**ILRI logo**

**ACTIVITIES INVOLVING BIOLOGICAL AGENTS**

**RISK ASSESSMENT FORM RA 3.1**

**To be completed by PI or unit head for each project involving biological agents and then submitted to** [**ILRIResearchcompliance@cgiar.org**](mailto:ILRIResearchcompliance@cgiar.org)

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| **I. GENERAL** | |
| **\*Reference No.** |  |
| **Principal Investigator**  (Person ultimately responsible for this research activity) |  |
| **ILRI staff responsible and role** |  |
| **Name of Student/research fellow working on project** |  |
| **Names of others involved in conducting the research and their roles:** |  |
|  |  |
| **Title of risk assessment** |  |
| PREMISES WHERE THIS WORK WILL BE CARRIED OUT (**Location(s) of activities)** | |
| **Laboratory Work:** |  |
| **Animal Work:** |  |
| **Plant work:** |  |
| **Proposed start date of project:**    **Proposed End date of project:** | |

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| **II. BRIEF DESCRIPTION OF WORK** |
| **1.Background of project;**  **2.Objectives of the project;**  **3. Description of procedures:**  *(Describe the types of laboratory procedures to be used and highlight any non-standard laboratory operations.*  **4. Substances used:** *(Provide details of the micro-organisms/biological agent involved and/or, where appropriate, details of materials that may contain micro-organisms.* |

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| **III. HAZARD RATING AND RISK EVALUATION** | | | | |
| **Hazard rating** | | **\*\*Risk evaluation** | | |
| Name or synonym(s) of biological agent(s) to be used in the activities | \*Hazard Group  *State 1, 2, 3, 4.* | Low | Medium | High |
|  |  |  |  |  |
| *Reason for Justification of risk evaluation:* |  | | | |

\*Categorise each of the biological agent(s) according to its Hazard Group (for more information see <http://www.safety.ed.ac.uk/resources/Bio/Guidance/General/HazGroup.shtm> and <http://www.hse.gov.uk/pubns/misc208.pdf>).

\*\*Decide whether the biological agent(s) as used in the activities present a Low, Medium or High Risk to the user: *Tick appropriate boxes.*

*The risk is* ***Low*** *- if it is most unlikely that harm would arise under the controlled conditions listed, and even if exposure occurred, the harm would be relatively slight. The risk is* ***Medium*** *- if it is more likely that harm might actually occur and the outcome could be more serious. The risk is* ***High*** *- if harm is likely to arise (e.g. there have been previous incidents, the situation looks like an accident waiting to happen) and that harm might be serious.*

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| **IV. NATURE OF BIOLOGICAL MATERIALS USED** | | |
| Name, and where applicable,  Strain or groups of strains | Source\* | Virulence properties/consequences of exposure to biological agent |
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\*indicate from where the biological materials were obtained

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| **V. ROUTES BY WHICH EXPOSURE TO THE BIOLOGICAL AGENT(S) ARE HAZARDOUS TO HEALTH**  (TICK THE RELEVANT BOXES) | | | | | |
| Contact with or bite from infected animal | Penetration or absorption through skin or cut in skin | Direct splash contact with eyes | Inhalation of aerosol containing biological agent(s) | Ingestion | Injection via sharps |
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| **VI. DISEASES THAT MIGHT BE CAUSED (Animal, plant or human diseases)** | | | |
| Name of disease | Route of transmission | Signs of disease | Is a vaccine available |
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| **VII. GROUP OF WORKERS WHO MAY BE AT INCREASED RISK:** *(for example pregnant workers etc.)* | | | |

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| **Grounds for concluding exposure is NOT a risk to human health** (*tick relevant boxes)* | | |
| The agent(s) are in Hazard Group 1, classed as low risk and quantities of agent(s) are too small to constitute any risk to health under foreseeable circumstances of use, even if control measures break down; or there is no available exposure route. | Yes | No |
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*If the above applies finish the assessment now by completing the declaration at the end of the form. If the above does not apply continue with the assessment.*

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| **VIII. POTENTIAL IMPACT TO THE ENVIRONMENT (if none, indicate so)** |
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| **IX. CONTROL MEASURES** *(TICK RELEVANT BOXES)* |

**1. ENGINEERING CONTROL MEASURES**

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| The work can be carried out safely on the open bench using good microbiological practice. | | *YES* | *NO* |
| The work must be carried out wholly in a microbiological safety cabinet(s). | | YES | NO |
| The work must be carried out in a specialised containment room(s). \* | | YES | NO |
|  | \* Specify location of room and containment level: | | |
| The work can be carried out partially on the open bench and partially in a microbiological safety cabinet.\*\* | | YES | NO |
|  | \*\* Specify which type of cabinet is to be used and what part(s) of the work activity must be carried out within the cabinet | | |
| Is the internationally recognised biohazard sign displayed? YES NO | | | |

**2. PERSONAL PROTECTIVE EQUIPMENT (PPE).**

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| --- | --- | --- | --- | --- | --- | --- | --- |
| Eye protection |  | Face protection |  | Foot protection |  | Hand protection |  |
| Respiratory protection |  | Other (e.g. clothing) |  | | | | |
| Specify the PPE to be worn: | | | | | | | |
| Specify WHICH STAGE of activity the item(s) of PPE must be worn: | | | | | | | |
| Disinfection of all used PPE will be done after the experiments and lab coats will be taken for machine wash | | | | | | | |

*Non-disposable items of PPE must be inspected regularly and records retained for inspection.*

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| **X.HEALTH MONITORING** | | | |
|  | Yes | No | N/A |
| Is an effective vaccine/prophylaxis available? |  |  |  |
| *\** Are staffs REQUIRED to be vaccinated? |  |  |  |
| Specify the vaccinations needed: | | | |
| Is Medical Surveillance required to ensure that the control of exposure to the hazardous substance(s) is adequate? |  |  |  |

*\* If yes, this should be arranged via ILRI’s appointed Health Service Provider.*

*Not applicable as the disease is not zoonotic.*

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| **XI.DISINFECTANT TO BE USED***(tick relevant box)(If none. Indicate so)* |
| Name the Type of disinfectant to be used and the concentration |

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| **XII. INSTRUCTIONS FOR THE WORK ACTIVITY** *(TICK RELEVANT BOXES)* | | | |
|  | Yes | | No |
| Are SOPs for the work Available  (Provide EOHS department with the SOPS for records) |  | |  |
| The work activity contains procedures requiring a specific scheme of work. \* |  | |  |
| \* Scheme of work: either summarise below or give reference to an **attached** document: | | | |
| Arrangements are in place to ensure that those with language difficulties understand the instructions/scheme of work. |  |  | |

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| **XIII. TRAINING***(TICK RELEVANT BOX)* | |
| The activity is of such a simple nature and of such low risk that no special training is required. |  |
| The activity requires specific training to ensure that it is carried out safely \* |  |
| \* Specify training to be given:  *Individual training records must be retained for inspection* | |

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| **XIV.SUPERVISION *(TICK RELEVANT BOXES)*** | | |
|  | PI | RESEARCH TECHNICIAN |
| Who will approve straightforward routine work |  |  |
| Who will specifically approve the scheme of work |  |  |
| Who will provide personal supervision during the activity |  |  |

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| **XV. PERSONS NOT INVOLVED IN THE WORK ACTIVITY DIRECTLY *THAT MAY BE AT RISK FROM THE HAZARDS OF THE ACTIVITY.***  *(tick relevant boxes)* | | | | | |
| Scientific staff |  | Technical staff |  | Postgraduate students |  |
| Office staff |  | Maintenance staff |  | Cleaning staff |  |
| Contractors |  | Emergency personnel |  | Visitors |  |
| Others (specify) |  | | | | |

*Persons identified above may require to be informed, in part or in full, of the information contained in this risk assessment.*

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| **XVI.STORAGE SPACE*(TICK RELEVANT BOXES)*** | | |
|  | YES | NO |
| Will you store samples in -80 degree freezer *(If yes indicate the freezer No.)* |  |  |
| Will you store samples in -40 degree freezer *(If yes indicate the freezer No.)* |  |  |
| Will you store samples in -20 degree freezer *(If yes indicate the freezer No.)* |  |  |
| Will you store samples in liquid nitrogen tanks *(If yes indicate the tank No.)* |  |  |

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| **XVII. EMERGENCY PROCEDURES *(TICK RELEVANT BOXES)*** | | |
|  | YES | NO |
| Are written emergency instructions provided at the work site(s)? |  |  |
| Are emergency contact names and telephone numbers provided at the work site(s)? |  |  |
| Effective disinfectants for neutralising spills of the biological agent(s) are available? |  |  |
| Are suitable and sufficient spill kits available? |  |  |
| Has a person with the appropriate training and knowledge been appointed to deal with spillages of particularly hazardous biological agents?  Specify whom and how they are to be contacted: |  |  |
| All are involved in the work and their contacts posted on the facility? |  |  |

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| Is the location of the following, if applicable, known to the operator? *(tick relevant boxes)* | | | | | |
| Body shower |  | First aid box |  | Oxygen |  |

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| Does the operator know how to summon, if applicable, the following personnel? *(tick relevant box)* | | | | | |
| First Aider |  | EOHS department |  | External emergency services |  |

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| **XVIII. DISPOSAL OF WASTE RESIDUES (*TICK RELEVANT BOXES)*** |
| Specify the inactivation of biological agent and disposal method you will use for the following waste; |
| 1. All solids containing the agent: 2. All Liquids containing the agent: 3. Contaminated sharps: 4. Chemicals containing the agent: 5. Any other waste not mentioned above: |

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| If the precautions specified in this form do not adequately control the risks of handling the biological agent(s) involved in the work activity, specify below the additional precautions required: |

**Assessment carried out by PI or Unit Head**

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| Name: |
| Signature |
| Title |

**Assessment Reviewed by EOHS Manager**

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| --- |
| Name Date |
| Signature |
| Title |

**Assessment authorised by IBC Chair**

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| Name Date |
| Signature |
| Title |

**User declaration**

I have received a copy of this Risk Assessment and understand the risks and the measures that must be taken to control such risks.

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| **Name of person working in the project** | **Designation( e.g Post Doc, Research Assistant)** | **Specific Activity to be performed (e.g DNA extraction)** | **Years’ Experience working in the specific activity** | **Date and signature** |
|  |  |  |  | Sign:  Date: |
|  |  |  |  | Sign:  Date: |
|  |  |  |  | Sign:  Date: |
|  |  |  |  | Sign:  Date: |
|  |  |  |  | Sign:  Date: |

**All personnel involved with the work must complete this declaration.**

**The Principal Investigator (PI) or Unit Head must keep an up to date list of person(s) working with biological materials.**

**RISK ASSESSMENT DOCUMENT TRACKER**

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| --- | --- |
| Date Risk Assessment received at EOHS office |  |
| Date Reviewed at EOHS office |  |
| Date Discussed by IBC for a level 2 and above project |  |
| Date Approved by EOHS office for level 1 project |  |
| Date approved by IBC for level 2 and above projects |  |
| Date official communication relayed to PI on approval or rejection of project |  |