

**ADA Department of Testing Services  
Examination Program Updates**

**Joint Commission on National Dental Examinations (JCNDE)**

ADEA Section on Dental Hygiene Education  
March 13, 2023

**Background**

When the National Board Dental Hygiene Examination (NBDHE) program was introduced in 1962, there were four examinations consisting of 100 test items each. Each of the four examinations covered three subjects. In 1973, a single, comprehensive examination consisting of approximately 400 test items replaced the four-examination battery. This comprehensive examination was organized around functions that a dental hygienist could be asked to perform. By 1990, all U.S. licensing jurisdictions accepted the NBDHE as evidence of fulfillment of the written examination requirement for licensure.

In 1998, the examination was restructured to include 350 items, of which 150 were associated with patient case material. In 2012, the Joint Commission moved to pass/fail reporting of results for candidates who passed the examination. Candidates who fail receive their overall score and results feedback for remediation purposes.

The JCNDE continues its efforts to enhance and improve its licensure dental hygiene examinations.

**The Dental Hygiene Examinations of the JCNDE: A Roadmap for Development**

In 2022, the Joint Commission adopted strategic goals and a roadmap for the dental hygiene examinations of the JCNDE, representing significant advancements for the NBDHE program and the upcoming Dental Hygiene Licensure Objective Structured Clinical Examination (DHLOSCE) program in the next five years (2022-2026). These advancements include the following:

- Development and implementation of an updated, comprehensive practice analysis for dental hygiene (2022-2023)
- Updates to the NBDHE test specifications (i.e., percentages of items assigned to topic areas) and publication of updated NBDHE forms in accordance with these test specifications (anticipated 2025).
- Implementation of the 3PL scoring model for the NBDHE, to more precisely evaluate candidate skills (anticipated 2025).
- Implementation of an updated NBDHE performance standard (anticipated 2025).
- Designing, constructing, and successfully implementing the Dental Hygiene Licensure Objective Structured Clinical Examination (DHLOSCE) (anticipated launch late 2024).
- Designing and implementing a framework for multi-stage adaptive testing for the NBDHE (anticipated 2026).

**Dental Hygiene Licensure Objective Structured Clinical Examination (DHLOSCE)**

In 2021 the JCNDE considered and approved a business plan to develop a DHLOSCE. The DHLOSCE will give boards the ability to identify those who lack the clinical skills necessary for safe Dental Hygiene practice, using a professionally developed examination backed by strong validity evidence. The DHLOSCE will also help eliminate undesirable situations and complications that can arise from the use of patients in the examination process, allowing for more objective, fair, and comprehensive measurement of candidate skills. Critically and fundamentally, the DHLOSCE will help boards in their mission to protect the public.

Thus far, the DHLOSCE Steering Committee has:

- established preliminary content specifications, indicating specific examination topics and the initial percentage of test questions that would be allocated to each topic for a 200-item examination.
- established the general structure of the DHLOSCE and identified permissible item formats.
- established the structure for DHLOSCE test construction teams and set forth minimum qualifications for DHLOSCE test constructors. Formally approved a pool of volunteers to serve as DHLOSCE test constructors.
- indicated that DHLOSCE items should be developed using item templates.
- determined that the DHLOSCE should be a computer-based, media-rich examination containing large numbers of clinical images, radiographs, 3D models, and other types of reference materials.
- conducted numerous DHLOSCE Test Construction Team meetings involving dental and dental hygiene subject matter experts.
- made its recommendation concerning the dental hygiene practice analysis approach to be utilized for DHLOSCE development; the JCNDE in turn will consider this recommendation in June 2023 (the practice analysis will serve both the DHLOSCE and the NBDHE).

The JCNDE is developing a new practice analysis framework to inform the development of its dental hygiene examinations. Input from the dental hygiene community is incredibly important. **The dental hygiene community and other relevant stakeholders will be asked to provide feedback on task statements in the summer of 2023.** Please keep an eye out for this information, and make sure to provide your comments and feedback when details become available.

The JCNDE anticipates launching the DHLOSCE in late 2024.

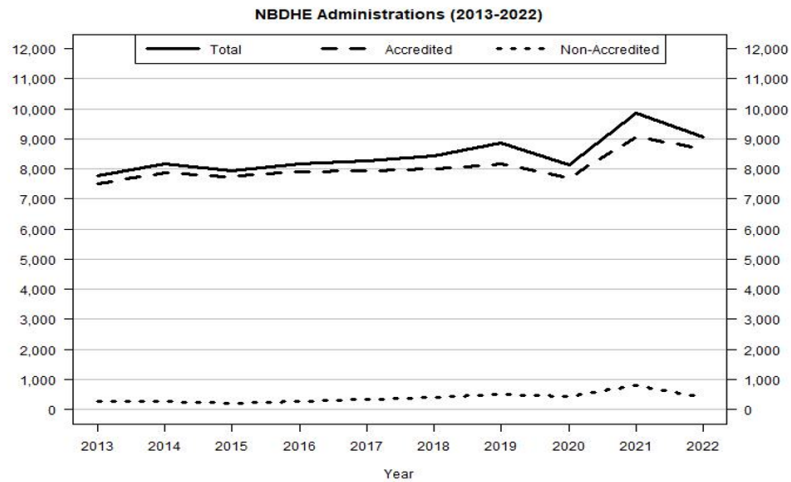
**The JCNDE requests the support of dental hygienists for this exciting new examination program, which has the potential to introduce substantial improvements to the validity, reliability, and fairness of the dental hygiene clinical licensure examination process.**

For additional information and updates please see: [Dental Hygiene Licensure Objective Structured Clinical Exam \(DHLOSCE™\) | Joint Commission on National Dental Examinations \(ada.org\)](#).

### NBDHE Administrations and Failure Rates

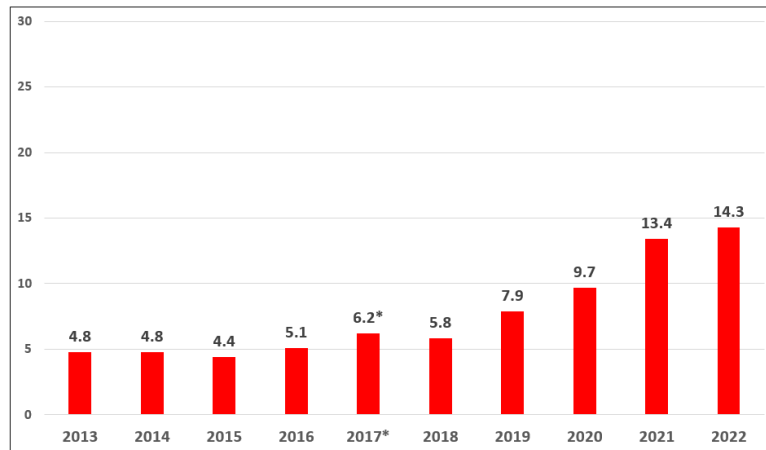
The following presents information concerning NBDHE candidate volume for a 10-year period. This data includes all individuals who completed the NBDHE (first time, repeaters, candidates educated by accredited and non-accredited programs).

#### NBDHE Administrations (2013-2022)



The following presents NBDHE candidate performance information for a 10-year period. This trend data includes candidates enrolled in accredited schools in the U.S and Canada who took the NBDHE for the first time. As indicated, failure rates have increased substantially in recent years. DTS believes that the global pandemic is continuing to have an impact on candidates, even as infection rates have declined.

#### NBDHE Failure Rates (%)



\* A new standard was introduced this year, based on updated standard setting activities.

## Test Construction Teams (TCTs)

Test Construction Teams (TCTs) are responsible for the development of items and examination forms, using JCNDE guidelines for writing high-quality multiple-choice items. Criteria for selecting Test Constructors are reviewed and published annually. TCT members are selected by the JCNDE based on factors such as the match between examination content needs and each individual's areas of expertise and experience. TCTs fall in one of three categories: Topics Areas and Disciplines; Cases, Testlets, Patient Boxes; and Review (images, items, forms).

**DTS invites faculty in your dental hygiene program to consider serving as test constructors, to help further strengthen the licensure examinations of the JCNDE.**

For additional information and updates please see: [Become a Volunteer Test Constructor | American Dental Association \(ada.org\)](#).

## Image Portal

The JCNDE relies on dental and dental hygiene professionals to provide high-quality images for use in licensure testing. New contributions help replenish examination item pools with new content and case materials. The **Image Portal** is a mechanism for submitting images for consideration and possible use in examinations. Submissions may include radiographs, intraoral or extraoral photographs; photos of study casts; and supplemental case information including dental charts, or medical history.

**DTS requests that faculty collect and submit images to the Image Portal, to help further strengthen the licensure examinations of the JCNDE.** For additional information, please see the image portal webpage: [Image Portal | Joint Commission on National Dental Examinations \(ada.org\)](#).

## Web Resources

The JCNDE webpages ([jcnde.ada.org](#)) have a multitude of resources available for your use.

- Candidate Guides
- Image Portal
- Recent and Forthcoming Updates to Examinations
- Technical Reports
- Unofficial Reports from the JCNDE Annual Meetings
- Volunteer Test Constructor Information
- Webinars

