Greetings from the BSO

Welcome Back! I hope that everyone’s semester is off to a great start. We are looking forward to assisting you with all of the new projects that you have planned for 2012. Please keep me in mind as you plan this semester’s seminar schedule. I’d be happy to give a safety training for your department and it would count towards your quarterly safety training requirement. Also, remember to keep washing your hands to protect yourself from the flu and the common cold as well as the pathogens you work with in your laboratories!

The next IBC meeting will be held on Wednesday, January 25th. The deadline for protocol submission has already passed, however. Please make sure to submit protocols requiring full committee review by Wednesday, March 14th to be reviewed at the March 28th meeting. Feel free to contact us with any questions, concerns, or suggestions you may have. Please use us as a resource, as we are here to help!

Reportable Incidents Involving Biohazardous Material

When accidents occur in the lab, it is best practice to report these accidents so that others may learn from your mistakes. We ask that you report any accidents involving biohazardous material to the BSO within 48 hours of the occurrence. Following the initial notification to the BSO, a “Laboratory Incident Report Form” must be completed and submitted to the BSO within one week of the incident. The form can
be found on the biosafety webpage (http://compliance.vpr.okstate.edu/IBC/forms.aspx) and is included at the end of this issue of the Biozone for your reference. Reportable incidents can include but are not limited to:

- needlestick injury with a needle that has been exposed to biohazardous material,
- other sharps injuries where the skin is broken and exposed to biohazardous material,
- inhalation of infectious aerosols,
- spills of biohazardous material outside of primary containment (Biological Safety Cabinet (BSC), centrifuge rotor with bioseal, etc.) that are greater than 10ml or are highly concentrated (note all spills involving select agents and toxins must be reported immediately regardless of volume or concentration),
- release of biohazardous material outside of the approved laboratory, and
- lab personnel displaying symptoms of the disease that is caused by the pathogen you are working with in the lab.

You will not be penalized or punished for reporting lab incidents. Remember, even if the person involved in the accident does not become infected with the biological agent that they were exposed to, the incident should still be reported. It is also very helpful to report near miss incidents. A near miss is when you come very close to having an accident. We can learn from near miss incidents just as we do from accidents to prevent accidents from occurring in the future. Currently there is no national system for reporting laboratory exposures, but the Centers for Disease Control and Prevention (CDC) calls for the need of a “voluntary, nonpunitive surveillance and reporting system with the potential for anonymity to be implemented in the United States.”

**To Publish or not to Publish Avian Influenza Research**

Two laboratories have recently engineered the H5N1 avian-influenza virus, rendering it transmissible via aerosol in ferrets, which are a model species for the flu in humans. The mutated forms of the H5N1 virus have the potential to cause a pandemic in humans. Projects
such as this one are considered dual risk because the information can be misused to cause harm. The National Science Advisory Board for Biosecurity (NSABB) reviewed the research and recommended that details about the methods used to create the mutant virus be omitted in any publications for biosecurity reasons. *Science* and *Nature*, the two journals that are publishing the work have agreed to redact information by the request of the National Institutes of Health (NIH). The journals, however, are asking that NIH create a repository for the entire sequence of the engineered virus and that it should be made available to researchers who have a valid reason to view the data. It is not clear how a “valid reason” will be defined.

Some researchers are upset about this decision because they feel that the data may be useful for developing vaccines for avian influenza. These researchers argue that censoring the information may eventually harm the very population the agencies are trying to protect. There are others who support the decision to limit who can see the information. Some are calling for additional oversight of dual use projects. They feel that there is a need for more in depth evaluation of dual use research prior to the publication stage.

Which side of the fence are you on?

**References**


**Training Documentation**

The Principal Investigator (PI) listed on each IBC protocol must ensure that their personnel are trained before working on a project involving biohazardous material. Personnel should also be trained on an annual basis and whenever procedures change. Don’t forget to train the
support personnel such as animal caretakers, who are assisting you in your research. It is important to document these training sessions for your records. We recommend using the training verification forms on our webpage (http://compliance.vpr.okstate.edu/IBC/forms.aspx) to capture what was covered in the training and to document who was trained. As we do our walk through inspections, we will be asking to see these documents.

**Biosafety Guidance for Diagnostic Laboratories**

A CDC-convened Biosafety Blue Ribbon Panel published “Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories” in the latest Morbidity and Mortality Weekly Report: http://www.cdc.gov/mmwr/pdf/other/su6101.pdf. The document is intended to supplement the material to the Biosafety in Microbiological and Biomedical Laboratories (BMBL). Diagnostic laboratories provide unique safety challenges that were not directly addressed in the BMBL. The guidelines are not requirements but are recommendations to create a safe working environment. These concepts are not only applicable to traditional diagnostic laboratories but can also be applied to other research laboratories that work with environmental samples in which the biological safety risks are unknown.

Thank you for taking the time to read our newsletter. I hope that you found the information helpful. We appreciate your interest in the biosafety program and we look forward to working with you in the future!
Report of Laboratory Biosafety Incident

Laboratory Supervisor: ___________________________ Department: ___________________________

Location of Incident: ___________________________ Date of Incident: ________________ Time: __________

Employee(s) knowledgeable of the incident (name(s) and phone number(s)):

Description of incident:

Was medical attention sought?  □ No  □ Yes, where: ______
  • If YES, describe:

Was the unit department head (or equivalent) notified?  □ No  □ Yes
  • If YES, when:

Was the Biological Safety Officer notified?  □ No  □ Yes
  • If YES, when:

Describe the employee/departmental/medical/biological safety officer actions.

Additional corrective measures taken or to be taken.

Describe policy or security failures contributing to the incident.

_____________________________________________  ______________________________________________
Signature of Principal Investigator  Signature of Department Head (or equivalent)
or Lab Supervisor
Printed Name: ___________________________
Printed Name: ___________________________

The incident must be reported to Carrie Smith (4-3203) or carrie.a.smith@okstate.edu) within 48 hours. A copy of this incident report must be submitted to the Office of University Research Compliance within 1 week of the incident. Send to: Carrie Smith, 219 Cordell North.