1. Introductions                    All
2. June is Safety Month             Mary Beth Koza
3. Annual Biological Safety Review  Garry Coulson
4. **Policies for Review and Approval** Mary Beth Koza
   a. High School Students and Minors in Laboratories Policy
   b. Formaldehyde Exposure Control Policy
5. Emergency Management Update      Darrell Jeter
6. Campus Safety Update            Derek Kemp

Items in **BOLD** must be approved by Committee
June 14, 2018

USSC Meeting
1. Introductions

2. June is Safety Month

3. Annual Biological Safety Review

4. Policies for Review and Approval
   a. High School Students and Minors in Laboratories Policy
   b. Formaldehyde Exposure Control Policy

5. Emergency Management Update

6. Campus Safety Update

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June is Safety Month

• Observed annually in June, National Safety Month focuses on reducing leading causes of injury and death at work, on the road and in our homes and communities. We provide downloadable resources highlighting a different safety topic for each week in June:
  • Week 1: Emergency Preparedness
  • Week 2: Wellness
  • Week 3: Falls
  • Week 4: Driving

• Safety Awareness Month: 2018 A PROCLAMATION
  BY THE GOVERNOR OF THE STATE OF NORTH CAROLINA

• Shop Safety Fair: June 19
National Safety Month 2018: Wellness

June 11, 2018
(The information below is provided by the National Safety Council.)

We ask a lot of ourselves each day, and over time this can put a strain on our own wellness. Try these tips to help improve your wellness at every stage of life.

Focus on Your Wellness Each Day

- Take the stairs instead of the elevator or go for a walk at lunch to work physical activity into your daily schedule.
- Take advantage of workplace wellness programs and choose healthy snacks each day.
- Find nearby options for exercise classes through your local parks department.

We hope you stay safe and healthy this month!
Biosafety Office

What we do:

“The Biological Safety Section provides general surveillance over activities involving biohazardous agents, monitors and reviews the performance and maintenance of containment systems, provides consulting services on aspects of biological safety and provides guidance and assistance concerning the packaging and shipping of biohazardous agents.”

- Emergency Response (24-hour)
- Injury reporting and Accident Investigations
- Laboratory PPE Guidance
- Biological Waste Management
- Respiratory Protection
- Shipping and Transporting
- Spill Response and Training
- Lab-specific training (In-person and Online)
- Biosafety Cabinet education, consulting and certification
- Bloodborne Pathogen (BBP) awareness and training
- Compliance with Regulatory bodies and UNC policies
- Disinfectant & Sterilant consultation
- Equipment safety evaluation
- Facility design consultation
- Permits (Import and Export)
- SOP development for high-risk agents or activities
Institutional Biosafety Committee (IBC)

What we do:

- **UNC Charter:** “The IBC is responsible for the oversight, administration, and review of UNC-CH Lab policies and projects involving research with recombinant or synthetic nucleic acid molecules and hazardous biological materials that may pose safety, health, or environmental risks.”
Biosafety Program

Culture of Safety

- Partnership
- Compliance
- Training
- Education
- Consulting
Biosafety Annual Highlights 2017/2018

Education
- Annual Biosafety Stewardship Month (November 2017) – “Promoting Biosafety through Good Governance”
- Awareness of risks in the use of cell phones and personal items in laboratory – “Safe Work with Microorganisms on Campus”
- Compliance with NIH Guidelines – “Research with Transgenic Plants”

Training
- 37 training courses (online and in-person)
- ~30,000 workers in 2017/2018 (up to 6/2018)
  - Bloodborne Pathogens training – healthcare workers, facilities services, researchers, childcare providers etc.
  - BSL-2, BSL-2+ and BSL-3 training
  - Shipping and export regulations
  - NIH regulations – Recombinant DNA and Synthetic Nucleic Acid Molecules

Laboratory Inspections
- 306 Total
  - 275 BSL-2 laboratories,
  - 24 BSL-2+ laboratories
  - 7 BSL-3 laboratories
Biosafety Annual Highlights 2017/2018

Protocol Reviews

- 1,355 protocols reviewed and approved by the Biosafety Office and IBC.
  - 694 Schedule F’s for research with Biological Hazards
  - 339 Schedule G’s for research with Recombinant DNA
  - 322 Schedule H’s for research with Transgenic Animals

- 34 Clinical Trials Involving Human Gene Transfer (Gene Therapy) reviewed
- 1,233 IACUC Protocols
Biosafety Annual Highlights 2017/2018

▶ Emergency Drills

- Multi-agency drill with UNC Police, Chapel Hill Fire Department (CHFD) and Orange County Health Department (OCHD)
- Test response to “man-down” scenario in BSL-3 laboratory (April 2018) due to unknown causes with possible biological spill
  - Series of 18 drills
  - Unused “cold” BSL-3 laboratory (MBRB)
  - Assess effectiveness of UNC Police Dispatch
  - Assess effectiveness of OCHD Dispatch
  - Assess response times of UNC Police, CHFD and OCHD
  - Assess entry procedures used by responding firefighters
  - Assess “patient” extraction procedures
  - Assess exit procedures
- Improve comfort level and safety of CHFD entry team
- Completing compilation and analysis of data from all 18 drills and collating personnel assessments of the drills – identify strengths & weaknesses (“gaps”) in the Emergency Response to improve proficiency up and down the chain.
High Containment Drills
High Containment Drills
2017-2018 NIH/CDC Reportable Incidents

- 7 Total Reportable Incidents
- 4 Incidents reported to NIH
- 2 Incidents reported to CDC
- 1 Incident reported to both CDC and NIH

<table>
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<tr>
<th>Biosafety Level</th>
<th># of Incidents</th>
<th># Involving Animals</th>
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<tbody>
<tr>
<td>2</td>
<td>4 (NIH)</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>2 (CDC) 1 (CDC &amp; NIH)</td>
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Biosafety Annual Highlights 2017/2018

• **Biosecurity**
  - Biosafety: “Protect the people and environment” – risk mitigation
  - Biosecurity: “Protect the asset [biological/chemical/radiological] – threat and vulnerability mitigation
  - Hosted Federal Bureau of Investigation (FBI) Weapons of Mass Destruction (WMD) Division seminar at EHS in April 2018
    - Representatives of regional and national FBI offices
    - Awareness of potential chemical and biological risks
    - Identify roles and responsibilities of law enforcement agencies and research institutions and identify benefits and obstacles to improve cooperation and communication between agencies and institutions
Biosafety Annual Highlights 2017/2018

Compliance

- New Regulations: Inactivation and Removal of Select Agents (March 2017)
  - Select Agent Regulations (SAR)
  - 7 CFR Part 331, 9 CFR Part 121.3 and 42 CFR Part 73.3
  - United States Department of Health and Human Services (HHS)
  - United States Department of Agriculture (USDA)
  - Policies and procedures for rendering Select Agents or their regulated nucleic acids as non-infectious or non-viable
    - **GOAL**: allow material to be moved to lower containment (e.g. BSL-4 to BSL-2), be used in unregistered spaces and transferred without FSAP approval

- UNC-CH compliance with Inactivation regulations:
  - Created guidance document for labs working with Select Agents
  - Procedure Development and Validation
  - Required documentation of Validation
  - Validation Certificates
  - Reviewed validation documents with labs for compliance to regulations
  - In process of formal incorporation into Select Agent documents

- Reformatted Select Agent program (Chapter 20) to fit new guidelines from CDC regarding requirement for Incident Response Plan (IRP), Security Plan (SP) and Biosafety Plan (BP)

- Scheduled Inspection by CDC for renewal of UNC Select Agent Registration
  - June 26-29th
High School Student and Minors in Labs Policy

• First issued in 2009
• Delineated what can be worked with based on type of hazard:
  • Biological
    • Minors are prohibited from working with biohazardous materials above Biosafety Level 2 (BSL-2)
    • Minors may not be exposed to, or work with, biological material or agents that require medical surveillance
    • Minors may not perform duties in which they are required to directly work with human and/or nonhuman primate blood, body fluids and tissue
    • Minors are prohibited from working with human and nonhuman primate retroviruses
    • Minors may not directly work with research animals
  • Radiological
    • Minors under age 16 are prohibited from working with radiation;
    • Minors 16 or 17 years of age are prohibited from handling source vials and need special permission from the RSO to use other radioactive materials, including performing monthly surveys;
    • Minors who are employees are not permitted in areas of high radiation or airborne radioactivity (as defined in 10 CFR 20.1003) or any area where there is potential exposure to radiation in excess of 0.1 rem (1 mSv) total effective dose equivalent or in excess of the limits set forth in 10A NCAC 15.1611
    • Minors are prohibited from directly operating X-ray generating equipment
  • Chemical
    • Minors are not permitted to work with carcinogens, reproductive toxins or other acutely toxic chemicals.
    • Minors are prohibited from working with controlled substances (Schedule I-V) and chemical precursors
    • Minors may handle lower risk chemicals in limited circumstances, with proper safety equipment as necessary, at the discretion of the principal investigator
  • Equipment
    • Minors are not permitted in areas with Class 3B or 4 lasers
    • Minors are not permitted to work with hazardous equipment (such as lathes, drill press, laser cutters, etc.)
• Removed consent form since HR already has one in place as part of intern/visiting scholar/volunteer paperwork
Formaldehyde Exposure Control Policy

- First issued in 2012
- Minor edits
  - Hyperlinks to EHS webpages
  - Updated OSHA language for regulated area signage:

  DANGER
  FORMALDEHYDE
  MAY CAUSE CANCER
  CAUSES SKIN, EYE AND RESPIRATORY IRRITATION
  AUTHORIZED PERSONNEL ONLY
UNIVERSITY SAFETY AND SECURITY COMMITTEE
MINUTES

June 14, 2018

Members Present: Derrick Kemp, Mary Beth Koza, Darrell Jeter, Craig Fletcher, Christopher Payne, David Kaufman, Beverly Errede, Doug Cyr, Linc Butler

Members Absent: Michael Rolleri, Paul Pogge, Judy Faubert, Lorraine Alexander, Matthew Hawkins, Jeff McCracken, Mitchell Picker, Dalton Sawyer, Anna Wu

Guests: Mary Crabtree, Garry Coulson

1. June Safety Month

Mary Beth presented the Governor’s Proclamation - “June Is Safety Month”. EHS has several events scheduled for the month. Mary Crabtree discussed the Shop Safety Fair scheduled for next Tuesday. EHS HMP team has several vendors that will be available to answer questions regarding: FR Clothing for Electrical worker and the changes in material technology; DeWalt Tools – Silica – dust collection, etc.

2. Biological Safety Update

Garry Coulson discussed the Bio Safety program report. This report includes the following: IBC – Research on RDNA (required of any NIH funding; oversight of program/research), Supports the culture of safety – focus heavily on education (includes memos: Nov – Bio Stewardship, Safe work of Microorganism (such as cell phones), compliance issue working transgenic plant. He stated the team likes to be engage with UNC researcher, mainly by inspections, to drive strong relationship. A few annual Highlights include over a 1000 protocol reviews and 34 clinical gene therapy trials in human.

In April, Bio Safety Team held over 18 multi-agency drills (UNC Police, CHFD, Orange County EMS). The purpose of the drills was to address: effectiveness of dispatch and response time and procedures (how they followed); opportunity to see what the lab looks like; Identify strength and weakness – feedback from those involve to shore up responses.

Coulson stated that Bio Safety’s primary role really is to protect the people and environment along with biosecurity (i.e. protect the agent).

A FBI workshop was hosted on campus. The topics of discussion were on risk and strength that institutions can lean on. Implementation of new guidance regarding requirement for Incident Response Plans, Security Plan and Biosafety Plan. CDC scheduled inspection in June 2018.

3. High School Student and Minors in Lab Policy

Mary Beth Koza presented the revision of the policy based on emphasis of STEM research programs. Instead of a broad overarching policy it now delineates based on type of hazard associated with the lab. Removes the EHS consent form since HR already has one place as part of the intern/visiting scholar/volunteer paperwork. Outlines the responsibility of the Lab Supervisors

Derek moved to approve the policy, Doug Cyr 2nd – all approved. No abstentions
4. **Formaldehyde Exposure Control Policy**

Mary Beth Koza presented the Formaldehyde Exposure Control Policy. This policy, first issued in 2012, had some minor edits made to include the newly updated OSHA language for regulated area signage along with hyperlinks to EHS webpages. Koza reported that the use of formaldehyde has reduced on campus.

Derek moved to approve, Dr. Kaufman 2nd – all approved. No abstentions

5. **Emergency Operation Update**

Darryl Jeter presented some activities involving emergency operation for UNC. A Campus Emergency Response officials’ training will be held this month. The training includes updates of plans, new restructure, and special events response. Summer Siren testing will be scheduled for activation in July along with updates to Alert Carolina for 2018-2019. Active Shooter response and publishing of some protocols for Student and Staff in the fall is currently underway.

Jeter reported the following goals for UNC; 1) Emergency Operation Plan – preparing for hazard vulnerabilities that UNC may be most prone too (such as weather events); 2) Training/Education Program for F, S, Student – with a new webpage; 3) collaborate with EHS on more comprehensive Emergency Action Plan – how to develop, activation, and response for Building Managers; 4) Implement Standardization and move towards accreditation for UNC through EMAP (Emergency Management Action Program) - review 3/5 year.

6. **Public Safety Update**

Dereck Kemp stated Public Safety goals are personal safety first, then property. Classroom locks – June 25 – July 5 implementation of more locks that Students and Faculty have requested. Focus on being proactive in response.

Adjourn 4:10