

Institutional Biosafety Committee Cornell University 395 Pine Tree Road Suite 320 Ithaca, NY 14850 t. 607-255-0741 f. 607-255-0758 email. cu_ibc@cornell.edu

<u>Procedures For Reporting And Managing Incidents Involving Accidental</u> <u>Release/Exposures or Personnel Contamination while using Recombinant Or Synthetic</u> <u>Nucleic Acid (r/sNA) Molecules** or Other Biohazardous Materials</u>

1. Types of Reportable Incidents:

Incidents which result in the exposure of personnel to research materials that contain recombinant or synthetic nucleic acids (r/sNA) or biohazardous materials are reportable to the Cornell University IBC. Examples of incidents that may result in a report to the IBC are:

- Needlesticks or other injuries from sharp materials (e.g., scalpel, broken glass)
- Contact with eyes, nose, mouth, open wounds, cuts, scratches
- Inhalation of aerosolized material (e.g., a large spill of risk group 2 or higher agents outside of a biological safety cabinet)
- Bites or scratches from infected research animals or animals with introduced r/sNA molecules
- Release or loss of transgenic plants, animals, or materials

Accidental spills and personnel contamination resulting from research involving recombinant and synthetic nucleic acids will be handled in accordance with <u>Section IV-</u><u>B-7-a-(3) of the NIH Guidelines</u> that govern this type of research.

To report any On-Campus Emergency <u>Cornell Police</u> at 911 on a Cornell Phone, 607-255-1111 on a Cell Phone

2. Immediate Action

2.1. Personnel exposure to infectious agents or recombinant or synthetic nucleic acids (r/sNA)

- Call 911 on a Cornell Phone, 607-255-1111 on a Cell Phone for all life-threatening emergencies.
- Splash to eyes: Flush with water at eyewash for 15 minutes.
- Needlesticks, cuts, scratches, animal bites, skin contact: wash area with soap and water for 15 minutes.
- Perform first aid, if applicable.
- Notify supervisor.
- Seek an urgent medical evaluation at Cayuga Medical Center or other healthcare provider qualified to manage urgent medical concerns as soon as possible after an exposure. Personnel must be prepared with information about the materials handled. Students may be seen at Cornell Health. Cornell Health does not treat faculty or staff.

Document exposures, injuries, and illnesses in the Cornell University Injury/Illness/Exposure Report, <u>https://ehs.cornell.edu/incident-reporting.</u>

2.2. If release of or loss of transgenic plants, animals or materials**, spill outside of biosafety cabinet, or inappropriate waste disposal

- Clean up spill per lab protocols if small spill or spill inside a biosafety cabinet.
- Call <u>Cornell Police</u> at 911 on a Cornell Phone, 607-255-1111 on a Cell Phone if assistance is needed. CUPD will dispatch EHS to assist with clean-up.
- Notify supervisor.
- Contact the Institutional Biosafety Officer within 24 hours at 607-255-8200 or "askEHS".

** Accidental spills and personnel contamination resulting from research involving recombinant and synthetic nucleic acids will be handled in accordance with <u>Section IV-</u><u>B-2-b-(6) of the NIH Guidelines</u> that govern this type of research.

3. Reporting

3.1. Individual/s involved in the spill/exposure

- Immediately report the incident to the Principal Investigator or your supervisor.
- File an Incident Report through the EHS Incident Reporting Website, <u>https://ehs.cornell.edu/incident-reporting</u> with the assistance of your supervisor. This incident reporting system is used for injuries and environmental releases.

3.2. Principal Investigator

- Complete an Injury/Illness/Exposure Reporting form with the staff member at: <u>https://ehs.cornell.edu/incident-reporting.</u>
- Contact the IBC administrator (<u>cu_ibc@cornell.edu</u>) who will coordinate the completion of the <u>NIH incident report</u>.

If the incident involves r/sNA molecules, contact the Institutional Biosafety officer and IBC administrator within 24 hours of the incident.

3.3. Institutional Biosafety Officer

- Coordinate the response to the incident and determine mitigating actions to be taken for containment/clean-up/disposal/personnel care and other safety concerns identified.
- Coordinate the investigation of the incident with the PI and other units as necessary. Please refer to University Policy 8.6 for more information on incident management.
- Identify corrective actions and risk mitigation strategies, related to the environment, health, or safety, for the university to implement.
- In coordination with the identified units, prepare a report describing the incident. The report will be presented by the Biosafety Officer at a convened IBC meeting.

3.4. Institutional Biosafety Committee

- Review the incident and set measures to mitigate the problem and preclude its reoccurrence.
- Determine if any actions need to be taken with regards to the suspension of research activities if outcomes are not satisfactory.
- If further action is required, the Director of Research Assurance in ORIA will work with the Chair of the IBC, the Biosafety Officer, and other university officials to manage the resolution.

3.5. Office of Research Integrity and Assurance (ORIA)

- Coordinate with the University Biosafety Officer, the Chair of the IBC, and determine if the incident constitutes a reportable event per the NIH Guidelines. ORIA may also be involved in decisions to report to other regulatory (Local/State/Federal) agencies is required. Consult with the NIH if needed in making this determination.
- Collaborate with the University Biosafety officer, the PI, and any affected research personnel to investigate the incident and ensure that corrective actions are appropriate.
- If reporting to the NIH is required, prepare an incident report per the NIH requirements. Consult with the PI, researcher, Biosafety Officer, and Chair of the IBC to ensure that the report is accurate and complete.
- If necessary, report to the Institutional Official and NIH Office of Science Policy within 30 days, unless the IBC determines that a report has already been filed by the Principal Investigator.
 - The following types of accidents **require immediate reporting**:
 - 1...1. Spills or accidents occurring in high containment (BL3) laboratories resulting in an overt or potential exposure. (NIH Guidelines Appendix G-II-C-2-q)
 - 1...2. Spills or accidents in BL2 laboratories resulting in an overt exposure. (NIH Guidelines <u>Appendix G-II-B-2-k</u>)
 - Send reports to NIH Office of Science Policy <u>NIHGuidelines@od.nih.gov</u> and Cornell University EHS.

4. Contact information for reporting

- Cornell University Injury/Illness/Exposure Report https://ehs.cornell.edu/incident-reporting
- Institutional Biosafety Officer: 607-255-8200 or "<u>askEHS</u>"
- IBC Administrator (ORIA): 607-255-0741 or <u>cu_ibc@cornell.edu</u>
- Director of Research Assurance (ORA) 607-255-5398 or <u>cu_ibc@cornell.edu</u>
- Cornell Health Occupational Medicine 607-255-6960 or occmed@cornell.edu

5. NIH Guidelines For Research Involving Recombinant Or Synthetic Nucleic Acid Molecules (NIH Guidelines) (Excerpt relevant to requirements related to accidental spills, personnel contamination, or exposure resulting from recombinant or synthetic nucleic acid molecule research).

On behalf of the institution, the Institutional Biosafety Committee is responsible for:

Section IV-B-2-b-(6). Adopting emergency plans covering accidental spills and personnel contamination resulting from recombinant or synthetic nucleic acid molecule research.

Section IV-B-2-b-(7). Reporting any significant problems with or violations of the *NIH Guidelines* and any significant research-related accidents or illnesses to the appropriate institutional official and NIH OSP within 30 days, unless the Institutional Biosafety Committee determines that a report has already been filed by the Principal Investigator. Reports to NIH OSP shall be sent to the Office of Science Policy, National Institutes of Health, preferably by e-mail to: <u>NIHGuidelines@od.nih.gov</u>; additional contact information is also available <u>here</u> and on the <u>OSP website</u> (www.osp.od.nih.gov).

As part of this general responsibility, the Principal Investigator shall:

Section IV-B-7-a-(3). Report any significant problems, violations of the *NIH Guidelines*, or any significant research-related accidents and illnesses to the Biological Safety Officer (where applicable), Greenhouse/Animal Facility Director (where applicable), Institutional Biosafety Committee, and other appropriate authorities (if applicable).

At Cornell, it is the responsibility of the PI is to complete the reporting requirements detailed in section 3 of this guidance document. The PI is to work with the IBC and ORIA to complete the report to the NIH. Completed reports are sent by the Cornell IBC to the Office of Science Policy (OSP), National Institutes of Health, by e-mail to: <u>NIHGuidelines@od.nih.gov</u>. NIH OSP may be notified within the first 24 hours of the incident by the IBC administrator in the event of overt or potential exposures to RG2 or RG3 organisms containing recombinant or synthetic nucleic acids. The final report will be completed and submitted by the IBC administrator within 30 days. The PI will be cc'd on any correspondence to the NIH OSP.

References:

- <u>NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid</u> <u>Molecules</u>
- <u>Biosafety in Microbiological and Biomedical Laboratories</u>
- <u>NIH FAQ's about Incident Reporting</u>
- EHS 1985 Incident Reporting Using Cority