

Basic, Clinical Sciences: Anesthesia Procedures, Methods, and Techniques

The Standards for Monitoring is a list of Standards developed by the ASA's committee on Standards and Practice Parameters for what level of monitoring is required for basic anesthesia care. That being said, they are not all inclusive and advanced monitoring may be required given specific patient comorbidities or advanced surgical requirements. The goal of the ASA standards for monitoring is to reduce patient morbidity and mortality and not following them may lead to patient injury and provider liability. Highlights include:

1. A qualified anesthesia provider must be present for all forms of anesthesia care (MAC, Regional, General Anesthesia, etc.). A trained individual must be onsite to deal with the ever-changing conditions of the anesthetized patient and prepared to deal with any changes that occur.
2. Oxygenation must be monitored through inhaled measures and pulse oximetry. Every Anesthesia machine has an inspired Oxygen Analyzer with lower limit alarms, which must be functional and active during all forms of anesthesia care. Blood oxygenation must also be monitored via a pulse oximeter with audible alarm and lower limit alarms.
3. Ventilation is also monitored parameter under the ASA Standards and is done several ways. First if by the trained anesthetist who observes chest rise, auscultates breath sounds, and when applicable, monitors the reservoir bag for signs of adequate ventilation. End tidal CO₂ must also be observed and quantitative measure is preferred over qualitative. This is required to be quantitative by either: Capnography, capnometry or mass spectroscopy when either endotracheal tube or LMA is used. As above for pulse oximetry, lower limit alarms must be used. Finally regarding ventilation, when using a ventilator, a system must be able to detect disconnection of the circuit such as expiratory flow monitors.
4. Circulation must also be monitored. This is done by measuring blood pressure through whatever form is deemed appropriate and this must be checked at least every 5 minutes. Heart Rate and EKG must also be used during any anesthetic procedure. Finally, there must also be checks of heart sounds, peripheral pulses, or oximetry used during the procedure.
5. Temperature is the final parameter and must be monitored when changes in patient body temperature are expected through the duration of the case. Of all the standards, this is the only that is not required to be present, only when applicable.

Sources

[Standards for Basic Anesthetic Monitoring: American Society of Anesthesiologists, 10/28/15, PDF](#)

[Keys to the Cart: January 1, 2018; A 5-minute video review of ABA Keywords](#)

