



Case Western Reserve University
Department of Environmental Health & Safety

Laboratory Specific Supplement:

CWRU Exposure Control Plan for Biohazards (including Bloodborne Pathogens)

All laboratories at CWRU that handle any biohazardous materials including bloodborne pathogens and other potentially infectious materials, as defined by OSHA, must complete a supplement to the University's exposure control plan. This supplement is to be updated by the laboratory's exposure control officer on an annual basis or as there are changes to procedures, pathogens or laboratory personnel.

The exposure control plan serves as laboratory training tool as well a means to communicate laboratory hazards to non-laboratory personnel such as security, maintenance, EH&S and first responders. It is for this reason that this ECP supplement should be located in the lab and easy to find.

This supplement needs to address the following:

- PI and laboratory staff information and training
- Biohazard(s) information
- Possible exposure risk (risk analysis)
- Risk mitigation including engineering and administrative controls, along with required PPE
- Decontamination procedures

Principle Investigator: _____

PI office location: _____

PI phone and email: _____

Laboratory Exposure Control Officer (if not PI): _____

Exposure Control Officer phone & email: _____

Materials of Human or Non-Human Primate Origin: (Only one line needs to be addressed for similar materials)

Material (cells, tissue, organ)	Obtained from a primary donor or vendor?	Do these materials have a product specification sheet?	If obtained from a primary donor, is your study population known or expected to be infected with a pathogen? If so, what.	Are you using known oncogenic, tumorigenic or cancerous materials?

Potential Exposure Information:

What are the potential transmission routes for any pathogens you are using?

- Airborne Bloodborne Ingestion
 Mucus Membranes Opportunistic Zoonotic

Briefly describe symptoms of exposure:

Do you have post-exposure procedures in place? Yes No

If Yes, does University Health Services have a copy of these procedures? Yes No

General Regulatory Information:

Do your experiments include the use of recombinant or synthetic oligonucleotides (including but not limited to GPF, luciferase, nanoparticles, RNAi in animals)? Yes No

Do your experiments include the use of transgenic animals or plants (including *D. melanogaster*, *C. elegans* or yeast)? Yes No

Are you using a select agent? Yes Yes, exempt quantities No

Will you be using hazardous chemicals simultaneous with biohazards? Yes No

Will you be using radioactive materials simultaneous with biohazards? Yes No

Aerosols:

Will you be performing any aerosol producing procedures, such as:

- | | | | |
|--|--------------------------------------|------------------------------------|-------------------------------------|
| <input type="checkbox"/> Centrifugation | <input type="checkbox"/> Blending | <input type="checkbox"/> Vortexing | <input type="checkbox"/> Sonicating |
| <input type="checkbox"/> Pipetting | <input type="checkbox"/> Mixing | <input type="checkbox"/> Grinding | <input type="checkbox"/> Necropsy |
| <input type="checkbox"/> Flow cytometry /sorting | <input type="checkbox"/> Other _____ | | |

What types of engineering controls will be employed to mitigate the aerosol risks?

- | | | | |
|--|--|--------------------------------------|---------------------------------------|
| <input type="checkbox"/> Biosafety cabinet | <input type="checkbox"/> Sealed rotors | <input type="checkbox"/> Tube opener | <input type="checkbox"/> Sealed vials |
| <input type="checkbox"/> HEPA filter | <input type="checkbox"/> Other _____ | | |

Sharps:

Do any of your procedures include the use of sharps, such as:

- | | | | |
|---|--------------------------------------|------------------------------------|---------------------------------|
| <input type="checkbox"/> Needles and syringes | <input type="checkbox"/> Scalpels | <input type="checkbox"/> Glassware | <input type="checkbox"/> Razors |
| <input type="checkbox"/> Pasture pipettes | <input type="checkbox"/> Other _____ | | |

Will any of your procedures utilizing sharps involve:

- | | |
|---|---|
| <input type="checkbox"/> Human subjects | <input type="checkbox"/> Non-anesthetized, living animals |
|---|---|

What types of engineering controls will be employed to mitigate the sharps risks?

- | | | | |
|---|---|--|--------------------------------|
| <input type="checkbox"/> Sharps container | <input type="checkbox"/> Broken glass box | <input type="checkbox"/> Broom & dustpan | <input type="checkbox"/> Tongs |
| <input type="checkbox"/> Recapping stand | <input type="checkbox"/> Engineered (safe) sharps | | |
| <input type="checkbox"/> Other _____ | | | |

Disinfection/Decontamination:

Which of the following primary disinfectants will be employed for work space and spill clean-up?

- | | | |
|---|---------------------------------------|--------------------------------------|
| <input type="checkbox"/> 10% Bleach | <input type="checkbox"/> 1-5-1 Clidox | <input type="checkbox"/> Phenolytics |
| <input type="checkbox"/> Quaternary ammonia | <input type="checkbox"/> Other _____ | |

Personal Protective Equipment:

Indicate all PPE to be used while working with the biohazards listed in this document:

- | | | | |
|-----------------|---|---|--------------------------------------|
| Gloves: | <input type="checkbox"/> Nitrile | <input type="checkbox"/> Latex | <input type="checkbox"/> Other _____ |
| Eye Protection: | <input type="checkbox"/> Safety glasses | <input type="checkbox"/> Safety goggles | <input type="checkbox"/> Face shield |
| Lab coat: | <input type="checkbox"/> Reuseable | <input type="checkbox"/> Disposable | |
| Respirator: | <input type="checkbox"/> N95 | <input type="checkbox"/> Cartridge | <input type="checkbox"/> PAPR |
| Additional PPE: | <input type="checkbox"/> Tyvek Suit | <input type="checkbox"/> Shoe covers | <input type="checkbox"/> Hair bonnet |
| | <input type="checkbox"/> Apron | <input type="checkbox"/> Ear plugs | |
| Other _____ | | | |

Biohazardous/Medical Waste:

Waste containment:

- Rigid sharps container
- Broken glass box

- Cardboard burn box
- Other _____

- Red bags

Hazard neutralization:

- Autoclave
- Other _____

- Mixed waste, EH&S to dispose

- Chemical disinfection

Work Practices:

Please describe any specific work practices that will be employed while utilizing the biohazards listed in this document which have not previously been described in University's ECP or this supplement:

Assurances:

As the Principle Investigator of the research described within this document, I understand the safety of all persons who enter my laboratory is ultimately my responsibility. Furthermore, I understand it is my duty to:

- Ensure all new staff and students have undergone EH&S Laboratory Standard and Biosafety training.
- Provide laboratory specific training to all new personnel. This will include a review of this document as well as a review of CWRU's Exposure Control Plan and Laboratory Safety Manual.
- Ensure annual laboratory and EH&S Biosafety retraining for all staff members.
- Provide all necessary Personal Protective Equipment to all laboratory members.
- Update and re-submit this document annually or whenever there is a change in procedure, pathogen or staff.
- Ensure each member of the laboratory has been adequately informed of the risks associated with the biohazards in use and is aware of the symptoms of exposure.
- Properly train each laboratory member on each procedure to be performed and all equipment.

Signed _____ Date _____
Exposure Control Officer

Signed _____ Date _____
Principle Investigator

Electronic signatures are acceptable. The signature of the ECO and/or the PI also represents that all laboratory staff have reviewed and understand this document.

Continued from pages 2 & 3:

Laboratory Personnel: (include all personnel who have access to the laboratory)

Name	Position	Training Completed (Biohazard and Lab Standard)	Email	Phone number

Biohazard Locations: (list all laboratory locations where biohazards are used or stored)

Building	Room Number	BSL/ABSL level	Please list storage and containment equipment in each room (<i>ex. -80 freezer, incubator, etc.</i>) For biosafety cabinets, list the Class and Type (<i>ex. Class II A2</i>)

Biohazard Inventory: (if only utilizing materials of human or non-human primate origin, please proceed to the next question)

Type of hazard (virus, bacteria, toxin, parasite, recombinant or synthetic oligonucleotides, etc.)	Species/ Name	Risk Group and BSL/ABSL level?	Medical monitoring required or recommended (if yes, what?)	Additional concerns for immunocompromised individuals?

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