**Sevoflurane**

**Class:** General Anesthetic, Inhalation

**Indications:** Induction and maintenance of general anesthesia

Unlabeled: Intraoperative cardio-, hepatic-, and neuroprotection (ischemic preconditioning)

**Available dosage form in the hospital:** Solution, Inhalation: 250 mL bottle.

**Dosage:** **Anesthesia:** Inhalation: Minimum alveolar concentration (MAC), the concentration that abolishes movement in response to a noxious stimulus (surgical incision) in 50% of patients, is 2.6% (25 years of age). Surgical levels of anesthesia are generally achieved with concentrations from 0.5% to 3%; the concentration at which amnesia and loss of awareness occur is 0.6%.

- MAC values for surgical levels of anesthesia:
  - 25 years:
    - Sevoflurane in oxygen: 2.6%
    - Sevoflurane in 65% N<sub>2</sub>O/35% oxygen: 1.4%
  - 40 years:
    - Sevoflurane in oxygen: 2.1%
    - Sevoflurane in 65% N<sub>2</sub>O/35% oxygen: 1.1%
  - 60 years:
    - Sevoflurane in oxygen: 1.7%
    - Sevoflurane in 65% N<sub>2</sub>O/35% oxygen: 0.9%
  - 80 years:
    - Sevoflurane in oxygen: 1.4%
    - Sevoflurane in 65% N<sub>2</sub>O/35% oxygen: 0.7%

**Common side effects:** >10%:

- Cardiovascular: Hypotension (4% to 11%; dose dependent)
- Central nervous system: Agitation (7% to 15%)
- Gastrointestinal: Nausea (25%), vomiting (18%)
- Respiratory: Cough increased (5% to 11%)
1% to 10%:

Cardiovascular: Bradycardia (5%), tachycardia (2% to 6%), hypertension (2%)

Central nervous system: Somnolence (9%), dizziness (4%), fever (1%), headache (1%), hypothermia (1%), emergence delirium

Gastrointestinal: Salivation increased (2% to 4%)

Respiratory: Airway obstruction (8%), laryngospasm (2% to 8%), breath-holding (2% to 5%), apnea (2%)

Miscellaneous: Shivering (6%), movement (1%)

Pregnancy Risk Factor: B