Eleventh Edition

Rector's Community and Public Health Nursing

Promoting the Public's Health

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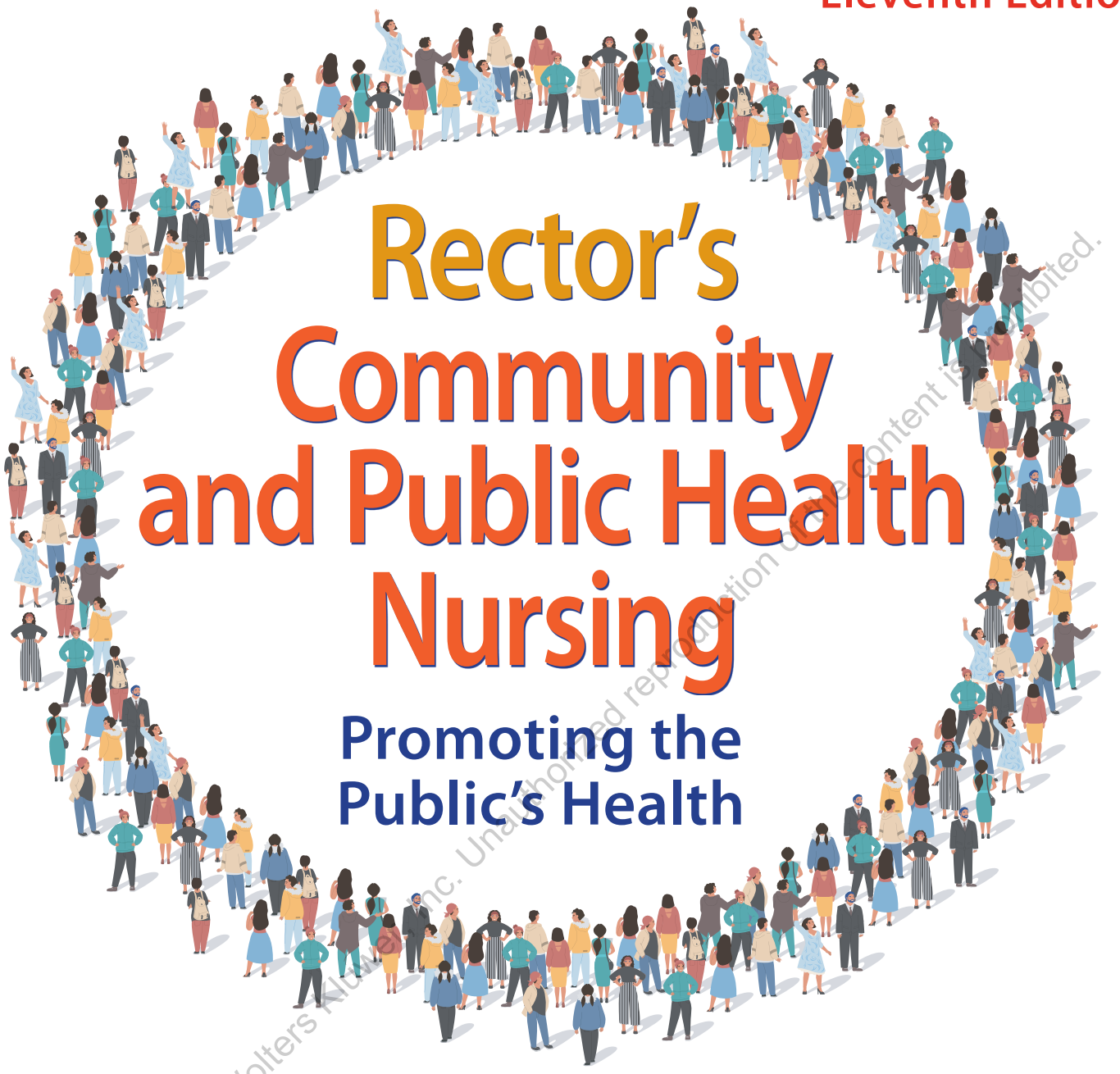

Rector's Community and Public Health Nursing

Promoting the Public's Health

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To my family, with love.

—Mary Jo Stanley

To my students, a heartfelt thank you for trusting me with your stories to share in this textbook.

—Charlene Niemi

With love, to my husband, my children, and my grandchildren.

—Cherie Rector

ABOUT THE AUTHORS

Dr. Mary Jo Stanley, PhD, RN, CNE, lives with her family in Colorado, where she gardens, raises alpacas, and enjoys Colorado's outdoor beauty. Dr. Stanley has been a nurse for over 38 years and in higher education for 16 years. Over Dr. Stanley's career, she has practiced in community, public, and school health settings, as well as in acute care ICU and PACU facilities. She earned a Bachelor of Science in Nursing, Master of Science in Nursing, Clinical Nurse Specialist, and School Nurse Credential from San Jose State University. Dr. Stanley completed her PhD in nursing with an emphasis in education from the University of Northern Colorado, where she was also on the faculty for many years. Dr. Stanley is a Certified Nurse Educator (CNE) with experience in curriculum creation and revision, and accreditation work. She is Professor Emeritus in the School of Nursing at California State University Stanislaus, where she served as the RN-BSN Program Director and the Director for the Nursing Department. Currently, she is a Professor at Colorado Mesa University.

Throughout her academic career, Dr. Stanley has taught classes to undergraduate and graduate students. Undergraduate teaching areas have included community/population theory and clinical, leadership and management theory and clinical, health assessment, foundations, health promotion, professional development, health education, capstone practicum, and professional roles. Graduate classes in nursing have included education theory and clinical, contemporary practices theory and clinical, nursing research, evidence-based practice, and graduate project Chair for Master of Science in Nursing students. Her research, publications, presentations, and grants have focused on educational development, strategies for teaching, and community health. Dr. Stanley has consulted for online instruction and is a certified online course reviewer. She is an active member of the Association of Community Health Nursing Educators and of Sigma Theta Tau International.

Dr. Charlene Niemi, PhD, MSN, RN, PHN, is a native Californian and has not ventured more than 30 miles from where she was born. Dr. Niemi enjoys spending time with her husband of 38 years, their two adult sons and their girlfriends, and the family dogs. She spends her free time people-watching while on walks, as well as having lengthy discussions on theology with friends. She has been in nursing and higher education for 34 years. Wanting to follow in her mother's footsteps, Dr. Niemi attended nursing school with the goal of becoming a trauma 1 emergency department RN. However, her last course in nursing school was community/public health nursing, which changed the course of her career.

Dr. Niemi has a Public Health Nurse (PHN) Certificate from the State of California and has vast experience in multiple public/community settings that include school health, correctional health, faith-based nursing, and public health nursing. At California State University, she developed the community health nursing curriculum and functioned as the lead for 12 years. In addition to community/public health, Dr. Niemi developed the psychiatric nursing curriculum and was lead at the same university.

Currently, Dr. Niemi is a faculty member at the University of California, Los Angeles, where she teaches public health nursing, psychiatric nursing, and geriatric nursing. Her research focuses on health literacy and social determinants of health; stigma in family members of those incarcerated; and childhood trauma. Dr. Niemi's education includes a BSN and an MSN (Nursing Education) from Mount Saint Mary's University and a school nurse credential from California State University, Fresno. Her PhD in Nursing is from Azusa Pacific University, with a dissertation on the role of forgiveness on the psychological well-being of men who had been abused by priests as children.

An important aspect of her life involves community outreach; she is the Director of Health Education and on the Board of Directors for Care Harbor, a mega clinical that provides free medical, dental, and vision care in a large metropolitan city. She is an active member of the American Public Health Association (PHN Section) and Sigma Theta Tau. Dr. Niemi is a recipient of the DAISY Faculty Award and an Emeritus faculty member at California State University Channel Islands.

Dr. Cherie Rector, PhD, RN, PHN, is a native Californian and an Emeritus Professor in the Department of Nursing at California State University, Bakersfield. While there, she served as lead faculty in community health nursing, Director of the School Nurse Credential Program and the RN to BSN Program, helping to develop and revise curriculum in those areas. She also developed an online curriculum for the RN to BSN program and taught in-person distance learning, and online courses in graduate and undergraduate programs. Prior to that, she served in an administrative position as Director of Allied Health and the Disabled Students Program at College of the Sequoias. She has also been the Coordinator of the School Nurse Credential Program and the RN to BSN Program at California State University, Fresno, overseeing curriculum development in those areas, for both online and in-person classes.

Undergraduate teaching areas have included community health nursing, foundations/health assessment, health teaching, leadership, and capstone classes. In

addition, she has taught graduate courses in community health nursing, research, vulnerable populations, family theories, interprofessional development, and school nursing. She has served as a consultant to school districts and hospitals in the areas of child health, research, and evidence-based practice; has served on various state, local, and national boards and task forces; and has had leadership roles in professional nursing organizations.

Over the course of her career, Dr. Rector has practiced in community health and school nursing settings and in acute care neonatal nursing. Her grants, research, publications, and presentations have focused largely on child and adolescent health, school nursing, public health nursing, nursing education, and program development for underrepresented students.

Dr. Rector earned an associate degree in nursing from College of the Sequoias and a BSN from the Consortium of the California State Universities, Long Beach. She completed a master's degree in nursing (Clinical Nurse Specialist, Community Health) and a school nurse credential from California State University, Fresno. Her PhD in educational psychology is from the University of Southern California. She is an active member of the American Public Health Association (PHN Section), the Western Institute of Nursing, Sigma Theta Tau, and the Association of Community Health Nursing Educators.

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PREFACE

The 11th edition of this book would not be possible without the contributions of previous authors. *Rector's Community and Public Health Nursing: Promoting the Public's Health* is the product of a legacy of nursing educators who bring their expertise, knowledge, and talents to each chapter. In recognition of Dr. Cherie Rector's numerous contributions to this textbook, we extend a heartfelt thank you for her many years of commitment to the writing and editing of this book. We pride ourselves on the accuracy of the textbook and rely on numerous subject matter experts from across the United States to peer review each chapter, providing the reader with a quality product.

The 11th edition provides foundational grounding in population-focused nursing with a heavy emphasis on the needs of aggregate and vulnerable groups. The textbook provides fundamentals of public health while gearing the presentation of the material to be classroom friendly. The text introduces students to key populations with whom they may engage while working in community settings. Through stories and features, it exposes students to commonly occurring situations in which they may find themselves as new nurses in the community and in other settings. Lastly, students will gain a solid understanding of how population-focused nursing occurs in the community.

We as authors recognize that students often deprioritize this course because the bulk of nursing education is focused on acute care, and most new graduates express interest in working in that setting. However, the COVID-19 pandemic reminded the world of the foundational need for public health nursing to protect and promote the public's health. In this textbook, we focus on showing the connection between community/public health population-focused nursing and the practice of acute care nursing, providing students with examples and information that will broaden their knowledge of their patients and enable them to provide more effective nursing care wherever they may choose to practice.

In this text, we also educate students that population-focused care does occur in acute care settings (e.g., infection control, programs to reduce length of stays, or readmission rates), and many hospital systems recognize the need for more community-based options. With more stringent Medicare reimbursement guidelines (e.g., nonpayment for medical errors and early readmissions), increased bundling, and a laser focus on value-based care, hospitals are striving to improve safety and quality and reduce readmission rates with more of a focus on transitional care and case management. Healthcare reform is changing the landscape for patients and providers, and care is becoming even more community based.

Population-focused tools and interventions are not only important in the community setting and within public health nursing; they are needed in acute care, as infection rates continue to rise, and nurse-sensitive outcome indicators are closely monitored. When a patient is discharged from the hospital, it is important for their nurse to understand their unique circumstances and how to best work with the patient and family to prevent further illness and promote better health. Transitional care is becoming more commonplace, and nonprofit hospitals must conduct community assessments, sometimes in conjunction with local public health departments or public health consultants.

Acute care settings and public health agencies are grappling with healthcare reform, a booming aging population, major natural disasters such as the pandemic and weather events, the opioid crisis and mental health, and the complex reality that the health of people, families, and communities extends beyond access to health services. In the United States, we are also seeing a renewed interest in the social determinants of health. It is now recognized that the largest factors influencing an individual's health status are behavior, genetics, adequate access to safe housing and healthy food, environment, and education status.

The United States is a melting pot of diverse people, religions, beliefs, and values. Despite our multiplicity, implicit biases and atrocities related to racism remain. Inclusivity and acknowledging one's positionality in partnership with diverse communities brings issues to the forefront in support of a more inclusive environment. We advocate to students that they will need to be ready to step up to contend with these issues, and this textbook will help them become prepared.

Over the years, we have carefully considered the feedback of community and public health instructors across the United States, and we have heard you that student engagement is a pressing issue. This textbook's features are designed to capture students' attention and encourage them to apply public health nursing principles to practice.

NEW TO THIS EDITION

The 11th edition concentrates on the most accurate, pertinent, and current information for students and nursing faculty with a focus on diverse, equitable, and inclusive practices, as well as the influence of social determinants of health (SDOH). All chapters are peer reviewed.

Expanded and new content in this 11th edition includes the following:

- **NEW!** In the following features, terminology and questions related to the Clinical Judgment Measurement Model (CJMM), developed by the National

Council of State Boards of Nursing (NCSBN), is used to support students' need to think critically and to use clinical judgment. (Terminology includes the following steps of the CJMM: Recognize Cues, Analyze Cues, Prioritize Hypotheses, Generate Solutions, Take Action, and Evaluate Outcomes; see https://www.ncsbn.org/public-files/NGN_Winter19.pdf for more information.)
    - **NEW! Case Studies** added at the end of some chapters focus on a contextual approach to understanding content, aligning with the 10 Essential Public Health Services. Case Studies examine situations and C/PHN roles based on chapter content within a real-world context, allowing students to use clinical judgment as they work through community and public health situations.
    - **Updated! C/PHN Use of the Nursing Process/Clinical Judgment** boxes quickly focus students' attention on key concepts and interventions related to public health nursing content and situations. This feature promotes student awareness of how the nursing process (something familiar to them) as well as the CJMM can be used in public health nursing.
- **Updated! Active Learning Exercises** at the end of each chapter challenge students, promote concept application and higher-level learning skills, as well as encourage active involvement in solving community health problems unique to specific areas. These may include internet-based exercises and can be assigned by instructors as learning activities or class assignments. A new feature in this edition is Bloom's taxonomy alignment of these activities to chapter competencies (chapter objectives), similar to the alignment of a course. One of the learning activities in each chapter focuses on the 10 Essential Public Health Services for student application and contextual understanding of content.
- **NEW! A chapter on veterans health** (Chapter 28) has been added in Unit 6, Vulnerable Populations.
- **NEW! Streamlining of content:** Unit 7 on settings has been removed; this information has been integrated into the chapters as appropriate to the C/PHN role to show context.
- **Special Boxes in This Book:** This section of this book's front matter, found immediately following the Table of Contents, makes it easier to find the features and stories that bring the theoretical content in the text to life. This section has been updated to include the new features.

Additional Key Features of the Text

In addition to the new and expanded features noted in the previous section, this edition includes the following key features from previous editions:

- **Evidence-Based Practice** boxes demonstrate how current research can be applied to public/community health nursing practice to achieve optimal client/aggregate outcomes.
- **Stories From the Field** boxes use storytelling to convey real-life situations and interventions accompanied by application-based questions. Storytelling has been shown to be very effective as a teaching/learning tool, especially in nursing education (Roddy et al., 2021; Yamashito, 2022). Through storytelling, students work to understand and apply the necessary art and skills for working with clients in a community setting.
- **Levels of Prevention Pyramid** boxes, unique to this text in their complexity and comprehensiveness, enhance understanding of the levels of prevention concepts that are basic to public/community health nursing. Each box addresses a chapter topic, describing nursing actions at each of the three levels of prevention. We place primary prevention (rather than tertiary prevention) at the pyramid's base to reflect its importance as a foundation for health.
- ***Healthy People 2030*** boxes highlight pertinent goals and objectives to promote health.
- **Perspectives** boxes share viewpoints from a variety of sources. The perspective may be from a nursing student, a novice or experienced public health nurse, a faculty member, a policy maker, or a client. These short features require students to think critically, reflect on commonly held misconceptions about C/PHN, and recognize the link between skills learned in this specialty practice and other practice settings, especially acute care hospitals.
- **Spotlight on Essential Nursing Competencies** (formerly QSEN: Focus on Quality) boxes focus on quality and safety in nursing education. These boxes help students understand that quality and safety are important not only in acute care but also in the public health setting.
- **What Do *You* Think?** boxes present thought-provoking current topics and common dilemmas found in C/PHN or ethical issues that may arise in healthcare settings. Students are asked to reflect and critically think about the issues presented to them.
- **Population Focus** boxes direct the student's attention to chapter concepts from a population-focused viewpoint.
- **Learning Objectives** and **Key Terms** sharpen the reader's focus and provide a quick guide for mastering the chapter content.
- The **Introduction** section presents the chapter topic, and the bulleted **Summary** section provides an overview of the material covered, serving as a concise and focused review.
- **Additional assessment tools** are provided throughout the chapters to enhance student assessment skills with people, families, or aggregates/populations.
- **References** for each chapter, found at the end of the book, provide current research and classic sources that offer a broad base of authoritative information for furthering knowledge on each chapter's subject matter.

Organization of This Book

For the 11th edition, the content has been streamlined into 6 units and 28 chapters.

Unit 1, "Foundations of Community/Public Health Nursing," covers fundamental principles and background about community/public health nursing.

- Chapter 1, "Introduction to Community/Public Health Nursing," discusses basic public health concepts of health, illness, wellness, community, aggregate, population, and levels of prevention. The chapter introduces leading health indicators, *Healthy People 2030* goals and objectives, and prevention as viewed through upstream/downstream approaches.
- Chapter 2, "Public Health Nursing in the Community," explains roles and settings for community/public health nursing, the core public health functions of public health, and the 10 Essential Public Health Services. Nursing standards of practice and community/public health nursing roles are presented.
- Chapter 3, "History and Evolution of Public Health Nursing," examines public health nursing's rich and meaningful history, its nursing leaders, the evolution of nursing education, and the social influences that have shaped our current practice. Features and pictures highlight historical landmarks and the C/PHN role during different time periods.
- Chapter 4, "Research, Evidence-Based Practice, Quality Improvement, and Ethics," considers values, ethical principles, and decision making unique to this nursing specialty. Evidence-based practice and research principles relating to community health nursing are also discussed, along with the nurse's role in utilizing current research, and addressing quality improvement in their practice.
- Chapter 5, "Transcultural Nursing," focuses on the concept of culture and the evolving demographics that constitute the changing population. A lens for diversity, equity, and inclusion and the influence of SDOH are discussed. The chapter presents the nurse's role in cultural awareness in providing care and relating to biases. The need for advocacy and social justice supports the C/PHN role.

Unit 2, "Community/Public Health Essentials," covers the structure of community/public health within the overall health system infrastructure and introduces the basic public health tools of epidemiology, communicable disease control, and environmental health.

- Chapter 6, "Structure and Economics of Community/Public Health Services," examines the economics of healthcare and compares U.S. health outcomes with those of other countries, while also discussing the impact of healthcare reform. The chapter also reviews official health agencies, some landmark public health legislation, and basic information on different types of health insurance.
- Chapter 7, "Epidemiology in the Community," highlights basic concepts of epidemiology and different methods of epidemiologic investigation and research, updates from the global pandemic, and what we learned for future events along with the C/PHN's role in epidemiology.
- Chapter 8, "Communicable Disease," presents a population focus on communicable disease control and immunization programs, highlighting vaccine hesitancy and effective approaches with clients along with updates from COVID-19 and lessons learned. The chapter discusses communicable disease investigations and common communicable diseases often seen in C/PHN practice.
- Chapter 9, "Environmental Health and Safety," covers concepts vital to environmental health along with the nurse's role in researching and intervening to promote a healthier environment for all.

Unit 3, "Community/Public Health Nursing Toolbox," includes tools used by the public health nurse to ensure practice effectiveness.

- Chapter 10, "Communication, Collaboration, and Technology," covers communication and collaboration, and collaborative communication with communities and cross-sectorial partners as well as clients. Also presented are health literacy and technology as they relate to community messaging, and the use of technology, especially in the wake of COVID-19. The chapter discusses the use of data and analytics, EHRs, mHealth, and GIS, among others, as examples of technology applications.
- Chapter 11, "Health Promotion Through Education," focuses on health literacy, with an emphasis on helping clients and aggregates achieve behavioral change through the application of educational and behavioral models.
- Chapter 12, "Planning, Implementing, and Evaluating Community/Public Health Programs," focuses on planning, implementing, and evaluating community health programs related to community/public health nursing practice. The chapter highlights use of SMART objectives and the implementation of programs.
- Chapter 13, "Policy Making and Advocacy," concludes this unit with an explanation of the public health nurse's role in political advocacy and policymaking, highlighting examples of successful political action campaigns and client empowerment strategies.

Unit 4, "The Health of Our Population," further expands the focus of the public health nurse, examining the family as client, the community as client, global health, emergency preparedness, and violence.

- Chapter 14, "Family as Client," applies family models to promoting family health and how C/PHNs work directly with families as clients. Conceptual frameworks and application of the nursing process to family health help promote healthy families. Home visiting protocols and safety are discussed.
- Chapter 15, "Community as Client," applies the nursing process to communities as clients and the foundations for community health promotion. Various community assessments are discussed, along with sources of data and community development.

- Chapter 16, "Global Health Nursing," highlights global health and international nursing using real-life case examples and perspectives on global health disparities.
- Chapter 17, "Disasters and Their Impact," examines preparedness with a closer look at disasters, terrorism, mass casualty events, and war. The Community/public health nurse's role in emergency preparedness, disaster management, preventive measures against terrorism, and *Healthy People 2030* objectives are also included in this chapter.
- Chapter 18, "Violence and Abuse," includes family- and community-level violence, with content on factors influencing violence, levels of prevention, and *Healthy People 2030* objectives related to this content.

Unit 5, "Aggregate Populations," covers maternal–child health, school-age children and adolescents, adults, and older adults, integrating the role of the nurse in various C/PHN settings.

- Chapter 19, "Maternal–Child Health," provides a PHN perspective in working with this aggregate. The Nurse–Family Partnership is highlighted, and material is updated and streamlined, with a focus on the C/PHN role.
- Chapter 20, "School-Age Children and Adolescents," examines the needs of this aggregate population and the C/PHN's roles and functions when working with this group.
- Chapter 21, "Adult Health," focuses on *Healthy People 2030* objectives and health promotion strategies for adults.
- Chapter 22, "Older Adults," includes updated content on memory care and dementia facilities, economic disparities, and health promotion strategies as they relate to healthy aging for these clients.

Unit 6, "Vulnerable Populations," covers basic concepts on vulnerability and social justice, and highlights vulnerable populations such as people who identify as LGBTQ+, veterans, refugees, people with disabilities, individuals with behavioral health issues, unsheltered populations, and rural, urban, and migrant populations.

- Chapter 23, "Working With Vulnerable People," introduces the foundations of vulnerable populations and groups commonly classified as vulnerable. It also covers social justice concepts and C/PHN strategies for working with vulnerable populations.
- Chapter 24, "Clients With Disabilities," covers civil rights legislation, the concept of universal design, support systems for this population, and risk for abuse of people in this group.
- Chapter 25, "Behavioral Health in the Community," addresses behavioral health issues (e.g., mental health, substance use) and the C/PHN's role in focusing on these problems using frameworks and screening tools. This chapter includes material on current mental health issues such as the opioid crisis and legislation that impacts public health practice.
- Chapter 26, "Unsheltered Populations," focuses on subpopulations of people experiencing homelessness across the United States and resources and services to help meet their needs. The chapter also examines the C/PHN role as an advocate and case manager.
- Chapter 27, "Rural, Migrant, and Urban Communities," encompasses the challenges and common problems facing these populations. It also explores issues of social justice, medically underserved populations, and frontier nursing.
- Chapter 28, "Veterans Health," provides an overview of veteran culture and health issues including interventions of the role of the C/PH nurse with this population.

A NOTE ABOUT LANGUAGE USED IN THIS BOOK

Wolters Kluwer recognizes that people have a diverse range of identities, and we are committed to using inclusive and nonbiased language in our content. In line with the principles of nursing, we strive not to define people by their diagnoses but to recognize their personhood first and foremost, using as much as possible the language diverse groups use to define themselves, and including only information that is relevant to nursing care.

We strive to better address the unique perspectives, complex challenges, and lived experiences of diverse populations traditionally underrepresented in health literature. When describing or referencing populations discussed in research studies, we will adhere to the identities presented in those studies to maintain fidelity to the evidence presented by the study investigators. We follow best practices of language set forth by the *Publication Manual of the American Psychological Association*, 7th Edition, but acknowledge that language evolves rapidly, and we will update the language used in future editions of this book as necessary.

A Comprehensive Package for Teaching and Learning

To further facilitate teaching and learning, a carefully designed ancillary package has been developed to assist faculty and students.

RESOURCES FOR INSTRUCTORS

Tools to assist with teaching this text are available upon its adoption at http://thePoint.lww.com/Rector11e.

- An **e-Book** gives you access to the book's full text and images online.
- The **Test Bank** lets you put together tests to help assess students' understanding of the material. Test questions are mapped to chapter learning objectives and page numbers.
- The following materials are provided for each book chapter:
  - **PowerPoint Presentations** provide an easy way for you to integrate the textbook with your students' classroom experience, either via slide shows or handouts. Multiple-choice and true/false questions are integrated into the presentations to promote class participation and allow you to use iClicker technology.

- An **Image Bank** lets you use the photographs and illustrations from this textbook in your PowerPoint slides or as you see fit in your course.
- Sample **Syllabi** provide guidance for structuring your community and public health nursing course.
- An **AACN Essentials Map** identifies content and special features in the book related to competencies identified by the American Association of Colleges of Nursing.

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ACKNOWLEDGMENTS

This textbook continues to evolve as it reflects our societal, historical, and community influences. Contributing authors are experts in various fields and specialty areas of community and public health nursing, providing a balanced and complete product. Most of our contributors have years of experience teaching community/public health nursing in the classroom and in community/public health settings. Contributors represent a cross section from across the United States, and the content reflects a broad spectrum of views and expertise. We have also carefully edited all chapters to make this a cohesive textbook with a common voice. We seek feedback from our readers and are proud to offer a peer-reviewed textbook.

The creation of a textbook takes a village. We have had the immense pleasure of working with an amazing team at Wolters Kluwer. A heartfelt thank you to Senior Acquisitions Editor Jodi Rhomberg, Senior Development Editors Meredith Brittain and Jacquelyn Saunders, and Editorial Coordinator Erin Hernandez for your hard work and attention to detail on the 11th edition of *Rector's Community and Public Health Nursing: Promoting the Public's Health*. We appreciate you!

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CHAPTER 21

Adult Health

"Wellness is not a 'medical fix' but a way of living—a lifestyle sensitive and responsive to all the dimensions of body, mind, and spirit, an approach to life we each design to achieve our highest potential for well-being now and forever."

—Greg Anderson

KEY TERMS

- Adult
- Alcohol use disorder (AUD)
- Anorexia nervosa
- Binge eating
- Bulimia nervosa
- Cancer
- Cardiovascular disease (CVD)
- Chronic lower respiratory disease (CLRD)
- Diabetes
- Erectile dysfunction (ED)
- Gynecologic cancer
- Health disparity
- Life expectancy
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- Osteoporosis
- Perimenopause/menopausal transition
- Prostate
- Substance use disorder (SUD)
- Transgender
- Unintentional injuries

LEARNING OBJECTIVES

Upon mastery of this chapter, you should be able to:

1. Identify major chronic illnesses found in adults throughout the lifespan.
2. Examine the concepts of life expectancy and health disparities, and how they apply to adults living in the United States.
3. Discuss factors affecting the health of adults in the United States.
4. Identify primary, secondary, and tertiary health promotion activities designed to improve the health of adults across the lifespan.
5. Identify the *Healthy People 2030* objectives for adults.
6. Appraise the role of the community health nurse in promoting the health of adults across the lifespan.

INTRODUCTION

Mr. Alvin Mason worked in the fields since age 10 in a rural and racially/ethnically diverse sugarcane farming region in south central Florida. He eventually became a cane cutter and then a truck driver transporting the cane from the field to the factory over 50 times daily. His wife Eula, with 12 years of education compared to Alvin's 8, became a "burner"—someone who manages the controlled burns of the sugarcane fields, depending on the wind direction and weather prediction. Both Alvin and Eula developed asthma at some point in the last 5 years. Alvin was diagnosed several years ago with type 2 diabetes, high BMI, and hypertension during his first visit to a medical provider. Alvin, age 51, had never been screened for cancer, but reported pain, difficulty, and occasional bleeding on urination. His wife noted that he had developed some "memory issues" and was rather unsteady and short of breath occasionally when he walked long distances. They both are life-long members of their local church, which is their only means of socialization, other than visits from their son. They raise chickens and have a vegetable garden, do not drink alcohol, and are eager to learn what they can do to age in place in their 1800 square feet home, gifted to them by the farming industry in the 1950s. What is the C/PHN most concerned about regarding Alvin and Eula's health? How can the Masons best care for themselves as they age?

Mr. Fernandez is a relatively healthy middle-aged individual, with no chronic health conditions. He has a family history of type 2 diabetes, cardiovascular disease, and colon cancer. He tries to adhere to a healthy diet, but a moderately stressful career and busy family make it difficult to find time to eat healthy and exercise. Over the past few years, he has noticed weight gain and

is concerned that this, along with his family history, may lead to the development of chronic disease. What are the considerations for Mr. Fernandez based on his age, risk factors, and current health status? What preventative services and screenings might he need?

Community and public health nurses (C/PHNs) are in a key position to educate clients like the Masons and Mr. Fernandez on health promotion and disease prevention and inform them of United States Preventive Services Task Force recommendations (USPSTF, 2023). This teaching impacts community health by improving the health of individuals.

The term **adult** has many different meanings in society. To children, an adult is anyone in authority, including a 14-year-old babysitter. As people age, they tend to redefine the term upward in age. It is not unusual, for example, to hear an older person describe a couple in their mid-30s as "kids." The U.S. criminal justice system distinguishes between adults and juveniles for purposes of delimiting types of crimes and possibilities for punishment, and labor legislation provides different protections for children than for adult workers. Even hospitals and healthcare systems vary somewhat as to the ages at which they distinguish pediatric and older adult clients from middle-aged adults.

How would you characterize an adult? Does your definition rest solely on age, or is it influenced by other factors, such as marital status, employment status, financial independence, amount of responsibility for self and others, and so on?

- For the purposes of this chapter, an adult is defined as anyone 18 years of age or older. Obviously, there are tremendous differences in health profiles and healthcare needs as people age.
- As adults enter their middle years (35 to 65), they experience many normal physiologic changes. However, some changes are the result of disease, environment, or lifestyle and can be modified through behavior change.

Many health promotion and health protection programs are designed specifically for males or for females,* as the examples below illustrate.

- Mammography screening programs and prenatal clinics are designed with female health in mind.
- Teaching about testicular self-examination (TSE) and prostate cancer screening is typically included in health promotion programs for males.
- Programs in many areas, such as cardiac rehabilitation, stress management, and dating violence prevention, may have initially targeted one gender but are now established as programs for all genders.

This chapter examines mortality and morbidity statistics, historical development of research foci, workforce change, the healthcare needs of males and females, as well as the health of adults in general.

*In this chapter, "male" means a person assigned male a birth, and "female" means a person assigned female at birth.

MORTALITY AND MORBIDITY STATISTICS

Examining mortality statistics provides key information to understand changes in the health and well-being of a population. In 2022, a total of 3,273,705 people died in the United States. The age-adjusted death rate decreased by 5.3% from 879.7 in 2021, to 832.8 in 2022, per 100,000 for all ages (Ahmad et al., 2023). This decrease may have been in part due to the slowing of the COVID-19 pandemic related to the first year of global vaccinations (Watson et al., 2022a). Causes of death varied by age, sex assigned at birth, and ethnicity; the 10 leading causes of death for all people in rank order are shown in Table 21-1.

Since the beginning of the 21st century, the major causes of death have remained fairly consistent. This was a major shift from the turn of the 20th century, when communicable diseases, such as tuberculosis and pneumonia, were the leading causes of death. The shift from communicable to chronic illness can be attributed to the significant advances in public health, prevention, technology, pharmacotherapy, and biomedical research (see Chapters 1 and 7). However, with the new threat of novel viruses such as COVID-19 impacting morbidity and mortality on a global scale, a return to public health measures, including vaccination programs, is again playing a vital role in combating communicable diseases. The Centers for Disease Control and Prevention (CDC) recommends the following vaccine schedule for adults: https://www.cdc.gov/vaccines/adults/rec-vac/index.html

Changes in recent leading causes of death include the following:

- In 2021, nine of the top 10 causes of death remained unchanged from 2020. The leading cause in 2021 was heart disease, followed by cancer and COVID-19.

TABLE 21-1 The 10 Leading Causes of Death for All Ages in 2021

Cause of Death (in rank order)	Number of Deaths
1. Diseases of the heart (heart disease)	695,547
2. Malignant neoplasms (cancer)	605,213
3. COVID-19	416,893
4. Unintentional injuries (accidents)	224,935
5. Cerebrovascular diseases (stroke)	162,890
6. Chronic lower respiratory diseases	142,342
7. Alzheimer disease	119,399
8. Diabetes	103,294
9. Chronic liver disease and cirrhosis	56,585
10. Nephritis, nephritic syndrome, and nephrosis (kidney disease)	54,358

Source: National Center for Health Statistics (2023); https://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm

- Influenza and pneumonia dropped from the list of 10 leading causes in 2021, likely due to mask wearing and quarantine practices related to COVID-19 (CDC, 2021a).
- Chronic liver disease and cirrhosis moved up as the 9th leading cause of death in 2021.

The remaining leading causes in 2021 (unintentional injuries, stroke, chronic lower respiratory diseases, Alzheimer disease, diabetes, and kidney disease) remained unchanged from 2020 (Xu et al., 2022). Other statistics of importance to public health nurses include the following:

- Cerebrovascular diseases (stroke) are the third leading cause of death for females (Office of Women's Health, 2023).
- Unintentional injuries (accidents) are the leading cause of death for all adults aged 25 to 44 years and the third leading cause of death for males (CDC, 2022a).
- Cancer is the leading cause of death in adults aged 45 to 65 years (Siegel et al., 2022).

LIFE EXPECTANCY

Life expectancy is the average number of years that a person is projected to live. It is another standard measurement used to compare the health status of various populations and is typically calculated based on age-specific death rates. Health statistics often report life expectancy figures at birth and at 65 years of age (see Table 21-2), and also at 75 years of age.

- The U.S. ranks lowest in life expectancy for both males and females among countries with high GDP per capita (Ho, 2022; see Table 21-3).
- Females have a higher life expectancy than males, but the gap narrowed from 7.0 years in 1990 to 5.0 years in 2018. However, these differences are now doubled for those without a college education, regardless of race or ethnicity (Case & Deaton, 2021).
- Other differences in life expectancy based on race and ethnicity in the United States reflect disproportionate burden of morbidity and mortality. In 2021, people of Hispanic origin had a life expectancy of 77.7 years, whereas the life expectancy for White individuals was 76.4 years and for Black individuals was 70.8 years (Hill et al., 2023).

HEALTH DISPARITIES

The overarching goal of the *Healthy People* initiative is to eliminate health disparities and improve the health of all people living in the United States. A **health disparity** is defined as a difference in health status that occurs by gender, race/ethnicity, education or income, disability, geographic location, or sexual orientation (CDC, 2022b). Health disparities occur when one segment of the population has a higher rate of disease or mortality than another or when survival rates are less for one group when compared with another (National Institutes of Health [NIH], 2019). Often, people with the greatest health burden have the least access to healthcare services, adequate healthcare providers, information, communication technologies, and supporting social services. Interdisciplinary,

TABLE **21-2** Life Expectancy at Birth and 65 Years of Age: United States, Selected Years, 1900–2018

	At Birth (Expected Years Overall)			At 65 Years (Expected Years Remaining)		
Year	Total	Male*	Female*	Total	Male	Female
1900	47.3	46.3	48.3	—	—	—
1950	68.2	65.6	71.1	13.9	12.8	15.0
1960	69.7	66.6	73.1	14.3	12.8	15.8
1970	70.8	67.1	74.7	15.2	13.1	17.0
1980	73.7	70.0	77.4	16.4	14.1	18.3
1990	75.4	71.8	78.8	17.2	15.1	18.9
2000	76.8	74.1	79.3	17.6	16.0	19.0
2010	78.7	76.2	81.0	19.1	17.7	20.3
2016	78.7	76.2	81.1	19.4	18.0	20.6
2017	78.6	76.1	81.1	19.4	18.0	20.6
2018	78.7	76.2	81.2	19.5	18.1	20.7

*In this table, "male" refers to a person assigned male at birth, and "female" refers to a person assigned female at birth.
—, data not available.
Reprinted from National Center for Health Statistics (NCHS). (2022). *Health, United States 2023.* https://www.cdc.gov/nchs/data/hestat/life-expectancy/life-expectancy-2018.htm
Kochanek, K.D., Anderson, R.N., Arias, E. (2020). *Changes in life expectancy at birth, 2010–2018. NCHS Health E-Stat.*

TABLE 21-3 Life Expectancy at Birth, in Years, of the United States and Comparable Countries, 2022

Country	Male[a]	Female[a]
Australia	81.2	85.3
Austria	78.8	83.5
Belgium	79.6	83.9
Canada	79.1	83.6
France	79.4	85.2
Germany	78.3	83.2
Japan	81.1	87.1
Netherlands	80.3	83.2
Sweden	81.5	84.8
Switzerland	81.6	85.4
United Kingdom	79.0	82.9
United States	**74.8**	**80.2**
Comparable Country Average	**80.8**	**84.4**

[a]In this table, "male" refers to a person assigned male at birth and "female" refers to a person assigned female at birth.

Adapted with permission from Rakshit, S., McGough, M., & Krutika Amin, K. F. F. (2024). *How does U.S. life expectancy compare to other countries?* © 2024 PETERSON-KFF Health System Tracker. All Rights Reserved. Retrieved September 5, 2024, from https://www.healthsystemtracker.org/chart-collection/u-s-life-expectancy-compare-countries/#Life%20expectancy%20at%20birth%20by%20sex,%20in%20years,%202022

collaborative, public, and private approaches as well as public–private partnerships are needed to develop strategies to address the health disparity goal of *Healthy People 2030*. Chapter 23 discusses health disparities in more detail.

MAJOR HEALTH PROBLEMS OF ADULTS

Morbidity and mortality among adults vary substantially by age, sex assigned at birth, and race/ethnicity. Several leading causes of death are presented in this section. Heart disease is the first leading cause of death in adults and is presented along with stroke. Malignant neoplasms, COVID-19, unintentional injuries, chronic lower respiratory diseases (CLRDs), and diabetes are among the top 10 leading causes of death and are discussed separately. Other selected major causes of death are covered in detail in other chapters: suicide (Chapter 25), Alzheimer disease (Chapter 22), and homicide (Chapter 18).

Coronary Heart Disease and Stroke

Cardiovascular disease (CVD) describes a group of heart and blood vessel disorders including hypertension, coronary heart disease (CHD), stroke, arrhythmias, valvular heart disease, peripheral vascular disease, and cardiomyopathies (Tsao et al., 2023). Over the last three decades, cardiovascular mortality in the United States has declined by about 50% (Tsao et al., 2023). These gains are attributed to the increased use of evidence-based medical therapies for secondary prevention and reduction in risk factors associated with lifestyle and environment (see Fig. 21-1). Despite these improvements, approximately one third of all deaths in the United States are still due to CVD. Currently, an estimated 92.1 million adults are living with one or more types of CVD, and over half of these people are 60 years of age or older. It is estimated that every 33 seconds an American will die from CVD (CDC, 2023a).

In the United States, underrepresented racial/ethnic populations continue to encounter more barriers to CVD diagnosis and care, receive lower-quality treatment, and experience worse health outcomes. Such disparities are linked to complex factors such as income and education, genetic and physiologic factors, access to care, and communication barriers. Although it appears as though the disparity gap may be declining, this is in part due to gains made by underrepresented racial/ethnic populations and worsening cardiovascular health in White populations (Javed et al., 2022). Furthermore, evidence is linking climate change to worsening health outcomes in underrepresented racial/ethnic groups (Berberian et al., 2022). To tackle inequalities in CVD morbidity and mortality, actions that focus on the social determinants of health are needed. This includes the development and implementation of health and social policy interventions that improve access to and quality of healthcare services and a reduction in poverty and unemployment (Javed et al., 2022).

Risk factors for CVD can be separated into three categories: major nonmodifiable, modifiable, and contributing (Tsao et al., 2023).

- Major risk factors that cannot be modified or treated include heredity (family history, race), increasing age, and sex assigned at birth.
- Risk factors that can be modified, treated, or controlled include high blood cholesterol, high blood pressure, smoking tobacco, physical inactivity, diabetes, and obesity/overweight.
- Risk factors that are known to contribute to heart disease are stress, alcohol consumption, and diet and nutrition.

Heart Disease

- Heart disease is the number one killer of females, causing the death of 310,661 American females in 2021 (CDC, 2023b). The most common heart problem, CHD, is underdiagnosed, undertreated, and under-researched in females.
- In addition, females have a higher mortality rate after a heart attack and poorer outcomes than males, and this may be related to delayed diagnosis and treatment.
- Risk factors for heart disease in females are age, family history, race/ethnicity, physical inactivity, sleep apnea, obesity, diabetes, high blood pressure,

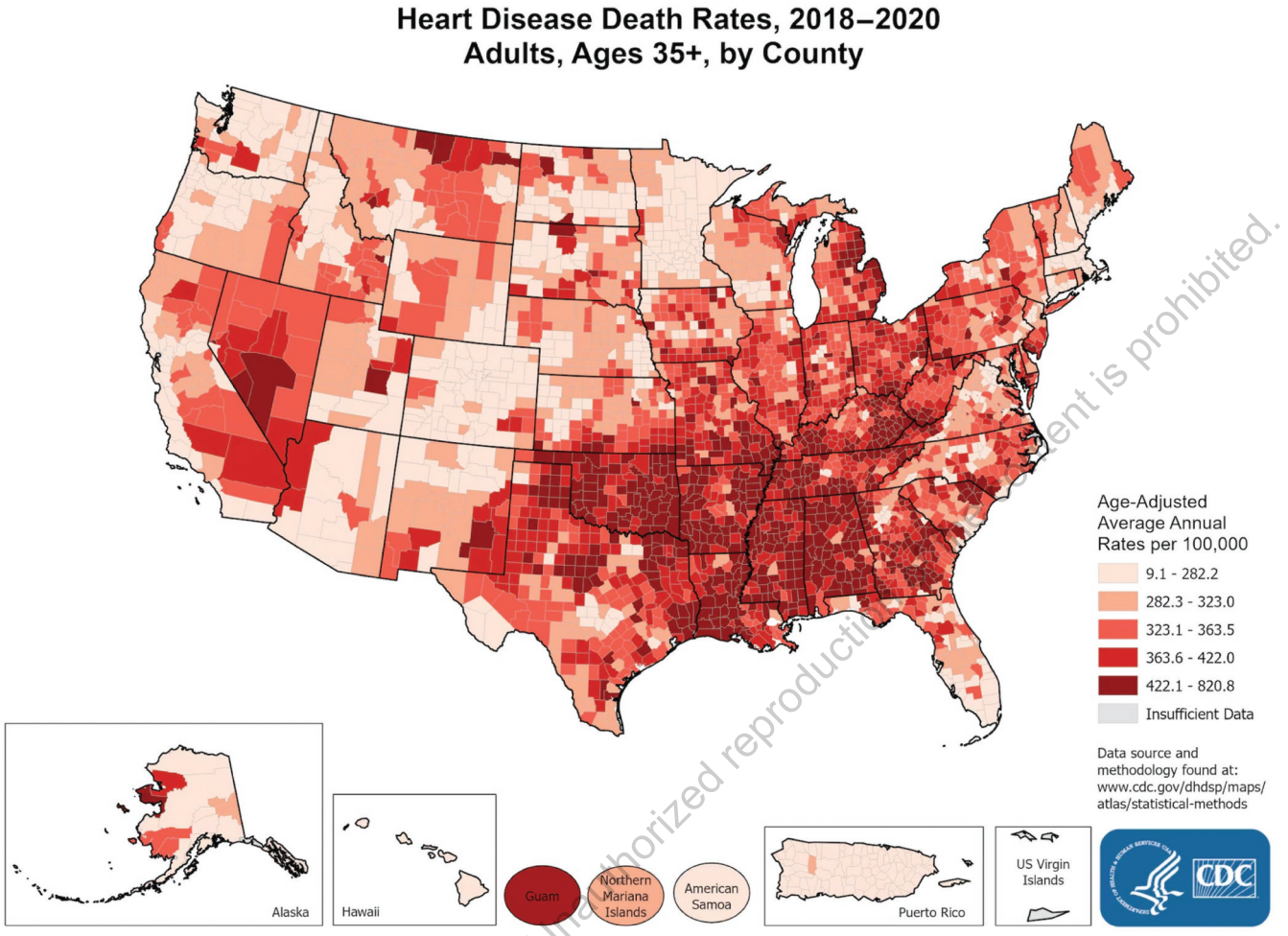

FIGURE 21-1 Heart disease death rates, 2018–2020 adults, ages 35+ by county. (Source: Centers for Disease Control and Prevention, Division for Heart Disease and Stroke Prevention. (2022). *Quick maps of heart disease and stroke*. Retrieved from https://www.cdc.gov/dhdsp/maps/quick-maps/index.htm)

high cholesterol, and cigarette smoking. Nine of 10 females have at least one risk factor for heart disease (Office on Women's Health, 2023).

Family history, race/ethnicity, and advancing age cannot be changed, but females can make lifestyle changes to alter other risk factors. The remaining risk factors are issues that the community health nurse can discuss with female clients in this age group. Community health nurses can help raise awareness regarding heart disease when working with patients at the individual, family, or aggregate levels. Some important facts that can be shared are as follows:

- Heart disease accounts for 1 in 5 female deaths in the United States, yet less than half (44%) of females recognize that heart disease is their number one cause of death (CDC, 2023a).
- Almost two thirds of females who suddenly die from heart disease have had no previous symptoms (CDC, 2023a).
- Hispanic females are more likely to develop heart disease 10 years earlier than non-Hispanic females (AHA, 2023).
- Nearly 60% of non-Hispanic Black females have heart disease (AHA, 2023).
- The average age for the first heart attack in females is 72.0 years (Tsao et al., 2023).
- In all age groups, mortality rate for females following a heart attack is higher than in males (Office on Women's Health, 2023).

An excellent resource is "*Go Red for Women*," a public awareness program of the American Heart Association (AHA) to help improve knowledge (AHA, 2023). Also, *Well-Integrated Screening and Evaluation for Women across the Nation* (WISEWOMAN), a CDC program that helps females with little or no health insurance reduce their risk for heart disease, stroke, and other chronic diseases (located in 21 sites across 19 states), can be helpful. The program assists females ages 40 to 64 in improving their diet, physical activity, and other behaviors (see Fig. 21-2). Locally, this program also often provides cholesterol and other screening tests (AHA, 2023).

Cardiovascular Disease. Heart disease is the leading cause of death in males across most racial/ethnic groups.

FIGURE 21-2 A healthy diet is an important part of health promotion.

Despite a decline in the overall death rate from CVD, the burden of disease among males remains high.

- In 2021, CVD caused 384,886 deaths in males, or about 1 in 4 male deaths (CDC, 2023b).
- Of those CVD-related fatalities, 50% of these patients have no previous symptoms of the disease.
- The average age for a first heart attack among males is 64.5 years, but one in five heart attacks now occur in men under age 40.
- Age-adjusted heart disease rates per 100,000 for men (CDC, 2022):
  - Non-Hispanic Black: 267.5
  - Non-Hispanic White: 210.7
- It is interesting to note, if all forms of major CVD were eliminated, life expectancy among all people would increase by almost 7 years (Virani et al., 2021).

Major risk factors for heart disease in males include hypertension, hyperlipidemia (high LDL), tobacco use, diabetes, obesity/overweight, lack of physical activity, excessive alcohol consumption, stress, and low daily fruit and vegetable consumption (Boxes 21-1 and 21-2). When working with adult males, the community health nurse should educate them about the importance of modifying factors that increase their risk of developing CVD (CDC, 2020a). C/PHNs should discuss the signs and symptoms of a heart attack and how to access emergency medical treatment with adult males.

About half of all Americans (49%) have at least one of the three key risk factors for heart disease: high blood pressure, high cholesterol, and cigarette smoking. The likelihood of heart disease or stroke multiplies with the increasing number of risk factors present (CDC, 2023b).

Stroke ranks fifth among all causes of death in the United States and is a leading cause of serious, long-term physical and cognitive disability in adults (Box 21-1).

- Approximately 795,000 Americans experience a new or recurrent stroke each year—610,000 of these are first attacks and 185,000 are recurrent attacks. On average, someone in the United States has a stroke every 40 seconds.
- Stroke-related death rates increased from 38.8 per 100,000 in 2020 to 41.1 per 100,000 in 2021 (CDC, 2023c).

BOX 21-1 EVIDENCE-BASED PRACTICE

Landmark Research on Cardiovascular Disease

The hallmark Framingham Heart Study identified major risk characteristics associated with the development of CVD and the effects of related factors such as blood triglycerides, gender, and psychosocial issues. The study began in 1948 under the direction of National Heart Institute, now known as the National Heart, Lung, and Blood Institute (NHLBI). At that time, the death rates from CVD were rising, but little was known about the general causes of heart disease and stroke. The Framingham Heart Study researchers recruited 2336 males and 2873 females between the ages of 30 and 62 in an effort to identify common factors or characteristics that contribute to CVD. All participants lived in the town of Framingham, Massachusetts. Every 2 years, these people were scheduled for an extensive medical history, physical examination, and laboratory tests. In 1971, the study enrolled 5124 of the original participants' adult children and their spouses (offspring cohort) (Framingham Heart Study, 2018).

In an effort to reflect the changing demographics that occurred in the town of Framingham since the original cohort was enrolled, researchers implemented a new study in 1994. This study included people of Black, Hispanic/Latino, Asian, Indian, Pacific Islander, and Native American origin (Omni cohort). In 2002, a third generation (the children of the offspring cohort) was recruited and a second group of Omni participants was enrolled in 2003. Over the last several years, investigators expanded their research into the role of genetics and CVD. The Framingham Heart Study celebrated its 70th anniversary in 2018, with 15,447 participants covering three generations and 3698 peer-reviewed research articles since it began in 1948. Fortunately, findings from the Framingham Heart Study will continue to make important scientific contributions about the causes and treatment of CVD and related health issues (Framingham Heart Study, 2018).

Source: Framingham Heart Study (2018).

- Disparities exist among people who are at risk for having a stroke. For example, females have a higher lifetime risk of having a stroke compared with males, with approximately 55,000 more females than males experiencing a stroke each year.
- The risk of having a first stroke is nearly twice as high for Black people than White people, and Black people are more likely to die following a stroke than are their White counterparts. The risk for stroke among Hispanic/Latino individuals falls between that of White and Black populations, with stroke mortality increasing in this population since 2013.
- In the Southeastern United States (the "Stroke Belt"), stroke death rates are higher than in any other part of the country. Strokes cost the United States $56.8 billion in 1 year alone. This total includes the cost of healthcare services, medications, and missed days of work (Tsao et al., 2023).

BOX 21-2 EVIDENCE-BASED PRACTICE

SDOH in Black Males

Hypertension is a significant disorder among Black males in the United States who develop hypertension-related complications at an earlier age as compared with other racial/ethnic groups. A clinical review (Abrahamowics et al., 2023) looked at the disparities in the epidemiology of hypertension and the impact of social determinants of health (SDOH) on quality care and outcomes. Many SDOH factors impact blood pressure control such as health literacy, socioeconomic status, access to healthcare, health awareness, and dietary habits, which can influence hypertension control. Barriers that impede hypertension control might include inadequate access to healthy food and the presence of food deserts. These dietary patterns are important for hypertension management and are directly related to income, access, and literacy. Additionally, medication and treatment adherence can be difficult due to provider access and understanding of the disease process.

Recognizing the diverse differences within populations and groups is crucial for developing a stratified approach. Community-based management programs such as Cedar-Sinai's L.A. Barbershop is cost-effective; it has improved blood pressure in non-Hispanic Black males by using pharmacists to deliver hypertension care in local barbershops (Bryant et al., 2021). Inclusion of ethnic pharmacologic/nonpharmacologic treatment plans by providers, use of telehealth or mobile monitoring, and community access to healthy foods can address known disparities and the impact of SDOH on health and hypertension in Black males (Abrahamowics et al., 2023).

Cancer

Cancer is a major chronic illness comprising over 200 different diseases and remains the second leading cause of death in the United States after heart disease (Siegel et al., 2022).

- In 2022, there were approximately 18.1 million Americans living with cancer and that number is projected to increase by 24% to 22.5 million by 2032 (National Cancer Institute [NCI], 2023).
- In the next 10 years, the number of people living 5 or more years after a cancer diagnosis is projected to increase approximately 30%, to 16.3 million (American Cancer Society [ACS], 2023a).
- Approximately 87% of all cancers are diagnosed in people 50 years of age and older, and as people age, they are more likely to develop cancer.
- Among ethnic groups, Black people are more likely to develop and die from cancer.
- Over their lifetime, males living in the United States are more likely to develop cancer than females.
- The Agency for Healthcare Research and Quality estimated the total expenditures for cancer in 2020 to be $208.9 billion, an increase of 10%, most likely due to the increase in aging and growth in the United States (National Cancer Institute (NCI), 2022).

Cancer is caused by internal and external factors.

- Internal factors are inherited gene mutations, hormones, immune conditions, and gene mutations that occur from metabolism.
- External factors include tobacco and alcohol use, chemicals, radiation, infectious organisms, and poor lifestyle choices.
- Exposure to agricultural environmental factors such as inhaling polluted air, drinking contaminated water, and working with pesticides also increase cancer morbidity/mortality (Melanda et al., 2022). See Chapter 9 and 27 for more information.
- These factors can occur in isolation or together to initiate illness.
- Screenings can reduce the cancer mortality rate, especially malignancies associated with the breast, colon, rectum, cervix, and lung (ACS, 2023b).

Lung Cancer

While the lung cancer death rate continues to decline, it remains the number one cause of cancer deaths among adults in the United States. In 2023, there will be an estimated 238,340 new lung cancer cases and 127,070 deaths, attributing to 20% of all cancer deaths in the United States. This is a decrease of 5% from 2018 (ACS, 2023a). However, reductions in cancer screening and diagnosis related to the initial COVID-19 quarantine restrictions are associated with lower 2020 cancer incidence rates (NCI, 2023).

Cigarette smoking is the predominant risk factor for lung cancer. The number of cigarettes smoked and the number of years a person smoked both increase a person's risk of developing lung cancer. Other risk factors include occupational or environmental exposure to secondhand smoke, radon, or asbestos; genetic susceptibility (disease at an early age); and a history of tuberculosis. Annual screening for lung cancer using low-dose computed tomography scan is recommended for people 55 to 74 years of age who currently smoke or have smoked in the past 15 years and have at least a 30-pack history. Shared decision making in screening and smoking cessation counseling for current smokers are key factors in the success of screening and prevention (Lopez-Olivio et al., 2021).

Colon and Rectal Cancers

Colon and rectal cancers are the third most common cancers in adults. In 2018, an estimated 97,220 cases of colon and 43,030 cases of rectal cancers were expected to occur, resulting in 50,630 deaths (Siegel et al., 2023).

- The risk of developing colorectal cancer increases with age, and 90% of all cases are diagnosed in people 50 years of age or older.
- There are several modifiable factors associated with the increased risk of colorectal cancer. These factors

include obesity, physical inactivity, a diet high in red or processed meat, alcohol consumption, long-term smoking, and low intake of whole grains, fruits, and vegetables.
- Other risk factors include certain inherited genetic mutations, personal or family history of polyps or colorectal cancer, and personal history of chronic inflammatory bowel disease.
- The U.S. Preventive Services Task Force (USPSTF, 2023) recommends that for people of all genders who are at average risk, screening for colon and rectal cancer should begin at age 45 years and end at age 75.

Chronic Lower Respiratory Diseases

Chronic lower respiratory disease (CLRD), the sixth leading cause of death, refers to conditions characterized by shortness of breath due to airway obstruction, and it is not curable (WHO, 2023). CLRD includes chronic bronchitis, emphysema, asthma, occupational lung diseases, and pulmonary hypertension. Risk factors include exposure to tobacco smoke, including second-hand smoke, air pollution, occupational vapors, dust, and chemical fumes (Syamlal, 2022).

The term chronic obstructive pulmonary disease (COPD) accounts for the most deaths from CLRD, and it includes emphysema and chronic bronchitis. In 2020, COPD was the 6th leading cause of death, affecting older adults in the United States. A staggering $800 billion is the projected cost of caring for people with COPD over the next 20 years (Zafari et al., 2021). An important note is that females are more vulnerable to lung damage from cigarette smoke and other pollutants because their lungs are smaller, and research has found that estrogen plays a role in worsening the disease (American Lung Association [ALA], 2023).

- The exact cause of asthma is unknown, but research indicates that both genetic and environmental factors contribute to its cause. In the United States, nearly 21 million adults suffer from asthma. The prevalence of asthma is higher in females (9.7%) than in males (6.2%) and highest among Black adults (Asthma and Allergy Foundation of America, 2023).

The COPD National Action Plan includes strategies to prevent, diagnose, and treat this disease (National Institute of Health [NIH], 2021), including education, environmental controls, and pulmonary rehabilitation.

COVID-19 (SARS-CoV-2)

A mysterious new virus appeared on the world stage in 2019, and impacted countries on a scale not seen since the 1918 H1N1 Influenza pandemic. The devastation from this disease stemmed largely from its high communicability and illness severity among those with a vulnerable or compromised health status, such as older adults and those with comorbidities. Over 30 million people worldwide were infected, and close to 1 million died in the first 6 months, with 200,000 of those deaths in the United States (Wang et al., 2022). On March 11, 2020, the World Health Organization (WHO) declared COVID-19 a pandemic. Between March 2020 and October 2021, COVID-19 became the third leading overall cause of U.S. deaths (Shiels et al., 2022), with most occurring in the underserved groups of non-Hispanic American Indian/Alaskan Native, non-Hispanic Black or African American people, and lower socioeconomic communities (USDHHS Office of Inspector General [USDHHS OIG, 2022]). However, public health programs to supply masks, vaccinations, and education aided in diminishing this disparity in 2022. In May 2023, the Department of Health and Human Services declared the end of the COVID-19 public health emergency, noting the vital role that public health initiatives played in combating this illness (USDHHS, 2023).

Unintentional Injuries

Unintentional injuries refer to any injury that results from unintended exposure to physical agents, including heat, mechanical energy, chemicals, or electricity. They are the fourth leading cause of death overall and the leading cause of death for people 44 years of age and younger (see Fig. 21-3).

In 2020, deaths from unintentional injuries increased by 11.1% (Ahmad & Anderson, 2021), with deaths per 100,000 population = 67.8, and over 24 million visits to the emergency departments for unintentional injuries (CDC, 2022a).

In 2021, total costs of all preventable injury-related incidents equaled $1255.4 billion. This included fire and vehicle damage, employers' uninsured expenses, medical bills, wage and productivity loss, and administrative expenses (National Safety Council, 2022a).

FIGURE 21-3 Unintentional injuries such as falls are the leading cause of death for those aged 44 years and younger.

The top three causes of unintentional injuries include motor vehicle crashes, unintentional drownings, falls, and unintentional poisoning (overdoses) (National Safety Council, 2022a). The CDC advocates for preventing opioid overdose by improving opioid prescribing, reducing exposure to opioids, preventing misuse of opioids, and improving treatment modalities for opioid use disorder (CDC, 2022c). See Chapter 25 for more on substance use.

In the United States, motor vehicle accidents are a leading cause of death. In 2017–2018, an average of 3.4 million people visited an emergency room due to injuries from motor vehicle accidents (Davis & Cairns, 2021).

- The costs of medical care and productivity losses due to motor vehicle accidents in a 1-year period exceeded $75 billion in 2017 (Davis & Cairns, 2021).
- Efforts to decrease motor vehicle injuries are directed toward the prevention of motor vehicle crashes through education and policies related to seat belts, impaired driving, distracted driving, older adult drivers, teen drivers, and motorcycle and bicycle safety.

Diabetes

Diabetes is the eighth leading cause of death in the United States. This chronic health condition puts people at risk for other serious health conditions, including heart disease, stroke, hypertension, blindness, kidney disease, and nervous system disease (i.e., neuropathy, which is a loss of sensation or pain in the feet or hands).

- Over 37 million Americans have type 1 or type 2 diabetes, and 8.5 million adults have not yet been diagnosed (CDC, 2023d; Table 21-4).
- An additional 96 million adults have prediabetes. Risk factors for type 2 diabetes include family history, being overweight, age greater than 45 years, not getting enough physical activity, and history of gestational diabetes.

TABLE 21-4 Estimated Diagnosed and Undiagnosed Diabetes Among People Ages 18 Years or Older, United States, 2017–2020

Group*	Number Who Have Diabetes and Rate per 1000
Ages 18–44 years old	4.2%
Ages 45–64 years old	17.5%
Ages 65 years or older	26.8%
Males	14%
Females	12%

*In this table, "male" refers to a person assigned male at birth, and "female" refers to a person assigned female at birth.
Source: National Diabetes Statistics Report. Center for Disease Control https://www.cdc.gov/diabetes/data/statistics-report/diagnosed-undiagnosed-diabetes.html

- People of African American, Hispanic/Latino, non-Hispanic Black, American Indian, Alaska Native, and non-Hispanic Asian race/ethnicity are at greater risk for developing type 2 diabetes than White people (CDC, 2023d).
- Screening for diabetes for all people is recommended beginning at age 45 years and repeated every 3 years if test results are normal and for asymptomatic adults who are overweight and obese. People with more than one risk factor may need to be screened more frequently (CDC, 2023d).

Confounding Health Concerns

In this next section, several of the most common maladies that contribute to leading causes of death are examined. Others are examined in-depth in other chapters in this text.

Obesity

Obesity is a contributor to or exacerbates many of the leading causes of mortality and morbidity discussed in this chapter. Obesity is defined as having a body mass index (BMI) of 30 or greater and is recognized as a national health threat and a major public health challenge in the United States. This condition is a major risk factor for CVD, along with certain types of cancer, type 2 diabetes, obstructive sleep apnea, and premature death (CDC, 2022d; Watson et al., 2022b).

- The *National Health and Nutrition Examination Survey* highlighted that between 2017 and 2020, the prevalence of obesity among adults was 41.9%. Middle-aged adults (40 to 59 years old) had a higher prevalence of obesity at 44.3% than young adults (20 to 39 years old) at 39.8%. The prevalence of obesity in adults over the age of 60 years was 41.5%.
- People from lower socioeconomic and education levels have a higher prevalence of obesity, as do non-Hispanic Black and Hispanic adults.
- Additionally, certain geographic regions have higher obesity rates than others in the United States. The South (32.4%) and Midwest (32.3%) have the highest prevalence of obesity, and at least 36% of adults in Alabama, Arkansas, Iowa, Louisiana, Mississippi, Oklahoma, and West Virginia have obesity (CDC, 2022e).

Obesity can have serious health consequences; it contributes to the leading cause of death in the United States and worldwide (CDC, 2022d; Watson et al., 2022b), and it is associated with reduced quality of life and poorer mental health outcomes. In addition, those that have obesity are at increased risk for mortality, hypertension, elevated LDL, dyslipidemia, stroke, type 2 diabetes, gallbladder disease, osteoarthritis, CHD, sleep apnea, some cancers, and difficulty with physical functioning (CDC, 2022d; Watson et al.., 2022b). There are also economic and societal consequences from obesity, including medical costs associated with related health issues and productivity concerns related to absenteeism, as well as premature mortality and morbidity (CDC, 2022d). Healthy behaviors that include healthy diet patterns and regular physical exercise should be incorporated into lifestyle habits.

BOX 21-3 *HEALTHY PEOPLE 2030*

Select Objectives Related to Obesity

OA-01	Increase the proportion of older adults with physical or cognitive health problems who get physical activity
NWS-03	Reduce the proportion of adults with obesity
NWS-05	Increase the proportion of healthcare visits by adults with obesity that include counseling on weight loss, nutrition, or physical activity
PA-02	Increase the proportion of adults who do enough aerobic physical activity for substantial health benefits
PA-04	Increase the proportion of adults who do enough muscle-strengthening activity

Reprinted from Office of Disease Prevention and Health Promotion (ODPHP). (n.d.-a). Obesity. *Healthy People 2030*. U.S. Department of Health and Human Services. https://health.gov/healthypeople/search?query=obesity

Community environments that are safe and offer healthy food and places for physical activity are also necessary (Watson et al., 2022b; Box 21-3). *Healthy People 2030* has several objectives targeting obesity, some of which are shown in Box 21-3.

It is recommended that adults engage in a minimum of 150 minutes (2.5 hours) of moderate intensity or 75 minutes of vigorous aerobic exercise every week, in addition to 2 days of muscle-strengthening exercises (WHO, 2020). However, studies have revealed that even 11 minutes a day of activity can assist with lowering the risk of cardiovascular disease and diabetes (Garcia et al., 2023). Community health nurses play an important role in combating obesity through educating adults on the importance of maintaining a healthy weight, or weight reduction if indicated, through physical activity and proper nutrition.

Substance Use

A **substance use disorder (SUD)** occurs when the recurrent use of alcohol and drugs causes clinically and functionally significant impairment such as health problems, disability, and failure to meet major responsibilities at work, school, or home (National Survey on Drug Use and Health, 2021).

- In 2021, an estimated 35.5 million Americans (61%) aged 26 or older had a SUD related to their use of alcohol or illicit drugs (SAMHSA, 2023).
- Although the prevalence of SUD is higher in males, females are less likely to enter treatment (Fonseca et al., 2021).
- The misuse of opioids, leading to opioid use disorder, has become a national epidemic and public health concern. The number of drug overdose deaths increased by nearly 30% from 2019 to 2020, and most (75%) of those 91,799 drug overdose deaths in 2020 involved an opioid.

Alcohol Use Disorder

The medical diagnosis of **alcohol use disorder (AUD)** refers to a chronic relapsing brain disease characterized by compulsive alcohol use, loss of control over alcohol intake, and a negative emotional state when not using. To be diagnosed with AUD, a person must meet certain criteria as delineated in the Diagnostic and Statistical Manual of Mental Disorders (DSM) (National Institute on Abuse and Alcoholism [NIAAA], 2023). Under the current version of the DSM (DSM-V), anyone meeting 2 of the 11 criteria during the same 12-month period can be diagnosed with AUD. The severity of AUD is outlined as mild, moderate, or severe based on the number of criteria met (NIAAA, 2023).

Tobacco Use

Tobacco use is another major public health problem and the leading cause of preventable diseases and deaths in the United States.

- Despite the evidence that smoking causes cancer, heart disease, stroke, lung diseases, diabetes, and COPD, over 28 million Americans smoked cigarettes in 2021 (CDC, 2023e).
- It is encouraging that cigarette smoking among adults has declined to the lowest recorded prevalence since 1965 (42%) (CDC, 2023f).
- However, e-cigarette use increased from 1920 to 1921 (from 3.7% to 4.5%) mostly among people aged 18 to 24 years (Cornelius et al., 2022).
- Furthermore, troubling disparities in those who still smoke remain, which are those with less education and lower income; American Indians and Alaska Natives; residents of rural areas; the South and Midwest; gay, lesbian, or bisexual adults; and those battling anxiety or depression. Adults enrolled in Medicaid or are uninsured smoke twice as much as those with private health insurance or Medicare (CDC, 2023g).
- Cigarette smoking is responsible for more than 480,000 deaths per year in the United States, including more than 41,000 deaths resulting from secondhand smoke exposure. This is about 1300 deaths every day (CDC, 2023e).
- The cost of cigarette smoking reached a staggering $600 billion in 2018. Over half of that amount came from lost productivity, and $240 billion was a result of healthcare spending (CDC, 2023h).
- When examining cigarette smoking based on sex assigned at birth, males (13.1% of them) are more likely to smoke cigarettes than females (10.1% of them) (CDC, 2023g).
- E-cigarettes (also known as e-cigs, e-hookahs, mods, vape pens, vapes, tank systems, and electronic nicotine delivery systems) are used by 4.5% of adults in the United States (Cornelius et al., 2022).
- E-cigarette use consists of inhaling aerosolized nicotine that is produced after heating. However, the aerosolized product also contains additional potentially harmful substances such as heavy metals and cancer-causing agents. Although adults may use e-cigarettes to reduce craving for regular cigarettes that contain tobacco, the FDA has not approved e-cigarettes as an aid to quit smoking (CDC, 2023i).

Because of the significance of the problem, 24 of the *Healthy People 2030* objectives are related to tobacco use (Office of Disease Prevention and Health Promotion [ODPHP], n.d.-b).

Opioid Use

The illegal use of prescription opioids, synthetic opioids (fentanyl), and heroin is a major public health concern in the United States. A serious national crisis exists due to the misuse of and dependency on. This rise in opioid overdose deaths began with increased prescribing of opioids in the 1990s, the rise in heroin use beginning in 2010, and synthetic opioid (such as fentanyl) abuse stemming from 2013 (CDC, 2022c).

- Every day, at least 136 people die due to opioid overdose in the United States (National Center for Drug Abuse Statistics, 2022).
- In 2021, twice the number of people died from drug overdoses (98,268) as compared to 2017 (47,600) (National Safety Council, 2022b).
- This all-time high is partially related to stress and isolation caused by the COVID-19 quarantine restrictions: Preventable opioid overdose deaths increased by 41% in 2020 and an additional 18% in 2021 (National Safety Council, 2022b).
- Economic costs during the COVID-19 pandemic reached nearly $1.5 trillion (Joint Economic Council [JEC], 2022).
- This economic crisis from prescription opioid misuse in the United States includes costs of healthcare, treatment to overcome dependency, criminal justice management, and lost productivity (Congressional Budget Office [CBO], 2022).

The full extent of the damage of the opioid crisis goes beyond economics, influencing family and community life and placing an extreme strain on community resources, including first responders, emergency rooms, hospitals, and treatment centers.

In 2018, the NIH launched HEAL (Helping to End Addiction Long-term) Initiative, an aggressive, trans-agency effort to increase scientific solutions to positively impact the national opioid public health crisis (NIH, 2023). HEAL is focusing efforts on 1) understanding, managing, and treating pain and 2) improving prevention and treatment for opioid misuse and dependency.

SEXUAL ORIENTATION, GENDER IDENTITY, AND SEXUAL HEALTH

When determining appropriate preventative and healthcare needs, it is important that in addition to recognizing people's biologic characteristics we also take into account the designations with which they identify. Awareness of sexual orientation and gender identity (SO/GI) can assist the C/PHN in caring for all adults while providing necessary healthcare services, which might include appropriate healthcare screenings, assessment and risk for sexually transmitted infections, behavioral health concerns and effective interventions, and parenting discussions (CDC, 2022f; see Fig. 21-4).

People may question their sexuality and gender identification at any time during their life. Sexual orientation and gender identity are not the same; sexual orientation describes a person's pattern of emotional, romantic, and sexual attractions (APA, 2022a; CDC, 2022f), whereas gender identity describes what gender a person identifies as representing their person. **Transgender** is a term for people whose gender identity or expression does not conform with the sex to which they were assigned at birth. People who do not identify as either male or female may identify as gender nonbinary or genderqueer (American Psychological Association [APA], 2022a).

FIGURE 21-4 One example of a person's gender identity and identified pronouns.

Regardless of sexual orientation or gender identification, when taking a sexual and reproductive history, C/PHNs must ask all patients questions regarding risky behaviors, unprotected sex, multiple partners, STIs, family planning, health screenings, and intimate partner violence (CDC, 2022f; Guttmacher Institute, 2020). Discrimination and lack of cultural competence and training for LGBTQ+ populations preclude effective care. Additionally, LGBTQ+ populations are more at risk for violence, harassment, trauma, and targeted injustices (National Sexual Violence Resource Center, 2021).

Sexual Health and STIs

Sexual health and STIs are important health concerns for adults. Sexual activity typically commences in adolescence and continues throughout the lifespan. STIs are epidemic in the United States, with 20 million new cases every year; this number is astounding given that many STIs are treatable (Office of Disease Prevention and Health Promotion [ODPHP], n.d.-c; see Chapter 8).

- Human papillomavirus (HPV) is the most common STI in the United States. Approximately 56 million Americans are infected with HPV, resulting in 13,545 cases of cervical cancer and over 47,000 HPV-associated cancers (26,000 among females and 21,000 among males) (CDC, 2022g). Gardasil 9 is a two or three dose vaccine that can prevent 90% of cervical cancers, as well as anogenital warts, and is approved for all people 9 to 45 years old (CDC, 2020b).
- Chlamydia and gonorrhea are also common STIs; statistics indicate prevalence is underreported and delay in treatment occurs due to limited symptomatology. Rates for both these STIs have increased in adults in

recent years. Chlamydia is the most reported nationally notifiable disease in the United States, with more than 1.6 million cases in 2021 (CDC, 2023j).

- The rate of gonorrhea is lower than chlamydia, but in 2021, there were 710,151 cases reported, making it the second most nationally reported notifiable disease in the United States. Rates of gonorrhea have increased in males and females since 2013. Although gonorrhea is treatable, antibiotic resistance remains an issue (CDC, 2023j). See Chapter 8 for more information on communicable diseases.
- In 2022, more than 38,000 people were diagnosed with human immunodeficiency virus (HIV) in the United States (CDC, 2024). Despite advances in the prevention and treatment of HIV, the disease continues to disproportionately impact males, with 80% of new infections in the United States affecting gay and bisexual men (CDC, 2024). An additional impact of HIV is evident in Black/African American and Hispanic/Latino communities (HIV.gov, 2023). The percentage of people diagnosed with HIV varies by geographic region in the United States. It is therefore important that prevention, testing, and treatment interventions be tailored for each area's distinctive needs (CDC, 2024): https://www.cdc.gov/hiv/statistics/overview/incidence.html
- The CDC (2021b) recommends routine STI screening for all people who are sexually active; visit their website for the most current recommendation)

C/PHNs working with adults should provide factual information to increase the adult's knowledge of STI risk. This information should be a part of frank discussions regarding condom use, gender of sexual partners, type of sexual activity (oral, anal, vaginal), life-threatening consequences of an undiagnosed STI, and undesirable pregnancy outcomes. Outside of abstinence, condom use is the first line of prevention against STIs. See Chapter 8 for more on communicable diseases.

Female Health

Females (see Fig. 21-5) have not been the focus of medical attention throughout history. Exclusion and underrepresentation in studies and treatments have impeded care affecting morbidity and mortality for this group (Office of Women's Health, 2020). Advances in female health are very recent and primarily an advantage for females living in Western countries, where the feminist movement has made major inroads.

FIGURE 21-5 Female health has not historically been the focus of healthcare research.

Overview of Factors Influencing Female Health

Female rights in the United States started in the second half of the 19th century and over time addressed issues directly or indirectly impacting the health of this population, including voting rights, labor laws, reproductive rights, and intimate partner violence (International Women's Day, n.d.). Female health is still overlooked in much of the world. Only in the past few decades has the health of females been a formidable issue in the United States, coming not so coincidentally with the modern feminist movement that began in the 1960s.

- The landmark 1963 publication *The Feminine Mystique* helped launch the modern feminist movement by critically examining the role of females in American society (Foster, 2015; Friedan, 2013). The Boston Women's Health Book Collective *Our Bodies, Ourselves* (initially released in 1970 with the title *Women and their Bodies*) represented the first book to explore female health issues, exclusively written by and for females. In addition, this publication served as a model for those who wanted to learn about themselves, communicate their findings with doctors, and challenge the medical establishment to change and improve the care that females received (Our Bodies Ourselves, n.d.).
- To further expand the dialogue regarding female health, consumer activists created the National Women's Health Network in 1975, primarily to shape health policy and support consumer health decisions (National Women's Health Network, 2022). These historical occurrences likely contributed to more female researchers and participants in research.
- Feminists paved the way for females to have their voices heard on many health, social, and political issues. Females sought out higher education opportunities in greater numbers and entered workplaces once solely occupied by males, especially during and after World War II.
- These positive changes escalated females toward greater equality, and with equality came the freedom—and pressure—for females to compete with males in their social and work settings. Issues related to female health were discovered as a result of research that now more regularly includes females.
- The importance of female health research was reaffirmed in the NIH's Revitalization Act of 1993, Subtitle B—clinical research equity regarding females and underrepresented groups to "identify projects for research on female health that should be conducted or supported by the national research institutes; identify multidisciplinary research relating to research on females that should be so conducted or supported …" (NIH, 1993, section 486). Yet more work in this area is needed.
- Despite advances in female rights, gender discrimination and bias continue. In many places within the United States, females continue to make 0.78 cents for every $1 dollar earned by a male, while Black females

and Latina females make even less. Equal economic opportunities, educational equity, and gender-based violence are public health concerns (American Civil Liberties Union [ACLU], 2023).

Female Health Research

In response to changing priorities, researchers have designed and implemented major studies that focus exclusively on females. Five significant studies have provided and continue to provide important health information about this population:

- The *Women's Health Initiative* (WHI) was a major research program addressing the most common causes of death, disability, and poor quality of life in postmenopausal females—CVD, cancer, and osteoporosis (WHI, 2023).
- The *Women's Health Study* (WHS) evaluated the effects of vitamin E and low-dose aspirin therapy in primary prevention of CVD and cancer in apparently healthy females (WHS, n.d.).
- The *Nurses' Health Study (NHS) I* involved investigating risk factors for cancer and CVD, and the *NHS II* researched diet and lifestyle risk factors in a population younger than the original NHS cohort (NHS, 2016).
- The *NHS III* is currently investigating female health issues related to lifestyle fertility/pregnancy, environment, and nursing exposures (NHS, 2016; NIH, 2020).
- For a discussion of how research in genomics and pharmacogenomics is being applied to female health, see Box 21-4.

The WHI addressed CVD, cancer, and osteoporosis and was one of the largest prevention studies of its kind in the United States, starting in 1991 and spanning 15 years. This study was sponsored by the NIH and the NHLBI, involved 161,808 females ages 50 to 79 years, and was considered to be one of the most far-reaching clinical trials for female health ever undertaken. To date, more than 616 publications have been associated with findings from this study, which address coronary artery calcium, breast cancer risk, colorectal cancer, venous thrombosis, peripheral arterial disease risk, risk of CHD, dementia and cognitive function, and the effects of estrogen alone in reducing the risk of CHD (WHS, n.d.; National Center for Biotechnology Information, 2023).

The WHS was a randomized, double-blind, placebo-controlled clinical trial sponsored by the NHBLI and the NCI. It was the first large clinical trial to study the use of low-dose aspirin to prevent heart attack and stroke in

BOX 21-4 EVIDENCE-BASED PRACTICE

Genomics and Pharmacogenomics

A person's genome consists of their entire set of DNA, including all genes. Genomics considers how a person's genes interact with each other, the person's environment, and their behaviors, such as diet and exercise, to influence growth, development, and health (CDC, 2023q). This is different from genetics, which considers the function and composition of a single gene. Discoveries made in the field of genomics allow healthcare providers to translate research to clinical practice. For example, genomics has increased understanding of why people with the same disease may not respond similarly or have the same treatment outcomes, guiding individualized treatment. It also assists in the identification of people with increased risk for the development of certain diseases based on gene mutation, gene interaction, and environment, to develop individualized prevention and treatment strategies. These advances in science and technology have allowed healthcare to increase its focus on the delivery of individualized care and prevention, known as precision medicine (CDC, 2023q; NIH, 2022; NIH, NCI, 2021).

Nurses and other healthcare providers use genomics routinely in practice. In the community setting, the nurse may educate females about breast cancer and risk factors, providing information about genetic testing for those with a family history. Healthcare providers partner with patients who have BRCA1 or BRCA2 gene mutations to individualize breast and ovarian cancer prevention and screening. The same is true for those with a strong family history of heart disease. Careful family and personal health histories may guide healthcare providers to recommend testing for familial hypercholesterolemia (FH). People with gene mutations causing FH need targeted treatment to prevent adverse cardiac events (Diboun et al., 2022). Nurses play a key role in patient education to assist the person with FH in reducing or eliminating modifiable risk factors that could also contribute to cardiovascular disease.

Another important aspect of genomics is pharmacogenomics, which considers information about a person's genome to guide decision making in medication and dose selection. The utilization of pharmacogenomics to guide treatment has become routine for some disease states and medications. Examples of utilizing pharmacogenomics to guide treatment include the following:

- Avoiding primaquine and other medications known to cause acute hemolytic anemia in people with G6PD deficiency, caused by an alteration of the G6PD gene
- Choosing an HIV medication other than abacavir for people with an HLA-B*57:01 allele due to increased risk for developing a severe hypersensitivity reaction
- Adjusting warfarin dose in people with CYP2C9 or VKORC1 gene variations to avoid increased bleeding risk (Dean, 2018; FDA, n.d.; NORD, 2023; Zhang et al., 2024)

Individualizing patient care based on genomics and pharmacogenetics will continue to increase as the availability of genomic data expands. It is essential for nurses to have an understanding of genomics and pharmacogenomics in order to answer questions appropriately and provide appropriate and individualized health promotion and disease prevention education.

Source: Centers for Disease Control and Prevention (2023q); Dean (2018); Diboun et al. (2022); Food and Drug Administration (FDA) (n.d.); National Institutes of Health (NIH) (2022); National Institutes of Health, National Cancer Institute (NIH, NCI) (2021); National Organization for Rare Diseases (NORD) (2023).

females 45 years of age and older. This study began in 1991 and continued through March 2009 for additional observation and follow-up of the original 28,345 participants. Findings indicated that low-dose aspirin does not prevent first heart attacks or death from cardiovascular causes in females; however, stroke was found to be 17% lower in the aspirin group. More than 110 professional articles are associated with this investigation. Recent publications address the association of dietary fat intake with the risk of atrial fibrillation in females and the novel protein glycan biomarker and future CVD events (WHS, n.d.).

The NHS (three separate phases) represents the longest-running study related to female health in the world, investigating factors that influence the health of this group.

- The *NHS I*, a prospective study that began in 1976, enrolled registered nurses aged 30 to 55 years. Every 2 years, participants received a follow-up questionnaire with questions about diseases and health-related topics including smoking, hormone use, and menopausal status. Later in the study, questions regarding diet, nutrition, and quality of life were added.
- The *NHS II* represented females who started using oral contraceptives in adolescence, a population with long-term exposure during early reproductive years. Females aged 25 to 42 years were enrolled and followed forward in time. Every 2 years, participants received a follow-up questionnaire and were surveyed about diseases and health-related topics including smoking, hormone use, pregnancy history, and menopausal status.
- The *NHS III* began recruitment in 2010 and will continue until 100,000 nurses (registered and licensed practical, 22 to 45 years of age) are enrolled. Also, nurses from Canada are participants, and the study aims to be more representative of the diverse backgrounds of nurses. These studies are supported by major nursing organizations, with more than 280,000 participants to date (NHS, 2016).

Female Health Promotion Across the Lifespan

What healthcare needs do females have that are different from those of males? Is there a need to look at health promotion throughout the life cycle of adult females? How is the health of an 18-year-old female different from that of a 50-year-old female? Females have different healthcare needs that must be considered, and these concerns vary with age. Knowing what the needs are is essential to knowing how to help females promote their health.

***Healthy People 2030* Goals for Females.** As a nation, we have been focusing on improving the health of all people living in the United States through the *Healthy People* initiatives, commencing with the 1979 Surgeon General's report, *Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention*, providing measurable population objectives. In the nation's fourth generation of health planning, 35 objectives pertain to the health of females (Box 21-5). As the community health nurse works with people at various stages in the life cycle, the objectives in *Healthy People 2030* can give structure to program planning and services offered to females in the community at the primary, secondary, and tertiary levels of prevention (USDHHS, 2020a).

Young Adult Females (18 to 35 Years). Females in the earlier years of adulthood have different tasks to accomplish and issues to address than females in later adulthood, and the transition from adolescence to adulthood can be stressful. There are major developmental tasks that young females need to accomplish such as forming an identity and the development of intimacy. Behaviors associated with young adulthood may include

BOX 21-5 *HEALTHY PEOPLE 2030*

The Objectives for Females*

Core Objectives—Targets Below Benchmark

MICH-04	Reduce maternal deaths
MICH-05	Reduce severe maternal complications during delivery hospitalizations
MICH-06	Reduce cesarean births among low-risk women with no prior births
MICH-07	Reduce preterm births
MICH-08	Increase the proportion of pregnant women who receive early and adequate prenatal care
MICH-13	Increase the proportion of women who had a healthy weight before pregnancy
FS-03	Reduce infections caused by Listeria
STI-03	Reduce the syphilis rate in females
STI-04	Reduce congenital syphilis
TU-15	Increase successful quit attempts in pregnant women who smoke

*In this box, "females" and "women" refers to people assigned female at birth.
Reprinted from Office of Disease Prevention and Health Promotion (ODPHP). (n.d.-c). Women. Healthy People 2030. U.S. Department of Health and Human Services. https://health.gov/healthypeople/objectives-and-data/browse-objectives/women

FIGURE 21-6 Choosing a career path is one developmental task for young adults.

postsecondary education, choosing and establishing a career (see Fig. 21-6), military service, choosing a partner, establishing independence, and family planning (decision to have/not have children; timing for having children whether through childbirth, adoption, or foster parenting). During this time, females also develop a personal philosophy that encompasses meaningful and comforting spiritual beliefs that are consistent with day-to-day living (Berk, 2018).

Females in this age group tend to be healthy. Unfortunately, during this period, many females engage in less healthy behaviors such as physical inactivity, poor eating habits, unprotected sex, and smoking (Box 21-6). Some, if not all, of these behaviors may have been established in adolescence and represent modifiable behaviors. If not addressed, poor lifestyle choices can contribute significantly to the leading causes of morbidity and mortality: diseases of the heart and vascular systems, cancers, chronic respiratory diseases, and diabetes (Li et al., 2020). The majority of health concerns for many females in this age group are related to eating disorders, reproductive health and STIs, physical activity, mental health and mood disorders, and substance use.

Reproductive Health

During the reproductive years, it is important for females to be as healthy as possible (see Fig. 21-7; CDC, 2023k). During this time, healthy habits can be initiated, and unhealthy habits resolved to ensure the best health during the years people focus on having children and for the outcome of their babies when pregnant. Preconception health is important for all females of reproductive age, not just for those planning to become pregnant, because it focuses on getting healthy and staying healthy (CDC, 2023l).

BOX 21-6 WHAT DO *YOU* THINK?

Fad Diets

Each year, approximately 45 million Americans begin a diet. Fad diets have been around for centuries and don't seem to be going anywhere. Every year new diets promise results, but do they work and are they safe?

In 2018, the ketogenic diet (keto) made its way back into the mainstream. This is a high-fat, low-carbohydrate diet that eliminates sugar, grains/starches, fruits, beans/legumes and encourages high-fat foods such as eggs, nuts, meats/fish, full-fat dairy and cheeses, and healthy oils. Low-carb vegetables are also encouraged. The goal is to reach ketosis by replacing dietary carbs with fats. Benefits may include weight loss and decreased glucose and insulin levels. There are conflicting studies reporting benefits and risks of the ketogenic diet. While people adhering to this diet lose weight, once carbohydrates are reintroduced, the resulting side effect is often weight gain. Research has shown both increase and decrease in LDL cholesterol, as well as the development of insulin resistance, and nonalcoholic fatty liver disease.

The paleolithic diet is known by a few different names and continues to be a popular option among people trying to lose weight. This is a low-carbohydrate, high-protein diet that encourages high consumption of lean meats and vegetables, moderate consumption of fruits, nuts, and seeds, and abstinence from dairy, legumes, and grains. While it has many of the same attributes of keto, it is higher in protein and lower in fat. Evidence suggests that maintaining a low carbohydrate diet, such as the paleo or ketogenic diet, long term may increase mortality from cardiovascular disease, stroke, and cancer, when compared to higher carbohydrate diets. However, the source of carbohydrate intake, whole-food versus highly processed, must be considered and whole-food sources recommended as an individual's main carbohydrate intake.

The plant-based, or vegan, diet has gained momentum in recent years and eliminates all animal products including meat, eggs, and dairy. It is rich in fruits, vegetables, nuts, seeds, legumes, and plant proteins. While there are variations of veganism, such as whole-food plant-based or raw, there are many vegan "junk foods" or processed vegan replacement foods that can cause more harm than good. Adherence to a plant-based diet that is not heavily based on processed vegan foods may reduce weight and help manage or eliminate chronic disease.

Other recent dieting trends include intermittent fasting, juicing, detoxing, and gluten-free diet. Whether people ask about the health benefits or adverse effects of diets they are following or considering, it's important to encourage them to research potential nutritional deficiencies certain diets may cause. This allows for intentional monitoring for dietary deficiencies and supplementation if needed. For example, people following a ketogenic diet may not be consuming sufficient amounts of fiber or vitamins and minerals found in fruits and vegetables. Vegans may need to supplement or be intentional about consuming vitamins B12 and D3, omega-3 fatty acids, iron, and calcium.

Do you know someone who seems to always be trying the latest diet? Is that person successfully losing weight or in a constant weight loss/weight gain cycle? As a C/PHN, how would you approach this subject?

Source: American College of Cardiology (2023); Healthline (2023); T. Collin Campbell Center for Nutrition Studies (2023).

FIGURE 21-7 Good health is important during pregnancy.

Although preconception care is addressed in *Healthy People 2030*, many of the preconception objectives are related to family planning and maternal health. The CDC has developed a checklist for females of reproductive age to commit to healthy preconception activities including the following (CDC, 2023l):

- Make a plan and take action.
- See a healthcare provider.
- Take 400 µg of folic acid every day.
- Stop smoking, using drugs, and drinking excessive amounts of alcohol.
- Avoid toxic substances.
- Avoid environmental contaminants.
- Reach and maintain a healthy weight.
- Seek help if living in a stressful environment or experiencing intimate partner violence.
- Learn family history.
- Get mentally healthy.
- When ready, plan pregnancy.
- Stay current on immunizations.

Community health nurses have been at the forefront of maternal and child healthcare for decades, and they must continue to strive to incorporate components of preconception care into their practices. Nurses must also advocate for clients to influence public policy, which has the potential to improve access to care for many females and improve pregnancy outcomes.

Adult Females (35 to 65 Years). Females in the adult age group of 35 to 65 years have established patterns of living that have served them well or ill (Li et al., 2021). During this period, the results of years of choices may present themselves in the form of chronic illnesses. Nevertheless, many females in this age group have time to change health habits to possibly reverse encroaching chronic illnesses. For other females, lifestyle choices and undetected diseases have shortened their lifespans, and large numbers of females in this age group are dying prematurely.

Adult female demographics are shifting. An increasing number of educated female are having children, and they are having them later in life; they are also spending more time in the workforce before they have children. Births within the United States are decreasing. Additionally, one in four birthing parents is a solo parent, raising children on their own. Stereotypes are shifting as working female face pressure to be more involved as parents, while males are more involved in childcare and housework than in the past (Pew Research Center, 2023). Females between 35 and 65 years of age may face challenges such as follows:

- Caring for aging parents
- Supporting young adult children
- Family–work role conflict
- Financial vulnerabilities
- Shrinking social and healthcare safety net
- Changing mental and physical health
- Gender/racial gap
- Parenting pressures (Infurna et al., 2020)

Menopausal Transition

- **Perimenopause**, or **menopausal transition**, is the period of time leading up to the last menstrual cycle and is characterized by cycle changes and irregularity. Females typically begin to notice symptoms of perimenopause in their 40s. Menstrual flow may be light or heavy, and spotting may occur, depending on varying estrogen and progesterone levels. Females may also have vasomotor symptoms such as hot flashes (flushes) or night sweats, as well as sleep disturbances and vaginal and urinary tract changes (American College of Obstetricians and Gynecologists [ACOG], 2020; Martin & Barbieri, 2023). The average length of perimenopause is 4 years but may last up to 10 years.
- **Menopause** is a time that marks the permanent cessation of menstrual activity (last menstrual period). The average age is 51 years (range = 45 to 58); however, it can occur earlier (Office on Women's Health, 2021). Natural menopause is defined as cessation of menstrual periods for 12 consecutive months, and the person can no longer become pregnant (Office of Women's Health, 2021).
- Menopause symptoms differ among females and may last months to years. They range from hardly noticeable in some individuals to very severe in others. Symptoms include nervousness or anxiety, hot flashes (flushes), chills, excessive sweating (often at night), excitability, fatigue, mood disorders (apathy, mental depression, crying episodes), insomnia, palpitations, vertigo, headache, numbness, tingling, myalgia, urinary disturbances, and vaginal dryness (ACOG, 2020; Office on Women's Health, 2021).
- According to the *Study of Women's Health Across the Nation* (SWAN), hot flashes and some of the other menopausal symptoms last an average of 7.4 years, persisting 4.5 years once menopause is reached. However, these symptomatic menopausal transitions may persist, as noted in a study with Chinese females who had excess weight or obesity (Tang et al., 2022).

Recommendations for females in the menopausal transition include discussions about menopausal symptoms, osteoporosis, cancer screening, and assessment for CVD along with a determination of the need for appropriate menopausal hormone therapy (MHT) (Martin &

Barbieri, 2023; Office of Women's Health, 2021). Additionally, postmenopausal risks associated with osteoporosis should be assessed; ACOG provides recommendations for osteoporosis management (ACOG, 2022).

- Females who choose natural or herbal supplements for symptomatic relief should be counseled on lack of evidence supporting efficacy and long-term safety, as well as potential side effects and drug interactions (Women's Health Concern, 2022).
- Other complementary health approaches females may choose for menopausal symptom relief include hypnotherapy, meditation, yoga, and acupuncture (Johnson et al., 2019).
- Combined estrogen and progestin therapy for primary prevention of chronic conditions in postmenopausal people is not recommended (U.S. Preventative Services Task Force, 2022).
- Estrogen alone for primary prevention of chronic conditions in postmenopausal people who have had a hysterectomy is not recommended (U.S. Preventative Services Task Force, 2022).

Osteoporosis

- A gradual loss in bone density is known as **osteoporosis**. Typically, bone mass stops increasing around age 30 years. As females age, bones may weaken and easily fracture as estrogen levels decrease.
- In the United States, 1 in 4 females over the age of 65 years has osteoporosis (CDC, 2022j). Therefore, it is important for females to build strong bones early. Bone density is influenced by many factors such as heredity, race/ethnicity, physical activity, and nutrition. It is important for females of all ages to maintain a healthy diet that is rich in calcium and vitamin D, engage in physical activity, and avoid smoking (see Fig. 21-8).
- There are several classes of medications that can be used to treat osteoporosis (Endocrine Society, 2022; Office of Women's Health, 2021).
- Screening for osteoporosis in females over the age of 65 years or in postmenopausal women under age 65 years with increased risk for osteoporosis-related fractures is recommended (Bone Health and Osteoporosis Foundation, 2022). See Chapter 22 for more on osteoporosis in older females.

FIGURE 21-8 Menopause is a transitional period in a female's life.

Gynecologic Oncology

Gynecologic cancer refers to cancers that start in female reproductive organs including cervical, ovarian, uterine, vaginal, vulvar, and fallopian tube (CDC, 2023m). Of these six gynecologic cancers, only cervical cancer can be screened. Common signs of gynecologic cancer include the following:

- Abnormal bleeding or discharge (except for vulvar)
- Feeling of fullness or bloating
- Back or abdominal pain
- Dysuria
- Constipation (ovarian and vaginal cancers)
- Skin changes, itching, burning, sores, rash in vulvar region (vulvar cancer) (CDC, 2023m)

Cervical cancer screening has improved early detection and prevention of cervical cancer dramatically. Both the incidence and the death rates for cervical cancer have been stable from 2010 to 2019 because of treatment of preinvasive cervical lesions. The major risk factors for this disease are infection with certain types of HPV, unprotected intercourse at an early age, and multiple sex partners. In 2023, it is estimated that 13,960 new cases of invasive cervical cancer will be diagnosed in the United States, contributing to 4310 deaths among females from this disease. The 5-year survival rate for this cancer, if prompt treatment is initiated, is 67.2% for all stages (SEER, 2023b). The CDC (2023m) published the following cervical cancer screening recommendations:

- Females age 21 to 29 years: cervical cytology; if normal, may wait 3 years.
- Females age 30 to 65 years: every 3 years with cervical cytology alone, or every 5 years with high-risk human papillomavirus testing (hrHPV), or every 5 years with hrHPV and cytology combination.
- Females older than 65 years: recommend against screening with adequate screening previously and not at high risk.

C/PHNs can continue to improve screening and early diagnosis through education and advocating for low-cost screening, which will allow at-risk females with low incomes or rural location access to regular cervical cancer screenings. In addition to screening, educating patients about the HPV vaccine is an important strategy to reduce the incidence of cervical cancer. The Gardasil 9 vaccine protects against 9 HPV virus types that may cause cervical cancer and anogenital warts. It is started as early as age 9 and given as two (age 9 to 13) or three doses (age 14 and older) over 6 months.

Ovarian cancer contributes to more deaths than any other cancer of the female reproductive system and accounts for 2.2% of cancer deaths among females. In 2023, a total of 19,710 cases were anticipated, and 13,270 deaths were expected.

- The primary risk factor for this disease is a strong family history of breast or ovarian cancer. The 5-year survival rate is 50.8% compared to cervical (67.2%) and breast (90.8%) cancers.
- The USPSTF recommends against routine screening for ovarian cancer in people who do not have

symptoms. However, people considered at high risk should receive a pelvic exam, a transvaginal ultrasound, and a blood test for the tumor marker CA 125. Therefore, C/PHNs need to continue to stress the importance of early detection (SEER, 2023c).

Myalgic Encephalomyelitis/Chronic Fatigue Syndrome

- **Myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS)** is a chronic and debilitating disease characterized by fatigue lasting for 6 or more months, worsening of symptoms after exertion, and unrefreshing sleep. Other symptoms may include cognitive impairment, orthostatic intolerance, frequent sore throat, headache, painful muscles, and joint pain. It is estimated that between 836,000 and 2.5 million people in the United States have ME/CFS, with females affected up to four times more than males.
- Symptoms may last for months or years, waxing and waning, and are difficult to validate objectively, but they are subjectively debilitating. Because the cause is unknown, there is no specific treatment and no prevention suggestions.
- Treatment is focused on supportive care for the associated pain, depression, and insomnia.
- The community health nurse can assess activity level and degree of fatigue, emotional response to the illness, and coping ability. Emotionally supportive family members and healthcare providers are helpful. Referring patients to mental health counseling or a local support group is useful for many patients and within the role of the community health nurse (CDC, 2021c).

Health Issues that Predominantly Affect Females

Eating Disorders

Eating disorders are estimated to affect over 5 million people in the United States (4.4 million females and 1.1 million males) (APA, 2022b). There is a high comorbidity association of eating disorders with mental health disorders affecting all biopsychosocial domains of people's lives, posing medical complications and quality of life issues. The three most common eating disorders are anorexia nervosa, bulimia nervosa, and binge eating (National Institute of Mental Health [NIMH], n.d.).

- **Anorexia nervosa** is characterized by marked weight loss, emaciation, a disturbance in body image, and a fear of weight gain. People affected lose weight either by excessive dieting or by purging themselves of ingested calories. People have a distorted body image; inability to maintain body weight can be life-threatening due to electrolyte disturbances, anemia, and secondary cardiac arrhythmias. Low body weight can impair the person's health impeding insulin production, leading to amenorrhea (absent menstrual periods) and decreased bone density (National Eating Disorders, 2022).
- **Bulimia nervosa** is characterized by recurrent episodes of binge eating, self-induced vomiting and diarrhea, misuse of laxatives or diuretics, excessive exercise, strict dieting or fasting, and an excessive concern about body shape or weight. Bulimic people have a fear of gaining weight and are unhappy with their body image, yet they may fall within normal parameters for their weight (NIMH, n.d.).
- **Binge eating** is the most common eating disorder in the United States, with typical onset in late adolescence and early 20s. It is characterized by repeated episodes of uncontrolled eating including eating large amounts quickly, when not hungry, and until comfortably full. Obesity is common because purging is not a characteristic of this disorder. This disorder results in increased risk for type 2 diabetes, high cholesterol, osteoarthritis, kidney disease or renal failure, heart disease, and hypertension (NIMH, n.d.).

The community health nurse can play a vital role in identifying affected people and refer these people to appropriate healthcare providers, mental health counselors, and self-help groups. Screening tools that may help identify people requiring referral for further assessment are available (NIMH, n.d.).

Breast Cancer

Although breast cancer overwhelmingly affects females, 1 out of every 100 cases is diagnosed in a male CDC, 2022h (CDC, 2022h). Overall, females' death rates from breast cancer have declined since 1990 (Table 21-5); this can be attributed to early detection and improvements in treatment. The sooner breast cancer is discovered, the more successfully it is treated. Obtaining regular clinical breast exams and mammograms, eating a diet low in fat and high in fruits and vegetables, breastfeeding (if possible), and avoiding prolonged use of menopausal hormonal therapy (MHT) all promote breast health. It was estimated in 2023 that there would be 297,790 new cases of breast cancer in females diagnosed in the United States, contributing to 43,170 deaths among females. The 5-year survival rate for this cancer, if prompt treatment is

TABLE 21-5 Breast Cancer Death Rates Among All People Assigned Female at Birth: 2016–2020

	Rate (%)
Age-Adjusted Rates per 100,000	
All races	19.6
Black	27.6
White	19.7
American Indian/Alaska Native	20.5
Hispanic	13.7
Asian/Pacific Islander	11.7

Source: Cancer Statistic Center (2023); Estimated deaths. https://cancerstatisticscenter.cancer.org/#!/cancer-site/Breast

initiated, is 90.8% (SEER, 2023a). Risk factors are similar for males and females:

- Genetic mutations (BRAC1 and BRAC2)
- Getting older
- Radiation therapy
- Hormone therapy
- Reproductive history
- Personal/family history of breast cancer
- Obesity (CDC, 2022h, 2022i)

For females, breast density, exposure to the drug diethylstilbestrol, physical inactivity, and alcohol use are added risk factors. For males, liver disease, Klinefelter syndrome, and conditions that affect the testicles are additional risk factors. For those at risk, genetic testing for BRAC1 and BRAC2 mutations might be recommended (CDC, 2022h, 2022i and National Cancer Institute n.d.). For females, the breast self-examination (BSE) is no longer a routine screening recommendation. However, it is important that all adults are familiar with their breasts. This allows them to recognize any overt changes in their breasts, especially changes related to size, shape, symmetry, nipple discharge, as well as skin changes. The C/PHN has many resources available to provide information and to teach adults breast awareness in their homes, small groups in clinics, or in various other community settings to enhance knowledge of breast health (ACS, 2022).

For females, breast cancer screening is important for early detection when tumors are likely to be smaller and confined to the breast. Early detection is associated with better prognosis for survival. The American Cancer Society (ASC, 2022) published the following breast cancer screening recommendations for females of average risk:

- Females between 40 and 44 years: should be an individual decision, and the patient's context (risk for disease) should be taken into account.
- Females 45 to 54 years: yearly mammogram.
- Females 55 years and older: may choose to have mammograms every other year or may continue yearly based on their risks.
- Screening continues while the female is in good health and expected to live at least 10 more years.
- Clinical breast exams are not recommended for breast cancer screening among average-risk females of any age.

Male Health

Males (see Fig. 21-9) have a higher mortality after 60 years, with health habits formed in their earlier years influencing health outcomes as they age. Males are therefore more likely to die earlier from a chronic illness or risky behaviors than females (Zarulli et al., 2021). This is evidenced by the difference in life expectancy between males and females in the United States; females survive an average of 5 years longer than males. Additionally, males of color are disproportionately affected by life expectancy as compared to their White counterparts (CDC, 2021c; Kaiser Family Foundation, 2023; Zarulli et al., 2021).

FIGURE 21-9 Males have different healthcare needs at various stages of life.

Overview of Factors Influencing Male Health

Historically, males have been less likely to seek healthcare for physical or mental health concerns. The past decade has expanded males health to include specialty health centers and healthcare specific to such areas as endocrine, reproductive, sexual, physical performance, surgical, and psychological issues (Houman et al., 2020). How the male identity is maintained can include high-risk activities, resulting in a higher death rate. Examples of these activities may include substance use, use of firearms, poor eating habits, inactivity, obesity, excessive alcohol consumption, and smoking (CDC, 2021e; Li et al., 2021).

Male Health Promotion Across the Adult Lifespan

In the early years of young adulthood (between 18 and 35 years), males continue to grow and mature. Adult males aged 35 to 65 years have reached maturity, the peak of their physical and intellectual development, and their greatest earning power. What specific needs do males in these age groups have? Are their needs being met through provided services?

***Healthy People 2030* Goals for Males.** *Healthy People 2030* addresses male health through family planning, STD, LGBTQ+, and adult health issues such as mental health, substance misuse and opioids, tobacco, nutrition, physical activity, chronic diseases, and cancer (Box 21-7).

Young Adult Males (18 to 35 Years). The young adult male has many tasks to accomplish including:

- Acquisition of training/education leading to a personally rewarding career
- Selecting a compatible partner and establishing a life together (see Fig. 21-10)
- Practicing and internalizing a belief and value system that brings comfort and meaning to existence
- Actively planning for having or not having children
- And participating in the betterment of the greater community

Young males may choose work that involves skills or a trade, office work, or a variety of other endeavors,

BOX 21-7 *HEALTHY PEOPLE 2030*

The Objectives for Males*

Core Objectives

C-07	Increase the proportion of adults who get screened for colorectal cancer
C-08	Reduce the prostate cancer death rate
STI-02	Reduce gonorrhea rates in male adolescents and young men
STI-05	Reduce the syphilis rate in men who have sex with men
HIV-03	Reduce the number of new HIV diagnoses
LGBT-01	Increase the number of national surveys that collect data on lesbian, gay, and bisexual populations
LGBT-02	Increase the number of national surveys that collect data on transgender populations
PA-02	Increase the proportion of adults who do enough aerobic physical activity for substantial health benefits
TU-01	Reduce current tobacco use in adults
SU-03	Reduce drug overdose deaths
SU-13	Reduce the proportion of people who had alcohol use disorder in the past year
SU-15	Reduce the proportion of people who had drug use disorder in the past year
NWS-03	Reduce the proportion of adults with obesity
MHMD-08	Increase the proportion of primary care visits where adolescents and adults are screened for depression

*In this box, "males" and "men" refers to people assigned male at birth.
Reprinted from Office of Disease Prevention and Health Promotion (ODPHP). (n.d.-d). Healthy People 2030. U.S. Department of Health and Human Services. https://health.gov/healthypeople/objectives-and-data/browse-objectives

including active duty military. They may also be veterans of military service.

In 2019, the Behavioral Risk Factor Surveillance System reported 53.8% of young males had at least one chronic health condition, with 22.3% reporting more than one chronic condition. The most prevalent conditions are obesity, depression, and high blood pressure with a higher prevalence in young males with a disability or who are unemployed (Watson et al., 2022). There is a concerted effort by C/PHNs nurses to raise awareness so young males ages 18 to 35 can manage and treat these chronic issues. Health prevention activities for this age group include the following:

- Blood pressure screening
- Diabetes screening
- Cholesterol screening
- Dental examination
- Eye examination
- Immunizations (National Library of Medicine, 2023)

FIGURE 21-10 Choosing a significant other is a developmental task of young adulthood.

Young males may engage in risk-taking behaviors without thinking about the consequences. Depending on their attitudes and practices before entering young adulthood, they may or may not be enticed to experiment or continue with the use of tobacco, alcohol, or illicit drugs. This is an important age group for the C/PHN to reach with health information because decisions made in these formative years may affect how these individuals live the rest of their lives. The nurse can meet with people in this populations in work settings, college campuses, military bases, health clubs and bars, and at single-adult groups sponsored by religious communities and other organizations.

Reproductive Health

Another issue to address is the young male's attitudes and beliefs about sex. Males who are sexually active can reduce the possibility of being infected with an STI by

limiting the number of sexual partners and using condoms consistently and correctly. Condoms also serve as a form of birth control. Monogamy (having sex with only one partner) and abstinence can further reduce or eliminate the chance of contracting an STI. Male involvement in reproductive health and contraceptive decision making has been shown to increase effectiveness in prevention of pregnancy and STI (CDC, 2023n). C/PHNs can serve as a resource and can help patients obtain free or low-cost condoms and treatment for STIs.

During the reproductive years, especially when a male has decided that their family is complete (see Fig. 21-11), they may choose a permanent form of birth control through a surgical procedure called *vasectomy*. A vasectomy entails the following:

- Block/cut/removal of all or a segment of the vas deferens
- Sperm cannot be released
- Routinely conducted on an outpatient basis
- Minimally invasive
- Takes about 30 minutes (CDC, 2023o)

Compared to tubal ligation (a surgical form of contraception for females), vasectomy is equally effective in preventing pregnancy, but vasectomy is simpler, faster, safer, and less expensive. A vasectomy does not protect against STIs and may be reversed depending on the procedure (CDC, 2023i). Because these methods, however, are intended to be irreversible, patients of all genders should be counseled about the permanency of these procedures (CDC, 2023o).

The choices a young adult male makes during these years establish healthy eating, work, rest, and exercise habits that will be beneficial for a lifetime. People should follow the dietary food guidelines that are recommended by the U.S. Department of Agriculture (2020–2025). Establishing a pattern of rest that allows the body to recover and refresh from a day full of meaningful activities will help the individual look forward to each day. The person should establish an exercise routine that meets personal needs, fits skills and talents, and includes

FIGURE 21-11 Reproductive health is an important consideration for males.

FIGURE 21-12 Adult males are encouraged to maintain good health through eating a healthy diet and getting regular exercise.

some physical activities that involve the family (see Fig. 21-12). These choices provide the knowledge that they are doing everything they can to keep themselves healthy and to prevent the two major killers of males—heart disease and cancer (Li et al., 2020). Typically, young adult clients have few interactions with healthcare providers in any given year. It is important for people in this age group to have regular health checkups, be assessed for early signs of disease, and engage in health promotion activities.

Adult Males (35 to 65 Years). Males in the developmental stage between 35 and 65 years of age face many challenges as well as opportunities. Challenges might include the following:

- Caring for their own families and children
- Caring for aging parents and in-laws
- Economic burdens of putting children through college
- Adjusting to the reality that their career path is probably set, and many life choices have been made

The term "midlife" is applied to the age period 40 to 60 years, during which terms such as "midlife crisis" have been used to describe tension or emotions related to a person's life and how a person feels about their life choices. People in this age range of all genders range may look back on their life and reflect on milestones achieved or not achieved. This period of time can be a difficult stage of life due to the following:

- Reappraisal of values, priorities, and personal relationships
- Doubt and anxiety realizing that life is half over
- Beliefs that one has not accomplished enough
- Struggles to find new meaning or purpose in life
- Boredom with one's personal life, job, or partners
- Desires to make life changes in personal life, job, or partners

Males in midlife are at higher risk for suicide than the general population (SAMHSA, 2023). It is important to distinguish a reappraisal of life priorities from depression,

which is not a normal part of mid-life behavior (CDC, n.d.; Center for Men's Health, 2022).

Males in this age range may also experience andropause, also known as male menopause or a decrease in testosterone levels. Hormone levels for males may change as they age, and it is important to know symptoms of low testosterone:

- Loss of energy
- Low libido (decreased sex drive)
- Erectile dysfunction
- Hot flushes or sweats
- Weight gain
- Breast discomfort or swelling
- Infertility
- Reduction in bone density (CDC, 2023p; Center for Men's Health, 2022)

As males age, continued good health habits are important such as adequate sleep, healthy foods, and regular exercise. Earlier health behaviors may influence health later in life, leading to chronic conditions such as diabetes, heart disease, high blood pressure, and obesity (Li et al., 2021). Not all treatments are appropriate for low testosterone, and having the correct diagnosis for symptomatology is important. The C/PHN has a role to play in reinforcing good lifestyle choices and stress management for males.

The later years in this stage, ages 50 to 64, involve preparation for retirement. In anticipation of retirement, these years are marked by the following:

- Expanded social relationships
- Pursuit of new hobbies to fill increased leisure time
- Finishing a career and accumulation of the best retirement benefits
- Making life altering decisions
- Potential health problems
- Loss of loved ones, particularly a spouse or long-term companion

Successful navigation of this stage can be fulfilling but may require enhancement self-care skills. This includes having a positive attitude toward aging, one that examines the benefits of maturity, finds a balance between work and home, and maintains a healthy lifestyle by eating balanced meals and obtaining regular exercise. The community health nurse can provide anticipatory guidance to males approaching this stage and provide them with information on ways to manage life more effectively.

Reproductive Health

Erection problems are common among males of all ages but especially as individuals age. **Erectile dysfunction (ED)**, sometimes called impotence, is the repeated inability to get or keep an erection firm enough for sexual intercourse. The word impotence may also be used to describe other problems that interfere with sexual intercourse, such as lack of sexual desire and problems with ejaculation or orgasm. Using the term *erectile dysfunction* makes it clear that these other issues are not involved (National Institute of Diabetes and Digestive and Kidney Diseases [NIDDK], n.d.; Urology Care Foundation, 2023a). The vascular, nervous, and endocrine symptoms can cause or contribute to ED (NIDDK, n.d.). Some causes of ED include the following:

- Over 50
- Diabetes
- High blood pressure
- Cardiovascular disease
- Smoking
- Drug use
- Excessive alcohol
- Obesity
- Lack of exercise (Urology Care Foundation, 2023a)

In addition, there can be physical reasons for ED such as blood flow to penis, nerve signals from brain to spinal cord, cancer treatment, and medications. Emotional causes can include stress or worry (Urology Care foundation, 2023a). Treatments for ED may include lifestyle changes, counseling, changing medications, medications specific for ED, vacuum erection devices, penile implants, and surgery (NIDDK, n.d.; Urology Care Foundation, 2023a). The C/PHN should counsel males with ED symptoms to seek sound medical advice and be cautious of gimmicky products.

Testicular Cancer

- Testicular cancer occurs most often in males older than 65 years of age and rarely occurs in those younger than 40, but the chance of prostate cancer rises significantly after 50 years of age (ACS, 2023c).
- A few risk factors have been identified that increase a young adult's chance of developing testicular cancer including a personal history of an undescended testicle, abnormal testicular development, family history of testicular cancer, race/ethnicity (White), and age, (ACS, 2023c).
- It is a rare form of cancer and is not on the list of objectives for males in *Healthy People 2030*. If detected early, this cancer is highly curable.
- According to the Testicular Cancer Society (2023), it may be beneficial to the overall health of a young adult to know how to perform a testicular self-examination. For more information on TSE, visit the following website of the Testicular Cancer Society: https://testicularcancersociety.org/pages/self-exam-how-to

Prostate Health. Prostate health is another concern that may occur later in this life stage. The **prostate** is a doughnut-shaped gland located at the bottom of the bladder, about halfway between the rectum and the base of the penis. The prostate encircles the urethra. The walnut-sized gland produces most of the fluid in semen. Males can experience infection (prostatitis), prostate enlargement (benign prostatic hyperplasia [BPH]), and prostate cancer (American Cancer Society [ACS], 2023d).

- BPH is very common.
- The primary risk factor for developing BPH is age. Nearly 50% of men over 50 years of age

report symptoms that are related to prostate gland enlargement.
- Symptoms of BPH are caused by an obstruction of the urethra and gradual loss of bladder function, which results in incomplete emptying of the bladder. The most commonly reported symptoms of BPH involve lower urinary tract symptoms (LUTS), such as hesitant, interrupted, or weak urinary stream, urgency or leaking of urine, and more frequent urination, especially at night.
- Patients often report the symptoms of BPH before the primary provider diagnoses it through a digital rectal examination (DRE).
- Treatment for BPH can include medication or surgery to reduce the size of the prostate (Urology Care Foundation, 2023b).

Prostate cancer is the most frequently diagnosed cancer in males and is the second leading cause of cancer deaths.

- According to the ACS (2023b, 2023d), 1 male in 8 will get prostate cancer during their lifetime, and 1 male in 41 will die from the disease.
- However, most prostate cancers grow slowly and do not cause any health problems.
- More than 3.1 million males in the United States who have been diagnosed with prostate cancer at some time in their lives are still alive today.
- Prior to age 40, prostate cancer is very rare, but the chance of having prostate cancer rises rapidly after age 50.
- About 6 cases in 10 are diagnosed in men 65 years of age and older.
- Although age is the strongest risk factor for prostate cancer, family history and ethnicity also need to be considered. Prostate cancer occurs more often in Black males than in those of other races and occurs less often in Asian and Hispanic/Latino males.

The reasons for these racial and ethnic differences are not clear. Starting at age 50, all males should talk to their healthcare provider about the pros and cons of screening for prostate cancer. This discussion should start at age 45 if a man is Black or has a biological father or brother who had prostate cancer before age 65. Having a biological father or brother diagnosed with prostate cancer doubles a patient's risk. ACS (2023b, 2023d) recommends a discussion about screening:

- For males 50 years old at average risk of prostate cancer and are expected to live at least 10 more years
- For males 45 years old at high risk for prostate cancer including Black males and those who have a biological father or son (first-degree relative) diagnosed with prostate cancer at an early age (younger than 65)
- For males 40 years old at higher risk (more than one first-degree relative diagnosed with prostate cancer at an early age)

Following a discussion, those who want to be screened should get a prostate-specific antigen (PSA) test; a digital rectal examination (DRE) may also be done (ACS, 2023e). Screening recommendations can be found at (ACS, 2023e): https://www.cancer.org/cancer/types/prostate-cancer/detection-diagnosis-staging/tests.html

Treatment for prostate cancer ranges from management through monitoring of PSA tests, biopsy, or watching for symptoms, to invasive procedures such as surgery (ACS, 2023f). Options may include the following:

- Treatment options may include surgery to remove all or part of the prostate (prostatectomy), radiation, and hormone therapy.
- Surgery, radiation, and hormone therapy all have the potential to disrupt sexual desire and performance, temporarily or permanently.
- Urinary dysfunction and incontinence are common side effects that occur after surgery or radiation.
- Radiation therapy, including internal and external treatments.
- Other procedures may include cryotherapy, ultrasound, chemotherapy, and immunotherapy (ACS, 2023d; CDC, 2023e).

A C/PHN can reinforce or clarify information shared with the patient by the healthcare provider, discuss treatment options with the patient and their family, and provide the support they may need if prostate cancer is diagnosed.

ROLE OF THE COMMUNITY HEALTH NURSE

The community health nurse works with adults in all age groups using the three levels of prevention—primary, secondary, and tertiary—as a guide. Interventions are conducted at the individual, family, group, and aggregate levels to make progress toward the *Healthy People 2030* objectives (Box 21-8).

Client teaching by the community health nurse is a major factor in preventing and managing chronic diseases. The challenge to the nurse is to be prepared to discuss issues, backed up with knowledge of and access to the appropriate community resources, to meet client needs. What the nurse can accomplish can be quite dramatic in terms of reducing days in the hospital because of chronic disease, improving quality of life for the person with a chronic illness, and preventing a combination of unhealthy habits from becoming causative factors in new cases of chronic disease. A nursing care plan matrix can guide the community health nurse in discussing areas of health promotion and protection with the client. An example of a nursing care plan matrix for young adults can be found in Box 21-9.

Primary Prevention

- Primary prevention activities focus on education to promote a healthy lifestyle. Much of the community health nurse's time is spent in the educator role.
- When working with people, the C/PHN should encourage routine health examinations, healthy eating habits, adequate sleep, moderate drinking, and no smoking. Among aggregates, the community health nurse focuses on community needs for services and

BOX 21-8 LEVELS OF PREVENTION PYRAMID

Breast Cancer

SITUATION: Breast cancer.
GOAL: Using the three levels of prevention, avoid or promptly diagnose and treat negative health conditions and restore the fullest potential.

Tertiary Prevention

Rehabilitation	*Health Promotion and Education*	*Health Protection*
■ Recovery at home with return to activities of daily living within 2 wk	■ Maintains periodic follow-up with healthcare provider, follow-up mammogram at 6 and 12 mo, and as recommended by healthcare provider ■ Education regarding risk for other cancers (cervical, ovarian, uterine, etc.)	■ Practices breast awareness and receives mammograms as recommended; receives screening for ovarian cancer—transvaginal ultrasonography and blood test for tumor marker CA 125

Secondary Prevention

Early Diagnosis	*Prompt Treatment*
■ Identification of lump in left breast, appointment made with healthcare provider for evaluation ■ Receives mammogram and sonogram	■ Needle aspiration of lump followed by cytologic studies ■ Lumpectomy with removal of two suspicious lymph nodes ■ Low-dose radiation

Primary Prevention

Health Promotion and Education	*Health Protection*
■ Education regarding breast awareness and mammograms, as needed ■ Education regarding environmental exposure and breast cancer (smoking, alcohol, chemicals) ■ Education regarding low-fat diet and maintaining a body mass index <29	■ Avoidance of environmental exposures that may contribute to cancer ■ Maintains breast awareness and obtains mammogram when appropriate

programs that will keep that population healthy, such as providing flu vaccine clinics, teaching sexual responsibility, and preventing STIs.

The community health nurse may collaborate with community leaders and other stakeholders in designing programs, work with committees to secure funding, or approach the state legislature to lobby for needed changes to state laws and policies governing the health of adults. At other times, the nurse works with small groups of adults who could benefit from making healthy choices in diet, relaxation, and physical activity. Likewise, it is not unusual for the C/PHN to work with an individual to promote healthy living.

Secondary Prevention

- Secondary prevention focuses on screening for early detection and prompt treatment of diseases. Throughout the lifespan, screening tests can help adults identify disease early; currency on immunizations is recommended to protect yourself and loved ones, as well as prevent serious illness.
- A significant amount of the community health nurse's time is spent in assessing the need for planning, implementing, or evaluating programs that focus on the early detection of diseases.
- This is followed by teaching to prevent further damage from the disease in progress or to prevent the spread of the disease if it is communicable. Examples of secondary prevention programs include establishing mammography clinics, teaching breast and TSE, and screenings—blood pressure, blood glucose, BMI, and Cholesterol (see Box 21-10).

Tertiary Prevention

- The tertiary level of prevention focuses on rehabilitation and preventing further damage to an already compromised system. Many adults with whom a

BOX 21-9 Nursing Care Plan Matrix for Health Promotion, Young Adults: 18 to 35 Years

Community health nurses can use this matrix to individualize teaching, services, and care to young adult clients. Use the questions to stimulate the development of an individualized approach that is client focused and client driven with the community health nurse acting as the catalyst. In any or all of these areas, the community health nurse may (1) discuss issues and commend the client for positive attitudes and behaviors (e.g., when the client is making healthful decisions, such as condom use for their health and the health of significant others); (2) discuss the issues and guide the client to resources that will enhance more positive behaviors and decisions (e.g., flu shot clinic or healthy lifestyle program for adults); or (3) discuss the issues and inform the client that immediate changes must be made to protect the health of self or others and inform/utilize the appropriate resources as soon as possible (e.g., follow-up for symptoms related to suspected STI).

1. *Life partner.* Ascertain whether the client is looking for a life partner or is choosing to live a single life. Discuss how the single life is satisfying for the client and ways to make it richer.
   Discuss settings in which client can meet others (male or female, based on sexual preference) with similar interests, philosophy, and outlook, such as work settings, school settings, faith communities, recreational communities, and the like.
   Discuss what the client is looking for in a potential life partner, expectations for the relationship, what the client contributes, how the client compromises and resolves conflict, and other issues. If in a relationship, what is good, what needs improving, and how to initiate change.
2. *Life's work.* How is the client preparing for their life's work (education, formal training, on the job training)? Will the life's work provide resources for client's life plans? Will the work choice provide long-term satisfaction? Is the work choice a "stepping stone" to another work role? How will/do they handle work and rearing children? What needs changing or can be improved in the work/children arrangement?
3. *Planning for children.* What knowledge do they have about family planning? What methods fit best with their philosophy, religious beliefs, and lifestyle? What are the long-term effects of the choices? How many children is the client planning to rear? Have they thought through the ramifications of this number? If choosing not to have (or unable to have) children, how will they deal with this? Do they want alternative suggestions for raising a child (adoption, foster parenting) or information about interacting with children (volunteering)?
4. *Maintaining physical and mental health.* In this area, the community health nurse needs to explore all areas of health promotion and protection. This will include discussions regarding primary and secondary prevention. Primary prevention discussions could include the following:
   - Diet and nutrition
   - Physical and leisure activities
   - Safe sex practices
   - Periodic health examinations
   - Personal safety—seat belts, protective helmets, dating violence, etc.
   - Immunizations
   - Regular use of sunscreen
   - Stress reduction activities

   Secondary prevention discussions could include the following:
   - Screening for sexually transmitted infections
   - Testicular self-examination
   - Smoking cessation
   - Pelvic examinations and Pap smears
   - Counseling and support at times of stress
5. *Developing a life's philosophy.* Discuss client's personal life satisfaction, which may include religiosity and spirituality, living in congruence with cultural/ethnic/family beliefs and expectations, and coming to a comfortable level of satisfaction with life choices, having few regrets.

community health nurse works have chronic diseases, conditions resulting from another disease, or long-standing injuries with resulting disability.

- Ideally, negative health conditions can be prevented. If not, the next best thing is for them to be diagnosed early, without damage to an individual's health. But if negative health conditions have not been treated or brought under control, then the person is at a tertiary level of prevention. At this level of prevention, the nurse focuses on maintaining quality of life.

Caring for people at the tertiary level of prevention can become quite complicated because many body systems may be involved. In addition, all people function within many social systems, which may include family expectations, roles people have within the family, expected behaviors, community system knowledge and involvement, personal expectations, motivation, and support. Working at the tertiary level involves all of the nurse's skills in addition to community resources and a client who can be or wants to be motivated.

BOX 21-10 Secondary Prevention of STIs Among Nonpregnant Adults Experiencing Homelessness

Adults experiencing homelessness are at increased risk of negative health outcomes, including an increased incidence and prevalence of sexually transmitted infections (STIs), compared to the general population (Williams & Bryant, 2018). A 2019 study estimates that the prevalence of sexually transmitted infections (STIs) among adults experiencing homelessness ranges from 2.1% to 52.5%. A nurse-led clinic exclusively serving people experiencing homelessness (PEH) identified that it was likely underscreening for STIs. Ethical and theoretical principles were applied to research, and a protocol was developed to better guide the clinicians at a clinic to screen for STIs in adults experiencing homelessness and who are without symptoms and not pregnant.

The clinic lead identified that when serving PEH, a vulnerable population, it is important to account for how their prior lived experiences affect their health and health beliefs (O. Ridgway, personal communication, September 13, 2022). Therefore, Leininger's (1988) Sunrise Model was adapted to create a protocol that addressed Spiers' (2000) emic and etic principles of vulnerability and address the person as a whole being. Special consideration was taken to use inclusive terminology in relation to gender, religion, social, cultural, political, economic, education, and technologic factors (Leininger, 1988). The protocol was developed using a web-based tool so that it could be easily modified as the state of the science changes. It first approached the emic principles of culturally competent, trauma-informed, and gender-inclusive care and outlined how to take a detailed sexual history to determine risk. Then it addressed the etic principle to provide guidance on how to appropriately screen for STIs. It outlined screening intervals, appropriate screening tests, whether the infection was reportable in the state where the clinic is located, and whether retesting is necessary. This was broken down by patient population (people with a cervix, people with a penis who have intercourse with a person with a cervix (MSW), people with a penis who have intercourse with a person with a penis (MSM), people with a neopenis or neovagina, and people living with HIV) and then by STI (chlamydia, gonorrhea, hepatitis B, hepatitis C, herpes, HIV, human papillomavirus [HPV], syphilis, and trichomoniasis). PEH are vulnerable, underserved, and experience higher rates of STIs compared with the general population. Strategies are needed to address STI risk for this population. This project is a small step in improving the care of PEH at one clinic but may be transferable to other clinics who serve PEH. Future protocols may include partner testing, symptomatic testing, and STI treatment.

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Source: Leininger, M. (1988). Leininger's theory of nursing: Cultural care diversity and universality. *Nursing Science Quarterly, 1*(4), 152–160. https://doi.org/10.1177/089431848800100408

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Williams, S. P., & Bryant, K.L. (2018). Sexually transmitted infection prevalence among homeless adults in the United States: A systematic literature review. *Sexually Transmitted Diseases, 45*(7), 494–504. https://doi.org/10.1097/OLQ.0000000000000780

CASE STUDY 10 ESSENTIAL PUBLIC HEALTH SERVICES

Tertiary Prevention in the Community

Depending on the client's age, tertiary prevention can be simple or very complex. A 19-year-old person who breaks their leg while skiing needs information about using crutches safely, a reminder to eat protein foods for bone healing, and an appointment to return to their healthcare provider if they experience various symptoms and to get the cast removed. They generally need no additional help from others. Tertiary prevention in this case is uncomplicated. On the other hand, a 62-year-old who has 70 pounds of excess weight and with out-of-control blood glucose levels, symptoms of congestive heart failure, and difficulty walking more than 20 ft has much to accomplish in order to feel healthy.

1. ***Recognize Cues:*** *Which findings require immediate follow-up, are unexpected, or are most concerning?*
2. ***Analyze Cues:*** *What information is noted or needed for interpreting findings?*
3. ***Prioritize Hypotheses:*** *Based on the information that you have, what is happening?*
4. ***Generate Solutions:*** *What intervention(s) will achieve the desired outcome?*
5. ***Take Action:*** *What actions should you take or do first?*
6. ***Evaluate Outcomes:*** *Were outcomes achieved? Why or why not?*
7. *Which Essential Public Health Services influence this situation? (See Box 2-2.)*

SUMMARY

- Despite the shift in the 20th century in the leading cause of death from communicable to noncommunicable, there appeared on the world stage in 2019 a new virus not seen since the 1918 H1N1 Influenza pandemic. On March 11, 2020, the World Health Organization (WHO) declared COVID-19 (SARS-CoV-2) a global pandemic.
- The leading causes of death in adults in 2021 are diseases of the heart, malignant neoplasms, COVID-19, unintentional injuries, cerebrovascular diseases, and CLRDs. Obesity and substance use contribute to or exacerbate many of the leading causes of mortality and morbidity discussed in this chapter.
- Caring for our community requires recognition of people and the designations in which they identify as well as the biologic characteristics of a person for appropriate prevention and healthcare needs. Awareness of sexual orientation or gender identity (SO/GI) can assist in caring for all adults while providing necessary healthcare services.
- The healthcare needs of adults are of great concern. Many needs are the same for males and females, with important differences addressed in this chapter.
- Adults have healthcare needs that change as they age. Diet and exercise, obesity, substance use, safety, and healthy lifestyle choices are issues that adults must consider throughout their lives.
- Genomics refers to how a person's genetic makeup and environment predispose a person to the development of disease. Understanding a person's genetic risk and environmental factors that may further influence and increase risk allows community health nurses to provide targeted education on disease prevention. Heart disease and cancers remain important concerns for people of all genders, and health decisions made as a young adult can have a major impact on people as they age.
- Chronic illness is an issue of increasing concern as life expectancies increase. C/PHNs should use the three levels of prevention to promote health across the lifespan. Primary prevention activities focus on education to promote a healthy lifestyle and vaccination programs. Secondary prevention focuses on screening for early detection, and tertiary prevention focuses on prompt treatment of diseases.
- The C/PHN role at this stage is to assess needs; to plan, implement, or evaluate programs that focus on the early detection of diseases; and to educate clients to prevent further damage from or spread of disease. The tertiary level of prevention focuses on rehabilitation and prevention of further damage to an already compromised system. At this level of prevention, the nurse focuses on maintaining quality of life.

ACTIVE LEARNING EXERCISES

1. Using resources, determine what health issues affect adults in your town, city, or neighborhood. How does this affect the lifespan of adults in the community? Consider the socioeconomic impact that this has on members of your community. Who is most affected? What can you use as the C/PHN to promote the health of your community? Identify ways that the C/PHN can provide primary, secondary, and tertiary health promotion activities specific to these issues. (Objectives 3 and 4)
2. Identify a major chronic illness found in adults. Create a program to address this health issue. What steps would you take to develop a successful program? What would be important to emphasize with this age group? What resources (e.g., smartphone apps, online information) might be useful? (Objective 1)
3. Apply "Assess and Monitor Population Health" (1 of the 10 essential public health services; see Box 2-2) as follows: Using nursing and other healthcare databases, research a chronic disease associated with adults aged 35 to 65. Identify selected concerns and discuss both personal responsibility and societal responsibility (consider health equity and health disparities) regarding the management of this health problem. What are health priorities and why? (Objective 2)
4. Using Healthy People 2030, determine screening recommendations for clients who are 50 to 65 years of age. (Objective 5)
5. Complete a health history on an adult, including medical, family, social history, and environmental history. Based on the information collected, determine the individual's personal risk factors. Which risk factors are modifiable? Which are not modifiable? Which chronic diseases are they at risk for developing? What education would you provide to help the person reduce their risk? (Objective 6)