



LABORATORY BIOSAFETY CHECKLIST FOR BIOSAFETY LEVEL 1 AND 2

| A. Premise Information | |
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| 1.0 | Premise : |
| 2.0 | Principal Investigator : |
| 3.0 | Inspector : |
| 4.0 | Date / Time : |
| 5.0 | Laboratory Biosafety Level : 1 / 2 |

Check () in the appropriate box that best describes the laboratory in which work will be performed.

| B. Biosafety Level 1 | | | | | |
|-----------------------------|---|------------|-----------|-----------|-----------------------------|
| 1.0 | Laboratory Facilities | Yes | No | NA | Details/ Comment |
| 1.1 | Is a universal biohazard symbol for BSL 1 posted at the entrance of the laboratory? Do the sign include name, and phone number of the laboratory supervisor or other responsible personnel? | | | | |
| 1.2 | Do laboratories have a sink for hand washing? | | | | |
| 1.3 | Is furniture in the laboratory capable of supporting anticipated loads and uses? | | | | |
| 1.4 | Are spaces between benches, cabinets and equipment accessible for cleaning? | | | | |
| 1.5 | Are bench tops impervious to water and resistant to heat, organic solvents, acids, alkalis, and other chemicals? | | | | |
| 1.6 | Is furniture including bench tops in the laboratory covered with a non-porous material that can be easily cleaned? | | | | |
| 1.7 | Are laboratory windows that are open to the exterior fitted with screens? | | | | |
| 1.8 | Is an autoclave for pre-treatment of laboratory wastes is available? | | | | |
| 1.9 | Is an eyewash fountain is readily available in the laboratory? | | | | |
| 1.10 | Is an effective integrated pest management programme in place and managed appropriately? | | | | |
| 2.0 | Safety Equipment | Yes | No | NA | Details/ Comment |
| 2.1 | Is there first aid kit available? | | | | |
| 2.2 | Are suitable PPE available and used by laboratory personnel? | | | | |
| 2.3 | Is there any storage equipment to keep GM materials (Example refrigerator) | | | | |
| 2.4 | Is there a fume hood for working with hazardous chemicals? | | | | |

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| 2.5 | Are the equipment is regularly maintained? | | | | |
| 3.0 | Work Practices | Yes | No | NA | Details/ Comment |
| 3.1 | Is there any bio hazardous materials handled in the laboratory? | | | | |
| 3.2 | Do personnel wash their hands before leaving the lab? | | | | |
| 3.3 | Are mechanical pipetting devices used? | | | | |
| 3.4 | Is there a signage available for prohibiting from eating, drinking, smoking, handling contact lenses, applying cosmetics, and storing food for human consumption in the lab? | | | | |
| 3.5 | Are work surfaces decontaminated with an effective disinfectant on completion of work especially after spills or splashes of bio hazardous materials? | | | | |
| 3.6 | Is a sharp bin available for disposal of and all syringes/ needles/ sharps? | | | | |
| 3.7 | Are re-usable sharps properly cleaned and disinfected? | | | | |
| 3.8 | Is there a biological spill kit available? | | | | |
| 3.9 | Are all wastes that are contaminated with bio hazardous materials autoclaved or decontaminated? | | | | |
| 3.10 | Have all personnel been provided information about hazards and risk about their work activity? | | | | |
| 3.11 | Are laboratory waste segregated into dedicated waste bins and labelled properly? | | | | |
| 4.0 | Records and Documents | Yes | No | NA | Details/ Comment |
| 4.1 | Procurement and transfers of GMO/LMO | | | | |
| 4.2 | Biological material /LMO inventory | | | | |
| 4.3 | SOPs for contained use activity | | | | |
| 4.4 | Staff training and competency | | | | |
| 4.5 | Equipment maintenance | | | | |
| 4.6 | Decontamination and validation | | | | |

C. Biosafety Level 2

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|------------|---|------------|-----------|-----------|-----------------------------|
| 1.0 | Laboratory Facilities | Yes | No | NA | Details/ Comment |
| 1.1 | Is a universal biohazard symbol for BSL 2 posted at the entrance of the laboratory? Do the sign include name, and phone number of the laboratory supervisor or other responsible personnel? | | | | |
| 1.2 | The design of the facility should be such that laboratory activities are separated from common areas. (Examples offices and pantry) | | | | |
| 1.3 | Is a dedicated hand basin of the hands-free operation type provided within each laboratory? | | | | |

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|------------|---|------------|-----------|-----------|-----------------------------|
| 1.4 | Is furniture in the laboratory capable of supporting anticipated loads and uses? | | | | |
| 1.5 | Are spaces between benches, cabinets and equipment accessible for cleaning? | | | | |
| 1.6 | Are bench tops impervious to water and resistant to heat, organic solvents, acids, alkalis, and other chemicals? | | | | |
| 1.7 | Is furniture including bench tops in the laboratory covered with a non-porous material that can be easily cleaned? | | | | |
| 1.8 | If windows are present is it closed at all times? | | | | |
| 1.9 | Is an autoclave for pre-treatment of laboratory wastes is available in the contained facility? | | | | |
| 1.10 | Is an eyewash fountain is readily available in the laboratory? | | | | |
| 1.11 | Is an effective integrated pest management programme in place and managed appropriately? | | | | |
| 1.12 | Are laboratory floors smooth, easy to clean and resistant to chemicals? | | | | |
| 1.13 | Does the ventilation in the laboratory have directional air flow into the laboratory areas? | | | | |
| 1.14 | Is there a good housekeeping in the laboratory? | | | | |
| 2.0 | Safety Equipment | Yes | No | NA | Details/ Comment |
| 2.1 | Is there first aid kit available? | | | | |
| 2.2 | Is there a Class II biological safety cabinet in the laboratory, certified annually? | | | | |
| 2.3 | Is the BSC suitably located, away from door and air vent? | | | | |
| 2.4 | Is the BSC free of equipment or supplies that can block the air grills and disrupt proper airflow? | | | | |
| 2.5 | When lab personnel use vacuum lines with bio hazardous materials, are they protected with High Efficiency Particulate Air (HEPA) filters? | | | | |
| 2.6 | Is equipment for use or storage of bio hazardous materials (i.e. refrigerator, freezers) labelled with a biohazard symbol? | | | | |
| 2.7 | Is GM/LMOs are kept separately from non GM? | | | | |
| 2.8 | Is there a fume hood for working with hazardous chemicals? | | | | |
| 3.0 | PPE (Personal Protective Equipments) | Yes | No | NA | Details/ Comment |
| 3.1 | Are suitable PPE available relevant to the hazard on the laboratory and used by laboratory personnel? | | | | |
| 3.2 | Are respiratory mask available for aerosol generating infectious work? | | | | |
| 3.3 | Are covered shoes/foot cover used in the lab? | | | | |

| 4.0 | Work Practices | Yes | No | NA | Details/ Comment |
|------------|--|------------|-----------|-----------|-----------------------------|
| 4.1 | Is there any bio hazardous materials handled in the laboratory? | | | | |
| 4.2 | Do personnel wash their hands before leaving the lab? | | | | |
| 4.3 | Are mechanical pipetting devices used? | | | | |
| 4.4 | Is there a signage available for prohibiting from eating, drinking, smoking, handling contact lenses, applying cosmetics, and storing food for human consumption in the lab? | | | | |
| 4.5 | Are work surfaces decontaminated with an effective disinfectant on completion of work especially after spills or splashes of bio hazardous materials? | | | | |
| 4.6 | Is a sharp bin available for disposal of and all syringes/ needles/ sharps? | | | | |
| 4.7 | Are re-usable sharps properly cleaned and disinfected? | | | | |
| 4.8 | Is there a biological spill kit available? | | | | |
| 4.9 | Are all wastes that are contaminated with bio hazardous materials autoclaved or decontaminated? | | | | |
| 4.10 | Have all personnel been provided information about hazards and risk about their work activity? | | | | |
| 4.11 | Are laboratory waste segregated into dedicated waste bins and labelled properly? | | | | |
| 4.12 | Are suitable chemical disinfectant used for inactivating liquid waste? | | | | |
| 4.13 | Is a medical surveillance program in place for the laboratory personnel? (Example Hep B vaccination) | | | | |
| 4.14 | Is there a Laboratory Biosafety Guidelines or Biosafety Manual in the laboratory? | | | | |
| 4.15 | Are the lab specific Biosafety procedures incorporated into the Laboratory Biosafety Guidelines or Biosafety Manual? | | | | |
| 4.16 | Are needle-locking syringes or safety hypodermic needles used when appropriate? | | | | |
| 4.17 | Are bio hazardous materials transported in covered containers to prevent leakage? | | | | |
| 4.18 | Is there any incident/accident/laboratory exposure reporting system in place? | | | | |
| 4.19 | Is there an ERP in place? | | | | |
| 4.20 | Is medical follow-up obtained if appropriate? | | | | |
| 4.21 | Are animals and plants not associated with the work prohibited from the laboratory? | | | | |
| 4.22 | Are any experiments involving animals and plants carried out in the laboratory? | | | | |
| 5.0 | Records and Documents | Yes | No | NA | Details/ Comment |
| 5.1 | Procurement and transfers of GMO/LMO | | | | |

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|-----|---------------------------------------|--|--|--|--|
| 5.2 | Biological material /LMO inventory | | | | |
| 5.3 | SOPs for contained use activity | | | | |
| 5.4 | Staff training and competency | | | | |
| 5.5 | Equipment maintenance | | | | |
| 5.6 | Decontamination and validation | | | | |
| 5.7 | Incident/accident/laboratory exposure | | | | |

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| D. Additional comments/observations and recommendation | | | | | |
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Inspector's Signature:

Date: