

# **National Board Dental Hygiene Examination (NBDHE)**

## Case Development Guide

# TESTING SERVICES

ADA American Dental Association®

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*Changes to the National Board Dental Hygiene Examination (NBDHE) Program may occur after publication of this Guide. Updated PDFs will be posted to [ADA.org/NBDHE](https://ada.org/NBDHE). You will be subject to the policies and procedures currently in effect at the time of your test administration.*

## **BASIC STRUCTURE OF THE NATIONAL BOARD DENTAL HYGIENE EXAMINATION**

The current National Board Dental Hygiene Examination (NBDHE) consists of 350 test items. The discipline-based section (Component A) contains 200 items and the case-based section (Component B) includes 150 items based on 12 to 15 cases. This Guide provides information to potential contributors of patient cases for the case-based component of the NBDHE. For information concerning Component A, see the National Board Dental Hygiene Examination Specifications and the Test Item Development Guide published annually by the Joint Commission on National Dental Examinations.

### **THE CASE-BASED COMPONENT**

Patient cases are included in the National Board Dental Hygiene Examinations because it is important to assess knowledge of the dental clinical disciplines as well as the ability to use this knowledge in solving patient problems. As such, case-based test items are interdisciplinary in nature. Hence, patient cases are designed to measure candidates' abilities to make appropriate judgments, when faced with situations requiring the integration of biomedical and clinical dental sciences. Since the focus of each case scenario should be the patient, test questions are centered on delivering quality care to the individual patient. Each case should present as realistically as possible a situation that includes a patient, a set of conditions, and a presenting complaint or problem. Conditions should model those encountered in dental offices, and problems should represent an area of dental hygiene practice taught in accredited dental hygiene schools. Cases should test knowledge of the more important concepts required to deliver competent dental hygiene care. Each case is presented with a patient history, dental chart, radiographs, clinical photographs, and photographs of casts, when appropriate.

These materials are accompanied by eight to 15 test items addressing one or more of the following procedures of dental hygiene care delivery:

1. Assessing patient characteristics
2. Obtaining and interpreting radiographs
3. Planning and managing dental hygiene care
4. Performing periodontal procedures
5. Using preventive agents
6. Providing supportive treatment services
7. Professional responsibility.

Each case is developed according to the major subcategories of Section II of the NBDHE Test Specifications: Provision of Clinical Dental Hygiene Services. However, the number of items allocated to each subcategory represent the number of discipline-based items (Component A), and are not specific requirements for the case-based section of the NBDHE. It should be noted that test items on Community Dental Health under Section III of the NBDHE Test Specifications are excluded in the case-based section because of the independent nature of such items. However, community dental health items are included as testlets (item sets) in the first section (Component A) of the examination.

### **CATEGORIES OF PATIENTS**

The case-based questions are designed to address two categories of patients:

1. Adult — 80 percent of cases
2. Child — 20 percent of cases

For the 150 test items included in the case-based section, at least two cases must address the medical management of compromised patients. A compromised patient is one whose health status may require modification of standard treatment or special consideration.

Each examination should contain at least one case for each of the following patient types:

- Geriatric
- Adult-Periodontal
- Pediatric
- Special needs
- Medically compromised

### **COMPONENTS OF A CASE**

Patient information must age, sex, and chief complaint. Relevant physical characteristics, vital signs, medical and dental histories, and relevant social history can be included but are not required. In addition to a dental chart, case materials should include radiographs of diagnostic quality and free of technical errors, unless such errors serve an analytic purpose. Cases may contain intraoral and/or extraoral photographs (see next section for detailed requirements). Cases may also contain clinical photographs and photographs of casts. Collectively, the case materials provide multiple views for consideration in responding to test items. Cases may pertain to a patient's first visit, to a patient in the midst of treatment, or to a patient for whom treatment has been completed but who has returned with a complaint or for scheduled maintenance. Current Oral Hygiene Status and Supplemental Oral Examination Findings may also be included. All information should be clear and concise. In general, cases should exclude irrelevant information.

STANDARD ELEMENTS OF A PATIENT CASE

A patient box is a concise way for candidates to view information regarding the patient quickly and effectively. The patient box was designed to cut down on reading time by putting relevant information in a template that is consistent between items.

Patient Box: Patient Section

Patient

Female, 28 years old.

Chief Complaint

"I haven't been able to open my mouth for two days."

Background and/or Patient History

Three days prior, left mandibular third molar extraction.

Current Findings

Maximum opening is 10 mm

Section	Patient
Description	<ul style="list-style-type: none"><li>This section presents patient demographic characteristics (gender, age, and potentially ethnicity). <b>This area must be filled in.</b></li></ul>
Presentation Format	<ul style="list-style-type: none"><li>Male or Female, x years old.</li><li>Ethnicity may be included if relevant.</li></ul>
Example	<ul style="list-style-type: none"><li>Female, 28 years old.</li></ul>

Patient Box: Chief Complaint Section

Patient

Female, 28 years old.

Chief Complaint

"I haven't been able to open my mouth for two days."

Background and/or Patient History

Three days prior, left mandibular third molar extraction.

Current Findings

Maximum opening is 10 mm

Section	Chief Complaint
Description	<ul style="list-style-type: none"><li>This section presents the chief complaint as described by the patient or a guardian in the patient or guardian's own words. <b>This area must be filled in.</b></li></ul>
Presentation Format	<ul style="list-style-type: none"><li>If quoted directly from the patient, enclose the statement in quotation marks and voice the statement in the first person.</li></ul>
Example	<ul style="list-style-type: none"><li>"I've been unable to open my mouth for two days."</li></ul>

Patient Box: Background/Patient History

Patient

Female, 28 years old.

Chief Complaint

"I haven't been able to open my mouth for two days."

Background and/or Patient History

Three days prior, left mandibular third molar extraction.

Current Findings

Maximum opening is 10 mm

Section	Background/Patient History
Description	<ul style="list-style-type: none"><li>This section presents background information such as history of dental diagnosis and treatment, medical conditions, allergies, social history, etc. <i>This area may be left blank.</i></li></ul>
Presentation Format	<ul style="list-style-type: none"><li>The information is assumed to be factual and provided by the treating dentist.</li></ul>
Example	<ul style="list-style-type: none"><li>Three days prior, left mandibular third molar extraction.</li></ul>

Patient Box: Current Findings Section

Patient

Female, 28 years old.

Chief Complaint

"I haven't been able to open my mouth for two days."

Background and/or Patient History

Three days prior, left mandibular third molar extraction.

Current Findings

Maximum opening is 10 mm

Section	Current Findings
Description	<ul style="list-style-type: none"><li>This section presents information collected by dental professionals during the current visit. <i>This area may be left blank.</i></li></ul>
Presentation Format	<ul style="list-style-type: none"><li>Can include information such as height and weight, vital signs, results of diagnostic tests, and a general assessment of the patient condition.</li></ul>
Example	<ul style="list-style-type: none"><li>Facial edema</li><li>Lymphadenopathy</li><li>Extensive apical radiolucency associated with tooth 6</li><li>Temp. 100.3°</li><li>Blood glucose 240 mg/dL</li><li>BP 150/93</li></ul>

## **RADIOGRAPHS AND PHOTOS (intra- or extra-oral)**

All cases submitted to the Joint Commission for inclusion in the National Board Dental Hygiene Examination must include:

1. Patient box
2. Dental chart
  - Includes odontograms and periodontal probing depths
  - All submissions will be loaded into Dentrix for use on the exam
  - Oral hygiene status and supplemental findings should be entered in Patient Box
3. Photos/radiographs
  - Original, digitized images taken in the year 2000 or later are preferred.
  - Radiographs and photographs can be submitted via the Image Portal:
    - as individual images in their natural format.
    - as TIFF, PNG or JPEG files (TIFF & PNG are preferred).
    - at minimum 4" wide or 1200 pixels at 300ppi.
  - Radiographs must be of diagnostic quality and free of technical errors.
  - Color slides or photographs include:
    - intraoral and/or extraoral views.
    - slides of study casts (for orthodontic and prosthodontics cases).
    - slides of lesions (for cases including oral pathology).
  - Photos should be clear with natural color and contrast, and free of extraneous elements, such as mirrors, retractors, tape, instruments, and fingers.
  - Preferred views include:
    - a full frontal view of both arches in centric occlusion.
    - right and left lateral views in centric occlusion.
    - a full occlusal view of the upper arch.
    - a full occlusal view of the lower arch.
    - additional views—including close-ups of segments of a dental arch or quadrant—may be submitted after the views listed above are submitted to provide proper orientation.
  - Please clearly mark images as Right Side & Left Side or R & L. The orientation (Left & Right) of radiographs and photographs must be clearly labeled as if you are looking at the patient.
7. Copyright Agreement (pg. 5)
8. Case tracking form (pg. 6)
9. Sample Patient Release Form (pg. 7)

\* The orientation (Left-Right) of radiographs and photographs must be clearly labeled.

You must secure and maintain a signed patient release form at your site. Materials must not include any personal information that identifies the patient, e.g. name, SSN.

Please use the image portal to submit a case. If the case is suitable and selected for use on the NBDHE, an honorarium of \$500 will be sent to the case contributor.

[Submit images via the Image Portal.](#)

\*\* Submitted images and case materials become the property of the ADA. Individuals who submit images may continue their use of these images in educational materials, including classroom lectures. Images will be evaluated for quality purposes, and—if of sufficient quality—may be used in any examination program implemented by DTS. For additional information concerning terms and conditions, please visit the Image Portal.

## **CONFIDENTIALITY AGREEMENT**

I am aware that, in my work with the American Dental Association's (ADA's) Department of Testing Services (DTS), I will have access to information that must remain confidential. I understand this requirement and agree to maintain the confidentiality of any materials, recommendations and discussions before, during and after any meetings or activities in which I serve. I further understand that I may be removed from my role in working with the ADA and/or DTS if I fail to keep confidential any exclusive information protected by secrecy that becomes known to me by reason of the performance of my duties.

**Volunteer Initials** \_\_\_\_\_

## **COPYRIGHT AGREEMENT**

I am aware that, in working with the American Dental Association's (ADA's) Department of Testing Services (DTS), I may have access to, work with, or develop copyrighted or copyrightable materials. I acknowledge and agree, individually and collectively, that all such materials belong solely to the ADA and that the ADA holds any and all rights to obtain and retain ownership of copyrights for such materials in its own name. I acknowledge and agree that any and all contributions I make to such materials will be original works, not copies in whole or in part of works of third parties. I acknowledge and agree that the ADA is the sole owner of such materials, and that I have no ownership rights whatsoever in such materials, the ADA has all rights to obtain copyrights for such materials, and such materials constitute "work made for hire" under copyright laws. I assign any and all ownership rights I may have to the ADA, and I agree that I will execute any additional documents necessary to effect this assignment to the ADA upon request.

**Volunteer Initials** \_\_\_\_\_

In signing below, I agree to abide by all terms and agreements set forth in this agreement.

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Signature

Date

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Name (Print Legibly)

## NATIONAL BOARD DENTAL CASE MATERIAL TRACKING SHEET

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Office Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

E-Mail: \_\_\_\_\_

Phone: \_\_\_\_\_

Directions: Please indicate in the **Type of Case** box if a submitted case is an adult, pediatric, or medically compromised case. If an adult case, please indicate if the case focuses primarily on endodontics, periodontics, oral maxillofacial, general, etc.

Case Categories	Type of Case	No. of Radiographs	Panoramic View	No. of Photographs	Patient History	Dental Chart
Adult  Specialty:						
Pediatric						
Medically Compromised						

I have obtained a patient release form for this case.    Yes \_\_\_\_    No \_\_\_\_  
[The form will be maintained at my institution/office.]

**PLEASE RETURN THIS FORM WITH  
SUBMITTED CASE MATERIALS.  
THANK YOU FOR YOUR  
CONTRIBUTION!**

## ***SAMPLE PATIENT RELEASE FORM***

I hereby authorize \_\_\_\_\_ to release  
the information (dentist/dental hygienist's  
name)

in the dental records of \_\_\_\_\_ to the *American*  
(patient's name)

*Dental Association*, Department of Testing Services. The records will

include copies of current radiographs, intraoral and extraoral

photographs – photos of dental casts and any relevant dental

materials or appliances, dental chart, and a brief medical/dental

history. These records will be used for purposes of educational

assessment only. My name and personal identification information

will not be included with these records. I understand that this

authorization is effective on the date signed below and that a copy of

this authorization will be received upon my request.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date