Pros and Cons of Bioskills Lab Events in Non-Laboratory Environments

Small, Medium and Large

Federal Occupational Health and Safety Administration (OSHA)

OSHA operates the primary job safety and health program in twenty-nine (29) of the fifty states. Twenty-one states (21) operate their own job safety and health programs (three additional states cover only state and local government employees). States with approved programs must set job safety and health standards that are “at least as effective as” comparable federal standards. In most cases, states adopt standards identical to federal ones.
Regulated Medical Waste (RMW)

- **RMW** means liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are soaked with blood or other potentially infectious materials (OPIM) and are capable of releasing these materials during handling, contaminated sharps, and pathological and microbiological wastes containing blood or other potentially infectious materials.

- **Other Potentially Infectious Materials**
  1. The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, pleural fluid, pericardial fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids.
  2. Any uninfected tissue or organ (other than intact skin) from a human (living or dead); and
  3. HIV-containing cell or tissue cultures, organ cultures, and HIV- or HBV-containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.

- It is the employer’s responsibility to determine the existence of regulated waste. This determination should not be based on actual volume of fluid (blood), but rather on the potential to release fluid (blood), (e.g., when compacted in the waste container).

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Down the Drain

- Infectious liquid regulated medical waste (RMW) as defined by federal, state, and local government agencies may be discharged untreated to municipal sanitary sewer systems in all 50 States, with exceptions enacted by some state and local agencies. All states and local agencies allow treated RMW (e.g., Bleach treatment) that is rendered non-infectious to be discharged into municipal sanitary sewer systems.

- Heavily contaminated liquids containing large tissue particles or excessive bodily fluids, can be made solid using solidifiers and disposed of in bio-hazard containers for waste contractor pick up.

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Out with the Trash

- **Most States allow products with blood on them to go into regular garbage.** "If you have gauze that has blood or other patient waste product in it, a lot of times you can throw this in the regular garbage, as long as it’s not saturated," Dr. Trimas says. "That varies from state to state as well. In Florida, if we have gauze that has some blood on it from dabbing, if it can’t be rung out, then it can be thrown into the regular garbage. If you don’t do that and instead fill a whole red bag with things that could go into the regular garbage, that just wastes money."

- **Most items that have come in contact with Anatomical Specimens or bodily fluid, or have minimal visual signs of exposure, can be deposited in normal trash.**
Venue requirements

- Advance permission to operate a “wet-lab” on the premises
- Review venue’s policy on the conduct of Bioskills training.
- NO WINDOWS
- Limited access doors to reduce traffic through the area.
- Area required minimally about 10’x10’ per station, to contain and restrict biohazard dispersion.
- Access to the room a minimum of 1 hr/2 stations before and after the event time for set-up and clean-up of the event.
- C-arms require floors not be carpeted or special laminate preparation is required.
- Ease of access to room for moving shipping crate in and out
- Close to restrooms for scrubs/gowning changes.
- Access to a utility sink for instrument wash water.

Bioskills Technician Services

- The Bioskills Technician manages the bioskills workshop event venue, maintains equipment, instruments, and supplies.
- Preparation of bioskills workshop venue to ensure OSHA compliance and company “Bloodborne Pathogens Exposure Control Plan” policies are maintained.
- He/she will transfer and assume custodial responsibility of cadaveric specimens from licensed vendors, ensures the specimen(s) are accessible to only your workshop participants provides post-laboratory care of cadaveric specimens to ensure return to vendor for appropriate disposition.
  - The technician verifies proper specifications of specimen(s), reviews serology report(s) thoroughly to confirm each tissue specimen is negative for HIV 1 & 2, HbsAg and HCV, proper temperature, and condition of specimen.
- Sets up stations and Specimen preparation to client surgery ready use specifications
- Performs Instrument cleaning, assist Sponsor in repacking trays
- Cleaning tasks associated with body fluid spills.
- Custodial services prior to departure.

Biohazard Exposure Control

- No food or drinks of any type or container are permitted in the bioskills workshop.
- Personal belongings are stored outside the bioskills workshop, or in a designated area well outside the field of exposure to biohazard waste.
- Attendees are required to complete a “Cadaver Based Bio-Skills Training Workshop Disclaimer and Waiver” prior to entry into the workshop area.
- Everyone in laboratory who is within the operating field, including the visiting doctors/companies representatives and BSSS staff, are required to wear Personal protective equipment (PPE).
- PPEs provided, including gloves, protective goggles/masks/shield, gowns, head, and foot coverings for the laboratory workshop.
- All participants are responsible for wearing appropriate surgical attire beneath their PPEs (e.g. scrubs) and closed toed shoes are mandatory at all times.
Biohazard Exposure Control
• The lab entrances are to be posted with signs for Biohazard, gowns/entry instructions, no eating/drinking and radiation warnings (if applicable).
• All Laboratory doors should remain closed and/or the curtain drawn between the door and the laboratory area, during the event.
• PPEs are not to be worn outside of the laboratory.
• Any didactic or presentation should occur in a separate room.

Radiation Exposure Control
• C-arms are provided as needed, including lead vests, technician and delivery.
• In the event a location is selected where general public foot traffic is possible, barriers are erected to prevent the general public from standing closer than 20 feet from the event when the C-arm may be in use. Barrier minimally consist of Printed Barricade posters or tape stating “Caution Radiation Area”.
• When C-arms are in use, all event attendees should be equipped with lead apron, thyroid shields, and dosimeters (staff are provided dosimeters, attendees generally provide their own).

Manual Instrument Cleaning Procedure
• 5 step Decontamination cleaning process
  – Removal of bulk solids and contaminants
  – Pre-soak in neutral pH enzyme detergent soaking solution
  – Wash in neutral pH enzyme detergent soaking solution
  – Disinfection rinse
  – Instrument lubrication and corrosion control
• All-in-ONE™ UPS Universal Processing Solution (surgical instrument detergent enzyme cleaner lubricant), a neutral pH enzyme detergent soaking solution, is used in the field to pre-soak then hand wash instruments in bus-boy bins provided.
• Following manual washing instruments are rinsed thoroughly with clean water, then set out to air-dry on clean, disposable, absorbent, non-shedding towels.
• Instruments sent back to BSSS are re-washed in an automatic instrument washer, then treated with instrument lubricant “milk”.
5 step Decontamination cleaning process

- Removal of bulk solids and contaminants
  - Critical to remove tissue, fat, blood, and other contaminants from instruments PRIOR to washing
  - Pre-soak in neutral pH enzyme detergent soaking solution
  - All-in-ONE™ UPS Universal Processing Solution (surgical instrument detergent enzyme cleaner lubricant), a neutral pH enzyme detergent soaking solution, is used in the field to pre-soak then hand wash instruments in bus boy bins provided.
  - Wash in neutral pH enzyme detergent soaking solution

- Disinfection rinse

- Following manual washing instruments are rinsed thoroughly with clean water

- Instrument lubrication and corrosion control
  - Set out to air-dry on clean, disposable, absorbent, non-shedding towels.
  - Instruments sent back to Client, hospital or Bioskills Company for further re-processing, decontamination/sterilization in an automatic instrument washer and/or Sterilizer

Surface and Large Equipment Decontamination

- This applies to lab surfaces, (Floors, Walls, Table Tops) c-arm, endoscopic towers, refrigerators, surgical lights, video equipment, and other non-surgical instruments or equipment.
- Remove excess body fluids and tissue with a disposable, non-shedding disaffecting wipes, disposed of in biohazard buckets.
- For light surface contaminate, decontamination will be performed with 70% ethyl or isopropyl alcohol and 0.5–3% phenolic compounds applied on disposable towels.
- For heavy surface contaminate, decontamination will be performed with sodium hypochlorite (bleach) product, applied as a 5000 – 6000 ppm solution applied on disposable towels.

Bio-Hazard Waste Disposal

- Sharps Waste is placed in separate smaller bio-hazard sharps containers.
- Liquid waste can be disposed of down utility sinks or toilets. Stericycle is our contracted vendor for biohazard waste. We primarily use a sharps and medical waste mail back systems, as most BSSS events generate a small amount of biohazardous waste, such as sharps or “soft” medical waste. These mail back disposal kits meet all US Postal Service and US Department of Transportation (DOT) regulations for packaging, labels, and documentation.