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

1. Types of Reportable Incidents:

- Needlestick,
- Sharps injuries (e.g., scalpel, broken glass)
- Contact with eyes, nose, mouth, open wounds, cuts, scratches
- Inhalation of aerosolized material (e.g., large spill outside of biological safety cabinet agents at BSL-2, BSL-3)
- Bites/scratches from infected animals
- Bites from 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 the Section IV-B-2-b-(6) of the NIH Guidelines that govern this type of research.

To report any On-Campus Emergency Cornell Police at 911 on a Cornell Phone, 255-1111 on a Cell Phone

2. Immediate Action

2.1. If personnel exposure to infectious agents or r/sNA

- Splash to eyes: Flush with water at eyewash for 5 minutes
- Needlesticks, cuts, scratches, animal bites, skin contact: wash area with soap and water for 5 minutes
- Perform first aid, if applicable
- Notify supervisor
- Contact Cornell Health, Occupational Medicine (255-6960) as soon as possible after an exposure or if you develop symptoms suggestive of exposure to the biohazardous agent to determine if medical evaluation is indicated. After hours seek evaluation at Cayuga Medical Center
- Contact the Institutional Biosafety officer within 24 hours. (607- 255-8200 or “askEHS” ) Submit a report to the Cornell University Injury/Illness/Exposure Report, https://rmps-prod.hosting.cornell.edu/accinj/
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 biosafety cabinet, Contact EH&S (255-8200) if assistance is needed.
- Notify supervisor
- Contact the Institutional Biosafety Officer within 24 hours. (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 the Section IV-B-2-b-(6) of the NIH Guidelines 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 and the Institutional Biosafety Officer (607-255-8200 or “askEHS”).
- If medical attention is required, contact Cornell Health Occupational Medicine (607-255-6960) or go to Cornell Health, Occupational Medicine.
- Individual along with supervisor must file an Injury/Illness/Exposure Reporting form at: https://rmps-prod.hosting.cornell.edu/accinj/

3.2. Principal Investigator

- Complete an Injury/Illness/Exposure Reporting form with the staff member at: https://rmps-prod.hosting.cornell.edu/accinj/
- If incident involves r/sNA molecules, contact the Institutional Biosafety officer within 24 hours. Section IV-B-7-a-(3) of the NIH Guidelines specify the PI responsibility in such cases.
- Use the Incident Reporting Template located at: https://auth.osp.od.nih.gov/office-biotechnology-activities/biosafety/institutional-biosafety-committees/incident-reporting to write the incident report and send it to the University Biosafety officer at ab2324@cornell.edu and the IBC administrator dad3@cornell.edu.

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.
- Lead the investigation of the incident, involving other members of the University staff as needed; such as Facility Manager, BioSafety Engineer, Department Safety Representative, ORIA, Occupational Medicine, Greenhouse Manager, etc.
- Prepare a report describing the incident, the response, outcomes and resolution in consultation with the PI, any other stakeholders and ORIA if needed, and present 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 suspension of research activities if outcomes are not satisfactory.
- If further action is required, the Director of 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)

- In consultation with the University BioSafety Officer and the Chair of the IBC, determine if the incident constitutes a significant problem with or violation of the NIH Guidelines or a significant research-related accidents or illnesses, and if reporting to the NIH or 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 conduct an investigation of 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/OBA 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 Appendix G-II-B-2-k)

- Send reports to NIH/OBA at Office of Science Policy, National Institutes of Health, 6705 Rockledge Drive, Suite 750, MSC 7985, Bethesda, MD 20892-7985 (20817 for non-USPS mail), 301-496-9838, 301-496-9839 (fax) or NIHGuidelines@od.nih.gov

3.6. Cornell Health Occupational Medicine

- Provide medical care
- Maintain medical records
- In cases of communicable disease, report to the county health department and communicate with appropriate resources (e.g., infectious disease consultant, CDC)
4. Contact information for reporting

- Cornell University Injury/Illness/Exposure Report
  https://rmps-prod.hosting.cornell.edu/accinj/
- Institutional Biosafety Officer: Alexis Brubaker
  607-255-8200 or “askEHS”
- IBC Administrator (ORIA): Debra Dwyer
  607-255-7219 or dad3@cornell.edu
- ORIA Director: Amita Verma
  607-255-2214 or av234@cornell.edu
- Cornell Health Occupational Medicine
  607-255-6960

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.

**Note:** The *Laboratory Safety Monograph* describes basic elements for developing specific procedures dealing with major spills of potentially hazardous materials in the laboratory, including information and references about decontamination and emergency plans. The NIH and the CDC are available to provide consultation and direct assistance, if necessary, as posted in the *Laboratory Safety Monograph*. The institution shall cooperate with the state and local public health departments by reporting any significant research-related illness or accident that may be hazardous to the public health.

**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/OBA within 30 days, unless the Institutional Biosafety Committee determines that a report has already been filed by the Principal Investigator.

Reports to NIH/OBA shall be sent to the Office of Science Policy, National Institutes of Health, 6705 Rockledge Drive, Suite 750, MSC 7985, Bethesda, MD 20892-7985 (20817 for non-USPS mail), 301-496-9838, 301-496-9839 (fax) or NIHGuidelines@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, NIH/OBA, and other appropriate authorities (if applicable) within 30 days. Reports to NIH/OBA shall be sent to the Office of Science Policy, National Institutes of Health, 6705 Rockledge Drive, Suite 750, MSC 7985, Bethesda, MD 20892-7985 (20817 for non-USPS mail), 301-496-9838, 301-496-9839 (fax) or NIHGuidelines@od.nih.gov

NIH FAQ’s about Incident Reporting
The NIH FAQ about incident reporting state the following: The *NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules (NIH Guidelines)* states that "...any significant problems, violations of the *NIH Guidelines*, or any significant research-related accidents and illnesses" must be reported to NIH OBA within 30 days. Certain types of accidents must be reported on a more expedited basis. Spills or accidents in BL2 laboratories resulting in an overt exposure must be immediately reported to NIH OBA. Spills or accidents occurring in high containment (BL3 or BL4) laboratories resulting in an overt or potential exposure must be immediately reported to NIH OBA.

References:

NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules

Biosafety in Microbiological and Biomedical Laboratories