

BASICS

Overview

- \$ All veterinary hospitals have some similar basic safety needs. For example, all facilities will need to have an emergency evacuation plan or a certain number of fire extinguishers.
- \$ In addition to these general needs, individual facilities will each have specific requirements. For example, a facility that makes use of nuclear medicine would need to have certain rules and training for dealing with radioactive materials.
- \$ OSHA is the organization that enacts and enforces safety rules for the workplace. All states must abide by federal OSHA standards, and some states have additional regulations. It is important to check for rules in your state; not only does breaking these laws cost huge fines, but doing so endangers you, your staff, your clients, and the animals.
- \$ Fines are stiff: the cost for not displaying the Workplace Safety and Health poster is \$1,000. Willful violations of the standards can cost \$50,000 or more.
- \$ A review of the main aspects of OSHA's compliance and safety program will cover all of the major safety needs of a veterinary facility.
- \$ There are four sections to fulfilling a facility's OSHA compliance and safety program: administrative tasks, evaluation of the facility, personal protective equipment (PPE), and staff training. These should be done or handed out to trustworthy staff members by the Safety Supervisor (SS).

Terms Defined

- \$ Hospital Safety Manual (HSM). This is a collection of all the safety rules, regulations, and policies of the facility. It should have the set training schedule for the staff, a written safety plan, MSDSs, and evacuation plans for emergencies. Must be stored in an easily accessible location.
- \$ Material Safety Data Sheet (MSDS). Located near to the HSM, each sheet will contain all pertinent information about the chemicals used within the facility. It is the facility's responsibility to maintain a MSDS for each chemical.
- \$ Personal Protective Equipment (PPE). Item(s) that can and must be worn to protect the individual from direct or indirect contact with hazardous substances. Must be provided at no cost to the staff members.
- \$ Safety Supervisor (SS). Individual entrusted with overseeing the safety plan for the entire facility.

OPTIONS AND ISSUES

Administrative Tasks

- \$ Post signs and informative posters. A Job Safety and Health Protection Poster must be prominently displayed in all facilities, and paths to exit doors should be well marked with signs and arrows.
- \$ Keep accurate records of all aspects of the safety program.
- \$ Write up the safety plan, including evacuation routes for emergencies.
- \$ Detailed floor plans of the facility, with well-marked locations of potential hazards and safety equipment, should be made for each room. Examples of notable items include fire extinguishers, circuit breakers, compressed gas, alarm controls, and exit doors.
- \$ Paths to nearby exit doors should be clearly drawn with arrows on the floor plans.
- \$ Create a detailed hospital safety manual, which must be kept in an easily accessible location. Avoid keeping them in administrator's offices, as this discourages employees from reading them; instead, the employee break room would be an ideal location.

Evaluating the Facility

- \$ Assess all potential hazards relating both to the building and to the chemicals, machines, and tools used in the building.
- \$ All exit doors should be kept unlocked, with one-way locks, at all times.
- \$ Every facility should have adequate emergency lighting, which should turn on automatically whenever there is a power outage.
- \$ All exit lights must always be lit.
- \$ Good ventilation is essential. In addition to regular ventilating units, it is advisable to also have fans in areas where odors or vapors might accumulate. Examples include surgery, radiology, bathing, laboratory, and the exam rooms. It is helpful to have fans come on when lights are turned on.

PPE

- \$ Determine that all of the necessary PPE is ordered.
- \$ All PPE should be listed with its location.
- \$ Train all staff members in the use of the PPE.
- \$ Under OSHA, the use of PPE is mandatory for all workers.
- \$ Eye protection is necessary in any area where there is a possibility that foreign material could enter an eye.
- \$ There are different types of eyewash stations, ranging from the hand-held bottle to the more technological ones connected to an uninterrupted water supply. The most common ones are the faucet mounted stations, which are inexpensive and easy to install; however, they increase the chance of possible heat damage to the eye. It is very important that these types of stations have easily distinguishable hot and cold faucets.
- \$ Most practices will have more than one type of eyewash station.
- \$ One piece of practical PPE that does not need to be supplied by the practice) are good, comfortable shoes. When working around animals, open-toed shoes are not acceptable, and when working with large animals, steel-toed shoes are required (the latter does need to be provided by the business).

Staff Training

- \$ Having a safety plan is important, but it is worthless without educating the staff. All staff, both full and part time, must attend regular training on all safety issues. It is not enough to just write the items down and discuss them: the SS is responsible for making sure that each staff member can also demonstrate their ability to explain safety and evacuation plans, use PPE correctly, and read a MSDS.
- \$ Plan and adhere to a staff training program.
- \$ These sessions should be video taped for two reasons. First, it provides proof that the staff received training, which is important should there be a complaint filed against the practice by an angry employee. Secondly, when new staff members are hired, they can watch these videos instead of absorbing the SS's time.
- \$ Make sure that one staff meeting includes a thorough explanation of the Right to Know rule (OSHA). The rule states that all employees have the right to know what hazardous chemicals are present in the facility, requires the use of PPE (which should be provided at no cost), and requires that a collection of the MSDSs for all hazardous chemicals is located in an easily accessible spot.
- \$ There must be a training session for all staff members on the use of each piece of PPE.

Specific Problems

- \$ Sharps are the cause of most staff injuries. Proper use and disposal of needles and syringes must be taught to all staff, regardless of how much a particular person uses them. Recapping should be discouraged, as should needle cutting, which increases the possibility of aerosol contamination. There is special recapping equipment that is available for practices who prefer to recap syringes and needles.
- \$ The animals themselves can present a hazard: all staff members should be trained in handling and restraint. There is a lot of PPE that can be used, including muzzles, leashes, and catch-poles.
- \$ In veterinary hospitals, noise protection is rarely needed; however, in facilities that combine a hospital with a boarding area, noise can reach a level that poses a danger to staff hearing. Earplugs and noise-dampening headsets can be used to combat excessive noise. Usually, one attempts to lessen the sound by 20dB.
- \$ Recently, there has been an increase in the number of staff members who are allergic to latex. Reactions might range from mild skin irritations to asthma. Staff education is the best way to combat this problem. Although most such reactions will be cutaneous, all staff need to understand how to recognize these allergies and what to do if they occur.
- \$ Bathing areas have many possible hazards: lifting animals, noise, bathing chemicals, animal danger due to improper restraints, and slipping. It may be difficult to convince staff to use PPE in the bathing area, with the exception of a waterproof apron. Other ones that should be utilized are mats that decrease slippage, ramps that allow animals to walk to the bathing compartment, and protective goggles and gloves.
- \$ X-ray aprons, collars, gloves, and eyeglasses are PPE that should be used each and every time a staff member takes a radiograph. The primary beam should never come into contact with a body part: the safest place in an X-ray area is outside of the room.
- \$ When working with chemicals in either an automatic or manual processing area, it is best to wear protective gloves. Film badges should also always be worn, as they allow one to

- monitor exposure to radiation.
- \$ Most hospitals don't keep up with the necessary maintenance for anesthetic machines. Each machine needs to have its pressure checked daily, soda lime should be replaced after every ten hours of use, and vaporizers should be calibrated and hoses should be changed yearly. It is also important to have a quality scavenger system. When changing the absorbent in an anesthetic machines, protective gloves and goggles should be worn.
 - \$ Chemotherapy, nuclear medicine, and advanced imaging processes create new and more dangerous environments for veterinary workers. Consult the protocols that are provided by companies selling these products for advice.
 - \$ Two drugs that deserve special mention are formalin and ethylene oxide.
 - \$ Ethylene oxide is a human carcinogen and is used in gas sterilization. It needs to be used with the special equipment provided, and it is strongly suggested that there is a written protocol for the safe handling, storage, and use of this chemical.
 - \$ Formalin is an unusually dangerous human carcinogen. When necessary for tissue samples, it is best to purchase it in small vials with appropriate pre-measured quantities.
 - \$ Sometimes the simplest actions can be the best preventions. Washing one's hands after handling drugs, animals, or laboratory equipment will decrease the danger of contamination. Food should not be handled in any working area of a hospital, which will also lower chances of contamination.

MISCELLANEOUS

Abbreviations

- \$ AAHA: American Animal Hospital Association.
- \$ ANSI: American National Standards Institute.
- \$ ASTM: American Society for Testing and Materials.
- \$ HSM: Hospital Safety Manuel.
- \$ MSDSs: Material Safety Data Sheets.
- \$ OSHA: Occupational Safety and Hazard Association.
- \$ PPE: Personal Protective Equipment.
- \$ SS: Safety Supervisor.

Helpful Websites

- \$ AAHA Homepage. 2004. Available at <http://www.aahanet.org/> Accessed June 29, 2004.
- \$ OSHA Homepage. 2004. Available at www.osha.gov. Accessed June 28, 2004.
- \$ Seibert, Philip. Veterinary Practice Consultants: Solutions for the Veterinary Professions. 2002. Available at www.v-p-c.com/phil/aboutus.htm. Accessed June 30, 2004.

Author

Mark Crootof DVM
608 Rt. 29
Middle Grove, NY 12850