



Physician Anesthesiologists: The Anesthesia, Pain, and Critical Care Specialists

As you get ready to have surgery you will meet a key member of the team providing your care—your physician anesthesiologist. You may know that this doctor will monitor your anesthesia during surgery, but you might not realize the essential position this medical specialist has before, during, and after your procedure to keep you safe and comfortable.

Who Are Physician Anesthesiologists?

Physician anesthesiologists are medical doctors specializing in anesthesia, pain management, and critical care medicine, and they provide or guide nearly 90 percent of the anesthetics used in the more than 100 million procedures performed every year in the United States. With 12 to 14 years of education and 12,000 to 16,000 hours of clinical training, these physician specialists are the experts in managing pain. In addition, physician anesthesiologists have the extensive education and training to evaluate, diagnose, treat, and manage the entire spectrum of medical conditions and patients' needs. They also diagnose and treat potentially life-threatening complications that can happen suddenly during surgery.

Years of research by physician anesthesiologists have led to the development of techniques and protocols that make anesthesia safer and more effective than ever. This research is ongoing to make sure anesthesia care continues to advance. Your physician anesthesiologist will work with your doctor to develop and administer the anesthesia care plan for your procedure and also may lead an Anesthesia Care Team, which may include anesthesiology resident physicians, anesthesiologist assistants, and nurse anesthetists. Each team member has an important role and all work together to provide you effective and safe care, with the physician anesthesiologist maintaining overall responsibility.

What Types of Anesthesia Do Physician Anesthesiologists Provide?

Physician anesthesiologists are generally in charge of providing the following types of anesthesia care:

Regional anesthesia — Pain medication to numb a large part of the body, such as the area below the waist, is given through an injection or a small tube called a catheter. You will be awake, but unable to feel the area that is numbed. This type of anesthesia, including spinal blocks and epidurals, often is used for childbirth and for surgeries of the arm, leg, or abdomen. Possible side effects are headache, minor back pain, and bleeding beneath the skin where the anesthesia was injected. Rarely, a needle entered near the lung can cause the lung to collapse, or nerves can be damaged.

Monitored anesthesia care or intravenous (IV) sedation — The physician anesthesiologist will provide medication that will relax you through an IV placed in a vein. Depending on the procedure, the level of sedation may range from minimal—making you drowsy but able to talk—to deep, meaning you probably won't remember the procedure. This type of anesthesia often is used for minimally invasive procedures such as colonoscopies. IV sedation is sometimes combined with local (numbing a small area) or regional anesthesia. Possible side effects include headache, nausea, and drowsiness.

General anesthesia — This type of anesthesia is provided through an anesthesia mask or IV and makes you lose consciousness. It is usually used for major operations, such as knee replacement or open heart surgery. Side effects may include nausea and vomiting, sore throat, muscle aches, and chills and shivering. More serious complications can include confusion that can last for a few days after surgery, and problems concentrating and thinking.

The type of anesthesia you receive will depend on a variety of factors, including the procedure you're having, your health, and in some cases, your preference. To ensure the highest quality and safest care, talk to your physician to be sure your anesthesia care is led by a physician anesthesiologist.

How Does the Physician Anesthesiologist Care for You During Surgery?

Physician anesthesiologists guide you throughout your entire surgical experience—before, during, and after the procedure.

Before surgery — In the days or weeks before your surgery, your physician anesthesiologist will be sure you are fit for surgery and prepare you for the procedure by asking detailed questions about your health, examining you, and reviewing tests. Your physician anesthesiologist will answer your questions about the surgery and anesthesia. Be sure to let your physician anesthesiologist know about any medical problems you have, such as heart disease, diabetes, or asthma, what medications you are taking (prescription,

Physician anesthesiologists' education and training

12 to 14 Years of education covers:

- All basic science courses
- All clinical science courses
- Clinical rotations caring for patients with medical, surgical and mental health issues
- Focus on medical evaluation, diagnosis and treatment
- Preventive, acute, chronic, rehabilitative, hospice and palliative care

12,000 to 16,000 hours of clinical training covers:

- Comprehensive medical and surgical care, both outpatient and inpatient
- Clinical anesthesiology, focusing on all of the anesthesiology subspecialty areas including but not limited to obstetrics and gynecology, pediatrics, cardiovascular, neurological, pain medicine and critical care

over-the-counter, and herbal supplements), and whether you've had problems or concerns while having anesthesia in the past. Use this time to ask questions. Understanding your care will make you feel more comfortable and confident as you prepare for surgery. Your physician anesthesiologist will create an anesthesia plan specifically developed for you to ensure a safe and successful procedure.

During surgery — The physician anesthesiologist manages your pain and closely monitors your anesthesia and vital body functions during the procedure, working alone or with an Anesthesia Care Team. Your physician anesthesiologist will manage medical problems if they occur during surgery, as well as any chronic conditions you have such as asthma, diabetes, high blood pressure, and heart problems.

After surgery — In the recovery room, the physician anesthesiologist supervises the nurse and others who care for you and monitor your recovery—including your breathing, circulation, consciousness, and level of oxygen—and is immediately available if there are questions or concerns. The physician anesthesiologist typically is the person to decide when you are recovered from the effects of anesthesia and ready to go home or be moved to a regular room in the hospital or the intensive care unit. The physician anesthesiologist also creates a plan for your recovery and may be involved in pain management after you go home.

Treating Your Chronic Pain

Physician anesthesiologists specialize in pain control and some focus their practices on treating patients with chronic pain. If you suffer from pain that won't go away, such as migraine headaches, back pain, or pain caused by a condition such as fibromyalgia, ask your doctor about a referral to a physician anesthesiologist who specializes in treating chronic pain.

About the American Society of Anesthesiologists

Every day in hospitals, medical centers, ambulatory surgery centers, and physicians' offices across the nation, physician anesthesiologist members of the American Society of Anesthesiologists provide the highest-quality, safest anesthesia care to patients facing surgery or seeking relief from pain. For more information on the field of anesthesiology, visit the American Society of Anesthesiologists online at asahq.org. To learn more about how physician anesthesiologists ensure patient safety, visit asahq.org/madeforthismoment.