

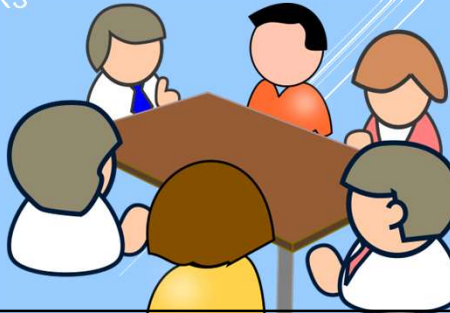
OCCUPATIONAL HEALTH AND SAFETY: WHERE DO WE GO FROM HERE?

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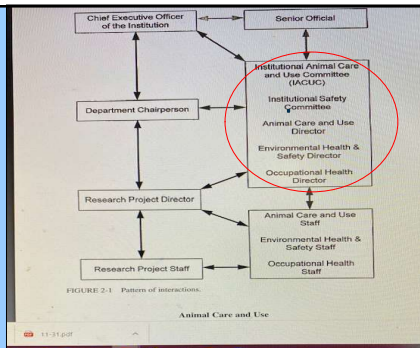


OCCUPATIONAL HEALTH AND SAFETY PROGRAMS CONTINUE TO BE CHALLENGING

INSTITUTIONAL STAKEHOLDERS



WHERE DO WE START?



THESE PROGRAMS CAN HAVE LOTS OF MOVING PARTS AND STAKE HOLDERS!

1970
14,000 workers were killed on the job – about 38 every day

Occupational Safety and Health Act was signed on December 29, 1970

OSHA has helped transform America's workplaces in ways that have significantly reduced workplace fatalities, injuries, and illnesses

PRESIDENT NIXON'S ADMINISTRATION

OHSP: The Basics

OHS PROGRAMS ARE AN INSTITUTIONAL RESPONSIBILITY



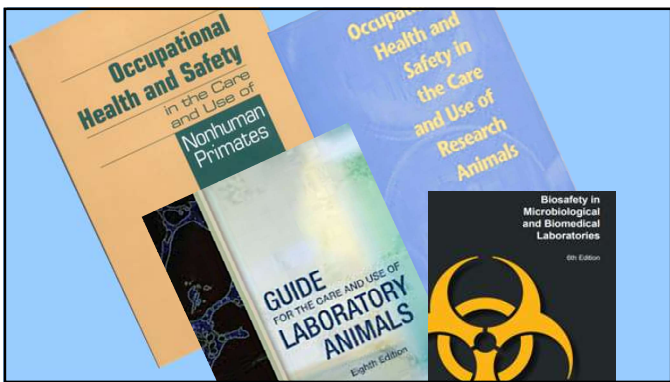
PROTECTING THE HEALTH AND SAFETY OF EMPLOYEES WHO CARE FOR, USE AND COME IN CONTACT WITH RESEARCH ANIMALS

REQUIRES THAT INSTITUTIONS THAT RECEIVE FEDERAL FUNDS MUST PROVIDE AN OHSP


- ▶ Public Health Service Policy on Humane Care and Use in Lab Animals

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 (CFR 1984g; DHHS 2009; PHS 2002).

The Guide



- ▶ An Effective Program requires coordination
 - ▶ Investigators or researchers
 - ▶ AV, IO and IACUC
 - ▶ Health and Safety staff
 - ▶ Occupational Health Services
 - ▶ Administration



Guide, pg. 17

"A SAFETY COMMITTEE MAY HELP FACILITATE COMMUNICATION"

Occupational Health and Safety Programs can seem daunting



one bite at a time...

- ▶ Hazard Identification
- ▶ Controlling Exposures
- ▶ Training
- ▶ Establishing Guidelines
- ▶ Consistency
- ▶ Monitoring
- ▶ Institutional Commitment and Coordination

HISTORICAL ELEMENTS OF AN **EFFECTIVE** OHSP PROGRAM

Provision of a safe working environment along with reviewing hazards associated with research protocols

IACUC INVOLVEMENT



Hazard Identification
Protocol Review





RISK ASSESSMENT




Defines nature and extent of exposure

- Position, duties, or role in research, institutional affiliation
- Workplace environment
- Species
- Known hazards
- PPE used
- Possible exposure types

RISK ASSESSMENT QUESTIONNAIRE



- ▶ Dogs
- ▶ Macaques* Cercopithecine herpesvirus 1
- ▶ Farm or Agricultural Animals
- ▶ Non-domesticated species
- ▶ Wildlife and Field Studies




HAZARD IDENTIFICATION-CAN BE SPECIES SPECIFIC

- ▶ **Rats and then mice** are among one of the most common sources of hazard exposure
- ▶ Urine is a major source of rodent allergens
- ▶ Minimize contact with rodent waste/litter

CONTROLLING MOST LIKELY EXPOSURES

- ▶ **75% of all institutions** -staff which developed allergic symptoms to rodents
- ▶ 10% of all lab workers will develop **occupational-related asthma**
- ▶ Allergies most often develops over a period of 1-2 year exposure
- ▶ Have the right Occupational Professionals involved in the risk assessment process

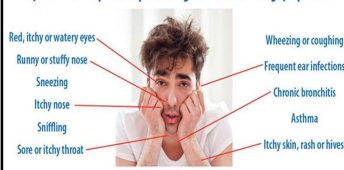
HAZARD IDENTIFICATION-RODENT SPECIFIC



CAUSES OF WORKPLACE OR OCCUPATIONAL ASTHMA

Irritant	Examples	Type of occupations/ environments at risk
Chemical dusts and vapors	Isocyanates, trimellitic anhydride, phthalic anhydride.	Manufacturers of foam mattresses and upholstery, insulation, packaging materials, plasticizers, and polyurethane paint
Animal substances	Bacterial dusts, dander, hair, mites, protein dusts, small insects	Farmers, animal handlers, kennel workers, jockeys, and veterinarians

Do you ever have patients presenting with the following symptoms?



Allergic Symptoms

- Rashes where animals are in contact with the skin
- Nasal congestion and sneezing
- Itchy eyes
- Asthma (cough, wheezing, and chest tightness).

SYMPTOMS OF LAB ANIMAL ALLERGIES

CONTROLLING EXPOSURES

ELIMINATE OR SUBSTITUTION
ENGINEERING
ADMINISTRATIVE
PPE


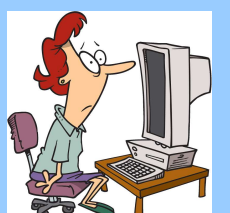


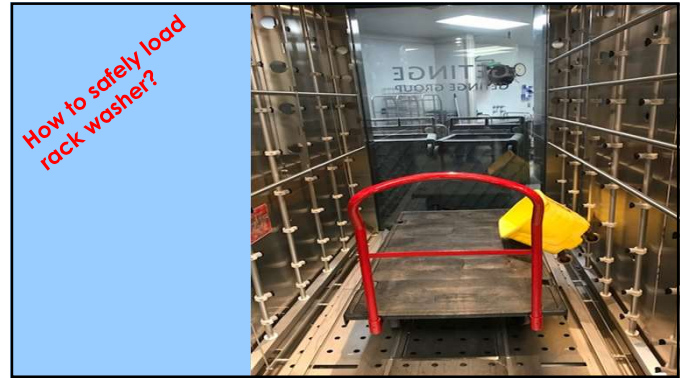


Training and Establishing Guidelines

Safety Starts with Training

OSHA requires employers to provide training to workers who face hazards on the job. OSHA also creates training materials, distribute training grants to nonprofit organizations, and provide training through authorized education centers.



Zoonosis
 Chemical, Physical and Biological Hazards
Hazards associated with Experimental Protocols
 Personal hygiene
 PPE
 Precautions during Pregnancy, Illness or Immunosuppression

REQUIRED TRAINING: THE GUIDE

Training and Establishing Guidelines

#1 Objective of OHSP
 Communicate hazard training to those who need to know
 Identify staff at risk of exposure and TRAIN them

IACUC, IBC AND SAFETY STAFF APPROVALS SHOULD BE COORDINATED

Monitoring and Consistency
 Application of the Rules
 Enforcement
 From the Chancellor to the Janitor

Institutional Coordination and Commitment

A CEO must understand that they are ultimately responsible

All Stakeholders must be educated and trained on what is required from them to have a successful program

For example **"Human Resources Department"** is frequently not included in establishing an effective program

Human Resources should know the nuances of your department/jobs being done there

HR should know who should be screened by OHS professionals

Animal Care or Research Staff that handle/exposed animals should be enrolled in OHSP

Re-evaluated on a regular basis or if they have a change in health status

OHSP WAIVER

I have read the above statements and decline participation in the _____ Occupational Health and Safety Program

I certify that I am enrolled in an occupational health and safety program for animal exposure at my primary workplace. I understand this may be verified by _____.

Contact Name for Occupational Health Verification

WE HAVE ALL EXPERIENCED A CATASTROPHIC, LIFE-CHANGING, **MULTI-YEAR PANDEMIC** THAT HAS CHANGED (AND IS CONTINUING TO CHANGE) US FOREVER.



"The pandemic represents a rare but narrow window of opportunity to reflect, reimagine, and reset our world."

Klaus Schwab
Founder and Executive Chairman, World Economic Forum



How has/was your program been impacted over the past few years while dealing with Covid?

What adjustments were made?

HOW HAS THE WORKPLACE CHANGED?



Workplace Respiratory Illness Policy

- *Masking vs Isolation
- *Testing
- *Quarantine

WORKER HEALTH POLICY





**Millennials will make up
75% of the workforce by
2025.**

Source: Deloitte



Current or Updated Trends in OHSP
AND A Healthy Workplace

Top Down Leadership is required to make a cultural shift in
OHS programs

Comprehensive non-compensation perks like holistic
wellness programs to attract the best talent

Foster engagement, performance, and well-being within your
team

Training and opportunities for individual growth

► **Benefits of Employee Wellness Plans**

- **Health and Wellness Programs** are associated with employee satisfaction rates
- Decreased Stress
- Improved Health and Productivity
- Improved recruitment and retention

- Aggression
 - Work-family stress
 - Job demands from workplace intensification
 - Stress associated with lack of control
 - Low workplace support
 - Less meaningful work
 - Job insecurity
 - Non-work responsibilities and quality of life
- PSYCHOSOCIAL HAZARDS ARE KEY
COMPONENTS TO SOME OHSP

2019, 58% of companies offer wellness benefits to support their employees and reduce workplace stress.

DURING THE PANDEMIC, 30% OF AMERICANS SHOWED SYMPTOMS OF ANXIETY, DEPRESSION, OR BOTH.

National Institute for Occupational Safety and Health (NIOSH) 2011
TOTAL WORKER HEALTH PROGRAM

Moving from focusing on individual behaviors where workplace is simply a venue to facilitate individual behavioral change. The new focus was placed on providing a healthy environment in the workplace

Research environments will have to decide what this looks like for us

FUTURE OF OHSP

WHY DO OHS PROGRAMS **FAIL**?



OHSP FAILURE PITFALLS

- ▶ Health/Medical Official resistant
- ▶ Researchers* contribution is not appreciated
- ▶ Veterinary Staff takes an overly exuberant role
- ▶ Human Resources being bypassed
- ▶ Administrator or CEO does not prioritize OHS Program

- ▶ FAILURE TO FAMILIARIZE OCC MEDICINE STAFF WITH WORK ENVIRONMENT, FACILITY HAZARDS AND RISKS
- ▶ FAILURE TO SHARE LITERATURE AND GUIDANCE DOCUMENTS
- ▶ FAILURE ESTABLISH AN APPROPRIATE BASE-LINE HISTORY/ HEALTH STATUS

OCCUPATIONAL MEDICINE PHYSICIAN OR NURSE HAS TO BE A MAJOR DRIVER OF THE PROGRAM

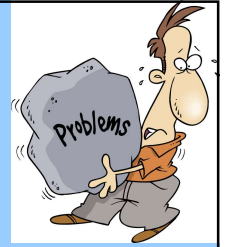
- ▶ Monitor and Evaluate OHS Program
- ▶ Representative from SEHS
- ▶ Monitoring (Documenting Non-compliance)
- ▶ Consequences for Non-compliance

**FAILURE OF IACUC TO ASSUME RESPONSIBILITY
USE THE PROGRAM REVIEW- SEMI-ANNUAL ASSESSMENT**

LET'S DISCUSS SOME SCENARIOS



- ▶ After 1-2 years, allergies with respiratory signs
 - ▶ Where can I work safely?
- ▶ Pregnant worker
 - ▶ Where can I work safely?
- ▶ Epilepsy
 - ▶ Where can I work safely?



AFTER YOU IDENTIFY PROBLEMS...THEY MUST BE MANAGED.

Dr K. OHS' Issue

- ▶ Well funded investigator
- ▶ Developed severe allergic reactions to rodents
- ▶ Was not cleared by SEHS
- ▶ Facility Access denied
- ▶ IACUC signature page made the PI responsible
- ▶ Protocol tabled



IF YOU DON'T GO TO THE FACILITY HOW CAN YOU TAKE RESPONSIBILITY?

Employee fails random drug test

- ▶ AALAS certified (LAT); lead tech role
- ▶ Failed a random drug test after being employed several years
- ▶ HR Options: a) Dismissal b) Employee Assistance Program



▶ **Failed** to involve Occ Health Representative


- ▶ Recommended counseling with rehabilitation professionals
- ▶ Risk Assessment for job duties
 - ▶ Isolated areas not recommended
 - ▶ Warned about potential hazards of isoflurane



FAILURE TO INVOLVE OHS PROFESSIONALS



DISCOVERED TO BE ABUSING ISOFLURANE



Science Advances




GREAT ADVANCES IN BIOMEDICAL RESEARCH: TOTAL NIH (2022) BUDGET APPROX. 33 BILLION; APPROX. 40% BASED ON ANIMAL MODELS YET, SURPRISINGLY THERE HAS BEEN MUCH LESS NEW INFORMATION GENERATED ON PROTECTING THE **PEOPLE** WHO CARE FOR THESE ANIMALS

UAMS
UNIVERSITY OF ARIZONA MEDICAL CENTER
FOR MEDICAL SCIENCE

Anonymously Reporting Animal-Staff Welfare Concerns

Did you know that **animal** staff welfare concerns can be reported anonymously? **Anonymous Compliance Hotline 1-888-511-3969.**

Animal Staff Welfare concerns will be passed on without retribution to the **Research-Compliance** Occupational Health and Safety Office, who will then investigate these concerns. Remember—in order to continue the pursuit of excellence in UAMS research programs, we need to work together to create a culture of compliance and prioritizing **animal** staff welfare

AFRICAN PROVERBS

"If you want to travel fast travel alone. If you want to travel far, travel together."