



LABORATORY BIOSAFETY CHECKLIST FOR BIOSAFETY LEVEL 1 AND 2

A. Premise Information	
1.0	Premise :
2.0	Principal Investigator :
3.0	Inspector 1 :
	Inspector 2 :
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?				
2.5	Are the equipment is regularly maintained?				
3.0	Work Practices	Yes	No	NA	Details/ Comment
3.1	Is there any biohazardous 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 biohazardous 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 biohazardous 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

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?				
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 biohazardous materials, are they protected with High Efficiency Particulate Air (HEPA) filters?				
2.6	Is equipment for use or storage of biohazardous 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 biohazardous 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 biohazardous 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 biohazardous 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 biohazardous 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				
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				

D. Additional comments/observations and recommendation

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E. INSPECTOR'S BY

Name	
Signature	
Date	