Does your lab use/handle any viable biological materials (blood, body fluids, tissues, microorganisms, viruses, select agent-listed materials including toxins)?

NO

Will you be working with

experimentally infected?

If YES, Animal Biosafety

for Researchers will be

required. ABSL-2 area

can be granted by Division of Animal Care.

orientation must also be

completed before access

animals that have been

YES

Do you handle BSL-2

designated materials?

YES

Principles & Practices of Biosafety

doing any of the following material-

training required initially and

specific activities?

Will you be working

with Herpes B risk

materials? If YES,

Herpes B Awareness

training is required

in addition to

Occupational

Health.

enrollment with

refresher annually.* Will you be

No biosafety training required

NO

Will you be working with

biological toxins? If YES,

more information.

Toxin Safety training will be

required; contact the BSO for

Are you a PI?

Biosafety 101:

recommended

even if you do not handle materials

SMP training

strongly

yourself.

YES

NO



Updated 10.2019

Use this tree in conjunction with the table on the following page to determine appropriate training for your lab. Please note that biosafety training requirements apply initially and annually thereafter.

No biosafety training required but Biosafety 101: SMP recommended if entering lab where biologicals are used. Minimally, PI or Lab Manager must provide an awareness training covering description and risk of materials in use and safety procedures for entering/exiting area.

Biological Materials Categories			
Term	Definition		
Select agent-listed materials	Biological agents and toxins identified by federal agencies as potential bioweapons (see <u>list</u>); possession of any listed agents requires immediate notification to the BSO (480-7078) if previously undeclared		
BSL-1 designated materials	Non-infectious microorganisms, uninfected animal tissues, body fluids and cells (other than non-human primate), plant materials, soil samples		
BSL-2 designated materials	Agents infectious to humans animals or plants, viral vectors derived from infectious viruses, human- or nonhuman primate-derived materials, biological toxins		
Biological toxins	Biologically-derived toxins and venoms that could, upon a single exposure event, pose a risk to health in an unimmunized human		
Herpes B risk materials	Old World nonhuman primate blood, body fluids or tissues (macaque- derived)		

* If you <u>only</u> handle human-derived clinical samples from populations presumed to be free of infectious disease, then you may take the Biosafety 101 training in conjunction with "working safely with human-derived materials" online module to fulfill your initial training requirements. If you handle human cells or materials from infected populations, complete Principles & Practices of Biosafety.

Do you handle BSL-1

designated materials?

YES

required or PI needs to

deliver and document

equivalent training

Biosafety 101: SMP training



Please contact the VEHS Biosafety Team (322-2057) for assistance with additional questions.

Biosafety Training Guide for Principal Investigators & Lab Supervisors

This document is intended to assist PI's in determining what biosafety training is needed for their lab staff based on the materials that they will handle in the lab. When performing their own training, PI's should generate and maintain a dated training record that contains a summary of the topics covered, as well as names and signatures of those in attendance. <u>Training needs to be completed initially and annually thereafter, regardless of biosafety level.</u> Note: BMBL refers to the CDC/NIH Biosafety in Microbiological and Biomedical Laboratories, 5th edition.

Materials to be handled by person	Applicable Standard	What training is required?	How can personnel be trained?
 Recombinant DNA molecules requiring only BSL-1 containment. biological agents (or materials containing such) not regarded as infectious to humans, animals or plants uninfected animal body fluids, tissues other than nonhuman primate-derived materials*. 	NIH Guidelines & CDC BMBL	 Regulatory awareness Standard microbiological practices Health/immune status considerations Basic incident response procedures These topics are included in the VEHS <u>Biosafety 101:</u> <u>Standard Microbiological Practices</u> course. 	 Senior lab staff with working knowledge of institutional biosafety policies and biosafety practices applicable to the lab. VEHS Biosafety with lab-specific elements reinforced by senior lab staff.
 Recombinant DNA molecules requiring BSL-2 containment biological agents (or materials containing such) regarded as infectious to humans, animals or plants human or nonhuman primate-derived cells* 	NIH Guidelines, CDC BMBL, OSHA BBP Standard (for human cells)	 All items listed for BSL-1, <u>AND</u> Biosafety cabinet operation Sharps safety Exposure control and response procedures Medical surveillance (as applicable) These topics are included in the VEHS <u>Principles &</u> <u>Practices of Biosafety</u> course. 	 Senior lab staff with working knowledge of institutional biosafety policies and biosafety practices applicable to the lab. VEHS Biosafety with lab-specific elements reinforced by senior lab staff. NOTE: At this level, PI must assure that personnel demonstrate proficiency in performing lab procedures requiring biocontainment.
Handling live animals that have been challenged with an infectious agent or otherwise require ABSL- 2 containment.	NIH Guidelines & CDC BMBL	 All items listed for BSL-2, <u>AND</u> <u>VEHS Animal Biosafety for Researchers</u> training ABSL-2 area orientation (performed by VEHS Biological & Animal Care Safety upon request when personnel have completed all prerequisite trainings) 	 VEHS Biosafety with lab-specific elements reinforced by senior lab staff. NOTE: At this level, PI must assure that personnel demonstrate proficiency in performing lab procedures requiring biocontainment.
Use of toxins of biological origin	CDC BMBL, CDC Select Agent Standard	 All items listed for BSL-2, <u>AND</u> Lab-specific toxin SOP training to be provided by lab's designated trainer Chemical safety training (<u>offered by VEHS Lab</u> <u>Safety</u>) 	VEHS Biosafety with lab-specific elements reinforced by senior lab staff. NOTE: At this level, PI must assure that personnel demonstrate proficiency in performing lab procedures requiring biocontainment.
Basic research use of human-derived materials other than cells	OSHA Bloodborne Pathogens (BBP) Standard	 Explanation of BBPs Explanation of OSHA BBP Standard & Vanderbilt's Exposure Control Plan Exposure control & response procedures for those handling materials. These topics are included in the VEHS <u>Biosafety 101:</u> <u>Standard Microbiological Practices</u> course in conjunction with <u>Working with Human-derived</u> <u>Materials</u> course. 	 Senior lab staff with working knowledge of institutional biosafety policies and biosafety practices applicable to the lab. VEHS Biosafety with lab-specific elements reinforced by senior lab staff.

*If nonhuman primate materials in use are from Old World/Macaque species, please contact VEHS BACS for scheduling Herpes B Awareness training and to determine additional actions.