

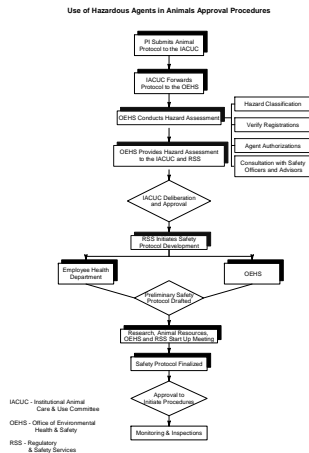
ENHANCING IBC AND IACUC COLLABORATION: REFINEMENT OF A COMPREHENSIVE ANIMAL CARE AND USE PROTOCOL HAZARD REVIEW PROGRAM FOR LAB ANIMAL RESEARCH

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Yale University, New Haven, CT.

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This poster serves as an update to a previous ABSA poster presentation on the framework for the review of animal protocols at Yale University for hazard identification and control. The Yale University Institutional Animal Care and Use Committee (IACUC) has strengthened its interaction with the Yale Office of Environmental Health & Safety (OEHS) and streamlined the process. An OEHS professional reviews all IACUC protocols, modifications with hazards associated. The designated OEHS professional screens for hazards identified by the Principal Investigator and for any other unidentified potential hazards or other regulated materials. A spreadsheet, created in advance of the IACUC monthly meeting, lists the major hazards identified (biological, chemical or radiological). The proposed IACUC protocols are also screened against OEHS and campus databases to identify the status of registrations, training, and hazard forms for experiments with human pathogens, toxins, non-exempt DNA, controlled substances, radioactive materials and high risk chemical agents. Finally, each OEHS discipline is responsible for providing Regulatory & Safety Services (RSS), on behalf of the IACUC, with any augmented safety procedures or special instructions for the protocol. The refined system has elevated and enhanced the review and discussion of hazards prior to the IACUC meeting. This information is used by RSS as the baseline information for the required start-up meeting with the Principal Investigators, Yale Animal Resources Center (YARC) husbandry and veterinary staff and has facilitated the safety protocol discussion.



SAFETY ASSESSMENT CRITERIA

HAZARD CLASSIFICATION

Biological

- BL2 agent
- BL3 agent
- Contag agent
- DNA
- Human Material

Chemical

- Toxic of biological origin
- Hazardous

Radiation

- Ionizing
- Non-ionizing

Physical

- Field Studies

VERIFICATION OF REGISTRATION

- Registration for the Use of Biological Materials (Form 1)
- Registration of Recombinant DNA Experiments
- Request to Use Infectious Agents
- Request to Use Hazardous Agents in Animals
- Registration for Biosafety Level 3(BL3) Research in Animals
- Request to Use Infectious Agents
- Worker Experience Form
- Authorization to Use Radionuclides
- Research Protocol Chemical Safety Review

AGENT AUTHORIZATIONS

Institutional Committee Approvals

- IBC
- SC
- State, Federal Approvals
- NRC
- ST, CT, DPH - Research and Animal Laboratory Registration
- SRM - Veterinary Permit
- Select Agent: DHS/SCDC and/or USDA

CONSULT WITH SAFETY OFFICERS AND ADVISORS

- Laboratory Inspectors
- Facility equipment / Engineering Controls
- Training records

SAMPLE OEHS ASSESSMENT TO THE IACUC

Date	Protocol #	PI	Hazard Class	Hazard Name	YARC Items	Use Location		AUTHORIZATIONS				NOTES
						Buildg	Room	IBC/BL3	BL3/Select	ONA	RSC	
Sep-07	XXX	Smith	Rat	H-3 Thymidine	Yes	Buildg 1	6N					Under Review
Sep-07	XXX	Smith	Chem	Phenylthiourea	Yes	Buildg 2	16				No	Under Review; Exempt DNA
Sep-07	XXX	Smith	Bio	Recombinant and terminal vectors	Yes	Buildg 6	21	Yes		Yes		Animal BSL-2 with biomedical waste removal
Sep-07	XXX	Smith	Chem	Bromodeoxyuridine, Thymidine	Yes	Buildg 7	24				Yes	Follow Hazardous Chemical SOP
Sep-07	XXX	Smith	Bio	LCMV	Yes	Buildg 2	501	No	No			Request to Use Infectious Agents in Animals form needed. Approval from the facility committee required prior to entering work
Sep-07	XXX	Smith	N/A		N/A	Buildg 11	805					No OEHS concerns
Sep-07	XXX	Smith	Rad	H-3 and C-14	No	Buildg 9	239			No		Hazard form needed for C-14 and H-3 work
Sep-07	XXX	Smith	Chem	Bromodeoxyuridine, Uraciltham	Yes	Buildg 7	20				Yes	Follow Hazardous Chemical SOP
Sep-07	XXX	Smith	N/A		N/A	Buildg 4	20					No OEHS concerns
Sep-07	XXX	Smith	N/A		N/A	Buildg 4	22					No OEHS concerns
Sep-07	XXX	Smith	N/A		N/A	Buildg 4	22					No OEHS concerns

SAFETY PROTOCOL DEVELOPMENT

OVERVIEW

- PI provides description of the objective and procedures and performs the initial risk assessment of the proposed use of hazardous agents

PRACTICES & PROCEDURES

- Laboratory practices and inspection
- Animal room practices
- Transportation of animals, agents and wastes
- Entry and exit procedures

TRAINING

- Biosafety, Bloodborne Pathogen, BLS
- Animal care and use
- Relevant tech experience
- Respiratory protection and fit testing
- Use of engineering controls and containment equipment
- Record keeping
- Labeling

EXPOSURE CONTROL

- Housing Assignment
- Selection of engineering controls
- Evaluation of primary and secondary barriers/containment
- Selection of personal protective equipment
- Emergency response procedures

MEDICAL SURVEILLANCE

- Health history
- Baseline sera, if applicable
- Immunizations, if applicable
- Medical clearance

WASTE MANAGEMENT

- Cage decontamination
- Wastes decontamination
- Carcass disposal
- Laboratory supplies
- Personal protective equipment
- Sharps collection

CONCLUSION

This refinement has elevated and enhanced the review and discussion of hazards associated with animal protocols prior to and during the IACUC meeting. The augmented safety procedures and/or special instructions serve as the foundation for the required safety start-up meeting with the Principal Investigators, Yale Animal Resources Center staff, OEHS and RSS and facilitated the safety protocol discussion during the start up meeting.