



Section 13: Appendix 1: Medications

NITROUS OXIDE / OXYGEN (NITRONOX)

Pregnancy Category - N

A	AEMT	A
P	PARAMEDIC	P

ACTIONS	<ol style="list-style-type: none"> 1. Nitrous oxide / oxygen is a mixture of 50% nitrous oxide and 50% oxygen 2. When inhaled, nitrous oxide/oxygen depresses the central Nervous system, causing sedation and analgesia 3. Nitrous Oxide: oxygen is self-administered 4. Provides rapid, easily reversible relief of pain
INDICATIONS	<ol style="list-style-type: none"> 1. Burns 2. Kidney stones 3. Musculoskeletal trauma 4. Fractures
CONTRAINDICATIONS	<ol style="list-style-type: none"> 1. Known hypersensitivity 2. Decreased level of consciousness or unable to follow instructions 3. History of drug or alcohol ingestion 4. History of COPD, emphysema, or any condition that may compromise respiratory efforts including: chest trauma, CHF, respiratory tract burns, or other trauma 5. Bowel obstruction or traumatic abdominal injury 6. Maxillofacial injuries or head injuries 7. Obstetric patient not in the process of delivery 8. Pediatric patient < 12 years or < 75 pounds 9. Intoxication 10. Psychiatric problems 11. Respiratory distress 12. Increased intracranial pressure 13. Decompression sickness
SUPPLIED	Supplied as Nitronox, a set containing oxygen and a nitrous oxide cylinder joined by a valve that regulates flow to provide a 50:50 mixture of the two gasses. The mixture is piped to a demand valve apparatus.
SIDE EFFECTS	Dizziness, apnea, cyanosis, nausea, vomiting. Ambulance crew may experience giddiness if the vehicle is not properly vented
ADULT DOSAGE	Instruct the patient to inhale deeply through a patient-held demand valve and mask or mouthpiece. Have patient inhale gas until pain relief or patient spontaneously is unable to hold mask.
PEDIATRIC DOSAGE	Not indicated in the pre-hospital setting
KEY POINTS	<ul style="list-style-type: none"> • Self-administered by mask: a good seal around mouth and nose is important; the gas is breathed deeply and may give relief after about two minutes; the patient should stop when relief is obtained • The paramedic should not hold the face mask in place for the patient
PROTOCOL USES	<ul style="list-style-type: none"> • Extremity Amputation / Trauma