

BSL-1 vs BSL-2 Requirements (BMBL 6th Edition)

Side-by-Side Comparison Table

Category	BSL-1 Requirements	BSL-2 Requirements
Agents Handled	Well-characterized agents <i>not</i> known to cause disease in healthy adults; minimal hazard.	Agents associated with human disease; moderate hazards to personnel/environment.
Training	Standard microbiological training; supervised by trained scientist.	<i>Specific training</i> in handling pathogenic agents; annual updates; supervised by competent scientists experienced with infectious agents.
Access Control	Not necessarily restricted; labs may be open to general building traffic.	Access <i>restricted</i> when work is conducted; visitors receive hazard information.
Standard Practices		
Handwashing required	Yes	Yes
No eating, drinking, cosmetics, or touching of mucosals	Yes	Yes
Follow written safety procedures	Yes	Yes
Institutions must have policies for occupational health	No	Yes
Personnel informed of immune competence issues	No	Yes
Enhanced documentation and training	No	Yes
PPE	As needed, based on risk: Lab coat/gown, gloves, face/eye protection	<i>Required:</i> Lab coat/gown, gloves, face/eye protection.

Primary Containment Equipment	No special containment required; open bench work typical.	Biological Safety Cabinet (Class I or II) required for aerosol-generating or splash-prone procedures.
Sharps Precautions	Standard sharps precautions.	Enhanced sharps protocols; written procedures; minimizing sharps use; safer devices recommended.
Decontamination	Surfaces decontaminated with EPA approved disinfectant routinely and after spills. Autoclave access recommended.	Same as BSL-1 <i>plus</i> : agent-appropriate decon methods; written spill response; all waste decontaminated before disposal.
Facility Design		
Self-closing doors	No	Yes
Handwashing sink	Yes	Yes
Handwashing sink near exit	No	Yes
BSCs vented properly	No	Yes
Eyewash station recommended	No	Yes
Autoclave available (in facility or suite)	No	Yes
Aerosol/Splash Risk Mitigation	Avoid splashes/aerosols; basic physical controls.	<i>All</i> aerosol/splash procedures conducted in a BSC or other containment device.
Health Surveillance	Not typically required except by institutional policy.	Required institution-specific occupational health considerations; personnel advised of immune status issues.
Safety Manual	Safety manual available and periodically reviewed.	Facility-specific biosafety manual required, containing agent-specific SOPs and decontamination methods