

Risk Categories	Areas Defined (<u>Examples ONLY</u> not all inclusive)								
<p>1 (Low)</p>	<p>Areas with general hazardous chemicals that do not have special risks. Examples:</p> <table border="0"> <tr> <td>1. Biosafety Level One (BSL1) laboratories</td> <td>3. Classroom teaching labs (Academic teaching)</td> </tr> <tr> <td>2. Labs with small useable amounts of chemicals</td> <td>4. Lasers (Class 1, 2, 3A)</td> </tr> </table>	1. Biosafety Level One (BSL1) laboratories	3. Classroom teaching labs (Academic teaching)	2. Labs with small useable amounts of chemicals	4. Lasers (Class 1, 2, 3A)				
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<p>2 (Moderate)</p>	<p>Areas considered special risk laboratories. This defines the majority of laboratories. These labs use and store particularly hazardous chemicals (select carcinogens, reproductive toxins, and toxic chemicals.) Examples:</p> <table border="0"> <tr> <td>1. All radioisotopes (use and storage)</td> <td>5. Large volumes of chemicals in storage (flammable cabinets etc.)</td> </tr> <tr> <td>2. Radiation producing equipment (X-rays, accelerators)</td> <td>6. High voltage electrical equipment (>600 volts)</td> </tr> <tr> <td>3. Biosafety Level Two (BSL2) containment laboratories with Non-Select Agents</td> <td>7. DEA Controlled Substances</td> </tr> <tr> <td>4. Lasers (Class 3B, 4)</td> <td>8. Lab performing research with vertebrate animals</td> </tr> </table>	1. All radioisotopes (use and storage)	5. Large volumes of chemicals in storage (flammable cabinets etc.)	2. Radiation producing equipment (X-rays, accelerators)	6. High voltage electrical equipment (>600 volts)	3. Biosafety Level Two (BSL2) containment laboratories with Non-Select Agents	7. DEA Controlled Substances	4. Lasers (Class 3B, 4)	8. Lab performing research with vertebrate animals
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<p>3 (High)</p>	<p>Areas with extremely hazardous activities and chemical or material use including highly sensitive areas where highest risk conditions exist. Examples:</p> <table border="0"> <tr> <td>1. Select Agent laboratories and Biosafety Level Three (BSL3) facilities</td> <td>3. Highly toxic gases or pyrophoric materials or gases (any quantity)</td> </tr> <tr> <td>2. Laboratories with security related equipment requiring passwords or security related entries (Select Agent, other highly sensitive or regulated areas)</td> <td>4. Areas whose grant applications require environmental and safety certification</td> </tr> </table>	1. Select Agent laboratories and Biosafety Level Three (BSL3) facilities	3. Highly toxic gases or pyrophoric materials or gases (any quantity)	2. Laboratories with security related equipment requiring passwords or security related entries (Select Agent, other highly sensitive or regulated areas)	4. Areas whose grant applications require environmental and safety certification				
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<p>Training/ SOPs</p>	<p>Risk Category Training and Procedure Requirements Level 1 - Requires lab safety training Level 2 - Requires lab safety training and Standard Operating Procedures (SOPs) for particularly hazardous Level 3 - Requires lab safety training, SOPs for particularly hazardous, and lab specific training plan</p>								

"**Carcinogens**" are chemicals which cause cancer. For the purpose of the CHP, chemicals which are known carcinogens include those which: are [regulated by OSHA as carcinogens](#) (29 CFR 1910); are listed under the category, "[known to be carcinogens](#)," in the Annual Report on Carcinogens published by the National Toxicology Program, or are listed under group 1 ("[carcinogenic to humans](#)") by the International Agency for Research on Cancer Monographs.

"**Reproductive toxins**" are chemicals which affect the reproductive capabilities including chromosomal damage (mutagens) and effects on the fetuses (teratogens). Examples of signs and symptoms include birth defects and sterility. Examples of chemicals which are reproductive toxins include lead and DBCP (dibromochloropropane).

"**Highly toxic**" are chemicals which have an average lethal dose of:

Ingestion: LD₅₀ of less than 50 mg/kg body weight when administered orally to albino rats;

Skin Contact: LD₅₀ of less than 200 mg/kg body weight when administered by continuous dermal contact over a 24 hour period to albino rabbits, or

Inhalation: LC₅₀ of less than 200 parts per million of gas or vapor or 2 mg/l of mist, fume, or dust, when administered continuously by inhalation for one hour to albino rats.

Extremely Hazardous Activities – a short list of chemicals/activities that are difficult to control and have lethal potential, or could trigger a life-shortening disease, in one low, level exposure, or could cause a lethal event (e.g., explosion). This list is evolving but will likely include highly toxic, pyrophoric and carcinogenic gases, toxic gases with poor warning properties, beryllium, methyl mercury, etc.