Article XIII

ANALGESIA, CONSCIOUS SEDATION, DEEP SEDATION, AND GENERAL ANESTHESIA RULES FOR A DENTIST IN AN AMBULATORY FACILITY

A. DEFINITIONS

- 1. Analgesia The diminution of pain or production of increased tolerance to pain in the conscious patient.
- 2. Anesthesia Partial or complete loss of sensation with or without the loss of consciousness.
- 3. Anesthesia Period The period of time beginning with the placement of a needle, mask, or solution into or onto the body until the patient has met the criteria which are appropriate for dismissal.
- 4. Levels of Supervision for Qualified Staff
 - a. Direct Supervision The dentist is in the dental office, authorizes the procedure, and remains in the dental office while the procedures are being performed by the auxiliary.
 - b. Personal Supervision The dentist is in the dental office, personally authorizes the procedure, and before the dismissal of the patient, evaluates the patient.
 - c. Operative Supervision- The dentist is personally operating on the patient and authorizes the auxiliary to aid the treatment by concurrently performing a supportive procedure.
- 5. Nitrous Oxide/Oxygen Inhalation Analgesia The administration, by inhalation, of a combination of nitrous oxide and oxygen producing an altered level of consciousness that retains the patient's ability to independently and continuously maintain an airway and respond appropriately to physical stimulation and/or verbal command. Nitrous oxide/ oxygen inhalation analgesia, when used alone, is not considered a form of sedation but is considered to be an analgesic only.
- 6. Qualified Staff An individual trained to monitor appropriate physiological parameters and to help in any supportive or resuscitating measures.
 - a. For dentists using Minimal or Moderate Sedation <u>Level I</u>, qualified staff must <u>be a certified assistant</u>, have a current Nitrous Oxide Permit from the Board and be currently certified in health care provider CPR.
 - b. For dentists using Deep or General Sedation, qualified staff must have a current Nitrous Oxide Permit from the Board and be currently certified in Healthcare Provider CPR AND have completed a Board approved course as outlined in Section & L of this rule and be registered with the Board as a Sedation Assistant.
- 7. Minimal Sedation (single dose) a minimally depressed level of consciousness produced by a pharmacological method that retains the patient's ability to independently and continuously maintain an airway and respond normally to tactile stimulation and verbal command. The patient should be oriented to

person, place and time. Although cognitive function and coordination may be modestly impaired, ventilatory and cardiovascular functions are unaffected. In accordance with this particular definition, the drug and/or techniques used should carry a margin of safety wide enough never to render unintended loss of consciousness. Further, patients whose only response is reflex withdrawal from repeated painful stimuli would not be considered to be in a state of minimal sedation. When the intent is minimal sedation for adults, the appropriate initial-dosing of a single enteral drug is no more than not to exceed the maximum recommended dose of a drug that can be prescribed for unmonitored home use. When the intent is Minimal Sedation, only one central nervous system depressing drug can be given in addition to nitrous oxide.

<u>Pediatric Considerations:</u> In addition to the physiologic parameters for Minimal Sedation in children under 12 years of age, when the intent is Minimal Sedation, only one drug can be given in addition to nitrous oxide. A drug CANNOT be from the scheduled category of drugs II, III or IV with the exception of diazepam. If a child under 12 years of age is given any drug for sedation from Schedule II, III or IV, with the exception of diazepam, that child is considered more than minimally sedated.

- 8. Moderate Sedation (Level I and Level II)- a drug-induced depression of consciousness during which patients respond purposefully to verbal commands, either alone or accompanied by light tactile stimulation. No interventions are required to maintain a patent airway and spontaneous ventilation is adequate. Cardiovascular function is usually maintained. In accordance with this particular definition, the drugs and/or techniques used should carry a margin of safety wide enough to render unintended loss of consciousness unlikely. Repeated dosing of an agent before the effects of previous dosing can be fully appreciated may result in a greater alteration of the state of consciousness than is the intent of the dentist. Further, a patient whose only response is reflex withdrawal from a painful stimulus is not considered to be in a state of moderate sedation.
 - <u>a. Moderate Sedation (Level I) Limited to the enteral route, with the exception of Nitrous Oxide administration.</u>
 - b. Moderate Sedation (Level II) No limitations on route of administration.
- 9. Deep Sedation- a drug-induced depression of consciousness during which patients cannot be easily aroused but respond purposefully following repeated or painful stimulation. The ability to independently maintain ventilatory function may be impaired. Patients may require assistance in maintaining a patent airway, and spontaneous ventilation may be inadequate. Cardiovascular function is usually maintained.
- 10. General Anesthesia a drug-induced loss of consciousness during which patients are not arousable, even by painful stimulation. The ability to independently maintain ventilatory function is often impaired. Patients often require assistance in maintaining a patent airway, and positive pressure ventilation may be required because of depressed spontaneous ventilation or drug-induced depression of neuromuscular function. Cardiovascular function may be impaired.
- 11. Titration- administration of incremental doses of a drug until a desired effect is reached. Knowledge of each drug's time of onset, peak response and

duration of action is essential to avoid over sedation. Although the concept of titration of a drug to effect is critical for patient safety, when the intent is moderate sedation <u>Level II</u> one must know whether the previous dose has taken full effect before administering an additional drug increment.

- 12. Routes of Administration Defined
 - a. Enteral: any technique of administration in which the agent is absorbed through the gastrointestinal tract or oral mucosa (i.e. oral, rectal, sublingual).
 - b. Parenteral: a technique of administration in which the drug bypasses the gastro intestinal tract (i.e. <u>transdermal, transmucosal, inhalation</u>, intramuscular, intravenous, intranasal, sub mucosal, subcutaneous, intraosseous).
 - c. Transdermal: a technique of administration in which the drug is administered by patch or iontophoresis through skin.
 - d. Transmucosal: a technique of administration in which the drug is administered across mucosa such as intranasal, sublingual or rectal.
 - e. Inhalation: a technique of administration in which a gaseous or volatile agent is introduced into the lungs and whose primary effect is due to absorption through the gas/blood interface.
- 13. Patient Physical Status Classification (as defined by the American Society of Anesthesiologists)
 - a. ASA I: A normal healthy patient
 - b. ASA II: A patient with mild systemic disease
 - c. ASA III: A patient with severe systemic disease
 - d. ASA IV: A patient with severe systemic disease that is a constant threat to life
 - e. ASA V: A moribund patient who is not expected to survive without the operation
 - f. ASA VI: A declared brain-dead patient whose organs are being removed for donor purposes
 - g. E: Emergency operation of any variety (used to modify one of the above classifications, i.e. ASA III-E)
- 14. Maximum Recommended Dose (MRD) maximum FDA- recommended dose of a drug as printed in FDA-approved labeling for unmonitored home use.
- 15. Incremental Dosing- administration of multiple doses of a drug until a desired effect is reached, but not to exceed the MRD.
- 16. Supplemental Dosing- during minimal sedation, supplemental dosing is a single additional dose of the initial drug that may be necessary for prolonged procedures. The supplemental dose should not exceed one-half of the initial total dose and should not be administered until the dentist has determined the clinical half-life of the initial dosing has passed. The total aggregate dose must not exceed 1.5 x the MRD on the day of treatment.
- 17. Pediatric Sedation- Any level above nitrous oxide analgesia on patients under the age of twelve (12) years.
- 18. Permit reclassification- All Level 3 permits currently held by any dentists on the date of adoption of this rule will be reclassified to Moderate Sedation permits. All Level 4 General Anesthesia permits currently held by any dentists on the date of adoption of this rule will be reclassified to Deep Sedation General

Anesthesia permits. Current permit holders of any level of sedation or anesthesia must be in compliance with Article XIII within two years of its approval and will be assigned the appropriate level of sedation or anesthesia permit for which they are in compliance.

B. EDUCATIONAL REQUIREMENTS

- 1. Nitrous Oxide/Oxygen Analgesia
 - a. Any dentist licensed in Arkansas may administer nitrous oxide/oxygen inhalation analgesia.
- b. A current certification in health care provider level of CPR is required.

 2. Minimal Sedation
 - a. Any dentist administering Minimal Sedation must have training to the level of competency in minimal sedation consistent with that prescribed in the ADA Guidelines for Teaching Pain Control and Sedation to Dentists and Dental Students, Section IV "Enteral and/or Combination Inhalation Enteral Minimal Sedation" OR an equivalent continuing education course approved by the Arkansas State Board of Dental Examiners and which may be completed in either a pre-doctoral dental curriculum or a post-doctoral continuing education course.
 - b. Dentists administering Minimal Sedation to children under the age of 12 must hold a current Pediatric Advanced Life Support (PALS) certification OR a Deep Sedation or General Anesthesia permit.
 - c. Dentists administering Minimal Sedation to patients 12 years of age or older must hold current certification in healthcare provider level of basic life support.

3. Moderate Sedation

- a. Any dentist administering Moderate Sedation must have successfully completed a comprehensive training program in moderate sedation that satisfies the requirements described in the Moderate Sedation training section of the ADA Guidelines for Teaching Pain Control and Sedation to Dentists and Dental Students OR an equivalent continuing education course approved by the Arkansas State Board of Dental Examiners.
- b. Dentists administering Moderate Sedation to patients under the age of 12 years must have current certification in Pediatric Advanced Life Support (PALS) certification OR a Deep Sedation or General Anesthesia permit.
- c. Dentists administering Moderate Sedation to patients 12 years of age or older must hold current certification in Advanced Cardiac Life Support (ACLS) or an appropriate dental sedation/anesthesia emergency management course.
- d. Dentists administering Moderate Sedation to adult patients who are deemed to be patients with special health care needs (e.g. ASA III) must complete additional hours of additional training related to sedation of complex patients per the ADA Guidelines for Teaching Pain Control and Sedation to Dentists and Dental Students.

4. Deep Sedation or General Anesthesia

- a. Any dentist administering Deep Sedation or General Anesthesia must have successfully completed an advanced education program in a facility accredited by the ADA Commission on Dental Accreditation that affords comprehensive and appropriate training necessary to administer and manage deep sedation or general anesthesia as set forth in the ADA Guidelines for the Use of Sedation and General Anesthesia by Dentists, Section IV. C. OR
- b. A residency in general anesthesia at an institution certified by the American Society of Anesthesiology, the American Medical Association, or the Joint Commission on Hospital Accreditation, resulting in the dentist becoming clinically competent in the administration of general anesthesia. The residency must include a minimum of 390 hours of didactic study, 1040 hours of clinical anesthesiology, and 260 cases of administration of General Anesthesia to an ambulatory outpatient.
- c. Dentists administering Deep Sedation or General Anesthesia must hold current certification in Advanced Cardiac Life Support (ACLS) or an appropriate dental sedation/anesthesia emergency management course.

B. Nitrous Oxide/Oxygen Analgesia

- 1. EDUCATIONAL REQUIREMENTS
 - a. Any dentist licensed in Arkansas may administer nitrous oxide/oxygen inhalation analgesia.
- b. A current certification in health-care provider level of CPR is required.

 2. PERMITS, QUALIFIED STAFF, EQUIPMENT, DOCUMENTATION, EMERGENCY CARE

 & PATIENT MONITORING For Nitrous Oxide/Oxygen Analgesia:
 - a. Permit: A permit is not required for the dentist.
 - b. Qualified Staff: All patients shall be monitored continuously by personnel who hold a current permit with the Board to induce and monitor nitrous oxide/oxygen inhalation analgesia and a current certification in health-care provider level CPR.
 - <u>c. Equipment: Fail safe nitrous oxide equipment with nitrous oxide scavenging.</u>
 - d. Documentation: The use of nitrous oxide and oxygen analgesia must be properly recorded on each individual patient's record.
 - <u>e. Emergency care: The dental office shall maintain emergency equipment and medications to perform basic life support.</u>
 - <u>f. Patient Monitoring: The dentist or qualified staff must remain in the</u> operatory while a patient is receiving nitrous oxide inhalation analgesia.

C. STANDARD OF CARE

These guidelines are designed to encourage a high level of quality care in the dental office setting. It should be recognized that emergency situations may require that these standards be modified based on the judgment of the clinician(s) responsible for the delivery of anesthesia care services. Changing technology and Arkansas rules, regulations or laws may also modify the standards listed herein.

- 1. Before the administration of sedation or general anesthesia, a complete written medical history must be obtained which shall include previous and current medications, vital signs, allergies and sensitivities. The recording of appropriate vital signs is required for all levels of sedation. The patient's weight should be recorded when appropriate. Patients with significant medical considerations (ASA III or IV) may require consultation with their primary care physician or consulting medical specialist as well as written clearance for treatment from that physician.
- During the anesthesia period the oxygenation, ventilation, and circulation of the patient must be continuously evaluated and documented by qualified staff assigned by the dentist.
- 3. Each licensed dentist administering Deep Sedation or General Anesthesia must provide for training in emergency procedures to his or her qualified staff personnel. Emergency preparedness updates or drills for all staff must be held at least annually.
- 4. A dentist who administers any type of sedation or general anesthesia shall maintain emergency equipment and medications appropriate for patient resuscitation. That dentist shall be proficient in handling emergencies and complications to include the maintenance of respiration, circulation, and the immediate establishment of a patent airway, and cardiopulmonary resuscitation. The dentist shall maintain appropriate emergency equipment and medications in the dental facility.
- 5. All scheduled medications shall be stored and inventoried in accordance with all applicable state and federal regulations.
- 6. The patient must be continuously observed during the anesthesia period either by the dentist or qualified staff.
- 7. Personal supervision is required for monitoring patients under nitrous oxide/oxygen analgesia for registered dental assistants holding a current Nitrous Oxide Permit from the Board.
- 8. Direct supervision is required for monitoring patients under nitrous oxide/oxygen analgesia for dental hygienists holding a current Nitrous Oxide Permit from the Board.
- 9. Supervision of dental auxiliaries monitoring sedated patients
 - a. Personal supervision is required for Minimal and Moderate Sedation
 - b. Operative supervision is required for Deep Sedation and General Anesthesia.
 - c. Personal supervision is required for Qualified Staff who continuously monitor post surgical patients before final evaluation and discharge by the dentist.
- 10. For Pediatric Sedation, all drugs from Schedule II, III or IV for sedations must be administered in the dental office.
- 11. No more than two patients age twelve or under may be sedated to a moderate level simultaneously by the same practitioner.

C. Minimal Sedation

- 1. Educational Requirements
 - <u>a. Any dentist administering Minimal Sedation must have training to the level of competency in minimal sedation consistent with that prescribed</u>

- in the ADA Guidelines for Teaching Pain Control and Sedation to Dentists and Dental Students, Section IV "Enteral and/or Combination Inhalation-Enteral Minimal Sedation" OR an equivalent continuing education course approved by the Arkansas State Board of Dental Examiners and which may be completed in either a pre-doctoral dental curriculum or a post-doctoral continuing education course.
- b. Dentists administering Minimal Sedation to children under the age of 12 must hold a current Pediatric Advanced Life Support (PALS) certification OR a Deep Sedation or General Anesthesia permit.
- c. Dentists administering Minimal Sedation to patients 12 years of age or older must hold current certification in healthcare provider level of basic life support.
- 2. PERMITS, QUALIFIED STAFF, EQUIPMENT, DOCUMENTATION, EMERGENCY CARE & PATIENT MONITORING for Minimal Sedation.
 - a. Permit: A permit from the Board is not required for Minimal Sedation.
 - b. Qualified Staff: All patients shall be monitored continuously by qualified staff who hold a current permit with the Board to induce and monitor nitrous oxide/oxygen inhalation analgesia and a current certification in health-care provider level CPR.
 - c. Equipment:
 - 1) The nitrous oxide and patient monitoring equipment listed below must be used for every patient being sedated. If multiple patients are being sedated simultaneously, each piece of equipment listed must be available for every patient being sedated.
 - (a) Fail safe nitrous oxide equipment
 - (b) Scavenging system for nitrous oxide
 - (c) Pulse oximeter for pediatric minimal sedation
 - (d) Blood pressure cuff and stethoscope
 - 2) The emergency equipment listed below must be available in any office where minimal sedation is administered:
 - (a) Oral air-ways
 - (b) Appropriate emergency drugs
 - (c) Automated External Defibrillators
 - (d) Positive pressure oxygen delivery system with appropriately sized mask
 - d. Documentation: The use of minimal sedation must be properly recorded on each individual patient's record. Documentation should include but not be limited to:
 - 1) Informed consent
 - 2) Health history
 - 3) For pediatric minimal sedation, heart rate and respiratory rate must be recorded preoperatively, intraoperatively and postoperatively as necessary. Blood pressure must be recorded preoperatively, intraoperatively and postoperatively as necessary unless the patient is unable to tolerate such monitoring (i.e. a small child with a blood pressure cuff). Oxygen saturation must also be recorded preoperatively, intraoperatively and postoperatively.

- 4) Names of all drugs administered including dosages and the weight of patients under the age of 12.
- 5) Local anesthetic record
- 6) Record of all procedures
- 7) Post-operative instructions
- 8) Record that level of consciousness was satisfactory prior to discharge
- e. Emergency care: The dental office shall maintain emergency equipment and medications to perform basic life support. Dentists intending to produce Minimal Sedation must be able to diagnose and manage the physiologic consequences (rescue) for patients whose level of sedation enters that of a higher level than Minimal. The dentist must have the training to identify and manage such an occurrence until either assistance arrives (emergency medical services) or the patient returns to the intended level of Minimal or lower level of sedation without airway or cardiovascular complications.
- f. Patient Monitoring: The dentist or qualified staff must remain in the operatory during active dental treatment to monitor the patient continuously until the patient meets the criteria for discharge to the recovery area. The dentist or qualified staff must monitor the patient during recovery until the patient is ready for discharge by the dentist. The dentists must determine and document that level of consciousness; oxygenation, ventilation and circulation are satisfactory prior to discharge.
- D. PERMITS, QUALIFIED STAFF, EQUIPMENT, DOCUMENTATION, EMERGENCY CARE & PATIENT MONITORING
- 1. Nitrous Oxide Inhalation Analgesia
 - a. Permit: A permit is not required for the dentist.
 - b. Qualified Staff: All patients shall be monitored continuously by personnel who hold a current permit with the Board to induce and monitor nitrous oxide/oxygen inhalation analgesia and a current certification in health-care provider level CPR.
 - c. Equipment: Fail safe nitrous oxide equipment with nitrous oxide scavenging.
 - d. Documentation: The use of nitrous oxide and oxygen analgesia must be properly recorded on each individual patient's record.
 - e. Emergency care: The dental office shall maintain emergency equipment and medications to perform basic life support.
 - f. Patient Monitoring: The dentist or qualified staff must remain in the operatory while a patient is receiving nitrous oxide inhalation analgesia.
- 2. Minimal Sedation
 - a. Permit: A permit from the Board is not required for Minimal Sedation.
 - b. Qualified Staff: All patients shall be monitored continuously by qualified staff who hold a current permit with the Board to induce and monitor nitrous oxide/oxygen inhalation analgesia and a current certification in health care provider level CPR.
 - c. Equipment:

- 1) The nitrous oxide and patient monitoring equipment listed below must be used for every patient being sedated. If multiple patients are being sedated simultaneously, each piece of equipment listed must be available for every patient being sedated.
 - (a) Fail safe nitrous oxide equipment
 - (b) Scavenging system for nitrous oxide
 - (c) Pulse oximeter for pediatric minimal sedation
 - (d) Blood pressure cuff and stethoscope
- 2) The emergency equipment listed below must be available in any office where minimal sedation is administered:
 - (a) Oral air-ways
 - (b) Appropriate emergency drugs
 - (c) Automated External Defibrillators
 - (d) Positive pressure oxygen delivery system with appropriately sized mask
- d. Documentation: The use of minimal sedation must be properly recorded on each individual patient's record. Documentation should include but not be limited to:
 - 1) Informed consent
 - 2) Health history
 - 3) For pediatric minimal sedation, heart rate and respiratory rate must be recorded preoperatively, intraoperatively and postoperatively as necessary. Blood pressure must be recorded preoperatively, intraoperatively and postoperatively as necessary unless the patient is unable to tolerate such monitoring (i.e. a small child with a blood pressure cuff). Oxygen saturation must also be recorded preoperatively, intraoperatively and postoperatively.
 - 4) Names of all drugs administered including dosages and the weight of patients under the age of 12.
 - 5) Local anesthetic record
 - 6) Record of all procedures
 - 7) Post-operative instructions
 - 8) Record that level of consciousness was satisfactory prior to discharge
- e. Emergency care: The dental office shall maintain emergency equipment and medications to perform basic life support. Dentists intending to produce Minimal Sedation must be able to diagnose and manage the physiologic consequences (rescue) for patients whose level of sedation enters that of a higher level than Minimal. The dentist must have the training to identify and manage such an occurrence until either assistance arrives (emergency medical services) or the patient returns to the intended level of Minimal or lower level of sedation without airway or cardiovascular complications.
- f. Patient Monitoring: The dentist or qualified staff must remain in the operatory during active dental treatment to monitor the patient continuously until the patient meets the criteria for discharge to the recovery area. The dentist or qualified staff must monitor the patient during recovery until the patient is ready for discharge by the dentist. The dentists must determine and document that levels of consciousness,

oxygenation, ventilation and circulation are satisfactory prior to discharge.

3. Moderate Sedation

- a. Permit: A permit from the Board is required. A Facility Permit is also required. In facilities where more than one dentist provides services to moderately sedated patients, the dentist who is personally providing the dental service to the moderately sedated patient must personally hold a valid moderate sedation permit, unless the sedation is being provided by a contracted anesthesia provider under Section D.6 of this rule.
- b. Qualified Staff: All patients shall be monitored continuously by qualified staff—who hold a current permit with the Board to induce and monitor nitrous oxide/oxygen inhalation analgesia and a current certification in health-care provider level CPR.

c. Equipment:

- 1) An operating theater large enough to adequately accommodate the patient on a table or in an operating chair and allow an operating team consisting of at least three individuals to freely move about the patient.
- 2) An operating table or chair which permits the patient to be positioned so the operating team can maintain the airway, quickly alter patient position in an emergency, and provide a firm platform for the management of cardiopulmonary resuscitation.
- 3) A lighting system which is adequate to permit evaluation of the patient's skin and mucosal color and a back up lighting system which is battery powered and of sufficient intensity to permit completion of any operation underway at the time of general power failure.
- 4) Suction equipment which permits aspiration of the oral and pharyngeal cavities and accepts a tonsilar suction. A backup suction device must also be available
- 5) An oxygen delivery system with adequate full face masks and appropriate connectors that are capable of delivering oxygen to a patient under positive pressure, together with an adequate backup system.
- 6) A recovery area that has available oxygen, adequate lighting, suction, and electrical outlets. The recovery area can be the operating theater. The patient must be able to be observed by qualified staff at all times during the recovery period.
- 7) Ancillary equipment must include the following:
 - (a) The nitrous oxide and patient monitoring equipment listed below must be used for every patient being sedated. If multiple patients are being sedated simultaneously, each piece of equipment listed must be available for every patient being sedated.
 - (i) Fail safe nitrous oxide equipment
 - (ii) Scavenging system for nitrous oxide
 - (iii) Pulse oximeter
 - (iv) Blood pressure cuff and stethoscope
 - (b) The emergency equipment listed below must be available in any office where moderate sedation is administered:

- (i) Oral air ways
- (ii) Appropriate emergency drugs
- (iii) Automated External Defibrillators
- (iv) Positive pressure oxygen delivery system with appropriately sized mask.
- d. Documentation: The use of moderate sedation must be properly recorded on each individual patient's record. Documentation should include but not be limited to:
 - 1) Informed consent
 - 2) Health history
 - 3) Heart rate, oxygen saturation and respiratory rate must be recorded preoperatively, intraoperatively and postoperatively as necessary.

 Blood pressure must be recorded preoperatively, intraoperatively and postoperatively as necessary unless the patient is unable to tolerate such monitoring (i.e. a small child with a blood pressure cuff).
- 4) Names of all drugs administered including dosages and the weight of any patient under 12 years of age.
- 5) Local anesthetic record
- 6) Record of all procedures
- 7) Post operative instructions
- 8) Record that level of consciousness was satisfactory prior to discharge 9) Time oriented anesthetic record
- e. Emergency care: The dental office shall maintain emergency equipment and medications to perform basic life support. Dentists intending to produce Moderate Sedation must be able to diagnose and manage the physiologic consequences (rescue) for patients whose level of sedation enters that of a higher level than Moderate. The dentist must have the training to identify and manage such an occurrence until either assistance arrives (emergency medical services) or the patient returns to the intended level of Moderate or lower level of sedation without airway or cardiovascular complications. The dentist must be trained in and capable of providing, at the minimum, bag valve mask ventilation so as to be able to oxygenate any patient who develops airway obstruction or apnea. The equipment listed in Section D. 3.c. of this Article is the minimal requirement for offices where Moderate Sedation is provided.
- f. Patient Monitoring: The dentist or qualified staff must remain in the operatory to monitor the patient continuously until the patient meets the criteria for recovery. When active treatment concludes and the patient recovers to a minimally sedated level, qualified staff may remain with the patient and continue to monitor them until they are discharged from the facility. The dentists must not leave the facility until the patient meets the criteria for discharge and is discharged from the facility. The dentist must determine and document that levels of consciousness, oxygenation, ventilation and circulation are satisfactory prior to discharge.

4. Deep Sedation

a. Permit: A permit issued to the dentist from the Board to administer Deep Sedation is required as well as a Facility Permit.

- b. Qualified Staff: The technique for Deep Sedation requires the following three individuals:
 - 1) A dentist holding a current permit for Deep Sedation from the Board
 - 2) An individual to assist with observation and monitoring of the patient and who may administer drugs if appropriately licensed; and
 - 3) Qualified staff to assist the operator as necessary. All individuals assisting at this level must:
 - (a) hold a current permit from the Board to monitor and administer nitrous oxide
 - (b) hold a current permit from the Board as a Sedation Assistant,
 - (c) hold a current certification in health-care provider level of CPR
- c. Equipment: Requirements are the same as the first six requirements for Moderate Sedation listed in Section D. 3.c. of this Article. In addition to those previously listed requirements, the following ancillary equipment is required:
 - 1) The nitrous oxide and patient monitoring equipment listed below must be used for every patient being sedated. If multiple patients are being sedated simultaneously, each piece of equipment listed must be available for every patient being sedated.
 - a. Fail safe nitrous oxide equipment
 - b. Scavenging system for nitrous oxide
 - c. Pulse oximeter
 - d. Blood pressure cuff and stethoscope
 - e. Electrocardioscope
 - f. Automatic blood pressure monitoring device
 - 2) The emergency equipment listed below must be available in any office where deep sedation or general anesthesia is administered:
 - a. Oral air way
 - b. Appropriate emergency drugs
 - c. Automated External Defibrillators
 - d. Positive pressure oxygen delivery system
 - e. Tonsillar and pharyngeal type suction tip
 - f. Laryngoscope complete with adequate selection of blades, batteries 498 and bulb
 - g. Endotracheal tubes and appropriate connectors
 - h. Adequate equipment for the establishment of an intravenous infusion
 - i. McGill forceps
 - j. Appropriate emergency drugs for ACLS
 - k. Thermometer
- d. Records: Anesthesia records must be maintained as a permanent portion of the patient file and shall include at a minimum:
 - 1) Informed consent
 - 2) Health history
 - 3) Vital signs, recorded preoperative, intraoperative and postoperative
 - 4) Names of all drugs administered including dosages
 - 5) Local anesthetic record
 - 6) Record of all procedures

- 7) Post-operative instructions
- 8) Record that level of consciousness was satisfactory prior to discharge
- 9) Time oriented anesthetic record
- 10) Pulse oximetry readings
- e. Emergency care: The dental office shall maintain emergency equipment and medications to perform advanced cardiac life support (ACLS). Dentists intending to produce Deep Sedation must be able to diagnose and manage the physiologic consequences (rescue) for patients whose level of sedation enters that of General Anesthesia. The dentist must have the training, skills, drugs and equipment to identify and manage such an occurrence until either assistance arrives (emergency medical services) or the patient returns to the intended level of Deep or lower level of sedation without airway or cardiovascular complications.
- f. Patient Monitoring: The dentist must remain in the operatory to monitor the patient continuously until the patient meets the criteria for recovery. When active treatment concludes and the patient recovers to a minimally sedated level, qualified staff may remain with the patient and continue to monitor them until they are discharged from the facility. The dentists must not leave the facility until the patient meets the criteria for discharge and is discharged from the facility. The dentists must determine and document that levels of consciousness, oxygenation, ventilation, circulation and temperature are satisfactory prior to discharge.

5. General Anesthesia

All requirements for permits, qualified staff, equipment, records, emergency care, and patient monitoring are exactly the same as for Deep Sedation.

6. Contracting Anesthesia

- a. A dentist whose dental office meets the facility requirements and has obtained a Facility Permit from the Board may contract with a licensed physician (MD) with a specialty in anesthesiology, certified registered nurse anesthetist (CRNA), or a dentist holding an anesthesia permit for in office Deep Sedation or General Anesthesia. The Arkansas State Board of Dental Examiners holds the contracting dentist ultimately responsible for the quality of the anesthesia given and the patient care delivered.
- b. A dentist may admit or have a patient admitted to an outpatient surgery center approved by the Arkansas Department of Health, JCAH (outpatient facilities), AAAHC, or other nationally recognized accreditation agency or a hospital and utilize any appropriate level of sedation or general anesthesia as provided by a licensed physician (MD) with a specialty in anesthesiology or a certified registered nurse anesthetist (CRNA) without the dentist holding a 560 Board permit for that level of anesthesia, sedation or a Facility Permit.

D. Moderate Sedation Level I

1. EDUCATIONAL REQUIREMENTS

a. Any dentist administering Moderate Sedation Level I must have successfully completed a comprehensive training program in moderate sedation that satisfies the requirements described in the Moderate Sedation training section of the ADA Guidelines for Teaching Pain Control

- and Sedation to Dentists and Dental Students OR an equivalent continuing education course approved by the Arkansas State Board of Dental Examiners.
- b. Dentists administering Moderate Sedation Level I to patients under the age of 12 years must have current certification in Pediatric Advanced Life Support (PALS) certification OR a Deep Sedation or General Anesthesia permit.
- c. Dentists administering Moderate Sedation Level I to patients 12 years of age or older must hold current certification in Advanced Cardiac Life Support (ACLS) or an appropriate dental sedation/anesthesia emergency management course.
- d. Dentists administering Moderate Sedation Level I to adult patients who are deemed to be patients with special health care needs (e.g. ASA III) must complete additional hours of additional training related to sedation of complex patients per the ADA Guidelines for Teaching Pain Control and Sedation to Dentists and Dental Students.
- 2. PERMITS, QUALIFIED STAFF, EQUIPMENT, DOCUMENTATION, EMERGENCY CARE & PATIENT MONITORING of Moderate Sedation Level I
 - a. Permit: A permit from the Board is required. A self-inspected Facility

 Permit is also required. In facilities where more than one dentist provides
 services to moderately sedated patients, the dentist who is personally
 providing the dental service to the moderately sedated patient must
 personally hold a valid moderate sedation permit.
 - b. Qualified Staff: All patients shall be monitored continuously by qualified staff who hold a current permit with the Board to induce and monitor nitrous oxide/oxygen inhalation analgesia and a current certification in health-care provider level CPR.
 - c. Equipment:
 - 1) An operating theater large enough to adequately accommodate the patient on a table or in an operating chair and allow an operating team consisting of at least three individuals to freely move about the patient.
 - 2) An operating table or chair which permits the patient to be positioned so the operating team can maintain the airway, quickly alter patient position in an emergency, and provide a firm platform for the management of cardiopulmonary resuscitation.
 - 3) A lighting system which is adequate to permit evaluation of the patient's skin and mucosal color and a back-up lighting system which is battery powered and of sufficient intensity to permit completion of any operation underway at the time of general power failure.
 - 4) Suction equipment which permits aspiration of the oral and pharyngeal cavities and accepts a tonsilar suction. A backup suction device must also be available
 - 5) An oxygen delivery system with adequate full face masks and appropriate connectors that are capable of delivering oxygen to a patient under positive pressure, together with an adequate backup system.

- 6) A recovery area that has available oxygen, adequate lighting, suction, and electrical outlets. The recovery area can be the operating theater. The patient must be able to be observed by qualified staff at all times during the recovery period.
- 7) Ancillary equipment must include the following:
 - (a) The nitrous oxide and patient monitoring equipment listed below must be used for every patient being sedated. If multiple patients are being sedated simultaneously, each piece of equipment listed must be available for every patient being sedated.
 - (i) Fail safe nitrous oxide equipment
 - (ii) Scavenging system for nitrous oxide
 - (iii) Pulse oximeter
 - (iv) Blood pressure cuff and stethoscope
 - (b) The emergency equipment listed below must be available in any office where moderate sedation is administered:
 - (i) Oral air-ways
 - (ii) Appropriate emergency drugs
 - (iii) Automated External Defibrillators
 - (iv) Positive pressure oxygen delivery system with appropriately sized mask.
- d. Documentation: The use of moderate sedation must be properly recorded on each individual patient's record. Documentation should include but not be limited to:
 - 1) Informed consent
 - 2) Health history
 - 3) Heart rate, oxygen saturation and respiratory rate must be recorded preoperatively, intraoperatively and postoperatively as necessary.

 Blood pressure must be recorded preoperatively, intraoperatively and postoperatively as necessary unless the patient is unable to tolerate such monitoring (i.e. a small child with a blood pressure cuff).
- 4) Names of all drugs administered including dosages and the weight of any patient under 12 years of age.
- 5) Local anesthetic record
- 6) Record of all procedures
- 7) Post-operative instructions
- 8) Record that level of consciousness was satisfactory prior to discharge
- 9) Time-oriented anesthetic record
- e. Emergency care: The dental office shall maintain emergency equipment and medications to perform basic life support. Dentists intending to produce Moderate Sedation Level I must be able to diagnose and manage the physiologic consequences (rescue) for patients whose level of sedation enters that of a higher level than Moderate. The dentist must have the training to identify and manage such an occurrence until either assistance arrives (emergency medical services) or the patient returns to the intended level of Moderate or lower level of sedation without airway or cardiovascular complications. The dentist must be trained in and capable of providing, at the minimum, bag-valve-mask ventilation so as to be able to oxygenate any patient who develops airway obstruction or apnea. The

- equipment listed in Section D. 2.c. of this Article is the minimal requirement for offices where Moderate Sedation Level I is provided.
- f. Patient Monitoring: The dentist or qualified staff must remain in the operatory to monitor the patient continuously until the patient meets the criteria for recovery. When active treatment concludes and the patient recovers to a minimally sedated level, qualified staff may shall remain with the patient and continue to monitor them until they are discharged from the facility. The dentists must not leave the facility until the patient meets the criteria for discharge and is discharged from the facility. The dentist must determine and document that level of consciousness; oxygenation, ventilation and circulation are satisfactory prior to discharge.

E. OBTAINING PERMITS FOR NITROUS OXIDE ANALGESIA, MINIMAL MODERATE AND DEEP SEDATION. GENERAL ANESTHESIA AND FACILITIES

- 1. Sedation & Anesthesia Permits:
 - a. Nitrous oxide/oxygen inhalation analgesia: Does not require a permit or registration with the Board.
 - b. Minimal Sedation: No permit is required for Minimal Sedation.
 - c. Moderate Sedation, Deep Sedation and General Anesthesia:
 - 1) Requires a permit for the dentist administering sedation /anesthesia.
 - 2) Requires a Facility Permit.
- 2. Obtaining a Permit:
 - a. Moderate Sedation, Deep Sedation and General Anesthesia Permits:
 - 1) In order to receive a Moderate Sedation Permit, Deep Sedation Permit or a General Anesthesia Permit, the dentist must apply on an application form to the Arkansas State Board of Dental Examiners, submit the required application fee, and submit documentation showing that the educational requirements have been met.
 - 2) Applicants who have applications approved by the Board are issued a permit. A self-evaluation and compliance form (available from the Board) must be completed and submitted before any Moderate Sedation, Deep Sedation or General Anesthesia usage can begin.
 - 3) After the Deep Sedation General Anesthesia permit has been issued, the Board requires an on site inspection of the facility, equipment and credentials of the personnel to determine if, in fact, the personnel, equipment and facility requirements have been met. The evaluation shall be conducted as outlined in this document.
 - 4) At the discretion of the Board, a re-evaluation of an office, dentist, and staff may be scheduled at any time. The Board shall consider such factors as it deems pertinent including, but not limited to, patient complaints and reports of adverse occurrences.
 - 5) Moderate Sedation, Deep Sedation and General Anesthesia permits must be renewed at the same time each year a dentist renews his license to practice dentistry. Failure to renew a permit will cause the forfeiture of the permit and once forfeited, re-application and reevaluation will be required. Forfeiture of a permit will immediately terminate the authority of a dentist to administer Moderate Sedation, Deep Sedation or General Anesthesia.

3. Facility Permits:

- a. Every dental office, clinic or facility where Moderate Sedation is to be administered to patients must have a Moderate Sedation Facility Permit issued by the Board. The dentist/owner of the practice or the dentist who is the primary provider of dental care in the office must complete a selfinspection Facility Permit application. Said application will be kept on file by the Board. The Board may, on a random basis, inspect any facility holding a Moderate Sedation Facility Permit. No Moderate Sedation shall be performed until the facility self-inspection form is received by the Board and a facility permit issued. Facility permits are required for all office where Level 3 permits are converted to Moderate Sedation permits on the date of adoption 622 of this rule. Dentists being reclassified from Level 3 to Moderate Sedation will have 90 days from the date of adoption of this rule to submit their self-inspection forms and have a facility permit issued. Any dentist providing Moderate Sedation without a facility permit after the 90 day grace period will be subject to having charges filed with the Board for providing Moderate Sedation without a facility permit.
- b. Every dental office, clinic, or facility where Deep Sedation or General Anesthesia is to be administered to patients must be inspected and meet the standards for a facility listed in this Article and have a Facility Permit issued by the Board. No Deep Sedation or General Anesthesia shall be performed until the facility has been inspected and a facility permit issued.
- c. To obtain a Deep Sedation General Anesthesia Facility Permit, the dentist owning said Facility must apply on an application form to the Arkansas State Board of Dental Examiners, and submit the required application fee to have the Facility inspected.
- d. All Facility Permits must be renewed at the same time each year that a dentist renews his license to practice dentistry. Failure to renew the permit will cause the forfeiture of the permit and once forfeited, re application and re inspection will be required. Forfeiture of a Facility Permit will immediately terminate the authority of a dentist to have Moderate Sedation, Deep Sedation or General Anesthesia administered in the Facility.

E. Moderate Sedation Level II

1. Educational Requirements

- a. Any dentist administering Moderate Sedation Level II must have proof of current certification in ACLS or an appropriate dental sedation/anesthesia emergency management course (a pediatric dentist may substitute PALS), and must provide proof of one (1) of the following:
- (i) Completion of an ADA accredited postdoctoral training program which affords comprehensive training to administer and manage parenteral conscious sedation, or
 - (ii) Completion of a continuing education course consisting of a minimum of sixty (60) hours of didactic instruction plus the management of at least twenty (20) patients which provides competency in parental conscious sedation. The course content must be consistent with that described for an approved continuing education program in these techniques in the ADA

Guidelines for Teaching the Comprehensive Control of Anxiety and Pain in Dentistry 2000 Edition, or its successor publication, or (iii) Completion of a board approved course.

- b. Successfully complete an on-site facility inspection.
- c. A minimum of 2 certified assistants must be present in the operatory during the procedure and 1 certified assistant must stay with the patient until dismissal from the facility.

2. PERMITS, QUALIFIED STAFF, EQUIPMENT, DOCUMENTATION, EMERGENCY CARE & PATIENT MONITORING for Moderate Sedation Level II

- a. Permit: A permit issued to the dentist from the Board to administer Moderate Sedation Level II is required as well as a Facility Permit.
- <u>b. Qualified Staff: The technique for Moderate Sedation Level II requires the following three individuals:</u>
 - 1) A dentist holding a current permit for Moderate Sedation Level II or Deep Sedation from the Board
 - 2) An individual to assist with observation and monitoring of the patient and who may administer drugs if appropriately licensed; and
 - 3) One qualified staff to assist the operator as necessary. All individuals assisting at this level must:
 - (a) hold a current permit from the Board to monitor and administer nitrous oxide,
 - (b) hold a current certification in health-care provider level of CPR
- c. Equipment: Requirements are the same as the first six requirements for Moderate Sedation Level I listed in Section D. 2.c. of this Article. In addition to those previously listed requirements, the following ancillary and emergency equipment is required:
 - 1) The nitrous oxide and patient monitoring equipment listed below must be used for every patient being sedated. If multiple patients are being sedated simultaneously, each piece of equipment listed must be available for every patient being sedated.
 - a. Fail safe nitrous oxide equipment
 - b. Scavenging system for nitrous oxide
 - c. Pulse oximeter
 - d.capnograph
 - e. Blood pressure cuff and stethoscope
 - f. Electrocardioscope
 - g. Automatic blood pressure monitoring device
 - h. Oral air-way
 - i. Appropriate emergency drugs
 - j. Automated External Defibrillators
 - k. Positive pressure oxygen delivery system
 - I. Tonsilar and pharyngeal type suction tip
 - m. Laryngoscope complete with adequate selection of blades, batteries and bulb
 - n. Endotracheal tubes and appropriate connectors
 - o. Adequate equipment for the establishment of an intravenous infusion

- p. McGill forceps
- g. Appropriate emergency drugs for ACLS
- r. Thermometer
- d. Records: Anesthesia records must be maintained as a permanent portion of the patient file and shall include at a minimum:
 - 1) Informed consent
 - 2) Health history
 - 3) Vital signs, recorded preoperative, intraoperative and postoperative
 - 4) Names of all drugs administered including dosages
 - 5) Local anesthetic record
 - 6) Record of all procedures
 - 7) Post-operative instructions
 - 8) Record that level of consciousness was satisfactory prior to discharge
 - 9) Time-oriented anesthetic record
 - 10) Pulse oximetry readings
- e. Emergency care: The dental office shall maintain emergency equipment and medications to perform advanced cardiac life support (ACLS).

 Dentists intending to produce Moderate Sedation Level II must be able to diagnose and manage the physiologic consequences (rescue) for patients whose level of sedation enters that of Deep Sedation. The dentist must have the training, skills, drugs and equipment to identify and manage such an occurrence until either assistance arrives (emergency medical services) or the patient returns to the intended level of Moderate Sedation Level II or lower level of sedation without airway or cardiovascular complications.
- f. Patient Monitoring: The dentist must remain in the operatory to monitor the patient continuously until the patient meets the criteria for recovery. When active treatment concludes and the patient recovers to a minimally sedated level, qualified staff may shall remain with the patient and continue to monitor them until they are discharged from the facility. The dentists must not leave the facility until the patient meets the criteria for discharge and is discharged from the facility. The dentists must determine and document that level of consciousness; oxygenation, ventilation, circulation and temperature are satisfactory prior to discharge.

F. ON SITE FACILITY INSPECTION AND EVALUATION/RE-EVALUATION FOR MODERATE SEDATION, DEEP SEDATION, GENERAL ANESTHESIA FACILITIES An evaluation or re-evaluation shall consist of a review of the following:

- 1. Office facilities, equipment, dental records and staff to include documentation of review of emergency preparedness with staff at least annually, written protocol for office emergencies and current appropriate licenses & permits for dentist(s) and staff.
- 2. Demonstration of the anesthesia technique for the level of sedation/anesthesia permit for which the dentist has applied. Dental procedures utilizing Deep Sedation or General Anesthesia must be observed.

- 3. Emergency Protocols Knowledge of and a method of treatment for the following emergencies:
 - a. Laryngospasm
 - b. Bronchospasm
 - c. Angina pectoris
 - d. Myocardial infarction
 - e. Hypotension
 - f. Hypertension
 - g. Cardiac Arrest
 - h. Allergic reaction
 - i. Seizures
 - j. Emesis and aspiration of foreign material under anesthesia
 - k. Syncope
 - I. Airway obstruction
 - m. Abnormal psychological responses
- 4. Composition of On site Inspection and Evaluation/Re evaluation Teams:
 - a. Teams shall consist of two or more dentists chosen and approved by the Board
 - b. The evaluators must hold a current permit of the same level or higher as the permit of the dentist being inspected and must have practiced with that level of sedation permit for a minimum of one year. Whenever possible, if the dentist being inspected is a dental specialist the evaluators will also be licensed in that same specialty.
 - c. The Board must appoint a dentist member of the Board to serve as an observer at any evaluation.
 - d. Grading of the Inspection and Evaluation:
 - 1) The inspection and evaluation shall be graded on a pass/fail system. An evaluation form provided by the Board shall be used. The grade shall be determined by the Board, based upon results provided by the evaluators.
 - 2) If there is not a recommendation for pass or fail by the evaluators, another evaluation will be made with either two different evaluators or with a third evaluator whose function would be to cast the deciding vote on the evaluation.
 - 3) The sedation or anesthesia permit of a dentist who fails the evaluation will be suspended by the Board. A dentist who has received such a negative evaluation may appeal that decision to the Arkansas State Board of Dental Examiners and request a re evaluation. This appeal must be made in writing to the Board stating the grounds for the appeal within 90 days from the evaluation. During the suspension and appeal process, the practitioner is prohibited from utilizing any sedation and/or General Anesthesia. Upon receipt of the appeal request, the Board will decide the matter and may grant or deny a permit, or request re evaluation of the appellant by a different evaluation team. An additional evaluation fee will be required for this re evaluation. Said re evaluation inspection must be completed within 60 days of receiving the appeal if the Board views that re inspection is appropriate.

F. Deep Sedation or General Anesthesia

- 1. EDUCATIONAL REQUIREMENTS
 - a. Any dentist administering Deep Sedation or General Anesthesia must have successfully completed an advanced education program in a facility accredited by the ADA Commission on Dental Accreditation that affords comprehensive and appropriate training necessary to administer and manage deep sedation or general anesthesia as set forth in the ADA Guidelines for the Use of Sedation and General Anesthesia by Dentists, Section IV. C. OR
 - b. A residency in general anesthesia at an institution certified by the American Society of Anesthesiology, the American Medical Association, or the Joint Commission on Hospital Accreditation, resulting in the dentist becoming clinically competent in the administration of general anesthesia. The residency must include a minimum of 390 hours of didactic study, 1040 hours of clinical anesthesiology, and 260 cases of administration of General Anesthesia to an ambulatory outpatient.
 - c. Dentists administering Deep Sedation or General Anesthesia must hold current certification in Advanced Cardiac Life Support (ACLS) or an appropriate dental sedation/anesthesia emergency management course.
- 2. PERMITS, QUALIFIED STAFF, EQUIPMENT, DOCUMENTATION, EMERGENCY CARE & PATIENT MONITORING for Deep Sedation or General Anesthesia
 - <u>a. Permit: A permit issued to the dentist from the Board to administer Deep Sedation or General Anesthesia is required as well as a Facility Permit.</u>
 - b. Qualified Staff: The technique for Deep Sedation and/or General Anesthesia requires the following three individuals:
 - 1) A dentist holding a current permit for Deep Sedation or General Anesthesia from the Board
 - 2) An individual to assist with observation and monitoring of the patient and who may administer drugs if appropriately licensed; and
 - 3) One qualified staff to assist the operator as necessary. All individuals assisting at this level must:
 - (a) hold a current permit from the Board to monitor and administer nitrous oxide
 - (b) hold a current permit from the Board as a Sedation Assistant,
 - (c) hold a current certification in health-care provider level of CPR
 - c. Equipment: Requirements are the same as the first six requirements for Moderate Sedation Level I listed in Section D.2.c. of this Article. In addition to those previously listed requirements, the following ancillary and emergency equipment is required:
 - 1) The nitrous oxide and patient monitoring equipment listed below must be used for every patient being sedated. If multiple patients are

being sedated simultaneously, each piece of equipment listed must be available for every patient being sedated.

- a. Fail safe nitrous oxide equipment
- b. Scavenging system for nitrous oxide
- c. Pulse oximeter
- d. capnograph
- e. Blood pressure cuff and stethoscope
- f. Electrocardioscope
- g. Automatic blood pressure monitoring device
- h. Oral air-way
- i. Appropriate emergency drugs
- j. Automated External Defibrillators
- k. Positive pressure oxygen delivery system
- I. Tonsilar and pharyngeal type suction tip
- m. Laryngoscope complete with adequate selection of blades, batteries and bulb
- n. Endotracheal tubes and appropriate connectors
- o. Adequate equipment for the establishment of an intravenous infusion
- p. McGill forceps
- q. Appropriate emergency drugs for ACLS
- r. Thermometer
- d. Records: Anesthesia records must be maintained as a permanent portion of the patient file and shall include at a minimum:
 - 1) Informed consent
 - 2) Health history
 - 3) Vital signs, recorded preoperative, intraoperative and postoperative
 - 4) Names of all drugs administered including dosages
 - 5) Local anesthetic record
 - 6) Record of all procedures
 - 7) Post-operative instructions
 - 8) Record that level of consciousness was satisfactory prior to discharge
 - 9) Time-oriented anesthetic record
 - 10) Pulse oximetry readings
- e. Emergency care: The dental office shall maintain emergency equipment and medications to perform advanced cardiac life support (ACLS).

 Dentists intending to produce Deep Sedation must be able to diagnose and manage the physiologic consequences (rescue) for patients whose level of sedation enters that of General Anesthesia. The dentist must have the training, skills, drugs and equipment to identify and manage such an occurrence until either assistance arrives (emergency medical services) or the patient returns to the intended level of Deep or lower level of sedation without airway or cardiovascular complications.
- f. Patient Monitoring: The dentist must remain in the operatory to monitor the patient continuously until the patient meets the criteria for recovery. When active treatment concludes and the patient recovers to a minimally sedated level, qualified staff may shall remain with the patient and continue to monitor them until they are discharged from the facility.

The dentists must not leave the facility until the patient meets the criteria for discharge and is discharged from the facility. The dentists must determine and document that level of consciousness; oxygenation, ventilation, circulation and temperature are satisfactory prior to discharge.

G. QUALIFIED STAFF: Sedation Monitoring Requirements

There are certain situations when a dentist must entrust the monitoring of a sedated patient to a staff member. The Board recognizes this need and has developed an expanded function permit for certain dental assistants, hygienists or other staff members who meet the following minimal criteria and have applied for and received a permit from the board.

Staff monitoring patients undergoing any level of sedation must hold a current Nitrous Oxide Permit from the Board and a current certification in health care provider level of CPR.

Staff monitoring patients undergoing Deep Sedation or General Anesthesia must hold a current permit from the Board as a Sedation Assistant. To qualify as a Sedation Assistant, a person must:

- 1. Be a Certified Dental Assistant, Registered Dental Assistant, Registered Nurse or Licensed Practical Nurse
- 2. Hold a current certification in health care provider level CPR
- 3. Hold a current permit from the Board to monitor and induce nitrous oxide analgesia
- 4. Successfully complete the American Association of Oral and Maxillofacial Surgeons Anesthesia Assistant's Training Program or a Board approved equivalent course.

Renewal of permit: To renew the Sedation Assistant permit biennially, the permit holder must show proof of a minimum of two hours of continuing education related to office emergency management or direct care of sedated patients. Proof of annual review of office emergency preparedness updates or drills, as required in Section C.3 of this article, can be submitted to fulfill this requirement.

G. Contracting Anesthesia

1. Any Dentist wishing to contract anesthesia for any level of sedation must possess the training, skills, drugs and equipment to provide the level of sedation or anesthesia contracted. A sedation or anesthesia permit must be obtained by the dentist for the level of sedation he/she is qualified to provide and a facility permit must be obtained. Once the appropriate permits have been obtained a Dentist may contract with a licensed physician (MD), certified registered nurse anesthetist (CRNA), or a dentist holding the equivalent sedation or anesthesia permit. A minimum of one certified assistant per patient is required at all times until the patient is discharged from the facility. The Arkansas State Board of Dental Examiners holds the contracting

- dentist ultimately responsible for the quality of the anesthesia given and the patient care delivered.
- 2. A dentist may admit or have a patient admitted to an outpatient surgery center approved by the Arkansas Department of Health, JCAH (out-patient facilities), AAAHC, or other nationally recognized accreditation agency or a hospital and utilize any appropriate level of sedation or general anesthesia as provided by a licensed physician (MD) with a specialty in anesthesiology or a certified registered nurse anesthetist (CRNA) without the dentist holding a Board permit for that level of anesthesia, sedation or a Facility Permit.

H. Regulations for Sedation and Anesthesia Permits

- 1. Nitrous oxide/oxygen inhalation analgesia: Does not require a permit or registration with the Board.
- 2. Minimal Sedation: No permit is required for Minimal Sedation.
- 3. Moderate Sedation Level 1:
 - 1) Requires a permit for the dentist administering sedation /anesthesia and self-inspection facility permit.
- 4. Moderate Sedation Level II, Deep Sedation and General Anesthesia:
 - 1) Requires a permit for the dentist administering sedation /anesthesia.
 - 2) Requires an on-site inspection Facility Permit.
- 5. All facilities providing any level of sedation are subject to board inspection.

I. Obtaining Permits:

- <u>a. Moderate Sedation Level I and II, Deep Sedation and General Anesthesia</u>
 <u>Permits:</u>
 - 1) In order to receive a Moderate Sedation Level I or II Permit, Deep Sedation Permit or a General Anesthesia Permit, the dentist must apply on an application form to the Arkansas State Board of Dental Examiners, submit the required application fee, and submit documentation showing that the educational requirements have been met.
 - 2) Applicants who have applications approved by the Board are issued a permit. A self-evaluation and compliance form (available from the Board) must be completed and submitted before any Moderate Sedation Level I or II, Deep Sedation or General Anesthesia usage can begin.
 - 3) After the Moderate Sedation Level II, Deep Sedation or General Anesthesia permit has been issued; the Board requires an on-site inspection of the facility, equipment and credentials of the personnel to determine if, in fact, the personnel, equipment and facility requirements have been met. The evaluation shall be conducted as outlined in this document.
 - 4) At the discretion of the Board, a re-evaluation of an office, dentist, and staff may be scheduled at any time. The Board shall consider such factors as it deems pertinent including, but not limited to, patient complaints and reports of adverse occurrences.

5) Moderate Sedation Level I and II, Deep Sedation and General
Anesthesia permits must be renewed at the same time each year a
dentist renews his license to practice dentistry. Failure to renew a permit
will cause the forfeiture of the permit and once forfeited, re-application
and re-evaluation will be required. Forfeiture of a permit will
immediately terminate the authority of a dentist to administer
Moderate Sedation Level I or II, Deep Sedation or General Anesthesia.

J. Facility Permits:

- a. Every dental office, clinic or facility where Moderate Sedation Level I is to be administered to patients must have a Moderate Sedation Level I Facility Permit issued by the Board. The dentist/owner of the practice or the dentist who is the primary provider of dental care in the office must complete a self- inspection Facility Permit application. Said application will be kept on file by the Board. The Board may, on a random basis, inspect any facility holding a Moderate Sedation Level I Facility Permit. No Moderate Sedation Level I shall be performed until the facility self-inspection form is received by the Board and a facility permit issued.
- b. Every dental office, clinic, or facility where Moderate Sedation Level II,
 Deep Sedation or General Anesthesia is to be administered to patients or
 contracted anesthesia is being utilized by a dentist must be inspected and
 meet the standards for a facility listed in this Article and have a Facility
 Permit issued by the Board. No Moderate Sedation Level II, Deep Sedation
 or General Anesthesia shall be performed until the facility has been
 inspected and a facility permit issued.
- c. To obtain a Moderate Sedation Level II, Deep Sedation or General
 Anesthesia Facility Permit, the dentist owning said Facility must apply on an
 application form to the Arkansas State Board of Dental Examiners, and
 submit the required application fee to have the Facility inspected.
- d. All Facility Permits must be renewed at the same time each year that a dentist renews his license to practice dentistry. Failure to renew the permit will cause the forfeiture of the permit and once forfeited, re-application and re-inspection will be required. Forfeiture of a Facility Permit will immediately terminate the authority of a dentist to have Moderate Sedation Level I or II, Deep Sedation or General Anesthesia-administered in the Facility.
- e. Facilities which have permits must be in compliance with the requirements of the corresponding level of anesthesia provided once the dentist holds a valid permit for that level of anesthesia.
- f. Every 5 years all facility permits must pass re-inspection for renewal.

K. ON-SITE FACILITY INSPECTION AND EVALUATION/RE-EVALUATION FOR MODERATE SEDATION LEVEL II, DEEP SEDATION, and GENERAL ANESTHESIA FACILITIES

An evaluation or re-evaluation shall consist of a review of the following:

1. Office facilities, equipment, dental records and staff to include

documentation of review of emergency preparedness with staff at least

- annually, written protocol for office emergencies and current appropriate licenses & permits for dentist(s) and staff.
- 2. Demonstration of the anesthesia technique for the level of sedation/anesthesia permit for which the dentist has applied. Dental procedures utilizing Deep Sedation or General Anesthesia must be observed.
- 3. Emergency Protocols Knowledge of and a method of treatment for the following emergencies:
 - a. Laryngospasm
 - b. Bronchospasm
 - c. Angina pectoris
 - d. Myocardial infarction
 - e. Hypotension
 - f. Hypertension
 - g. Cardiac Arrest
 - h. Allergic reaction
 - i. Seizures
 - j. Emesis and aspiration of foreign material under anesthesia
 - k. Syncope
 - I. Airway obstruction
 - m. Abnormal psychological responses
- 4. Composition of On-site Inspection and Evaluation/Re-evaluation Teams:
 - a. Teams shall consist of two or more dentists chosen and approved by the Board.
 - b. The evaluators must hold a current permit of the same level or higher as the permit of the dentist being inspected and must have practiced with that level of sedation permit for a minimum of one year. Whenever possible, if the dentist being inspected is a dental specialist the evaluators will also be licensed in that same specialty.
 - c. The Board must appoint a dentist member of the Board to serve as an observer at any evaluation.
 - d. Grading of the Inspection and Evaluation:
 - 1) The inspection and evaluation shall be graded on a pass/fail system. An evaluation form provided by the Board shall be used. The grade shall be determined by the Board, based upon results provided by the evaluators.
 - 2) If there is not a recommendation for pass or fail by the evaluators, another evaluation will be made with either two different evaluators or with a third evaluator whose function would be to cast the deciding vote on the evaluation.
 - 3) The sedation or anesthesia permit of a dentist who fails the evaluation will be suspended by the Board. A dentist who has received such a negative evaluation may appeal that decision to the Arkansas State Board of Dental Examiners and request a re-evaluation. This appeal must be made in writing to the Board stating the grounds for the appeal within 90 days from the evaluation. During the suspension and appeal process, the practitioner is prohibited from utilizing any sedation and/or General Anesthesia. Upon receipt of the appeal request, the Board will decide the matter and may grant or deny a

permit, or request re-evaluation of the appellant by a different evaluation team. An additional evaluation fee will be required for this re-evaluation. Said re-evaluation inspection must be completed within 60 days of receiving the appeal if the Board views that re-inspection is appropriate.

L. QUALIFIED STAFF: Sedation Monitoring Requirements

There are certain situations when a dentist must entrust the monitoring of a sedated patient to a staff member. The Board recognizes this need and has developed an expanded function permit for certain dental assistants, hygienists or other staff members who meet the following minimal criteria and have applied for and received a permit from the board.

Staff monitoring patients undergoing any level of sedation must hold a current Nitrous Oxide Permit from the Board and a current certification in health care provider level of CPR.

<u>Staff monitoring patients undergoing Deep Sedation or General Anesthesia must hold a current permit from the Board as a Sedation Assistant.</u> To qualify as a Sedation Assistant, a person must:

- 1. Be a Certified Dental Assistant, Registered Dental Assistant, Registered Nurse or Licensed Practical Nurse
- 2. Hold a current certification in health care provider level CPR
- 3. Hold a current permit from the Board to monitor and induce nitrous oxide analgesia
- 4. Successfully complete the American Association of Oral and Maxillofacial Surgeons Dental Anesthesia Assistant's National Certification Examination (DAANCE's) Training Program or a Board approved equivalent course.

Renewal of Sedation Assistant permit: To renew the Sedation Assistant permit biennially, the permit holder must show proof of a minimum of two hours of continuing education related to office emergency management or direct care of sedated patients. Proof of annual review of office emergency preparedness updates or drills, as required in Section K.3 of this article, can be submitted to fulfill this requirement.

M. STANDARD OF CARE

These guidelines are designed to encourage a high level of quality care in the dental office setting. It should be recognized that emergency situations may require that these standards be modified based on the judgment of the clinician(s) responsible for the delivery of anesthesia care services. Changing technology and Arkansas rules, regulations or laws may also modify the standards listed herein.

1. Before the administration of sedation or general anesthesia, a complete written medical history must be obtained which shall include previous and current medications, vital signs, allergies and sensitivities. The recording of appropriate vital signs is required for all levels of sedation. The patient's weight

- should be recorded when appropriate. Patients with significant medical considerations (ASA III or IV) may require consultation with their primary care physician or consulting medical specialist as well as written clearance for treatment from that physician.
- During the anesthesia period the oxygenation, ventilation, and circulation of the patient must be continuously evaluated and documented by qualified staff assigned by the dentist.
- 3. Each licensed dentist administering and/or contracting Moderate Sedation Level II, Deep Sedation or General Anesthesia must provide for training in emergency procedures to his or her qualified staff personnel. Emergency preparedness updates or drills for all staff must be held at least annually.
- 4. A dentist who administers any type of sedation or general anesthesia shall maintain emergency equipment and medications appropriate for patient resuscitation. That dentist shall be proficient in handling emergencies and complications to include the maintenance of respiration, circulation, and the immediate establishment of a patent airway, and cardiopulmonary resuscitation. The dentist shall maintain appropriate emergency equipment and medications in the dental facility.
- 5. All scheduled medications shall be stored and inventoried in accordance with all applicable state and federal regulations.
- 6. The patient must be continuously observed during the anesthesia period either by the dentist or qualified staff.
- 7. Personal supervision is required for monitoring patients under nitrous oxide/oxygen analgesia for registered dental assistants holding a current Nitrous Oxide Permit from the Board.
- 8. Direct supervision is required for monitoring patients under nitrous oxide/oxygen analgesia for dental hygienists holding a current Nitrous Oxide Permit from the Board.
- 9. Supervision of dental auxiliaries monitoring sedated patients
 - <u>a. Personal supervision is required for Minimal Sedation and Moderate</u>
 <u>Sedation Level I</u>
 - b. Operative supervision is required for Moderate Sedation Level II, Deep Sedation and General Anesthesia
 - c. Personal supervision is required for Qualified Staff who continuously monitor post-surgical patients before final evaluation and discharge by the dentist.
- 10. For Pediatric Sedation, all drugs from Schedule II, III or IV for sedations must be administered in the dental office.
- 11. No more than two patients age twelve or under may be sedated to a moderate level simultaneously by the same practitioner.
- N. Reporting of Death, Serious Complications or Injury
- 1. If a death, any serious complication or any injury occurs which may have resulted from the administration of any level of anesthesia, the licensee performing the dental procedure shall submit a written detailed report to the board within 72 hours of the incident along with copies of the patient's original complete dental records. If the anesthetic agent was administered by a person other than the person performing the dental procedure, that

person shall also submit a detailed written report. The detailed report(s) shall include:

- a. Name, age and address of patient;
- b. Name of the licensee and other persons present during the incident along with their names and addresses;
- c. Address where the incident took place;
- d. <u>Type of anesthesia and dosages of drugs administered to the patient including local anesthesia</u>;
- e. <u>A narrative description of the incident including approximate times</u> and evolution of symptoms; and
- f. The anesthesia record and the signed informed consent form for the anesthesia.

Exemptions: Licensed physicians with a specialty in anesthesiology and Certified Registered Nurse Anesthetists are exempt from the educational and permit requirements listed in this section. Other licensed health care providers, who can show proof of successful completion of a course which meets or exceeds those listed in this regulation, may obtain an exemption from the Board on a case by case basis.

Approved 12/10/1993; Amended 8/19/1995, 4/18/2003, 4/29/2005 and 5/15/2009