



**El Dorado County Emergency Medical
Services Agency**
Quick Reference

Revised Date: July 1, 2020

Medication Profile

Nitrous Oxide
(Nitronox, N₂O:O₂)

Class:

Analgesic gas

Action:

Produces rapid, reversible relief from pain

Onset: 2-5 minutes

Duration: 2-5 minutes

Adult & Pediatric Administration:

Nitrous Oxide is self-administered and can be administered to any age patient that is able to follow instructions and hold mouthpiece/mask.

1. Set up equipment outside ambulance
2. Explain the procedure to the patient
3. Instruct the patient to do the following:
 - a. Hold the facemask securely over nose and mouth
 - b. Breathe normally until the pain is relieved
 - c. Discontinue if Patient becomes drowsy or experiences side effects
4. Turn off nitrous oxide once patient is secured within ambulance

Higher elevations require higher concentrations of Nitrous Oxide:

- Above 4000ft: 60/40
- Below 4000ft: 50/50

Indications:

Fractures, sprains, soft tissue injuries, burns
Amputations
Low back pain (below level of thoracic spine)
Snake bites
Kidney stones
Contact base station for other uses

Contraindications:

Administration in ambulance or small spaces
Patient unable to hold mask/mouthpiece
Severe COPD
Decompression Sickness
Head injury
GCS less than 14
Hypotension
Pregnancy
Sedated or intoxicated patients
Pneumothorax
Bowel obstruction
Chronic ear or sinus infection
Chest/upper back pain from any cause

Side Effects:

Hypotension, Dizziness/ lightheadedness, ALOC,

Nausea/Vomiting

Pregnancy:

Category X

Notes:

Nitrous Oxide is a schedule III medication: Controlled substance Act of 1970.