Building a Research Occupational Health Program

OLAW Online Seminar
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OLAW FAQ G.9: olaw.nih.gov/guidance/FaqG

1. How can institutions identify and protect laboratory staff exposed to potential hazards?

Institutions must identify and protect laboratory staff exposed to potential hazards. This includes identifying potential exposures, implementing control measures to protect staff, and providing training and education.

- Hazard identification: Identify potential hazards in the workplace. This includes identifying substances, equipment, and procedures that may cause injury or illness.
- Risk assessment: Assess the potential risks associated with each identified hazard.
- Control measures: Implement control measures to reduce risks to acceptable levels. This includes engineering controls, administrative controls, and personal protective equipment.
- Training and education: Provide training and education to laboratory staff on the hazards they may face and the measures they can take to protect themselves.

For more information, please refer to OLAW's guidance on workplace hazards (olaw.nih.gov/guidance/wph).
Objectives

- Identify Occupational Health and Safety Program (OHSP) requirements per PHS Policy and Guide
- Indicate who is responsible for the OHSP
- Identify essential components of an effective OHSP

Requirements

**PHS Policy IV.A.1.f.**
For institutions with an Animal Welfare Assurance, the Institutional Program for Animal Care and Use must include a description of...

"the health program for personnel who work in laboratory animal facilities or have frequent contact with animals"
Requirements

Guide for the Care and Use of Laboratory Animals, 2011 (p 17-23)

“Each institution must establish and maintain an occupational health and safety program (OHSP) as an essential part of the overall Program of animal care and use.”

Requirements

Medical Evaluation and Preventative Medicine for Personnel

• “…development and implementation of a program of medical evaluation and preventive medicine should involve input from trained health professionals, such as occupational health physicians and nurses.”
  • “Confidentiality and other medical and legal factors must be considered…”

Polling Q1
Components of an OHSP

- Personnel Training
- Disaster Planning/Emergency Preparedness
- Risk Assessment
- Medical Treatment
- Facilities, Equipment & Monitoring
- Hazard Identification
- Health Assessment
- Personal Protection

Risk Assessment is an Essential Component

Two parts to the risk assessment process include:

- Identifying hazards associated with risks of the job
- Identifying risks of the individual

OLAW FAQ G.2. What is Required?

- Pre-placement medical evaluation
- Identification of hazards to personnel and safeguards appropriate to the risks associated with the hazards
- Appropriate testing and vaccinations
- Training of personnel regarding their duties, any hazards, and necessary safeguards
- Personal protective equipment (PPE)
OLAW FAQ G.2. What is Required?

- Policies and facilities that promote cleanliness
- Provisions for treating and documenting job-related injuries and illnesses
- Facilities, equipment and procedures designed, selected and developed to reduce the possibility of physical injury or health risk to personnel
- Good personal hygiene practices, prohibiting eating and drinking, use of tobacco products, and application of cosmetics and contact lenses in animal rooms and laboratories

Summary

- The institution is responsible for establishing and maintaining an effective OHSP
- The nature of the OHSP will depend on the facility, research, hazards, and species involved beginning with an identification of those hazards and assessment of the associated risks
- An effective OHSP requires evaluation of program components and the coordination of various research, program, administrative, and facility personnel

Building an Effective Research Occupational Health Program

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Associate Vice President for Research Administration
University of Rhode Island
Requirements for an Occupational Health and Safety Program (OHSP)

PHS Policy IV.A.1.f.
- For institutions with an Animal Welfare Assurance, the Institutional Program for Animal Care and Use must include a description of “the health program for personnel who work in laboratory animal facilities or have frequent contact with animals.”

Guide for the Care and Use of Laboratory Animals (p. 17)
- Each institution must establish and maintain an occupational health and safety program (OHSP) as an essential part of the overall Program of animal care and use.

Health Risks of Animal Care Staff

Veterinary services rank 2nd in incidence rates for non-fatal occupational injuries and illnesses

Types of injuries or illnesses:
- Laboratory animal allergies, with progression to asthma
  - 10-46% of exposed develop allergies
- Needlestick/sharps injuries
- Musculoskeletal disorders (MSDs)
- Compassion fatigue, stress, burnout
- Zoonotic infectious disease

Topics for Today

Confront the barriers
Improve upon what you have
Be inclusive
  - Go beyond the Guide
  - Consider the broader research community
Challenges and Barriers to an Effective OHSP

Lack of expertise
Lack of resources
Institutional barriers
  ➢ On-campus health services focused on student health only
  ➢ OHSP focused on clinical care, not research environment

Polling Q2

What Does Your OHSP Need to be?

“The nature of the OHSP will depend on the facility, research, hazards, and species involved.” (*Guide, p. 17*)
  ➢ Start by evaluating the risks
  ➢ Conduct an assessment of all activities involving animals
Building an Effective Program

Hallmark of an Effective Program?

Sound Implementation Strategies
Focus on developing sound, realistic policies and procedures

Based on your risks, understand program needs (i.e., time, resources)
- It's OK to start small
- Utilize outsourced expertise wisely
- Build in training opportunities

Program needs champions
- Leadership and doers

Regardless of size, a successful program requires a team approach

Engage Leadership → Gain Support

Hallmark of an Effective Program?

Strong Administrative Support

Engage
Proactively discuss regulatory requirements and risks with senior leadership

Data – conduct a gap assessment
- Internal or external
- Compare against requirements and peer institutions
- Survey program users
- Rate status of program areas (e.g., not present, developing, mature)

Challenge – Lack of a Broader OHSP

No on-site occupational health program
- List of providers as opposed to an occupational program to "integrate" into
- Urgent care is first line of treatment
- State-run programs
- Connect with institutional risk management
Example Situation
Growing Research Institution

No on-site occupational health service

- No occupational health expertise in-house
- Used biomedical research focused occupational health consultant to provide remote support (i.e., medical evaluations)
- Used consultant to train in-house staff

Gradually expanded in-house programs

Be Efficient

- Use available capabilities and services
- Use Health Services electronic medical records system for animal contact medical surveillance and respiratory protection medical evaluation

Improve Your OHSP – Learn, Grow, Evolve

Programs should be ever changing

- Semiannual IACUC program review is a good mechanism for self-evaluation

Identify funds for training opportunities

Improve your logistics

- Make interacting with the program as easy as possible – consider the researcher’s perspective
- Can communication between offices be improved?
- Interact with Human Resources to connect immediately with new hires
- Interact with Enrollment Services to obtain student rosters for classes that involve animal contact
Be Inclusive – Go Beyond the Guide

NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules

OSHA Standards
- 29 CFR 1910.1030 Bloodborne Pathogens
- 29 CFR 1910.95 Occupational Noise Exposure
- 29 CFR 1910.1048 Formaldehyde
- 29 CFR 1910.1450 Laboratory Standard

Nuclear Regulatory Commission Standards and Regulations

Include Everyone

Protections for:
- pregnant women;
- immunocompromised individuals; and
- People not involved with the animal care and use program (e.g. visitors, students, maintenance workers)

- Ensure your institution does not limit services to those with animal contact
- What about staff or students that do not have contact with animals?

What Does a Program Look Like?

Animal Exposure
- Medical surveillance program, health history questionnaire, tetanus vaccination
- Employees who handle wild animals will be provided rabies vaccinations

Biological Materials
- Laboratory workers who handle pathogens for which there is an effective vaccine available will be provided vaccinations for those agents
### What Does a Program Look Like?

**Reproductive Concerns**
- Laboratory workers who handle materials for which exposure may result in potential reproductive and developmental concerns will be provided risk evaluation and medical advice.

**Respiratory Protection**
- Laboratory staff may necessitate the use of a respirator due to medical considerations or exposure to allergens or hazardous materials.
- Connect with EH&S to provide fit testing.

**Other Occupational Injuries**

### Example Situation

**Clinical Care Focused Occupational Health Program**

- Robust clinical care occupational health program
  - Large research program
  - Beyond basic support for animal care staff (i.e., allergen exposures), there was a lack of understanding of other occupational risks.

- Work to incorporate research issues into larger occupational health program
  - Engaged OHSP team to participate in research-related functions to learn about research health risks (e.g., attending IBC, IACUC)
  - Established lines of communication with local emergency department to facilitate care the event of exposures.

### Improve Your OHSP

**Hallmark of an Effective Program?**

- **Ensure Coordination of Program Components**
  - Meet regularly with stakeholders

**Continue to develop resources**
- Medical SOPs for health providers
- Agent specific training, hazard specific training

**Expand to new areas**
- Ergonomic evaluations
Build Awareness

IACUC policy requires participation
- IACUC research protocols and courses that involve exposure to animals

IBC policy
- Communications with faculty, staff, and students
- Website, flyers, and magnets

Involve the Community ➔ Gain Support

Demonstrate the value of the OHSP
- Publish annual progress reports
- Ask for feedback

Questions

Submit to the chat box in the GoToMeeting control panel
Question 1
Can you provide possible approaches or options that Assured Institutions may implement regarding completion of a medical evaluation?

Question 2
My institution involves using animals in teaching. What is the expectation for the oversight of the students in an OHSP?

Question 3 Part I
A PI considering writing his own IACUC training protocol for rodents. It involves participants who will observe the procedure and others who will have an opportunity to perform hands-on surgical procedures. What are the Occupational Health requirements for participants observing animal procedures and for participants manipulating or performing the animal procedures?
Question 3
Part II
What is the most effective composition of the Occupational Health Program that would be amenable for a small university with few resources (e.g., no adjunct medical school)?

Question 3
Part III
What are the different models that universities use to fulfill NIH requirements (e.g., external contracts, relationship with hospitals)?

Question 3
Part IV
Who is responsible for ensuring that there is an Occupational Health Program and where does this program fit in the structural organization of the institution?
<table>
<thead>
<tr>
<th>Question 4</th>
<th>How can institutions and their IACUCs best prepare for a coronavirus pandemic?</th>
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<tr>
<td>Question 5 Part I</td>
<td>Can OLAW provide guidance to institutions that are unable to conduct semiannual facility inspections at least once every 6 months as a result of a complete shutdown due to COVID-19 and/or where only essential personnel are allowed into facilities?</td>
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<td>Question 5 Part II</td>
<td>If OLAW authorizes a waiver regarding conducting semiannual facility inspections within the 6 month timeframe as a result of COVID-19, will institutions be allowed to “pick up where they left off” or will they be required to “catch up”?</td>
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Question 6

If procedures on an IACUC-approved activity cannot be performed (e.g., administration of post procedural analgesia) as a result of a facility closure due to COVID-19, would that be considered reportable noncompliance to OLAW?

Question 7

What should institutions do in the event surgical masks or N95 respirators are not available for purchase due to shortages?

CDC Recommended Guidance for Extended Use and Limited Reuse of N95 Filtering Facepiece Respirators in Healthcare Settings: cdc.gov/noish/topics/hcwcontrols/recommendedguidanceextuse.html

CDC Strategies for Optimizing the Supply of N95 Respirators: cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/index.html

Question 8

What provisions should be made if an institution is unable to provide the support, resources, or services to maintain a compliant animal care and use program (e.g., shortage of available animal care personnel)?
Question 9
We have students that take classes on a farm. How should we handle their occupational health needs?

Question 10
We are almost finished with our Assurance renewal writing for submission, but with our institution is preparing for a shut-down/slow-down due to COVID-19, my fear is that it may not be submitted to OLAW in a timely manner. Is there any accommodation for business that is “not as usual”?

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