

**Table 2. Summary of Recommended Biosafety Levels for Infectious Agents**

BSL	Agents	Practices	Primary Barriers and Safety Equipment	Facilities (Secondary Barriers)
1	<ul style="list-style-type: none"> <li>■ Not known to consistently cause diseases in healthy adults</li> </ul>	Standard microbiological practices	<ul style="list-style-type: none"> <li>■ No primary barriers required.</li> <li>■ PPE: laboratory coats and gloves; eye, face protection, as needed</li> </ul>	Laboratory bench and sink required
2	<ul style="list-style-type: none"> <li>■ Agents associated with human disease</li> <li>■ Routes of transmission include percutaneous injury, ingestion, mucous membrane exposure</li> </ul>	<p>BSL-1 practice plus:</p> <ul style="list-style-type: none"> <li>■ Limited access</li> <li>■ Biohazard warning signs</li> <li>■ "Sharps" precautions</li> <li>■ Biosafety manual defining any needed waste decontamination or medical surveillance policies</li> </ul>	<p>Primary barriers:</p> <ul style="list-style-type: none"> <li>■ BSCs or other physical containment devices used for all manipulations of agents that cause splashes or aerosols of infectious materials</li> <li>■ PPE: Laboratory coats, gloves, face and eye protection, as needed</li> </ul>	<p>BSL-1 plus:</p> <ul style="list-style-type: none"> <li>■ Autoclave available</li> </ul>
3	<ul style="list-style-type: none"> <li>■ Indigenous or exotic agents that may cause serious or potentially lethal disease through the inhalation route of exposure</li> </ul>	<p>BSL-2 practice plus:</p> <ul style="list-style-type: none"> <li>■ Controlled access</li> <li>■ Decontamination of all waste</li> <li>■ Decontamination of laboratory clothing before laundering</li> </ul>	<p>Primary barriers:</p> <ul style="list-style-type: none"> <li>■ BSCs or other physical containment devices used for all open manipulations of agents</li> <li>■ PPE: Protective laboratory clothing, gloves, face, eye and respiratory protection, as needed</li> </ul>	<p>BSL-2 plus:</p> <ul style="list-style-type: none"> <li>■ Physical separation from access corridors</li> <li>■ Self-closing, double-door access</li> <li>■ Exhausted air not recirculated</li> <li>■ Negative airflow into laboratory</li> <li>■ Entry through airlock or anteroom</li> <li>■ Hand washing sink near laboratory exit</li> </ul>
4	<ul style="list-style-type: none"> <li>■ Dangerous/exotic agents which pose high individual risk of aerosol-transmitted laboratory infections that are frequently fatal, for which there are no vaccines or treatments</li> <li>■ Agents with a close or identical antigenic relationship to an agent requiring BSL-4 until data are available to redesignate the level</li> <li>■ Related agents with unknown risk of transmission</li> </ul>	<p>BSL-3 practices plus:</p> <ul style="list-style-type: none"> <li>■ Clothing change before entering</li> <li>■ Shower on exit</li> <li>■ All material decontaminated on exit from facility</li> </ul>	<p>Primary barriers:</p> <ul style="list-style-type: none"> <li>■ All procedures conducted in Class III BSCs or Class I or II BSCs in combination with full-body, air-supplied, positive pressure suit</li> </ul>	<p>BSL-3 plus:</p> <ul style="list-style-type: none"> <li>■ Separate building or isolated zone</li> <li>■ Dedicated supply and exhaust, vacuum, and decontamination systems</li> <li>■ Other requirements outlined in the text</li> </ul>