

## OUTLINE

### DESCRIPTION OF INSTITUTIONAL ANIMAL CARE AND USE PROGRAM

#### I. Introduction

- A. Name of Program Unit
- B. Overview and Purpose
- C. Description of the Organization (Attach organizational chart plus any support comments needed)
- D. Key Institutional Representatives
- E. Accreditation History
- F. Nature of Research, Testing, and Teaching Programs
- G. Research Funding Source(s)
- H. Summary of Facilities
- I. Other Units not Included in This Description
- J. Contract Facilities
- K. Other Relevant Background

#### II. Description

- A. Institutional Policies and Responsibilities
  - 1. Monitoring the Care and Use of Animals
    - a. Institutional Animal Care and Use Committee (s) (IACUC)
      - 1) Who appoints Committee/who is Institutional Official
      - 2) Composition/Frequency of Meetings/Responsibilities of the Committee
      - 3) Frequency of Committee Review

- 4) **USDA Inspection Report Responses**
- 5) **Other Monitoring Procedures**
- b. **Animal Care and Use Protocol Review and Approval**
- c. **Physical Restraint**
- d. **Multiple Major Surgical Procedures**
- e. **Food or Fluid Restriction**
- 2. **Veterinary Care**
- 3. **Personnel Qualifications and Training**
  - a. **Animal Resource Professional/Management/Supervisory Personnel**
  - b. **Animal Care Personnel**
  - c. **Research Staff**
- 4. **Occupational Health and Safety of Personnel**
  - a. **Hazard Identification and Risk Assessment**
  - b. **Personnel Training**
    - 1) **Description of Special Qualifications and Training for Work With Hazardous Agents in Animals**
    - 2) **Description of Educational Programs**
  - c. **Personal Hygiene and Protection**
    - 1) **Personal Protective Equipment/Work Clothing Provided**
    - 2) **Shower/Change Facilities**
    - 3) **Eating, Drinking, and Smoking Policies**
  - d. **Medical Evaluation and Preventive Medicine for Personnel**

- 1) Description of Program; Personnel Included
- 2) Aspects Relating to Hazardous Agents
- 3) Special Precautions for Primate Users

e. **Animal Experimentation Involving Hazards**

- 1) Description of Institutional Policies
- 2) Description of Oversight Process and Husbandry Practices
- 3) Containment of Hazardous Agents
- 4) Scavenging of Anesthetic Gases
- 5) List of Approved Hazardous Agents
  - a) Biologic Agents
  - b) Chemical Agents
  - c) Physical Agents

f. **Facilities, Procedures, and Monitoring**

- 1) Description of Requirements for Showers and Change Facilities
- 2) Description of Procedures that Reduce Potential for Injury
- 3) Description of Special Facilities
- 4) Description of Housing and Care for Animals Exposed to Hazardous Agents

**B. Animal Environment, Housing, and Management**

1. **Physical Environment**

a. **Housing**

- 1) Primary Enclosures

- 2) Sheltered or Outdoor Housing
    - 3) Naturalistic Environments
  - b. Animal Space Provisions
    - 1) Description of Sources/Process for Determining Cage/Pen Size
    - 2) Description of Exceptions to the Guide and Other Applicable Regulations
  - c. Temperature and Humidity
  - d. Ventilation
  - e. Illumination
  - f. Noise
2. Behavioral Management
- a. Structural Environment
  - b. Social Environment
  - c. Activity
3. Husbandry
- a. Food
    - 1) Type and Source
    - 2) Storage Facilities of Vendors
    - 3) Storage in Animal Facilities
    - 4) Storage in Animal Rooms
    - 5) Food Preparation Areas
    - 6) How Food is Provided

- 7) **Quality Control Procedures**
- b. **Water**
  - 1) **Source, Treatment and How Provided**
  - 2) **Quality Control Methods**
- c. **Bedding**
  - 1) **Type, How Used, and How Selected**
  - 2) **Storage Facilities/Vermin Control**
  - 3) **Quality Control Procedures**
- d. **Miscellaneous Animal Care and Use Equipment**
  - 1) **Motorized Vehicles**
  - 2) **Other Equipment**
- e. **Sanitation**
  - 1) **Bedding Change**
    - a) **Frequency of Contact and Non-Contact Bedding Changes**
    - b) **Exceptions to Guide (or Regulations) Recommended Frequencies**
    - c) **Location Where Soiled Bedding is Removed**
  - 2) **Cleaning and Disinfection of Primary Enclosures**
    - a) **Washing/Sanitizing Frequency For:**
      - i. **Solid Bottom Cages**
      - ii. **Suspended Wire Bottom/Slotted Floors**
      - iii. **Cage Tops**

- iv. **Cage Racks and Shelves**
  - v. **Cage Pans Under Suspended Cages**
  - vi. **Playpens, Floor Pens, Stalls, etc.**
  - vii. **Corrals/Outdoor Paddocks**
  - b) **Cage Washing/Sanitizing Procedures**
  - c) **Cleaning/Sanitizing Agents Used**
  - d) **Exceptions to Guide (or Regulations) Recommended Sanitation Intervals**
- 3) **Cleaning and Disinfection of Secondary Enclosures**
- a) **Animal Room Cleaning Frequency, Procedures, Methods and Agents**
  - b) **Corridor and Support Area Cleaning**
  - c) **Implements**
  - d) **Separation of Cleaning Implements By Room**
- 4) **Sanitation of Cage Equipment**
- a) **Procedures and Frequency for Feeders**
  - b) **Procedures and Frequency for Watering Devices**
  - c) **Procedures and Frequency for Enrichment Devices**
- 5) **Sanitation of Transport Cages, Equipment, and Vehicles**
- 6) **How Effectiveness of Cage Sanitation is Monitored**
- f. **Waste Disposal Methods**
- 1) **Soiled Bedding and Refuse**
  - 2) **Animal Carcasses**

- 3) **Hazardous Wastes**
- g. **Pest Control**
  - 1) **Program**
  - 2) **Notification of Animal Users**
- h. **Provisions for Emergency, Weekend, and Holiday Care**
  - 1) **Procedures for Weekend/Holiday Care**
  - 2) **Procedures for Contacting Responsible Animal Care and/or Veterinary Personnel**
  - 3) **Procedures for Monitoring Animal Facility Mechanical Systems**
  - 4) **Brief Description of Disaster Plan.**
- 4. **Population Management**
  - a. **Identification and Records**
    - 1) **Methods for Identification of Each Species**
    - 2) **Procedures for Maintaining Individual Records**
  - b. **Genetics and Nomenclature**
    - 1) **Program for Advising Investigators on Selection of Animal Based on Genetics**
    - 2) **Program for Advising Investigators on Use of Standard Nomenclature**
    - 3) **Breeding Colony Maintenance**
      - a) **Species, Stocks and Strains**
      - b) **Breeding Scheme**
      - c) **Genetic Monitoring Program**

**d) Use of Substrain Designation When Reporting Experimental Results**

**C. Veterinary Medical Care**

**1. Animal Procurement and Transportation**

**a. Methods for Evaluating Quality of Animals**

**b. How Animals are Transported**

**2. Preventive Medicine**

**a. Quarantine, Stabilization, and Separation**

**1) Receiving and Initial Evaluation Procedures**

**2) Quarantine Facilities and Procedures for Purpose Bred Animals**

**3) Quarantine Facilities and Procedures for Random Source Animals**

**4) Isolation Facilities and Procedures for Ill Animals**

**5) Periods for Physiologic, Psychologic, and Nutritional Stabilization**

**6) Program for Separation of Animals by Species, Source, and Health Status**

**b. Surveillance, Diagnosis, Treatment, and Control of Disease**

**1) Program**

**a) Daily Observation of Animals**

**b) Procedure for Providing Veterinary Medical Care**

**c) Medical Records Maintenance Procedures**

**d) Preventative Medicine Programs for Each Species**

**e) Animal Health Monitoring**

**2) Diagnostic Resources**

- a) Clinical Laboratory
- b) Necropsy/Histopathology
- c) Use of Available Diagnostic Resources Including Commercial Labs
- d) Radiology

**3. Surgery**

**a. Surgical Monitoring**

**b. Presurgical Planning**

**c. Training Program**

**d. Major and Minor Procedures**

**1) Criteria for Differentiation**

**2) Practices Employed**

**e. Aseptic Procedures**

**1) Procedures and Equipment**

**2) Methods Used to Sterilize Instruments and Protective Clothing**

**f. Surgical Facility Use**

**g. Postsurgical Actions**

**h. Mammalian Survival Procedures**

**1) Where Performed; Professional Supervision**

**2) Description of the Program**

**3) Major Support Equipment Available**

4) **Training and Experience of Personnel Performing Surgery**

i. **Rodent Survival Procedures**

1) **Facilities for Survival Rodent Surgery**

2) **Types of Procedures Performed**

3) **Techniques Used to Prevent Infection**

j. **Farm Animal Procedures**

1) **Where Performed; Professional Supervision**

2) **Description of Program**

3) **Major Support Equipment Available**

4) **Training and Experience of Personnel Performing Surgery**

k. **Survival, Non-Mammalian Procedures**

1) **Facilities for Non-Mammalian Surgery**

2) **Types of Procedures Performed**

3) **Techniques Used to Prevent Infection**

l. **Nonsurvival Procedures**

1) **Facilities for Nonsurvival Procedures on Nonrodent Mammals**

2) **Description of Program**

3) **Major Support Equipment Available**

4) **Training and Experience of Personnel Performing the Procedure**

4. **Pain, Distress, Analgesia, and Anesthesia**

- a. How and by Whom are Levels of Pain and Distress Assessed and Categorized
  - b. IACUC Guidelines for Avoiding Unnecessary Pain or Distress
  - c. Agents Used for Each Species
  - d. How Veterinarian Provides Input to Choice and Use of Drugs
  - e. How Use of Anesthetics and Analgesics is Monitored
  - f. Training and Experience of Personnel Performing Anesthesia
  - g. Description of Safety Procedures for Using Volatile Anesthetics and for Gas Scavenging
5. Euthanasia
- a. Methods for Each Species
  - b. Training and Experience of Personnel
6. Drug Storage and Control
- a. General Storage Arrangements
  - b. Recordkeeping Procedures
  - c. Ensuring Drugs and Supplies are Within Date of Expiration
- D. Physical Plant (Repeat this section for each facility)
1. Functional Areas
- a. Overview of General Arrangement and Condition of Facility-Location and General Arrangements
    - 1) Location of Animal Facility
    - 2) Physical Relationship to Research Labs
    - 3) General Arrangement of Animal Facility
    - 4) Specialized Animal Housing Systems

5) **Cubicle Availability and Design**

b. **Functional Space**

1) **Total Square Feet and Number of Animal Housing Rooms (Traditional Biomedical Facilities)**

- a) **Indoor space, A/C and heated**
- b) **Indoor space, heated, no A/C**
- c) **Indoor space, not environmentally controlled**
- d) **Outdoor facilities**

2) **Total Square Feet and Number of Animal Housing Areas ("Farm" Facilities)**

- a) **Indoor Space, A/C and Heated**
- b) **Indoor Space, Heated, No A/C**
- c) **Indoor Space, Not Environmentally Controlled**
- d) **Outdoor Facilities**
- e) **Acreage and Location**

c. **Support Areas**

1. **Total Square Feet and Number of Support Area Rooms**

- a) **Receiving**
- b) **Rodent/Rabbit Quarantine**
- c) **Random Source Animal Quarantine**
- d) **Isolation for Sick Animals**
- e) **Aseptic Surgery**
- f) **Necropsy**

- g) Radiology**
- h) Diet Kitchen**
- i) Feed Storage**
- j) Bedding Storage**
- k) Cage Wash**
- l) Clean Cage Storage**
- m) Incinerator/Waste Disposal**
- n) Diagnostic Lab**
- o) Animal Procedural Space**
- p) Personnel Facilities**
- q) Service Corridors**
- r) Lounge Facilities**
- s) Administrative Space**
- t) Mechanical**

**2. Construction Guidelines**

**a. Corridors in Animal Facility**

- 1) Composition, Dimensions, Protection**
- 2) Transport of Animals/Caging Equipment Through Common Use Corridors or Elevators**

**b. Animal Room Doors**

- c. **Exterior Windows**
  - d. **Floors**
  - e. **Drainage and Plumbing**
  - f. **Walls**
  - g. **Ceilings**
  - h. **Heating, Ventilation, and Air Conditioning**
  - i. **Power and Lighting**
    - 1) **Physical Aspects**
    - 2) **Provision of Emergency Power**
    - 3) **History of Power Failure**
    - 4) **Animal Loss or Health Problems Resulting From Power Failure**
  - j. **Storage Areas**
  - k. **Noise Control**
  - l. **Cage Sanitation Facilities**
    - 1) **Location**
    - 2) **General Features**
    - 3) **Equipment**
3. **Facilities for Aseptic Surgery**
- a. **Facilities for Aseptic Surgery**
    - 1) **Location of Support Functions**
    - 2) **Construction Features of Operating Room**
      - a) **Interior Surfaces**

b) **Ventilation System**

c) **Lighting**

d) **Outlets**

e) **Scavenging**

f) **Fixed equipment**

b. **Contamination Control**

c. **Surgical Support Areas**

d. **Post-operative Recovery Area**

4. **Farm Animals or Field Studies**

5. **Security**

# EXAMPLE

## ANIMAL USAGE

In order to assist the site visitors in their evaluation of the animal care and use program, please provide the information requested below. Information, organized by species should be given on all animals used in research, teaching, or testing, including those which may be used or housed in laboratories outside the animal care facility. Of particular interest is information on those animals which are used in research projects involving recovery surgical procedures, behavioral or other testing requiring chairing or other forms of restraint, or exposure to potentially hazardous materials.

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<b>TYPE OF PROCEDURES</b>	<b># OF PROTOCOLS</b>	<b>SPECIES</b>	<b>APPROX #/YEAR</b>	<b>PRINCIPAL INVESTIGATOR</b>	<b>LOCATION OF USE</b>
Liver macrophage-harvest euthanized	15	mice	1500	J. A. Smith M. J. Tyson A. M. Knight	Rm. 047 Rm. 078 Rm. 098
Embryo transfer	5	mice	2500		
Stapling devices- survival surgery	1	dogs	15	K. C. Day	Rm. 718
Thoracotomy/vascular implant- survival surgery	6	dogs	10		
Bone grafting	2	dogs	12		
Teaching demonstration	1	dogs	02		
Catherization (chaired)	2	NH primates	04		
Infectious disease	2	NH primates	45		
Neurosurgery	4	grey squirrel	15		
Motor nerve stimulator implantation	1	pigs	16		
Pyrogen testing	2	rabbits	35		
Antibody production- Freunds Adj	1	rabbits	09		
Corneal laser surgery	4	rabbits	24		

Use additional pages for presentation of animal usage if necessary

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ANIMAL USAGE

TYPE OF PROCEDURES	# OF PROTOCOLS	SPECIES	APPROX #/YEAR	PRINCIPAL INVESTIGATOR	LOCATION OF USE
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Use additional pages for presentation of animal usage if necessary



# EXAMPLE

## HEATING, VENTILATING & AIR CONDITIONING (HVAC) SYSTEM

Summarize the heating, ventilation and air conditioning (HVAC) information for each animal room/support facility indicating: a) source(s) of air, b) air recirculation rates if other than fresh air, c) air exchange rates, d) relative pressure differentials, e) humidity control, and f) date of most recent measurement/evaluation. Information may be provided in another format, providing all requested data is included. HVAC information should be provided from assessments obtained within the past 12 months.

<b>Room No.</b>	<b>Use</b>	<b>Air Source % Fresh/Recirculated</b>	<b>Treatment Filtered/Absorbers, etc.</b>	<b>Air Changes</b>	<b>Pressure</b>	<b>Humidity Control</b>	<b>Date Assessed</b>
10	Surgery	100% Fresh	HEPA	15	+	Y	8/92
125	Holding Room	100% Fresh	HEPA	12	-	Y	8/92
135	Holding Room	100% Fresh	Coarse filter/charcoal	10	-	Y	8/92
150	Treatment Room	100% Fresh	None	10	-	Y	7/92
175	Necropsy	100% Fresh	HEPA	15	-	Y	7/92
200	Cage Wash	30% Recirculated	Coarse filter	15	-	Y	7/92
210	Feed Storage	50% Recirculated	Coarse filter	10	-	Y	7/92
215	Storage	70% Recirculated	Coarse filter	08	-	Y	4/92
300	SPF Room	100% Fresh	HEPA	15	+	Y	4/92
A100	Swine Facility	100% Fresh	N/A	variable fan	N/A	N	

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**HEATING, VENTILATING & AIR CONDITIONING (HVAC) SYSTEM**

Summarize the heating, ventilation and air conditioning (HVAC) information for each animal room/facility indicating: a) source(s) of air, b) air recirculation rates if other than fresh air, c) air exchange rates, d) relative pressure differentials, e) humidity control, and f) date of most recent measurement/evaluation. Information may be provided in another format, providing all requested data is included. HVAC information should be provided from assessments obtained within the past 12 months.

<b>Room No.</b>	<b>Use</b>	<b>Air Source % Fresh/Recirculated</b>	<b>Treatment Filtered/Absorbers, etc.</b>	<b>Air Changes</b>	<b>Pressure</b>	<b>Humidity Control</b>	<b>Date Assessed</b>
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Use additional pages for presentation of HVAC if necessary