Safety in Central Service: Management Responsibility

LEARNING OBJECTIVE
1. Identify safety resources that support leadership and management responsibility in the Central Service department
2. Review three common workplace hazards: chemical/sterilant inhalation, skin contact and eye contact
3. Explain the importance of maintaining a safe work environment within the Central Service department

Without argument, the patient is at the center of everything healthcare professionals do; every action may, in some way, affect the patient’s outcome. Just as patients have a right to safe, high quality care, healthcare professionals have the right to work in a safe environment. Certified healthcare leaders are ethically responsible for ensuring that right is protected.

Central Service (CS) technicians have the right to know about hazardous chemicals in their workplace and they have the responsibility of knowing their job, remaining alert, learning and following safety rules, attending safety training programs, and participating in all fire and emergency drills. CS departments face unique hazards related to the processes and practices of medical device reprocessing. CS leaders should ask themselves whether they can identify safety resources that support their role and their team’s role in the department; whether they are aware of and able to respond to common workplace hazards in the event they or a colleague become injured; and whether they are able to coach and mentor their team on what is involved in creating and maintaining a safe work environment.

OBJECTIVE 1: IDENTIFY SAFETY RESOURCES THAT SUPPORT LEADERSHIP AND MANAGEMENT RESPONSIBILITY IN THE CENTRAL SERVICE DEPARTMENT
A sound training program, regardless of the subject or process, begins with a thorough understanding of the educational resources available. There are several safety resources available to CS leaders and technicians. The Eighth Edition of the International Association of Healthcare Central Service Materiel Management’s (IAHCSMM’s) Central Service Leadership Manual, Chapter 17, Central Services Leaders and Safety, Emergency Planning and Disaster Preparedness, addresses safety and identifies several valuable resources to support the department’s safety program. The following section reviews a few resources that can help CS leaders establish an effective safety training program.

REGULATORY ORGANIZATIONS
The healthcare facility must thoroughly investigate and comply with current federal, state, and local regulatory requirements and codes – including, but not limited to, electrical, fire prevention, safety, and local regulatory requirements and codes – related to the installation, operation and maintenance of processing...
With the Occupational Safety and Health Act of 1970, Congress created the Occupational Safety and Health Administration (OSHA), a division of the U.S. Department of Labor. The purpose of OSHA is to assure safe and healthful working conditions for working men and women by setting and enforcing standards – and by providing training, outreach, education and assistance. The employer bears the onus of responsibility for worker safety.

OSHA is responsible for:
- Establishing regulations to protect employees in the workplace;
- Driving workplace safety through its Hazard Communication Standard;
- Primary modes of communication, including Safety Data Sheets (SDSs, formerly known as Material Safety Data Sheets or MSDSs) and product labeling.

Under a department’s quality management system, documents should be controlled. SDSs should be reviewed on an annual basis, and the most current versions should be available at points of use. On OSHA’s website, www.osha.gov, a helpful PDF version that explains Hazard Communication SDSs is provided.

The Hazard Communication Standard (HCS) requires chemical manufacturers, distributors or importers to provide SDSs to communicate risks of hazardous chemical products. As of June 1, 2015, the HCS requires new SDSs to be in a uniform format and include the section numbers, headings, and associated information under the headings. Employers must ensure that SDSs are readily accessible to employees.

The National Institute for Occupational Safety and Health (NIOSH) is the U.S. federal agency responsible for developing new knowledge in the field of occupational safety and health and transferring that knowledge into practice. The Occupational Safety and Health Act of 1970 established NIOSH. NIOSH is part of the U.S. Centers for Disease Control and Prevention, in the U.S. Department of Health and Human Services. NIOSH has more than 1,300 employees from a diverse set of fields, including epidemiology, medicine, nursing, industrial hygiene, safety, psychology, chemistry, statistics, economics, and many branches of engineering. NIOSH works closely with the Occupational Safety and Health Administration (OSHA).

Another organization that addresses safety and health is the Centers for Medicare & Medicaid Services (CMS), a division of the Department of Health and Human Services (HHS). One of CMS’s programs, Hospital Compare, is a consumer-oriented website that provides information on how well hospitals provide recommended care to their patients. This information can help consumers make informed decisions about where to go for quality healthcare. Consumers may compare hospitals based on their overall star rating, summarizing up to 64 measures of quality shown on Hospital Compare.

CMS is responsible for:
- Ensuring that the voices and needs of the populations they represent are present as the agency develops, implements and evaluates its programs and policies.
- Ensuring all CMS beneficiaries have achieved their highest level of health, and that disparities in healthcare quality and access have been eliminated.

It is critical that CS department leaders understand the role the department plays in supporting the healthcare facility through CMS requirement compliance. Providing safe, clean and sterile medical devices for use in clinical procedures is the first step in supporting these CMS quality initiatives and, ultimately, making patients safer. Knowing the right questions to ask manufacturers is also important. CS leaders should do their homework and research the resources available, including white papers, regulations and guidelines, before accepting third party interpretation of requirements. If further clarification and confirmation is needed, leaders should consult with representatives from OSHA or NIOSH to gain a better understanding of these requirements.

The Association for the Advancement of Medical Instrumentation (AAMI) is a part of the American National Standards Institute (ANSI) and represents the U.S. on medical devices and processing (cleaning, disinfection, sterilization) at the International Organization for Standardization (ISO).

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In addition to AAMI, many other professional organizations provide evidence-based practice guidelines to support various healthcare professionals/disciplines. Organizations such as the Association of periOperative Registered Nurses (AORN) and the Association of Surgical Technologists (AST), for example, provide nurses and surgical technologists with guidance and support.

**OBJECTIVE 2: REVIEW THREE COMMON WORKPLACE HAZARDS: CHEMICAL/STERILANT INHALATION, SKIN CONTACT AND EYE CONTACT**

Leaders in the CS department are ultimately responsible for the protection of personnel, visitors and staff working within their department. In a quality management system (QMS), safety processes are addressed as part of human resources; “Personnel performing work affecting product quality shall be competent on the basis of appropriate education, training, skills and experience.”4 The work environment itself must also be addressed because work environment conditions can have an adverse effect on product quality. The department should document the requirements for the work environment and the procedures to monitor and control the work environment.4 Employee safety should be a priority with every process carried out in the department. Staff understanding and competence as it pertains to risks associated with chemical and/or sterilant inhalation, skin contact and eye contact can help prevent unnecessary injury.

**INHALATION SAFETY**

Respiratory protection from chemicals and/or sterilants is not usually required during normal or routine operation of equipment located in the CS department, as long as safety measures are established and monitored.3 To ensure safe use of consumable products and operation of processing equipment, the manufacturer’s Instruction for Use (IFU) should always be reviewed in cooperation with regulatory and industry guidelines. Departmental managers should ensure the equipment has been installed properly and is operating in accordance with the manufacturer’s written IFU; this can be accomplished by asking questions of the installation team and reviewing the installation qualification (IQ) documentation. Preventive maintenance, as well as daily care and handling of equipment, also contribute to the ongoing safety and operational performance, which helps ensure staff safety.

In addition to industry standards and guidelines, which are becoming increasingly harmonized due to the collaboration of industry experts, ventilation requirements are also specified by the equipment or product manufacturer. When multiple processes are taking place in a specific space or area of the department, air exchanges and ventilation requirements should default to the greater need. For example, if a specific piece of equipment requires five air exchanges per hour, and another product requires 10 air exchanges per hour, then the space should be set for 10 air exchanges per hour to support the greater demand.

If additional protection and/or monitoring is required, it is important to consult with the facility engineer and the healthcare organization’s industrial hygienist to identify an appropriate plan. It is also important to review and understand minimum standards, and ensure these are followed. Establishing an annual education and training plan to include measuring operator competence is also essential. There is nothing wrong with exceeding minimum standards, especially if it supports a culture of safety in the department. Personal monitoring should never be taken for granted and employees must understand that 24/7 environmental monitoring is not always enough. Sometimes, a combination of personal and environmental monitoring will meet and even exceed current regulatory requirements; however, it is equally important that the departmental staff also feel their safety needs are being met. Staff confidence can be supported through education and competency development. Personal monitoring devices should also be offered.

**SKIN SAFETY**

Ensuring skin protection can be accomplished using various types of personal protective equipment (PPE). Once again, based on the manufacturer’s written IFU, it may not be necessary to wear PPE for skin protection during routine operation, especially if the equipment is a part of a fully-enclosed system. For non-routine exposures, however, it may be necessary to don (put on) chemically-protective gloves, coveralls, and other resistant PPE. If skin contact occurs, the skin should be washed or rinsed in accordance with the manufacturer’s written IFU and the chemical SDS.

**EYE SAFETY**

Eye safety is critically important to all departmental personnel and visitors. Departmental managers should ensure...
appropriate eye protection is available to meet the many physical needs of their staff. In some instances, eye protection may not be necessary, such as during routine operation of fully-enclosed equipment/systems; however, chemical safety goggles should be worn for non-routine situations.

Splash-proof goggles or both safety glasses with side shields and a wraparound full-face shield may be required when working with certain chemicals, per the manufacturer’s written IFU. For eye protection, both safety glasses and face shields may be required because many face shields alone do not offer total protection against eye contamination; their use should be considered an adjunct to safety glasses in order to protect facial skin.

OBJECTIVE 3: EXPLAIN THE IMPORTANCE OF MAINTAINING A SAFE WORK ENVIRONMENT WITHIN THE CENTRAL SERVICE DEPARTMENT

INTERNAL COMMUNICATION
As part of the CS department’s QMS, leadership is required to ensure communication processes are established within the department. These communication processes must be appropriate for the department. The effectiveness of the department’s safety program needs to be included in the communication process. Transparency of communication is essential for ensuring technicians in the department have appropriate information on safety issues, warnings and overall knowledge of the chemicals and hazards deployed in the areas where they perform their duties.

QUALITY SYSTEMS
Environmental programs and QMS are periodically audited for conformance and compliance. Auditors review policies, procedures, maintenance records and logs, training records and documentation. A report of audit findings and nonconformities should be completed for follow-up action. A risk assessment program should also be designed to proactively evaluate the impact on medical device reprocessing as it relates to departmental safety.

CONCLUSION
Making safety a part of everyday practice is essential for establishing a culture that ensures a safe work environment. Departmental leaders can help ensure there is an understanding of general safety principles, and leaders can also serve as mentors and set the positive examples for others to follow.

Committing to workplace safety helps reduce potential hazards. A mature culture of safety becomes a part of the business day and requires very little effort once established; however, all departmental personnel will appreciate knowing they are working in a safe environment. It is the responsibility of all departmental personnel to learn and adhere to all safety requirements, policies and procedures; a zero tolerance for taking shortcuts is important, and departmental leaders must immediately report any safety hazard. Establishing a culture of safety will go a long way toward showing employees that their health and safety are important, and that the work they do every day is valued and supported.

REFERENCES
3. Association for the Advancement of Medical Instrumentation. 2013. ST58:2013 Chemical sterilization and high-level disinfection in health care facilities, pp. 3-60.

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