

What Your Processing Techs Need to Know

What knowledge and skills should an ambulatory surgery sterile processing tech with 1 year's experience possess to be considered competent? The Certification Board for Sterile Processing & Distribution identified these 6 areas:

1. Roles and Responsibilities

- purpose of processing area responsibilities
- manufacturer's recommendations regarding operation, maintenance, cleaning and troubleshooting of departmental equipment
- basic care and handling of instruments and equipment
- potential workplace hazards, such as wet floors, fumes, body fluids and sharps
- ergonomic considerations and body mechanics
- policies and procedures related to processing functions
- federal, state and local guidelines, standards and regulations (OSHA, FDA, CDC, EPA)
- professional standards and ethics related to patient and employee confidentiality, personal hygiene and dress codes
- continuous quality assessment programs
- health and safety related to environmental requirements, such as airflow and traffic control
- safety competency

2. Life Sciences

- microbiology related to cleaning, disinfecting and sterilizing
- factors in disease transmission (blood, skin, air, contaminated medical devices)
- modes of cross contamination
- types of microorganisms (bacteria, virus, fungus, prions)
- basic anatomy and physiology
- relationship between instrument type and types of tissue and body structure
- life sciences competencies
- basic medical terminology
- body's defenses against infection
- microbial growth conditions (temperature, humidity, oxygen)
- procedures for handling Creutzfeldt-Jakob Disease (CJD) contaminated supplies and equipment
- anatomy/physiology
- microbiology

3. Decontamination Competencies

- function and workflow of the decontamination room
- types of chemicals and their uses (including detergents, disinfectants, enzymatics and germicides)
- characteristics of chemicals (concentration, pH, expiration date, level of disinfection, contact time)
- disposal methods of biohazardous substances, chemicals and medical waste
- universal standards and personal protective equipment

- manufacturer's instructions for use of chemicals
- methods of cleaning, disinfecting and decontaminating instruments and equipment
- factors affecting decontamination (water temperature, loading procedures, water impurities)
- instruments, including general surgical instruments (clamps, scissors, retractors, suction tips) and specialty instruments (power tools, immersible/non-immersible, lumens, flexible and rigid scopes)

4. Prep and Handling Competencies

- instrument terminology and anatomy (jaws, shanks, box locks, ratchet, rings)
- types and functions of instruments
- types of instrument construction (finish, composition)
- basic principles of packaging
- characteristics of packaging materials in relationship to sterilization methods
- testing and preventative maintenance procedures for instruments and equipment
- linen pack and instrument tray construction (size, shape, density, weight)
- device manufacturer's processing requirements for instruments and equipment
- methods of monitoring sterilization (mechanical, biological, chemical)



▲ SKILL SET Your staff must understand all aspects of sterile processing, including the characteristics of chemicals and cleaning agents, PPE requirements, and the types and functions of instruments used at your facility.

5. Sterilization Competencies

- types of sterilizers and methods of sterilization (plasma, peracetic acid, steam)
- sterilization cycles and parameters (time, temperature, concentration, steam under pressure, humidity)
- operation and monitoring of sterilizers
- purpose, interpretation and documentation of sterilization indicators and integrators
- recall procedures
- loading and unloading criteria and procedures
- documentation procedures for lot number, date and load contents

6. Sterile Storage and Distribution Competencies

- factors that affect shelf life (damage, handling, temperature, humidity)
- storage requirements and shelving design (humidity, air exchange, placement)
- stock rotation (first-in, first out)
- inventory systems
- distribution systems (case carts, par level, exchange cart, "just in time" delivery, automated)
- sterility maintenance covers
- tamper-evident seals
- receiving procedures for handling medical supplies (corrugated boxes, breakout area, containers)

— Nancy Chobin, RN, CSPDM