I. Purpose
The NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules, and the Centers for Disease Control and Prevention’s Biosafety in Microbiological and Biomedical Laboratories (BMBL), requires incident response procedures to be outlined in a Laboratory-Specific Biosafety Manual (LSBM).

II. Scope
All University of Connecticut PIs at the Storrs campus, four regional campuses (Avery Point, Hartford, Stamford, Waterbury), and non-University entities utilizing the University’s laboratory space under the Technology Incubation Program (TIP) who conduct research involving biological materials. Exposures to human or non-human primate materials are covered under the Bloodborne Pathogen Exposure Control Plan.

III. Policy Statement
The University of Connecticut Storrs, and its regional campuses, and non-University entities will comply with the requirements of the NIH Guidelines, the CDC’s BMBL, and the Institutional Biosafety Committee’s (IBC) policies and procedures.

IV. Enforcement
Violations of this policy may result in appropriate administrative actions in accordance with University Laws and By-Laws, General Rules of Conduct for All University Employees, applicable collective bargaining agreements, and the University of Connecticut Student Conduct Code.

V. Definitions
Biological Materials - include any of the following requiring IBC oversight: recombinant or synthetic nucleic acid materials, biological agents and toxins, bacteria and their phages and plasmids, viruses, fungi, mycoplasmas, prions, and parasites; human and non-human primate tissues, body fluids, blood.
byproducts, and cell lines, transgenic and wild type animals and plants, animal remains and insects that may harbor zoonotic pathogens.

**Exposure** - exposures including, but not limited to skin punctures with contaminated needles, inhalation, or a splash that resulted in contact with mucous membranes (e.g. eyes). Additionally any symptoms related to the disease caused by an infectious agent being studied must be considered a documented exposure.

**Laboratory personnel** - individuals, including students of any kind, conducting research on or otherwise handling biohazardous materials under the supervision of a PI.

**VI. Responsibilities**

1. **UConn Biosafety Shall:**
   - Promptly respond to, and investigate accidents and injuries reported
   - Provide consultation or assistance, as needed, to personnel responding to incidents involving biological materials
   - Contact the appropriate regulatory agencies, as needed, in response to a reportable incident

2. **Principal Investigators Shall:**
   - Develop and maintain laboratory incident response procedures based on the hazards of the biological materials being used or stored; these procedures will be made available to all laboratory personnel under the PI’s direction and incorporated into the LSBM
   - Ensure all laboratory personnel are properly trained to respond safely to incidents involving biological materials accidents and spills
   - Ensure that a biological spill response kit and PPE are available and accessible
   - Follow incident reporting procedures outlined on page 4 of this document
   - Implement necessary corrective actions to mitigate incident recurrence

3. **Laboratory personnel shall:**
   - Be trained on the proper use, handling, and incident response procedures (i.e. spills and exposures) related to biological materials
   - Thoroughly review the PI’s LSBM and understand the contents within
   - Wear appropriate PPE and use engineering control equipment in the proper manner to reduce the risk of incidents
VII. Procedures

A. Immediate Response to Incidents Involving Biological Materials: Standard Operating Procedures (SOP)

Each BSL-2 laboratory must maintain a LSBM for potentially pathogenic materials. The objective of the LSBM is to protect the health of the laboratory personnel, minimize the risk of exposure to other personnel, and mitigate risks of release of biologicals outside of the laboratory. Personnel shall respond to incidents following the established procedures detailed in the LSBM. The PI must provide personnel training on the LSBM on an annual basis, which is documented in the LSBM.

The LSBM procedure on the IBC webpage contains spill and exposure response procedures. Each PI may write and/or revise the template SOPs to meet the constraints of parameters that are unique to the research environment; however the IBC reserves the right to require modifications of the SOPs to ensure the safety of personnel. PIs who have previously developed SOPs may simply add them to the LSBM.

1. The immediate response to a biological spill or exposure depends upon several factors, including the location of the incident, involvement of injuries and/or exposures, size of the spill, and hazards associated with the biological material. The SOPs in the LSBM must include guidance relevant to the particular organism and hazards involved. It is the responsibility of the PI to complete the template in its entirety and add any additional information or appendices, which will minimize any potential risk.

2. SOPs must address, at a minimum, the following scenarios:
   - Spills fully contained within a biosafety cabinet (BSC)
   - Spills outside the BSC
   - Potential exposures (e.g. a hole in a glove)
   - Exposures and injuries
   - Combined chemical and biological spills, if applicable
   - Combined radioactive and biological spills, if applicable
3. Incident response procedures must provide information regarding the responsibilities of laboratory personnel to seek medical attention, notify the PI, Biosafety Officer, and/or Public Safety as conditions warrant.

B. Reporting of Accidents and Spills

It is the responsibility of the PI, to complete an IBC Incident Reporting Form in consultation with the individual involved in the incident, and submit the completed form to the IBC at ibc@uconn.edu within the time frames indicated below. If assistance is needed with completing the form, contact the Biosafety Officer at 6-3180 or the IBC Program Manager at 6-1838. The IBC will review the form, suggest appropriate corrective actions, write a final report, and/or submit a report to the appropriate regulatory agencies as required.

Incidents must be reported as follows:

<table>
<thead>
<tr>
<th>Type of Spill¹ or Exposure²</th>
<th>Reporting Time Frame</th>
</tr>
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<tbody>
<tr>
<td>Exposure to a Risk Group 2 or 3 agent</td>
<td>Report <strong>immediately</strong> to the Biosafety Officer. Submit Incident Reporting Form to the IBC <strong>within 5 days</strong> of exposure.</td>
</tr>
<tr>
<td>Exposure to r/sNA materials</td>
<td></td>
</tr>
<tr>
<td>Spill outside primary containment (BSC) with a Risk Group 2 or 3 agents</td>
<td>Incident Reporting Form must be submitted to the IBC <strong>within 7 days of incident</strong>. If an exposure has occurred, see above.</td>
</tr>
<tr>
<td>Spill outside primary containment (BSC) with r/sNA materials</td>
<td></td>
</tr>
</tbody>
</table>

¹Human and non-human primate (NHP) cell lines and tissues are considered BSL-2 but are not RG2 agents. Spills of human and NHP cell cultures outside of the BSC do not normally require a formal report to the IBC, but must be reported to the BSO.

²Exposures to r/sNA materials will be considered to be a biohazardous exposure regardless of the length, base sequence, or exact chemical composition of the nucleic acid(s) involved. Further information on biological spills and exposures can be found in the Biological Safety Manual.

C. Follow-Up

When there is a documented exposure to a biological materials, the laboratory must work with the medical treatment provider to develop a post-exposure treatment plan.