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**OPINION: NITROUS OXIDE ADMINISTRATION**

**APPROVED DATE:** October 10, 2013

**REVIEWED DATE:**

**REVISED DATE:** July 2016

**ORIGINATING COMMITTEE:**

Practice & Education Committee

An advisory opinion adopted by WSBN is an interpretation of what the law requires. While an advisory opinion is not law, it is more than a recommendation. In other words, an advisory opinion is an official opinion of WSBN regarding the practice of nursing as it relates to the functions of nursing. Facility policies may restrict practice further in their setting and/or require additional expectations related to competency, validation, training and supervision to assure the safety of their patient population and/or decrease risk.

Within the Scope of /Role of \_\_\_APRN \_\_\_X\_\_\_RN \_\_\_LPN \_\_\_CNA

**ADVISORY OPINION  
NITROUS OXIDE ADMINISTRATION**

It is within the Scope of Practice of a Registered Nurse (RN) to administer nitrous oxide as a single agent, not to be administered concurrently with any other sedative or depressant agents.

**I. RATIONALE**

The intent of administering nitrous oxide is to achieve minimal sedation (anxiolysis). This procedure is performed by Registered Nurses (RNs) with additional education, skills, and demonstrated competency. This advisory opinion **CANNOT** be construed as approval for the RN to administer an anesthetic agent for the purposes of anesthesia.

**II. GENERAL REQUIREMENTS**

- A. Licensed Independent Provider is to be readily available in the facility.
- B. Candidates for nitrous oxide administration must be evaluated by Anesthesiology or Licensed Independent Provider and assessed for appropriateness before initiation of therapy and is not to be used to achieve moderate or deep sedation.
- C. A Licensed Independent Provider must be present during administration of nitrous oxide to a child less than 18 months of age.
- D. A written policy and procedure is maintained by the employer/facility.
- E. Policies, procedures, and protocols (order sets) have been approved by the facility prior to implementation.
- F. Policies, procedures and order sets will include use of nitrous oxide as a (anxiolytic), describe the role of the RN during nitrous administration, frequency of assessment, and qualified prescriber availability.
- G. Policy and procedure will specify the required emergency equipment and medications which must be immediately available to the patient receiving any medication classified as sedation agents. This includes all emergency equipment and medication required to regain and/or maintain the patient's cardiac and respiratory state.
- H. Instructional program that includes nitrous oxide administration/airway management with a minimum six (6) hours instruction including theory and didactic management of nitrous oxide administration.
- I. Only RNs who have satisfactorily completed an instructional program and have documented initial and ongoing clinical competency on file with the employer may administer nitrous oxide.

- J. Current certification in Basic Cardiac Life Support (BCLS) on file with the employer.
- K. Advanced Cardiac Life Support (ACLS) and Pediatric Advanced Life Support (PALS) as suitable to the age of the patient is on file with the employer.
- L. Continuous pulse oximetry will be monitored during nitrous oxide administration on all patients receiving nitrous oxide.
- M. The RN responsible for administering nitrous oxide may not leave the patient unattended or engage in other tasks that could compromise continuous monitoring of patient, airway and/or level of consciousness.
- N. The RN has the right and responsibility to refuse to administer any medication that may induce procedural sedation when in the professional judgment of the RN, the medication or combination of medications, the dosages prescribed, or frequency of administration may produce a state of moderate or deep sedation or place the patient at risk for complications.
- O. The specific dosage parameters are established by the Licensed Independent Provider prior to the RN administering nitrous oxide.
- P. The RN may administer and discontinue the nitrous oxide as ordered by the Licensed Independent Provider.

### III. COURSE OF INSTRUCTION to include, but not limited to:

- A. Anatomy and Physiology specific to age levels.
- B. Pre-sedation assessment specific to age levels.
- C. Pharmacologic properties of nitrous oxide / oxygen.
- D. Indications / Contraindications of nitrous oxide.
- E. Techniques of administration, titration and termination of nitrous oxide use.
- F. Level of consciousness assessment and physiological response to the drug.
- G. Airway management.
- H. Complication management.
- I. Emergency situation management and appropriate interventions.
- J. Abuse potential.
- K. Occupational exposure to nitrous oxide.
- L. Legal implications, responsibility, documentation.
- M. Nursing role.

### IV. REFERENCES

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