



California Dental Hygienists' Association
The Voice of Dental Hygiene

September 23, 2022

November 11, 2022

To: The Dental Assisting Committee
The Dental Board of California

On behalf of California Dental Hygienists' Association and the California Dental Hygiene Educators' Association, we strongly oppose allowing Registered Dental Assistants in Extended Functions (RDAEFs) the additional duty to administer local anesthesia and nitrous oxide-oxygen.

To provide **safe and effective** local anesthesia and nitrous oxide-oxygen sedation, the following education is required by the Commission on Dental Accreditation and the Dental Hygiene Board of California for a Registered Dental Hygienist to complete in a California Dental Hygiene program:

Pre-requisite Courses: Chemistry, Organic chemistry, Biochemistry, Anatomy, Physiology and Microbiology are all required to understand how local anesthetics and nitrous oxide interact and affect the human body.

- These courses must be completed before acceptance in a dental hygiene program.

Required DH Courses: Head and Neck Anatomy, Pharmacology, and Pain Management courses with 56 lab hours and anesthesia and nitrous oxide-oxygen sedation practice on student partners.

- Head and Neck Anatomy is required so students know where muscles, nerves and blood vessels are located and how to avoid any vital structures during anesthesia. Pharmacology and Pain Management courses cover anesthetics and nitrous oxide-oxygen in detail and how to calculate a safe dose without overdosing and potentially causing harm to the patient.

The Dental Hygiene Board of California (DHBC) requires local anesthesia and nitrous oxide-oxygen administration coursework require at least 38 hours of didactic and clinical coursework, with practice on student partners and non-student patients. For local anesthesia, this entails fifteen didactic hours along with fifteen hours of pre-clinical and clinical experiences. For nitrous oxide, this entails eight hours for nitrous oxide didactic instruction followed by four preclinical and four clinical hours.

Curriculum must include maxillary and mandibular anesthesia techniques for local infiltration/supraperiosteal, field blocks and nerve blocks to include anterior superior alveolar (ASA), middle superior alveolar (MSA), anterior middle superior alveolar (AMSA), posterior superior alveolar (PSA), greater palatine, inferior alveolar (IA), lingual, buccal, nasopalatine, mental, and incisive injections. Total, there are at least 72 injections that dental hygiene students must deliver during their coursework.

- A minimum of two preclinical (2) experiences per injection, which may be on another student.
- Four (4) clinical experiences per injection, which includes two (2) experiences on the right side of a patient and two (2) experiences on the left side of a patient, of which only one (1) may be on another student.



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- The administration of nitrous oxide-oxygen analgesia includes at least two (2) preclinical experiences on patients, both of which may be on another student, and at least three (3) clinical experiences on patients, of which only one may have been on another student and one of which was used to determine clinical competency in the course.
- Clinical experience includes the performance of a dental hygiene procedure while administering at least twenty (20) minutes of nitrous oxide-oxygen analgesia from the beginning of titration of nitrous oxide-oxygen to the discontinuation of nitrous oxide and beginning of final oxygenation.
- Management of Medical and Dental Emergencies of 2 units (30 hours) covers how to recognize and respond to emergencies in the dental office. The pathophysiology of reactions, overdoses and other negative reactions/interactions are taught as well as the most recent guidelines for anesthetic use and ASA patient categories.

Additionally, dental hygiene students continue to practice injections and nitrous oxide-oxygen sedation for at least two semesters after completion of the pain management course. Courses are reviewed and revised by faculty in dental hygiene programs with the most up-to-date information and techniques to ensure students are taught the most appropriate and effective anesthesia and nitrous-oxide oxygen sedation.

All courses are delivered at a college-level education and students receive an Associate's or Bachelor's in Dental Hygiene upon completion. RDAEFs are not required to have a college education to become licensed. Allowing auxiliaries with only technical training but no college-level science education to provide a procedure that can be potentially life-threatening and does not protect consumers.

The out of state (SNL) course is meant to provide RDHs from outside of California a required Pain Management course for California licensure. They have already taken Pharmacology and Head and Neck Anatomy and are licensed and practicing clinicians.

An RDAEF does not have the education and background to provide safe and effective local anesthesia and nitrous oxide-oxygen sedation. For the sake of consumer safety, we strongly recommend that the Dental Board of California do not allow RDAEFs to deliver local anesthesia and nitrous oxide-oxygen sedation.

Sincerely,

A handwritten signature in black ink that reads "Kathy Kane". The signature is written in a cursive, flowing style.

Kathy Kane, BS, RDHA
President, California Dental Hygienists Association

A handwritten signature in black ink that reads "Judy Yamamoto". The signature is written in a cursive, flowing style.

Judy Yamamoto, RDH, MS
Executive Director, California Dental Hygiene Educators' Association

