



## Section 13: Appendix 1: Medications

### NITROUS OXIDE / OXYGEN (NITRONOX)

Pregnancy Category - N

A	AEMT	A
P	PARAMEDIC	P

<b>ACTIONS</b>	<ol style="list-style-type: none"> <li>Nitrous oxide / oxygen is a mixture of 50% nitrous oxide and 50% oxygen</li> <li>When inhaled, nitrous oxide/oxygen depresses the central Nervous system, causing sedation and analgesia</li> <li>Nitrous Oxide: oxygen is self-administered</li> <li>Provides rapid, easily reversible relief of pain</li> </ol>
<b>INDICATIONS</b>	<ol style="list-style-type: none"> <li>Burns</li> <li>Kidney stones</li> <li>Musculoskeletal trauma</li> <li>Fractures</li> </ol>
<b>CONTRAINDICATIONS</b>	<ol style="list-style-type: none"> <li>Known hypersensitivity</li> <li>Decreased level of consciousness or unable to follow instructions</li> <li>History of drug or alcohol ingestion</li> <li>History of COPD, emphysema, or any condition that may compromise respiratory efforts including: chest trauma, CHF, respiratory tract burns, or other trauma</li> <li>Bowel obstruction or traumatic abdominal injury</li> <li>Maxillofacial injuries or head injuries</li> <li>Obstetric patient not in the process of delivery</li> <li>Pediatric patient &lt; 12 years or &lt; 75 pounds</li> <li>Intoxication</li> <li>Psychiatric problems</li> <li>Respiratory distress</li> <li>Increased intracranial pressure</li> <li>Decompression sickness</li> </ol>
<b>SUPPLIED</b>	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.
<b>SIDE EFFECTS</b>	Dizziness, apnea, cyanosis, nausea, vomiting. Ambulance crew may experience giddiness if the vehicle is not properly vented
<b>ADULT DOSAGE</b>	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.
<b>PEDIATRIC DOSAGE</b>	Not indicated in the pre-hospital setting
<b>KEY POINTS</b>	<ul style="list-style-type: none"> <li>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</li> <li>The paramedic should not hold the face mask in place for the patient</li> </ul>
<b>PROTOCOL USES</b>	<ul style="list-style-type: none"> <li>Extremity Amputation / Trauma</li> </ul>