## Enhanced BSL-1 Precautions for Animal Specimens with Unknown Risk

### Potential Hazards
- Examples include animal blood, tissue, serum, etc. Does not include live animals.
- Potential for many types of bloodborne pathogens, including but not limited to, Brucella spp., Leptospira spp., Hepatitis, and other bacterial and viral infections.
- In genetically-modified animals, tissue may have tumorigenic properties.
- Routes of exposure: percutaneous (non-intact skin, injections, punctures, lacerations) or mucous membrane (eyes, nose, mouth) contact.
- If exposed, acute or chronic illnesses could occur, i.e. chronic Hepatitis, Brucellosis, etc.

### Medical Screening
- None Required

### Transport
- Use a sealed, leak-proof container to transport materials.

### Work Practices
- Wash hands immediately after removing gloves and before leaving the work area.
- No mouth pipetting. No eating, drinking or applying cosmetics (including lip balm) in the work area.
- Use safe sharps practices (ex., safer sharps, no recapping, immediate disposal).
- If centrifuging, refer to Centrifugation Safety (linked here).

### Personal Protective Equipment (PPE)
- Lab coat (or gown/tyvek, etc.) and gloves required. Mucous membrane protection (e.g. safety glasses with a face mask or full-face shield) must be used if there’s a potential for splash or spray such as when working with tubing, valves, connection points, or liquids under pressure.
- Remove PPE prior to leaving the lab area. Wash hands.

### Cleaning & Disinfection
- Use an EPA-registered disinfectant. Refer to the label for dilution and contact time.
- **Liquid waste**: Treat with 1:10 household bleach (at least 0.5% sodium hypochlorite) for 20 minutes (or appropriate disinfectant) before being carefully poured down the drain (while wearing full face protection), followed by a copious amount of water.
- **Solid waste**: Contain material in a leak-proof bag and transport it in a secondary container to dispose in the buildings outside trash dumpster.
- **Sharps**: Activate safety device (if available) and place sharps immediately in puncture resistant sharps container (needle box); close when container is two-thirds filled or sooner. DO NOT attempt to jam needles into a full container. Follow solid disposal guidelines.

### Spills
- Wear full PPE, including a lab coat, disposable gloves, and full face protection.
- Pick up sharp items with mechanical device and place into sharps container.
- Cover spill with paper towel or other absorbent materials.
- Decontaminate area with 1:10 dilution of bleach: water (at least 0.5% sodium hypochlorite) or an appropriate disinfectant.
- Pour disinfectant on spill, first around the outer edges and circling in. Let sit for 20 minutes.
- Place all disposable material into a leak-proof bag and dispose as solid waste, see above.
- Repeat disinfection of area following the above steps.
- Refer to the Emergency Response Guide posted in your work area for more information.

### Exposures
- Remove contaminated clothing.
- Wash skin exposures with soap and water for 1 minute. For eye exposures, flood eyes with water from eyewash station or sink.
- Obtain medical attention, if necessary.
- **Report** to Employee Occupational Health and Wellness (EOHW) by dialing the BBF Hotline at 919-684-8115 or 115 from a Duke Phone.
- Complete the “Report a Work-Related Accident, Injury, or Illness” form found at [https://hr.duke.edu/wellness/workers-compensation](https://hr.duke.edu/wellness/workers-compensation)

### Training
- Complete minimum safety training requirements for your job.
- All personnel shall read and fully adhere to this document.

### Questions
- Contact OESO - Biological Safety Division at 919-684-8822 or biosafety@duke.edu