Biohazard Determination Flow Chart for Research

Research involving recombinant and synthetic nucleic acid molecules, artificial gene transfer, biologically derived toxins, or infectious agents.

Yes

PI Completes Risk Assessment Process and determines biosafety level.

Register and submit the research protocol application (SOPs, decontamination, waste disposal plan) with the Institutional Biosafety Committee (IBC). Refer to www.research.umn.edu/ibc/forms.html

IBC approves the application.

Bloodborne Pathogen (BBP) Training one time if not using human materials. BBP annually if using human materials. Biological Safety in the Lab training one time. If working with synthetic or recombinant nucleic acid molecules, then NIH Guideline Training one time.

No

Research involving the use of human material or non-human primate material but does not involve any items listed above.

Yes

PI Completes Risk Assessment and writes SOPs (Decontamination & Spill Cleanup Plan and Waste Disposal Plan.)

PI uses the Risk Assessment to determine the biosafety level (BSL). Unfixed human and non-human primate materials must be handled using BSL2 practices and containment.

Bloodborne Pathogen Training, every year.

No

Not considered to be a biohazard.

Refer to Page 2 for BSL 1 and BSL 2 Requirements
Biohazard Determination Flow Chart for Research

**BSL 1 - General Requirements** - for more detail refer to CDC/NIH publication Biosafety in Microbiological and Biomedical Laboratories (BMBL 5) 5th Edition.

- Working with Risk Group 1 agents that are not known to cause disease/illness in healthy adults.
- Signage on Door
- PPE: Gloves. Lab coat (recommended), eye and face protection (when needed).
- Sink
- If hazardous chemicals are also used in room it is recommended that the laboratory is under negative pressure.
- Inspected initially and periodically thereafter

**BSL 2 - General Requirements** - for more detail refer to CDC/NIH publication Biosafety in Microbiological and Biomedical Laboratories (BMBL 5) 5th Edition.

- Working with Risk Group 2 agents that are associated with disease or illness in humans, but in which the disease/illness is rarely serious and preventative or therapeutic interventions are available.
- PPE: Lab coat, gloves, respiratory protection and goggles/safety glasses (as needed)
- Sink
- Eyewash
- Controlled access
- Biosafety cabinets – when infectious aerosols may be generated during manipulation of biohazardous materials
- Signage on doors. Biohazard sign on refrigerators, incubators, etc.
- Decontamination procedures and autoclave
- Emergency procedures
- Spill clean-up kit and procedures
- Biohazard waste procedures and covered containers for biohazardous waste
- Required negative pressure for room
- Inspected annually and every 2 years for the compliant labs.