

New Jersey Register  
VOLUME 35, NUMBER 20  
**MONDAY, OCTOBER 20, 2003**  
**RULE ADOPTION**  
LAW AND PUBLIC SAFETY  
DIVISION OF CONSUMER AFFAIRS  
NEW JERSEY STATE BOARD OF DENTISTRY  
SCOPE OF PRACTICE OF LICENSED DENTAL HYGIENIST; SCOPE OF PRACTICE OF REGISTERED  
DENTAL ASSISTANT; NITROUS OXIDE/OXYGEN INHALATION ANALGESIA; DUTIES OF A  
LICENSED DENTIST; DELEGATION TO LICENSED DENTAL HYGIENIST AND REGISTERED DENTAL  
ASSISTANT

Adopted Amendments: N.J.A.C. 13:30-1A.2 and 2.4

Adopted New Rule: N.J.A.C. 13:30-8.20

Proposed: October 7, 2002 at 34 N.J.R. 3426(a).

Adopted: May 7, 2003 by the New Jersey State Board of Dentistry, John F. Ricciani, D.M.D., President.

Filed: September 26, 2003 as R.2003 d.414, with technical changes not requiring additional public notice and comment (see N.J.A.C. 1:30-6.3).

Authority: N.J.S.A. 45:1-15.1 and 45:6-50.

Effective Date: October 20, 2003.

Expiration Date: March 10, 2005.

**Summary of Public Comments and Agency Responses:**

The Board received comments from the following:

1. Richard N. Tennenbaum, D.M.D., F.A.C.D., Associated Oral and Maxillofacial Surgeons, P.A.;
2. Richard D. Riva, D.D.S.;
3. Lee M. Lichtenstein, D.M.D.;
4. Rex N. Ponnudurai, M.D., Chair, Dental Anesthesia Committee, New Jersey State Society of Anesthesiologists;
5. Ervin Moss, M.D., Executive Medical Director, New Jersey State Society of Anesthesiologists;
6. Roz Zeisler;
7. Barbara Burlew, R.D.H.;
8. C. Merry LeBlond, R.D.H., Chairperson, Department of Dental Auxiliaries Education, Middlesex County College;
9. Rebecca Welch Pugh, R.D.H., President, New Jersey Dental Hygienists' Association;
10. Patricia J. Hinkley Nicola, R.D.H.;
11. Arthur Meisel, New Jersey Dental Association;

12. Janet G. Farber, R.D.H.;
13. Christine Zwiebel;
14. Stephen Marcus;
15. Ignatius Kazella, D.D.S., F.A.G.D.;
16. Susan Andermann Singer, R.D.H.;
17. Russell Bent;
18. Linda Hecker;
19. Theresa Brisbin, R.D.H.;
20. Linda Tradler, R.D.H.;
21. Betty Dolan;
22. Jeanette Crofts;
23. Dorothy LaRue, R.D.H.;
24. Deborah Myers; and
25. Paul Bent.

COMMENT: Dr. Riva expressed concern about the proposed amendments and new rule, noting that it is possible for the administration of nitrous oxide to produce sedation and, in rare instances, general anesthesia. As a result, public safety will not be served if a sedative state has been produced and a dentist is not required to provide the necessary care and monitoring of the patient. The commenter believes that nitrous oxide has had a great safety record in the past because it has been used exclusively by dentists. Allowing individuals who have less training than dentists to utilize nitrous oxide will not serve the best interest of the general public. The commenter also believes that the proposal fails to address the problems that can result from the use of inhalation nitrous oxide in cases where patients are also taking sedative/hypnotic medications. In addition, the commenter believes that the proposal fails to ensure that the oxygen/nitrous oxide equipment that will be utilized has been inspected and that the personnel who will be using the equipment have had an office evaluation. In order to remedy this, the commenter suggests that the Board consider requiring a permit for the use of nitrous oxide as other states have done.

RESPONSE: The Board disagrees with the commenter's suggestion that the administration of nitrous oxide as contemplated in the proposed amendments and new rule could achieve deep sedation or a state of general anesthesia. The Board notes that under the nitrous oxide/oxygen delivery system contemplated in the proposal, the patient is receiving a minimum of 30 percent oxygen. Moreover, the patient is always breathing atmospheric air; the nitrous oxide that is administered by the fail-safe system is exhaled as the patient breathes in room air. In such an open system, the concentration of nitrous oxide in the patient's system will not produce a profound sedative effect. The Board believes that the concerns raised by the commenter are more appropriately associated with a closed nitrous oxide delivery system, that is, a delivery system in which nitrous oxide and oxygen are administered to an intubated patient. Because of the intubation, the patient is not breathing atmospheric air during the administration of the nitrous oxide/oxygen inhalation analgesia. Moreover, because intubation of the patient would require the administration of general anesthesia, a dentist utilizing a closed nitrous oxide delivery system would have to possess a general anesthesia permit and would have to satisfy all requirements associated with the administration of general anesthesia, as set forth in N.J.A.C. 13:30-8.3.

The Board also disagrees with the commenter's assertion that the proposal will not serve the best interest of the public.

The amendments to N.J.A.C. 13:30- 1A.2 and 2.4 will allow hygienists and dental assistants to monitor patients to whom nitrous oxide has been administered, but to in no way administer, or in any way alter, the level of nitrous oxide established by dentist, except in an emergency situation, at which time supportive personnel may turn off the nitrous oxide/oxygen inhalation analgesia. Monitoring of nitrous oxide patients by licensed dental hygienists and registered dental assistants will allow more dental patients to derive the benefits of analgesia while receiving routine dental treatments.

In addition, the Board notes that potential problems which could result from the use of nitrous oxide/oxygen inhalation analgesia in patients who are also taking sedative or hypnotic medications can be avoided if the dentist follows appropriate practice standards by taking an appropriate patient history prior to undertaking any dental procedure, as is required by N.J.A.C. 13:30-8.7, and incorporating the information so obtained into the treatment plan. The Board also believes that determinations as to the operating condition of the equipment used to administer nitrous oxide/oxygen inhalation analgesia, and the qualifications of those persons to whom the monitoring of nitrous oxide patients are entrusted, are determinations that must be made by the dentist responsible for utilizing the equipment and supervising such personnel. The Board notes that such equipment is currently being used in dental facilities where nitrous oxide/oxygen inhalation analgesia is administered, and no independent inspection of such equipment is required. However, the Board notes that, consistent with appropriate standards of practice, dentists must ensure that such equipment is in good working order, and is maintained and serviced according to manufacturer recommendations. Therefore, the Board declines to accept the commenter's suggestion to require a permit for the use of nitrous oxide/oxygen inhalation analgesia by dentists in the State.

COMMENT: Dr. Tennenbaum expressed concern regarding the proposal because he believes that neither registered dental hygienists nor registered dental assistants are properly equipped to deal with patients who begin dreaming and/or vomiting once they have received nitrous oxide. The commenter notes that nitrous oxide is a nauseant, and that at concentrations of 60 percent or greater, can lead to a decrease in consciousness. With the fail-safe, continuous flow machine contemplated in the proposal, one can deliver nitrous oxide at 70 percent and oxygen at 30 percent. The commenter questions whether a dental hygienist or dental assistant who has received only 14 hours of training is capable of dealing with a patient in such a situation. The commenter believes that if a patient will not be directly monitored by the dentist, the patient should never be given more than a 50 percent concentration of nitrous oxide, with oxygen flowing at 50 percent. The commenter also notes that if a patient begins to dream while under nitrous oxide, prudence dictates that there should be more than one person in the room. The commenter believes that the Board should revisit the issue of whether more than one person should be in the room with a nitrous oxide patient, and that the Board's decision to allow individual practitioners to decide whether a chaperon is necessary in such situations is inappropriate.

RESPONSE: The Board disagrees with the commenter's suggestion that licensed dental hygienists and registered dental assistants who have successfully completed the nitrous oxide training course set forth in N.J.A.C. 13:30-1A.2 and 2.4, will not be properly trained to deal with patients who may experience untoward reactions to the nitrous oxide. The mandatory training courses for such personnel will entail, at a minimum, seven hours of didactic training and seven hours of clinical training, with a minimum of 10 monitored administrations of nitrous oxide/oxygen inhalation and analgesia. The Board believes that such training will adequately prepare licensed dental hygienists and registered dental assistants to deal with the unlikely consequences suggested by the commenter and further notes that the treating dentist is on the premises and would be summoned immediately in the event of such an occurrence. The Board also notes that new rule N.J.A.C. 13:30-8.20 and the amendments to N.J.A.C. 13:30-1A.2 and 2.4 require the dentist to establish the appropriate concentrations of nitrous oxide and oxygen for the patient, and do not permit supportive personnel to alter the level established by the dentist, except in an emergency situation, at which time supportive personnel may turn off the nitrous oxide/oxygen inhalation analgesia. The Board notes that if appropriate levels of nitrous oxide and oxygen are established for the patient, combined with the use of a fail-safe machine, the nausea and vomiting to which the commenter refers will not occur.

Concerning the use of chaperons in dental offices, the Board notes that it considered this issue at length during its review of this proposal, and determined that the use of chaperons by dentists administering nitrous oxide/oxygen inhalation analgesia is a decision that is more appropriately made by the individual treating dentist. The Board continues to believe that the decision to use chaperons during any dental procedure should be left to the discretion of

licensed dentists, as are other decisions concerning the management and administration of their dental practices.

COMMENT: Dr. Lichtenstein expressed support for the proposal and believes that the proposed amendments and new rule will positively impact the health, safety and welfare of the general public. The commenter notes that the 14 hours of training required by the proposal, in addition to required continuing education, will adequately prepare dental hygienists and dental assistants to monitor patients who have been administered nitrous oxide/oxygen inhalation analgesia. Dr. Lichtenstein disagrees with the comments submitted by Dr. Ervin Moss on the original proposal, and notes that monitoring nitrous oxide/oxygen inhalation analgesia sedation in a conscious patient is completely on the other side of the anesthesia spectrum from "surgical anesthesia." In addition, Dr. Lichtenstein believes that the recordkeeping requirements imposed upon the supervising dentist by the new rule could be made minimally time consuming by the preparation of a standardized written form or chart.

RESPONSE: The Board thanks Dr. Lichtenstein for his support of the proposed amendments and new rule. The Board agrees with the commenter's observation that the recordkeeping requirements outlined in the proposal could be made minimally time consuming by the preparation of standardized forms or charts. The Board notes that nothing contained in new rule N.J.A.C. 13:30-8.20 would prohibit licensed dentists from creating such forms or charts for use in their dental practices. The Board notes further, however, that professional practice standards dictate that the use of standardized forms or charts do not relieve a dentist from the obligation to record a patient's individualized responses to treatment.

COMMENT: Dr. Ponnudurai, on behalf of the New Jersey State Society of Anesthesiologists, believes that the administration of nitrous oxide/oxygen, which involves the manipulation of the relative concentrations of these gases in the inspired gas mixture, could possibly result in the administration of a hypoxic gas mixture. The commenter does not believe that a fail-safe device in a nitrous oxide/oxygen delivery system can be completely relied upon. The commenter suggests that the Board require, at a minimum, the employment of an inspired oxygen concentration monitor to correctly verify the actual percentage of oxygen being administered, as well as a pulse oximeter to determine the oxyhemoglobin status of the patient during the administration of the inhalation analgesia. The commenter believes that such a requirement is important in light of the fact that dental auxiliaries may continue to administer nitrous oxide/oxygen inhalation analgesia while the dentist is in another room.

REPOSENSE: New rule N.J.A.C. 13:30-8.20 requires a licensed dentist to administer the nitrous oxide/oxygen inhalation analgesia to the patient. Licensed dental hygienists and registered dental assistants may not do anything to alter the level of analgesia established by the supervising dentist, except in an emergency situation, at which time supportive personnel may turn off the nitrous oxide/oxygen inhalation analgesia. Such personnel are not engaged in the administration of nitrous oxide. Moreover, because the levels of nitrous oxide and oxygen are established by the dentist, and because the system contemplated in the proposal is a fail-safe, open system in which the patient is additionally breathing atmospheric air, the Board believes that the hypoxic gas mixture to which the commenter refers will not result from the administration of nitrous oxide/oxygen inhalation analgesia in a dental office. The Board also notes that the use of an inspired oxygen concentration monitor and a pulse oximeter to determine the patient's oxyhemoglobin status during the administration of the nitrous oxide is not necessary when using the open, fail- safe system contemplated by the proposal, because regardless of the amounts of nitrous oxide and oxygen that the machine is administering, the levels are constantly being adjusted because the patient is breathing in atmospheric air and breathing out nitrous oxide. In addition, the Board notes that the American Dental Association does not recommend the use of an oxygen monitor for patients receiving nitrous oxide analgesia.

COMMENT: Dr. Ponnudurai noted that patients can suffer from "diffusion hypoxia" after the nitrous oxide is turned off following its administration. This can be prevented by continuing to administer oxygen only at 100 percent for a short time following the nitrous oxide administration. The patient must be closely observed with pulse oximeter monitoring. In addition, the commenter recommends prohibiting patients from driving home following nitrous oxide/oxygen inhalation analgesia administration for the sake of road and highway safety. The commenter recommends that the new rule require the patient to be taken home by an escort following the nitrous oxide administration.

RESPONSE: Under the proposal, licensed dental hygienists and registered dental assistants may only turn off the

nitrous oxide/oxygen inhalation analgesia if the patient is experiencing an untoward reaction. Therefore, in most instances, the supervising dentist will be responsible for turning off the machine and determining, in his or her professional judgement, what level of oxygen, if any, should continue to be administered by the fail-safe delivery system. In those situations where the patient experiences an untoward reaction and the licensed dental hygienist or registered dental assistant who is monitoring the patient turns the nitrous oxide delivery system off, the patient will be breathing atmospheric air until the dentist, who is to be immediately summoned, returns. The level of oxygen, if any, that should be administered to the patient in such a situation will be established by the treating dentist. As noted above in response to Dr. Ponnudurai's previous comment, the use of pulse oximeter monitoring is not required when using the open, fail-safe system contemplated by the proposal. Regardless of the levels of nitrous oxide and oxygen that the machine is administering, the levels are being diluted because the patient is breathing in atmospheric air and breathing out nitrous oxide. In addition, the Board disagrees with the commenter's assertion that the proposal should be amended to require patient discharge to an escort, and notes that the American Dental Association does not suggest nor recommend that an escort be mandated for patients who will be receiving nitrous oxide analgesia. The Board notes further that the decision to require an escort for a patient who is being administered nitrous oxide, and the type of instructions provided to the patient for follow-up care, are matters that are best left to the discretion of the treating dentist, who is required under N.J.A.C. 13:30-8.20(h) to personally discharge the patient after treatment.

COMMENT: Dr. Moss, on behalf of the New Jersey State Society of Anesthesiologists, observed that a 1994 National Institute for Occupational Safety and Health (NIOSH) study concluded that chronic exposure to nitrous oxide causes decreases in mental performance, audiovisual ability and manual dexterity, and may also cause adverse reproductive consequences. The commenter noted that nearly half a million employees working in the healthcare industry are at risk, and believes that the proposed amendments and new rule will add to the pool of at-risk individuals. Because patients expire nitrous oxide through their mouths, dental hygienists may be exposed to the gas for as many as eight hours a day. The commenter believes that the proposal should include mandatory analysis of room contamination in parts per million of nitrous oxide. In addition, the commenter believes that approval to use nitrous oxide by dental hygienists should be based on meeting NIOSH standards, as well as the performance of a quarterly analysis of contamination by an outside company specializing in gas analysis. The commenter notes that such requirements are already imposed upon New Jersey hospital and surgi-center locations in which general anesthesia is used.

RESPONSE: The Board does not disagree with the commenter's statements concerning NIOSH research on the effects of chronic exposure to nitrous oxide. The Board notes, however, that such findings have little bearing on the use of nitrous oxide in dental patients because such patients are not exposed to nitrous oxide on a continuous or chronic basis. Although chronic exposure to nitrous oxide may be an area of concern for licensed dental hygienists and registered dental assistants who monitor patients to whom the nitrous oxide has been administered, the Board notes that the new rule N.J.A.C. 13:30-8.20 provides for the use of nitrous oxide at a relatively low concentration, and also requires the use of a scavenging system when the nitrous oxide is in use, which will significantly limit the amount of nitrous oxide in the air in the operatory. The Board also notes that levels of nitrous oxide in the operatory can be quickly dissipated by maintaining appropriate ventilation measures. Moreover, all licensees involved in the use of nitrous oxide, whether they are dentists, licensed dental hygienists or registered dental assistants, will receive instruction in the use of nitrous oxide in an appropriate and safe manner as part of their required training. Therefore, the Board disagrees with the commenter's assertion that a mandatory analysis of room contamination should be required of all dental offices using nitrous oxide. Although the commenter observes that such a requirement has already been imposed upon hospitals and surgi-center locations where general anesthesia is used, the Board notes that the risks associated with nitrous oxide are substantially lower than the risks associated with the administration of general anesthesia and that comparisons between the two in the context of the proposal are misplaced.

The Board notes further that if assistive personnel are at all concerned about potential chronic exposure to nitrous oxide, they are not required to monitor patients to whom nitrous has been administered. The amendments to N.J.A.C. 13:30-1A.2 and 2.4 make monitoring of nitrous oxide patients voluntary on the part of licensed dental hygienists and registered dental assistants.

COMMENT: Dr. Moss recommends that the proposal be amended to require the use of oximetry in order to confirm adequate oxygenation, and that an oxygen monitor be adapted to the nitrous oxide delivery system in order to confirm that the minimum 30 percent oxygen is being delivered.

RESPONSE: As noted above in response to the comment submitted by Dr. Ponnudurai, the use of oximetry during the administration of the nitrous oxide is not necessary when using the open, fail-safe system contemplated by the proposal because the levels of nitrous oxide and oxygen that the machine is administering are affected by the patient breathing in atmospheric air and diluting the mixture.

COMMENT: Dr. Moss recommends that the proposal be amended to prohibit patients and hygienists from driving home following the administration of nitrous oxide because of the decreased dexterity, mental performance and audiovisual ability that may result from the administration. In addition, the commenter recommends that the proposal be amended to prohibit the administration of nitrous oxide if the patient, or the hygienist, is pregnant.

RESPONSE: The Board disagrees with the commenter's suggestion to require a driver for patients who have been administered nitrous oxide, or licensed hygienists who have monitored such patients, and reiterates the response provided above to the comment submitted by Dr. Ponnudurai. The decision to require an escort for a patient, or for a member of the dental staff, are matters that are best left to the discretion of the treating dentist. In addition, the Board notes that dentists are appropriately trained to make decisions concerning the use of nitrous oxide when a patient, or an assistant, may be pregnant. Dentists are required to abide by appropriate standards of practice in such situations.

COMMENT: Dr. Moss recommends that the proposal be amended to require the nitrous oxide/oxygen delivery system to be serviced and calibrated a minimum of two times per year, in order to guarantee 30 percent oxygen delivery. Maintenance should be performed by factory personnel whose credentials should be verified by the dentist.

RESPONSE: The Board disagrees with the commenter's suggestion and reiterates the response provided above to the comment submitted by Dr. Riva. The Board believes that determination as to the operating condition of the equipment used to administer nitrous oxide/oxygen inhalation analgesia must be made by the dentist responsible for utilizing the equipment, consistent with appropriate standards of practice which require that such equipment be maintained in good working order and consistent with manufacturer recommendations. The Board also notes that such equipment is already being used in dental facilities where nitrous oxide/oxygen inhalation analgesia is administered, and no independent inspection of such equipment is required.

COMMENT: Dr. Moss recommends that the proposal be amended to include OSHA and NIOSH standards.

RESPONSE: Because the Board must approve the nitrous oxide training courses for licensed dental hygienists and registered dental assistants, as set forth in N.J.A.C. 13:30-1A.2 and 2.4, the Board will ensure that such courses include appropriate instruction in applicable safety standards and, therefore, the Board declines to accept the commenter's suggestion to amend the proposal.

COMMENT: Ms. Zeisler urged the Board to adopt the proposal and noted that nitrous oxide has made her more comfortable and calm while having her teeth cleaned. The commenter believes that the proposal will help to alleviate that she and many other patients feel while obtaining dental treatment.

RESPONSE: The Board thanks Ms. Zeisler for her support of the proposed amendments and new rule.

COMMENT: Ms. Pugh, on behalf of the New Jersey Dental Hygienists' Association (NJDHA), expressed support for the proposal and noted that it has long been the policy of the NJDHA to support initiatives that would allow registered dental hygienists to monitor the administration of nitrous oxide. The commenter notes that the NJDHA is committed to working with the Board to correct any problems that may appear as the regulations are implemented.

RESPONSE: The Board thanks the New Jersey Dental Hygienists' Association for its support of the proposed amendments and new rule.

COMMENT: Ms. Zwiebel believes that concern over the proposal as it relates to the monitoring of nitrous oxide patients by dental hygienists is misplaced. The commenter notes that dentists routinely administer nitrous oxide to patients and then leave the treatment room. The commenter believes that the proposed amendments and new rule are not designed to allow for better patient care, but rather, are intended to legalize a practice in which most dentists

currently engage.

**RESPONSE:** The Board disagrees with the commenter's assertion that dentists routinely administer nitrous oxide to patients and then leave the treatment room and notes that such conduct, if it did occur in the past, would be a clear violation of Board rules.

**COMMENT:** Dr. Markus expressed support for the proposed amendments and new rule. The commenter notes that the proposal will benefit those consumers who are fearful of obtaining dental treatment because of low pain thresholds. The commenter notes that as a practicing dentist, he has never seen an adverse reaction to the proper administration of nitrous oxide. The commenter, however, questions why the proposal requires continuing education, and notes that hygienists are not required to relearn how to perform other functions, such as performing cancer examinations. Such retraining is not required for dentists. The commenter believes that the proposal, therefore, fails to treat hygienists equally. In addition, the commenter notes that the basic training requirements, that is, 14 hours of instruction with 10 administrations, are excessive, especially in light of the fact that hygienists will only be monitoring the patient at the dose established and administered by the dentist.

**RESPONSE:** The Board thanks Dr. Markus for his support of the proposed amendments and new rule, but disagrees with the commenter's suggestion that the training requirements set forth in the proposal are excessive. The Board believes that 14 hours of clinical and didactic training are necessary in order to ensure that licensed dental hygienists and registered dental assistants are appropriately trained in all aspects of monitoring patients to whom nitrous/oxide oxygen inhalation analgesia has been administered. For this reason, the Board also believes that the three hours of retraining in every other registration renewal period which must be completed by all licensed dental hygienists and registered dental assistants who monitor nitrous oxide patients is not excessive. The Board believes that such continuing education will serve to protect the health, safety and welfare of New Jersey consumers.

**COMMENT:** The remainder of the commenters expressed support for the proposed amendments and new rule, as did numerous other commenters whose comments were submitted after the comment period on the proposal expired. All the commenters urged the Board to adopt the proposal as they believe that the proposed amendments and new rule will benefit consumers and will positively impact the health, safety and welfare of the general public. The commenters believe that the proposal will allow fearful patients to obtain the dental treatment they need. In addition, some of the commenters noted that any concerns regarding the training of dental hygienists are unfounded because all registered dental hygienists have completed substantial course work during their dental hygiene education on the subjects of analgesia, anesthesia, chemistry and biology.

**RESPONSE:** The Board thanks the commenters for their support of the proposed amendments and new rule.

### **Summary of Agency Initiated Changes:**

The Board is amending N.J.A.C. 13:30-8.20(i) on adoption to correct an inadvertent reference in the proposal to "registered" dental hygienists. The correction refers "licensed" dental hygienists. In addition, the Board is making a technical amendment to subsection (i), to clarify an unintended ambiguity in the rule. Subsection (i), as proposed, provides that the delegation of the monitoring of nitrous oxide/oxygen inhalation analgesia to a hygienist or an assistant without having first met the standards or training and procedure set forth in N.J.A.C. 13:30-1A.2 or 2.4 will constitute a deviation from normal standards of practice. The Board believes that it is unclear whether the "first having met the minimum standards" language applies to the delegating dentist or to the licensed dental hygienist or registered dental assistant to whom the delegation is made. Although the Board believes that the intent of subsection (i) is clear in light of the references to N.J.A.C. 13:30-1A.2 or 2.4, which establish the standards of training and procedure for licensed dental hygienists and registered dental assistants, the Board has amended the rule to clarify this ambiguity.

### **Federal Standards Statement**

A Federal standards analysis is not required because the adopted amendments to N.J.A.C. 13:30-1A.2 and 2.4, and adopted new rule N.J.A.C. 13:30- 8.20, are governed by N.J.S.A. 45:6-1 et seq., and are not subject to any Federal standards or requirements.

**Full text of the adoption follows:**

<< NJ ADC 13:30-1A.2 >>

**13:30-1A.2 Scope of practice of licensed dental hygienist**

(a)-(b) (No change.)

(c) In addition to the activities set forth in (b) above, a licensed dental hygienist practicing under the direct supervision of a licensed dentist pursuant to N.J.A.C. 13:30-8.20 may monitor a patient to whom the supervising dentist has administered nitrous oxide/oxygen inhalation analgesia, provided that:

1. The licensed dental hygienist has successfully completed a Board-approved course offered in a CODA (Commission on Dental Accreditation of the American Dental Association) approved college or university clinical setting or hospital setting which emphasizes the administration of nitrous oxide simultaneous with the administration of oxygen and safe and effective patient monitoring;
  - i. The course shall be submitted to the Board for review and approval of course outline, content and objectives, curriculum vitae of instructors and whether the training is visual, hands-on or lecture;
  - ii. The nitrous oxide/oxygen administration course shall be at least 14 hours in length, which shall include at least seven hours of didactic training and seven hours of clinical training; and
  - iii. The clinical training shall include, at a minimum, 10 monitored administrations of nitrous oxide/oxygen inhalation analgesia;
2. The licensed dental hygienist holds a current certification in Basic or Advanced Cardiac Life Support by the American Heart Association, the American Red Cross or an equivalent association approved by the Board;
3. The licensed dental hygienist completes a three-hour didactic or clinical course in nitrous oxide/oxygen inhalation analgesia in every other registration renewal period. Completion of the recertification course shall be in addition to the continuing education requirements set forth at N.J.A.C. 13:30-5.2;
4. The licensed dental hygienist monitors the patient and maintains the therapeutic level of nitrous oxide/oxygen inhalation analgesia as established by the dentist; and
5. Upon any untoward reaction of the patient, the licensed dental hygienist immediately turns off the nitrous oxide/oxygen inhalation analgesia and summons the dentist.

(d) The monitoring of nitrous oxide/oxygen inhalation analgesia by a registered dental hygienist without first having met the minimum standards of training and procedures as contained in this section shall constitute a deviation from normal standards of practice required of a licensee.

Recodify existing (c)-(d) as (e)-(f) (No change in text.)

(g) A licensed dental hygienist who engages in the activities outlined in (b) and (c) above without direct supervision shall be deemed to be engaging in the unauthorized practice of dental hygiene and shall be subject to the penalties set forth in N.J.S.A. 45:6-58 and 45:1-25.

(h) A licensed dentist who permits a licensed dental hygienist to engage in the activities outlined in (b) and (c) above without direct supervision shall be subject to the penalties set forth in N.J.S.A. 45:1-25.

(i) (No change in text.)

<< NJ ADC 13:30-2.4 >>

### **13:30-2.4 Scope of practice of registered dental assistant**

(a) (No change.)

(b) A registered dental assistant practicing under the direct supervision of a licensed dentist pursuant to N.J.A.C. 13:30-8.20 may monitor a patient to whom the supervising dentist has administered nitrous oxide/oxygen inhalation analgesia provided the registered dental assistant does not perform any other function while monitoring the patient, and provided that:

1. The registered dental assistant has successfully completed a Board- approved course offered in a CODA (Commission on Dental Accreditation of the American Dental Association) approved college or university clinical setting or hospital setting which emphasizes the administration of nitrous oxide simultaneous with the administration of oxygen and safe and effective patient monitor:

i. The course shall be submitted to the Board for review and approval of course outline, content and objectives, curriculum vitae of instructors and whether the training is visual, hands-on or lecture;

ii. The nitrous oxide/oxygen administration course shall be at least 14 hours in length, which shall include at least seven hours of didactic training and seven hours of clinical training; and

iii. The clinical training shall include, at a minimum, 10 monitored administrations of nitrous oxide/oxygen inhalation analgesia.

2. The registered dental assistant holds a current certification in Basic or Advanced Cardiac Life Support by the American Heart Association, the American Red Cross or an equivalent association approved by the Board;

3. The registered dental assistant completes a three-hour didactic or clinical course in nitrous oxide/oxygen inhalation analgesia in every other registration renewal period. Completion of the recertification course shall be in addition to the continuing education requirements set forth at N.J.A.C. 13:30-5.3.

4. The registered dental assistant monitors the patient and maintains the therapeutic level of the nitrous oxide/oxygen inhalation analgesia as established by the dentist; and

5. Upon any untoward reaction of the patient, the registered dental assistant immediately turns off the nitrous oxide/oxygen inhalation analgesia and summons the dentist.

(c) The monitoring of nitrous oxide/oxygen inhalation analgesia by a registered dental assistant without first having met the minimum standards of training and procedures as contained in this section shall constitute a deviation from normal standards of practice required of a licensee.

(d) A registered dental assistant who engages in the activities outlined in (b) and (c) above without direct supervision shall be deemed to be engaging in the unauthorized practice of dental assisting and shall be subject to the penalties set forth in N.J.S.A. 45:1-25.

(e) (No change in text.)

<< NJ ADC 13:30-8.20 >>

### **13:30-8.20 Nitrous oxide/oxygen inhalation analgesia; duties of a licensed dentist, delegation to licensed dental hygienist and registered dental assistant**

(a) The following words and terms, as used in this section, shall have the following meanings, unless the context clearly indicates otherwise:

"Administration" means the determination and introduction of a therapeutic level of nitrous oxide/oxygen inhalation analgesia.

"Direct supervision" means acts performed in the office of a licensed dentist wherein the dentist is physically present on the premises at all times during the performance of such acts and such acts are performed pursuant to the dentist's order, control, and full professional responsibility.

"Monitoring" means observing or checking a patient's condition to assess the safety and comfort of the patient receiving nitrous oxide/oxygen inhalation analgesia.

"Nitrous oxide/oxygen inhalation analgesia" means the introduction by inhalation of a combination of nitrous oxide and oxygen gases to a conscious patient.

"Supervising dentist" means the dentist who induces or administers the nitrous oxide/oxygen inhalation analgesia to the patient.

(b) If a patient is to receive nitrous oxide/oxygen inhalation analgesia, a supervising dentist shall induce or administer the nitrous oxide/oxygen inhalation analgesia and shall exercise direct supervision and full responsibility for the patient.

(c) A supervising dentist may delegate the monitoring of the nitrous oxide/oxygen inhalation analgesia to a licensed dental hygienist during the performance of dental hygiene procedures provided that the patient is stabilized and that the licensed dental hygienist satisfies the requirements set forth in N.J.A.C. 13:30-1A.2.

(d) A supervising dentist may delegate the monitoring of the nitrous oxide/oxygen inhalation analgesia to a registered dental assistant who will perform no other function while monitoring the patient provided the patient is stabilized and the registered dental assistant satisfies the requirements set forth in N.J.A.C. 13:30-2.4.

(e) If a supervising dentist delegates the monitoring of the nitrous oxide/oxygen inhalation analgesia to a licensed dental hygienist pursuant to N.J.A.C. 13:30-1A.2, or to a registered dental assistant pursuant to N.J.A.C. 13:30-2.4, the supervising dentist shall ensure that:

1. The nitrous oxide/oxygen inhalation delivery system is a fail-safe unit which shall not deliver nitrous oxide unless oxygen is continuously flowing at a minimum of 30 percent and includes a scavenging system operating while the nitrous oxide is in use; and

2. The dental office is equipped, at a minimum, with the following:

i. A high speed vacuum source;

ii. Suction equipment;

iii. Equipment to deliver positive pressure oxygen; and

iv. Blood pressure monitoring equipment.

(f) A supervising dentist shall not delegate the monitoring of nitrous oxide/oxygen inhalation analgesia to a licensed dental hygienist or to a registered dental assistant if a patient is taking any medications, whether prescribed by the dentist or by another licensed practitioner, that in the professional judgment of the dentist may potentiate the effects of the nitrous oxide/oxygen inhalation analgesia, or may change the level of consciousness of the patient.

(g) The supervising dentist shall be responsible for ensuring that the patient records are documented to reflect the nitrous oxide and oxygen flow rates and the analgesia duration and clearing times.

(h) The supervising dentist shall personally discharge the patient following the administration of nitrous oxide/oxygen inhalation analgesia.

(i) The delegation of the monitoring of nitrous oxide/oxygen inhalation analgesia to a <<-registered->>

<<+licensed+>> dental hygienist pursuant to N.J.A.C. 13:30-1A.2 or registered dental assistant pursuant to N.J.A.C. 13:30-2.4 <<-without first having->> <<+who has not yet+>> met the minimum standards of training and procedures as stated therein shall constitute a deviation from normal standards of practice required of a licensee.