American Society of Anesthesiologists

ASA & Anesthesia Facts

- The American Society of Anesthesiologists (ASA) is an educational, research and scientific association of physicians organized to raise the standards of the medical practice of anesthesiology and to improve patient care.

- Since its founding in 1905, the Society's achievements have made it an important voice in American Medicine and the foremost advocate for all patients who require anesthesia or relief from pain.

Who are Anesthesiologists?

- As physicians, anesthesiologists are responsible for administering anesthesia to relieve pain and for managing vital life functions, including breathing, heart rhythm and blood pressure, during surgery. After surgery, they maintain the patient in a comfortable state during the recovery and are involved in the provision of critical care medicine in the intensive care unit. Learn more about anesthesiologists.

Training and Education

- In the U.S., physicians train extensively to become specialists in anesthesiology. Following high school, young scholars undergo a four-year undergraduate college degree. All students must complete requisite pre-med science requirements. Following completion of undergraduate studies, aspiring anesthesiologists undergo four years of medical school, followed by a four-year anesthesiology residency program.

- Upon completion of their residency, an anesthesiologist is eligible for board certification through the American Board of Anesthesiology (ABA). Board-certified anesthesiologists must maintain their certification with continuing medical education specifically approved by the ABA for Maintenance of Certification in Anesthesiology (MOCA®).

- Anesthesiologists are not required to subspecialize, but many do focus on one area of care to further hone their expertise. Learn more about specialty areas and anesthesiologists' training.

Anesthesia Safety

- The Anesthesia Patient Safety Foundation (ASPF) *was created by ASA in 1985, spearheading the patient safety movement.* The American Medical Association's *own patient safety foundation was modeled after the APSF.*

- Complications from anesthesia have declined dramatically over the last 50 years. Since the 1970s, the number of anesthesiologists has more than doubled and at the same time patient outcomes have improved.

Anesthesiology for the Surgical Patient

Preoperative Clinic

- Anesthesiologists play a vital role in assessing a patient's medical readiness for surgery. They are unique in their advanced knowledge of both the medical illnesses and the potential effects of surgery on the human body.
- The anesthesiologist performs a focused history and physical examination, reviews available laboratory and special test results and assesses the need for additional testing prior to proceeding with surgery.

Intraoperative Care

- It is estimated that nearly 40 million anesthetics are administered each year in the U.S. Anesthesiologists provide or participate in more than 90 percent of these anesthetics.
- In the operating room, anesthesiologists are responsible for the medical management and anesthetic care of the patient throughout the duration of the surgery. The anesthesiologist must carefully match the anesthetic needs of each patient to that patient's medical condition, responses to anesthesia and the requirements of the surgery.
- Anesthesiologists practice in either a "solo" or "Anesthesia Care Team" model.
    - "Solo" practice involves the physician anesthesiologist directly caring for a single patient throughout an entire surgical episode.
    - The "care team model" involves the physician anesthesiologist medically supervising or directing the work of non-physician anesthetists, such as nurse anesthetists (NA) or anesthesiologist assistants (AA).
- Anesthesiologists have important functions outside of the operating room, but the majority of their vital work takes place in the surgical suite. Their main roles during surgery are:
    - Provide continual medical assessment of the patient.
    - Monitor and control the patient's vital life functions, including heart rate and rhythm, breathing, blood pressure, body temperature and body fluid balance.
    - Control the patient's pain and level of consciousness to make conditions ideal for a safe and successful surgery.

The Postanesthesia Care Unit (PACU) or 'Recovery Room'

- After surgery, patients are transferred to the PACU, where they continue to emerge from the effects of anesthesia and monitored for evidence of recovery
    - Including activity level, adequacy of breathing, circulation, level of consciousness and oxygen saturation. Pain control is optimized.

- In most cases, the anesthesiologist decides when the patient has recovered enough to be sent home following outpatient surgery or has been stabilized sufficiently to be moved to a regular room in the medical facility or transferred to an intensive care unit.

Anesthesiology Beyond Surgery

- As medical technology has advanced, so has the need for anesthesiologists to care for patients outside the traditional operating suite.
    - Including: radiological imaging, gastrointestinal endoscopy, placement and testing of cardiac pacemakers and defibrillators, lithotripsy and electroconvulsive therapy.

Basic Science and Clinical Research

- Anesthesia research at the clinical and basic science levels has been completed almost exclusively by anesthesiologists or Ph.D. scientists with the goal of continually improving patient care and safety.

Ambulatory and Office-Based Anesthesia

- Anesthesiologists are working with federal and state legislators and agencies and collaborating with other physicians and accrediting bodies to establish safety standards for such facilities. Learn more about ambulatory surgery.

Critical Care and Trauma Medicine

- Anesthesiologists are uniquely qualified to coordinate the care of patients in the intensive care unit because of their extensive training in clinical physiology/pharmacology and resuscitation.
- The role of the anesthesiologist in a critical care setting includes the provision of medical assessment and diagnosis, respiratory and cardiovascular support and infection control.
- Anesthesiologists provide airway management, cardiac and pulmonary resuscitation, advanced life support and pain control. As consultants, they play an active role in stabilizing and preparing the patient for emergency surgery.

Pain Medicine

- Anesthesiologists ensure patients are safe, pain is managed and they are comfortable during and following surgery. They also provide their services in other areas of the hospital and in physicians' offices where painful medical tests or procedures are performed. Learn more about pain medicine.

Labor and Delivery

- These physician anesthesiology specialists help women manage their pain during labor and delivery both during natural vaginal births as well as cesarean births. Learn more about labor and delivery.