer or designee.
    - Ensure all have been evacuated

EVACUATION PLAN

- Total evacuation
  - Handicapped individuals (Wheelchairs, crutches, canes, etc.)
    - We will assist these people to the safest part of the same floor (toward an exit)
    - During a total evacuation the elevators may be utilized ONLY if instructed to do so by the Omaha Fire Department.
    - It may be necessary to carry handicapped individuals to the first floor for evacuation.



LATEX PRECAUTIONS PLAN
Some items that contain Latex

- Markers
- Adhesives
- Gloves
- Diazosensitized photo copy paper
- Electrical appliance cords
- Telephone receiver headset, shoulder rest
- Finger cots
- Glue, envelopes, stamps, plastic
- Ink, tape, erasers
- Mouse pad
- Plants
- Rubber bands
- Rubber button pads on phones, calculators
- Tubing
- Gowns
- Butterflies
- Co-flex
- Latex tourniquets
- Needles (rubber end)

LATEX PRECAUTIONS PLAN

Some items that contain Latex

- 3M transparent tape
- Ependorf combo tips
- Pipette tips
- Parafilm
- Sed-rate tubes
- Vacutainer holders
- 10cc, 20cc syringes
- Stopper on monoject tubes
- Needle banks
- Beral transfer pipettes
- UA cap, tubes, pipettes, V-tech Brand
- Fisher brand serum filters
- UA test strips
- TDX sample cups

LATEX PRECAUTIONS PLAN

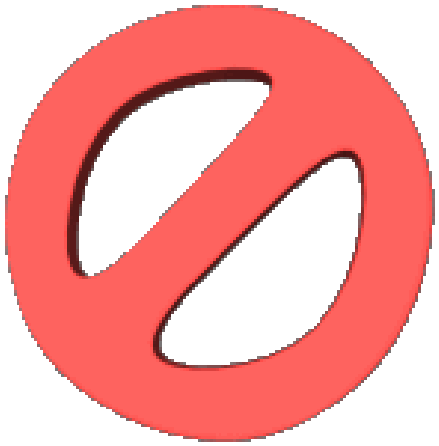
- Employee identification
  - If you know you have a latex allergy/sensitivity you must communicate this information to your immediate supervisor
  - You are responsible for maintaining proper latex allergy precautions
  - If you suspect you have a latex allergy/sensitivity, you need to report it to your supervisor and to the Employee Health for further screening.

LATEX PRECAUTIONS PLAN

- Employee identification
  - Your immediate supervisor document your latex allergy/sensitivity in your employee records.
  - Your department will then employ all reasonable efforts to accommodate your latex allergy/sensitivity to provide you with a latex-safe working environment
    - Purchase of latex-free supplies
    - Check equipment and replace with latex-free materials if economically feasible

LATEX PRECAUTIONS PLAN

- In-Patient identification
  - All patients should be identified during their admitting screening and assessment
    - If patient is latex sensitive, latex sensitive cart will be assign to the patient.
      - You should identify the patient as being latex sensitive by the Latex Sensitive Isolation posted.
      - Use only the latex free items found on the cart or those provide by the lab.



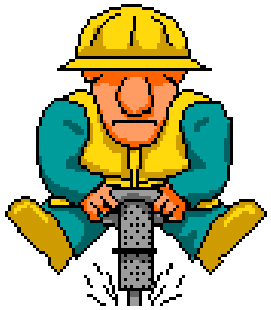
LATEX PRECAUTIONS PLAN

- Out-Patient identification
  - All patients <u>should</u> be identified by an orange tag “Latex Sensitive” attached by outpatient registration Desk Personnel
    - When you view the patient’s order in the computer, you should get a “Latex Allergy’ Alert
    - Use only latex free items on this patient.

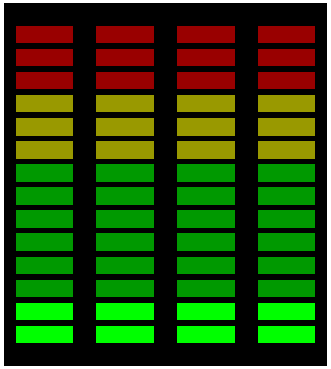
LABORATORY EROGNOMICS POLICY

- We need to provide a work environment that reduces or eliminates your exposure to conditions that lead to cumulative trauma disorders (CTD) and musculoskeletal disorder (MSD)
- It is your responsibility to recognize the signs and symptoms associated with these ergonomics risk factors and notify your supervisor.
- The NWIHCS Ergonomic Committee will do an assessment.

Noise Exposure



- OSHA guideline
  - When an employee's exposure to noise may equal or exceed 85 decibels for 8 or more hours, the employer shall develop and implement a monitoring program.
  - Baseline testing and monitoring will be repeated whenever a change in production, process, equipment, or controls cause an increase in noise exposures.



NWIHCS LAB FORMALDEHYDE PROGRAM

- We need to ensure formaldehyde is handled in the safest possible manner and in compliance with all applicable codes and standards.
- Limit contact
  - Protective clothing (lab coats)
  - Gloves
  - Eye shields/goggles if dispensing
  - Eyewash and safety shower near by

NWIHCS LAB FORMALDEHYDE PROGRAM

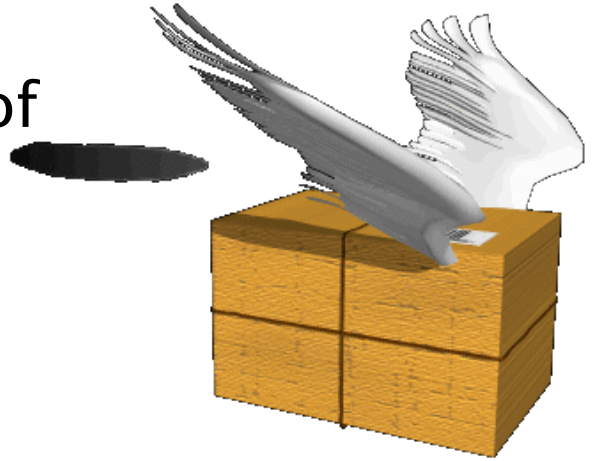
- If you come in contact with formaldehyde
  - Immediately flush the exposed areas
  - Notify your supervisor and proceed to Employee Health
- During grossing
  - Specimens will be handled in exhaust fume hood
  - Any other handling of containers with formaldehyde solutions should be handled in a well-ventilated area

NWIHCS LAB FORMALDEHYDE PROGRAM

- Health hazards you should be aware of
  - Cancer
  - Irritation and sensitization of the skin
  - Affects respiratory system
  - Eye and throat irritation
  - Acute toxicity
- If you experience irritation of your eyes, throat, skin due to exposure, report to Employee Health

Shipping Infectious Substances

- Our responsibility
  - For the shipments
  - Training others on shipping procedures
  - Classifying, identifying
  - Marking, labeling
  - Packaging and documentation of dangerous goods
  - Ends when package reaches its destination safely



Shipping Infectious Substances

- 9 Classifications (We only have 2)
  - #6 Infectious substances
    - Cause serious health effects
    - Bacteria, virus, parasite, human samples
  - #9 Dry Ice

Shipping Infectious Substances

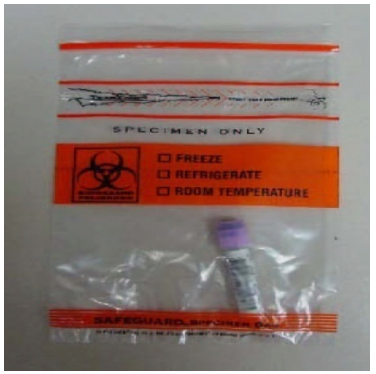
- Packaging
  - Triple packaging
    - Primary receptacle
    - Secondary receptacle
    - Outer shipping package

Shipping Infectious Substances

- Hazard labels
  - Specific hazard labels must be affixed to the outside of each package.
    - Biohazard Label for infectious substances
    - Miscellaneous for Dry Ice
      - Allow for pressure to be released
      - Write down the number of pounds used

Shipping Infectious Substances

- Packing
  - Place sample into biohazard bag with absorbent packing material



Shipping Infectious Substances

- Packing
  - Place bag into secondary container (screw top plastic jar)

Shipping Infectious Substances

- Packing
  - Place secondary container into Styrofoam container with corrugated cardboard box
  - Add Room Temp/Cold/Frozen Packs to maintain specimen temp.
  - Enclose an itemized list of contents between secondary packaging and the outer packaging

Shipping Infectious Substances

- Packing
  - Seal box and place OSHA Biohazard Label on the outside of the package
  - Mail to appropriate reference lab


Congratulations
You made it through!

Now complete the Laboratory Safety Quiz.