Pursuant to the authority of Iowa Code sections 147.76 and 153.33, the Dental Board hereby Adopts and Files amendments to Chapter 29, “Sedation and Nitrous Oxide Inhalation Analgesia,” Iowa Administrative Code 650.

These amendments define “hospitalization” for the purpose of reporting an adverse occurrence, update requirements for the use of moderate sedation and deep sedation/general anesthesia in accordance with newly issued American Dental Association (ADA) guidelines for the use of sedation, and clarify the type of Advanced Cardiac Life Support (ACLS) or Pediatric Advanced Life Support (PALS) certification courses allowed for the purposes of application and renewal of a sedation permit.

These amendments clarify situations wherein a licensee would be required to report an adverse occurrence. The current rules require a report in the case of hospitalization, but hospitalization is not currently defined in the Board’s rules; this has led to some uncertainty about requirements for reporting of adverse occurrences.

The amendments update sedation guidelines to match the new guidelines issued by the ADA. Comments received during past rule making related to this chapter urged the Board to wait for guidelines to be issued by the ADA prior to implementing changes. In the fall of 2016, the ADA issued new guidelines recommended for use in moderate sedation and deep sedation/general anesthesia. The Anesthesia Credentials Committee, a committee of the Board, reviewed the recommendations and advocated their adoption in order to have additional safeguards in place during the administration of moderate sedation or deep sedation/general anesthesia. The amendments require general anesthesia permit holders to maintain and be trained on equipment that monitors end-tidal CO₂ and on a pretracheal or precordial stethoscope during the use of deep sedation/general anesthesia in order to monitor auscultation of breath sounds.
These amendments update the requirements for certification in ACLS and PALS, which is a requirement for moderate sedation and general anesthesia permits. The amendments would require acceptable certification courses to include a clinical component wherein the practitioner must demonstrate competency in life support services. Online-only certification courses would not be accepted. These amendments would make the ACLS and PALS certification requirements consistent with the requirements for CPR certification for licensure and registration.

These amendments update the requirements for moderate sedation training. The ADA has recommended that moderate sedation training courses include training on rescuing a patient from a deeper level of sedation than intended, including training in airway management and the use of reversal medications.

These amendments require moderate sedation permit holders to maintain and be trained on equipment that monitors end-tidal CO\textsubscript{2} and on a pretracheal or precordial stethoscope unless precluded or invalidated by the nature of the patient, procedure or equipment.

Notice of Intended Action was published in the Iowa Administrative Bulletin on August 15, 2017 as **ARC 3261C**. A public hearing was held on September 12, 2017, at 2 p.m. at the office of the Iowa Dental Board. There were not any attendees at the public hearing, nor were any written comments received.

The Board reviewed and discussed the amendment during their October 13, 2017, open session board meeting and allowed additional comments from the public.

The amendments are subject to waiver or variance pursuant to 650-chapter 7.

After analysis and review of this rule making, no impact on jobs has been found.

These amendments are intended to implement Iowa Code section 153.20.

The following amendments are hereby adopted and filed.

**ITEM 1.** Adopt the following **new** definition of “Hospitalization” in rule **650—29.1(153):**
“Hospitalization” means in-patient treatment at a hospital or clinic. Out-patient treatment at an emergency room or clinic is not considered to be hospitalization for the purposes of reporting adverse occurrences.

**ITEM 2.** Amend subrule 29.3(2) as follows:

29.3(2) A dentist using deep sedation/general anesthesia shall maintain a properly equipped facility at each facility where sedation is administered. The dentist shall maintain and be trained on the following equipment at each facility where sedation is provided: capnography to monitor end-tidal CO2, pretracheal or precordial stethoscope to continually monitor auscultation of breath sounds, EKG monitor, positive pressure oxygen, suction, laryngoscope and blades, endotracheal tubes, magill forceps, oral airways, stethoscope, blood pressure monitoring device, pulse oximeter, emergency drugs, defibrillator. A licensee may submit a request to the board for an exemption from any of the provisions of this subrule. Exemption requests will be considered by the board on an individual basis and shall be granted only if the board determines that there is a reasonable basis for the exemption.

**ITEM 3.** Amend subrule 29.3(4) as follows:

29.3(4) A dentist administering deep sedation/general anesthesia must document and maintain current, successful completion of an certification in Advanced Cardiac Life Support (ACLS) course. Current certification means certification by an organization on an annual basis or, if that certifying organization requires certification on a less frequent basis, evidence that the permit holder has been properly certified for each year covered by the renewal period. In addition, the course must include a clinical component.

**ITEM 4.** Amend subrule 29.4(1) as follows:

29.4(1) A permit may be issued to a licensed dentist to use moderate sedation for dental patients provided the dentist meets the following requirements:

a. Has successfully completed a training program approved by the board that meets the
American Dental Association Guidelines for Teaching Pain Control and Sedation to Dentists and Dental Students and that consists of a minimum of 60 hours of instruction and management of at least 20 patients; and

b. Has formal training in airway management. Has successfully completed a training program that includes rescuing patients from a deeper level of sedation than intended, including managing the airway, intravascular or intraosseous access, and reversal medications; or

c. Has submitted evidence of successful completion of an accredited residency program that includes formal training and clinical experience in moderate sedation, which is approved by the board; and

d. Has completed a peer review evaluation, as may be required by the board, prior to issuance of a permit.

**ITEM 5.** Amend subrule 29.4(2) as follows:

**29.4(2)** A dentist utilizing moderate sedation shall maintain a properly equipped facility. The dentist shall maintain and be trained on the following equipment at each facility where sedation is provided: capnography or pretracheal/precordial to monitor end-tidal CO₂ unless precluded or invalidated by the nature of the patient, procedure or equipment, pretracheal or precordial stethoscope, EKG monitor, positive pressure oxygen, suction, laryngoscope and blades, endotracheal tubes, magill forceps, oral airways, stethoscope, blood pressure monitoring device, pulse oximeter, emergency drugs, defibrillator. A licensee may submit a request to the board for an exemption from any of the provisions of this subrule. Exemption requests will be considered by the board on an individual basis and shall be granted only if the board determines that there is a reasonable basis for the exemption.

**ITEM 6.** Amend subrule 29.4(4) as follows:

**29.4(4)** A dentist administering moderate sedation must document and maintain current successful completion of an certification in Advanced Cardiac Life Support (ACLS) course. A
dentist administering moderate sedation to pediatric patients may maintain current certification in Pediatric Advanced Life Support (PALS) in lieu of ACLS. Current certification means certification by an organization on an annual basis or, if that certifying organization requires certification on a less frequent basis, evidence that the permit holder has been properly certified for each year covered by the renewal period. In addition, the course must include a clinical component.

ITEM 7. Amend subrule 29.5(11) as follows:

29.5(11) Use of capnography required beginning January 1, 2014. Use of capnography and pretracheal or precordial stethoscope.

a. Consistent with the practices of the American Association of Oral and Maxillofacial Surgeons (AAOMS), all general anesthesia/deep sedation permit holders shall use capnography at all facilities where they provide sedation beginning January 1, 2014.

b. All general anesthesia/deep sedation permit holders shall use a pretracheal or precordial stethoscope to continually monitor auscultation of breath sounds beginning January 1, 2018.

ITEM 8. Amend subrule 29.5(12) as follows:

29.5(12) Use of capnography or pretracheal/precordial stethoscope required for moderate sedation permit holders. Beginning January 1, 2015 2018, all moderate sedation permit holders shall use capnography or a pretracheal/precordial to monitor end-tidal CO₂ unless precluded or invalidated by the nature of the patient, procedure or equipment. In cases where the use of capnography is precluded or invalidated for the reasons listed previously, a pretracheal or precordial stethoscope must be used to continually monitor the auscultation of breath sounds at all facilities where they permit holders provide sedation.