Principal Investigator: Date Approved:

**Handling Human Tissues and Cells**

This SOP applies to individuals who work with human materials, including cells, blood, serum, tissues, feces and body fluids, where aerosols may be generated or samples are known to contain pathogens.

Individuals working with human materials have an increased risk for exposure to bloodborne pathogens, such as Hepatitis B virus, Hepatitis C virus or Human Immunodeficiency virus. The OSHA Bloodborne Pathogens standard (CFR 1910.1030) describes the requirement for working with these cells, including engineering and work practice controls and PPE.

**Personal Protective Equipment**



**Engineering Controls, Equipment, and Materials**

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| **Biosafety Cabinet (BSC)** | Enclosed, ventilated laboratory workspace that protects the worker from aerosols |
| **Biohazard Waste Container(s)** | Solid, sharps and/or liquid waste containers, as appropriate, compliant with medical waste handling requirements |
| **Disinfectant** | Appropriate for human tissues and cells (see Decontamination SOP) |
| **Splash Shield** | Plexiglas or other shield that separates open containers of hazardous materials from the user and behind which work can be conducted |

1. Don and doff PPE appropriate for procedures involving human materials (e.g., safety goggles required when splashing is anticipated)

**Procedures**

1. Conduct all work in a Biosafety Cabinet.
2. Decontaminate instruments, equipment and work surfaces that have come into contact with human materials with an appropriate EPA-registered disinfectant
3. Dispose of items that have come into contact with human materials as biohazardous waste
4. Dispose of sharps (e.g., needles, scalpels, syringes) as biohazardous sharps waste
5. Wash hands with soap and water immediately after glove removal (see Hand Sanitation SOP)

**Cautions and Considerations**

* All work must be registered with and approved by the institutional Biosafety Committee, including an emergency response plan for exposures
* The laboratory must have a facility-specific Biosafety Manual or Exposure Control Plan
* Bloodborne Pathogens training must be conducted on an annual basis: contact EHS Biosafety
* Additional PPE (e.g., double gloves) may be required for certain procedures
* Reduce or eliminate sharps and glass (consult with EHS Biosafety for safer alternatives)
* Follow post-exposure procedures for an exposure and contact EHS at 801-581-6590 within 12 hours

**References**

1. [University of Utah Exposure Control Plan](https://ibc.utah.edu/biosafety-policies.php)