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LOUISIANA STATE UNIVERSITY SCHOOL OF VETERINARY MEDICINE

SAFETY POLICIES AND PROCEDURES MANUAL

VERSION 1.1
INTRODUCTION

The LSU School of Veterinary Medicine is committed to providing the faculty, staff, and students with the safest environment in which to learn, teach, conduct research, and serve the community. This commitment requires compliance with national, state, and university safety standards and is a responsibility shared with all members of the SVM community. Fulfillment of this responsibility requires conformity to the following policies and procedures that are intended to prevent or greatly diminish the risk of injury at the School of Veterinary Medicine.

LSU EMERGENCY TEXT MESSAGING SYSTEM

1. The SVM faculty, staff, and students, are strongly encouraged to opt into the LSU emergency text messaging system. This system is designed to communicate emergency information to the LSU community quickly, accurately, and effectively.
2. Open the following link for sign-up instructions: http://itsweb.lsu.edu/VCIT/etxt/item8491.html.

SVM EMERGENCY TEXT MESSAGING SYSTEM

1. The SVM faculty, staff, and students are strongly encouraged to opt into the SVM emergency text messaging system. This system is designed to communicate emergency information specifically for the SVM to its faculty, staff, and students quickly, accurately, and effectively. The SVM has a unique audience with communication needs that differ from those of the rest of the university including that of a hospital that is operational 24/7, 365 days a year.
2. To sign up for the SVM emergency text message, send your name and cell phone number to Julie Thomas (jtho279@lsu.edu) or Ginger Guttner (ginger@lsu.edu).

EMERGENCY RESPONSE AND REPORTING

1. In the event of a medical or fire emergency, move to a safe area including, if necessary, out of the building.
2. To report the emergency to the LSU Police Department (PD) Dispatcher, call 911 on an SVM landline or 578-3231 on a cellphone.
3. Give the LSU Police Department Dispatcher the nature of your emergency, your name, your location, and do not disconnect until told to do so.
4. In the event of a threatening individual, leave the building immediately if possible. If this not possible, then shelter in place in a locked room and do not leave until you are notified by LSU personnel that it is safe to do so. Do not confront a threatening individual.
5. To report the emergency, call 911 or 578-3231 on any SVM landline or on a cellphone.
6. Give the LSU Police Department Dispatcher a description of the individual, his location, the nature of his threatening behavior (Is he armed with a weapon?), and do not disconnect until told to do so.

AUTOMATED EXTERNAL DEFIBRILLATOR (AED)

1. Definition: An automated external defibrillator or AED is a portable electronic device that automatically diagnoses the potentially life threatening cardiac arrhythmias of ventricular fibrillation and ventricular tachycardia in a patient, and is able to treat them through defibrillation, the application of electrical therapy which stops the arrhythmia, allowing the heart to reestablish an effective rhythm. With simple audio and visual commands, AEDs are designed to be simple to use for the layman, and the use of AEDs is taught in many first aid, first responder, and basic life support (BLS) level CPR classes provide immediate are provided with simple, easy to follow directions for operation. “Automatic External Defibrillators for Public Access Defibrillation”. Circulation (American Heart Association) 95 (1677–1682) 18 March 1997.
2. Two AED’s are located in the SVM Veterinary Teaching Hospital by room’s 1619 (in exam room corridor next to Community Practice) in the Small Animal Hospital and between LA ICU and the
3. In the event that an individual may require the use of an AED, first place a call for emergency medical service to the LSU PD dispatcher at 911 or 578-3231 (from any landline or cellphone) and then follow directions found with the AED.

**ACCIDENT REPORTING and DOCUMENTATION**

Faculty and staff are strongly encouraged to document any accident/injury that occurs. Regardless of the severity or the need for first aid or medical treatment, all incidents should be reported. The reporting procedure is as follows:

1. Employee sustains an injury or has a near miss.
2. Employee reports to supervisor.
3. Supervisor advises employee to contact the Injury Call Center.
4. Employee move to private location to call the Injury Call Center. There are posters in each unit that list the emergency call center number.
5. Injury Call Center RN asks employee questions regarding the injury to provide first aid advice, determine if medical attention should be sought and also complete an incident report on behalf of the employee. Employee may request medical attention even if RN does not deem it necessary. Supervisors are asked to allow employee privacy during this time.
   a. If physician care is not desired or sought, an RN will call later to check in on the employee to make sure that further care is not necessary.
   b. If medical attention is needed or requested by the employee, the RN will ask the employee to hold while they contact Prime Occupational Medicine to ensure that the injured employee can be seen immediately.
      i. If between 7:00 AM and 4:30 PM, the RN will return to the line and advise the injured employee to seek medical attention at Prime Occupational Medicine, or if patient cannot be seen immediately at Prime, the RN will find another medical facility that employee can visit.
      ii. RN will send treatment authorization and issue a Pharmacy card to the treatment facility so that the injured employee incurs no out of pocket expenses.
6. Employee will inform supervisor if physician has put them on any restrictions and will submit to supervisor or HR any documentation regarding the details of the restrictions.
7. RN will follow up with injured employee within a 24 hour period when medical treatment is not needed at the time.
8. Incident report will be sent to LSU Risk Management. Employee will be assigned an adjuster who will be their contact for future appointments and workers compensation questions.
   a. If employee misses work because of incident, employee will use sick or annual time off and indicate “Workers Compensation” in the comments.
   b. Risk Management will request copies of sign in sheets/time off slips/ETA, etc from the department when needed.
9. LSU Risk Management will send incident report to employee’s HR Contact. HR Contact will send employee FMLA paperwork (if applicable) to be filled out by their physician and returned to LSU HRM.

Injury Call Center (1-877-764-3574) is staffed 24/7/365 by licensed RNs so employees will always be able to speak with a nurse without having to leave a voicemail. The RNs that staff the Injury Call Center all have at least 10 years’ experience and are required to be licensed in all 50 states. The Injury Call Center offers bilingual and translation services as well.

If you have a medical emergency, please call LSU PD at 578-3231 as they will be able to get an ambulance to campus faster than dialing 911 from a cell phone*. If you dial 911 from any LSU landline your call is automatically redirected to LSU PD. *Dialing 911 from a cell phone will direct you to the city office which results in a delayed response time.
FIRE DRILL

1. The LSU School of Veterinary Medicine will conduct a fire drill evacuation annually.
2. The fire drill will occur when classes are in session.
3. The fire drill will be announced by email and signage at least one week in advance of the drill. No unannounced drills are conducted at the School of Veterinary Medicine.
4. Fire drills will not be conducted on test days for the professional students.
5. Fire drills will start five minutes before 10:00 am and end no later than five minutes after 10:00 am on Tuesday, Wednesday, or Thursday. No fire drills are conducted on Monday or Friday.
6. When the alarm sounds building occupants will leave the building via the closest stairwell exit in an orderly manner and move away from the building. The elevators should not be used during a fire drill or an actual fire emergency.
7. During the drill, department safety coordinators will reconnoiter their area to close open room doors and remind departmental occupants to leave the building. Departmental safety coordinators will document any incident where departmental personnel refuse to comply with the evacuation order and give this information to the SVM Safety Officer.
   - Rob Poston – LADDL
   - James German – VTH
   - Peter J Mottram – PBS
   - Susie Brown and Dr. Martha Littlefield – CBS
   - Bonnie Brocato – Facilities/Admin
   - Simone Adams – DLAM
   - Elizabeth Day-Schick – VCS
8. A return-to-building signal will be given by the SVM Safety Officer or his/her designee for building occupants to reenter the building.
9. Hospital personnel attending critical care patients, performing diagnostic testing, or involved in surgical procedures are allowed to stay with their patients if they are not in harm’s way. If these individuals’ health and welfare are threatened, then they must evacuate their areas.
10. During an actual fire emergency, animals may not be removed from the Veterinary Teaching Hospital without the consent of the Fire Captain and the Veterinary Teaching Hospital Director or his/her designee.

BUILDING SAFETY AND SECURITY

1. Faculty, staff, and students (professional and graduate) are issued identification/security badges that must be worn at all times.
2. Lost or stolen identification/security badges must be reported to a security officer as soon as possible.
3. The badges allow SVM personnel entrance into the building and to access areas they are authorized to enter.
4. Visitors must stop at the front lobby security desk for permission to enter the building and then are escorted by SVM personnel into the SVM.
5. SVM personnel should direct unescorted individuals to the lobby security desk when they are found in the building.
6. Access to building after business hours is limited to certain entrances as determined by the SVM Administration. These entrances will require identification/security badges for access.
7. Only authorized personnel are allowed access to Biosafety Level 3 laboratories.
8. SVM personnel leaving the building at night may ask the security officer to watch them as they walk to their car.

Principal investigators and instructors are responsible for compliance to University safety regulations in their respective research (clinical and non-clinical) or teaching laboratories. To be compliant these laboratories must meet the following requirements:
FIRE EXTINGUISHER

1. A fire extinguisher must be mounted on the wall in the laboratory.
2. A sign with the words “Fire Extinguisher” is positioned above the fire extinguisher.
3. Fire extinguishers are certified annually.
4. Missing or out of certification fire extinguishers are reported to SVM Facility Planning and Control.

FIRST AID KIT

1. A first aid kit must be in plain sight in the laboratory.
2. A sign with the words “First AID KIT” is positioned above the first aid kit.
3. First aid kits periodically checked for missing or expired items.

EYE WASH

1. An eyewash solution must be available at a sink in the laboratory.
2. A sign with the words “Eyewash” positioned above the eyewash solution. The eyewash solution’s expiration date is periodically checked.
3. Eyewash solutions and not use passed their expiration date.
4. Report missing or expired eyewash solutions to SVM Facility Planning and Control.

COMPRESSED GAS CYLINDER

1. Compressed air cylinders must be secured to a wall or lab bench and capped if a regulator is not attached.
2. If it is necessary to maintain a cylinder with regulator on a cylinder cart, then the cart must be placed close and parallel to a wall away from foot traffic.

ELECTRICAL EXTENSIONS

1. Electrical extensions cord maybe used temporarily provided they are:
   1.1. not to be laid in aisles unless protected from damage; they shall be so placed so as to not create a tripping hazard.
   1.2. not to be used as a substitute for fixed wiring.
   1.3. not to be run through holes in walls, ceiling, floors, doors, windows, or hung from light fixtures or attached to building surfaces.

HOUSEKEEPING

1. Laboratories must be kept clean and well-ordered without cluttered floor space.

LABORATORY ENTRANCE SIGNAGE

1. Laboratory entrance signage must be present at the laboratory entrance and display the following information:
   (1) the department name, (2) the laboratory room number, (3) biosafety level if applicable (4) laboratory personnel’s contact information including afterhours phone numbers, (5) personal protective equipment required in the laboratory, (6) laboratory prohibitions, and (7) hazards found in the laboratory.

PERSONAL PROTECTIVE EQUIPMENT

1. The biosafety level of a laboratory determines the personal protective equipment required.
2. Personal protective equipment that may be required includes but is not limited to lab coats, gloves, goggles, aprons, face shield, hair bonnet, and booties.
3. Personal protective equipment required in a laboratory must be stated on the Laboratory entrance safety sign.

**BIOLOGICAL SAFETY CABINETS**

1. Biological safety cabinets are certified every year.
2. Biological safety cabinets that fail certification or out of certification must not be used and are labeled “Locked Out; Do Not Use” until repaired and/or certified.

**FOOD AND DRINK**

1. Food and drink policy in rooms and laboratories that contain biological materials, rDNA (adopted April 26, 2012 by the LSU Inter-Institutional Biological And Recombinant Dna Safety Committee (IBRDSC)
   1.1. This policy applies to all staff, faculty, students and University guests
   1.2. Do not drink, eat, store food or beverages, chew gum, apply cosmetics or use tobacco products (smoke, chew, dip) in rooms where chemicals, biohazardous or radioactive materials, or other potentially hazardous materials are present. Food or beverage containers may not be stored in the laboratory and washed drinking cups, food containers or eating utensils may not be dried on laboratory drying racks. Refrigerators used for storing food or beverages should be dedicated to food only and should be located outside of the laboratory.
   1.3. Each school, department, or division is responsible for identifying laboratories/rooms where eating, drinking, and similar activities are prohibited, and for notifying individuals of appropriate areas for such activities.

**MATERIAL SAFETY DATA SHEETS**

1. **Definition:** A material safety data sheet (MSDS), safety data sheet (SDS), or product safety data sheet (PSDS) is an important component of product stewardship and Occupational safety and health. It is intended to provide workers and emergency personnel with procedures for handling or working with that substance in a safe manner, and includes information such as physical data (melting point, boiling point, flash point, etc.), toxicity, health effects, first aid, reactivity, storage, disposal, protective equipment, and spill-handling procedures. MSDS formats can vary from source to source within a country depending on national requirements. “Material safety data sheet”. Wikipedia, The Free Encyclopedia. Wikimedia Foundation, Inc. 19 September 2012. Web. 23 September 2012.
2. Personnel working in SVM research and teaching laboratories will have electronic access to MSDSs for the substances in their laboratories and may elect to have hard copies if desired.

**CHEMICAL STORAGE**

1. Do not store more than 1 gallon of flammable materials on lab benches or tables.
2. Do not store more than five gallons of flammable materials outside of a flammable storage cabinet.
3. Do not store incompatible chemicals together.
4. Secondary containment is required when moving chemicals and when storing hazardous waste near sinks and drains.

**SHARPS**

1. Sharps containers are placed in all research and teaching laboratories that generate waste sharps material.
2. Sharps are discarded into designated sharps containers are use.
3. Full and secured sharps containers are placed in biohazard waste containers for disposal.

BIOSECURITY

1. SVM personnel will use the appropriate personal protective equipment in research and teaching laboratories.
2. All disposable personal protective equipment will be placed in biohazard waste containers before leaving research or teaching laboratories.
3. SVM personnel will avoid contaminating environmental services in research and teaching laboratories.
4. SVM personnel are advised to wash their hands after using the bathroom and before eating.
5. SVM personnel are advised to wash their hands or use hand sanitizer frequently in the SVM.
6. Eating or drinking in research or teaching laboratories is not permitted.
7. Wearing gloves or soiled lab coats in public areas is not permitted.

CORRIDORS AND STAIRWELLS

1. Before items are placed in the halls, permission must be received from SVM Facility Planning and Control.
2. The Louisiana State Fire Marshall’s Inspector must review and approve items to be placed in corridors.
3. Stairwells must be clear of any items at all times.

RADIATION SAFETY

1. The LSU Radiation Safety Office and the SVM Radiation Safety Officer regulate the use and management of radioactive material in the School of Veterinary Medicine.
2. Eating and drinking in areas containing radioactive material is not permitted.

SVM HAZARDOUS WASTE CATEGORIES AND DISPOSAL METHODS

1. Refer to SVM and USPHS Waste Categories Version 1.2 on the following page for SVM waste streams and their disposal methods.
2. SVM waste that has been declared biohazardous or potentially biohazardous is placed in a biohazard waste container.
3. The room number is written on the outside of the container and the container is held by the owner until housekeeping moves the container to cage on the dock by radiology to await pickup by the biohazardous waste disposal vendor.
4. SVM personnel are prohibited from pouring chemicals into the SVM’s sanitary drainage system that are not approved for this disposal method.
5. Hazardous chemical and non-hazardous pharmaceutical are collected by a representative of the LSU Office of Environmental Health and Safety.
Receptacle

Waste removal vendor's

Block bags are placed in

Sharps containers

Thermal tax paper

Posters

Brown paper

Cells on agar media

Bacteriologic media

Cotton balls (box card in rigid container)

Rubber bands

Vaccine needles (boxed in rigid container)

Marineolders

Traffic cards

Eye cartons

Envelopes

Syringes

Razor blades

Scissors

Broken glass (any kind)

Broken dishes (any kind)

Small sharps

Sharps waste boxes

Clean and sharp needles

Orange bags (previous)

Food containers

Some liquids (time specific containers)

Black bag waste

Red bag waste

Orange bag waste

Ancillary waste (any kind)
ANESTHESIA SAFETY PROTOCOLS

Subject: Compressed Gas Storage

Purpose and Scope: To formalize a Departmental Policy regarding the storage of compressed gas cylinders. The procedures set forth are designed to ensure that compressed gas cylinders are used and maintained in accordance with all applicable Louisiana Fire Codes, OSHA regulations, ODOT regulations and the Compressed Gas Association.

Policy:

Empty compressed gas cylinders should be stored separate from full ones. When in storage, regulator shall be removed and the protective cap shall be attached. All compressed gas cylinders will be stored in the vertical, valve-end-up position at all times and shall be securely affixed to a wall or bench using appropriate straps, chains or clamps.

Cylinders will be stored separately at least 35 feet away from any source of excessive heat, in an area away from vehicle or pedestrian traffic.

Gas cylinders shall be transported in the upright position and be securely affixed to the transport device. Compressed gas cylinders will not be taken into a confined space.

Compressed gas cylinders equipped for use with pressure reducing regulators shall have the gas pressure turned off at the regulator when not in use.

Oxygen cylinders, valves, regulators, hose and other apparatus and fittings will be kept free from oil or grease and will not be handled with oily hands, oily gloves, or greasy tools or equipment.

Only trained employees shall use compressed gas cylinders.

Anyone observing the unsafe storage, handling, or operating condition of compressed gas cylinders will notify his/her supervisor immediately.

Subject: Sharps/Biohazard Boxes

Purpose and Scope:

To formalize a Departmental Policy regarding the storage/disposal of all materials appropriately deemed “sharps”.

Policy:

There are 2 sharps containers located in the small animal prep area, 1 container in each Operating Room, 1 container located in the Large Animal Prep area.

OSHA requires nonsterile sharps disposable containers to be closable, puncture-resistant, leak-proof on all sides and bottom, accessible, ability to be maintained in an upright position, and be labeled with the biohazard symbol.

The opening of the sharps container should be large enough to accommodate the intended sharps devices and unobstructed. The sharps container should not be overfilled. It is recommended that the container be replaced and properly disposed when three-fourths full.
Never reach into a sharps container with fingers or instruments. Once disposed, sharps must not be retrieved from the container.

It is recommended that a person or persons be designated and responsible for changing and replacing full containers as a matter of consistency.

Utilization of mechanical devices will decrease the possibility of sharps accidents sustained. Mechanical devices or instruments, rather than the fingers, should be used to grasp uncapped hypodermic needles to load onto and take off of syringes, load and unload suture needles, and load and unload scalpel blades onto the knife handle.

Contaminated needles and other contaminated sharps shall not be bent, recapped, or removed except as noted below. Shearing or breaking of contaminated needles is prohibited.

Contaminated needles and sharps shall be recapped or removed only when no alternative is feasible or when it is required by a specific medical procedure. Any recapping or removal must be accomplished through the use of a mechanical device or a one-handed technique. The recapping or removal of contaminated sharps is actively discouraged under any circumstances because of the high potential risk of injection.

Immediately after use, contaminated sharps shall be placed in the sharps containers.

Before sharps containers are removed from the work area, they shall be closed securely. If leakage is possible, a closable, sturdy, leak proof, and labeled or color-coded secondary container shall be used.

Other waste containers that contain blood or other potentially infectious material (biohazard boxes) shall be closable, able to contain all contents, leak proof, labeled and/or color-coded, and closed securely prior to removal. If the primary waste container is contaminated on the outside, a closable, sturdy, leak proof, and labeled or color-coded secondary container shall be used, and it shall also be closed prior to removal.

All containers packaged for disposal are labeled with room of origin and the initials of packager. They are then placed beside the door in the hallway and are picked up by facility services periodically throughout the day.

**Subject: Work Place Protocols**

These protocols should be used to reduce the likelihood of exposure by altering the manner in which a task is performed. If there remains a likelihood of occupational exposure even when engineering and work practice controls are in place, then personal protective clothing shall also be used.

**Hand washing**

Readily accessible hand washing facilities shall be provided, or, if this is not feasible, an appropriate antiseptic hand cleanser and clean cloth or paper towels. In any case, employees shall wash hands with soap and running water as soon as feasible after removal of gloves or other personal protective equipment.

The supervisor shall ensure that employees wash hands immediately or as soon as feasible after removing gloves or other personal protective equipment and also shall ensure that employees wash hands and any other skin with soap and water or flush mucous membranes with water immediately, or as soon as feasible, following contact of such body areas with potentially infectious materials.

**Eating, Drinking, Smoking, etc.**

Eating, drinking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is a reasonable likelihood of occupational exposure. Food and drink shall not be kept in refrigerators, freezers, shelves, cabinets, or on countertops or bench tops where blood or other potentially infectious materials are present.

Smoking and the use of all tobacco products on the LSU Campus is prohibited. This prohibition applies to all individuals while on the LSU Campus, including faculty, staff, students, administrators, contractors, and visitors.
Splashing, Spraying, Spattering

All procedures involving blood or other potentially infectious materials shall be performed so as to minimize splashing, spraying, spattering, and generation of droplets.

Specimen Containers

Specimens of blood or other potentially infectious materials shall be placed in a container that prevents leakage during collection, and handling.

Subject: Protective Equipment

Responsibility

The principal supervisor shall provide or ensure provision of appropriate personal protective equipment to each employee who is subject to occupational exposure to infectious blood or potentially infectious material. The equipment is provided at no cost to the employee. Examples of such equipment include gloves, gowns, laboratory coats, head and foot coverings, face shields, masks, eye protection, resuscitation bags, pocket masks, or other ventilation devices.

The principal supervisor shall ensure that each employee uses personal protective equipment when warranted.

Availability

Protective equipment in appropriate sizes shall be available in the work area or issued to employees. Hypoallergenic gloves or similar alternatives shall be readily available to those allergic to the normal gloves provided.

Cleaning and Repair

The principal supervisor shall ensure that personal protective equipment shall be cleaned, laundered, or disposed of at no cost to the employee. Personal protective equipment shall be repaired or replaced as needed to maintain its effectiveness.

Wear in Work Areas Only

All personal protective equipment shall be removed prior to leaving the work area.

Gloves

Gloves shall be worn when it is reasonably anticipated that employees may have hand contact with infectious blood, other potentially infectious materials, mucous membranes, and nonintact skin. Gloves shall be worn when performing vascular access procedures that are to remain in place longer than 24 hours and when handling or touching contaminated items or surfaces.

Disposable gloves shall be replaced as soon as practical when contaminated, torn, punctured, or otherwise compromised in their ability to function as a barrier.

Masks, Eye Protection, and Face Shields

Masks in combination with eye protection devices (such as goggles or glasses with solid side shields) or chin-length face shields, shall be worn whenever splashes, spray, spatter, or droplets of blood or other potentially infectious material may be generated and eye, nose, or mouth contamination can be reasonably anticipated.

Gowns, Aprons, and Other Protective Body Clothing

Appropriate protective body clothing shall be worn in occupational exposure situations. When gross contamination can be anticipated, surgical caps or hoods and shoe covers should be worn.
Subject: Housekeeping

Responsibility

The supervisor is responsible for ensuring that the work area shall be maintained in a clean and sanitary condition. A written schedule for cleaning and method of decontamination is required.

Cleaning

All equipment and environmental and working surfaces shall be cleaned and decontaminated with an appropriate disinfectant after contact with blood or other potentially infectious material. Contaminated work surfaces shall be decontaminated after completion of procedures, immediately or as soon as feasible after any contamination of surfaces or after any spill of blood or other potentially infectious materials, and at the end of the work shift if the surface may have become contaminated since the last cleaning.

Environmental surfaces (e.g., floors) are routinely cleaned either by Facilities Management personnel or by an outside contractor under the direction of Facilities Management. The schedule and method of implementation are presented in their departmental procedures.

NOTE: Facilities Management or Housekeeping does not clean contaminated floors. If floors are overtly contaminated or suspected of being contaminated, department personnel shall clean and decontaminate the floors using appropriate procedures.

The supervisor shall ensure routine cleaning of work surfaces and equipment as well as cleaning and disinfection of equipment, environmental surfaces, and work surfaces that have been in contact with infectious blood or other infectious materials.

Broken Glassware

Broken glassware that may be contaminated shall not be picked up directly with the hands. It shall be cleaned up using mechanical means, such as a brush or dustpan, a vacuum cleaner, tongs, or forceps.

Subject: Laundry

Instructions

Dirty laundry shall be handled as little as possible. It shall be placed into bags or containers at the point of use. It shall not be sorted or rinsed in the location of use. The bags or containers shall be placed in the designated bins located in all animal use areas. Laundry is done on a regular basis in the laundry area off of the BZEM dock area.

Subject: First Aid

A first aid kit is located in Small Animal Prep, Small Animal ICU, Pharmacy, Small Animal Treatment Room, Anesthesiology Prep Room, & Large Animal ICU. It should be maintained with antiseptic, band aids, and other bandage materials. These are kept in areas of easy access which are clearly and visibly labeled.

Subject: Eye Wash Stations

Eye Wash Stations are located in the Small Animal and the Large Animal Prep Area. They are both clearly and visibly labeled.

Employees should use the following safety procedures:

1. Do not panic.
2. Shout out for help to allow co-workers to assist you.
3. Get to the eye wash station and turn the eye wash on.
4. Rinse both eyes with copious amounts of water for a minimum of 15 minutes.
5. Keep your eyelids open by using your hands to ensure adequate flushing of the eyes.
6. Someone should contact emergency medical personnel at 9-911.
7. Continue rinsing eyes until emergency medical personnel arrive to assist.

Please note: The emergency eye wash station is only for first aid. It is not medical treatment for chemical exposures. Make certain that you seek proper medical attention. It is important to inform the physician what you were exposed to.

Subject: Fire

Immediately evacuate to the designated site if you do not have a patient under anesthesia. (Through the Barn - Behind the Freight Dock if you are in the anesthesia area. If you are not in the anesthesia area, proceed to the nearest exit.)
Shut off all Oxygen valves as you are leaving
Move away from the fire and smoke whenever possible
Touch closed doors with the back of your hand to test for heat; do not open them if they are hot
Use stairs only; do not use elevators
Do not re-enter the building until you have been instructed to do so by emergency responders
From a safe location call the campus Police Department —or 911
If you have an anesthetized patient proceeds as quickly as possible to ICU for them to be recovered.
If you are in surgery with a patient, surgery is to be stopped and closed then the patient recovered in ICU. If the surgery is not able to be closed and recovered the patient should be euthanized immediately and everyone is to evacuate to the designated site.

Nicole Fitzgerald RVT, VTS-Anesthesia
Louisiana State University
Anesthesia Supervisor
MRI SAFETY PROCEDURES LSU SVM

Emergency contact numbers

Radiologists

   Dr. Lorrie Gaschen 225 754 2773 or 225 754 2781
   Dr. Nathalie Rademacher 225 505 8720

Assistant Hospital Director

   Al Desselle 225-937-5512

   Hitachi (vendor)

Contact Josh Davis, Service Area Manager, to inform of situation

   Josh Davis - Service Area Manager, Southeast 2
   C: (330) 414-4561
   VM: (330) 425-1313 X2830

First contact in the event of emergency in the MRI unit

   After hours duty radiologist should be called

   Schedule is posted in MRI in the emergency information folder
SAFETY RULES:

- **NO UNTRAINED PERSONNEL SHOULD ENTER THE SCANNER ROOM**

A high magnet field strength is present at all times.

The control and equipment rooms are safe and have no magnetic field.

No metal item of any kind, no cell phones, credit cards may enter the scanner room.

**ABSOLUTE** Contraindications for people entering the room are those with:

- **PACEMAKERS**
- Aneurysm clips
- Cochlear implants

**ACCESS RESTRICTED TO:**

- Radiology faculty and staff only

- **KEY ACCESS** through control room single door (LARGE ANIMAL BREEZEWAY):
  1. Radiology faculty and staff
  2. Front desk police
  3. Al Desselle
• NO ACCESS permitted to the scanner room through double doors to breezeway and inside corridor to hospital

THESE DOORS SHOULD NEVER BE OPENED by anyone except for radiology faculty or staff

• Cleaning of MRI rooms

NO FACILITIES PERSONNEL SHOULD ENTER THE SCANNER ROOM FOR ANY REASON

Radiology staff will clean the MRI room, empty trash, etc..

NO FLOOR POLISHERS permitted anywhere inside the MRI unit.

FIRE!

FIRE FIGHTERS AND EMS

NEVER ENTER THE ROOM WITH ANY TYPE OF METAL DEVICE UNDER ANY CIRCUMSTANCES (EX. OXYGEN TANKS)

THE LARGER THE OBJECT THE MORE LETHAL IT CAN BE

METAL OBJECTS AS LARGE AS A TRUCK CAN BE SUCKED INTO THE MAGNET WITH DEVASTATING CONSEQUENCES

Hazards in the scanner room:

Strong magnetic field: the field is always active

Absolute contraindication to entering room:

Pacemaker, aneurysm clips, cochlear implants

NO METAL DEVICES OF ANY KIND

NO Oxygen Tanks, No fire hoses

Liquid Cryogenic Gas: Helium

Can cause immediate frost bite of skin if contact is made in the event of a leak

NEVER touch the magnet (scanner) in the event of an emergency as it can conduct a lethal electric shock

Ex> Leaking helium gas, smoke, fire coming from the unit

Fire Suppression Operations
Upon being dispatched to an incident involving an MRI unit, responders should be aware of all of the hazards mentioned previously. Tactics should involve determining if the MRI unit is involved in the fire or not.

**Non-Fire Involvement:** If the unit is not involved in the fire, medical facility staff should be consulted on the condition of the unit (A MRI unit is always "on" - whether it is in use or not). If it is in operation, the staff should be consulted and make sure that all patients and staff are accounted for. Once rescue considerations have been considered, the room containing the unit should be checked for any fire extension from the doorway or from a safe distance within the room. While in proximity of the machine, the operation of the machine should be assessed. If the unit is within its proper operating parameters, the room containing the unit should be isolated and monitored until the incident has been controlled.

Once the incident has been stabilized and if safe to do so, facility staff (with fire department personnel escort) should be allowed to enter the room and assess the condition of the MRI unit. Power and coolant gases to the unit should only be turned off as a last resort. While it is possible to perform emergency shutdown of the magnet through a process known as "quenching the magnet", this process is dangerous and involves bleeding off the cryogenic gas from the magnet housing. Improperly performing this operation could create an oxygen deficient atmosphere in the MRI room and cause the machine to internally overheat and ignite.

**Fire Involvement:** If the MRI is in close proximity to the fire or is part of the fire, fire suppression crews should enter the room and assess the involvement of the MRI unit from a safe distance. Non-metallic fire extinguishers may be available, if so, small fires should be extinguished from a distance using the fire extinguisher.

Larger fires should be extinguished from a distance using a hoseline. Fire suppression crews should take into account that an electrical hazard and a magnetic hazard exist while attacking the fire and suppression tactics should be adjusted accordingly. Safety officers should stress that all tactics be performed at a safe distance from the MRI unit.

Each fire situation will be different and medical facility personnel should be involved as much as safety will allow in the salvage and overhaul process.

Once fires are extinguished, medical facility staff or maintenance personnel should be permitted to enter the area if safe to do so, with fire department personnel escort and assess the condition of the MRI unit. After an assessment has been performed a plan of action to safely shutdown the unit and perform salvage/overhaul operations should be developed by fire and medical facility personnel. Once the plan is developed it should be implemented accordingly. Safety officers should constantly ensure that all electrical hazards have been eliminated and the magnetic hazard has been minimized during these operations. The incident commander should ensure the MRI unit receives minimal damage during salvage and overhaul operations due to fire investigation concerns.

**Fire Investigation Considerations**
Another area of concern is fire investigation. Investigators should check with fire command and the incident safety officer prior to entering the MRI fire area. The investigator should ensure that all electrical and magnetic hazards have been minimized or eliminated prior to their entry.

Prior to beginning the investigation the fire investigator should make sure that "right-of-entry" has been secured. After gaining entry the investigator should remember and conduct the investigation from a perspective that does not create "spoliation of evidence" issues. The MRI unit is a complex machine. If the unit appears to be involved in the ignition of the fire, proper investigation techniques should be used during the investigation to not destroy any critical fire origin and cause evidence.

While performing the fire investigation, the investigator should have (if safety permits) medical facility maintenance personnel present. These personnel should be kept at a distance as to not impede with the investigation but be available to answer any questions the investigator may have.

The room containing the MRI unit should be documented using nationally recognized standards and proper evidence gathering techniques should be used. Non-metallic tools should also be used to dig and recover any evidence around the MRI Unit due to the magnetic hazard. All details of the investigation should be documented, photographed and included in the investigator's report of the incident.

Upon completion of the fire investigation, the fire investigator should ensure that the room is secured as much as possible. Medical facility personnel should be directed to not enter the MRI room, tamper or destroy any evidence and to remain out of the room until all insurance parties with a vested interest have been made aware of the fire and had a chance to inspect and analyze the room and equipment.

- QUENCY/ EMERGENCY SHUT DOWN BUTTON

  The following situations are THE ONLY TIMES that may require quenching of the magnet

  The on duty radiologist is the ONLY person that my permit the emergency shutdown to occur

  LARGE METAL OBJECT PINS OR IMPALES A PERSON AGAINST THE MAGNET and NO OTHER MEANS CAN BE USED TO FREE THE PERSON

  a. Do not attempt to pull large magnetic objects (oxygen tanks) from a magnetic field. The object may change its magnetic polarity and re-align itself on the magnet and become a projectile and cause serious or fatal injury
  b. NEVER touch a quenched magnet due to possibility of lethal electoral shock
MEMO

To: All Approved Radiation Principal Investigators
Dr. Vincent L. Wilson, Chair of Radiation Safety Committee
Dr. Robert A. Holmes, Member of Radiation Safety Committee
Dr. J. David Bankston, Member of Radiation Safety Committee

Cc: Ms. Mary Haik Kirkley, MS, Manager of Radiation Safety Office
Mr. Daryn M. Bovard Research Specialist of Radiation Safety Office
Ms. Leslie M. Smith, Safety Officer of Pennington Biomedical Research Center
Mr. Al Desselle, Assistant Director of Veterinary Teaching Hospital
Mr. Mike Durham, Director of Occupation and Environmental Safety Office

From: Wei-Hsung Wang, Ph.D., CHP, CLSO, Director

Subject: Radiation Safety Practice

Periodically, I prepare an informational memo to remind all approved radiation principal investigators of radiation safety procedures, practices, and plans. I appreciate your efforts to help the University to be in full compliance with the Federal/State mandatory requirements. Your cooperation and support are critical to maintain a healthy and safe working environment as well as to avoid any violations and public embarrassment to the University. Please review the following issues regarding the use of sources of radiation under the Louisiana State University System’s Broad Scope Radioactive Material License and applicable regulations.
Please contact the Radiation Safety Office at 578-2008 or 578-2747 if you have additional questions or suggestions. Your input is always welcome. Please place a copy of this memo into your Radiation Safety Manual binder under the tab of “Correspondence” for your future reference. Also, please pass this memo on to the laboratory individuals under your supervision.

1. **Responsibilities and Authority** *(Radiation Safety Manual Section 2.4)*
   All persons involved with the handling, use, and storage of radioactive materials and radiation sources have the general responsibilities to assure full compliance with all University regulations and policies pertaining to radiation safety. Approval of the Radiation Safety Office is required for all user projects, including laboratory and teaching uses, research and development projects, and any other activities with potential radiological hazards.

2. **Enforcement** *(Radiation Safety Manual Section 2.5)*
   The Annual Radiation User Review Report, the Inventory Verification Report, and response to the Notice of Inspection Deficiency shall be returned to the Radiation Safety Office promptly in order not only to maintain current and accurate records but also to efficiently take corrective actions. Under PS-99, persons who violate radiation safety procedures and/or applicable Federal/State regulations may be placed on probation or be immediately suspended or revoked their privileges to use sources of radiation.

3. **User Applications** *(Radiation Safety Manual Section 3.3)*
   Individuals who wish to use sources of radiation in research, development, teaching, or demonstration projects must obtain prior approval from the Radiation Safety Office. Approval for the use of radiation sources at LSU, AgCenter, and Pennington Biomedical Research Center is based on your completion and submission of the user application packet. The application is specific in terms of the radionuclide, quantity, protocol, and location of your proposed work. Any deviations (such as changes of experimental procedures, moving of radiation laboratories, etc.) from your original application require submission and approval of a new/modified user application packet by the Radiation Safety Office, prior to performing the deviation.

4. **Training** *(Radiation Safety Manual Section 3.4)*
   In addition to the initial radiation safety training, each approved radiation principal investigator is required to provide and document annual in-laboratory refresher training to all persons assigned to or frequenting the radiation laboratory. The following topics of this refresher training shall be covered, but not limited to:
   
   a. No eating and drinking,
   b. Security of radioactive materials,
   c. Proper waste disposal, and
   d. Laboratory emergencies involving radioactive materials.
   An Annual In-Laboratory Training form is enclosed under the tab of “Training Records” in your Radiation Safety Manual binder for your documentation.

5. **Waste Handling Procedures** *(Radiation Safety Manual Section 3.9)*
   Do not mix solid and liquid waste. All waste (solid, liquid, and scintillation vials) must be properly tagged/labeled during storage and at the time of pickup. All costs of the disposal of radioactive waste shall be the responsibility of the generator.

Transfer or shipment of radioactive materials or radiation-producing machines can only be approved by the Radiation Safety Office. It is the principal investigator’s responsibility to notify the Radiation Safety Office in advance of planned transfer, shipment, or moving of radioactive materials or radiation-producing machines so that appropriate records, labeling, and procedures can be generated. In addition, in order to maintain constant surveillance and control of sources of radiation in your radiation laboratory, please ensure that the laboratory is locked when not occupied.

7. **Storage of Radioactive Materials** *(Radiation Safety Manual Section 3.11).*

In order to maintain constant surveillance and control of sources of radiation in your radiation laboratory, please ensure that the laboratory is locked when not occupied.

8. **Personnel Monitoring** *(Radiation Safety Manual Section 3.15).*

Records of individual radiation dose histories are maintained in the Radiation Safety Office. Individuals may check their individual records and obtain a hard copy by written request during normal business hours. The Radiation Safety Office will respond to requests for radiation exposure histories from employers after an individual leaves the University.

9. **Procedure for Badging and for Investigating Elevated Results** *(Radiation Safety Manual Section 3.16).*

Prior to the beginning of each wear period, the new radiation dosimeters will be mailed to each principal investigator for her/his staff. Participants must return their used radiation dosimeters as soon as they receive the new radiation dosimeters, since the used radiation dosimeters will be sent to a certified processor at the end of the third week of the beginning of each wear period in order to obtain accurate readings for participants in a timely manner. A late fee of $10.00 for each dosimeter returned after the specified due date will be imposed on the principal investigator.

10. **Fees** *(Radiation Safety Manual Section 3.20).*

As directed by the University Administration, the Radiation Safety Office routinely assesses an annual fee on all approved radiation principal investigators to support the operation of the Radiation Safety Office. Possessors of radiation producing equipment must also pay an annual registration fee to the Louisiana Department of Environmental Quality.

11. **General Rules for Radioactive Materials** *(Radiation Safety Manual Section 5.2).*

Eating, drinking, storage of eating utensils, smoking, or the application of cosmetics is not permitted in areas where radioactive materials are used or stored. Food and food preparation materials cannot be disposed in radiation laboratories for any reason. If food, drinks, or cosmetics are required for teaching or research purposes, a “Not for Human Consumption/Uses” label shall be applied on them. Gloves, laboratory coats, goggles, and personal radiation dosimeters shall be worn accordingly. No flip-flops or open-toe shoes shall be worn in the radiation laboratories.

12. **Radiation Equipment.**

Before moving or surplusing of radiation equipment (such as X-ray machines, counting devices, centrifuges, freezers, refrigerators, etc.) that produces radiation, contains radioactive sources, or bears radiation signs, the Radiation Safety Office shall be notified to assure that no X-ray tubes or radioactive sources are left in the equipment and no removable radioactive contamination is detected on the equipment.