



Summary of Recommended Biosafety Levels for Infectious Agents

BSL	Agents	Practices	Primary Barriers and Safety Equipment	Facilities (Secondary Barriers)
1	Not known to consistently cause diseases in healthy adults	Standard microbiological practices	<ul style="list-style-type: none"> ■ No primary barriers required. ■ PPE: laboratory coats and gloves; eye, face protection, as needed 	Laboratory bench and sink required
2	<ul style="list-style-type: none"> ■ Agents associated with human disease ■ Routes of transmission include percutaneous injury, ingestion, mucous membrane exposure 	BSL-1 practice plus: <ul style="list-style-type: none"> ■ Limited access ■ Biohazard warning signs ■ “Sharps” precautions ■ Biosafety manual defining any needed waste decontamination or medical surveillance policies 	Primary barriers: <ul style="list-style-type: none"> ■ BSCs or other physical containment devices used for all manipulations of agents that cause splashes or aerosols of infectious materials ■ PPE: Laboratory coats, gloves, face and eye protection, as needed 	BSL-1 plus: <ul style="list-style-type: none"> ■ Autoclave available
3	Indigenous or exotic agents that may cause serious or potentially lethal disease through the inhalation route of exposure	BSL-2 practice plus: <ul style="list-style-type: none"> ■ Controlled access ■ Decontamination of all waste ■ Decontamination of laboratory clothing before laundering 	Primary barriers: <ul style="list-style-type: none"> ■ BSCs or other physical containment devices used for all open manipulations of agents ■ PPE: Protective laboratory clothing, gloves, face, eye and respiratory protection, as needed 	BSL-2 plus: <ul style="list-style-type: none"> ■ Physical separation from access corridors ■ Self-closing, double-door access ■ Exhausted air not recirculated ■ Negative airflow into laboratory ■ Entry through airlock or anteroom ■ Hand washing sink near laboratory exit