

## Required Training for BSL-3

1. Completion of EHRS general lab safety requirements
  - a. Penn Profiler (<http://knowledgeink.upenn.edu/pennprofiler/>): Required annually for all University employees (and individuals working in labs, including students)
  - b. Introduction to Laboratory and Biological Safety Part 1- EHRS (UP.83015.ITEM.INTROBPART1): online via Knowledge Link; Required once
  - c. Introduction to Laboratory and Biological Safety Part 2- EHRS (UP.83015.ITEM.INTROBPART2): in-person, offered 2x per month; Required once
  - d. Laboratory Safety Update-EHRS (UP.83015.ITEM.CHLUW): online via Knowledge link; Required one year after Intro training, then every 2 years
  - e. Management of Laboratory Waste- UNIV (UP.83015.ITEM.WMLUW): online via Knowledge Link; Required every 2 years
  - f. Biosafety Cabinet Operation- EHRS (UP.83015.ITEM.BCLIW): online via Knowledge Link; Required once
  - g. Bloodborne Pathogens V2 (UP.83015.ITEM.BBPV2): online via Knowledge Link; Required annually for all those who work with human materials, including cell lines
  - h. Recombinant or Synthetic Nucleic Acid Guidelines-EHRS (UP.83015.ITEM.RDNA): online via Knowledge Link; Required every 3 years for those working with rDNA, including modified microorganisms
2. Demonstrate proficiency in BSL-2 practices and procedures in BSL-2 lab: Observation by Biosafety Officer (BSO) or IBC approved trainer
3. Didactic Training: provided by BSO – in person PowerPoint and discussion; can done with multiple individuals
  - a. Overview of design, procedures, policies of BSL-3 lab: facility features, differential pressure, PPE requirements, waste procedures, biosafety cabinet use, materials handling, emergency alarms
  - b. Must pass a written test at end of this training
4. Complete enrollment in respiratory protection program: required prior to entry in BSL-3 lab and annually
  - a. Medical clearance
    - i. Staff: Occupational Medicine
    - ii. Students: Student Health Services
  - b. EHRS provides fit test and training for N95 respirator, PAPR training
5. Tour and orientation of laboratory: by BSO or IBC approved trainer
  - a. 1-2 people maximum per session
  - b. Entrance and exit procedures including PPE donning and doffing
  - c. Emergency procedures
6. Observation Phase I – cold work in BSL-2: live observation in user's BSL-2 lab, demonstrate proficiency in IBC approved SOPs and general BSL-3 practices
7. Observation Phase II – cold work in BSL-3: live observation in user's BSL-3 lab space without the infectious agent(s), demonstrate proficiency in IBC approved SOPs and BSL-3 practices
8. Observation Phase III – hot work in BSL-3: live observation in user's BSL-3 lab space without the infectious agent(s), demonstrate proficiency in IBC approved SOPs and BSL-3 practices
9. Test: After completion of all hands-on training and observation, user will meet with BSO and demonstrate proficiency in BSL-3 policies, practices, and emergency response.

Note: Observation Phase I, II, III will vary depending on each user's prior experience and skill level. Each trainee will progress to next phase under the approval of BSO after demonstrating proficiency. These sessions are one on one with BSO or IBC approved trainer.