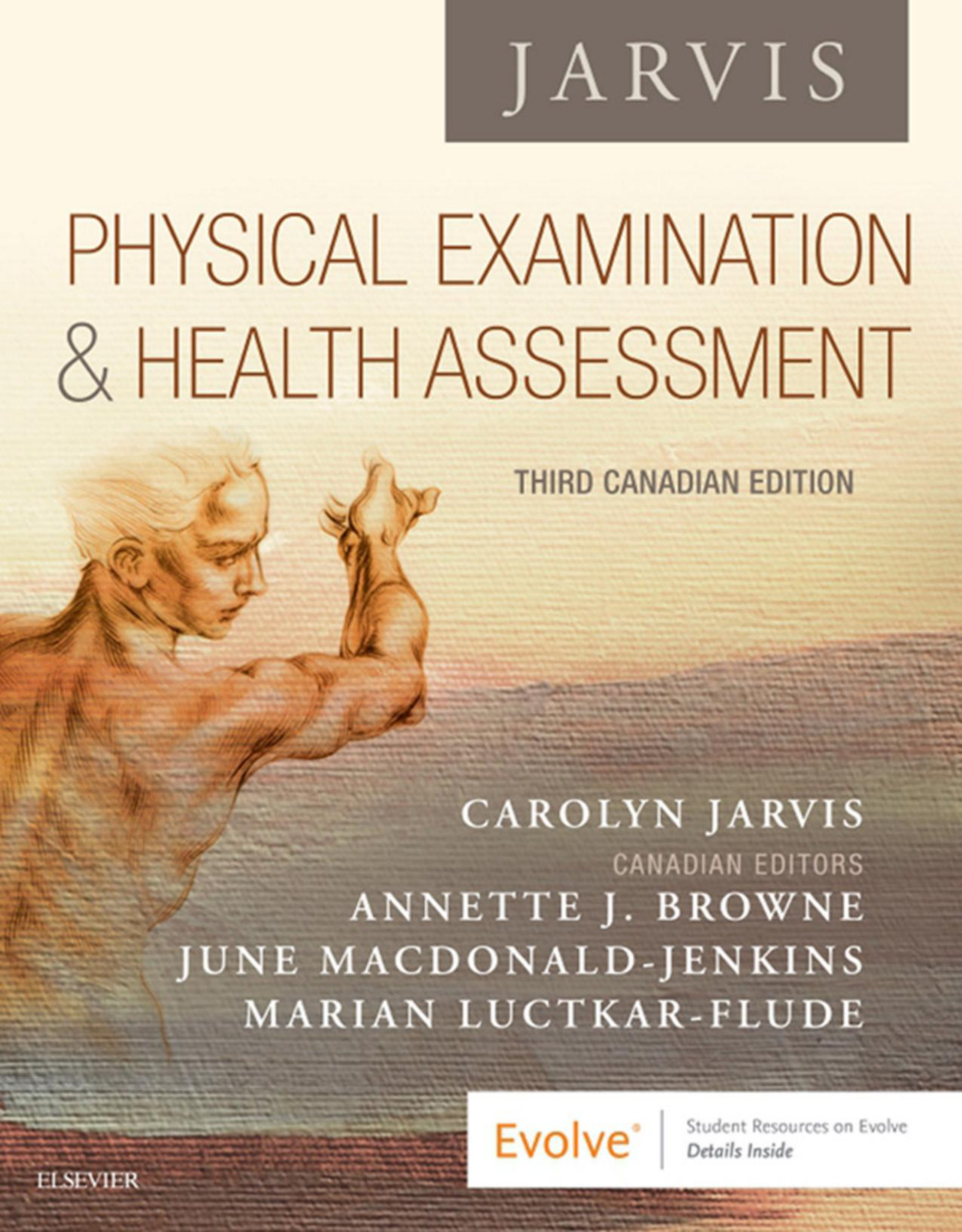




JARVIS

PHYSICAL EXAMINATION & HEALTH ASSESSMENT

THIRD CANADIAN EDITION

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HOW THIS BOOK IS ORGANIZED

The following colour bars are used consistently for each section within a chapter to help locate specific information:

STRUCTURE AND FUNCTION

Anatomy and physiology of the body system

SUBJECTIVE DATA

Health history through questions (Examiner Asks) and explanation (Rationale)

OBJECTIVE DATA

Core of the examination part of each body system chapter with skills, expected findings, and common variations for healthy people, as well as selected abnormal findings, health promotion, and a summary examination checklist

DOCUMENTATION AND CRITICAL THINKING

Clinical case studies with sample documentation for subjective, objective, and assessment data

ABNORMAL FINDINGS

Tables describing pathological disorders and conditions, with illustrations and photographs

SPECIAL CONSIDERATIONS FOR ADVANCED PRACTICE

Tables or illustrations and photographs of abnormal findings for advanced practice or special circumstances, where appropriate

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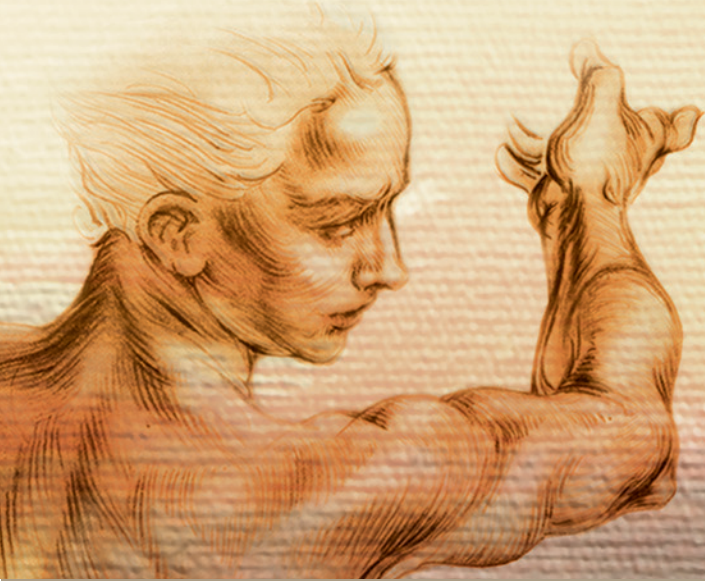
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& HEALTH ASSESSMENT

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JARVIS

PHYSICAL EXAMINATION & HEALTH ASSESSMENT

THIRD CANADIAN EDITION

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PHYSICAL EXAMINATION & HEALTH ASSESSMENT, THIRD CANADIAN EDITION

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To Paul, who read every word, with love and thanks
Carolyn Jarvis

The work and ideas I have contributed are dedicated to Rachel Browne,
Don Browne and Eva Minkoff, who instilled in me values of social justice.
Annette J. Browne

My work in this edition is dedicated in memory of my brother Dan,
much loved and missed.
June MacDonald-Jenkins

My work on this book is dedicated with love to Richard,
for your patience and support and all that you do. PYZ.
Marian Luctkar-Flude

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Carolyn Jarvis received her BSN cum laude from the University of Iowa, her MSN from Loyola University (Chicago), and her PhD from the University of Illinois at Chicago, with a research interest in the physiologic effect of alcohol on the cardiovascular system. She has taught physical assessment and critical care nursing at Rush University (Chicago), the University of Missouri (Columbia), and the University of Illinois (Urbana), and she has taught physical assessment, pharmacology, and pathophysiology at Illinois Wesleyan University (Bloomington).

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PREFACE

It is important that students develop, practise, and then learn to trust their health history and physical examination skills. In this book we give you the tools to do that. Learn to listen to the patient—most often they will tell you what is wrong (and right) and what you can do to meet his or her health care needs. Then learn to inspect, examine, and listen to the person's body. The data are all there and are accessible to you by using just a few extra tools. High-technological machinery is a smart and sophisticated adjunct, but it cannot replace your own bedside assessment of your patient.

Whether you are a beginning examiner or an advanced-practice student, this book holds the content you need to develop and refine your clinical skills. The **Third Canadian Edition** of *Physical Examination & Health Assessment* is a comprehensive textbook of health history-taking methods, physical examination skills, health promotion techniques, and clinical assessment tools.

Thank you for your enthusiastic anticipation of this third Canadian edition. We are excited to be able to bring you an established, successful text with a focus on Canadian issues and content to further meet the needs of both novice and advanced practitioners in Canada.

DUAL FOCUS AS TEXT AND REFERENCE

Physical Examination & Health Assessment is both a **text for beginning students** of physical examination and also a **text and reference for advanced practitioners such as nurse practitioners and clinical nurse specialists**. The chapter progression and format permit this scope without sacrificing one use for the other.

Chapters 1 through 8 focus on **health assessment of individuals and families**, including preventive health care recommendations and other health promotion recommendations across the lifespan; the importance of **relational practice** in health assessment; **cultural and social considerations in assessment**; interviewing and complete health history gathering; and approaches to use for **mental health assessment**, **substance use assessment**, and **interpersonal violence assessment**.

Chapters 9 through 12 begin the approach to the **clinical care setting**, describing physical data-gathering techniques, how to set up the examination site, body measurement and vital signs, pain assessment, and nutritional assessment.

Chapters 13 through 27 focus on the **physical examination and related health history** in a body-systems approach. This is the most efficient method of performing the examination and is the most systematic and logical method for student learning and retrieval of data. **Each chapter has five major sections:** Structure and Function, Subjective Data (history), Objective Data (examination skills and findings), Documentation and Critical Thinking, and Abnormal

Findings. An additional section **Special Considerations for Advanced Practice** is included in selected relevant chapters. The novice practitioner can review anatomy and physiology and learn the skills, expected findings, and common variations for generally healthy people and selected abnormal findings in the Objective Data sections. The sections on **Special Considerations for Advanced Practice** were created to address assessment approaches that are particularly relevant for **advanced practice nurses**, for example clinical nurse specialists or nurse practitioners. These sections also help to delineate the boundaries between basic assessments and more advanced assessments that may be conducted by advanced practice nurses.

Chapters 28 through 31 integrate the complete health assessment. **Chapters 28 and 29** present the choreography of the head-to-toe examination for a complete screening examination in various age groups and for the focused examination of a hospitalized adult. Special populations are addressed in **Chapters 30 and 31**—the health assessment of the pregnant woman and the functional assessment of the older adult.

Students continue to use this text in subsequent courses throughout their education, and experienced clinicians will use this text as part of their advanced nursing practice. Given that each course demands more advanced skills and techniques, students can review the detailed presentation and the additional techniques in the Objective Data sections as well as variations for different age levels. Students can also study the extensive pathology illustrations and detailed text in the Abnormal Findings sections.

This text is valuable to both advanced practice students and experienced clinicians because of its comprehensive approach. *Physical Examination & Health Assessment* can help clinicians learn the skills for advanced practice, refresh their memory, review a specific examination technique when confronted with an unfamiliar clinical situation, and compare and label a diagnostic finding.

NEW TO THE THIRD CANADIAN EDITION

All chapters are **revised and updated** to include Canadian concepts, terminology, statistics, standards and guidelines, and assessment tools commonly used in Canadian health care settings. Six revised **Promoting Health** boxes are presented. These boxes describe an important health promotion topic related to the system discussed in each chapter—a topic you can use to enhance preventive recommendations and other types of patient education initiatives.

Special Considerations for Advanced Practice sections provided in selected chapters identify assessment approaches that are particularly relevant for advanced practice nurses. **Critical Findings** textboxes are placed strategically throughout the chapters to alert practitioners to assessment findings

that require immediate attention, action, and decision-making. The New **Social Determinants of Health Considerations** sections have been newly written in each chapter to reflect content relevant to Canada. The social and economic factors that influence health, illness, and access to health care are discussed, and implications requiring consideration in the context of health assessment are identified. Highlights of Canadian content in each chapter are outlined below.

Chapter 1, Critical Thinking and Evidence-Informed Assessment, includes new perspectives on critical thinking and diagnostic reasoning as integral to health assessment. The relevance of conducting assessments based on evidence-informed decisions is emphasized. Relational approaches to nursing practice are discussed to foster nurses' capacities to convey respect, and as a means to avoid objectifying people in the process of health assessment.

Chapter 2, Health Promotion in the Context of Health Assessment, is newly written and integrates the latest Canadian guidelines for health promotion, illness prevention, screening, immunizations, and health education across the lifespan. Emphasis is placed on health promotion opportunities and actions that can be taken in the process of conducting health assessments.

Chapter 3, Cultural and Social Considerations in Health Assessment, is newly written to reflect the increasingly diverse populations in Canada. Examples of current trends in health, socioeconomic, and gender inequities are reviewed and discussed in terms of the implications for health assessment. New content relevant to Indigenous peoples is provided including an overview of the recently released Truth and Reconciliation Commission of Canada Calls to Action. Guidelines are provided for conducting assessments that respectfully take into account the social and economic contexts shaping people's lives.

Chapter 6, Mental Health Assessment, is newly written to provide content reflecting Canadian perspectives on the personal and social factors that shape people's mental health. New content relevant to Indigenous populations is provided, including strategies for conducting relevant, respectful assessments. The chapter provides strategies for conducting mental health assessments, including mental status examinations and risk assessments for suicide. The developmental adaptations that are required to conduct meaningful assessments across the lifespan are also discussed.

Chapter 7, Substance Use in the Context of Health Assessment, is a cutting-edge, new chapter—one of the first of its kind in a nursing health assessment textbook. It provides clinicians with the knowledge and skills to integrate assessments regarding substance use across a range of practice settings and with patients of all ages. Factors influencing the use of substances and the health effects of substance use are discussed. An entirely new section on harm reduction, including the principles of harm reduction and the relevance to health assessment, is provided. Emphasis is placed on the non-judgmental, non-stigmatizing approaches for assessing substance use.

Chapter 8, Interpersonal Violence Assessment, has also been heavily revised to include guidelines for assessing intimate partner violence, sexual assault, child abuse, and elder abuse as important problems for health care professionals to recognize and respond to. The chapter discusses the long-term effects of violence on health and the implications in the context of health assessment. Mandatory reporting requirements are also discussed, and practical strategies for assessing violence in a nonjudgmental and supportive manner are emphasized.

Chapter 9, Assessment Techniques and the Clinical Setting, focuses on assessment techniques and includes the Canadian Hypertensive Education Program guidelines for diagnosis. The chapter will help both novice and advanced practitioners make clinical decisions based on accurate assessment techniques.

Chapter 11, Pain Assessment, has been updated to include assessment tools for both conscious and unconscious patients. These additions reflect a growing trend toward caring for palliative patients in the community setting and the increased complexity of caring for the patient found outside the intensive care environment.

Chapter 12, Nutritional Assessment and Nursing Practice, has been updated to reflect growing concerns around food safety and security and assessment tools to better address nutrition, determinants of health, and reinforce the latest information concerning dietary reference intakes and nutrition labeling in Canada.

Chapter 14 has focused content related to head injuries and the Return to Play requirements for post-concussion assessment and recommendations.

Chapter 17, Nose, Mouth, and Throat, has included new health promotion content related to E-cigarettes.

Chapter 26, Male Genitourinary System, and **Chapter 27, Female Genitourinary System** both have new content related to assessment of the genitalia for transgender persons, and the latest Canadian recommendations for HPV vaccines for males and females.

Chapter 29, Bedside Assessment and Electronic Health Recording, includes an expanded section describing electronic health recording and patient safety.

APPROACHES USED IN THIS EDITION

The Third Canadian Edition of *Physical Examination & Health Assessment* builds on the strengths of the U.S. Seventh Edition and is designed to engage students and enhance learning:

1. **Method of examination** (Objective Data section) is clear, orderly, and easy to follow. Hundreds of original examination illustrations are placed directly with the text to demonstrate the physical examination in a step-by-step format.
2. **Two-column format** begins in the Subjective Data section, where the running column highlights the rationales for asking various history questions. In the Objective Data section, the running column highlights

selected abnormal findings to show a clear relationship between normal and abnormal findings.

3. **Abnormal Findings tables** organize and expand on material in the examination section. These have been revised and updated with many new clinical photos. The atlas format of these extensive collections of pathology and original illustrations helps students recognize, sort, and describe abnormal findings. When applicable, the text under a table entry is presented in a Subjective Data–Objective Data format.
4. **Developmental approach** in each chapter presents prototypical content on the adult, then age-specific content for the infant, child, adolescent, pregnant woman, and older adult so that students can learn common variations for all age groups.
5. **Social Determinants of Health Considerations** are discussed throughout as factors that shape health, illness, and access to health care. In addition to [Chapter 3](#), where these issues are discussed in depth, social and economic considerations are included throughout the chapters to orient readers to relevant issues in the Canadian context.
6. **Stunning full-colour art** shows detailed human anatomy, physiology, examination techniques, and abnormal findings.
7. **Health history** (Subjective Data) appears in two places: [Chapter 4](#), The Interview, has the most complete discussion available on the process of communication and on interviewing skills, techniques, and potential traps to avoid. This chapter includes guidelines for communicating with people whose primary language differs from yours and for working with interpreters to conduct sensitive and accurate health assessments. In [Chapter 5](#), The Complete Health History, and in pertinent history questions that are repeated and expanded in each chapter, history questions are included that highlight health promotion opportunities and activities. This approach to emphasizing history questions helps students to understand the relationship between subjective and objective data. Because the history and examination data are considered together, as they would be in the clinical setting, each chapter can stand on its own if a person has a specific problem related to that body system.
8. **Summary checklists** toward the end of each chapter provide a quick review of examination steps to help you develop a mental checklist.
9. **Sample recordings** of normal findings show the written language you should use to ensure that charting is complete yet succinct.
10. **Focused assessment and clinical case studies** of frequently encountered situations demonstrate the application of assessment techniques to patients of different ages in differing clinical situations. These case histories, in subjective-objective-assessment-plan (SOAP) format, ending in diagnosis, are presented in the language actually used during recording.
11. **Integration of the complete health assessment** for the adult, infant, and child is presented as an illustrated essay

in [Chapter 28](#). This approach integrates all the steps into a choreographed whole. Included is a complete write-up of a health history and physical examination.

12. **User-friendly design** makes the book easy to use. Frequent subheadings and instructional headings help readers to easily retrieve content.
13. **Bedside Assessment of the Hospitalized Adult**, in [Chapter 29](#), provides a unique photo sequence that **illustrates a head-to-toe assessment** suitable for each daily shift of care. It would be neither possible nor pertinent to perform a complete head-to-toe examination on every patient during every 24-hour stay in the hospital; therefore, this sequence shows a consistent specialized examination for each 8-hour shift that focuses on certain parameters pertinent to areas of medical, surgical, and cardiac step-down care.

The Canadian content that appears in the book—particularly the content about dealing with hospitalized patients, older adults, and pain assessment; relating to substance use and interpersonal violence; and cultural and social considerations—form part of the standard repertoire of knowledge from which Canadian examiners can draw.

CONCEPTUAL APPROACH

The Third Canadian Edition of *Physical Examination & Health Assessment* reflects a commitment to the following approaches:

- **Relational practice** in clinical practice recognizes that health, illness, and the meanings they hold for people are shaped by one's gender, age, ability, and social, cultural, familial, historical, and geographical contexts. These contexts influence how nurses and other health care professionals view, relate, and work with patients and families. By practising relationally, health care professionals will be optimally prepared to conduct accurate health assessments and to respond meaningfully to the patient's health, illness, and health promotion needs.
- **Health promotion** is discussed in depth in [Chapter 2](#), with an emphasis on how to integrate health promotion into the process of health assessment. Health promotion textboxes are also provided in most chapters outlining the latest health promoting practices.
- Engaging with the patient as an **active participant in health care** involves encouraging discussion of what the person is currently doing to promote his or her health and supporting people to participate in health promoting practices given the social contexts of their lives.
- **Social determinants of health considerations** take into account our global society and the shifting landscape of Canada's populations. Strategies are provided for integrating attention to the wide range of social, economic and ethnocultural diversity within Canada in health assessment.
- Assessing individuals **across the lifespan** reflects the understanding that a person's state of health must be considered in light of their developmental stage.

Developmental anatomy; modifications of examination techniques; and expected findings for infants and children, adolescents, pregnant women, and older adults are provided. **Developmental Considerations** are provided in each relevant chapter, along with strategies for adapting health assessment approaches and techniques across the lifespan.

ANCILLARIES

- The *Pocket Companion for Physical Examination & Health Assessment* continues to be a handy and current clinical reference that provides pertinent material in full colour, with over 150 illustrations from the textbook.
- The *Student Laboratory Manual* with physical examination forms is a workbook that includes a student study guide, glossary of key terms, clinical objectives, regional write-up forms, and review questions for each chapter. The pages are perforated so that students can use the regional write-up forms in the skills laboratory or in the clinical setting and turn them in to the instructor.
- The revised *Health Assessment Online* is an innovative and dynamic teaching and learning tool with more than **8000 electronic assets**, including video clips, anatomic overlays, animations, audio clips, interactive exercises, laboratory/diagnostic tests, review questions, and **electronic charting activities**. Comprehensive **Self-Paced Learning Modules** offer increased flexibility to faculty who wish to provide students with tutorial learning modules and in-depth capstone case studies for each body system chapter in the text. The **Capstone Case Studies** now include **Quality and Safety Challenge** activities. Additional **Advance Practice Case Studies** put the student in the exam room and test history taking and documentation skills. The comprehensive **video clip library** shows exam procedures across the life span, including clips on the pregnant woman. Animations, sounds, images, interactive activities, and video clips are embedded in the learning modules and cases to provide a dynamic, multi-modal learning environment for today's learners.
- *Physical Examination & Health Assessment Video Series* is an 18-video package developed in conjunction with this text. There are 12 body system videos and 6 head-to-toe videos, with the latter containing complete examinations of the neonate, child, adult, older adult, pregnant woman, and the bedside examination of a hospitalized adult. This series is available in DVD or streaming online formats. There are over 5 hours of video footage with highlighted Cross-Cultural Care Considerations, Developmental Considerations, and Health Promotion Tips, as well as Instructor Booklets with video overviews, outlines, learning objectives, discussion topics, and questions with answers.
- The companion *EVOLVE Website* (<http://evolve.elsevier.com/Canada/Jarvis/examination/>) contains learning objectives, more than 300 multiple-choice and alternate-format review questions, system-by-system exam summaries, bedside exam summaries, printable key points from the chapter, and a comprehensive physical exam form for the adult. **Case studies**—including a variety of developmental and cultural variables—help students apply health assessment skills and knowledge. These include 25 in-depth case studies with critical thinking questions and answer guidelines, as well as printable health promotion handouts. Also included is a complete Head-to-Toe Video Examination of the Adult that can be viewed in its entirety or by systems, as well as a new printable section on Quick Assessments for Common Conditions.
- **Simulation Learning System.** The new *Simulation Learning System* (SLS) is an online toolkit that incorporates medium- to high-fidelity simulation with scenarios that enhance the clinical decision-making skills of students. The SLS offers a comprehensive package of resources, including leveled patient scenarios, detailed instructions for preparation and implementation of the simulation experience, debriefing questions that encourage critical thinking, and learning resources to reinforce student comprehension.
- For instructors, the Evolve website presents TEACH for Nursing, PowerPoint slides with Audience Response Questions for iClicker and Case Studies, a comprehensive Image Collection, and a Test Bank. **TEACH for Nurses** provides annotated learning objectives, key terms, teaching strategies for the classroom in a revised section with strategies for both clinical and simulation lab use and critical thinking exercises, websites, and performance checklists. The **PowerPoint** slides include 2000 slides with integrated images. **Audience Response Questions** provide 90 questions for in-class student participation. A separate 1200-illustration **Image Collection** is featured and, finally, the ExamView **Test Bank** has over 1000 multiple-choice and alternate-format questions with coded answers and rationales.

IN CONCLUSION

Throughout all stages of manuscript preparation and production, every effort has been made to develop a book that is readable, informative, instructive, and vital. Your comments and suggestions have been important to this task and continue to be welcome for this new Canadian edition.

Carolyn Jarvis
Annette J. Browne
June MacDonald-Jenkins
Marian Luctkar-Flude

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I am grateful for the many talented and dedicated colleagues who helped make the revision of the 7th edition of this textbook possible.

Thank you to the bright, hardworking professional team at Elsevier. I am fortunate to have the support of Laurie Gower, Content Development Manager. Laurie is positive and skilled in directing the big picture of the books, as well as the endless details. She has a calm and forthright manner that is so welcome. Also, I am grateful to work daily with Heather Bays, Senior Content Development Specialist. Heather juggled all the deadlines, readied all the manuscript for production, searched out endless photos for abnormal examination findings, kept current with the permissions, and so many other daily details. Her work is pivotal to our success. I feel lucky she joined our team.

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art and tables, and we still came out with comparable page length for the 7th edition.

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Carolyn Jarvis

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Carolyn Jarvis's text has been a constant companion throughout my clinical and teaching career. The opportunity to adapt this classic textbook to reflect Canadian perspectives, content, and guidelines is a major honour. I have thoroughly enjoyed thinking critically about the range of content to include, especially given the diverse range of students, clinicians, and faculty who may use this text. I want to thank Dr. Sally Thorne, a professor at the University of British Columbia School of Nursing, for encouraging me to take on this project. I am also grateful to June MacDonald-Jenkins and Marian Luctkar-Flude for adapting this text in significant ways to reflect the unique context of nursing practice in Canada. I am fortunate to be able to draw on the expertise of Dr. Dana Edge, Dr. Vicki Smye, Dr. Colleen Varcoe, Laraine Michalson, and Dr. Erin Wilson as chapter authors and contributors, and I thank them for providing highly pertinent and cutting-edge content. Finally, thank you to John, whose loving support makes this work possible.

Annette J. Browne

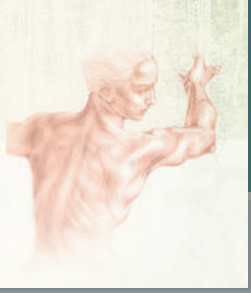
What a pleasure to have been given the opportunity to potentially influence the learning of students across the country. My thanks to every student who risked taking a stance of inquiry, looked for more, and sought the answers; you are the reason that editing this text was such a pleasure. I, too, would like to thank the editorial team at Elsevier Canada; they have been gracious and supportive while ensuring that we met timelines for publication of the Third Canadian Edition. I would like to thank my colleagues Dr. Ellen Vogel, Christina Vaillancourt, and Andrea Miller for contributing to [Chapter 12](#), Nutritional Assessment and Nursing Practice,

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June MacDonald-Jenkins

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Marian Luctkar-Flude



Critical Thinking and Evidence-Informed Assessment

Written by Carolyn Jarvis, PhD, APN, CNP

Adapted by Annette J. Browne, PhD, RN

 <http://evolve.elsevier.com/Canada/Jarvis/examination/>

The ability to conduct a high-quality health assessment and physical examination is foundational to nursing practice. Similarly, to provide relevant, timely, and appropriate nursing and health care, nurses must be able to accurately describe assessment findings to patients, families, and other members of the interprofessional team. Assessments must be conducted in ways that convey respect for the whole person, to avoid objectifying people. Learning to conduct systematic assessments is integral to developing confidence in clinical abilities and capacity to respond effectively to patients' needs.

You work in a primary health care clinic in a Canadian city. Ellen K. is a 23-year-old woman whom you have seen several times over the past 2 months (Fig. 1.1). She has been admitted for observation at the emergency department because of sudden onset of shortness of breath.

The health care provider in the emergency department documented a health history and performed a complete physical examination. Examples of the preliminary list of significant findings recorded in her health record are as follows:

- *Appearance:* Sitting quietly alone in the examination room. Facial expression appears sad. Eyes fill with tears when she discusses her partner.
- *Elevated BP [blood pressure];* 142/100 at end of examination today.
- *Diminished breath sounds,* with moderate expiratory wheeze and scattered rhonchi at both bases.
- *Grade II/VI systolic heart murmur,* left lower sternal border.
- *Resolving hematoma,* 2 to 3 cm, R [right] infraorbital ridge.
- *Missing R lower first molar,* gums receding on lower incisors, multiple dark spots on front upper teeth.
- *Well-healed scar,* 28 cm long $\times$ 2 cm wide, R lower leg, with R leg 3 cm shorter than L [left], sequelae of auto accident at age 12.
- *Altered nutrition:* omits breakfast; daily intake has no fruits, no vegetables; meals at fast food restaurants most days.

- *Oral contraceptives for birth control* $\times$ 3 years, last pelvic examination 1 year ago.
- *Smokes a half PPD [pack of cigarettes per day]* $\times$ 2 years, prior use one PPD $\times$ 4 years.
- *Started using alcohol at age 16.* For past 2 years, has equivalent of 3 to 4 drinks per day $\times$ 4 to 5 days a week. Last intake of alcohol was yesterday.
- *Currently is unemployed* $\times$ 6 months. Receives employment insurance ($\approx$ \$680/month). Previous work as cashier in large department store.
- *History of emotional and physical abuse related to current relationship with partner.* Today has orbital hematoma as a result of being struck by partner. States, "We had a big fight."
- *Relationships:* Over past 12 months, has not been in communication with her parents, who live in another city. Has one close woman friend who lives nearby. Significant relationship is with partner of 2 years, with whom she resides in a rented small basement suite.

The examiner analyzed and interpreted all the data; clustered the information, sorting out which data to refer and which to treat; and identified the diagnoses. Of interest is how many significant findings are derived from data the examiner collected. Not only physical data but also cognitive, psychosocial, and behavioural data are significant for an analysis of Ellen's health state. Also, the findings are interesting when considered from a life cycle perspective; that is, Ellen is a young adult who normally should be concerned with the developmental tasks of emancipation from parents, building an economically stable life, and developing caring relationships.

A body of clinical evidence has validated the importance of using assessment techniques in Ellen's case. For example, measuring blood pressure is a way to screen for hypertension, and early intervention can prevent heart attack and stroke. Listening to breath sounds is a way to screen (in Ellen's case) for asthma, which is compounded by the use of tobacco. Listening to heart sounds reveals Ellen's heart murmur, which could be innocent or functional, or a sign of a structural abnormality in a heart valve; further examination will yield further data.



1.1

ASSESSMENT: POINT OF ENTRY IN AN ONGOING PROCESS

Assessment is the collection of data about an individual's health state. Throughout this text, you will study the techniques of collecting and analyzing **subjective data** (i.e., what the person *says* about himself or herself during history taking) and **objective data** (i.e., what you as the health care provider *observe* by inspecting, percussing, palpating, and auscultating during the physical examination). Together with the patient's record, laboratory studies, and other diagnostic tests, these elements form the **database**. For example, in the preceding case of Ellen, an example of subjective data is "History of emotional and physical abuse related to current relationship with partner." An example of objective data is "Resolving hematoma, 2 to 3 cm, R infraorbital ridge."

From the database, you make a clinical judgement or diagnosis about the individual's health state or response to actual health problems or risk factors and life processes, as well as diagnoses about overall levels of wellness. Thus, the purpose of assessment is to make a judgement or diagnosis on the basis of data from various sources.

An organized assessment is the starting point of diagnostic reasoning. Because all health care diagnoses, decisions, and treatments are based on the data you gather during assessment, it is paramount that your assessment be factual and complete.

Diagnostic Reasoning

The step from data collection to diagnosis can be a difficult one. Most beginning examiners perform well in gathering the data, with adequate practice, but then treat all the data as being equally important. This makes decision making slow and laboured.

Diagnostic reasoning is the process of analyzing health data and drawing conclusions to identify diagnoses. It has four major components: (a) attending to initially available cues; (b) formulating diagnostic hypotheses; (c) gathering data relative to the tentative hypotheses; and (d) evaluating each hypothesis with the new data collected, thus arriving

at a final diagnosis. A *cue* is a piece of information, a sign or symptom, or a piece of laboratory data. A *hypothesis* is a tentative explanation for a cue or a set of cues that can be used as a basis for further investigation.

For example, Ellen K., the patient described at the beginning of this chapter, presents with a number of initial cues, one of which is the resolving hematoma under her eye. (a) You can recognize this cue even before history documentation begins. Is it significant? (b) If Ellen were to say she ran into a door, mumbles as she speaks, and avoids eye contact, you formulate a hypothesis of trauma. (c) During the history documentation and physical examination, you gather data to support or reject the tentative hypothesis. (d) You synthesize the new data collected, which support the hypothesis of trauma but eliminate the accidental cause. The final diagnoses are "resolving right orbital contusion" and "risk for trauma."

Diagnostic hypotheses are activated very early in the reasoning process. Consider a hunch that Ellen has suffered physical trauma. A hunch helps diagnosticians adapt to large amounts of information because it clusters cues into meaningful groups and directs subsequent data collection. Later, you can accept your hunch or rule it out.

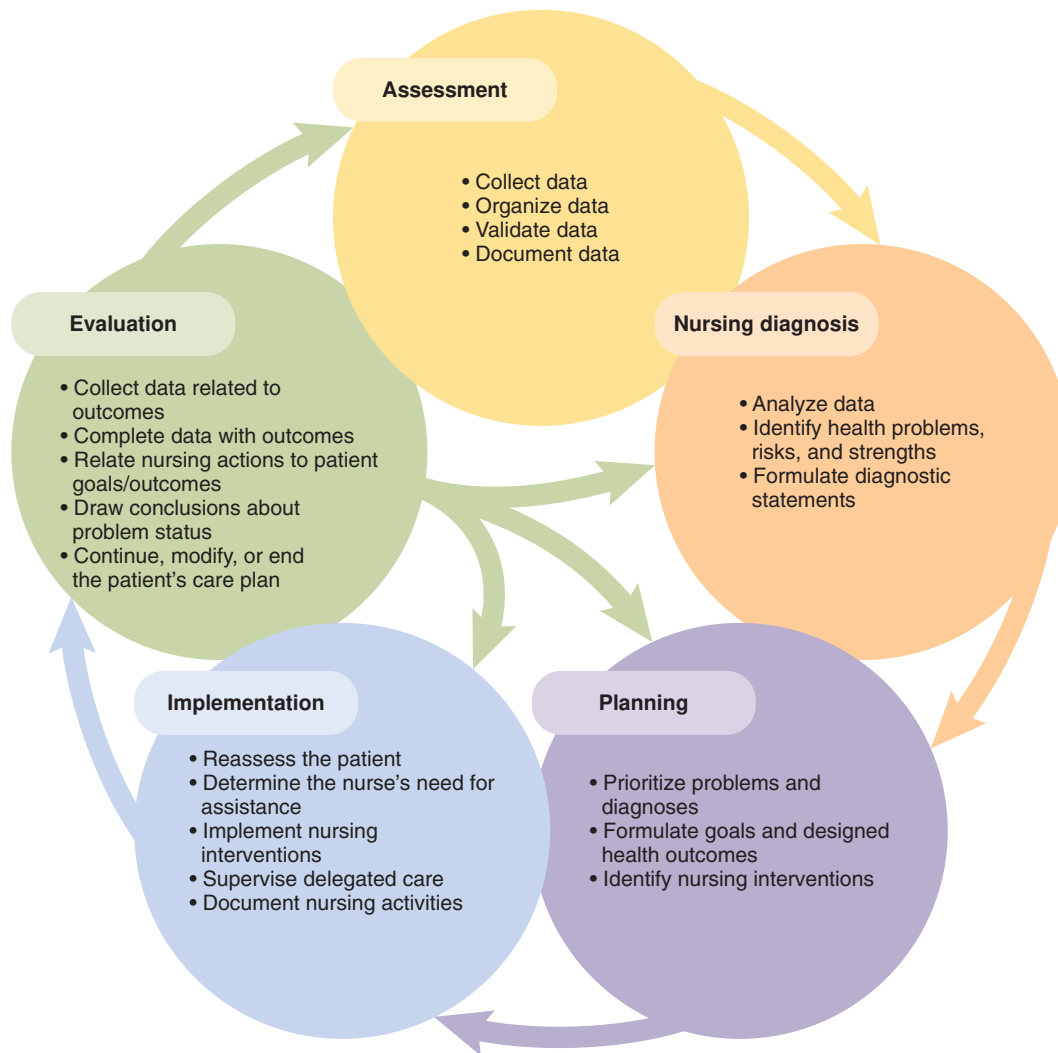
Once you complete data collection, you can develop a preliminary list of significant signs and symptoms and all patient health needs. This list is less formal in structure than your final list of diagnoses will be and is in no particular order. (Such a list for Ellen is found on p. 1 of the opening vignette.) Cluster or group together the assessment data that appear to be causal or associated. For example, for a person in acute pain, associated data may include rapid heart rate and anxiety. Organizing the data into meaningful clusters is slow at first; experienced examiners cluster data more rapidly.¹

Validate the data you collect to make sure they are accurate. As you validate your information, look for gaps in data collection. Be sure to find the missing information because identifying missing information is an essential critical thinking skill. How you validate your data depends on experience. If you are unsure of the blood pressure, validate it by repeating the measurement yourself. Eliminate any extraneous variables that could influence blood pressure results, such as recent activity or anxiety over admission. If you have less experience analyzing breath sounds or heart murmurs, ask an expert to listen. Even for nurses with years of clinical experience, some signs always require validation (e.g., a breast lump).

Critical Thinking and the Diagnostic Process

The **nursing process** is a systematic method of planning and providing patient care organized around series of phrases that integrate evidence-informed practice and critical thinking.² The nursing process typically includes five phases: (a) assessment, (b) nursing diagnosis, (c) planning, (d) implementation, and (e) evaluation. As shown in Fig. 1.2, the nursing process is a dynamic, interactive process requiring clinicians to move back and forth within the phases.

The method of moving from novice to becoming an expert practitioner is through the use of critical thinking.¹



1.2 The clockwise arrow indicates how the nursing process is typically used to provide patient care. While not depicted, counterclockwise arrows are “at play” and help us to understand how information acquired in one step of the nursing process informs the previous step. Note that evaluation relates to nursing diagnosis, planning, and implementation. (Cullen, M. L., & Wagner, S. (2015). The nursing process in the 21st century. In D. M. Gregory, C. Raymond-Seniuk, L. Patrick, et al. (Eds.), *Fundamentals: Perspectives on the art and science of Canadian nursing* (pp. 164–191). Philadelphia: Wolters Kluwer Health.)

All nurses start as novices, when clear-cut rules are needed to guide actions. Critical thinking is the means by which nurses learn to assess and modify, if indicated, before acting.

The following critical thinking skills are organized in a logical progression according to how these skills might be used in the nursing process.³ Although the skills are described sequentially here, they are not used that way in the clinical area. Rather than a step-by-step linear process, critical thinking is a multidimensional thinking process. With experience, you will be able to apply these skills in a rapid, dynamic, and interactive way. You will also be able to conduct health assessments and physical examinations in ways that convey genuine positive regard for and acceptance of the person, and that show you are not viewing people with regard merely to their bodily parts. For now, follow Ellen’s case study through these steps:

1. *Identify assumptions.* That is, recognize that you could take information for granted or see it as fact when actually there is no evidence for it. Ask yourself what you may be taking for granted here. For example, in Ellen’s situation, you might have assumptions of a “typical profile” of a person who uses alcohol or who experiences physical violence on the basis of your past experience or exposure to media coverage. However, the facts of Ellen’s situation are unique.
2. *Identify an organized and comprehensive approach to assessment.* This approach depends on the patient’s priority needs and your personal or institutional preference. Ellen has many physical and psychosocial issues, but at her time of admission, she is not acutely physically ill. Thus you may use any organized format for assessment that is feasible for you: a head-to-toe approach, a body

systems approach (e.g., cardiovascular, gastro-intestinal), a regional area approach (e.g., pelvic examination), or the use of a preprinted assessment form developed by the hospital or clinic.

3. *Validate or check the accuracy and reliability of data.* For example, in addiction treatment, a clinician corroborates data with a family member or friend to verify the accuracy of Ellen's history. In Ellen's particular case, her significant others are absent or nonsupportive, and the corroborative interview may need to be with a social worker.
4. *Distinguish normal from abnormal when signs and symptoms are identified.* This is the first step in problem identification, and your ease will grow with study, practice, and experience. Increased blood pressure, wheezing, and heart murmur are among the many abnormal findings in Ellen's case.
5. *Make inferences or hypotheses.* This skill involves interpreting the data and deriving a correct conclusion about the health status. It is a challenge for the beginning examiner because both a baseline amount of knowledge and experience are needed. Is Ellen's blood pressure increased as a result of the stress of admission or as a result of a chronic condition? Is the heart murmur "innocent" or a sign of heart valve disease?
6. *Cluster related cues, which helps you see relationships among the data.* For example, heavy alcohol use, social and interpersonal consequences of alcohol use, academic consequences, and occupational consequences are a clustering of cues that suggest a pattern of alcohol use that results in significant harms.
7. *Distinguish relevant from irrelevant.* A complete history and physical examination yield a vast amount of data. Look at the clusters of data, and consider which data are important for a health problem or a health promotion need. This skill is also a challenge for beginning examiners and one area in which the expertise of a clinical mentor can be invaluable.
8. *Recognize inconsistencies.* Ellen explains that she ran into a door (subjective data), which is at odds with the location of the infraorbital hematoma (objective data). With this kind of conflicting information, you can investigate and further clarify the situation.
9. *Identify patterns.* Awareness of patterns helps you fill in the whole picture and discover missing pieces of information. To decide whether the systolic murmur is a problem for Ellen, you need to know the usual function of the heart, characteristics of innocent murmurs, and risk factors for abnormal or pathological murmurs.
10. *Identify missing information, gaps in data, or a need for more data to make a diagnosis.* Ellen will likely require further diagnostic tests to determine whether her respiratory issues are asthma-related to specify a diagnosis.
11. *Promote health by identifying priorities with the patient, assessing risk factors, and considering a patient's social context.* This skill applies to generally healthy people and concerns disease prevention and health promotion.

To accomplish this skill, you need to identify and work with each patient to manage known risk factors for the individual's age group and social context. Managing risk factors drives the health promotion goals and priorities. For example, safety planning is an important intervention for Ellen, inasmuch as she identified interpersonal violence as an immediate concern. Following Ellen's lead, you would convey acceptance of her and a willingness to listen, and you would tell Ellen that the abuse she experiences is not her fault (see [Chapter 8](#)). You would ask Ellen whether she is interested in developing a safety plan to ensure that she has a safe place to go to if her partner becomes abusive, or whether she is interested in discussing other issues that she identifies as priorities. You might ask her whether she would like to talk to a social worker who could help her address her social, economic, or housing needs. Depending on her priorities, you might also refer Ellen to a dental clinic that provides low-cost or no-cost dental care.

12. *Diagnose actual and potential (risk) problems from the assessment data.* These include, for example, potential for alcohol use disorder; right orbital contusion (resolving); elevated blood pressure; systolic heart murmur; diminished respiratory function related to wheezes and rhonchi; interpersonal violence and trauma. Medical and nursing diagnoses should not be considered isolated from each other; interprofessional perspectives and assessment data are needed to fully understand a person's health status. **Nurse practitioners**, for example, have expanded scopes of practice. Nurse practitioners are registered nurses who typically have master's degrees and have advanced education in health assessment and the diagnosis and management of illnesses and injuries, including the ability to order diagnostic tests and prescribe medications. Nurse practitioners provide a direct point of entry to the health care system for case management, diagnosis, treatment, prevention, and promotion, and, in some cases, palliative care.⁴ For example, it makes sense that the medical diagnosis of asthma be reflected in the nursing diagnoses, in view of the nurse's knowledge of the signs of asthma. In this book, common nursing diagnoses are presented along with medical diagnoses to illustrate common abnormalities. It is important to observe how these two types of diagnoses are interrelated.

With regard to Ellen's case, for example, the medical diagnosis is used to evaluate the cause of disease. The nursing diagnosis is used to evaluate the response of the whole person to actual or potential health problems. Note that the admitting nurse and later the physician auscultate Ellen's lung sounds and determine that they are diminished and that wheezing is present. Diminished breath sounds, with moderate expiratory wheeze and scattered rhonchi at both bases, represent both medical problems and nursing clinical problems. The physician or nurse practitioner listens to diagnose the cause of the abnormal sounds (in this case, asthma) and to order specific diagnostic tests or medication

TABLE 1.1 Identifying Immediate Priorities**Principles of Setting Priorities****1. Make a complete list of current medications, medical problems, allergies, and reasons for seeking care.**

Refer to them frequently because they may affect how you set priorities.

2. Determine the relationships among the problems: If problem Y causes problem Z, problem Y takes priority over problem Z. **Example:** If pain is causing immobility, *pain management* is a high priority.**Setting priorities is a dynamic, changing process:**

at times, the order of priority changes, depending on the seriousness and relationship of the problems.

Example: If abnormal laboratory values are at life-threatening levels, they become a higher priority; if the patient is having trouble breathing because of acute rib pain, managing the pain may be a higher priority than dealing with a rapid pulse (first-level priority, listed in the following section of this table).

Steps to Setting Priorities**1. Assign high priority to first-level priority problems (immediate priorities):** Remember the “ABCs plus V”:

- **A**irway problems
- **B**reathing problems
- **C**ardiac/circulation problems
- **V**ital sign concerns (e.g., high fever)

Exception: With cardiopulmonary resuscitation (CPR) for cardiac arrest, begin chest compressions immediately. Go online to <https://resuscitation.heartandstroke.ca/guidelines/position/CPR> for the most current CPR guidelines.

2. Next, attend to second-level priority problems:

- Mental status change (e.g., confusion, decreased alertness)
- Untreated medical problems that necessitate immediate attention (e.g., for a diabetic patient who has not had insulin)
- Acute pain
- Acute urinary elimination problems
- Abnormal laboratory values
- Risks of infection, to safety, or to security (for the patient or for others)

3. Address third-level priority problems (later priorities):

- Health problems that do not fit into the previous categories (e.g., problems with lack of knowledge, activity, rest, family coping)

Source: Adapted from Alfaro-LeFevre, R. (2017). *Critical thinking and clinical judgment: A practical approach* (6th ed.). Philadelphia: W.B. Saunders.

treatment. The nurse listens to detect abnormal sounds early, to monitor Ellen’s response to treatment, and to initiate supportive measures and health education.

13. *Set priorities when a patient has more than one health or illness issue occurring concurrently (which is often the case).* In the acute care hospital setting, the initial problems are usually related to the reason for admission. However, the acuity of illness, as well as the person’s

social and family context, often determines the order of priorities of the person’s problems (Table 1.1).

For example, **first-level priority problems** are those that are emergencies, life-threatening, and immediate, such as establishing an airway or supporting breathing. **Second-level priority problems** are those that are next in urgency: those necessitating your prompt intervention to forestall further deterioration, such as mental status change, acute pain, acute urinary elimination problems, untreated medical problems, abnormal laboratory values, risks of infection, or risk to safety or security. Ellen has abnormal physical signs that fit in the category of untreated medical problems. For example, Ellen’s adventitious breath sounds are a cue to further assess respiratory status to determine the final diagnosis. Ellen’s mildly elevated blood pressure also needs monitoring.

Third-level priority problems are those that are important to the patient’s health but can be addressed after more urgent health problems are addressed. In Ellen’s case, the data indicating diagnoses of knowledge deficit, social isolation, risk for other-directed violence, and risk for situational low self-esteem fit in this category. Interventions to treat these problems are lengthier, and the response to treatment is expected to take more time.

Collaborative problems are those in which the approach to treatment involves multiple disciplines, and nurses often have the primary responsibility to diagnose the onset and monitor the changes in status. For example, the data regarding alcohol use represent a collaborative problem. With this problem, the sudden withdrawal of alcohol has profound implications on the central nervous and cardiovascular systems. Ellen’s response to the rebound effects of these systems is managed.

14. *Identify patient-centred expected outcomes.* What specific, measurable results that will show an improvement in the person’s problem after treatment will you expect? The outcome statement should include a specific time frame. For example, before discharge from the emergency department, and nurses will talk with Ellen to help her consider a safety plan for dealing with interpersonal violence that fits with her life context (see Chapter 8).
15. *Determine specific interventions that will achieve positive outcomes.* These interventions aim to prevent, manage, or resolve health problems. They constitute the health care plan. For specific interventions, state who should perform the intervention, when and how often, and the method used.
16. *Evaluate and revise your thinking.* Observe the actual outcomes, and evaluate them in relation to the expected outcomes (do the stated outcomes match the individual’s actual progress?). Then, analyze whether your interventions were successful or not. Continually think about what you could be doing differently or better.
17. *Determine a comprehensive plan or evaluate and update the plan.* Record the revised plan of care and keep it up to date. The use of electronic health records is widespread in Canada; nurses play an important role in

influencing the flow, use, and management of information. Communicate the plan to the multidisciplinary team. Be aware that the plan of care is a legal document, and accurate recording is important for accountability purposes, billing purposes, quality assurance and evaluation, and research.

EVIDENCE-INFORMED ASSESSMENT

All patients must be provided with the most current best-practice techniques. The term **evidence-informed practice (EIP)** is increasingly used in the literature to encompass a more inclusive view of what “counts” as evidence than is conventionally implied when using the term *evidence-based practice*.⁵ Many forms of evidence inform clinical decision making and the delivery of nursing care, including evidence generated through intervention studies, clinical trials, ethnographic research, systemic reviews, policy analyses, and evaluation studies, among others—hence the relevance of the term *evidence-informed practice*. EIP is more than the use of best-practice techniques to treat patients; it can be defined as “a paradigm and life-long problem solving approach to clinical decision-making that involves the conscientious use of the best available evidence (including a systematic search for and critical appraisal of the most relevant evidence to answer a clinical question) with one’s own clinical expertise and patient values and preferences to improve outcomes for individuals, groups, communities, and systems.”⁶ Many EIP guidelines, including those developed by the RNAO (see <http://rnao.ca/bpg>), are applicable in a number of jurisdictions in Canada. As shown in Fig. 1.3, note how clinical decision making depends on all four factors: the best and most appropriate evidence from a critical review of research



1.3

literature; the patient’s own context and preferences; the clinician’s experience and expertise; and finally, physical examination and assessment. Assessment skills must be practised with hands-on experience and refined to a high level.

Although assessment skills are foundational to EIP, it is important to question tradition when no compelling research evidence exists to support it. Some time-honoured assessment techniques have been omitted from the examination repertoire because clinical evidence has shown them to be less than useful. For example, the traditional practice of auscultating bowel sounds was found not to be the best indicator of returning gastro-intestinal motility in patients who have had abdominal surgery.⁷ Madsen and colleagues⁷ first reviewed earlier studies suggesting that early postoperative bowel sounds probably do not represent the return of normal gastro-intestinal motility and that listening to the abdomen is therefore not useful in this situation. Research did show the primary markers for returning gastro-intestinal motility after abdominal surgery to be the return of flatus and the first postoperative bowel movement. Madsen and colleagues instituted a new practice protocol and monitored patient outcomes to check whether discontinuing the auscultation of bowel sounds was detrimental to patients who had undergone abdominal surgery. Detrimental outcomes did not occur; the new practice guideline was shown to be safe for patients’ recovery and a better allocation of staff time.

EXPANDING THE CONCEPT OF HEALTH

Assessment is the collection of data about an individual’s health state. A clear idea of an individual patient’s health status is important because it determines which assessment data should be collected. In general, the list of data that must be collected has lengthened as the concept of health has broadened.

According to the **biomedical model**, which is the predominant model of the Canadian health care system, health is the absence of disease (Fig. 1.4). Health and disease are viewed as two ends of a continuum. Disease is assumed to be caused by specific agents or pathogens. Thus the biomedical focus is the diagnosis and treatment of those pathogens and the curing of disease. Assessment factors are a list of bio-physical symptoms and signs. A person is certified as healthy



1.4

when these symptoms and signs have been eliminated. When disease does exist, the medical diagnosis is worded to identify and explain the cause of disease.

Accurate diagnosis and treatment of illness are important parts of health care. However, the medical model has limiting boundaries. According to the **behavioural model**, health care extends beyond treating disease to include secondary and primary preventions, with emphasis on changing behaviours and lifestyles (e.g., quitting smoking or eating nutritiously).⁸ The **socioenvironmental model** incorporates sociological and environmental aspects in addition to the biomedical and behavioural ones. The socioenvironmental perspective parallels the definition provided by the World Health Organization,⁹ which defines *health* as a resource for living and as the abilities to realize goals or aspirations, meet personal needs, and change or cope with everyday life. Building on these ideas, the *Ottawa Charter for Health Promotion*⁹ identified the prerequisites to health as peace, shelter, education, food, income, a stable ecosystem, sustainable resources, social justice, and equity. Although the *Ottawa Charter* was written in 1986, many people in Canada still lack these basic prerequisites, and their health is profoundly compromised as a result.

By developing the *Ottawa Charter for Health Promotion*, Canada has taken a leading international role in emphasizing the importance of the **social determinants of health**. Social determinants are the social, economic, and political conditions that shape the health of individuals, families, and communities.¹⁰ For example, some of the best predictors of adult-onset diabetes, mental illness, heart attack, and stroke are low income, inability to afford nutritious foods, and crowded housing or lack of affordable housing. These are issues that also affect patients' and families' abilities to engage in health-promoting practices.

As discussed in [Chapter 2](#), Canada has also been a major international leader in the area of **health promotion**. *Health promotion* can be defined as a comprehensive social and political process of enabling people to increase control over the determinants of health and thereby improve their health.¹⁰ Health-promoting actions focus on strengthening the skills and capabilities of individuals and families and are directed toward changing social, economic, and environmental conditions to improve health.

A RELATIONAL APPROACH TO NURSING PRACTICE

The concept of “relational” is increasingly used to describe the complex, interrelated nature of health, people, society, and nursing practice.⁸ *Relational* is not the same as *relationships*: Although relationships between people are important, relational practice refers to more than interpersonal relationships. A **relational approach in nursing practice** accounts for the fact that health, illness, and the meanings they hold for a person are shaped by the person's social, cultural, family, historical, and geographical contexts, as well as the person's gender, age, ability, and other individual

contexts. Relational approaches focus nurses' attention on what is significant to people in the context of their everyday lives and how capacities and socioenvironmental limitations shape people's choices. One of the central skills of relational practice is *reflectivity*, a process of continually examining how you view and respond to patients on the basis of your own assumptions, cultural and social orientation, past experiences, and so on. Approaching nursing practice relationally promotes (a) understanding across differences rather than defensiveness and (b) responsiveness rather than a sense of frustration or powerlessness. The application of relational approaches in clinical practice are discussed further in [Chapters 3, 4, and 6–8](#).

Nurses need to draw on a variety of perspectives. For example, if you were working with Ellen, the young woman in the chapter opening case study, you would use a biomedical perspective to assess and treat her underlying respiratory infection. From a behavioural perspective, you might focus on providing information and teaching Ellen about how to eat more nutritious foods. The socioenvironmental model would attune you to assessing Ellen's risks for violence and supporting her to develop a safety plan in case she needs to remove herself quickly from a violent situation at home. Considering the social determinants of health, you would focus attention on whether Ellen could afford fresh fruits or vegetables or pay for the prescription necessary to treat her respiratory infection. A relational stance would prompt you to consider what biases or assumptions might be influencing you in relation to Ellen and would involve your exploring with her the issues she thought were most important at this point in her life. For example, the health assessment process might indicate that the most important health-promoting intervention would be a referral to a women's social support agency in the community.

COLLECTING FOUR TYPES OF DATA

Every examiner needs to collect four different kinds of data, depending on the clinical situation: (a) complete, (b) episodic or problem-centred, (c) follow-up, and (d) emergency.

Complete (Total Health) Database

The complete database includes a complete health history and results of a full physical examination. It describes the current and past health states and forms a baseline against which all future changes can be measured. It yields the first diagnoses.

In primary care, the complete database is compiled in a primary care setting, such as a pediatric or family practice clinic, independent or group private practice, college health service, women's health care agency, visiting nurse agency, or community health care agency. When you work in these settings, you are the first health care provider to see the patient, and you have primary responsibility for monitoring the patient's health care. For the well person, this database must describe the person's health state, perception of health, strengths or assets such as the ability to engage in

health maintenance or health-promoting practices, support systems, current developmental tasks, and any risk factors or social issues. For the ill person, the database also includes a description of the person's health problems, perception of illness, and response to the problems.

In acute hospital care, the complete database also is compiled after the patient's admission to the hospital. In the hospital, data related specifically to disease may be collected by the admitting physician. You collect additional information about the patient's perception of illness, functional ability or patterns of living, activities of daily living (ADLs), health maintenance behaviours, response to health problems, coping patterns, interaction patterns, and health goals.

Episodic or Problem-Centred Database

The episodic database is for a limited or short-term problem. It is a "mini-database," smaller in scope and more focused than the complete database. It concerns mainly one problem, one cue complex, or one body system. It is used in all settings: hospital, primary care, or long-term care. For example, 2 days after surgery, a hospitalized person suddenly has a congested cough, shortness of breath, and fatigue. The history and examination focus primarily on the respiratory and cardiovascular systems. In another example, a person presents with a rash in an outpatient clinic. The history and examination follow the direction of this presenting concern, such as whether the rash had an acute or chronic onset, was associated with a fever, and was localized or generalized. Documentation of the history and examination must include a clear description of the rash.

Follow-Up Database

The status of any identified problems should be evaluated at regular and appropriate intervals. What change has occurred? Is the problem getting better or worse? What coping strategies are used? The follow-up database is used in all settings to monitor short-term or chronic health problems.

Emergency Database

The emergency database calls for a rapid collection of the data, often compiled while life-saving measures are occurring. Diagnosis must be swift and sure. For example, in a hospital emergency department, a person is brought in with suspected substance overdose. The first history questions are "What did you take?", "How much did you take?", and "When did you take it?" The person is questioned simultaneously while their airway, breathing, circulation, level of consciousness, and disability are being assessed. Clearly, the emergency database requires more rapid collection of data than does the episodic database.

FREQUENCY OF ASSESSMENT

The frequency of assessment varies with the person's age, sex, gender, ability, social context, and illness and wellness needs. Most ill people seek care because of pain or some abnormal signs and symptoms they have noticed. Their visit

to a health care facility prompts an assessment: the gathering of a complete, an episodic, or an emergency database.

For the well person, however, opinions are changing about assessment intervals. The term *annual checkup* is vague. What does it constitute? Is it necessary or cost effective? Does it sometimes give an implicit promise of health and thus provide false security? What about the classic situation in which a person suffers a heart attack 2 weeks after a routine checkup that includes normal findings on an electrocardiogram? The timing of some formerly accepted recommendations have now changed; for example, the Papanicolaou (Pap) test for cervical cancer in females is no longer required annually depending on past test results and the female's health history.¹¹ Screening guidelines for the use of mammography, breast self-examination, and clinical breast examination to screen for breast cancer have also recently changed, and recommendations vary significantly in different provinces and territories.¹¹ The same annual routine physical examination cannot be recommended for all persons because health priorities vary among individuals, different age groups, and risk categories.

In Canada, there are various guidelines for disease prevention and health promotion. New national and provincial guidelines are developed regularly for particular populations; an example is the 2017 updated recommendations on human papillomavirus (HPV) vaccine guidelines for girls, women, boys, and men.¹²

National standards for **immunizations** are contained in the *Canadian Immunization Guide*, and updates to information are published as a Table of Updates several times a year.¹³ Each province and territory adapts these standards slightly according to its population's needs. It is important to check the provincial or territorial guidelines where you practice. **Periodic health examinations** are designed to prevent morbidity and mortality by identifying modifiable risk factors, social determinants of health, early signs of treatable conditions, and counsel on lifestyle issues (e.g., diet and exercise).¹⁴ In 1980, the Canadian Task Force on the Periodic Health Examination produced its first evidence-informed clinical practice guidelines. The task force was renamed the *Canadian Task Force on Preventive Health Care* in 1984, and many of the guidelines were updated in 2006, again in 2013, and new guidelines and appraisals continue to be added online.¹⁵

Since 2006, the Public Health Agency of Canada¹⁶ has taken the lead in developing and distributing health promotion, disease prevention, and other guidelines for children, adults, pregnant women, and older adults. The Canadian Medical Association's¹⁷ *Clinical Practice Guidelines* are also updated regularly and include prevention, promotion, and treatment guidelines for use by nurses, nurse practitioners, and physicians.

For infants and children, clinical practice guidelines developed at the provincial and territorial level are accessible; these guidelines include the following:

- Developmental screening tools
- Schedules for periodic well-child assessments

- Health promotion, injury prevention, and disease prevention strategies for various age groups
- Depression screening tools for adolescents
- Strategies to promote healthy parenting
- Strategies to support psychosocial and emotional development in children

For example, the *Rourke Baby Record*¹⁸ is an evidence-informed health maintenance and prevention guide that can be used by community health nurses, nurse practitioners, and physicians caring for children during the first 5 years of life. The Canadian Paediatric Society¹⁹ and the World Health Organization²⁰ also have evidence-informed developmental and preventive screening guidelines.

Tables 1.2, 1.3, 1.4, and 1.5 contain examples of clinical preventive health care recommendations per age group, beginning with birth to 9 years of age. These recommendations are periodically updated, and they vary from one province or territory to another, as noted previously; however, these tables provide a good overview of preventive guidelines over the lifespan. Addressing health promotion in the context of health assessment is discussed in depth in Chapter 2.

ASSESSMENT THROUGHOUT THE LIFE CYCLE

It makes good sense to consider health assessment from a life cycle approach. First, you must be familiar with the usual and expected developmental tasks for each age group. This knowledge alerts you to which physical, psychosocial, cognitive, and behavioural tasks are currently important for each person. Next, once assessment skills are learned, they are more meaningful when considered from a developmental perspective. Your knowledge of communication skills and health history content is enhanced as you consider how they apply to individuals throughout the life cycle. The physical examination also is more relevant when you consider age-specific data about anatomy, the method of examination, normal findings, and abnormal findings (see Fig. 10.5 pm p. 168). For example, an average normal blood pressure for a female Ellen K.'s age is 116/70 mm Hg.

For each age group, the approach to health assessment arises from an orientation toward wellness, quality of life,

and health maintenance. The nurse learns to capitalize on the patient's strengths. What is the patient already doing that promotes health? What other areas are amenable to health teaching so that the patient can further build the potential for health?



SOCIAL DETERMINANTS OF HEALTH CONSIDERATIONS

Considerations with respect to the social determinants of health are critical in health and physical assessments. An introduction to key concepts related to the social determinants of health is provided in Chapter 3. These concepts are threaded throughout the text as they relate to specific chapters, and a relational stance in your clinical practice will help you to attend to the varying contexts that shape people's health and well-being.

As you will read in more depth in Chapter 3, Canada's population, estimated at 35 151 728, has increased 5.0% since 2011.^{21,22} Although the majority of the population is Canadian born, the Canadian population is increasingly diverse, primarily as a result of international migration. According to the 2016 census, 4.9% of the total population reported "Aboriginal identity".²³ As discussed in Chapter 3, the term *Aboriginal* is commonly used, for example, by Statistics Canada, to refer to Indigenous peoples, and in Canada, Indigenous peoples includes First Nations, Métis, and Inuit.

In Canada, health and social inequities are widening, which has had a negative influence on the health of Canadians.^{10,24} At least 15% of Canadians live in impoverished circumstances, and these rates are dramatically higher for women who are raising children on their own (51%).¹⁰ Evidence continues to demonstrate that poverty is the primary cause of poor health among Canadians.¹⁰ For example, living in inadequate or overcrowded living conditions increases people's risk for respiratory illness, mental health problems, and injuries.²⁴ Nurses and other health care providers therefore require the skills and knowledge to effectively—and respectfully—explore these interrelated social, economic, and cultural factors affecting peoples' physical and mental health.

TABLE 1.2 Clinical Preventive Health Care Recommendations: Birth to Age 9 Years

Leading Causes of Death (2008)^a

Conditions originating in perinatal period (<1 year)
 Congenital anomalies (<1 year)
 Sudden unexpected infant death (SUID) (<1 year)
 Unintentional injuries
 Cancer
 Nervous system diseases

^aData from Public Health Agency of Canada. (2016). *Leading causes of death, Canada, 2008 males and females combined, counts*. Retrieved from <http://www.phac-aspc.gc.ca/publicat/lcd-pcd97/table1-eng.php>.

TABLE 1.2 Clinical Preventive Health Care Recommendations: Birth to Age 9 Years—cont'd

Interventions for the Pediatric Population^b**Screening**

Hip examination, serial
 Eye examination, serial
 Hearing and ear examination, serial
 Visual acuity screen, serial
 Skin and scalp, serial
 Nose and mouth, serial
 Chest and abdomen, serial
 Serial height, weight, head circumference measurements, serial
 Developmental milestones: language, social, and emotional issues, serial
 Sleep and eating habits, serial
 Blood test to screen for 15+ treatable disorders depending on province or territory at time of birth (most common: congenital hypothyroidism [CH], cystic fibrosis [CF], medium-chain acyl-CoA dehydrogenase deficiency [MCAD], and phenylketonuria [PKU] [at birth]).

Counselling**Injury Prevention:**

Child safety car seats and boosters (<5 years)
 Seatbelts (<5 years)
 Violence and firearms safety
 Helmet safety
 Trampoline safety
 Water safety (e.g., swimming and boating)
 Smoke detector, flame-retardant sleepwear
 Set hot water heater temperature below 48.9°C (120°F)
 Window and stair guards, pool fence
 Poison control phone number (see website of the Canadian Association of Poison Control Centres: <http://www.capcc.ca>)

Diet and Exercise:^c**Infant Diet (0–12 Months):**

- Recommend exclusive breastfeeding for the first 6 months and sustained up to 2 years (individually counsel those families who have made a fully informed choice not to breastfeed on the use of breast milk substitutes).
- Recommend that all exclusively breastfed, healthy, term infants in Canada receive 10 µg/day (400 IU/day) of vitamin D, and that this dosage should continue until the infant diet includes at least 10 µg/day (400 IU/day) from other sources.^d
- Recommend meat, meat alternatives, and iron-fortified cereal as an infant's first complementary foods.
- Advise parents and caregivers not to give honey to a child under 1 year of age to prevent infant botulism.

Toddler and Older Children Diet (12 Months+):

- Recommend a regular schedule of meals and snacks, offering a variety of whole, nonprocessed foods from the four food groups.
- Recommend foods prepared with little or no added salt or sugar.
- Explain to parents and caregivers that nutritious, higher-fat foods are an important source of energy for young children.
- Encourage continued breastfeeding, or offering 500 mL per day of homogenized (3.25% M.F.) cow milk.
- Recommend limiting fruit juice and sweetened beverages. Encourage offering water to satisfy thirst.
- Encourage parents and caregivers to be role models and instill lifelong healthy eating habits.
- Encourage adequate vitamin D intake.

^bAndreatta, D. (2013, August 25). Canada has no national standard for newborn screening: Here's why it should. *The Globe and Mail*. Retrieved from <http://www.theglobeandmail.com/life/health-and-fitness/health/canada-has-no-national-standard-for-newborn-screening-heres-why-it-should/article13940675/>; Canadian Paediatric Society. (2013). *Schedule of well-child visits*. Retrieved from http://www.caringforkids.cps.ca/handouts/schedule_of_well_child_visits; Perinatal Services BC. (2017). *Disorders screened*. Retrieved from <http://www.perinatalservicesbc.ca/health-professionals/professional-resources/screening/newborn/disorders-screened>.

^cData from Canadian Paediatric Society (2012). *Healthy active living: physical activity guidelines for children and adolescents*. Retrieved from <http://www.cps.ca/en/documents/position/physical-activity-guidelines>; Health Canada. (2015). *Nutrition for health term infants: recommendations from six to 24 months*. Retrieved from <http://www.hc-sc.gc.ca/fn-an/nutrition/infant-nourisson/recom/recom-6-24-months-6-24-mois-eng.php>.

^dCanadian Paediatric Society. (2017). *Vitamin D supplementation: Recommendations for Canadian mothers and infants*. Retrieved from <https://www.cps.ca/en/documents/position/vitamin-d>.

TABLE 1.2 Clinical Preventive Health Care Recommendations: Birth to Age 9 Years—cont'd**Exercise (Infant to 9 Years Old):**

- Infants (<1 year) should be physically active several times daily—particularly through interactive floor-based play.
- Toddlers (1–2 years) and preschoolers (3–4 years) should accumulate at least 180 min of physical activity at any intensity spread throughout the day. Exercise includes a variety of activities in different environments and activities that develop movement skills. There should be progression toward at least 60 min per day of energetic play by 5 years of age.
- Children (5–11 years) should accumulate at least 60 min of moderate-to-vigorous-intensity physical activity daily. Exercise includes vigorous-intensity activities at least 3 days per week and activities that strengthen muscle and bone at least 3 days per week.

Anticipatory Guidance:

Inquiries about developmental milestones

Night-time crying

Skin cancer:

- Sun exposure and protective clothing

Electronic media^a

- TV/tablet/smartphone screen time (<2 years, not recommended; 2+ years, 0–2 hr/day maximum)
- Hearing protection

Substance use:

- Effects of second-hand smoke
- Antismoking message

Dental health:

- Regular visits to dental care provider
- Flossing once daily, brushing with fluoride toothpaste twice daily

Social support:

- Abuse and violence
- Mental health
- Body image and dieting
- Peer relationships and bullying

Immunizations (Examples)^f

Diphtheria–tetanus–acellular pertussis–inactivated poliovirus (DTaP-IPV)^g

Haemophilus influenzae type b (Hib) conjugate^h

Measles-mumps-rubella (MMR)ⁱ

Varicella (chicken pox) (Var)^j

Hepatitis B (HB)^k

Pneumococcal conjugate (Pneu-C-13)^l

Meningococcal C conjugate (Men-C)^m

Influenza (Inf)ⁿ

Rotavirus (Rot)^o

^aData from Screen Smart. (2010). *Screens and health*. Retrieved from http://www.screensmart.ca/screens_health.

^fData from Public Health Agency of Canada. (2017). *Canada's provincial and territorial routine (and catch-up) vaccination programs for infants and children*. Retrieved from https://www.canada.ca/content/dam/phac-aspc/documents/services/provincial-territorial-immunization-information/childhood_schedule.pdf.

^gAt ages 2, 4, 6, and 18 months and 4–6 years.

^hAt ages 2, 4, 6, and 18 months.

ⁱAt ages 12 months and 4–6 years.

^jAt age 12 months and 4–6 years.

^kThree doses in infancy or two or three doses in preteen or teen years, depending on province.

^lAt ages 2, 4, and 12 months.

^mInfancy: 12 months. At least one dose in primary infant series should be given after age 5 months. Earlier doses may be recommended depending on province or territory.

ⁿOne dose at age 6–23 months.

^oAt ages 2 and 4 months.

Continued

TABLE 1.2 Clinical Preventive Health Care Recommendations: Birth to Age 9 Years—cont'd**Chemoprophylaxis^a**

Ocular prophylaxis (birth) is no longer routinely recommended. More effective means of preventing ophthalmia neonatorum include screening all pregnant women for gonorrhea and chlamydia infection, and treatment and follow-up of those found to be infected. Mothers who were not screened should be tested at delivery. Infants of mothers with untreated gonococcal infection at delivery should receive ceftriaxone. Infants exposed to chlamydia at delivery should be followed closely for signs of infection.

Interventions for Populations at High Risk**POPULATION****POTENTIAL INTERVENTIONS**

First-time mothers of low socioeconomic status (SES); lone caregivers or teenage mothers at risk for child maltreatment	Home visitation by nurses during perinatal period through infancy
Children at high risk for dental caries	Fissure sealants
Infants at high risk for iron deficiency anemia	Routine hemoglobin testing
Children at high risk for exposure to lead	Blood lead screening
Indigenous children born in Canada; parental history of intravenous drug use, HIV-positive status, or alcohol abuse	Tuberculin (TB) skin test
Recent immigrant and refugee children ^a	TB skin test, blood test, infectious disease tests, thyroid and other biochemical function tests

^aRecommendations from Canadian Paediatric Society. (2015). Preventing ophthalmia neonatorum. Retrieved from <http://www.cps.ca/en/documents/position/ophthalmia-neonatorum>.

^aRecommendations from Canadian Paediatric Society. (2016). Caring for kids new to Canada. Retrieved from <http://www.kidsnewtocanada.ca/care/assessment>.

TABLE 1.3 Clinical Preventive Health Care Recommendations: Ages 10 to 17 Years**Leading Causes of Death (2008)^a**

Unintentional injuries
Suicide
Cancer
Homicide
Nervous system diseases

Interventions for the Preadolescent and Adolescent Population**Screening^b**

Height, weight measurements
Physical assessment of head, neck, chest, back, abdomen, gastro-intestinal tract, skin
Visual acuity screen
Blood pressure
Pelvic examination and sexually transmitted infection (STI) testing (females; can include cis-gendered young women, trans young men, and others)^c
Sexual maturity rating
Menstrual issues
Assessment for eating disorders
Assessment for depression and other mental health concerns
Assessment for problem drinking and other substance use

^aData from Public Health Agency of Canada. (2016). *Leading causes of death, Canada, 2008 males and females combined, counts*. Retrieved from <http://www.phac-aspc.gc.ca/publicat/lcd-pcd97/table1-eng.php>.

^bCanadian Paediatric Society. (2016). *An update to the Greig health record: Preventative health care visits for children and adolescents aged 6 to 17 years—Technical report*. Retrieved from <http://www.cps.ca/documents/position/greig-health-record-technical-report>.

^cScreening for cervical cancer under the age of 21 is not recommended. STI testing is recommended in all sexually active women, at least annually. There is insufficient evidence to recommend screening in males, unless they have specific risk factors (Canadian Paediatric Society. [2016]. *An update to the Greig health record: Preventative health care visits for children and adolescents aged 6 to 17 years—Technical report*. Retrieved from <http://www.cps.ca/documents/position/greig-health-record-technical-report>).

TABLE 1.3 Clinical Preventive Health Care Recommendations: Ages 10 to 17 Years—cont'd**Counselling****Injury Prevention:**

Seatbelts

Violence and firearms safety

Helmet safety

Trampoline safety

Water safety (e.g., swimming and boating)

Smoke detector, flame-retardant sleepwear

Poison control phone number (see website of the Canadian Association of Poison Control Centres: <http://www.capcc.ca/index.html>)

Avoidance of the combination of underage alcohol and drug use with activities such as driving, swimming, and boating

Diet and Exercise:^d

Limiting bad fats and cholesterol (e.g., processed foods); maintaining caloric balance; emphasizing whole grains, fruits, vegetables, and proteins

Adequate calcium intake

Adequate vitamin D intake

Regular exercise: children (5–11 years) and youth (12–17 years) should accumulate at least 60 min of moderate-to-vigorous-intensity physical activity daily. Exercise includes vigorous-intensity activities at least 3 days/week, and activities that strengthen muscle and bone at least 3 days/week

Anticipatory Guidance:Electronic media^e

- TV/Tablet/smartphone screen time (10+ years, 0–2 hours/day maximum)
- Hearing protection

Skin cancer:

- Limiting sun exposure and wearing protective clothing

Substance use:

- Antismoking message
- Avoidance of underage drinking, underage marijuana consumption, and other illegal drugs

Sexual behaviour:

- STI prevention: avoiding high-risk behaviour; using male or female condoms; abstinence; and barrier with spermicide
- Prevention of unintended pregnancy: using contraception

Dental health:

- Regular visits to dental care provider
- Flossing once daily and brushing with fluoride toothpaste twice daily

Social support:

- Abuse and violence
- Mental health
- Body image and dieting
- Peer relationships and bullying

Immunizations (Examples—For Full List, See Source in Note f)Diphtheria–tetanus–acellular pertussis (DTap) vaccine^f

Hepatitis B

Human papillomavirus (HPV) vaccine

Interventions for Populations at High Risk**POPULATION****POTENTIAL INTERVENTIONS**

Indigenous children born in Canada; parental history of intravenous drug use, HIV-positive status, or alcohol abuse

Tuberculin (TB) skin test

Recent immigrant and refugee children^g

TB skin test, blood test, infectious disease tests, thyroid and other biochemical function tests

^dCanadian Paediatric Society. (2012). *Healthy active living: physical activity guidelines for children and adolescents*. Retrieved from <http://www.cps.ca/en/documents/position/physical-activity-guidelines>.^eScreen Smart. (2010). *Screens and health*. Retrieved from http://www.screensmart.ca/screens_health.^fCaring for Kids. (2017). *Diphtheria-tetanus-acellular pertussis (dTap) vaccine*. Retrieved from https://www.caringforkids.cps.ca/handouts/diphtheria_tetanus_acellular_pertussis_vaccine.^gCanadian Paediatric Society. (2016). *Caring for kids new to Canada*. Retrieved from <http://www.kidsnewtocanada.ca/care/assessment>.

TABLE 1.4 Clinical Preventive Health Care Recommendations: Ages 18 to 64 Years

Leading Causes of Death (2008)^a**Ages 18–44:**

Unintentional injuries
Suicide
Cancer

Ages 45–64:

Cancer
Circulatory system diseases
Digestive system diseases

Interventions for the Adult Population^b**Screening**

Height, weight measurements
Blood pressure
Pelvic examination, sexually transmitted infection (STI) testing, and cervical testing (females; can include cis-gendered women, trans men, and others)^c
Fecal occult blood test for colorectal cancer^d (≤50 years)
Mammography ± clinical breast examination^e
Screening for depression^f
Clinical and risk factor screening for osteoporosis (≤50 years)^g
Assessment for problem drinking and other substance use

^aData from Public Health Agency of Canada. (2016). *Leading causes of death, Canada, 2008 males and females combined, counts*. Retrieved from <http://www.phac-aspc.gc.ca/publicat/lcd-pcd97/table1-eng.php>.

^bData from Canadian Task Force on Preventive Health Care. (2013). *Guidelines*. Retrieved from <http://canadiantaskforce.ca>.

^cCervical screening recommendations are presented for screening asymptomatic females who are or have been sexually active. They do not apply to females with symptoms of cervical cancer, previous abnormal screening results (until they have been cleared to resume normal screening), those who do not have a cervix (due to hysterectomy), or who are immunosuppressed (Canadian Task Force on Preventive Health Care. [2013]. Screening for cervical cancer. *Canadian Medical Association Journal*, 185(1), 35–45). Screening for cervical cancer under the age of 21 is not recommended. STI testing is recommended in all sexually active females, at least annually. There is insufficient evidence to recommend screening in males, unless they have specific risk factors (Canadian Paediatric Society. [2016]. *An update to the Greig health record: Preventative health care visits for children and adolescents aged 6 to 17 years—Technical report*. Retrieved from <http://www.cps.ca/documents/position/greig-health-record-technical-report>).

- For females aged 20 to 24, we recommend not routinely screening for cervical cancer (weak recommendation; moderate-quality evidence).
- For females aged 25 to 29, we recommend routine screening for cervical cancer every 3 years (weak recommendation; moderate-quality evidence).
- For females aged 30 to 69, we recommend routine screening for cervical cancer every 3 years (strong recommendation; high-quality evidence).

^dAt least once every 2 years.

^eRecommendations vary in different provinces: be sure to check your local guidelines. The following recommendations are presented for the use of mammography and clinical breast examination to screen for breast cancer (Canadian Task Force on Preventive Health Care. [2011]. Recommendations on screening for breast cancer in average-risk women aged 40–74. *Canadian Medical Association Journal*, 183(17), 1991–2001. Retrieved from <http://www.cmaj.ca/content/183/17/1991.full#sec-3>). These recommendations apply only to females at average risk for breast cancer aged 40 to 74 years. They do not apply to females at higher risk due to personal history of breast cancer, history of breast cancer in a first-degree relative, known *BRCA1/BRCA2* mutation, or prior chest wall radiation. No recommendations are made for females aged 75 and older, given the lack of data. The Canadian Task Force on Preventive Health Care recommends the following:

- For females aged 40–49, we recommend not routinely screening with mammography (weak recommendation; moderate-quality evidence).
- For females aged 50–69, we recommend routinely screening with mammography every 2 to 3 years (weak recommendation; moderate-quality evidence).
- For females aged 70–74, we recommend routinely screening with mammography every 2 to 3 years (weak recommendation; low-quality evidence).
- We recommend not routinely performing clinical breast examinations alone or in conjunction with mammography to screen for breast cancer (weak recommendation; low-quality evidence).

^fThese recommendations on screening for depression are provided for adults 18 years of age or older who present at a primary care setting with no apparent symptoms of depression (Canadian Task Force on Preventive Health Care. [2013]. *Screening for depression in primary care*. Retrieved from <http://canadiantaskforce.ca/guidelines/all-guidelines/2005-screening-for-depression-in-primary-care/>). These recommendations do not apply to people with known depression, with a history of depression, or who are receiving treatment for depression.

- For adults at average risk for depression, we recommend not routinely screening for depression (weak recommendation; very-low-quality evidence).
- For adults in subgroups of the population who may be at increased risk for depression, we recommend not routinely screening for depression (weak recommendation; very-low-quality evidence).

^gThe key predictors of fracture related to osteoporosis are low bone mineral density (BMD), prolonged use of glucocorticoids, use of other high-risk medications, prior fragility fracture, age, and family history. A detailed history and a focused physical examination are recommended to identify risk factors for low BMD, falls, and fractures, as well as undiagnosed vertebral fractures. In selected individuals, BMD should be measured with dual-energy X-ray absorptiometry (Papaioannou, A., Morin, S., Cheung, A. M., et al. [2010]. 2010 clinical practice guidelines for the diagnosis and management of osteoporosis in Canada: Summary. *Canadian Medical Association Journal*, 182(17), 1864–1873).

- Measure height annually, and assess for the presence of vertebral fractures.
- Assess history of falls in the past year. If there has been such a fall, a multifactorial risk assessment should be conducted, including the ability to get out of a chair without using arms.

TABLE 1.4 Clinical Preventive Health Care Recommendations: Ages 18 to 64 Years—cont'd**Counselling****Injury Prevention:^h**

Seatbelts and car seats

Avoidance of the combination of alcohol and drug use with activities such as driving, swimming, and boating

Smoke detector

Workplace safety

Diet and Exercise:

Limiting bad fats and cholesterol (e.g., processed foods); maintaining caloric balance; emphasizing whole grains, fruits, vegetables, and proteins

Adequate calcium intake

Adequate vitamin D intake

Regular physical activity that fits with health regime (e.g., low impact on joints)—at least 30 min of moderate-to-vigorous-intensity physical activity daily

Sexual Behaviour:

STI prevention: avoidance of high-risk behaviour; use of male or female condoms; and barrier with spermicide

Prevention of unintended pregnancy: contraception

Skin Cancer:

Limiting sun exposure and wearing protective clothing

Substance Use:

Smoking cessation

Responsible alcohol consumption

Harm reduction

Dental Health:

Regular visits to dental care provider

Flossing once daily and brushing with fluoride toothpaste twice daily

Immunizations (Example)

Diphtheria-tetanus (Td)ⁱ

Chemoprophylaxis

Multivitamin with folic acid (women planning or capable of pregnancy)

Calcium (≥50 years)

Vitamin D supplements (all adults)

Interventions for High-Risk Populations^b

POPULATION	POTENTIAL INTERVENTIONS
Recent immigrants and refugees from endemic areas; Indigenous people born in Canada; parental history of intravenous drug use, HIV-positive status, or high alcohol and substance use	Tuberculin (TB) skin test
Individuals at high risk for type 2 diabetes (e.g., hypertension, dyslipidemia)	Fasting plasma glucose test

^hMore information available at Parachute Canada. (2017). *Resources*. Retrieved from <http://www.parachutecanada.org/resources>.

ⁱTd booster every 10 years. Based on Public Health Agency of Canada. (2018). *Canadian immunization guide*. Retrieved from <https://www.canada.ca/en/public-health/services/canadian-immunization-guide.html>. Be sure to consult more specific provincial and territorial guidelines in your local area.

TABLE 1.5 Clinical Preventive Health Care Recommendations: Ages 65 Years and Older**Leading Causes of Death (2008)^a**

Circulatory system diseases

Cancer

Respiratory system diseases

Mental health disorders

Nervous system diseases

^aData from Public Health Agency of Canada. (2016). *Leading causes of death, Canada, 2008 males and females combined, counts*. Retrieved from <http://www.phac-aspc.gc.ca/publicat/lcd-pcd97/table1-eng.php>.

TABLE 1.5 Clinical Preventive Health Care Recommendations: Ages 65 Years and Older—cont'd

Interventions for the Older Adult Population^b**Screening**

Height, weight measurements

Blood pressure

Cholesterol

Diabetes

Pelvic examination, sexually transmitted infection (STI) testing, and cervical testing (females; can include cis-gendered women, trans men, and others)^cFecal occult blood test^dMammography ± clinical breast examination^eScreening for depression^f

Visual screening (Snellen eye chart)

Hearing screening

Fall prevention (postfall multidisciplinary team assessment)

Bone mineral density (BMD)^g

Assessment for problem drinking and substance use

^bData from Canadian Task Force on Preventive Health Care. (2013). *Guidelines*. Retrieved from <http://canadiantaskforce.ca>.^cCervical screening recommendations are presented for screening asymptomatic females who are or have been sexually active. They do not apply to females with symptoms of cervical cancer, previous abnormal screening results (until they have been cleared to resume normal screening), those who do not have a cervix (due to hysterectomy), or who are immunosuppressed (Canadian Task Force on Preventive Health Care. [2013]. Screening for cervical cancer. *Canadian Medical Association Journal*, 185[1], 35–45). For women aged ≥70 who have been adequately screened (i.e., three successive negative Pap tests in the last 10 years), we recommend that routine screening may cease. For females aged 70 or over who have not been adequately screened, we recommend continued screening until 3 negative test results have been obtained (weak recommendation; low-quality evidence).^dRecommendations from the Canadian Task Force on Preventive Health Care suggest:

- Screening adults aged 60–74 for colorectal cancer (CRC) with fecal occult blood test (FOBT) (either guaiac FOBT [gFOBT] or fecal immunochemical test [FIT]) every two years OR flexible sigmoidoscopy every 10 years (strong recommendation; moderate-quality evidence)
- Screening adults aged 50–59 for CRC with FOBT (either gFOBT or FIT) every two years OR flexible sigmoidoscopy every 10 years (weak recommendation; moderate-quality evidence)
- Not screening adults aged 75 and over for CRC (weak recommendation; low-quality evidence)
- Not using colonoscopy as a screening test for CRC (weak recommendation; low-quality evidence) (Canadian Task Force on Preventive Health Care. [2013]. *Colorectal cancer*. Retrieved from <http://canadiantaskforce.ca/guidelines/published-guidelines/colorectal-cancer/>)

^eRecommendations vary in different provinces: be sure to check your local guidelines. The following recommendations are presented for the use of mammography and clinical breast examination by the Canadian Task Force on Preventive Health Care (Canadian Task Force on Preventive Health Care. [2011]. Recommendations on screening for breast cancer in average-risk women aged 40–74. *Canadian Medical Association Journal*, 183[17], 1991–2001. Retrieved from <http://www.cmaj.ca/content/183/17/1991.full#sec-3>). These recommendations apply only to females at average risk for breast cancer aged 40 to 74 years. They do not apply to females at higher risk due to personal history of breast cancer, history of breast cancer in first-degree relative, known *BRCA1/BRCA2* mutation, or prior chest wall radiation. No recommendations are made for women aged 75 and older, given the lack of data. The Canadian Task Force on Preventive Health Care recommends the following:

- For females aged 50–69, we recommend routinely screening with mammography every 2 to 3 years (weak recommendation; moderate-quality evidence).
- For females aged 70–74, we recommend routinely screening with mammography every 2 to 3 years (weak recommendation; low-quality evidence).

^fThese recommendations on screening for depression are provided for adults 18 years of age or older who present at a primary care setting with no apparent symptoms of depression. These recommendations do not apply to people with known depression, with a history of depression or who are receiving treatment for depression.

- For adults at average risk for depression, we recommend not routinely screening for depression (weak recommendation; very-low-quality evidence).
- For adults in subgroups of the population who may be at increased risk for depression, we recommend not routinely screening for depression (weak recommendation; very-low-quality evidence) (Canadian Task Force on Preventive Health Care. [2013]. *Screening for depression in primary care*. Retrieved from <http://canadiantaskforce.ca/guidelines/all-guidelines/2005-screening-for-depression-in-primary-care/>).

^gThe key predictors of fracture related to osteoporosis are low bone mineral density (BMD), prolonged use of glucocorticoids, use of other high-risk medications, prior fragility fracture, age, and family history. A detailed history and a focused physical examination are recommended to identify risk factors for low BMD, falls and fractures, as well as undiagnosed vertebral fractures. In selected individuals, BMD should be measured with dual-energy X-ray absorptiometry (Papaioannou, A., Morin, S., Cheung, A. M., et al. [2010]. 2010 clinical practice guidelines for the diagnosis and management of osteoporosis in Canada: Summary. *Canadian Medical Association Journal*, 182[17], 1864–1873). Best practices for an older population include measuring height annually, assessing for presence of vertebral fractures, and history of falls in past year. If there has been such a fall, conduct a multifactorial risk assessment, which includes the ability to get out of a chair without using arms (Canadian Task Force on Preventive Health Care. [2013]. *Prevention of osteoporosis and osteoporotic fractures in postmenopausal women*. Retrieved from <http://canadiantaskforce.ca/guidelines/all-guidelines/2002-prevention-of-osteoporosis-and-osteoporotic-fractures-in-postmenopausal-women/>).

TABLE 1.5 Clinical Preventive Health Care Recommendations: Ages 65 Years and Older—cont'd**Counselling****Injury Prevention:^h**

Nonslip surfaces in place of residence
 Using grab bars and other safety aids
 Using medication wisely
 Seatbelts
 Moving slowly out of bed and chair
 Avoidance of the combination of alcohol and drug use with activities such as driving, swimming, and boating
 Smoke detector
 Workplace safety

Diet and Exercise:

Limiting bad fats and cholesterol (e.g., processed foods); maintaining caloric balance; emphasizing whole grains, fruits, vegetables, and proteins
 Adequate calcium intake
 Adequate vitamin D intake
 Regular physical activity that fits with health regime (e.g., low impact on joints)—at least 30 min of moderate-to-vigorous-intensity physical activity daily

Sexual Behaviour:

STI prevention: avoidance of high-risk behaviour; use of male or female condoms

Skin Cancer:

Limiting sun exposure and wearing protective clothing

Substance Use:

Smoking cessation
 Responsible alcohol consumption
 Harm reduction

Dental Health:

Regular visits to dental care provider
 Flossing once daily and brushing with fluoride toothpaste twice daily

Immunizations (Examples)

Diphtheria-tetanus (primary series for previously unimmunized adults or booster dose every 10 years)ⁱ
 Influenza^j
 Pneumococcal vaccine^k
 Shingles vaccine^l

Chemoprophylaxis

Calcium and vitamin D supplements^m

Interventions for High-Risk Populations^b**POPULATION**

Individuals who experience cognitive decline or a memory complaint; this information may be self-reported or come from caregivers or others close to the person
 Individuals with vascular risk factors for dementia (elevated systolic blood pressure, dyslipidemia)
 Individuals at high risk for type 2 diabetes (e.g., hypertension, dyslipidemia)
 Recent immigrants and refugees from endemic areas; parental history of intravenous drug use, HIV-positive status, or alcohol abuse

POTENTIAL INTERVENTIONS

Cognitive assessment and careful follow-up required
 Management of hypertension; physical exercise
 Fasting plasma glucose test
 Tuberculin (TB) skin test

^hPublic Health Agency of Canada. (2016). *You can prevent falls*. Retrieved from <http://www.phac-aspc.gc.ca/seniors-aines/publications/public/injury-blessure/prevent-eviter/index-eng.php>.

ⁱTd booster every 10 years. Based on Public Health Agency of Canada. (2018). *Canadian immunization guide: Part 4—Active vaccines*. Retrieved from <https://www.canada.ca/en/public-health/services/canadian-immunization-guide.html>. Be sure to consult more specific provincial and territorial guidelines in your local area.

^jAnnually.

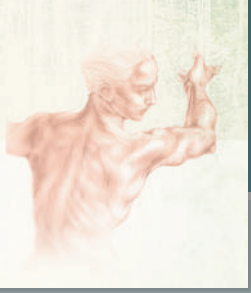
^kGiven once after age 65.

^lHealthLinkBC. (2017). *Shingles vaccine*. Retrieved from <https://www.healthlinkbc.ca/healthlinkbc-files/shingles-vaccine>.

^mFor people without documented osteoporosis, there is fair evidence that calcium and vitamin D supplementation alone prevents osteoporotic fractures (grade B recommendation) (Canadian Task Force on Preventive Health Care. [2013]. *Prevention of osteoporosis and osteoporotic fractures in postmenopausal women*. Retrieved from <http://canadiantaskforce.ca/guidelines/all-guidelines/2002-prevention-of-osteoporosis-and-osteoporotic-fractures-in-postmenopausal-women/>).

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Health Promotion in the Context of Health Assessment

Written by Dana S. Edge, PhD, RN

 <http://evolve.elsevier.com/Canada/Jarvis/examination/>

Changes in the conceptualization about the meaning of health began with the World Health Organization's 1946 declaration that health is "not merely the absence of disease."¹ Since that time, the definition of health has transformed from being a two-dimensional concept to one that accounts for the importance of the environment, both physical and social, in defining health. It is not enough simply to have access to good health care services. In this chapter, you are introduced to the role that Canada has played in health promotion, the foundational concepts of disease prevention and health promotion, and how nurses assess health-promoting behaviours in clinical settings.

HEALTH PROMOTION: DEVELOPMENT AND CONCEPTS

Prevalent patterns of disease and mortality in North America changed from infectious diseases in the early 1900s to chronic conditions by the late 1950s. Sanitation improvements and the discovery of penicillin played a role in this shift. Many individuals were spared contracting potentially fatal cases of polio, diphtheria, and pertussis with the development of vaccines in the 1940s and early 1950s.

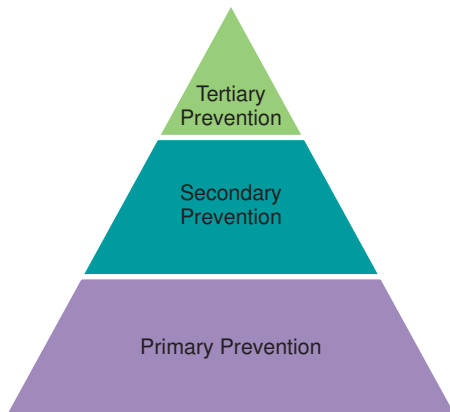
The three levels of disease prevention are (a) primary, (b) secondary, and (c) tertiary prevention, which represent the biomedical approach to health promotion (Fig. 2.1). Sanitation and immunization are examples of **primary prevention**, whereby people and populations are prevented from becoming ill, sick, or injured in the first place. The definition of *primary prevention* continues to evolve, but currently it refers to the promotion of health and the prevention of illness by assisting individuals, families, and communities to prevent known health problems, protect existing states of health, and promote psychosocial wellness.² Often, primary prevention entails the dissemination of health information so that individuals, families, and communities have the necessary tools to keep themselves healthy and prevent disease. Primary prevention strategies, however, need to be tailored to peoples' needs and social contexts to be relevant, feasible, and effective.

Primary prevention was first discussed by American academics Hugh R. Leavell and Edwin G. Clark in the 1940s; they further described **secondary prevention** as early

detection of disease, before symptoms emerge, and **tertiary prevention** as the prevention of complications when a condition or disease is present or has progressed.³ Screening tests, such as mammography, lipid profiles, and the Papanicolaou (Pap) test, are examples of secondary prevention. As you teach a patient with newly diagnosed diabetes how to care for their feet, you are engaging in tertiary prevention activities designed to help the patient avoid complications of diabetes, such as a diabetic ulcer or infection. **Box 2.1** illustrates the levels of prevention for tobacco-related illnesses.

Nurses' ability to understand the natural history of a particular disease, to know the patterns of disease occurrence, and to detect a condition early all factor into how they intervene to prevent disease. Prevention strategies are not static; as the understanding about a condition evolves, so do the prevention and treatment approaches. For example, before 1982, peptic ulcer disease was attributed to oversecretion of gastric acid, and stress was considered to be a major contributor to the excess acid. Treatment with antacids and, in severe cases, surgery, were the norms. The discovery that a bacterium, *Helicobacter pylori*, is a major risk factor in the development of gastric and duodenal ulcers^{4,5} totally shifted the management and prevention of the condition, including nurses' approach to health teaching.⁶

Despite medical breakthroughs and advances in technology, curative approaches to health have limits.⁷ Canada has been a leader since the 1970s in the development of health promotion frameworks. The 1974 *Lalonde Report* highlighted the limitations of the health care system to Canadians and to the international community. The traditional approach to health shifted from biomedical responses to the influences of lifestyle, human biology, and the social environment with this development.^{8,9} The report laid the foundation for future health promotion initiatives in Canada. The *Declaration of Alma-Ata* reinforced health promotion principles in 1978, which heralded a shift in power from health care providers to consumers of health care and their communities.⁷ Moreover, in 1986, the *Ottawa Charter for Health Promotion* was released with five action strategies to improve the health of populations.¹⁰ **Health promotion**, as defined by the World Health Organization, is "the process of enabling people to increase control over, and to improve their health. It moves beyond a focus on individual behaviour towards a wide



2.1 Levels of health prevention.

BOX 2.1 Prevention of the Damaging Effects of Tobacco

Primary: Teaching a group of Grade 3 students about the harmful effects of tobacco use.

Secondary: Providing tobacco cessation or reduction strategies to a current smoker who has expressed an interest in attempting to quit or cut down.

Tertiary: Limiting second-hand smoke exposure to a patient with chronic obstructive lung disease.

range of social and environmental interventions.”¹¹ In 1984, the World Health Organization set out five principles of health promotion, which continue to guide practice today:

1. Health promotion involves the population as a whole in the context of their everyday lives.
2. Health promotion is directed toward action on the social determinants of health.
3. Health promotion combines diverse but complementary methods.
4. Health promotion seeks to achieve effective and concrete public participation.
5. Health promotion is nurtured and enabled by health care providers, particularly those in primary health care.¹²

How much do environmental, social, and biological factors influence health? We now know that 50% of all health outcomes can be attributed to social and economic factors, 25% to health care services, 15% to biology and genetics, and 10% to the built and natural environment.¹³

The **social determinants of health** as outlined by the Public Health Agency of Canada (PHAC) include the following elements: income and social status; social support networks; education and literacy; employment/working conditions; social environments; physical environments; personal health practices and coping skills; healthy child development; biology and genetic endowment; health services; gender; and culture.¹⁴ The socioeconomic environment, in particular, has a profound influence on individuals' health. Income, social status, social support networks, education, employment, and social environments are components of the socioeconomic

environment. **Disparities in health** occur when the combination and interaction of the social determinants of health result in differences in health status between segments of the population. When disparities are avoidable, but outside the control of individuals, **health inequities** result.¹⁵

Certain populations in Canada are at increased risk for disease and disability as a result of growing social and health inequities.¹⁶ For example, First Nations and Inuit peoples have shorter life expectancy and higher rates of morbidity from infectious diseases, such as tuberculosis, than do the rest of Canadians.¹⁷ Temporary foreign workers, whose numbers have doubled in Canada between 2004 and 2013, also experience health inequities. They are employed predominantly in the agricultural sector, and concerns have been raised about their working conditions.¹⁸ Questionable working conditions, inadequate housing, and vulnerability affect temporary workers' ability to work and, ultimately, their health.¹⁹ Undocumented immigrants and refugee claimants face similar challenges in terms of their ability to access health care.²⁰ Poor health indicators can be linked directly to social and economic conditions such as overcrowding, low income, and lack of access to nutritious foods, particularly for those living on-reserve or in remote locations.

THE POPULATION HEALTH PROMOTION MODEL AS A GUIDE TO NURSING ASSESSMENT

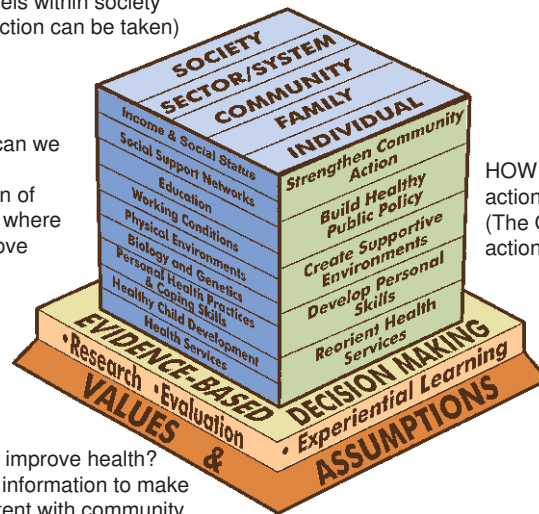
Nursing assessment occurs at the individual, family, community, and population levels. The Population Health Promotion Model provides a multifaceted approach to considering the social determinants of health in our nursing health assessment, whether one is working in a tertiary hospital, an outpatient clinic, long-term care, home care, a public health agency, or working as a policy analyst. The Population Health Promotion Model was developed in 1996 by Hamilton and Bhatti (Fig. 2.2). A three-dimensional cube rests on a base foundation of the values and assumptions of a society upon which evidence-informed decision making occurs. Three faces of the 3-D cube are visible. On the top, a continuum from the individual to society is depicted, representing with *who or whom* health care providers are to engage with. On one side, the five action strategies of the Ottawa Charter provide guidance as to *how* we can take health promotion action. Finally, the original nine social determinants of health are listed on the opposite side of the cube, indicating on *what* we can take action to promote health (today, Canada also recognizes social environments, gender, and culture as social determinants of health). The model illustrates the larger context and societal influences that affect individuals, families, communities, and populations.

Health promotion forces nurses to focus upstream* to the root causes of health conditions that afflict individuals.

*Taking action to avoid a problem before it occurs is referred to as “moving upstream” and is the hallmark of primary prevention.⁸

WHO: With whom can we act?
(The levels within society
where action can be taken)

WHAT: On what can we
take action?
(The determination of
health care areas where
action could improve
health)



HOW: How can we take
action to improve health?
(The Ottawa Charter
action strategies)

WHY: Why take action to improve health?
(Using the best available information to make
decisions that are consistent with community
needs, values, and resources)

2.2 The Population Health Promotion Model.

Health care providers alone cannot tackle many of the barriers to adequate health in populations. Instead, public policy, by nurses and others, must promote sustainable employment, sound education, food security, environmental protection, political stability, and affordable health care. Enacting such policies necessitates that multiple players, including the public, understand the importance of the social determinants of health and act to improve them.

In addition to influencing health policy, health care providers play a pivotal role in promoting health at individual, family, and community levels through health education and counselling, immunization, and screening activities. Inquiry into the social determinants of health is completed during health history encounters with patients and families (Table 2.1). Health education is one specific intervention strategy that is employed by all nurses to promote patients' health. The Population Health Promotion Model can be used to consider social determinants of health during health encounters with patients, and to guide health promotion strategies when working with individuals, families, and communities. At a higher societal level, the Population Health Promotion Model serves to influence change in health, social, and environmental policies.

SPECIFIC HEALTH PROMOTION INTERVENTIONS

Consider Randy, a 45-year-old single man who seeks health care for recurrent early morning insomnia. During your interview with him, Randy reports that he falls asleep easily at night but awakens around 3:00 A.M. and spends hours unable to fall back asleep, sitting in front of the television in his armchair. As the interview proceeds, Randy indicates that he was a chief engineer at a major automotive assembly plant but was "let go" 4 weeks ago; he is not sure how he will be able to pay his bills or his mortgage. His aging

TABLE 2.1 Social Determinants of Health and the Health History

Social Determinants of Health ^b	Corresponding Components of the Health History ^a
Socioeconomic environment: - Income and social status - Social support networks - Education and literacy - Employment/working conditions - Social environments	Biographical data; functional assessment (interpersonal relationships; social and economic contexts; spiritual resources; occupational health)
Physical environments	Functional assessment (environmental hazards)
Healthy child development	Developmental history
Personal health practices and coping skills	- Health promotion and harm reduction approaches - Functional assessment (self-concept; coping and stress management)
Biology and genetic endowment	Family history
Health services	Most recent examination (medical, dental, immunizations)
Gender	Biographical data
Culture	Biographical data; cultural perception of health

^aSee Chapter 5 in this book.

^bFrom Public Health Agency of Canada. (2017). *What determines health?* Retrieved from <http://www.phac-aspc.gc.ca/ph-sp/determinants/index-eng.php#determinants>.

parents, who live in another province, are not aware of his situation. Randy reveals that he has lost 5 kg during the past month and is not interested much in eating. At this point in the encounter, you have information about his presenting concern, socioeconomic status, and his coping skills. At this visit, more detail about his social supports and how he can manage financially is required. Future visits could explore his physical environment, personal health practices, family history, social and cultural contexts, and use of preventive health care services.

Your assessment and interventions in relation to Randy's presenting symptom of insomnia are affected by the knowledge that the suicide rate among Canadians is highest for men between ages 40 and 59 (32.5 per 100 000).²¹ Randy is experiencing the loss of a valued occupational role and social isolation, which increase the risk for self-harm. Your interventions today focus on identifying any deviations from health in your physical examination that could explain the insomnia, screening for depression and suicidal ideation (see Chapter 6), and working with Randy on a plan to support him during this period of upheaval in his life. The approach used with Randy is illustrative of a counselling intervention to support healthy practices and behaviours, given the context of his life, and to promote overall health. Depending on Randy's responses, screening for suicidal ideation may be required (see Chapter 6). From the previous description, several social determinants of health have been assessed in this one encounter between you and Randy.

HEALTH EDUCATION AND COUNSELLING ACTIVITIES IN HEALTH PROMOTION

Focusing on patients' strengths, capacities, and resources, nurses can inquire about patients' injury prevention, diet, exercise, sexual health, substance use, dental health, anticipatory guidance, and primary prevention of specific cancers during health encounters.²² Any health education intervention should be informed by the developmental level and the cultural, social, and economic context of the individual (and the family); the readiness of the person to engage in discussions related to health information; the availability of local resources; and the prevalent health conditions for which the individual may be at risk. For example, Canadian men younger than 20 are at risk for injuries during recreational and organized sports activities.²³ During a health care visit by a young man, you are provided with the opportunity to learn about the man's interests, his health-protective behaviours (e.g., protective gear), and his beliefs about vulnerability, and you can tailor your health education messages accordingly.

Health education and counselling can be utilized at all three levels of prevention. As exhibited in in Box 2.1, the primary and secondary tobacco prevention examples are health education strategies; an example of tobacco-related health education at the tertiary prevention level is the proper instruction of inhaler use for a hospitalized patient with smoking-related chronic obstructive pulmonary disease (COPD). With tertiary prevention, the goal is to assist

patients in preventing complications of disease and illness. It is important to recognize that health education is one strategy of health promotion. Furthermore, health education is not synonymous with health promotion, as health education is a limited approach when the resources to implement recommended health promotion strategies or influence economic and social change are unavailable.²⁴

IMMUNIZATIONS

Active immunization through the use of either vaccines or toxoid preparations elicits immunological self-response within the host body that provides protection at a later exposure date. The measles-mumps-rubella (MMR) immunization is an example of a vaccine, whereas protection against diphtheria and tetanus is provided through the administration of a toxoid.^{25,26} In some instances, antibodies are administered in the form of immune globulin to people who have already been exposed to a disease; this action is known as *passive immunization*, and the effects are short-lived. As mentioned previously, immunization is a primary prevention activity. Inadequate coverage or lack of booster vaccinations can result in re-emergence of infectious disease in susceptible hosts, such as mumps outbreaks in 2014 and 2017 among National Hockey League (NHL) players.²⁷ Opportunities to check immunization status with patients, including booster status, occur with nearly every health encounter, and yet it is an opportunity frequently missed in many health care settings due to a variety of factors.²⁸



SCREENING

Early detection of a condition or disease is possible when a sensitive and effective tool for detection is available; when the natural history of the condition has a long latency period before symptoms appear; and when an acceptable treatment method is available.²⁹ Some malignancies are amenable to early detection, including cervical, breast, colon, skin, and prostate tumours. Nurses can also screen to identify individuals at risk for falls, depression, visual acuity loss, problematic alcohol or substance use, and hearing loss. Screening is based on the prevalence of the disease in the population; therefore, routine screening is reasonable when the prevalence is relatively high in a specific age group, gender, or

ethnic population. The natural history of disease, the pattern of the disease in the population, and other epidemiological indicators, in addition to the individual's risk profile, provide the evidence to support the decision of whether to screen.

SCREENING TOOLS FOR DEVELOPMENTAL TASKS

Before its revision in 1989, public health nurses in Canada used the Denver Developmental Screening Test (DDST), a professionally administered test, extensively. By the early 1990s, however, the Canadian Task Force on Preventive Health Care had reported insufficient evidence for the routine developmental screening of children.³⁰ Because of the lack of evidence of effectiveness, as well as funding cuts in public health, the routine use of the DDST ceased. In its place, several provincial programs now use the Nipissing District Developmental Screen (NDDS), a parent-report screening tool (Fig. 2.3 shows the screening tool for 2-year-olds).

The NDDS originated in 1993 from the work of a multidisciplinary committee of health professionals within the Nipissing District of Ontario; by 1997, the screen was being used across Canada, and since that time, the tool has been revised and analyzed for cultural sensitivity, Grade 5 literacy level, and reliability. Currently, Ontario, New Brunswick, and the Nunavut have endorsed the NDDS as the screening tool of choice in provincial programs, and the forms are free of charge to Ontario residents.³¹ Translated versions in French, Spanish, and Vietnamese are available, and the tool can be accessed electronically, with interactive screens. The NDDS elicits a “yes” or “no” response from parents for a set of developmental milestones appropriate to the age of the child; a “no” response highlights a potential developmental delay. Other available parent-report developmental screening tools that were developed in North America include the Ages and Stages Questionnaires (ASQ), the Child Development Inventory (CDI), and the Parents' Evaluation of Developmental Status (PEDS). Weighing the evolving discoveries in neuroscience and the effects of environment on early childhood development, the Canadian Paediatric Society endorsed the systematic use of a developmental screening tool (e.g., NDDS, ASQ, PEDS) at each 18-month well-baby visit.³² An overview of developmental tasks for each age group can be found on the Evolve website.

CASE EXAMPLE: INCORPORATING HEALTH PROMOTION STRATEGIES

Mary is a 72-year-old Cree woman who is living with five members of her extended family in a three-bedroom bungalow on-reserve. For the past 10 years, Mary has been living with type 2 diabetes and has been seen by health care providers on a regular basis. Over the past 6 months, her glucose levels have not been at target, despite the adjustment of her oral hypoglycemic agent. She has come today to clinic because she just does not feel “right.” You check her glucose level and find that it is moderately elevated. What

information do you need to gather to properly care for Mary? What are potential factors that may have contributed to Mary's diabetes? What else might be happening in her environment that might be contributing to her not feeling “right”? How will you determine the focus of your health assessment? What are relevant cultural and social considerations that should inform your health messages and health promotion strategies? Let's consider how an appreciation of health promotion concepts, including the social determinants of health, can assist in your assessment.

As you begin to gather Mary's story about not feeling “right,” be mindful of living conditions and circumstances within the community. A larger appreciation of the cultural and historical influences in Mary's community provides context for potential health inequities that may have contributed to Mary's ill health.^{33,34}

You need to begin by reviewing with Mary what her typical day has been like over the past 6 months, particularly with regard to her diet, medication, and exercise patterns. Mary's understanding of the disease process, her social support, factors potentially impeding her ability to walk in the community (as her form of exercise), plus your understanding of local food availability and affordability all contribute to a better understanding of the situational influences affecting Mary.^{33,34} You can ask Mary several questions: “You told me that you don't feel ‘right.’ Can you describe what you mean by ‘not right?’” “You've been told you have diabetes, Mary. Tell me what diabetes means to you.” “How do the diabetes pills make you feel? Any problems with taking them?” “Mary, tell me about what you ate yesterday. Today?” “How often are you able to eat traditional food?” “Mary, who prepares the meals in your home?” “How often are you able to purchase fresh fruits or vegetables?” “What do you think may be wrong, Mary?” Inquiry into Mary's daily activities and any recent departures from her routines, along with her beliefs about what might be causing her to feel “not right,” can provide immeasurable insights into her beliefs and behaviours. These assessment data are critical for beginning a plan with Mary to develop health promotion strategies that are acceptable to her. Such an approach leads to safer, more appropriate care.³⁵ Exploration of Mary's experience may also lead to identification of community-level health issues such as the need for more affordable access to fruits and vegetables that can be addressed locally or advocated for at a regional, provincial, or federal level for change.

SUMMARY

Individuals and their families reside in communities that are part of a much larger sociopolitical environment. As you focus on caring for an individual, you must remain mindful of the larger context and engage in upstream thinking to more fully understand the person's particular situation. Health care providers frequently undervalue the influence of a well-placed question or comment to a patient. Even short health assessment encounters offer the opportunity to inquire about health-promoting behaviours within the

ndds.ca

Child's Name: _____
 Birthdate: _____ Today's Date: _____

The ndds checklist is designed to help monitor your child's development.

Y N BY **TWO YEARS** OF AGE, DOES YOUR CHILD:

- ☐ ☐ 1 Understand one and two step directions? (*"close the door", "go find your book and show it to grandma"*)*
- ☐ ☐ 2 Ask for help using words?
- ☐ ☐ 3 Learn and use one or more new words a week? (*may only be understood by family*)
- ☐ ☐ 4 Join two words together? (*"want cookie", "car go", "my hat"*)*
- ☐ ☐ 5 Eat most foods without coughing and choking?
- ☐ ☐ 6 Eat with a utensil with little spilling? **
- ☐ ☐ 7 Take off own shoes, socks, or hat? **
- ☐ ☐ 8 Try to run?
- ☐ ☐ 9 Play in a squat position? *A*
- ☐ ☐ 10 Walk backwards or sideways pulling a toy?
- ☐ ☐ 11 Make scribbles and dots on paper or in sand?
- ☐ ☐ 12 Put objects into a small container? *B*
- ☐ ☐ 13 Like to watch and play near other children?
- ☐ ☐ 14 Say "no", and like to do some things without help? **
- ☐ ☐ 15 Use toys for pretend play? (*give doll a drink*)*
- ☐ ☐ 16 Use skills already learned and develop new ones? (*no loss of skills*)
- ☐ ☐ 17 Copy your actions? (*you clap your hands and he/she claps hands*)*

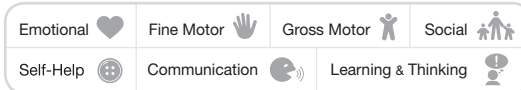


2
YEARS
English

* Examples provided are only suggestions.
 You may use similar examples from your family experience.

** Item may not be common to all cultures.

Always talk to your healthcare or childcare professional if you have any questions about your child's development or well being.
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The following **activities for your child** will help you play your part in your child's development.



I am learning about my feelings. Give me words for my feelings and show that you understand.



Let's play a game. Use two shoeboxes and two toys. We each get a box and a toy. Let's take turns putting our toy in, over, under, behind, and on the box. Talk to me about what we are doing.



Let me open and close plastic containers by twisting and turning the lids. Help me find the right lid to put on each container.



I want to become independent. Encourage me to get dressed and undressed, do household tasks, turn lights on and off, and open and close doors.

I love to pour water from containers during my bath.

I enjoy stringing beads or buttons on a shoelace, string, or pipe cleaner. Talk to me about the colour and count the beads as I lace them. Remember, I may still put things in my mouth, so watch me.



Sing songs with me throughout the day and repeat them often. This helps me learn to sing them on my own. Leave out parts of the song or rhyme for me to finish.



Provide me with toys that allow me to push or pedal with my feet. This will help me learn to climb on and off and to pedal. Make sure I have lots of room. Praise my efforts.



I like to play sorting games with you. We can sort objects by shape, touch, colour, and size. Use spoons, blocks, toys, and clothing.

Let's practise climbing and jumping. I love to get in and out of a box or jump from a bottom step. We can have fun together.

Let's sing *Old MacDonald* and move our bodies like the animals: hop like a frog or bunny, squat or waddle like a duck, or jump up and down like a kangaroo.



I love sharing storybooks with you. Cuddle me while we read together.

I am learning to make decisions; offer me choices throughout the day.

I may get ear infections. Talk to my doctor about signs and symptoms.

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2.3, cont'd

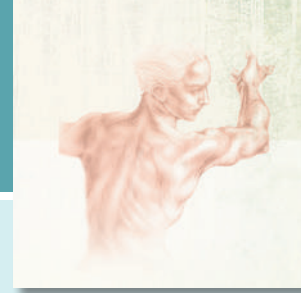
context of the visit (e.g., asking about bicycle helmet use during an assessment of a minor sports-related injury). The key is to attend to what is being said and not said, to appreciate the environmental context, and to demonstrate genuine respect. The effect of the social determinants of health on an individual's health status cannot be underestimated, and the opportunities to promote health are endless.

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Cultural and Social Considerations in Health Assessment

Written by Annette J. Browne, PhD, RN, and Colleen Varcoe, PhD, RN

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Who is the person you are meeting for the first time? Where does the person come from? How does the person identify in relation to his, her, or their cultural, social, or family background? What is the person's heritage, gender, ethnicity, and religious orientation? What language(s) does the person understand, speak, and read? What are the person's health and illness beliefs and practices? As discussed in [Chapter 1](#), operating from a **relational** standpoint,* you should ask yourself: "Who am I? Where do I come from? What is my social, cultural, and family background? How would I identify in terms of my heritage, ethnicity, gender, and religion? What is my primary language? Do I understand, speak, and read a language other than English? What are my health and illness beliefs and practices?" A **relational approach** to health assessment prompts you to ask: "How do my social, cultural, and professional backgrounds shape my ability to relate to, and my assumptions about, the various people I encounter in my practice?" Approaching cultural and social considerations in health assessment from a relational stance helps you understand and attend to the contexts that shape patterns of health and illness. These contexts include people's past experiences, culture, and heritage; how they identify in terms of gender, their socioeconomic status, and history; and their understanding of health, illness, and strategies for maintaining health. By recognizing and attending to these contexts, you will be optimally prepared to conduct accurate health assessments and respond meaningfully to people's health, illness, and health promotion needs.

Over the course of your professional education, you will study the developmental tasks and the principles of health promotion across the lifespan and learn to conduct numerous assessments, such as: documentation of a complete

health history, a mental health assessment, an assessment of risks for violence, a nutritional assessment, a pain assessment, and a physical examination of a patient. As a health care provider, you will continually experience similarities and differences between you and the patients (and patients' families) with whom you come in contact. These differences are based on a wide range of factors including life experiences, opportunities, circumstances, and linguistic, social, familial, and cultural traditions. A relational approach is aimed at making similarities and differences more transparent, so that we can be as responsive as possible to people's diverse needs.



The purposes of this chapter are as follows:

1. To describe concepts that are central to understanding cultural and social considerations in health assessment
2. To distinguish between cultural sensitivity, cultural competence, and cultural safety, and their implications for practice
3. To review the shifting demographic trends within the Canadian population
4. To provide examples of ethnocultural diversity within the Canadian population

*In this chapter, the term *relational* refers to "the complex interplay of human life, the world, and nursing practice" and is "grounded in the assumption that people are relational beings who are situated in and constituted through social, cultural, political and historical processes and communities."¹ Therefore, a relational approach to nursing practice extends beyond nurse–patient relationships to consider the contexts, structures, and forces that influence patients, nurses, the health care system, our communities, and societies.

5. To review trends in health, social, and gender inequities in Canada
6. To identify guidelines for assessing the social, cultural, and economic contexts that shape people's health

As you encounter the various questions we pose in this chapter, take a few minutes to reflect on the thoughts and reactions that may arise, and how they could impact your practice as a nurse.

CULTURAL AND SOCIAL CONSIDERATIONS: CENTRAL CONCEPTS

Culture, Ethnicity, and Culturalism: What Do Nurses Need to Know for Accurate Health Assessments?

No single definition of **culture** exists. All too often, definitions tend to be so general that they lack any real meaning or are so specific that they erase the complexity and shifting nature of culture. In disciplines such as anthropology, culture is understood as an inherently complex dimension of people's lives. That is because culture is a "dynamic relational process of selectively responding to and integrating particular historical social, political and economic, physical and linguistic" factors, and is "relationally determined and contextual."¹ Anderson and Reimer-Kirkham explain further that culture is "not therefore reduced to an easily identifiable set of characteristics, nor is it a politically neutral concept."²

Despite these complexities, in health care, culture tends to be viewed in a very limited and narrow way as the values, beliefs, customs, practices, and characteristics of particular ethnocultural group members (Figs. 3.1 and 3.2). These assumed "cultural traits" are typically those identified as different from "ours," the unspoken comparison being made with the assumed dominant norm. From this narrow viewpoint, nurses and other health care providers often operate on the basis of erroneous assumptions about people who are assumed to be members of particular ethnocultural groups. Operating in this manner can cause nurses and others to overlook the most salient factors that are influencing people's health.

Ethnicity is also not synonymous with *culture*. **Ethnicity** is a complex concept that can encompass multiple different aspects such as one's country of origin or ancestry, identity, and family history, languages spoken, and, in some cases, religious identity.^{3,4} However, how individuals identify their ethnicity often changes as a result of new immigration flows and the changing nature of identity politics and nationalism. Some people may identify as part of an **ethnic group**, referring to a population or group who identify with each other based on a shared heritage, culture, language, or religious affiliation, but many do not.⁵ These trends are complex: in Canada, the definition of *ethnicity* continues to shift and evolve. For example, in 2009, Statistics Canada began using the term *population group* in place of *ethnicity* to refer to "the population group or groups to which the person belongs."⁶



3.1 What aspects of culture do you see in this picture? Most people think of the carvings as "cultural" but how many of us see the house's architecture, the logging slash behind the house, and the various items (ladder, chimney) as also reflecting culture?



3.2 What definition of *culture* comes to your mind when looking at this picture?

In health care, because Canada and the United States have drawn so heavily on narrowly defined ideas about culture, there has been a proliferation of textbooks in nursing and medicine that provide systematized descriptions or lists of cultural characteristics for various groups. This is problematic for a number of reasons. How individuals relate to their cultural orientation develops in distinctive ways depending on where they live, their family background, socioeconomic circumstances, educational attainment, language(s) spoken, spiritual orientation, ancestry, and history as both individuals and as members of specific groups. Therefore, although culturally based characteristics are applicable to some people, within any given group, individuals will have varying health practices, differing levels of knowledge about health-related issues, and diverse points of view and family norms. For example, Chinese communities in Canada are extremely diverse. There is no predefined approach to follow in interacting with people who have recently emigrated from China. Furthermore, there are often significant differences between generations, including differences after migration. The dangers of applying presumed lists of cultural traits to patients whom you encounter lies in drawing on stereotypes and making assumptions about particular people, which, in turn, lead to unsafe health assessment practices. Nurses and other health care providers must therefore find ways of learning about all their patients, and their contexts, to understand how best to address their health needs.¹

The process of conceptualizing culture in fairly narrow terms, or assuming that people act in particular ways because of their culture, is known as **culturalism**. From a culturalist perspective, culture is often given as the primary explanation for why certain people or populations experience various health, social, or economic problems. Research shows that health care providers frequently attribute people's social problems to their cultural characteristics.^{4,7,8} Doing so would lead them to wrongly assume that violence toward women may be acceptable in particular cultural groups or that some people are more prone to using drugs or alcohol because of their "culture." Similarly, you cannot make accurate assumptions about people's health beliefs on the basis of their ethnicity. For example, it would be wrong to assume that people from China necessarily embrace the hot-cold theory of health and illness (an explanatory model in which the treatment of illness requires cold, heat, dryness, or wetness to restore balance). Such assumptions are culturalist because they are based on (a) popularized (and often stereotypical) ideas about culture as something fixed and inherent to particular groups defined by language, country of origin, or physical characteristics, and (b) the notion that culture is the primary explanation for people's health-related practices or decisions. These assumptions are problematic because they do not lead to useful information and can be erroneous in relation to providing high-quality care.

To counter this tendency toward culturalism in health care, it can be useful to define culture from a **critical cultural perspective**.⁷ According to a critical cultural perspective, *culture* is a relational aspect of individuals that shifts and changes over time, depending on an individual's history,

social context, past experiences, gender identity, professional identity, and so on. Viewing culture in this way does not imply that health care providers should not pay attention to patients' values, beliefs, and practices. From a critical perspective of culture, these factors are viewed as highly significant: not as determining factors in people's lives but as intersecting with broader social determinants of health. For example, rather than viewing people's diet (or other health-related practices) as determined by their "culture," a critical cultural perspective prompts you to consider the fact that people's dietary intake is equally influenced by their income, access to food resources, ability to afford fresh fruits and vegetables, geographical location, and educational levels. In many rural or remote communities, high-carbohydrate fast foods or drinks are often less expensive than milk, fresh fruits, and vegetables. This explains why people in these communities can have difficulties purchasing fresh foods that are beneficial to them. It also explains, in part, why rates of type 2 diabetes may be high in some Indigenous communities, where access to traditional foods (e.g., berries, fish, game) has been denied by government policies (e.g., the reserve system and land appropriation) and environmental damage (e.g., collapse of fisheries). Similarly, people who immigrate to Canada may have difficulty accessing familiar ingredients and therefore turn to less healthy, prepackaged foods. Thus, when a nurse documents a health history, understanding whether a person or family has the resources to purchase a healthy range of foods is as important as understanding their culturally based preferences for particular foods.

Just as each individual has a particular cultural orientation, health care has a particular culture. The Canadian health care system has particular features, sometimes referred to as the **dominant health care culture**. For example, health care providers working in the dominant health care culture often judge people negatively depending on their health practices (for example, for their failure to exercise or to stop smoking tobacco). They may also tend to value adherence or "compliance" with medical recommendations, such as technical diagnostic procedures, medications, and surgeries. However, the extent to which patients and their family members ascribe to the values of the dominant health care culture varies greatly. For some patients, the Western-style approach to history-taking (asking questions in quick succession) is not part of their pattern of communication. For some, taking a prescribed medication requires consultations with other family members. If you are alert to, and respectful of, the wide variety of health care practices and understandings about health, you will more easily find a mutually acceptable way to address people's concerns. This requires you to remain critically reflective about how you may be conveying features of the dominant health care culture in ways that can make patients feel uncomfortable or hesitant to share their perspectives.

These issues also have implications for how people will respond when asked on standard health history forms to identify their ethnicity. In the United States, people are regularly asked to identify their "race," but in Canada, this question is asked less often because "race" is understood as a

social construct, not a fixed biological category. Some health history forms include categorical responses that people are asked to select from, while others include open-ended questions such as, “How would you identify your culture or ethnicity?” In some cases, people may choose to self-identify as, for example, Ukrainian, Greek, Sri Lankan, or Jewish. Increasingly, however, people who live in Canada are self-identifying as “Canadian,” regardless of whether they were born in Canada or not. Others may not wish to report an ethnocultural identity other than Canadian because they are concerned that they might be treated differently because of how they identify.^{3,4}

“Race” and Ethnicity: Why Is It Important to Distinguish Between These Terms?

In health care and other sectors of Canadian society, the concept of ethnicity is often used as a substitute for the idea of “race.” It is essential for nurses and other health care providers to understand that although discussions about “race” are politically charged and often pervasive, “race” is a social construct that has no biological legitimacy. In 1951, in the aftermath of World War II, the United Nations Educational, Scientific and Cultural Organization (UNESCO) dismissed “race” as a biological category, stating that “biological differences between human beings within a single ‘race’ may be as great as, or greater than, the same biological differences between races.”⁹ As a social construct, however, the idea of “race” is powerful and continues to be used in a variety of national contexts to classify humankind according to common ancestry and differentiation by physical characteristics such as skin colour, hair texture, stature, and facial characteristics.⁵ This tendency occurs within the discipline of nursing and medicine as “race” becomes conflated with the fact that people have genetic characteristics. The reality is that all people, regardless of the colour of their skin or other physical appearances, are a mixture of populations. Skin colour, eye shape, and hair texture are genetically determined—and reflect heredity and ancestry—but those features do not signify any meaningful biological groupings or “races.”

The idea of ethnicity operates in a similar way: it is used in various national and international contexts to categorize people, and is a social construct. For example, in Canada, **visible minorities** are defined by Statistics Canada as “persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour,” and as consisting “mainly of the following groups: Chinese, South Asian, Black, Arab, West Asian, Filipino, Southeast Asian, Latin American, Japanese, and Korean.”¹⁰ Using the term *visible minority* to classify people by skin colour or other physical characteristics is a racializing process. Health care providers should be aware that some people view the term *visible minority* as demeaning because it does not account for people’s various histories and social contexts.

Unlike in Canada, in the United States, the terms “race” and *ethnicity* are often used interchangeably to categorize people as, for example, “Black,” “White,” “Hispanic,” or “Asian.” As noted earlier, these categories signal social classifications rather than genetically linked groups of people.

Importantly, although “race” is not a biological entity, the social dynamics that occur in societies because of racialization (e.g., discrimination against people based on the colour of their skin or presumed ethnocultural characteristics) can have profound effects on patterns of health and illness. Nurses and other health care providers need to be aware of these effects and the terms used by researchers to study them.

Racialization is a process of attributing social, economic, or presumed cultural differences to “race.”¹¹ Racialization may be conscious and deliberate (an act of **racism** in which discrimination is overt) or unconscious and unintended. Racism is founded on the view that there are supposedly biologically real divisions that involve “a hierarchy of value.” Racialization exerts power through everyday actions and attitudes and from institutionalized policies and practices that disadvantage individuals and groups on the basis of presumed biological, physical, or genetic differences. For example, in our research, we have observed situations in which health care providers have erroneously assumed that alcoholism is “genetic” among Indigenous peoples, which leads them to presume that an Indigenous patient who has an unsteady gait is inebriated when, in fact, the patient may be experiencing cerebral bleeding, severe dehydration, a seizure disorder, or ataxia as a side effect of prescription medication.^{12–15}

Racialization is closely linked to culturalism, because people whose behavior, practices, health or life circumstances are most likely to be explained by others as due to “culture” are those who are most likely to be racialized. For example, in Canada, people seen as Euro-Canadian (or Caucasian) are often thought not to “have a culture,” because they are so fully aligned with the dominant culture, whereas non-Caucasians are often racialized and their differences explained as “cultural.”

Racialization is also closely linked to discrimination. **Discrimination** is the systemic inequitable treatment of individuals or groups based on stratified classifications.¹¹ It refers to unfair, or morally wrong, social arrangements or acts, or the perception thereof, that have the potential for disadvantage or denial. Like other inequities, discrimination arises from social arrangements that are potentially remedial. The prevalence of certain diseases, such as hypertension, diabetes, and circulatory disease, can be higher in particular population groups and can vary according to genetic, biological, and family history. However, those factors intersect in significant ways with social factors, such as socioeconomic characteristics, gender roles and identities, and exposure to stressful experiences, including discrimination. For example, research in the United States has demonstrated that the increased incidence of high blood pressure among people of African descent, when socioeconomic and other factors are controlled, is attributable to experiences of discrimination.¹⁶ In Canada, Nova Scotians who have African ancestry have been shown to have a higher incidence of circulatory disease, diabetes, and mental health issues that cannot be explained by socioeconomic characteristics or distance to a hospital,¹⁷ which suggests that psychosocial stress and discrimination may explain the differences.

As a health care provider, you need to think critically about these processes and examine the categories and assumptions that you may be using (sometimes unconsciously) in relation to particular patients and families.^{3,4} In health assessments, it is usually not necessary to ask people to identify their ethnicity. Instead, focusing on an individual's particular understandings, explanations, values, and practices related to health and illness will help you obtain information relevant to health and avoid making assumptions—in other words, provide culturally safe care.

CULTURAL SENSITIVITY, CULTURAL COMPETENCE, AND CULTURAL SAFETY: WHAT DO NURSES NEED TO KNOW?

Depending on the setting in which you work, you will be called on to provide culturally sensitive, culturally competent, or culturally safe care. **Cultural sensitivity** reflects the idea that people have culturally based understandings, practices, and customs, and that health care providers should be aware of and accommodate those understandings. Being culturally sensitive can be useful if it is done in a way that does not stereotype people for the ways in which they may be different from the dominant cultural norm. However, a critical cultural perspective emphasizes that health care providers must go further by recognizing that people's understandings, practices, and customs shift and change over time and context, and intersect with broader social determinants and power relations operating in society and in health care (Fig. 3.3). The Canadian Nurses Association (CNA) “believes that cultural competence is an entry-to-practice level competence for registered nurses” and defines **cultural competence** as “the application of knowledge, skills, attitudes or personal attributes required by nurses to maximize respectful relationships with diverse populations of clients and co-workers.”¹⁸ The CNA also recognizes “that cultural issues are intertwined with socioeconomic and political issues” and “is committed to social justice as central to the social mandate of nursing.”¹⁸ Regardless of the terminology used or the school of thought, it is not possible to develop knowledge about cultural and social considerations through brief

cross-cultural training programs alone. Rather, you must develop knowledge in several areas, such as the following:

1. Your own personal ethnocultural and social background
2. The culture of nursing and related professions
3. The culture of the health care system
4. The significance of social, economic, and cultural contexts
5. Your ability to critically examine your assumptions about each of these areas

The idea of *cultural safety* can assist you in gaining knowledge in these areas.

Cultural Safety

The concept of cultural safety emerged in the nursing literature in the 1990s in New Zealand, developed by Maori nurse leaders and educators who were concerned about the persistent health and health care inequities affecting Maori people (the Indigenous people of New Zealand).^{19–21} The CNA recognizes **cultural safety** “as both a process and an outcome whose goal is to promote greater equity” by focusing on the root causes of “power imbalances and inequitable social relationships in health care.”¹³ Cultural safety is increasingly being incorporated in nursing, medicine, and other health care disciplines to provide care that takes into account the social, economic, political, and historical contexts of people's lives and how those contexts affect their health and health care experiences.^{22–24} Nurses and health care providers who practice in culturally safe ways acknowledge that culturally based meanings and practices are to be respected. However, they are also directed to change the culture of health care, especially the practices and policies that perpetuate culturalism, racialization, and inequities.

Some of the main principles of cultural safety are as follows:

- Individual and institutional racism and discrimination, and culturalism create risks for patients, particularly when people from a particular group perceive they are “demeaned, diminished or disempowered” within the health care system.²⁵
- Attention is shifted away from cultural differences as the source of the “problem” and onto the culture of health care as the site for transformation.¹³
- It is more important to consider how people are perceived and treated within the health care system than to determine or catalogue culturally specific beliefs or practices.²⁶

Because relational approaches are concerned with relationships among providers and patients within particular historical, economic, social, and cultural contexts, relational approaches are integral to cultural safety (Box 3.1).

DEMOGRAPHIC PROFILE OF CANADA: TRENDS AND THEIR RELEVANCE TO HEALTH ASSESSMENT

Tensions and inequities often arise along the lines of perceived differences across populations and groups. For example, they can arise for people who are not fluent in either of Canada's official languages or for people who are



3.3 How can you counteract your own assumptions?

BOX 3.1 Using Culturally Safe Approaches

As you approach a new patient who is different from you in terms of appearance, age, skin colour, clothing, socioeconomic status, accent, or primary language spoken, take the time to ask yourself the following questions:

- What biases, assumptions, or stereotypes are influencing my verbal and nonverbal behaviours and decisions?
- What am I paying attention to, and how is that causing me to overlook certain things?
- How does the work environment (e.g., norms, colleagues, workload) contribute to, or challenge, the formation of these stereotypes and assumptions?

most at risk of experiencing the negative impacts of racism. Nurses need to be knowledgeable about how these dynamics can manifest in health care so that they can provide care that is consistent with the CNA's *Code of Ethics for Registered Nurses*²⁷ and foster health equity. For these reasons, it is important for nurses to keep up to date with Canada's changing demographic trends.

The 2016 census estimated that Canada's population is 35 151 728, an increase of 5.0% since 2011.²⁸ Although the majority of the population is Canadian born (around 79.4% of the total population in 2011), the Canadian population is increasing primarily as a result of international migration—which accounts for about two-thirds of Canada's population growth between 2011 and 2016.^{29,30} Canada's population is diverse in terms of languages spoken, where people live, age distribution, and ethnocultural identities.

Canada's two official languages, English and French, are entrenched in the country's history. As a result of this history, rights and institutional support for English and French are entrenched in Canadian society. Notably, much less support is provided for the preservation and revitalization of Indigenous languages, despite the fact that Indigenous peoples are the original inhabitants. In 2011, nearly 58% of the Canadian population reported English as their mother tongue,* and nearly 22% reported French as their mother tongue.³¹ Canada is diversifying linguistically; of significance is the fact that just over 70% of people who immigrated to Canada in 2011 reported a mother tongue other than English or French.^{32,33} Many distinct Indigenous language families and dialects also exist. Strategies for communicating effectively with people whose primary language is different from yours are discussed in-depth in [Chapter 4](#).

In 2016, 83.2% of the population lived in an urban area,³⁴ 70.4% of Canadians were living in one of Canada's 35 large

*Mother tongue is defined by Statistics Canada as the first language learned at home in childhood and still understood by the individual. If the person no longer understands the first language learned, the mother tongue is the second language learned. For a person who learned two languages at the same time in early childhood, the mother tongue is the language this person spoke most often at home before starting school.



3.4 How does our geography shape health?



3.5 How does our geography shape health care access?

census metropolitan areas (CMAs)^{†,35} (Figs. 3.4 and 3.5). Based on 2016 census data, the population of six CMAs exceeds 1 million: Toronto, Montreal, Vancouver, Calgary, Ottawa-Gatineau, and Edmonton.²⁸ Together, these cities are home to 47% of Canada's total population.

Canada's population is aging as a result of low fertility and increasing life expectancy.³⁵ The proportion of the population aged 65 and over has increased from 13.7% in 2006 to 16.5% in 2016. Since 2015, Canada's population of people aged 65 and older is greater than children aged 0 to 14 (the proportion of the population under 14 years of age was 16.1% in 2016).³⁵

In the 2016 census, over 250 ethnic origins or ancestries were reported by the Canadian population, and 4 in 10 people reported more than one origin.³⁶ Ethnic origin responses are a reflection of each respondent's perception of their ethnic ancestry. An "ancestor" is usually more distant than a grandparent. As noted in the 2016 census guide:

[†]A CMA is an area consisting of one or more neighbouring municipalities situated around a major urban core. A CMA must have a total population of at least 100 000, of which 50 000 or more live in the urban core.

BOX 3.2 Principles of Culturally Competent Care

- **Resist the practice of “othering.”** This is the tendency to classify people or groups in a way that separates them from the whole. An “us” and “them” mentality supports a social hierarchy and power imbalances.
- **Everyone has a unique cultural identity.** Identities also intersect as people often identify with more than one cultural group.
- **There is as much diversity within cultures as across them.** Sex and gender, life stage, social status and other factors mean that no single cultural identity defines a cultural group. Everyone has a unique personality, aspects of shared cultural identity and a common humanity.
- **There is a difference between self-identity and being identified.** No one benefits from having their identity described and prescribed by others. People need to be able to self-identify with cultural groups. They also must choose if general information about a group applies to them. Unfortunately, people’s health is partly determined by the identity imposed upon them by others.
- **Beware the dangers of stereotyping.** A stereotype is a belief or an attitude about a person or group that may not be based in reality. Stereotyping leads to the end of dialogue and understanding. For all of the above reasons, use the information provided here to inform your work but don’t use it to stereotype an individual or a group.

From Nova Scotia Health Authority. (2016). *Diversity lens tool kit* (p. 6). Retrieved from <https://www.cdha.nshealth.ca/diversity-inclusion>.

*Ethnic origin refers to a person’s ‘roots’ and should not be confused with citizenship, nationality, language or place of birth. For example, a person who has Canadian citizenship, speaks Punjabi (Panjabi) and was born in the United States may report Guyanese ethnic origin. ... In the 2016 Census, the terms ‘ethnic origin,’ ‘ethnic group’ and ‘ethnic ancestry’ are used interchangeably.*³⁷

The following were among the top 20 ethnic origins reported by the Canadian population: English (6.3 million people), Scottish (4.8 million people), French (4.7 million people), Irish (4.6 million people), Chinese (1.8 million people), East Indian (1.4 million people), and Filipino (837 130 people).³⁶

The increasing ethnocultural, linguistic, and social diversity in Canadian society necessitates health care policies and practices that support providers so that they can work with a wide range of people and populations. Box 3.2 lists principles of culturally competent care recommended by the Nova Scotia Health Authority;³⁸ each province and territory will have standards and policies tailored to its local context. Many hospitals and health care agencies in Canada have similar standards and policies.

ETHNOCULTURAL DIVERSITY WITHIN THE CANADIAN POPULATION

Ethnocultural diversity is part of Canada’s national identity. As the demographics indicate, the majority of Canadians

associate themselves with the dominant linguistic groups (English and French) and with the dominant European ancestry. These patterns create the potential for “othering”^{*} in health care, as well as the potential for modelling culturally safe, actively respectful ways of working across differences in health care. Differences are most evident when members of dominant groups provide care to people who are from racialized groups or visible minorities, such as Indigenous peoples or people who have immigrated to Canada, particularly if those persons are not fluent in one of the official languages. Therefore, to provide culturally safe care, health care providers require particular knowledge pertaining to Indigenous peoples and immigrants.

Indigenous Populations in Canada

The term *Indigenous peoples* refers to the original inhabitants of the land.¹³ In Canada, Indigenous peoples includes First Nations, Métis (people of mixed European and Indigenous ancestry), and Inuit. The term *Aboriginal* is also commonly used (e.g., by Statistics Canada), and the colonial term *Indian* is still used in federal policy documents (e.g., the *Indian Act*), though the term *First Nations* is viewed as more respectful. In the 2016 census, 2.1 million people, or 6.2% of the total Canadian population, reported “Aboriginal ancestry”[†] (single or multiple response).³⁹ The 2016 census also indicated that 1 673 785 Aboriginal people in Canada reported “Aboriginal identity,”[‡] accounting for 4.9% of the total population.⁴⁰ Of the three main Aboriginal groups, First Nations (North American Indians) was the largest, with 1.5 million people. Within this group, Cree (356 660), Mi’kmaq (168 480), and Ojibway (125 725) were the most common ancestries. Métis ancestry was reported by 600 000 people, and Inuit ancestry was reported by 79 125 people.³⁶ It is important to recognize that there is diversity within First Nations, Métis, and Inuit populations. This diversity is reflected, in part, by the more than 70 Indigenous languages currently spoken and the more than 600 unique First Nations/Indian Bands in Canada (Fig. 3.6).⁴¹ *Registered Indians* are persons who are registered under the *Indian Act*. *Treaty Indians* are persons who belong to a First Nation or Indian band that signed a treaty with the Crown. Registered or treaty Indians are sometimes also

^{*}*Othering* is a term that refers to the projection of assumed cultural or social characteristics, differences, or identities onto members of particular groups. These projections are not based on actual differences; rather, they are based on stereotypes.

[†]According to Statistic Canada, *Aboriginal ancestry* refers to a person’s ancestry associated with the Aboriginal peoples of Canada; that is, First Nations (North American Indian), Métis, and Inuit. “Ancestry” refers to the ethnic or cultural origins of the person’s ancestors, an ancestor being usually more distant than a grandparent. A person can have more than one ethnic or cultural origin.

[‡]According to Statistics Canada, *Aboriginal identity* refers to a person’s identification with the Aboriginal peoples of Canada; that is, First Nations (North American Indian), Métis, or Inuk (Inuit) and/or registered or treaty Indians (i.e., registered under the *Indian Act*), and/or those who have membership in a First Nation or Indian band.



3.6 What are your initial assumptions about this woman? She is the granddaughter of a renowned traditional medicine woman, Mrs. Sophie Thomas, from Saik'uz First Nation, British Columbia.

called *status Indians*.⁴² In 2016, First Nations people with registered or treaty Indian status accounted for just over three-quarters (76.2%) of the First Nations population.⁴¹

As has been the trend in recent years, many people are moving from rural and northern communities to urban areas, often to seek employment that is not available in other regions. According to the 2016 census, among the First Nations people with registered or treaty Indian status, 44.2% lived on-reserve and the rest lived off-reserve.⁴¹ The cities with the largest Indigenous populations in 2016 were Winnipeg, Edmonton, Vancouver, and Toronto.⁴³ In 2016, 72.8% of the Inuit population lived in Inuit Nunangat (the area from the western-most Arctic to the eastern shores of Newfoundland and Labrador).⁴¹

Policies Affecting Indigenous Peoples in Canada

In Canada, the complex history of colonialism, and current policies and practices within governments, organizations and institutions have resulted in profound social disruption within many Indigenous communities. They have contributed to a lack of employment opportunities, limited access to educational programs, inadequate and often crowded housing, and high levels of poverty.^{44,45} The regulation of First Nations people's lives through the policies of the *Indian Act* and the ongoing restrictions placed on self-government, land claims, and economic development in Indigenous communities continue to shape life opportunities, economic conditions, and the overall health and social status of individuals and families.

The *Indian Act*, originally developed in 1876, was founded on the paternalistic motivation to assimilate and govern "Indians" (i.e., First Nations people). The original *Indian Act* has been amended several times, but it remains an actively applied legislation and contains all the federal policies and regulations pertaining to "registered status Indians." The *Indian Act* classifies First Nations people into registered status Indians and non-status Indians to distinguish people who receive legal recognition as First Nations citizens in

Canada from those who do not.⁴⁶ The process of obtaining registered status is complex and requires a series of applications submitted to the federal department responsible for meeting the government's constitutional, treaty, political, and legal responsibilities to First Nations people.

Until very recently, non-status First Nations people were not recognized by the federal government under the *Indian Act*, either because they were unable to prove their status or because they had lost their status rights. For example, many First Nations women and their children in Canada lost their status when they married non-status men. Although the *Indian Act* was changed in 1985 and 2011 to repeal these discriminatory policies, it is still possible for the grandchildren of status First Nations women to lose their status designation. The issue of who has status and who does not is relevant to health care providers because people who are "non-status Indians" are not entitled to the limited benefits available to people who are "status Indians." These inclusions and exclusions are also shifting: in 2016, the Supreme Court of Canada declared that Métis and non-status Indians are "Indians" for the purpose of federal Parliament's law-making jurisdiction under subsection 91(24) of the *Constitution Act, 1867*. However, the ruling does not affect Métis and non-status Indian eligibility for programs and services currently targeted to status Indians.^{47,48}

Currently, First Nations people who are status Indians and Inuit receive limited health care benefits (called Non-Insured Health Benefits [NIHBs]) not covered by provincial health insurance plans.⁴⁹ NIHBs are administered by Health Canada and include selected prescription medications, limited medical supplies and equipment, short-term crisis counselling, limited coverage for glasses and vision care, medical transportation, and dental care (although many dentists do not provide services to people who have status because the dentist must wait to be reimbursed by the federal government, as opposed to receiving payment directly from the patient). Unfortunately, many members of the public, including health care providers, are unaware that the services provided through NIHBs are very limited and that these benefits do not apply to non-status people or Métis.

Another prevalent misconception is that Indigenous peoples in Canada do not pay taxes. This misconception can be a source of resentment for some Canadians. In general, Indigenous peoples are required to pay taxes on the same basis as other people in Canada, except where limited exemptions are defined by the *Indian Act* for people with status.⁵⁰ Status First Nations people are not required to pay provincial or federal taxes for goods, services, income, and property on-reserve. However, this exemption does not apply to the majority of First Nations people in Canada, who live off-reserve. Non-status people and Inuit are subject to taxation, like all other Canadians.

Inequities in Health Status

In the past in Canada, discriminatory practices and policies were aimed at assimilating Indigenous peoples into the dominant Canadian society. First Nations lands were