

Candidate Handbook

for the

NDAEB Written Examination

Revised January 2017



Introduction

This handbook provides information to candidates preparing to write the National Dental Assisting Examining Board (NDAEB) Examination. While efforts have been made to ensure the information supplied is accurate, you acknowledge the handbook and its contents are being provided to you on an “as is” basis without any warranties, representations or conditions regarding its accuracy and that all risk associated with its use is assumed by you. In no event will the National Dental Assisting Examining Board or its agents be liable to you for any loss or damage arising, whether directly or indirectly, from your use of this handbook, including any special, indirect or consequential damages, howsoever caused. Should discrepancies occur, please notify the National Dental Assisting Examining Board office at Suite 205, 2255 St. Laurent Blvd, Ottawa, ON, K1G 4K3. Telephone: (613) 526-3424.

In Canada, the regulation of the dental assisting profession lies within the jurisdiction of each province. Provincial governments have mandated the responsibility to a provincial regulatory body called a College, Board, Council or Association.

While the NDAEB will encourage all dental assisting regulatory bodies to recognize the NDAEB certificate as the initial requirement for registration/certification/licensure/ listing in their province, acceptance of the NDAEB certificate is completely at the discretion of the Canadian Dental Assisting Regulatory Authorities.

NDAEB Mission

The NDAEB’s mission is to assure individuals have met the current national baseline standard in the knowledge and skills required by Canadian provincial or territorial regulatory authorities for recognition as an intra-oral dental assistant.

Vision

The NDAEB will strive for excellence in the provision of valid and reliable national dental assisting examinations.

Values

The NDAEB is committed to fairness, transparency and excellence in the services it provides to candidates, stakeholders and the public.



Table of Contents

Introduction.....	1
Application Requirements	3
Fees	4
Application Procedure	4
Application Withdrawal	4
Testing Accommodations and Special Sitings	5
Test Dates and Sites	6
Examination Admission Requirements.....	6
Examination Duration.....	6
Examination Format and Test Blueprint	6
FDI Tooth Numbering System	7
Testing Agency.....	7
Passing Score	7
Key Validation.....	8
Examination Results	8
Examination Re-Writes.....	9
Examination Re-Scoring and Appeals	9
Test Security.....	10
References.....	10
Exam Preparation.....	10
Conduct During the Exam.....	11
Domain Description for Dental Assisting	12
1. Conduct Appropriate to a Professional Setting	12
2. Dental Sciences	12
3. Clinical Support Procedures.....	13
4. Patient Records	14
5. Patient Care Procedures	14
6. Practice Management Procedures	20
7. Laboratory Procedures	20
8. Preventative Procedures.....	21
Preamble – Sample Test Questions.....	24
Answer Key to Sample Questions	35
Appendices.....	34
Appendix A CDA’s Considerations re: Control of Radiation in the Dental Office.....	34
Appendix B Workplace Hazardous Materials Information System.....	37
Appendix C Rules of Conduct and Exam Information.....	43



Application Requirements

Candidates must be deemed eligible to write the NDAEB Examination. Applicants, applying for Examination, who have completed theoretical and clinical education in all National Core Skills from a program of education recognized by the NDAEB, will be eligible for Examination. The National core skills are outlined in the NDAEB Domain Description for Dental Assisting (see section contained in this handbook). Effective June 1999 NDAEB policy requires that students complete their in-office practicum before writing the NDAEB examination. The experience gained during in-office placements may be advantageous as you prepare to write the examination.

Eligibility of Candidates from Canadian Accredited Programs

Applicants applying for Examination from Canadian dental assisting education programs which are accredited by the Commission on Dental Accreditation of Canada (CDAC), are eligible for Examination with proof of successful completion of education (no further verification required).

Eligibility of Candidates from Non-Accredited Programs

Applicants applying for Examination from all other formal schools of dental assisting education not accredited by the (CDAC), must have their credentials reviewed by the Candidate Eligibility Assessment Committee (CEAC), prior to being granted eligibility for registration for examination.

Eligibility of International Applicants

Applicants educated outside Canada who have successfully completed an intra-oral dental assisting program, or equivalent dental program such as dentistry or dental hygiene, who meet the theoretical and clinical education requirements in the National core skills as outlined in the NDAEB Dental Assisting Domain Description, may apply to write the NDAEB Examination. To be considered for eligibility to write the NDAEB exam, the applicant must submit her/his academic credentials to a qualifications assessment service acceptable to the NDAEB. (See the NDAEB website www.ndaeb.ca for details). Following receipt of a report from an NDAEB approved agency, certified true copies of transcript and diploma, to be submitted directly to the NDAEB by the candidate along with a completed Dental Assisting Course Work report, the NDAEB Candidate Eligibility Assessment Committee (CEAC) will review all documents to determine the applicant's eligibility to write the NDAEB exam. In lieu of an agency report, proof of registration and exam eligibility with the National Dental Examining Board of Canada (NDEB) is an acceptable alternative.

Note: The NDAEB requires graduates of a Dental Assisting program (or other formal allied dental health care program) achieved outside of Canada, to provide a course outline, completed by the candidate's educational program, clearly indicating the mandatory core skills required for NDAEB exam eligibility were included in that program. If an outline is not currently on file, the NDAEB will contact the program directly to request a program survey on behalf of the candidate. The CEAC makes the final decision on candidate eligibility. Applicants who do not meet the exam eligibility criteria will be required to complete formal theoretical and clinical education upgrading in Canada prior to being granted exam eligibility. Fees for credential review by an agency are separate from NDAEB exam fees and are the responsibility of the applicant.

The written examination represents Part I of the mandatory two-part NDAEB certificate for international applicants. Part II of the NDAEB certificate requires the successful completion of the NDAEB Clinical Practice Evaluation (CPE) or education in lieu.



Fees

First Time Writer Exam Fee **\$450.00** (CAD only) • Rewrite Exam Fee **\$275.00** (CAD only)

- Notes:**
1. Exam fees **include** a \$50 **non-refundable** application fee.
 2. A \$150.00 (CAD only) assessment fee will apply to all **international credentials assessments** conducted by NDAEB for exam eligibility following receipt of an agency report and academic records.
 3. Fees charged by credentials assessment agencies such as ICES, IQAS or WES and licensing fees charged by regulatory bodies or membership associations are separate from NDAEB exam fees.

Application Procedure

- Complete the NDAEB Exam application which is available on the NDAEB website (www.ndaeb.ca), download and **mail, courier or hand deliver** to the NDAEB office in Ottawa. Be sure to provide a valid email address. You **MUST** also enclose proof of completed dental assisting education (diploma or transcript for Level I and II if taken separately) or a letter from the dental assisting school you are currently attending, confirming the expected successful completion date of the program which must be before the date of the examination you are applying for.
- Enclose appropriate payment (first time or rewrite fee) payable to the NDAEB by money order or bank draft in Canadian funds **ONLY**. (Personal cheques, cash, debit or credit cards or foreign currency will **NOT** be accepted).
- The completed application form, required documentation and payment must be received at the NDAEB business office **no later than 4:30 p.m. Eastern Time** on the application deadline date. Incomplete or late applications will be returned.
- Once the NDAEB receives and approves your examination application, you will receive an email directing you to the *candidate portal* (<https://candidates.ndaeb.ca>) where you can access your registration letter and receipt online.
- Candidates will receive an email approximately 2-3 weeks prior to the examination date directing them to the *candidate portal* where they can access their **Admission Letter**. The letter will include the date, time and site/location of the examination. **To be allowed entry to the exam, candidates must present their Admission Letter in printed format or on their smart phone screen, along with government issued photo ID.** If you have not received your admission letter notification email **7 days** prior to the examination date, please contact the NDAEB office and an email will be resent directing you to the *candidate portal*.
- Admission letters presented on a smartphone screen will be accepted, provided all information is clearly viewable by the exam invigilator at your site. After showing your admission letter to the invigilator, you **MUST turn off your device** which must remain off at all times until you sign out of the exam and depart the testing room.

Application Withdrawal

Exam applications may be withdrawn, however, candidates are assessed withdrawal fees as stated below. Candidates who withdraw **MUST** inform the NDAEB business office **in writing** by mail, email (with signed letter attached) or fax as soon as possible prior to the exam date. Applicants withdrawing from the examination due to circumstances related to illness or emergency, **MUST** accompany their written notification of withdrawal with a physician's certificate or written verification provided by a religious leader or other such professional. Upon review by the NDAEB, examination withdrawal fees may be waived, depending on the circumstances. The NDAEB reserves the right to determine circumstances that qualify as grounds for withdrawal without financial penalty.



Candidates registered for examination and who fail to present for the sitting without providing twenty-four (24) hours prior written notice to the NDAEB are assessed the full examination fee. In the event a candidate is unable to attend the exam sitting for medical or serious personal reasons, their exam fees may be reimbursed, or the candidate may be registered for the next session without additional charge, provided the candidate submits a letter from a physician or other professional, confirming the reason for failing to attend the exam. Candidates must submit their documentation to the NDAEB office no later than 30 days following the exam date they did not attend in order to receive reimbursement or transfer at no cost to the next available exam sitting. Applicants must reapply for another examination if their exam fees are reimbursed. Withdrawn applications will **NOT** be held on file by the NDAEB and will be returned to the applicant.

Withdrawal Fees

Withdrawal within 45 days from the date of examination **\$ 50.00**

Withdrawal within 30 days from the date of examination **\$ 75.00**

Withdrawal within 15 days from the date of examination **\$100.00**

Withdrawal within 48 hours from the date of examination **\$150.00**

Withdrawal with less than 24 hours of the date of examination **\$450 (1st time writer)**

Withdrawal with less than 24 hours of the date of examination **\$275 (rewrite)**

The \$50.00 application fee is non-refundable and applies to all withdrawals regardless of the circumstances causing the candidate to withdraw.

Testing Accommodations and Special Sitings

The NDAEB makes every reasonable effort to administer examinations in a manner that is fair and equitable to all persons.

Testing accommodations or special sitting dates for religious reasons must be approved by the NDAEB. Testing accommodations may include: extra time (time and one half = 6 hours); a quiet (separate) room; an exam reader, an exam recorder (ie., scribe), and/or computerized assistive technology such as Kurzweil.

Note: the duties of an exam reader are to **read aloud** the test questions to the candidate, not to coach the candidate or to provide assistance that would help the candidate select the correct answers. Exam readers are selected by the NDAEB and do not have a background in dental assisting, dentistry or a related field. Candidates must understand that if requesting a recorder for special accommodations, the recorder, the NDAEB and its agents assume no liability and are not responsible for ensuring the accuracy of the Written Examination and/or Clinical Practice Evaluation (CPE) results. It is the candidate's responsibility to ensure their answers are recorded on the answer sheet according to the instructions given to the recorder.

Requests for special sitings and testing accommodations must be received in writing at the NDAEB office **no later than** the application **deadline date** by submitting a signed special sitings/accommodations request form (available at www.ndaeb.ca). Written verification of circumstances requiring special accommodations, e.g. special needs related to learning disabilities or medical conditions must be supported by a report written and signed by a regulated health care professional such as a psychiatrist, clinical psychologist or physician. The report must include a statement confirming that the applicant has an ongoing, recognized disability that requires testing accommodations. **Note:** reports supporting requests for testing accommodations based on learning disabilities or similar conditions must have been dated within the last five years before the exam application deadline date.



Special sitting dates for religious reasons must be supported in writing by a religious leader.

Prayer Times will be observed. Candidates must submit the “Request for Special Accommodations” form stating the number of times required for prayer and the duration to facilitate scheduling by NDAEB staff.

Test Dates and Sites

The NDAEB Examinations are scheduled four (4) times per year on the last Saturday of March, June, September, and the second Saturday in December. Testing centres are located in cities where recognized dental assisting programs (full day programs) are operating.

Candidates may request an alternate, unscheduled testing centre at the time of application. The NDAEB reserves the right to deny the opening of an unscheduled site.

Changes to exam sites **cannot** be made after the application deadline.

Examination Admission Requirements

For admission to the testing centre on examination day, the candidate must:

- Arrive at the examination site at least fifteen (15) minutes early for registration (8:30 a.m.); however, times may vary depending on the number of candidates writing. Refer to your admission letter for your reporting time.
- **Present** the letter of admission provided on the NDAEB candidate portal (<http://candidates.ndaeb.ca>).
- **Present** one (1) piece of **government issued** photo identification with signature (eg: driver’s license or passport)
- **Bring *two* HB pencils and an eraser. Note:** The NDAEB will **NOT** provide pencils and erasers.

Exam Duration

Candidates will be allowed a maximum of 4 hours to complete the examination unless extra time is granted by the NDAEB to accommodate a candidate who has submitted a request for special testing accommodations requiring extra time.

Directives to Candidates will be read at 8:45 a.m.

Exam Time 9:00 a.m. - 1:00 p.m.

Examination Format and Test Blueprint

The examination is composed of 200 multiple choice items and is available in French or English. Many of the items found on the examination are case based (see vignette example later in this handbook). All test items come from the NDAEB test item library. The percentage of items from each of the Domain Description sections that constitutes the test blueprint is noted below. The variation of items encountered on each form of the examination will match the distribution of items as identified in the test blueprint.



Test Blueprint

- Section 1 Conduct Appropriate to a Professional Setting 5 - 10%
- Section 2 Dental Sciences 7 – 12%
- Section 3 Clinical Support Procedures 5 – 10%
- Section 4 Patient Records 5 – 10%
- Section 5 Patient Care Procedures 40 – 50%
- Section 6 Practice Management Procedures 5 – 10%
- Section 7 Laboratory Procedures 5 – 10%
- Section 8 Preventive Procedures 15 – 20%

FDI Two-Digit Notation

FDI Tooth Numbering System

The NDAEB uses the FDI Two - Digit Notation to identify teeth by number.

Each patient's mouth is divided into quadrants: upper-right (Q1), upper-left (Q2), lower-left (Q3) and lower-right (Q4).

For more information regarding the FDI World Dental Federation visit their website at www.fdiworldental.org

Permanent Teeth

upper right							upper left								
18	17	16	15	14	13	12	11	21	22	23	24	25	26	27	28
48	47	46	45	44	43	42	41	31	32	33	34	35	36	37	38
lower right							lower left								

Deciduous teeth (baby teeth)

upper right						upper left									
			55	54	53	52	51	61	62	63	64	65			
			85	84	83	82	81	71	72	73	74	75			
lower right						lower left									

Testing Agency

The National Dental Assisting Examining Board has a contractual agreement with the University of Alberta for the provision of professional testing services. Among their responsibilities, the University of Alberta guides the Written Exam Committee in the development of exam items, scores exam papers and conducts statistical analyses following examinations to determine passing scores.

Passing Score

The NDAEB uses the modified Angoff standard setting method to set passing scores. This standard setting method requires a panel of judges to review the items (questions) and to render judgment on expected candidate performance on each item. On average, the passing score will vary between the low and mid 60s% range, depending on the items (questions) appearing on each test paper. Less difficult forms of the exam tend to have higher passing scores than more difficult exams. As a result, no candidate will be disadvantaged due to having written a more difficult version of the exam. Likewise, no candidate will gain advantage due to having taken a less difficult form of the exam.



Key Validation

Following each exam sitting, prior to the release of exam results to candidates, the Written Exam Committee performs an exercise known as key validation. Key validation involves a statistical performance review of all questions appearing on the examination. Key validation allows the Written Exam Committee to identify specific questions where a high percentage of candidates answered the same question incorrectly. When this occurs, committee members review the questions and answers to determine if:

1. the question was marked correctly
2. there is potentially more than one acceptable answer to the question
3. the question is free from ambiguity
4. the candidates failed to answer the question correctly

If key validation indicates that either 1, 2, or 3 above are the reasons for the statistical inconsistency, the question is either remarked accordingly or deleted from the scoring.

Examination Results

- The University of Alberta scores all examinations and produces the statistical data required to generate examination results.
- Candidates will receive an email notification from the NDAEB **within six (6) weeks of the writing date** advising them that their results have been made available on the candidate portal. **Paper copies of results will no longer be mailed to candidates.**
- Examination results will **not** be given over the telephone, by email or other electronic means.
- Examination results will only be discussed with the candidate in general terms. Candidates requiring detailed information or wishing to appeal must do so in writing. (See Exam Re-scoring and Appeals section.)
- A diploma or final transcript verifying completion of the dental assisting education program, **MUST be provided to the NDAEB office prior to the release of the NDAEB Certificate.**
- The NDAEB will automatically release the exam results of all candidates, pass or fail, to the Canadian Dental Assisting Regulatory Authority (CDARA) in the province in which the candidates wrote the exam. Other CDARA may request exam results on individual candidates who did not write the exam in their province. The NDAEB will release pass or fail exam results to any CDARA upon request. The release of exam results to third parties, other than a CDARA, will only be released with the written consent of the candidate. Please refer to NDAEB privacy policy for details.

Note: When reviewing the exam results letter, scores are reported in each of the 8 areas of the Domain (refer to the Test Blueprint earlier in this handbook). As each of the 8 Domain areas is weighted differently (more questions in some areas than others) overall scores cannot be determined by totaling the individual Domain area scores and dividing by 8. All exam papers are scored electronically by the testing agency and failures rescored by hand to ensure no error was made before releasing exam results to candidates.



Examination Re-Writes

Candidates who achieve a score below the passing score established for a particular exam may apply to rewrite the exam. The NDAEB encourages unsuccessful candidates to re-write at the next available sitting date.

Unsuccessful candidates may seek tutoring help from educational programs however the NDAEB assumes no responsibility for assuring that these programs eg. NDAEB exam preparation courses, will prepare candidates for a successful examination.

Candidates will be permitted three (3) attempts on the NDAEB written examination. Candidates who are unsuccessful following three attempts will be required to retake their entire dental assisting education at a program accredited by the Commission on Dental Accreditation of Canada (CDAC), or a program eligible through the NDAEB curriculum assessment process, should they wish to rewrite the NDAEB exam. For provincial licensure/registration purposes, the NDAEB recommends attending a program accredited by CDAC as not all Canadian Dental Assisting Regulatory Authorities (CDARA) will recognize education completed at non-accredited dental assisting programs.

Examination Re-Scoring and Appeals

Candidates may submit a re-score request or submit an appeal of their examination result.

REQUIREMENTS

1. Requests for an examination re-score or appeal must be received in writing at the NDAEB office no later than 4:30 p.m. Eastern Time on the thirtieth (30th) day after the date of the exam results letter. All requests must be signed by the candidate. Candidates submitting an appeal **must** provide and explain the **grounds / reasons for an appeal** with their written request.
2. In the event a candidate's score is reversed through re-scoring making the candidate eligible for NDAEB Certificate without re-examination, the NDAEB will refund the re-scoring fee and will issue the NDAEB certificate where applicable.
3. The NDAEB Appeals Committee rules on all appeals. Successful appeals **will not** result in the issuing of the NDAEB certificate but **may** result in a rewrite at no cost to the candidate if, in the opinion of the Appeals Committee, conditions during the exam sitting may have contributed to the candidate being unsuccessful. In such cases, the exam score in question **may** be expunged from the candidate's file. All decisions by the Appeals Committee are final and will not be revisited.

RE-SCORING AND APPEAL FEE

Re-Scoring Fee **\$150.00** • Appeal Fee **\$150.00**

Fees must accompany the written request for re-scoring or appeal. The NDAEB accepts bank draft or money order payments only.



Test Security

The NDAEB maintains strict security of the content of the examination before, during and after the examination. Please refer to the section “**Conduct During the Exam**” in this handbook.

All examination materials are protected by copyright ©. Duplication or copying of exam materials in any manner is strictly prohibited.

References

Subject matter for exam questions is based on the NDAEB Domain Description for Dental Assisting included in this Candidate Handbook. All exam questions are referenced to one of the publications listed below. The NDAEB does not require candidates to purchase any specific textbook for study purposes. The NDAEB may use any of the following reference materials to validate examination questions:

1. Clinical Practice of the Dental Hygienist, 12th Edition Wilkins (2017) ISBN 978-1-4511-9311-4 (Chapter 15: Dental Biofilm and Other Soft Deposits; Chapter 22: Dental Stains and Discolorations; Chapter 23: Indices and Scoring Methods; Chapter 28: Oral Infection Control: Toothbrushes and Toothbrushing; Chapter 29: Oral Infection Control: Interdental Care; Chapter 36: Fluorides; Chapter 37: Sealants; Chapter 44: Dentin Hypersensitivity; Chapter 45: Extrinsic Stain Removal; Chapter 46: Tooth Bleaching); *or*

Intraoral Prevention Procedures and Practicum (Selected Chapters from Clinical Practice of the Dental Hygienist, 12th Edition, By Esther M. Wilkins), Customer Edition, Wolters Kluwer Health (2016), ISBN: 978-1-4963-6215-5
2. Dental Assisting, A Comprehensive Approach, 4th Edition Delmar (2013), ISBN 13:978-1-1115-4298-6
3. Modern Dental Assisting, 11th Edition, Torres and Ehrlich (2015), ISBN 978-1-4557-7451-7

Exam Preparation

ATTENTION

Candidates should pay particular attention to preparing for the NDAEB examination. It represents a comprehensive examination of your entire dental assisting educational program. **Adequate preparation time and careful planning are the keys to success.** The NDAEB exam is based on the Domain Description for Dental Assisting. The Domain Description, in the section below, is the document that reflects the national standards of practice established for dental assisting in Canada. Not all dental assisting educational programs are exactly alike, therefore, it is **recommended** that the **Domain Description and all Appendices** in this handbook be used as the **main study** guide, along with one of the **dental assisting textbooks** listed as a reference in this handbook. While course notes may be helpful, using them alone **will not** adequately prepare you for the NDAEB exam. The NDAEB requires that students complete their in-office practicums before attempting to write the NDAEB examination. The experience gained during in-office placements may be advantageous as you prepare to write the examination. Effective June 1999 this became policy.

Candidates who do not prepare adequately may not be successful on the NDAEB examination.



Conduct During The Exam

1. **MINIMIZE BELONGINGS:** Candidates are advised to **minimize the personal belongings** they bring to the exam. Handbags, backpacks and outerwear will be stored in an area designated by the exam administrator and **cannot be accessed** during the exam, including during washroom breaks. **Access** to personal belongings will be **denied** until the candidate has completed the exam and signed out of the testing room. This includes access to electronic devices (see below). The NDAEB and / or the institutions where the exams are administered accept no responsibility for lost or stolen belongings. Exam candidates are advised **not to** bring valuables to the exam site. Candidates do so at their own risk.
2. **LATE ARRIVALS:** Candidates arriving more than **30 minutes** after the exam begins will **not be admitted**. Candidates admitted to the exam room after the exam has commenced and not later than thirty minutes after the start time will **not** be given extra time to complete the exam.
3. **WATER IS PERMITTED:** Clear plastic or other see through type bottles containing **water** only, **ARE** permitted during the exam. Candidates are advised to take care when drinking as spoiled or ruined test papers cannot be scored.
4. **FOOD / SNACKS NOT PERMITTED:** Food and/or snacks are **NOT** permitted in the exam room **except if approved** by the NDAEB to accommodate special medical circumstances/conditions. Requests to bring food into the testing room must be supported by a letter from a physician confirming the need for periodic access to food during the exam due to documented medical reasons. Such requests must be received at the NDAEB office by the exam application deadline date. Foodstuffs approved by the NDAEB **MUST NOT** cause a distraction for other exam candidates resulting from smells or noise when accessing or consuming the item.
5. **ELECTRONIC DEVICES NOT PERMITTED:** Cellular phones, pagers, calculators, computers, electronic readers, scanners, cameras or *any other* electronic device, are **NOT** permitted in the exam room and **MUST** be stored in a bag to be left in an area designated by the invigilator. All electronic devices **MUST** be **turned off** and **MUST remain off** until candidates sign out of the exam and leave the exam room. **Anyone found accessing or using a device** will be automatically **expelled** from the exam sitting and will receive **ZERO** as their test score.
6. **RE-ENTRY TO EXAM ROOM NOT PERMITTED AFTER SIGNING OUT:** Candidates are **not permitted** to reenter the classroom under any circumstances after they have signed out.



Domain Description for Dental Assisting

The Domain Description for Dental Assisting represents the knowledge, skills, attitudes and behaviours the dental assistant should possess upon entry/re-entry into practice and is utilized for:

- Preparing candidates for the exam;
- Dental assisting education (curriculum development);
- Examination development and review.

The Domain Description reflects the national entry level standard established for dental assisting in Canada as agreed upon by stakeholders of the profession.

1. CONDUCT APPROPRIATE TO A PROFESSIONAL SETTING (5-10% of 200 item exam)

- 1.1 Apply the principles of the Provincial/National Code of Ethics including self-reflection as to personal competence to perform assigned, legal duties
- 1.2 Practice according to the principles of dental jurisprudence and Provincial regulatory legislation regarding legal scope of practice
- 1.3 Apply time management, problem solving and critical thinking techniques
- 1.4 Apply effective communication techniques with patients, care givers, service providers and dental health team members including written and electronic formats
- 1.5 Use professionally acceptable medical and dental terminology and abbreviations
- 1.6 Recognize signs of suspected physical, sexual and emotional abuse or neglect and report suspected cases to the appropriate authority
- 1.7 Explain treatment to patients and/or caregivers and respond to questions to help resolve concerns in accordance with the principles of obtaining informed consent
- 1.8 Apply privacy policies according to the Personal Information Protection and Electronic Documents Act (PIPEDA) and provincial privacy laws to all communications

2. DENTAL SCIENCES (7-12% of 200 item exam)

2.1 ORAL ANATOMY

- 2.1.1 Describe, locate and identify structures of the oral cavity
- 2.1.2 Describe, locate and identify soft tissue landmarks of the oral cavity
- 2.1.3 Describe, locate and identify tooth anatomical landmarks
- 2.1.4 Describe, locate and identify the tissues and supporting structures of the teeth
- 2.1.5 State the functions of teeth and their supporting structures

2.2 ANATOMY OF THE HEAD AND NECK

- 2.2.1 Identify and locate the bones of the head and describe their structure and function
- 2.2.2 Identify anatomical landmarks of the head
- 2.2.3 Identify and describe the parts of the temporomandibular joint (TMJ), its movements and disorders
- 2.2.4 Identify the muscles of the face and oral cavity and describe their function
- 2.2.5 Identify and locate the salivary glands and ducts and describe their function
- 2.2.6 Identify and locate the sinuses



- 2.2.7 Identify and describe the innervations of the teeth and surrounding tissue of mandibular and maxillary arches
- 2.2.8 Identify and locate the lymph nodes of the head and neck and describe their functions

2.3 TOOTH DEVELOPMENT AND ERUPTION

- 2.3.1 Describe oral facial development including the teeth
- 2.3.2 Describe tooth eruption and exfoliation patterns

2.4 ORAL PATHOLOGY

- 2.4.1 Describe genetic, developmental and acquired anomalies/pathologies of the hard and soft tissues of the oral cavity
- 2.4.2 Describe the etiology and progression of hard and soft tissue lesions

2.5 MICROBIOLOGY

- 2.5.1 Describe and identify diseases related to micro-organisms including bacteria, spores, viruses, fungi, protozoa and prions
- 2.5.2 Describe the routes of disease transmission

2.6 PHARMACOLOGY

- 2.6.1 Describe the effects and interactions of non-prescription, prescription and controlled drugs on patient care and safety issues
- 2.6.2 Explain the purpose and process of recording medications including dosages and frequency taken
- 2.6.3 Explain the indications for pre-medication prior to dental treatment
- 2.6.4 Interpret information regarding medications taken for medical conditions
- 2.6.5 Explain the clinical indications for antibiotic prophylaxis prior to invasive procedures

3. CLINICAL SUPPORT PROCEDURES (5-10% of 200 item exam)

3.1 PRINCIPLES OF ASEPSIS

- 3.1.1 Explain the rationale for infection prevention procedures in the dental office
- 3.1.2 Explain approved methods for the prevention of disease transmission for patients and dental healthcare providers including:
 - 3.1.2.1 standard infection control procedures
 - 3.1.2.2 sanitation, disinfection, sterilization and storage
 - 3.1.2.3 quality assurance protocols for instrument processing equipment and procedures in accordance with manufacturers' instructions
 - 3.1.2.4 personal protective equipment
 - 3.1.2.5 immunization
- 3.1.3 Discuss the ethical and legal considerations of treating patients with infectious diseases
- 3.1.4 Employ accepted safety standards for infection prevention and handling of hazardous materials and substances in the workplace according to Workplace Hazardous Materials Information System (WHMIS) and Occupational Health and Safety Regulations



- 3.1.5 Employ ethical protocols for injury prevention, exposure control, post-exposure first-aid and maintenance of employee health records
- 3.1.6 Explain protocols used to reduce biofilm within dental unit waterlines and evacuation systems

3.2 EQUIPMENT AND SUPPLIES

- 3.2.1 Identify, operate, and maintain dental instruments and equipment
- 3.2.2 Select and prepare supplies

3.3 TEAM ERGONOMICS

- 3.3.1 Apply principles of ergonomics in positioning the patient/operator/dental assistant throughout all procedures
- 3.3.2 Apply the principles of instrument and material transfer to support procedural efficiency and patient safety
- 3.3.3 Use appropriate instrumentation techniques to ensure procedural efficiency and patient safety

4. PATIENT RECORDS (5-10% of 200 item exam)

- 4.1 Apply protocols to comply with legal requirements for maintaining and transferring patient records/documents in both paper-based and electronic systems.
- 4.2 Complete and update patient records/documents using paper-based and electronic systems to include:
 - 4.2.1 personal history
 - 4.2.2 health history
 - 4.2.3 intra-oral/extra-oral examination
 - 4.2.4 oral hygiene indices
 - 4.2.5 diagnostic study models and bite registration
 - 4.2.6 radiographs
 - 4.2.7 photographs
 - 4.2.8 vital signs
 - 4.2.9 consent forms
 - 4.2.10 care /treatment plan and progress notes/treatment records/medications administered
- 4.3 Relate patient health history information to treatment
- 4.4 Use professionally acceptable terminology, charting symbols, abbreviations and tooth numbering systems

5. PATIENT CARE PROCEDURES (40-50%)

5.1. OBTAIN VITAL SIGNS

- 5.1.1 Explain the rationale for obtaining vital signs
- 5.1.2 Describe procedures for measuring pulse, temperature, blood pressure, and respiration with reference to “normal” ranges
- 5.1.3 Describe factors that affect vital signs
- 5.1.4 Obtain vital signs including blood pressure, pulse, respirations and temperature



5.2 COLLECT DIAGNOSTIC INFORMATION

5.2.1 Assist with diagnostic procedures

5.2.1.1 State the types of and provide the rationale for performing diagnostic procedures

5.2.1.2 Prepare and transfer equipment and supplies for diagnostic procedures

5.2.2 Obtain preliminary impressions for study models

5.2.2.1 State the rationale for obtaining preliminary impressions and bite registrations for the fabrication of study models

5.2.2.2 Select and prepare equipment and supplies specific to the patient's dentition and anatomy

5.2.2.3 Manipulate preliminary impression material

5.2.2.4 Obtain mandibular and maxillary preliminary impressions following procedural steps

5.2.2.5 Evaluate impressions

5.2.2.6 Disinfect impressions

5.2.2.7 Prepare impressions for storage and pouring

5.2.2.8 Obtain, evaluate and disinfect simple bite registrations

5.2.2.9 Provide pre-operative, operative and post operative information/instructions

5.2.3 Produce digital and conventional film based radiographic images

5.2.3.1 Describe components of x-ray machines and their functions

5.2.3.2 Describe factors that affect the quantity and quality of the x-ray beam

5.2.3.3 Describe composition of dental film and types of digital imaging receptors

5.2.3.4 Describe components of the dental film packet and their purposes

5.2.3.5 Describe care, storage and handling of dental films and digital imaging receptors

5.2.3.6 Describe the biological effects of radiation exposure

5.2.3.7 Describe personal radiation monitoring devices and procedures

5.2.3.8 Describe the types of radiographic images and the rationale for their use

5.2.3.9 Provide pre-exposure information and instructions to the patient

5.2.3.10 Apply principles of extra-oral and intra-oral radiographic techniques

5.2.3.11 Select and prepare equipment and supplies

5.2.3.12 Expose prescribed radiographic images in accordance to A.L.A.R.A. principles when using conventional film based or digital radiography

5.2.3.13 Apply quality assurance standards

5.2.3.14 Process exposed conventional films

5.2.3.15 Explain causes and corrective measures for radiographic image exposure, processing and handling errors



- 5.2.3.16 Describe radiographic image duplicating procedures
- 5.2.3.17 Evaluate radiographic images for technical quality, accuracy and diagnostic acceptability
- 5.2.3.18 Describe the difference between radiolucent and radiopaque
- 5.2.3.19 Identify and describe anatomical landmarks and dental anomalies on radiographic images
- 5.2.3.20 Mount, label and store/save radiographic images
- 5.2.3.21 Differentiate between direct and indirect digital imaging

5.3 EMERGENCY CARE

- 5.3.1 Assist with the assembly and maintenance of emergency supplies, drugs and equipment
- 5.3.2 Assist in the prevention and management of dental office emergencies
- 5.3.3 Identify and interpret signs and symptoms of medical conditions which may require emergency care
- 5.3.4 Assist in the management and treatment of dental emergencies

5.4 MANAGEMENT OF PATIENTS WITH SPECIAL NEEDS

- 5.4.1 Schedule appointments to accommodate patients with special needs
- 5.4.2 Adapt procedures according to patients' physical needs and mobility limitations
- 5.4.3 Provide information and instructions to patients and care givers with consideration of their cognitive level and communication ability

5.5 ANAESTHESIA AND PAIN MANAGEMENT

- 5.5.1 Assist with the administration of topical and local anaesthetic
 - 5.5.1.1 Identify precautions during application of topical and administration of local anaesthetic
 - 5.5.1.2 Describe injection techniques and locate injection sites
 - 5.5.1.3 Describe signs and symptoms of adverse reactions to anaesthetic
 - 5.5.1.4 Describe procedure for application of topical and administration of local anaesthetic
 - 5.5.1.5 Prepare equipment and supplies for topical and local anaesthetic administration
 - 5.5.1.6 Monitor patient for signs of anxiety and adverse reactions to anaesthetic
 - 5.5.1.7 Apply techniques for the safe handling of needles
 - 5.5.1.8 Manage needlestick injuries according to protocols
 - 5.5.1.9 Provide pre-operative, operative and post operative information/instructions for administration of topical and local anaesthetic
- 5.5.2 Apply topical anaesthetic agents as prescribed
 - 5.5.2.1 Select and prepare equipment and supplies for treatment
 - 5.5.2.2 Prepare injection site and apply the topical anaesthetic according to manufacturer's instructions
 - 5.5.2.3 Assess tissue for adverse reactions and apply corrective measures



5.5.3 Assist with sedation and general anaesthesia

- 5.5.3.1 Differentiate between levels of sedation and general anaesthesia
- 5.5.3.2 Identify contra-indications for the administration of sedation and anaesthesia and monitor patient for adverse reactions to each
- 5.5.3.3 Describe signs and symptoms of adverse reactions to anaesthesia and sedation
- 5.5.3.4 Prepare equipment and supplies and monitor patient for signs of adverse reactions related to sedation and anaesthesia
- 5.5.3.5 Record and monitor vital signs before, during and after sedation and anaesthesia
- 5.5.3.6 Provide verbal/written, pre-operative, operative, post-operative and home care information/instructions

5.6 MOISTURE CONTROL TECHNIQUES

- 5.6.1 State indications and contra-indications for various moisture control techniques
- 5.6.2 Select equipment and supplies, prepare for and assist with moisture control
- 5.6.3 Place and remove moisture control equipment and supplies
- 5.6.4 Apply and remove dental dam
 - 5.6.4.1 Select and prepare equipment and supplies considering the patient's dentition and prescribed procedure
 - 5.6.4.2 Assist with the application and removal of dental dam
 - 5.6.4.3 Apply and remove dental dam following procedural steps
 - 5.6.4.4 Evaluate dental dam placement and isolation effectiveness
 - 5.6.4.5 Identify and correct dental dam positioning and isolation errors
 - 5.6.4.6 Provide pre-operative, operative and post operative information/instructions
- 5.6.5 Position oral evacuation to maintain a dry operating field and patient comfort

5.7 OPERATIVE DENTISTRY PROCEDURES

- 5.7.1 Identify cavity/restoration classifications
- 5.7.2 Use terminology associated with cavity preparation and restorations
- 5.7.3 Assist with the application of treatment liners
 - 5.7.3.1 Describe the functions and benefits of liners, bases, varnishes, cements and bonding materials and the indications and contra-indications for their use
 - 5.7.3.2 Describe the components of bonding systems, their uses, effects and precautions
 - 5.7.3.3 List the order of placement and location for treatment liners
 - 5.7.3.4 Prepare, manipulate and transfer treatment liner, acid etchant and bonding materials according to manufacturer's instructions



- 5.7.4 Apply treatment liners (no pulpal involvement), acid etch and bonding materials.
 - 5.7.4.1 Select and prepare equipment and supplies
 - 5.7.4.2 Apply treatment liners, acid etchant and bonding materials following procedural steps
 - 5.7.4.3 Evaluate placement according to criteria and make modifications as necessary
- 5.7.5 Assist with the application and removal of matrix systems and wedges
 - 5.7.5.1 State the rationale for using matrix systems and wedges
 - 5.7.5.2 Select and assemble matrix system and wedge(s) for prescribed restorative procedures
 - 5.7.5.3 Assist with placement and removal of matrix system and wedge(s)
- 5.7.6 Apply and remove matrix system and wedge(s)
 - 5.7.6.1 Select and prepare equipment and supplies
 - 5.7.6.2 Apply matrix system and wedge(s) following procedural steps
 - 5.7.6.3 Evaluate placement according to criteria
 - 5.7.6.4 Correct application errors
 - 5.7.6.5 Remove matrix system and wedge(s) following procedural steps
 - 5.7.6.6 Evaluate removal according to criteria
- 5.7.7 Assist with preparation and placement of permanent restorative materials.
 - 5.7.7.1 Describe the properties and explain the rationale for the use of amalgam and tooth-coloured restorative materials
 - 5.7.7.2 Prepare equipment and supplies and assist with amalgam placement and finishing procedures, observing mercury hygiene practice
 - 5.7.7.3 Describe tooth-coloured restorative materials and their polymerization
 - 5.7.7.4 Prepare equipment and supplies and assist with placement and finishing of tooth coloured restorative materials
 - 5.7.7.5 Provide verbal/written, pre-operative, operative, post-operative and home care information/instructions
- 5.7.8 Dispense and/or mix temporary restorative materials
 - 5.7.8.1 Explain the rationale for using various types of temporary restorative materials
 - 5.7.8.2 Prepare equipment and supplies and assist with placement of temporary restorative materials
 - 5.7.8.3 Provide verbal/written, pre-operative, operative, post-operative and home care information/instructions
- 5.7.9 Assist with tooth whitening techniques
 - 5.7.9.1 State indications and contra-indications for whitening of vital and non-vital teeth
 - 5.7.9.2 Describe tooth whitening materials and techniques
 - 5.7.9.3 Describe the complications which may result from tooth whitening



- 5.7.9.4 Prepare equipment and supplies and assist with tooth whitening
- 5.7.9.5 Provide verbal/written, pre-operative, operative, post-operative and home care information/instructions
- 5.7.10 Assist with placement of dental implants
 - 5.7.10.1 State indications and contra-indications for the placement of the various types of dental implants
 - 5.7.10.2 Describe the diagnostic tests and information necessary to prepare for dental implant placement
 - 5.7.10.3 Prepare equipment and supplies and assist with the placement of dental implants
 - 5.7.10.4 Describe complications that may arise from the placement of dental implants
 - 5.7.10.5 Provide verbal/written, pre-operative, operative, post-operative and home care instructions

5.8 ORAL AND MAXILLOFACIAL SURGICAL PROCEDURES

- 5.8.1 State indications and contra-indications for surgical procedures
- 5.8.2 Prepare equipment and supplies and assist with surgical procedure
- 5.8.3 Monitor patient's condition prior to, during and after surgical procedures
- 5.8.4 Describe complications which may arise from surgical procedures and their treatment
- 5.8.5 Provide verbal/written, pre-operative, operative, post-operative and home care information/instruction
- 5.8.6 Perform suture removal
 - 5.8.6.1 Identify various suture materials and techniques
 - 5.8.6.2 Assess soft tissue for signs of healing, infection or post-operative complications and record/report to dentist
 - 5.8.6.3 Evaluate site to determine where to cut suture
 - 5.8.6.4 Cut and remove suture
 - 5.8.6.5 Provide patient with post-operative care instructions following suture removal
 - 5.8.6.6 Provide verbal/written, pre-operative, operative, post-operative and home care information/instructions

5.9 ENDODONTIC PROCEDURES

- 5.9.1 State indications and contra-indications for endodontic procedures
- 5.9.2 Describe diagnostic tests to determine tooth vitality
- 5.9.3 Prepare equipment and supplies and assist with endodontic procedures in both primary and permanent dentitions
- 5.9.4 Describe complications which may arise from endodontic procedures and their treatment
- 5.9.5 Provide verbal/written, pre-operative, operative, post-operative and home care information/instructions



5.10 PERIODONTIC PROCEDURES

- 5.10.1 State indications and contra-indications for periodontic procedures
- 5.10.2 Describe periodontal screening and recording
- 5.10.3 Prepare equipment and supplies and assist with periodontic procedures
- 5.10.4 Describe complications which may arise from periodontic procedures and their treatment
- 5.10.5 Provide verbal/written, pre-operative, operative, post-operative and home care information/instructions

5.11 PROSTHODONTIC PROCEDURES

- 5.11.1 Differentiate between fixed and removable prostheses
- 5.11.2 State indications and contra-indications for fixed and removable prostheses
- 5.11.3 Prepare equipment and supplies and assist with prosthodontic procedures
- 5.11.4 Describe the dental assistant's role in coordinating the preparation, packaging, delivery and reception of lab cases
- 5.11.5 Describe complications which may arise from prosthodontic procedures and their treatment
- 5.11.6 Provide verbal/written, pre-operative, operative, post-operative and home care information/instructions

5.12 ORTHODONTIC PROCEDURES

- 5.12.1 Describe and classify occlusion and malocclusion according to Angle's Classification
- 5.12.2 Use terminology associated with malaligned teeth and arches
- 5.12.3 Identify and describe factors affecting occlusion
- 5.12.4 Differentiate between fixed and removable orthodontic appliances
- 5.12.5 State indications and contra-indications for orthodontic treatment
- 5.12.6 Prepare equipment and supplies and assist with orthodontic procedures
- 5.12.7 Describe the dental assistant's role in written and verbal communication with the dental lab
- 5.12.8 Coordinate the preparation, packaging, delivery and reception of lab cases
- 5.12.9 Describe complications which may arise from orthodontic procedures and their treatment
- 5.12.10 Provide verbal/written, pre-operative, operative, post-operative and home care information/instructions

6. PRACTICE MANAGEMENT PROCEDURES (5-10% of 200 item exam)

- 6.1 Manage and maintain filing, recall and inventory systems in both paper-based and electronic systems
- 6.2 Manage patient appointments, referrals and consultations
- 6.3 Manage and maintain financial records in both paper-based and electronic systems

7. LABORATORY PROCEDURES (5-10% of 200 item exam)

- 7.1 Process impressions, trim and finish models
- 7.2 Fabricate appliances and trays
- 7.3 Maintain supplies and instruments, operate equipment and manipulate materials following protocols for safety and asepsis



8. PREVENTIVE PROCEDURES (15-20% of 200 item exam)**8.1 PROVIDE ORAL HYGIENE INSTRUCTION**

- 8.1.1 Describe the periodontal disease process and the factors affecting its development and progress
- 8.1.2 Describe the caries process and the factors affecting its development and progress
- 8.1.3 Describe the indications, contra-indications, types, purposes and methods of applying disclosing agents
- 8.1.4 List and describe oral hygiene indices
- 8.1.5 Apply the principles of instruction and learning to individuals and groups
- 8.1.6 Collect data to assess patient needs using methods such as: plaque/biofilm indices, disclosing agents in addition to observation of tissue condition
- 8.1.7 Develop oral hygiene goals using patient centered approach
- 8.1.8 Select and demonstrate oral care aids specific to oral conditions to achieve goals
- 8.1.9 Apply disclosing agents
- 8.1.10 Evaluate outcomes of oral hygiene instruction, provide feedback and make necessary modifications

8.2 PROVIDE NUTRITIONAL COUNSELING RELATIVE TO ORAL HEALTH

- 8.2.1 List nutrients, their sources, functions and effects
- 8.2.2 Collect data to assess patient's nutritional needs
- 8.2.3 Develop dietary goals using patient centered approach
- 8.2.4 Make dietary recommendations specific to oral health conditions utilizing "Canada's Food Guide for Healthy Living"
- 8.2.5 Evaluate nutritional counseling outcomes, provide feedback and make recommendations and/or modifications

8.3 PERFORM SELECTIVE CORONAL POLISHING

- 8.3.1 State the rationale, indications and contra-indications for selective coronal polishing
- 8.3.2 Differentiate between intrinsic and extrinsic stain
- 8.3.3 Describe the etiology of stains
- 8.3.4 Select and prepare equipment and supplies specific to the patient's needs
- 8.3.5 Remove stain according to procedural steps
- 8.3.6 Evaluate selective coronal polishing outcomes and make any necessary modifications
- 8.3.7 Provide verbal/written, pre-operative, operative, post-operative and home care information/instructions

8.4 APPLY ANTI-CARIOGENIC AGENTS

- 8.4.1 State the rationale, indications and contra-indications for application
- 8.4.2 Describe the effects of anti-cariogenic agents on tooth structure
- 8.4.3 Describe methods for topical application of anti-cariogenic agents
- 8.4.4 Assess patient needs for appropriate anti-cariogenic agents selection
- 8.4.5 Select and prepare equipment and supplies for various types of anti-cariogenic agents specific to the patient's needs
- 8.4.6 Apply anti-cariogenic agents according to manufacturer's instructions



- 8.4.7 Evaluate anti-cariogenic agent outcomes, provide feedback and make necessary recommendations and/or modifications
- 8.4.8 Provide verbal/written, pre-operative, operative, post-operative and home care information/instructions

8.5 APPLY PIT AND FISSURE SEALANTS

- 8.5.1 State the rationale, indications and contra-indications for application
- 8.5.2 Describe sealant materials and their polymerization
- 8.5.3 Select and prepare equipment and supplies for prescribed treatment
- 8.5.4 Evaluate the effectiveness of various moisture control techniques
- 8.5.5 Prepare prescribed surfaces and apply sealant material according to manufacturer's instructions
- 8.5.6 Evaluate sealant placement according to criteria and make modifications if required
- 8.5.7 Provide verbal/written, pre-operative, operative, post-operative and home care information/instructions

8.6 APPLY DESENSITIZING AGENTS

- 8.6.1 State the rationale, indications and contra-indications for application
- 8.6.2 Describe desensitizing agents and their mode of action
- 8.6.3 Select and prepare equipment and supplies for prescribed treatment
- 8.6.4 Prepare prescribed surfaces and apply material according to manufacturer's instructions
- 8.6.5 Evaluate the application of the desensitizing agent according to criteria and make modifications if required
- 8.6.6 Provide verbal/written, pre-operative, operative, and post-operative and home care information/instructions

8.7 PERFORM TOOTH WHITENING USING TRAYS

- 8.7.1 State the rationale, indications and contra-indications for patient use
- 8.7.2 Select and prepare equipment and supplies
- 8.7.3 Determine existing tooth shade prior to whitening
- 8.7.4 Demonstrate and deliver the product to the patient according to manufacturer's instructions
- 8.7.5 Identify and explain effects of improper use of whitening products
- 8.7.6 Provide verbal/written, pre-operative, operative, post-operative and home care information/instructions



Terminology Used in the Domain Description

The following terms are used in the Domain Description:

1. **Patient (s)** – refers to: individuals, groups or community
2. **Special Needs** – refers to patients who require modifications in the approach to dental care including: children, geriatric patients, pregnant women and patients who are medically, mentally or physically compromised.
3. **Dental Material/Biomaterials** – are addressed as they pertain to specific procedures

Notes:

1. **Digital Radiography** – The NDAEB recognizes that not all educational institutions have digital radiography facilities and therefore does not expect candidates to have clinical experience with digital equipment. Items (questions) appearing on the NDAEB exam pertaining to digital radiography will be based on entry level theoretical knowledge of process and equipment, referenced to the textbooks listed in the candidate handbook.
2. **Practice Management Procedures** – The NDAEB recognizes that not all educational institutions provide students with access to computerized dental office management systems/software. As a result, items (questions) appearing on the NDAEB exam related to dental practice management procedures will be based on entry level knowledge, referenced to the textbooks listed in the candidate handbook.



Preamble - Sample Test Questions

The following sample test items (questions) are examples of the kinds of questions candidates should be prepared to answer on the NDAEB examination. Many, but not all, items in the test item library have been developed in a vignette style where a description of a clinical situation precedes specific individual questions. Matching items will also appear on the exam. The number of questions that relate to any given scenario will usually vary from 3-6. The examination will also include stand alone items (those that have no clinical scenario preceding them). Individual questions will cover a broad spectrum of the Domain Description for Dental Assisting found in this handbook. All items in the test item library are updated regularly to ensure they test to current standards. All items and their correct answers are referenced to the Domain Description and to one of the current dental assisting textbooks commonly used in dental assisting education in Canada as listed in this handbook.

Sample Test Questions

1. Stand alone items: A single multiple choice item requiring the candidate to select best/correct answer. Item 1 below is an example of a stand alone item.
2. Vignette: case based items. These consist of a description of a case scenario (vignette) followed by a number of associated items. Items 5–12 are a set of items all related to a common vignette.
3. Matching Items: consist of a vignette along with a set of answers and several associated items. Items 38 to 40 are examples of items related to the vignette and the set of answers. Each of the answers may be used. Use the following sample questions to test your dental assisting knowledge and preparedness for the NDAEB exam. Candidates should note that items appearing on the NDAEB exam may not be exactly as shown below as some items may include photo images or vignettes of various lengths. Your ability to successfully answer the questions below does not guarantee a passing mark on the NDAEB exam. Study is required.

Sample Questions:

ITEM 1

In relation to dental radiography, which one of the following terms refers to the anatomical landmark used to identify a maxillary canine periapical film?

1. Maxillary sinus.
2. Mental foramen.
3. Bifurcated roots.
4. Maxillary tuberosity.

Domain reference: 5.2.3.19



ITEM 2

Prior to exposing a dental radiograph/image, placement of the lead apron over the patient protects which one of the following tissues?

1. Vascular.
2. Gonadal.
3. Muscular.
4. Digestive.

Domain reference: 5.2.3.6

ITEM 3

A blood pressure cuff should be placed over which one of the following arteries?

1. Pulmonary.
2. Brachial.
3. Carotid.
4. Radial.

Domain reference: 5.1.2

ITEM 4

Which three factors are essential in order to produce accurate diagnostic casts?

1. Water to powder ratio, temperature of gypsum and force of mixing.
2. Water temperature, form of gypsum used and force of mixing.
3. Water to powder ratio, mixing time and water temperature.
4. Type of spatula used, vibration and water temperature.

Domain reference: 7.1

ITEM 5

What is the name of the adhesive film which retains bacterial colonies to the teeth?

1. Striae.
2. Pellicle.
3. Calculus.
4. Materia alba.

Domain reference: 8.1.2

ITEM 6

Which one of the following radiographic images is most useful in detecting interproximal caries?

1. Panoramic.
2. Periapical.
3. Bite-wing.
4. Occlusal.

Domain reference: 5.2.3.8



ITEM 7

Which one of the following fluids provides lubrication during the movements of the temporomandibular joint?

1. Blood.
2. Saliva.
3. Synovial fluid.
4. Lymphatic fluid.

Domain reference: 2.2.3

ITEM 8

What is the correct way to store scrap amalgam?

1. In a plastic waste container.
2. In a glass container filled with water.
3. In a metal container with sodium hypochlorite.
4. In a tightly closed mercury recycling container.

Domain reference: 3.1.4

ITEM 9

In a steam sterilizer, the distilled water is converted to steam then condensed back into liquid water. What happens to the condensed water?

1. It is drained from the sterilizer and discarded down the drain in the sink.
2. The sterilizer continues to convert the water to steam over and over.
3. It will require shock treatment to eliminate bacteria.
4. It must be collected as contaminated liquid waste.

Domain reference: 3.2.1

Vignette Based Sample Questions**VIGNETTE ITEMS 10 – 13**

A patient presents to the dental office with concerns about sensitivity on a lower canine tooth. The dentist performs an examination and diagnoses gingival recession and abrasion on the facial root surface of tooth 33. The patient has 100% dental insurance coverage for diagnostic, preventive and restorative services.

ITEM 10

What is the etiology of the sensitivity?

1. Exposed pulp.
2. Exposed dentinal tubules.
3. Hypersensitive dentogingival fibers.
4. Damaged periodontal ligament fibers.

Domain reference: 2.1.4



ITEM 11

Which one of the following conditions could cause the tooth pathology?

1. Use of an abrasive dentifrice.
2. Fingernail biting.
3. A fibrous diet.
4. Bulimia.

Domain reference: 2.4.2

ITEM 12

Which of the following terms refers to the dentist with regard to the dental insurance?

1. Carrier.
2. Provider.
3. Beneficiary.
4. Assignment.

Domain reference: 6.3

ITEM 13

The patient should be encouraged to use a dentifrice containing fluoride and which other chemical agent?

1. Triclosan.
2. Gluteraldehyde.
3. Potassium nitrate.
4. Pyrophosphate salts.

Domain reference: 8.1.8

VIGNETTE ITEMS 14 – 16

A 24-year-old patient presents for an emergency exam. During the interview it is noted that he is a heavy smoker and has been under a great deal of emotional stress. The clinical examination findings are: a biofilm index of 3 with some ulceration of interdental papillae.

ITEM 14

Which one of the following gingival conditions does this patient have?

1. Herpetic gingivostomatitis.
2. Necrotizing periodontitis.
3. Aggressive periodontitis.
4. Pericoronitis.

Domain reference: 2.4.1



ITEM 15

What is the recommended treatment for this patient?

1. Scaling and curettage, brushing and flossing twice per day, fluoride.
2. Debridement, careful brushing at home, warm water rinses.
3. Daily chlorhexadine rinses, stop smoking aids.
4. Gingivectomy.

Domain reference: 5.10.1

ITEM 16

What does the biofilm index assigned to this patient mean?

1. No accumulated biofilm.
2. Marginal biofilm only.
3. Moderate biofilm levels that can be easily seen.
4. Heavy biofilm accumulations on both the tooth and gingival surfaces.

Domain reference: 8.1.4

VIGNETTE ITEMS 17 – 20

A 7-year-old falls down some stairs, and is immediately transported to a hospital dental facility. Clinical examination of the injured area reveals that tooth 11 has a fracture with pulpal exposure and that 21 has been avulsed. The patient's father has the avulsed tooth.

ITEM 17

For the re-implantation of the tooth to have the highest success rate, how quickly should it be placed back into the alveolus?

1. Within 30 minutes.
2. Within 45 minutes.
3. Within the first hour.
4. Within the first few hours.

Domain reference 5.3.4

ITEM 18

How should the avulsed tooth have been kept during transportation to the hospital?

1. In disinfectant.
2. Wrapped in wet gauze.
3. In a container of liquid fluoride.
4. Wrapped in a dry, sterile gauze or bandage.

Domain reference: 5.3.4



ITEM 19

What would be used to stabilize the re-implanted tooth?

1. An acrylic splint.
2. Temporary cement.
3. A custom-fit mouthguard.
4. Polyvinyl siloxane or silicone.

Domain reference: 5.3.4

ITEM 20

Which one of the following treatments would be correct for tooth 11?

1. Zinc-oxide-eugenol sedative restoration.
2. Glass ionomer base and stainless steel crown.
3. Calcium hydroxide pulp cap and interim resin restoration.
4. Desensitizing dentin sealer, pin-retained composite resin restoration.

Domain reference: 5.7.8.1

VIGNETTE ITEMS 21 – 24

A 75-year-old patient presents at the dental office with a fractured tooth 46. While reviewing the medical history, the dental assistant notes that the patient has rheumatoid arthritis and type II diabetes. The clinical examination also reveals generalized gingival recession, cervical tooth abrasion and several root caries.

ITEM 21

What is the main cause of this patient's oral conditions?

1. Biofilm.
2. Calculus.
3. Medications.
4. Materia alba.

Domain reference: 2.4.2

ITEM 22

Which one of the following complications is associated with the patient's medical conditions?

1. Anaphylaxis.
2. Hypotension.
3. Xerostomia.
4. Vertigo.

Domain reference: 4.3



ITEM 23

Which one of the following tooth brushing techniques should be recommended for this patient?

1. Fones.
2. Bass sulcular.
3. Rolling stroke.
4. Horizontal scrub.

Domain reference: 8.1.8

ITEM 24

Due to the patient's disclosed medical condition, the dental assistant may suggest which one of the following oral health aids?

1. Interdental picks.
2. Waxed dental floss.
3. A modified toothbrush handle.
4. Antimicrobial mouth rinse to replace brushing.

Domain reference: 8.1.8

VIGNETTE ITEMS 25 – 28

A patient presents for a bridge preparation. The dentist administers the local anaesthetic then the dental assistant takes an alginate impression of the lower left quadrant. Teeth 36 and 37 are missing and tooth 38 has drifted into the 37 position. The bridge will go from tooth 35 to tooth 38. The insurance plan provides 80% reimbursement for this type of treatment.

ITEM 25

In which direction has tooth 38 moved?

1. Distally.
2. Labially.
3. Mesially.
4. Lingually.

Domain reference: 5.12.2

ITEM 26

What type of provisional restoration would be best for this patient?

1. Custom acrylic.
2. Zinc oxide eugenol.
3. Preformed aluminum.
4. Porcelain fused to metal.

Domain reference: 5.11.3



ITEM 27

What will the alginate impression be used for?

1. An opposing arch model.
2. As a matrix for the provisional.
3. To design the anatomy of the retainers.
4. To determine the occlusal clearance required.

Domain reference: 5.11.3

ITEM 28

How many units will the patient's bridge consist of?

1. 2
2. 3
3. 4
4. 5

Domain reference: 5.11.3

VIGNETTE ITEMS 29 – 32

A patient presents for an emergency examination of tooth 16. The tooth has been sensitive to pressure for several weeks and the patient indicates that it is getting worse. The dentist does an intra-oral examination and prescribes a direct digital periapical radiograph of the area. The dental assistant is directed to assemble equipment and supplies for pulp vitality testing.

ITEM 29

Where would the dental assistant place the sensor for the prescribed image?

1. At 90 degree angle to the long axis of the tooth.
2. Away from the tooth, near the vault of the palate.
3. Vertically positioned, as close to the tooth as possible.
4. Horizontally positioned, slightly away from the mylohyoid ridge.

Domain reference: 5.2.3.10

ITEM 30

What radiolucent structure would the dental assistant expect to see near the apex of the fractured tooth?

1. Lamina dura.
2. Maxillary sinus.
3. Zygomatic arch.
4. Parotid salivary gland.

Domain reference: 5.2.3.19



ITEM 31

Which one of the following teeth would be best as the control tooth for the pulp vitality test?

1. 17
2. 15
3. 26
4. 46

Domain reference: 5.9.2

ITEM 32

The cold test for the tooth causes an intense pain that does not resolve for a few minutes. What diagnosis is most probable?

1. Normal pulp.
2. Necrotic pulp.
3. Reversible pulpitis.
4. Irreversible pulpitis.

Domain reference: 5.9.1

Matching type sample questions:

A dental assistant must be able to self-correct errors made during dental dam punching and placement. From the list of errors below, chose the one that best matches the scenario given in the item. Each error may be used once, more than once or not at all.

1. Holes are punched too large.
2. Arch is punched too flat.
3. Holes are punched too far apart.
4. Arch is punched too curved.

33. Bunching and stretching on lingual of dam when placed.

34. Folding occurs on the facial aspect of completed dam.

35. Inversion of the dam is impossible, resulting in leakage throughout.

36. Excess dam material is present between all exposed teeth.

37. Bunched dam material on the mesial and distal of the operative tooth results in the handpiece catching and tearing the dam septa.

Domain reference: 5.6.4.5



A dental assistant is responsible for performing rubber cup polishing. Patients present with many types of stains. From the list of stains below, select the one that best matches the description given. Each type of stain may be used once, more than once or not at all.

1. Orange.
 2. Yellow.
 3. Tobacco.
 4. Chlorhexadine.
38. Black tenacious deposits are present in pits and fissures, on enamel and on restorations.
39. A non-smoker presents with yellow-brown stains on interproximal and cervical areas of the teeth, as well as on restorations, dorsal surface of the tongue and within retained biofilm.
40. A 12-year-old patient presents with stains on the buccal surfaces of maxillary permanent molars and lingual surfaces of lower anterior teeth. The recorded biofilm index is 2.

Domain reference: 8.3.3

Answer Key to Sample Questions:

Item 1: 1	Item 21: 1
Item 2: 2	Item 22: 3
Item 3: 2	Item 23: 2
Item 4: 3	Item 24: 3
Item 5: 2	Item 25: 3
Item 6: 3	Item 26: 1
Item 7: 3	Item 27: 2
Item 8: 4	Item 28: 2
Item 9: 1	Item 29: 2
Item 10: 2	Item 30: 2
Item 11: 1	Item 31: 3
Item 12: 2	Item 32: 4
Item 13: 3	Item 33: 2
Item 14: 2	Item 34: 4
Item 15: 2	Item 35: 1
Item 16: 4	Item 36: 3
Item 17: 1	Item 37: 3
Item 18: 2	Item 38: 3
Item 19: 1	Item 39: 4
Item 20: 3	Item 40: 2



Appendix A

Canadian Dental Association's Considerations re: Control of Radiation in the Dental Office
Considerations re: Control of X-Radiation in Dentistry

Introduction

Since the Federal Government maintains jurisdiction over the standards of the construction and functioning of x-ray equipment, while its installation, registration and office design criteria for its use are promulgated by provincial legislatures, any guidelines developed by CDA for the use of x radiation in the dental office should not deal specifically with legislative areas, but rather set forth guidelines which reflect and demand professional competence and judgement.

General Guidelines

1. All x-ray equipment, and its accessories, must conform to the Federal requirements of the Radiation Emitting Devices Act and the Food and Drugs Act.
2. All equipment installation and room design criteria must conform to provincial regulations. In the absence of existing provincial regulations in any particular jurisdiction, the dentist should refer to Health Canada Safety Code 30.
3. All operators should possess an adequate knowledge of the physics and potential hazards of x radiation, and be able to produce consistent radiographs of diagnostic quality, keeping the dose to the patient as low as reasonably achievable (ALARA). All operators should be licensed or certified according to the standard recognized by the provincial licensing body.
4. A quality assurance program should be established in all aspects of radiological practice in the dental office on a regular basis in accordance with provincial regulations.
5. It is highly desirable that the operator/owner request a radiology technologist, radiation physicist or similarly qualified person to perform a regular inspection of the x-ray equipment to assess radiation output and "normalize" the x ray taking system. This is to ensure that existing exposure and processing conditions are producing clinically acceptable radiographs with an acceptable exposure range.
6. An exposure guideline chart should be fixed near the control panel of the x-ray machine describing the exposure factors to be used on that machine for children, adults and edentulous patients.
7. The dentist should view radiographs under optimal conditions. A magnifying glass with a variable intensity viewer is desirable. Extraneous light should be minimized.
8. It is highly desirable that dentists enroll in continuing education in the many aspects of diagnostic radiology, physics of radiology and radiation biology.



Protection for Female Operators

Any female operator who suspects or knows she is pregnant must be assured that for the duration of her pregnancy her work duties are compatible with the recommended dose limits. In general, there is no reason to remove pregnant operators, or other pregnant staff members, from their duties of operating dental x-ray equipment.

Operators in Training and Students

1. Students in radiography training programs must not expose a patient to x rays except under supervision of a qualified operator, i.e. a licensed dentist or operator qualified through certified training, and licensed by the respective provincial authority.
2. For operators-in-training and students, the recommended radiation dose limits for the public apply.
3. Deliberate radiation exposure of an individual must not be performed solely for training purposes.

General Guidelines for Office Personnel

1. A room must not be used for more than one x-ray procedure simultaneously, unless adequate shielding is provided between x-ray machines.
2. Persons not essential to the radiologic procedure must not be in the room during patient exposure.
3. Operators should not be in the room at the time of exposure. If an operator must be in the room with the patient during the exposure, he or she should preferably use appropriate shielding. If an operator must stay in the room and cannot otherwise use a shield, the operator should stand between 90° and 135° to the primary beam and at least 3 meters from the subject being radiographed. In a dental office, continual and routine use of a lead apron for an operator is not indicated.
4. The dental film should be fixed in position by the patient or by use of a holding device. Operators should not hold the film in position or be in the room during exposure unless there is no other way to obtain the radiograph. If operators must hold the film in position, they should use appropriate shielding.
5. If parents or escorts are called to assist, appropriate shielding should be worn by those persons.
6. The x-ray housing should not be held by the operator during operation.
7. All dental personnel involved in the taking and processing of radiographs should wear personal dosimeters to ensure that the current radiologic practice is not exposing them to radiation exceeding acceptable limits as defined in Safety Code 30. If continuous use is not felt to be necessary, periodic use is recommended.
8. Under normal circumstances there should be no radiation recorded on the dosimeter badge. Where personnel are recording radiation levels on a regular basis, steps must be taken to investigate and correct the situation.



Guidelines to Protect the Patient

The exposure to the patient should be kept as low as reasonably achievable, but at the same time providing an adequate radiological examination capable of providing an accurate diagnosis.

1. The prescription of a radiologic examination by a licensed dentist must be based on a clinical examination for the purpose of obtaining information not readily available from other sources.
2. The justification for taking dental radiographs must be determined by a need to obtain specific information which could contribute to diagnosis or the formation of a treatment plan rather than utilizing the concept of the routine periodic examination with or without examining the patient. The taking of radiographs on request by third parties for administrative purposes only are not recommended.
3. One should determine if any recent radiographs are available and see if those are adequate.
4. When a patient changes dentists and diagnostic information is sought which might have been available on previous radiographs, then the new dentist should attempt to obtain such radiographs, rather than routinely issue a new prescription for radiographs.
5. The number of radiographs required should be kept to the minimum, consistent with obtaining the required diagnostic information.
6. Operators should select films of a speed and quality that will permit the production of radiographs of an acceptable diagnostic quality with minimum exposure of the patient to radiation.
7. The quality of radiographs should be monitored routinely to ensure that diagnostic requirements are met.
8. The decision to repeat radiographs should not be based on ideal technical requirements, but rather on a lack of required diagnostic information.
9. Appropriate shielding should be used when exposing patients to radiation.
10. The x-ray beam for radiographs should be collimated so that it irradiates only the minimum area necessary for the examination.

X Rays and the Pregnant Patient

There is no medical contra-indication to taking dental radiographs of a pregnant patient. However elective procedures may be deferred until after the pregnancy at the patient's request.



X Rays and Patients Who Have Received Radiation Therapy

There is no medical contra-indication to taking dental radiographs on patients who are receiving or who have had radiation therapy.

Conclusion

The frequency of a radiological examination is a matter of clinical judgement. The selection of equipment and techniques used is the decision of a dentist. The aim of these guidelines is to ensure that dental offices comply with the ALARA principle and keep the amount of patient radiation exposure at as low a level as possible given current accepted radiological practice.

Approved
Canadian Dental Association Board of Directors
February 2005

Appendix B

WHMIS Workplace Hazardous Materials Information System

How it affects you. Occupational Health and Safety Regulations

What is WHMIS?

The Workplace Hazardous Materials Information System (WHMIS) is a legislated system to provide information on the dangers and safe handling of materials used in the workplace. The system was initiated and developed through joint consultation between representatives from industry, labour and government. Application of the legislation will be uniform throughout the provinces and territories of Canada. The Federal legislation requires suppliers of hazardous materials (referred to as controlled products) to provide specific information on their products through material safety data sheets and labels. Employers who use products are required by provincial regulations to inform their workers of the risks related to the materials and to implement safe work practices. The WHMIS system is an important component of the duties of an employer with respect to all chemical and biological substances.

What should an employer do to comply with the regulations?

1. Review harmful chemical and biological substances in the workplace.
2. Determine which substances are controlled products.
3. Obtain Material Safety Data Sheets (MSDS) for controlled products.
4. Ensure that all containers are suitably labelled.
5. Arrange for the training of workers.

REVIEW HARMFUL CHEMICAL AND BIOLOGICAL SUBSTANCES IN THE WORKPLACE

- List all chemical or biological substances used at the place of employment that may be harmful to the health and safety of workers.
- Identify the worksites where these products are used or produced.



DETERMINE WHICH SUBSTANCES ARE CONTROLLED PRODUCTS

- Identify controlled products – that is those meeting the criteria defined in the Controlled Products Regulations for:
 1. A compressed gas
 2. Flammable and combustible material
 3. Oxidizing material
 4. Poisonous and infectious material
 5. Corrosive material
 6. Dangerously reactive material

There is no list of controlled products however; materials bearing a label with a border as shown on the “Supplier Label” (attached) will be controlled products. Items handled under The Transportation of Dangerous Goods Act will very likely be controlled products. Consult your supplier for information.

There are some partial exemptions to WHMIS requirements where the materials are controlled by other requirements for example products under The Pest Control Products Act.

OBTAIN MATERIAL SAFETY DATA SHEETS (MSDS) FOR CONTROLLED PRODUCTS

A Material Safety Data Sheet (MSDS) is a document that describes the dangers and safe handling of the material. The required headings are shown on the “Material Safety Data Sheet Headings” sheet (see below) – pay particular attention to preventive measures, first aid and hazardous ingredients. The MSDS must be provided by the supplier to all workplaces where the material is sold. The material may not be used at a workplace unless an MSDS is readily available. Where a controlled product is made at a workplace the employer must prepare an MSDS.

- Obtain or prepare an MSDS for all controlled products and check that each section has an entry. The terms "not applicable" (n.appl) or “not available” (n.av.) are acceptable entries where appropriate.
- Arrange a system to amend the MSDS as new information becomes available and to replace when outdated (maximum 3 years).
- Examine the MSDS and ensure that work practices used at the workplace are safe and in accordance with recommendations under the category of Preventive Measures.
- Make copies of the MSDS for worksite distribution. The employer may transfer supplier MSDS to his own format if there is no less content and the supplier MSDS is available on request. The contents of an MSDS can also be transmitted to worksites by electronic means providing workers are able to access the information and a hard copy is available.

ENSURE THAT ALL CONTAINERS ARE SUITABLY LABELLED

Supplier Labels

A supplier must affix a defined label on the containers of all controlled products. The information to be given includes the dangers, precautionary measures, and first aid. The border of the label is distinctive and helps to readily identify a controlled product. This label known as the supplier label could be a mark, sticker, tag or wrapper and must not be removed, modified or deliberately defaced as long as the material stays in the container. If it is accidentally defaced it must be replaced.



Workplace Labels

Where material is transferred from the original container (which should have a supplier label) to another container, a workplace label must be attached to it. A workplace label contains three items of information:

- An identifier of the material which must be the same as that used on the MSDS;
- Information for the safe handling of the material;
- A statement that an MSDS is available.

Works, signs or symbols may be used to show what safe handling measures are needed provided they are understood by workers. There are some exceptions to the requirement for workplace labels. These include:

- When the material in a container is to be used only by one person during the workshift
- Where the material is decanted during laboratory activities
- Where material is in a pipe or reaction vessel
- Where the containers are about to be labelled for sale

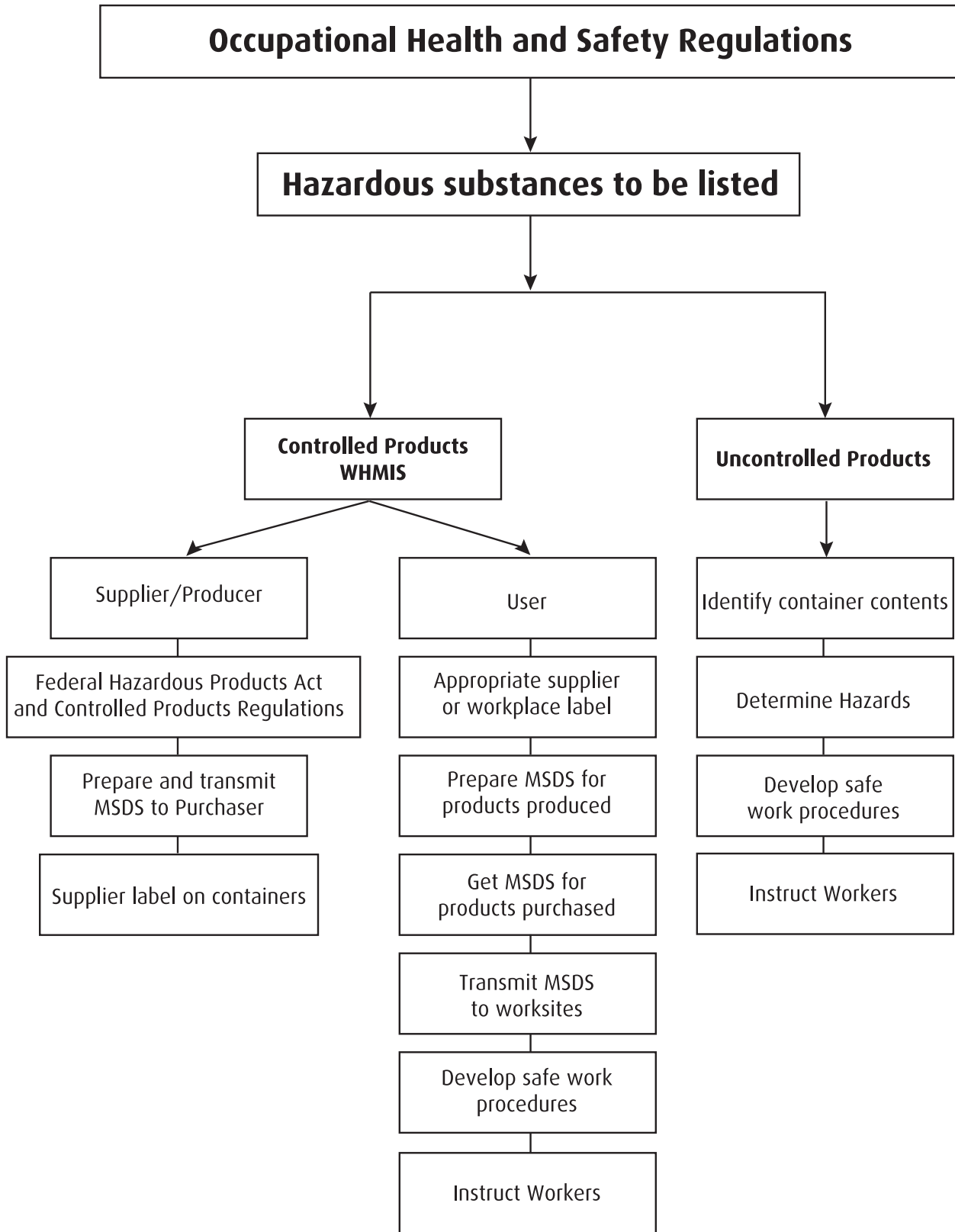
ARRANGE FOR THE TRAINING OF WORKERS

- The employer must arrange a training program, in consultation with the Occupational Health and Safety Committee at the workplace, for all workers in close proximity to any controlled product (those who could be affected by the material either by use or due to a spill or leak).
- All workers identified as being in close proximity to controlled products must be trained on the content and purpose of information provided on an MSDS and a label. They must also be advised of the dangers of materials nearby and trained on emergency procedure.
- Workers must be trained on the systems of workplace labelling.
- Identify where controlled products are used and which workers could be affected by specific materials so that appropriate training can be given.
- Workers handling controlled products are to be advised of the risks associated with the specific materials used and trained in safe work procedures.
- Workers are to be informed of any information received at a workplace regarding the danger or safe use of a controlled product. Managers should be advised to carefully examine mail for such information and a system must be set up for distribution or advising workers of the information.

MATERIAL SAFETY DATA SHEET HEADING









1. Product Information
2. Hazardous Ingredients
3. Physical Data
4. Fire and Explosion Data
5. Reactivity Data
6. Toxicological Properties
7. Preventive Measures
8. First Aid Measures
9. Preparation Information





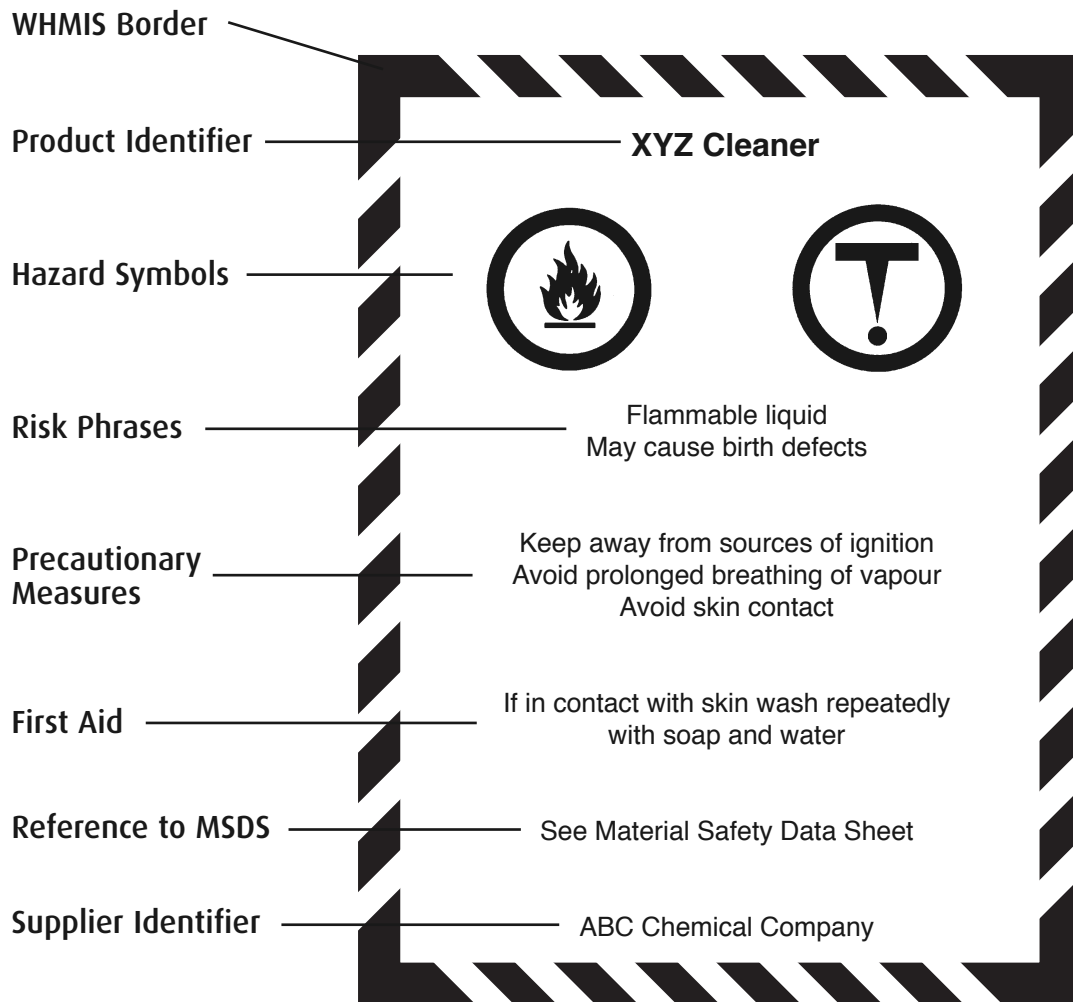
Hazard Symbols and Classes

(Adapted from: *Occupational Health and Safety Canada* Volume 4, Number 5, page 54. Used with permission.)

This symbol represents...	It means the material...
 <p>Class A Compressed Gas</p>	<ul style="list-style-type: none"> • poses an explosion danger because contents are held under high pressure • may cause its container to explode if heated • may cause its container to explode if dropped
 <p>Class B Combustible and flammable material</p>	<ul style="list-style-type: none"> • may burn at relatively low temperatures • may burst into flame spontaneously in air or release a flammable gas on contact with water • may cause a fire when exposed to heat, sparks or flames or as a result of friction
 <p>Class C Oxidizing material</p>	<ul style="list-style-type: none"> • may cause a fire when it comes into contact with combustible materials such as wood • may react violently or cause an explosion when it comes into contact with combustible materials such as fuels
 <p>Class D - Division 1 Poisonous and infectious material: immediate and serious toxic effects</p>	<ul style="list-style-type: none"> • may be fatal or cause permanent damage if inhaled or if it enters the body through skin contact
 <p>Class D - Division 2 Poisonous and infectious material: other toxic effects</p>	<ul style="list-style-type: none"> • may cause death or permanent damage as a result of repeated exposure over time • may be a skin or eye irritant • may be a sensitizer, which produces a chemical allergy • may cause cancer, birth defects or sterility
 <p>Class D - Division 3 Poisonous and infectious material: biohazardous infectious material</p>	<ul style="list-style-type: none"> • may cause serious disease resulting in illness or death
 <p>Class E Corrosive material</p>	<ul style="list-style-type: none"> • causes severe eye and skin irritation upon contact • causes severe tissue damage with prolonged exposure • may be harmful if inhaled
 <p>Class F Dangerously reactive material</p>	<ul style="list-style-type: none"> • is very unstable • may react with water to release a toxic or flammable gas • may explode as a result of shock, friction or increase in temperature • undergoes vigorous polymerization



Supplier Label



Appendix C

Rules of Conduct During the Examination

Each candidate must comply with the rules of conduct during the examination. Candidates who do not or whose conduct is considered disruptive or inappropriate will be required to return all examination material to the Test Invigilator and leave the examination room. Further, the individual will not be permitted to re-enter the examination room to complete the exam. In this circumstance the candidate's examination will receive a failing grade and no refund will be issued.

Rules of Conduct

1. Memorize your **NDAEB Exam Registration Number #** stated on your Letter of Admission.
2. On exam day candidates **must** bring 2 HB pencils and an eraser.
3. You are permitted a maximum of **4 hours** to complete the examination **unless** you have been granted a special accommodation (extra time) by the NDAEB. **Note:** Test Invigilators will be advised by the NDAEB of any special accommodations granted.
4. During the exam, time remaining will be posted as follows: 3 hrs remain, 2 hrs, 1 hr, 30 min, & 15 min.
5. **Personal belongings must be left with the Invigilator.** The use of electronics such as: cell phones, pagers, cameras, Blackberries, MP3 players, Discmans, calculators, laptops and **any other** electronic device **is strictly prohibited**. All such items **must be turned off and remain off during the entire** exam sitting. Such electronic devices must be stored in your bag away from your desk in a location designated by the exam invigilator. Electronic devices cannot be accessed during the exam sitting under any circumstances, including during washroom breaks. Likewise, papers, books or other items are not permitted, except those provided by the Test Invigilator. **Anyone using any electronic device during the exam will be escorted from the exam room, and awarded a score of zero on their exam paper.**
6. You may **NOT** use aids such as books or paper while taking the examination.
7. Only one person at a time is allowed out of the room for washroom breaks. **All bags must remain in the classroom and cannot be taken to the washroom.** Electronic devices will **not** be taken to the washroom or removed from your bag until the exam is over and you have signed out of the testing room. Please raise your hand and remain seated until you are excused by the Test Invigilator.
8. Upon completion of the examination, deliver the exam booklet and answer sheet to the Test Invigilator. Ensure that the invigilator records your time out on the attendance sheet.
9. Once you have completed the examination and have left the test room you will not be re-admitted under any circumstances. Ensure you take all personal belongings and leave the examination area, including adjacent corridors.



10. YOU are responsible for protecting the integrity of your answers. If cheating is detected or evidence of cheating is disclosed at the time answer sheets are being scored, those involved, whether they are copiers or those copied from, will receive a failing grade on the exam. This warning notice will not be repeated, but will be in effect and applicable to all parts of the examination.
11. If you have any problems on the day of the exam please call the NDAEB office at 613-526-3424.

Please read the Candidate Handbook carefully.

IMPORTANT

1. Ensure that your name and registration number are properly recorded on the front cover of your examination booklet. **Do not tear the BOOKLET apart.**
2. Ensure that your name, registration number and examination booklet number are properly recorded on your answer sheet.
3. **DO NOT MARK THE ANSWER SHEET ANYWHERE EXCEPT IN THE ANSWER CIRCLES.**
4. **The answer sheets are read/scored by optical scanner. To record your answer, follow the instructions below exactly:**
 - a) To indicate a response, **BLACKEN** the appropriate circle with your pencil. Your response must be **DEFINITE** and **BLACK**, otherwise the optical scanner may not sense it, resulting in an unanswered or omitted item.
 - b) To change a previously recorded response you **MUST ERASE the response completely (DO NOT CROSS IT OUT)**. If the erasure is incomplete, the optical scanner may sense both responses which will be treated as incorrect.
5. **Only responses recorded on the answer sheet will be scored. DO NOT** mark your responses in the examination booklet with the intention of transferring them later to the answer sheet. You will **NOT** be given extra time to record or transfer responses from the examination booklet to the answer sheet if time has expired. It is recommended that you start to answer the items at once rather than reading through the paper first and then beginning to record your answers as you may run out of time.
6. **All items are equally weighted.** Correct responses are worth 1 mark; incorrect responses are worth zero marks.
7. It is to your advantage to answer every item even if you are not completely satisfied that you know the correct answer. There is no penalty for guessing.
8. Any item which is omitted, that is, for which no answer circle has been shaded in, will be treated as incorrect.
9. Any item which has more than one response selected, that is, more than one answer circle has been shaded in on the answer sheet, will be treated as incorrect.



10. If you think an item is misprinted or incorrect, answer the item to the best of your ability with the information provided. The item, along with other items which do not perform well statistically, will be identified for review prior to final scoring (key validation). Such items may be rekeyed or if found unreliable, deleted from the final scoring.
11. **Failure to return the complete examination booklet and/or a properly completed answer sheet will result in a mark of zero.**
12. **You are not permitted to copy items from the test booklet for any reason. Attempts to remove exam items from the test centre will be considered cheating which will result in a score of zero on your exam and further consequences will apply.**
13. **Candidates will receive an email notification from the NDAEB within six (6) weeks of the writing date advising them that their results have been made available on the candidate portal. Paper copies of results will no longer be mailed to candidates.**

IDENTIFICATION OF EXAMINATION BOOKLETS AND ANSWER SHEETS

1. Confirm that your name and registration number are properly recorded on the front cover of your examination booklet. Do not tear the BOOKLET apart.
2. On your personalized Answer Sheet provided, ensure your NAME (surname and given name), NDAEB ID number, date and exam location (city) are correct. If an error has been made, advise the invigilator immediately.
3. When recording your answers on the answer sheet, fill in the bubbles using an HB pencil. Be sure to fill the bubble in completely as light circles or other marks cannot be recognized by the computer/scanner when your answer sheet is scored. This may result in a failing grade on the exam.

Instructions for filling in the remainder of the answer sheet are provided on the following pages.

EXAMPLE:

The image shows an example of an NDAEB Answer Sheet (Feuille reponse). It features a grid of bubbles for answers 1 through 200, arranged in four columns. The header includes the NDAEB logo and the text "National Dental Assisting Examining Board" and "Bureau national d'examens d'assistance dentaire". Below the logo, the candidate's name "JOHN SAMPLE" and ID number "20150001" are printed. The exam date "MARCH 2015" and location "KARAKATA, NL" are also listed, along with the exam booklet number "EXAM BOOKLET: 10001". A barcode is located below the header information. The grid of bubbles is organized into four columns, with the first column containing answers 1-40, the second 41-80, the third 81-120, and the fourth 121-200. Each bubble is a small circle with a letter 'O' inside, and a vertical line of bubbles is on the left side of the grid.



THE EXAMINATION

This examination contains:

Single Answer "A" type items

These items have a stem and four options, of which only **ONE** is correct.

EXAMPLE

Which one of the following methods best communicates empathy to a patient?

1. Using negative reinforcement when a patient displays fear.
2. Attempting to understand the patient from his/her own perspective.
3. Making fun of the patient's fears.
4. Attempting to educate the patient about fear.

For the above example the correct answer is option number 2, and would be marked thus on the answer sheet.



NOTE: Some items utilizing specialized pictorial material (i.e. Graphs, Charts, etc.) may be distributed throughout this test booklet.

