



AAALAC: OCCUPATIONAL HEALTH & SAFETY

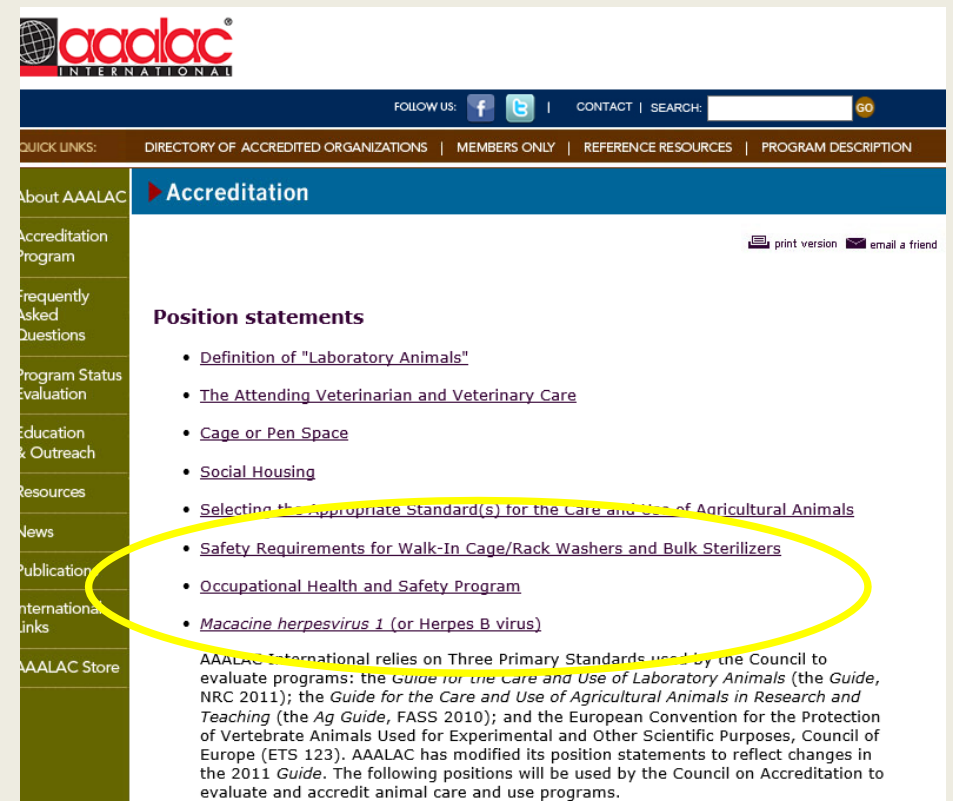
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OHS POSITION STATEMENTS from AAALAC

- Safety Requirements for Walk-In Cage/Rack Washers and Bulk Sterilizers
- Occupational Health & Safety Program
- *Macacine herpesvirus 1* (or Herpes B virus)

<http://www.aaalac.org/accreditation/positionstatements.cfm>



The screenshot shows the AAALAC International website. The header includes the AAALAC logo, social media links, and a search bar. The navigation menu includes 'About AAALAC', 'Accreditation Program', 'Frequently Asked Questions', 'Program Status Evaluation', 'Education & Outreach', 'Resources', 'News', 'Publications', 'International Links', and 'AAALAC Store'. The 'Accreditation' section is highlighted in blue. Below the navigation, there are links for 'print version' and 'email a friend'. The main content area is titled 'Position statements' and lists several statements:

- [Definition of "Laboratory Animals"](#)
- [The Attending Veterinarian and Veterinary Care](#)
- [Cage or Pen Space](#)
- [Social Housing](#)
- [Selecting the Appropriate Standard\(s\) for the Care and Use of Agricultural Animals](#)
- [Safety Requirements for Walk-In Cage/Rack Washers and Bulk Sterilizers](#)
- [Occupational Health and Safety Program](#)
- [Macacine herpesvirus 1 \(or Herpes B virus\)](#)

Below the list, the text states: 'AAALAC International relies on Three Primary Standards used by the Council to evaluate programs: the *Guide for the Care and Use of Laboratory Animals* (the *Guide*, NRC 2011); the *Guide for the Care and Use of Agricultural Animals in Research and Teaching* (the *Ag Guide*, FASS 2010); and the *European Convention for the Protection of Vertebrate Animals Used for Experimental and Other Scientific Purposes*, Council of Europe (ETS 123). AAALAC has modified its position statements to reflect changes in the 2011 *Guide*. The following positions will be used by the Council on Accreditation to evaluate and accredit animal care and use programs.'

Occupational Health & Safety Program

AAALAC:

- Hazard identification and risk assessment
- Personnel training and protection
- Written procedures and policies regarding hazard use and monitoring
- Medical evaluation and preventative medicine

UNC - OHS Elements:

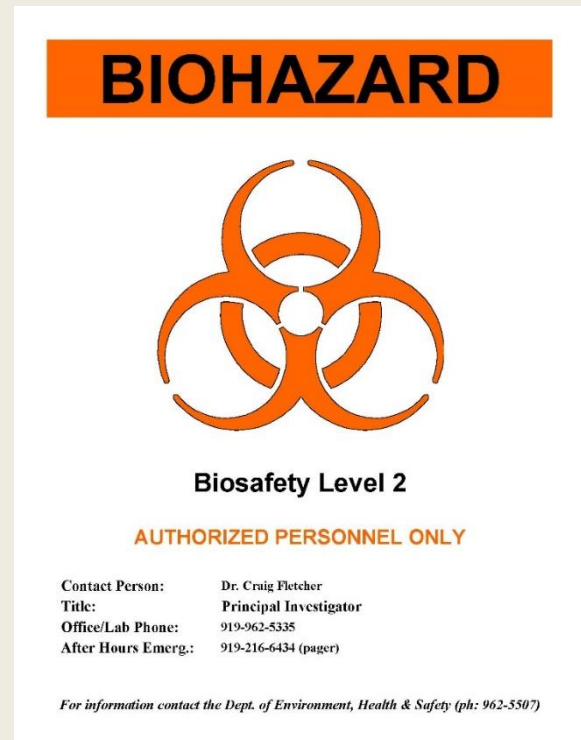
- Hazard Forms in ACAP protocols
- Online and in person safety training
- Lab Safety Plan and Lab Safety Manual
- SOPs integrate safety elements and required PPE
- Annual Animal Handler Questionnaire and injury medical evaluation

Other OHS Focus Areas

- Biological Hazards
- Chemical Hazards
- Radiological Hazards
- Zoonoses and Lab Animal Allergies
- Physical Plant
- PPE

Hazardous Agents - BIOLOGICALS

- Biological Hazard Forms in ACAP
- ABSL2
 - *Required entry signs for housing areas (DLAM, satellites, APSEs)*
 - *ABSL2 SOP*
 - *Biohazard cards on cages*
 - *Disinfection, Autoclave or Incinerate all waste*
- BSL2
 - *Lab entrance signs*
 - *Sch F on file in LSP*
 - *Biohazard symbol on equipment and storage areas*
 - *Disinfection, Autoclave or Incinerate all waste*



Hazardous Agents - CHEMICALS

- Chemical Hazard Forms in ACAP
- DLAM Areas
 - *Chemical hazard cards on cages*
 - *Door signs*
 - *Chemical Hazard SOP*
 - *Waste disposal segregation*
- Labs
 - *Lab entrance signs*
 - *Lab Safety Plan*
 - *Proper Storage*
 - *Hazardous Waste Management*

LABORATORY HAZARD INFORMATION

 CORROSIVE MATERIALS	 FLAMMABLE GAS	 NON-FLAMMABLE GAS	 FLAMMABLE MATERIALS	 OXIDIZING MATERIALS
 ULTRAVIOLET LIGHT	 WATER REACTIVE			

212 Beard Hall

EMERGENCY CONTACT INFORMATION

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Principal Investigator: <u>Harold Kohn</u>	Phone: <u>(919) 843-8112</u>
Department: <u>Medicinal Chemistry & Natural Products</u>	Date Updated: <u>12/01/09</u>

EYE PROTECTION & LAB COAT REQUIRED AT ALL TIMES. EATING & DRINKING ARE PROHIBITED IN LAB AREAS.

EMERGENCY: DIAL 911

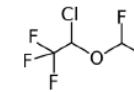
Chemicals - Anesthetics

- Isoflurane
 - Possible reproductive hazard
 - SOP (<https://ehs.unc.edu/files/2015/09/isoflurane.pdf>)
 - Waste gas scavenging
 - Active - local exhaust, house vacuum
 - Passive - F/Air Canister Management
- Urethane
 - Mutagen, carcinogen
 - SOP (<https://ehs.unc.edu/files/2015/09/urethane.pdf>)
 - Work in chemical fume hood
- MS-222
 - Skin/Eye/Respiratory irritation
 - SOP (<https://ehs.unc.edu/files/2015/09/ms-222.pdf>)
 - Weigh in chemical fume hood

EHS SOP #: 003	SUPERCEDES: n/a
VERSION NO.: 1.0	EFFECTIVE DATE: September 2013
PREPARED BY: Catherine Brennan	LAST REVISED: September 10, 2013

Standard Operating Procedure
For

ISOFLURANE



PURPOSE:

Isoflurane is a halogenated anesthetic gas commonly used in University animal research facilities and individual laboratories. This document establishes procedures for the safe handling and use of 1-chloro-2,2,2-trifluoroethyl difluoromethyl ether (CAS# 26675-46-7), commonly known as isoflurane or Forane®.

HEALTH EFFECTS:

Isoflurane is a halogenated hydrocarbon that is a clear, colorless volatile liquid at standard temperature and pressure with a mild ether-like odor. It is known to cause serious eye irritation and human exposure to waste anesthetic gases has been associated with reproductive effects.

Signs of acute exposure: nausea, vomiting, nose/throat/respiratory irritation, headache, dizziness, drowsiness, skin irritation.

Signs of chronic exposure: hypotension (low blood pressure), tachycardia (increased heart rate), respiratory depression, elevated blood glucose.

REGULATORY LIMITS: The Federal Occupational Safety and Health Administration (OSHA) do not have a Permissible Exposure Limit (PEL) for isoflurane. The National Institute of Occupational Safety and Health (NIOSH) have established a Recommended Exposure Limit (REL) of 2 ppm as a ceiling limit over a 1-hour time period for all halogenated anesthetic agents (1977). Isoflurane was developed later and was not included in this standard setting process so its applicability is questionable. However, based on potential risks it is recommended that no worker should be exposed to greater than 2 ppm of any halogenated anesthetic agent including isoflurane.

Hazardous Agents - RADIOLOGICAL

- Radiological Hazard Forms
- Ionizing Materials
 - *Lab entrance signs*
 - *Lab safety plan*
 - *Rad stickers on cages*
 - *PI takes responsibility for contamination surveys and waste*
- Non-ionizing (lasers, x-rays)
 - *Lab entrance signs*
 - *Illuminated signs*
 - *Lab safety plan*



Zoonoses and LAA

- Prevention
 - *Training*
 - *Changing hoods/BSC as controls*
 - *PPE (including Respirators)*
- Awareness
 - *Signs and symptoms*
 - *Potential exposures*
- Medical Evaluation
 - *UEOHC*



PPE

- Personal Protective Equipment
- Minimum Lab
 - *Safety glasses or goggles*
 - *Lab Coat*
 - *Nitrile or Latex Gloves*
 - *Long pants and closed toe shoes*
- Minimum DLAM
 - *Shoe covers*
 - *Bonnet*
 - *Surgical Mask*
 - *Nitrile or latex gloves*
 - *Bunny suit or lab coat*
 - *Long pants and closed toe shoes*



Physical Plant

- Engineering Controls
 - *Chemical Fume Hoods – annual certification, alarm*
 - *Biological Safety Cabinets – annual certification*
- Emergency Equipment
 - *Eye washes: monthly check by lab*
 - *Safety Showers: yearly check by Facilities*
 - *Fire extinguishers: yearly by EHS*

Waste Management

- Chemical
 - *Nothing down drain*
 - *Secondary containment*
 - *5Ls – Lids, Leaks, Labels, Location and Limits*
- Biological
 - *Steam sterilization via autoclave*
 - *Stericycle incineration*
- Carcasses
 - *Ziploc bag w/protocol number*
 - *Storage in freezer*
 - *Stericycle incineration*

Questions?

- Contact Info:
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