Congress of Neurological Surgeons
OSHA Anatomical Specimen Safety and Radiation Safety Compliance:
Practical Course Director Guidelines

General:

All Course participants will have been mailed the following documents:

1. CNS Anatomical Specimen Safety Compliance Participant Guidelines
2. CNS Radiation Safety Compliance Participant Guidelines
3. CNS Course Participant Agreement, Waiver, and Release

The signed, completed CNS Course Participant Agreement, Waiver, and Release needs to be on file for each participant.

The text of the above three documents is included below.
Following this are additional guidelines which are the responsibility of the Practical Course Director.

CNS Anatomical Specimen Safety Compliance Participant Guidelines:

ANATOMICAL SPECIMENS AT CNS COURSES:

All specimens obtained for use in CNS sponsored courses must undergo serology testing and screening for Hepatitis, HIV, and Syphilis.

Care must be taken to individually tag and identify each specimen, appropriately prepare the body, and surgically drape the specimen to protect the privacy and dignity of the anatomical donor.

TEACHING LABORATORIES:

General:

All material that comes in contact with the anatomical specimen is treated as a biohazard. Due to legal and ethical issues, human material under no circumstances should be removed form the teaching laboratory. Likewise, photography, video recording and audio recording are prohibited without the expressed consent of the CNS.

Participant cooperation is requested in maintaining the cleanliness of the laboratory. This requires special effort on the part of our facility, attendees, and course vendors:

1. Be sure your hand are clean before touching door knobs, chalk boards or audio visual equipment;
2. Clean your dissecting table at regular intervals;
3. Dispose of sharps in specially provided containers;
4. Always wear protective clothing such as scrubs and shoe covers;
5. Hang protective apparel in instructed areas;
6. Do not leave clothing, books, instruments or personal belongings in the laboratories;
7. Briefcases, bookbags or backpacks should not be brought into the cadaver areas;
8. Caution should be taken not to track tissue or chemicals outside the lab;
9. Shoe covers and protective clothing should not be worn outside the Anatomical Teaching Laboratory.

Disposal of Human Tissue:

All dissection trimmings and discarded tissue should be placed in labeled containers. All other waste (paper towels, aprons, gloves) will be placed in separate receptacles. Tissue and fluids dropped on the floor must be cleaned up immediately so that the floors do not become slippery and dangerous.

First Aid:

Dissection involves the use of sharp instruments and accidents will occur. Any cut or small injury should be attended to promptly and thoroughly washed with soap and water. First aid kits will be available. Unembalmed/fresh cadavers present additional concerns. It is suggested that all users of anatomical teaching facilities receive Hepatitis "B" series and exercise standard operating room procedures when using this material. If you have open cuts or abrasions, take precautions to protect the affected area.

There will be NO SMOKING, DRINKING, OR EATING in the laboratories. This policy will be strictly enforced. Violators will be asked to leave.

CADAVERIC BIOHAZARD STATEMENT:

This workshop will include hands-on cadaveric surgical bioskills workshop component. HIV and Hepatitis testing has been done on these cadavers and/or all available health records reviewed. The specimens are considered safe for use in our workshops. All cadaveric specimens will be handled with universal precautions to assure maximum personal protection against biohazards.

2. Gloves, gowns, caps, masks, shoe covers and eye protection will be provided for all participants and MUST BE WORN AT ALL TIMES WHILE HANDLING CADAVERIC SPECIMENS; protective apparel must be removed BEFORE LEAVING THE AREA. Strict compliance with OSHA, State and Federal rules and regulations will be enforced.

CNS Radiation Safety Compliance Participant Guidelines:

GENERAL PRINCIPLES OF RADIATION PROTECTION:

The best approach in dealing with radiation of any type is application of basic knowledge and principles coupled with common sense. Radiation is no different than other hazardous substances such as chemicals or electricity when considering basic safety. In general, good housekeeping and sanitary practices are stressed when using radioactive materials.

Use of the principles of TIME, DISTANCE, AND SHIELDING is essential to minimize exposure around radiation.

Time:

Overall exposure decreased the shorter the time one is exposed to any source or radiation whether it be ultraviolet rays from sunlight or sunlamp or x gamma radiation. Half the exposure time will result in one-half the exposure.

Distance:

The intensity of the radiation decreased rapidly as you move farther from a source, whether it be a sunlamp or an x-ray source. When moving twice the distance (as from one foot to two feet away) the intensity of radiation decreases by a factor of four.

Shielding:

Addition of any material between a source or radiation and a point of interest will decrease the intensity. The amount of decrease depends on the thickness and the type of material. In nuclear medicine and x-ray applications, lead is frequently used.

Additional Guidelines:

BIOHAZARD DISPOSAL:

Contaminated sharps shall be discarded immediately or as soon as feasible in containers that are:

Closable
2. Puncture resistant
3. Leakproof on sides and bottom
4. Labeled or color-coded

During use, containers for contaminated sharps shall be:

Easily accessible to personnel and located as close as feasible to the immediate area where sharps are used or can be reasonably anticipated to be found
2. Maintained upright throughout use
3. Replaced routinely and not be allowed to overfill

When moving containers of contaminated sharps from the area of use, the containers shall be:

Closed immediately prior to removal or replacement to prevent spillage or protrusion of contents during handling, store, transport, or shipping
Placed in a secondary container if leakage is possible. The second container shall be closable, constructed to contain all contents and prevent leakage during handling, storage, transport, or shipping, and labeled BIOHAZARD or colored-coded.

Containers shall not be opened or emptied.

Immediately or as soon as possible after use, contaminated reusable sharps shall be placed in appropriate containers until properly reprocessed. These containers shall be:

Puncture resistant
2. Labeled or color-coded
3. Leakproof on the sides and bottom
4. Designed so that HCWs do not have to reach into the containers

Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is reasonable likelihood of occupational exposure.

Food and drink shall not be kept in refrigerators, freezers, shelves, cabinets or on countertops or benchtops where blood or other potentially infectious materials are present.

All procedures involving blood or other potentially infectious materials shall be performed in such a manner as to minimize splashing, spattering, and generation of droplets of these substances.

Mouth pipetting/suctioning of blood or other potentially infectious materials is prohibited.

Specimens of blood or other potentially infectious materials shall be placed in a container, which prevents leakage during collection, handling, processing, storage, transport, or shipping.

If the specimen could puncture the primary container, the primary container shall be placed within a secondary container, which is puncture resistant in addition to the above characteristics.
All specimen containers shall be placed in ziploc bags at the time of collection.

Equipment, which may become contaminated with blood or other potentially infectious materials, shall be examined prior to servicing or shipping and shall be decontaminated as necessary, unless it can be demonstrated that decontamination of such equipment is not feasible. The portions of equipment remaining contaminated shall be labeled BIOHAZARD.

PERSONAL PROTECTIVE EQUIPMENT:

A garment penetrated by blood or other potentially infectious materials shall be removed immediately or as soon as feasible.

All personal protective equipment shall be removed prior to leaving work area.

When personal protective equipment is removed it shall be placed in an appropriately designated area or container for storage, washing, decontamination or disposal.

Gloves:

1 Gloves shall be worn when it can be reasonably anticipated that there might be hand contact with blood, other potentially infectious materials, mucous membranes, and non-intact skin; when performing vascular access procedures: and when handling or touching contaminated items or surfaces.
2. Disposable, single use, gloves shall be replaced as soon as practical when contaminated or as soon as feasible if they are torn, punctured, or when their ability to function as a barrier is compromised.
3. Disposable, single use gloves shall not be washed or decontaminated for reuse.
4. Utility gloves may be decontaminated for reuse if the integrity of the glove is not compromised. However, they must be discarded if they are cracked, peeling, torn, punctured, or exhibit other signs of deterioration or when their ability to function as a barrier is compromised.

Masks:

Masks in combination with eye protection devices, such goggles or glasses with solid side shields, or chin length face shields, shall be worn whenever splashed, spray, splatter, or droplets of blood or other potentially infectious materials may be generated and eye, nose, or mouth contamination can be reasonably anticipated.

Gowns, aprons, and Other Protective Body Clothing:

Appropriate protective clothing such as, but not limited to, gowns, aprons, or similar outer garments shall be worn in occupational exposure situations. The type and characteristics will depend upon the task and degree of exposure anticipated.

Surgical Caps or Hoods and/or Shoe Covers or Boots:

Surgical caps or hoods and/or shoe covers or boots shall be worn in instances when gross contamination can reasonably be anticipated (e.g., autopsies).

HOUSEKEEPING:

General:

The worksite must be maintained in a clean and sanitary condition.

2. All equipment and environmental and working surfaces shall be cleaned and decontaminated after contact with blood or other potentially infectious materials.
3 Contaminated work surfaces and floors shall be decontaminated with appropriate disinfectant after completion of procedures; immediately or as soon as feasible when surfaces are overtly contaminated or after any spill of blood or other potentially infectious materials.
4. Protective coverings used to cover equipment and environmental surfaces shall be removed and replaced as soon as feasible if they may have become contaminated.
5 Reusable containers which have a reasonable likelihood for becoming contaminated with blood or other potentially infectious materials shall be inspected and decontaminated on a regularly scheduled basis and cleaned and decontaminated immediately or as soon as feasible upon visible contamination.
6. Broken glassware, which may be contaminated, shall not be picked up directly with the hands. It shall be picked up using mechanical means, such as a brush and dustpan, tongs, or forceps.
Reusable sharps that are contaminated with blood or other potentially infectious materials shall not be stored or proceeded in a manner that requires laboratory personnel to reach by into the containers where these sharps have been placed.

Regulated Waste:

Regulated waste shall be placed in containers, which are:

Closable

2. Constructed to contain all contents and prevent leakage of fluids during handling, storage, transport, or shipping
3. **Labeled BIOHAZARD or color-coded**
4. Closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.

If outside contamination of regulated waste container occurs, it shall be placed in a second container. The second container shall be:

Closable
Constructed to contain all contents and prevents leakage of fluids during handling, storage, transport or shipping.
Labeled BIOHAZARD or color-coded

4. Closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.

Laundry:

Contaminated laundry shall be handled as little as possible with a minimum of agitation.

2. Contaminated laundry shall be bagged or containerized at the location where it was used and shall not be sorted or rinsed in the location of use.
3. Contaminated laundry shall be placed and transported in fluid – resistant bags.

BIOHAZARD LABELING:

Labels:

Warning labels shall be affixed to containers of regulated waste, refrigerators and freezers containing blood or other potentially infectious material; and other containers used to store, transport or ship blood or other potentially infectious materials, except as provided in Biohazard Disposal.

2. Required labels shall include the BIOHAZARD legend.
These labels shall be fluorescent orange or orange-red or predominantly so, with lettering or symbols in a contrasting color.

4. Required labels shall be affixed as close as feasible to the container by string, wire, adhesive, or other method that prevents their loss or unintentional removal.
5. Containers of blood, blood components, or blood products that are labeled as to their contents and have been released for transfusion or other clinical use are exempted from the labeling requirement.
6. Individual containers of blood or other potentially infectious materials that are placed in a labeled container during storage, transport, shipment or disposal are exempted from the labeling requirement.
7. Labels are required for contaminated equipment and shall also state which portions of the equipment remain contaminated.
8. Regulated waste that has been decontaminated need not be labeled or color-coded.