Inspection Guidance

Biosafety Level 1 is suitable for work involving well-characterized agents not known to consistently cause disease in immunocompetent adult humans, and present minimal potential hazard to laboratory personnel and the environment. BSL-1 laboratories are not necessarily separated from the general traffic patterns in the building. Work is typically conducted on open bench tops using standard microbiological practices. Special containment equipment or facility design is not required, but may be used as determined by appropriate risk assessment. Laboratory personnel must have specific training in the procedures conducted in the laboratory and must be supervised by a scientist with training in microbiology or a related science. The following standard practices, safety equipment, and facility requirements apply to BSL-1.

Sharps

Whenever practical, laboratory supervisors should adopt improved engineering and work practice controls that reduce risk of sharps injuries. Precautions including the following must always be taken with sharp items:

- Inform personnel that needles must not be bent, sheared, broken, recapped, removed from disposable syringes, or otherwise manipulated by hand before disposal
- Place all used needles and syringes in conveniently located puncture-resistant containers for disposal.
- Place all non-disposable sharps in a hard walled container for transport to a processing area for decontamination, preferably by autoclaving.
- Use mechanical means, such as a brush and dustpan, tongs, or forceps to clean up broken glassware and substitute plastic ware whenever possible.

Decontamination

Record the method of decontamination, how decontamination is verified, and autoclave location if it is used for decontamination. If removed from the lab for decontamination, materials must be in durable, leak-proof container and secured for transport.

OPIM = Other Potentially Infectious Materials

The lab should not have rugs, carpets, or fabric furniture and allow sufficient space between and around furnishings and equipment to be accessible for cleaning.

Pest Management

Appendix G of the BMBL details the components of an effective integrated pest management program. During inspections monitor for indicators of poor or ineffective pest management, including live or dead insects, rodent or insect droppings.

Occupational Health

Personal health status may impact an individual's susceptibility to infection, ability to receive immunizations or prophylactic interventions. Individuals having these conditions should be encouraged to self-identify to the institution's healthcare provider for appropriate counseling and guidance.

PPE—Personal Protective Equipment

Gloves should be selected based on a risk assessment and be compatible with materials handled. Alternatives to latex must be available and are preferred.

Facility

Bench tops should not show evidence of damage by water, heat or chemicals and able to support the mechanical loads placed on them.

Biosafety Level 2 Biosafety Level 2 builds upon BSL-1. BSL-2 is suitable for work involving agents that pose moderate hazards to personnel and the environment. It differs from BSL-1 in that: 1) laboratory personnel have specific training in handling pathogenic agents and are supervised by scientists competent in handling infectious agents and associated procedures; 2) access to the laboratory is restricted when work is being conducted; and 3) all procedures in which infectious aerosols or splashes may be created are conducted in BSCs or other physical containment equipment. The following standard and special practices, safety equipment, and facility requirements apply to BSL-2.

Protective lab coats, gowns, or uniforms are recommended for BSL-1, but are required for BSL-2 work. Similarly Biosafety Cabinets are not required for handling BSL-1 agents but are required for potential aerosolizing activities with BSL-2 agents. These activities include but are not limited to pipetting, centrifuging, grinding, blending, shaking, mixing, sonicating, opening containers of infectious materials, inoculating animals intranasally, and harvesting infected tissues from animals or eggs. Also, if high concentrations or large volumes of infectious agents are used. Such materials may be centrifuged in the open laboratory using sealed rotor heads or centrifuge safety cups
Any biosafety cabinet that is in use, must have provisions to assure proper performance.