BSL 2

Note: This document does not cover all requirements listed in the 5th edition BMBL (Biosafety in Microbiological and Biomedical Laboratories), only some of the changes.

1. A laboratory-specific biosafety manual must be prepared, adopted as policy, and must be available and accessible. Previously, biosafety procedures could be incorporated into standard operating procedures, instead of having a dedicated biosafety manual (BMBL, B.4.)

2. The laboratory supervisor must ensure that laboratory personnel “demonstrate proficiency” in standard and special microbiological practices safe before working at this biosafety level. Previously, demonstration of proficiency before working with agents was not specifically required (BMBL, B.5.)

3. Spills involving infectious materials must be contained, decontaminated, and cleaned up by staff properly training and equipped to work with infectious material. This is a new requirement for BSL-2. Previously, decontamination of spills by “trained, equipped personnel” was not specifically required until BSL-3 (BMBL, B.7a.)

4. Animals and plants are not permitted in the laboratory unless associated with the work being performed. Previously, BSL-2 restrictions applied to animals, but not plants. Plant restrictions were first noted in BSL-3 (BMBL, B.9.)

5. Eye and face protection must be disposed of with other contaminated laboratory waste or be decontaminated before reuse – This is a new requirement (BMBL, C.3.)

6. Eye, face, and respiratory protection should be used in rooms containing infected animals as determined by the risk assessment. This is a new requirement for BSL-2. Previously, it was a requirement for BSL-3 (BMBL, C.5.)

7. Laboratory doors should be self-closing and have locks in accordance with the institutional policies. Previously, lockable doors at this level were required for facilities housing “restricted” agents (BMBL, D.1.)

8. Laboratories must have a sink for hand washing. The sink may be manually, hands-free, or automatically operated. It should be located near the exit door. Previously, a hand-washing sink was required, but not near the exit door until BSL-3. (BMBL, D.2.)

9. Carpets and rugs in laboratories are not permitted. Previously, language for BSL-2 laboratories was that rugs and carpets are inappropriate. (BMBL, D.3.)

10. Vacuum lines should be protected with HEPA filters (or equivalent). Filters must be replaced as needed. This is a new requirement for BSL-2. Previously, HEPA filters were not required until BSL-3. (BMBL, D.7.)

11. Provisions to assure proper safety cabinet and air system performance must be verified. This requirement is new for BSL-2. Previously recommended at BSL-3. (BMBL, D.10.)