

Intravenous (TIVA) vs. Inhalation Anesthesia⁶

	Intravenous Anesthesia	Inhalational Anesthesia
Method of measurements	Blood concentration (not easily obtained)	Minimum alveolar concentration - concentration of an inhaled agent in the alveoli required to prevent movement in response to a surgical stimulus in 50 percent of patients
Common Agents	Propofol (sedative agent) WITH Opioid analgesic (fentanyl, remifentanyl, etc.)	- Sevoflurane - Desflurane - Haloflurane - Isoflurane - Nitrous oxide
Advantages	- Decreased postoperative nausea and vomiting (PONV) compared to inhalational anesthesia - Smooth emergence experience, with less of a hangover effect - Decreased cognitive impairment issues with propofol - Rapid titration ability with propofol - Better patient experience with propofol - Shorter recovery room times - Quicker extubation - Clinicians are not exposed to operating room contamination from inhaled gas	- Ease of administration - Greater analgesia - End-tidal anesthetic concentration (ETAC) monitoring
Disadvantages	- No equivalent to end-tidal anesthetic concentration (ETAC) monitoring - Increased risk for anesthesia awareness	- Confound evoked potential monitoring - Increased risk for postoperative nausea and vomiting (PONV)
Real time monitor of anesthetic concentration	No	Yes