

BASICS

Overview

- \$ A major part of any facility's OSHA program, the Hospital Safety Manuel (HSM) contains all safety-related information about the practice and reflects the official policy of the business concerning all safety-related issues.
- \$ In order for the facility to remain compliant, this document must be able to evolve and be updated as drugs and rules change.
- \$ The HSM could be created by the Safety Supervisor (SS) or a "universal" HSM can be purchased and adjusted to meet the needs of a specific practice.
- \$ It can be subdivided into sections: examples are given below. The number of chapters is flexible, and should be determined by the SS.
- \$ The HSM should be located in a place easily assessable. It should never be kept in the owner's or supervisor's office, as staff intimidation might decrease willingness to refer to it. The best place would be a common area, such as an employee break room.
- \$ All staff members should know where the HSM is stored and that they have the right to read it whenever they wish.

Terms Defined

- \$ Biological Safety Cabinet (BSC). Location where chemotherapeutic drugs can be handled and mixed. Should be vented to the outside, and will often contain a HEPA filter.
- \$ HEPA filter. Special filter that can remove minute particles.
- \$ Masking down. Anesthetic procedure that avoids the use of induction agents, usually for safety concerns. An anesthetic mask is held over the animal's nose and mouth.
- \$ Personal Protective Equipment (PPE). Items that can and must be worn to protect the individual from direct or indirect contact with hazardous substances.
- \$ Recapping. The process of putting the cap back on the exposed needle.
- \$ Safety Supervisor (SS). Individual entrusted with overseeing the safety plan for the entire facility.
- \$ Sharps. Anything that has the possibility of causing a puncture or laceration to the skin. Examples include needles and scalpel blades.
- \$ Tanking. Pumping anesthetic gas into a container until the animal within can be safely handled. Usually used with extremely fractious animals.
- \$ Zoonosis. Diseases that can be transmitted species to species: from animals to human beings.

OPTIONS AND ISSUES

- \$ Below are chapters for a HSM, with short descriptions of possible subheadings and

problems to be addressed when writing a HSM. This is by no means an exhaustive list: each practice SS will have to write a HSM uniquely suited to his or her facility.

Advanced Imaging

- \$ MRIs, fluoroscopies, CAT scans, and nuclear medicines are diagnostic procedures that can provide tremendous new information.
- \$ These are relatively new devices that are fairly expensive and thus not found in the majority of veterinary practices.
- \$ These procedures each bring their own potential hazards to the workplace. Current information should be well researched prior to their use.

Anesthesia

- \$ Possible Subheadings: Maintaining Anesthetic Machines, Waste Gases, Scavenger Systems (active, passive, or absorptive).
- \$ Possible Problems: Leaky anesthetic machines, poor ventilation, tanking and masking down animals, inadequate or faulty waste gas systems.

Animal Handling

- \$ Possible Subheadings: Restraint Devices, Importance of Proper Restraint, Methods of Restraint.
- \$ Possible Problems: bites, both for the physical damage and the possible transmission of disease.
- \$ Staff training is of paramount importance: everyone should be skilled in handling aggressive and docile animals.
- \$ There are many types of restraint devices that can help minimize injury.
- \$ Potential zoonosis should be discussed with staff, as well as what can be done to minimize staff exposure to serious diseases.
- \$ A rabies vaccination is not an OSHA requirement. In areas where rabies is prevalent, however, vaccination should be considered.
- \$ Personal hygiene helps: regular and thorough hand washing should be the norm.

Chemotherapy

- \$ Possible Subheadings: Essential Equipment, Mixing and Preparing Drugs, Administration of the CD, Animal Waste After Treatment, Disposal and Cleanup, Special Staff Training.
- \$ Due to the serious nature of these drugs, it is important to research them and consult with an oncologist before undertaking any chemotherapeutic procedures.
- \$ This process requires special equipment (a BSC and hood), staff training, and certain disposal procedures for waste products and animal waste products.

Electricity

- \$ Possible Subheadings: Older Electrical Service, Faulty Grounding, Extension Cords, Outlets.

- \$ Possible Problems: Outdated electrical wiring and electrical services that are no longer adequate for the equipment needs of the practice, inadequate or faulty grounding, inadequate or faulty use of extension cords, not enough outlets for new equipment needs.
- \$ Symptoms of electrical problems: circuit breakers trip easily or often, lights dim when the X-Ray machine is being used

Emergencies and Natural Disasters

- \$ Possible Subheadings: Emergency Action Plan, Emergency Lighting
- \$ Each part of the country has its own natural disasters. The hospital SS should plan accordingly.

Ethylene Oxide

- \$ A dangerous chemical used in gas sterilization.
- \$ Requires special equipment for use and external venting.

Ergonomics

- \$ Possible Problems: staff injuries result from repetitive motions, lifting heavy animals or supplies, chronic vibration, awkward postures, or forceful exertions.
- \$ Recently, many issues related to these traumas have been documented.
- \$ Ramps or mechanical tables can help with raising animals.
- \$ Ergonomically friendly computer keyboards and chairs can reduce repetitive motion injuries.
- \$ Cushioned floor mats can help in exam room and surgery.

Facility Hazards

- \$ Possible Problems in Old Buildings: old lead paint, dangerous insulation
- \$ Possible Problems in New Buildings: new ceramic floors can be particularly slippery.
- \$ Each facility must be individually evaluated to determine what potential hazards are present..

Fire

- \$ Possible Subheadings: Fire Evacuation Plan, Fire Extinguisher Placement and Use, Emergency Lighting
- \$ Possible Problems: inflammable products in areas with potential heat sources.
- \$ Alarm systems, such as smoke and heat sensors, that are connected with a central alarm station can help alert a fire station of an emergency.

Food

- \$ Possible Problems: communal refrigerators that store staff food and/or lab tests, drugs, or vaccines; staff eating where they work; i.e. treatment and exam tables substituting for dining tables.

Housekeeping

- \$ Possible Subheadings: Cleaning Schedule, Toxicity of Cleaning Agents.
- \$ Possible Problems: slips or falls from wet floors.
- \$ It makes good business sense to have a clean facility, and most practices require staff to assist with housekeeping.
- \$ Immediately wipe up any material spills or pet urinary spills to minimize the potential for a fall.
- \$ Staff should be encouraged to use slip-resistant footwear to minimize the potential for a fall.

Indoor Air Quality

- \$ Possible Subheadings: Exhaust Systems and Location, Zone Heating and Filtration, Humidity Control.
- \$ Possible Problems: outdated or inadequate HVAC system, low frequency of air change, the age and type of building, possible contaminants (type of insulation, tobacco smoke, animal hair, drug vapors, anesthetic gas vapors), the ability of the building to “breathe.”

Medical Waste

- \$ Possible Problems: used needles, scalpel blades, glass or plastic that is contaminated with human disease-causing agents, animal tissues that are infected with diseases communicable to human beings.
- \$ RMW has the potential to cause harm to humans.
- \$ Regulations for the disposal of RMW is the responsibility of the EPA.

Noise

- \$ Possible Problems: Indoor kennels with large numbers of dogs, where noise levels can reach over 100dB, causing ear damage.
- \$ Solutions range from decreasing noise through use of baffles to protecting ears with earplugs or headphones. The goal is to decrease the noise level by at least 20dB.
- \$ Signs warning of noise hazards needed.

Personal Protective Equipment (PPE)

- \$ Each veterinary area, such as treating, bathing, or exam rooms, require their own PPE.

Radiology

- \$ Possible Subheadings: Radiation Concerns, Processor Chemical Hazards.
- \$ Possible Problems: exposure, radiograph processing, disposal of solutions.
- \$ Each state has different regulations regarding registration of radiograph machines and periodic inspections.

- \$ Basic safety equipment would be gloves and aprons for everyone in the room; some states, however, might not allow people in the room.
- \$ Many hospitals will also provide thyroid collars and special eyeglasses.
- \$ Written procedures regarding the taking of radiographs should be posted near the machine.
- \$ Exposure can be easily monitored with film badges.
- \$ Portable radiographic machines increase the possibility of exposure due to scatter radiation and lack of shielding.
- \$ Radiograph processing, either with an automatic processor or by hand, poses serious dangers. The chemicals used can be highly flammable and corrosive with toxic vapors.
- \$ Disposal of chemical solutions is regulated.

Sharps

- \$ Possible Problems: RMW that have edges or points which can puncture or lacerate skin.
- \$ There are strict regulations concerning the collection and disposal of these products.

Staff Safety Training

- \$ Possible Subheadings: First Aid Procedures, Fire Drills, Evacuation Plans.
- \$ Written plans and explanations are helpful for staff training.
- \$ Keep a log of which staff members have taken and passed the different training protocols: this can protect the hospital in the event of an OSHA inspection.

Violence Prevention

- \$ Possible Problems: angry or intoxicated clients, disgruntled employees, angered staff family members, robbery.
- \$ Staff training in violence prevention programs may be the best way of preparing for such encounters.
- \$ Improved lighting, both inside and outside the practice, can deter robbery and assault.

EXAMPLES

- \$ Check Phillip Seibert and the AAHA's websites for examples of universal HSMs.

MISCELLANEOUS

Abbreviations

- \$ AAHA: American Animal Hospital Association.
- \$ BSC: Biological Safety Cabinet.
- \$ CD: Chemotherapeutic Drug.
- \$ EPA: Environmental Protection Agency.
- \$ HSM: Hospital Safety Manual.
- \$ HVAC: Heating, Ventilation, and Air Conditioning.

- \$ NIOSH: National Institute of Occupational Safety and Health.
- \$ OSHA: Occupational Safety and Health Administration.
- \$ PPE: Personal Protective Equipment.
- \$ SS: Safety Supervisor.
- \$ RMW: Regulated Medical Waste.
- \$ WAGs: Waste Anesthetic Gases.

Recommended Reading

- \$ AAHA. 2004. Available at www.aahanet.org. Accessed June 23, 2004. Go to the AAHA store for a universal HSM.
- \$ OSHA. Safety and Compliance Solutions. 2004. www.oshasource.com. Accessed June 21, 2004.
- \$ Peterson, RP, Cohen, JM. The Complete Guide to OSHA Compliance. Lewis Publishers, Inc, 1995.
- \$ Seibert, PJ. Veterinary Practice Consultants Homepage. 1998. Available at www.v-p-c.com/phil/. Accessed June 21, 2004. Contains universal HSM.
- \$ Seibert, P. The Complete Veterinary Practice Regulatory Compliance Manual, Fourth Edition. Calhoun: Self-Published, 1999.

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