

Surgical Technology: The Profession and The Professional

Introduction to Surgical Technology



Lesson Objectives

1. How the profession of Surgical Technology originated
2. Describe the process of training for Surgical Technologists
3. Discuss the Roles and Responsibilities of the Surgical Technologist
4. Discuss the services of the Association of Surgical Technologists (AST) and its support agencies
5. Discuss Career opportunities for Surgical Technologists
6. Discuss Professional Ethics and Behaviors

History of Surgical Technology

(Slide 1 of 2)

- **Before World War II (Pre–1939 Era)**

- Surgical Technology was considered an allied health profession (work collaboratively with healthcare providers)
- Nurse was the surgical assistant whose duties included:
 - Instrument preparation and assistance in surgical procedures
 - Assistance with administration of ether (for general anesthesia before surgery)
 - Instructed student nurses

- **After WWII (Post–1945 Era)**

- Need for Operating Room Personnels (ORPs) increased
- Nursing shortage created due to increase in battlefield survivors
- Corpsmen were trained to assist in surgery and called Operating Room Technicians (ORTs)

- **Post WWII – The Korean War (1950-1953)**

- Nursing shortage continued
- Former corpsmen filled in as "instrument nurses" later named as "circulating"
- First steam sterilizer introduced
- Association of Operating Room Technicians (AORT) founded in 1968

History of Professional Organizations

- The Association of Operating Room Nurses (**AORN**) created the Association of Operating Room Technicians (**AORT**) in 1968
- Liaison Council on Certification for the Surgical Technologist (**LCC-ST**) created a pathway for Certification of Surgical Technologists
 - First Certifying exam held in 1970
- AORT became Association of Surgical Technologists (**AST**) in 1973
- LCC-ST becomes the National Board of Surgical Technology and Surgical Assisting (**NBSTSA**) in 1974
 - Certified title for technicians becomes "Certified Surgical Technologist" (**CST**)

Professional and Affiliate Organizations

(Slide 1 of 2)

- Association of Surgical Technologists (**AST**)
 - Professional organization in surgical technology
 - Provides forums for learning, discussion advocacy
 - Involved in training and curriculum development
 - Advocated for standards in patient care
- Accreditation Review Council on Education in Surgical Technology and Surgical Assisting **ARC/STSA**
 - Recommends Accreditation of ST Programs
- Commission on Accreditation of Allied Health Education Programs (**CAAHEP**)
 - Grants Accreditation

Professional and Affiliate Organizations

(Slide 2 of 2)

- Accrediting Bureau of Health Education Schools
 - Nonprofit accrediting body recognized by the US Dept of Education
- National Board of Surgical Technology and Surgical Assisting (**NBSTSA**)
 - Certifying body for Surgical Technology



National Centre for Competency Testing (NCCT)

- **National Centre for Competency Testing (NCCT):**

- NCCT is an independent certification organization dedicated to administering competency exams and awarding credentials in various allied healthcare fields.
- It offers certifications for medical assistants, phlebotomy technicians, surgical technologists, and other healthcare professionals, providing opportunities for career advancement and professional development.

- **Tech in Surgery Certified Course:**

- The Tech in Surgery Certified (TS-C) course offered by NCCT is designed to train and certify individuals as surgical technologists.
- This course equips students with the necessary knowledge and skills to assist surgeons during operations, including pre-operative preparation, sterile technique, and intra-operative assistance, ensuring safe and efficient surgical procedures.

Watch the "History of Surgical Technology" Video for an overview of how surgical technology became what it is today

History of Surgical Technology Video



History of Surgical Technology Video

Summary of Video

- Foundations of Surgical Technology with Military through World War II and the Korean War
- The Association of Operating Room Nurses (AORN) creates what will become (Association of Surgical Technologists) AST
- National Board of Surgical Technology and Surgical Assisting (NBSTSA) is formed as the certifying body for Surgical Technologists

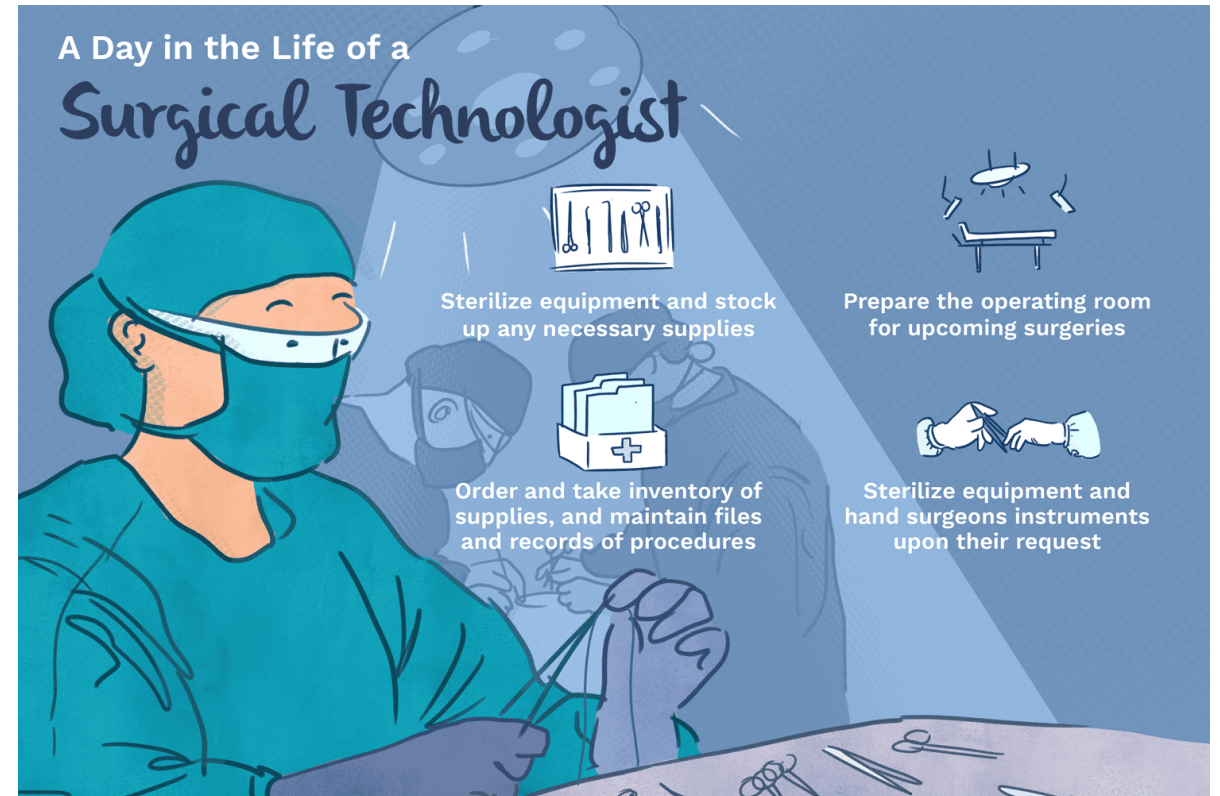
Field of Surgical Technology

- Part of allied health field
- Defined by Joint Commission as:
 - “Allied health professional works closely w/ surgeons, and other surgery personnel, delivering care before, during and after surgery

Role of the Surgical Technologist

(Slide 1 of 4)

- Role varies by:
 - Type of surgical facility
 - Individual specialization
- Major Roles Include:
 - Task Integration
 - Scrub Role
 - Assistant Circulator
 - Second Assistant
 - Other Perioperative Responsibilities



Role of the Surgical Technologist

(Slide 2 of 4)

1- Task Integration

- ST does not work in isolation
- Tasks and Responsibilities integrated with other professionals
- Becoming a "team player" is crucial

2- Scrub Role

- Sets up and maintains/protects the Sterile Field
- Prepares and passes instruments, supplies, equipment, and medications during Surgery
- Performs and maintains a "Surgical Count" with the Circulator (done prior to incision and when closing the surgical wound to prevent Retained Surgical Items (RSI))

Role of the Surgical Technologist

(Slide 3 of 4)

3- Assistant Circulator

- ST as "Non-Sterile" member of the surgical team.
- Role usually filled by a Registered Nurse (RN) but was historically the initial role of the Technologist.
- Prepares the non-sterile equipment in the Operating Room
- Opens sterile supplies, instruments and implants to the sterile field
- Assists with positioning and transferring the patient
- Performs Skin Prep (Varies by organization)
- Perform Urinary Catheter Insertion (Varies by state and organization, as an ST)

Role of the Surgical Technologist

(Slide 4 of 4)

4- Second Assistant

- Performs tasks that do not involve cutting into or removing tissue such as
 - Tissue Retraction
 - Suctioning (to maintain a "dry" surgical wound)
 - Hemostasis (preventing bleeding)
 - Assembling and connecting surgical drains/tubes
 - Applying wound dressings

5- Other Perioperative Responsibilities (emergency duty, patient care, management)

Watch the video "What is a Surgical Technologist" for a summary of the profession and the roles and responsibilities of a surgical technologist in the next slide.

What is a Surgical Technologist Video



What is a Surgical Technologist Video

Summary of Video:

- Surgical Technologist is not a Nurse
- ST goes through specialized training focused on the Operating Room
- ST sets up a sterile field and maintains sterility throughout a procedure
- ST is responsible for Instrumentation
- ST passes instruments, equipment and supplies to surgeon
- ST may assist surgeon and assistant surgeon

Role Definition of Certified Surgical Technologist

CST First scrub

- Set-up room, assist surgeon, maintain field

CST Second Scrub

- Retraction, suction, closure

CST assistant
circulator

- Assist RN, Non-sterile tasks

Surgical Assistant

- Surgeon assist, position, suture, technical

Working Conditions

- Indoors
- Standing
- Lift/Moving Heavy Equipment
- Risk of Communicable Diseases
- Unpleasant sights, sounds, odor
- Night shifts, evening shifts, calls on weekends and/or holidays



Surgical Technologist Training and Certification

Surgical Technologist Training

- Short Certificate Program (9 to 12 Months)
- 2-Year Associate Degree Course

Certification

STs must demonstrate competence via the following:

- Passing Certification Exam through The National Board of Surgical Technology and Surgical Assisting (NBSTSA)
- Certified Surgical Technologists (CSTs) must be maintained through Continuing Education Credits (CEUs)
 - Renewal is currently every 2 years (as of 2023)
- National Center for Competency Testing (NCCT) also offers Tech in Surgery (TS-C) Certification

Professional Ethics and Ethical Challenges

Expected Professional Ethics

- Respect human individuality and uniqueness
- Practice your profession with empathy
- Practice equal rights
- Respect all confidences entrusted to you
- Respect the free will of the patient
- Do no harm
- Surgical conscience

Potential Ethical Challenges

- Impairment in the workplace
 - Healthcare professionals have legal and ethical responsibility to report suspected impairment of a coworker or seek treatment themselves
- Refusal to perform an assigned task
- Refusal to work with a specific individual
- Ethical dilemma – Choosing from a set of choices not completely acceptable

Ethical Dilemmas

Think about this


Can you think of an ethical dilemma you may be faced with in Surgery?

Here is an example; You have a patient that is undergoing a surgery with a high risk of bleeding. They refuse blood transfusions, based upon their religious beliefs. How would you care for this patient, being respectful of their beliefs, which may conflict with your personal feelings?

Write your answers in the discussion forum (comments section) given below

Surgical Conscience

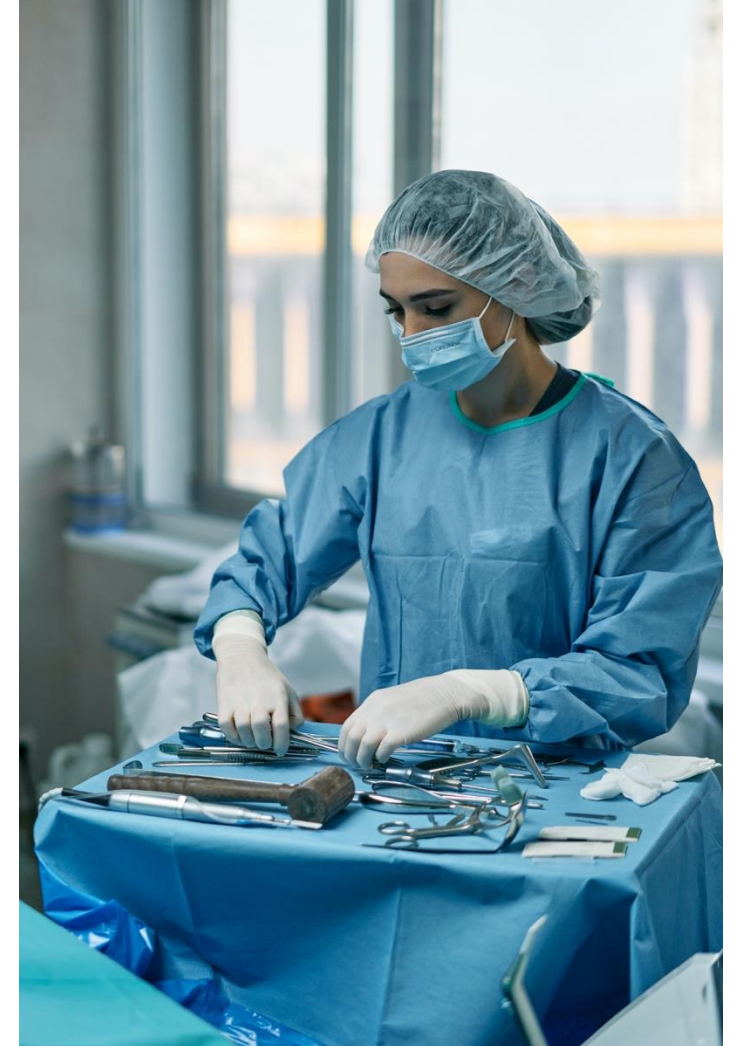
Ethical principle and professional responsibility that guides surgical practitioners to maintain the highest standards of integrity, honesty, and accountability throughout the surgical process.



| | |
|--------------------------|-----------------------|
| Accept responsibility | • For all actions |
| Maintain confidentiality | • Patient privacy |
| Non-discrimination | • NO personal basis |
| Cost control | • Reduce waste |
| Asepsis | • Sterility always!!! |
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Careers for Surgical Technologists

- Facility Based Surgical Technologist
- Military Service
- Specialty Practice
- Certified Surgical Technologist – Certified First Assistant
- Educator and Clinical Instructor
- Medical Industry Representative
- Materials Processing Management
- Traveling Surgical Technologist
- Other Career Opportunities



Preparing for Employment

- **Prepare Yourself First!**
 - Expand knowledge and skills
 - Develop time management skills
 - Explore career possibilities beforehand
 - Develop awareness of teamwork skills
- **Getting hired**
 - Prepare a resume
 - Research employers
 - List references
 - Practice filling out job applications
 - Prepare for an interview

Clinical Ladder Program

A clinical ladder program recognizes and rewards the professional growth of healthcare professionals in a specific specialty or discipline.

- Employ this to enhance your skills!
- Goals of Program:
 - Patient care
 - Recognition/Reward to ST
 - Accountability of ST
 - Professional Growth
 - Visibility of ST



Organization Websites from this Lesson

Professional Organization (AST)

1. <https://www.ast.org/>

Certifying Bodies (NBSTSA & NCCT)

1. <https://www.nbstsa.org/cst-certification>
2. <https://www.ncctinc.com/certifications/tsc>

Watch the Video from Chapter 1 of the E-book

Watch the video on "**Overview of Surgical Technologist**" from **Surgical Technology - Elsevier eBook on VitalSource, 8th Edition** by logging into your Evolve account

[Click Here](#) to access the video!

Read Chapter 1 From The E-book

Read **Chapter 1** from your E-Book to pass the upcoming quiz from **Surgical Technology – HTA's E-Book**.

[Click Here](#) to access Chapter 1!

Thank you!

Get ready for your quiz and rest of the activities now. Best of luck!