

Chapter Three

Health Promotion and Disease Prevention

Chapter Objectives

On completion of this chapter, the student should be able to discuss:

1. Concepts of health promotion and disease prevention.
2. Definitions of epidemiology, incidence, prevalence, morbidity, and mortality.
3. Primary, secondary, and tertiary levels of prevention.
4. Diversity of women based on such factors as race, ethnicity, age, and sexual orientation.
5. Diversity as a barrier to healthcare access.
6. Global health issues and the difference in the burden of disease in less economically developed versus more economically developed countries.
7. Differences in life expectancy according to gender and race.
8. Healthcare concerns and preventive measures for adolescents.
9. Healthcare concerns and preventive measures for young adults.
10. Healthcare concerns and preventive measures for women in midlife.
11. Healthcare concerns and preventive measures for senior women.
12. Taking responsibility for one's own health.

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Introduction

Being a woman is not a homogenous state. Just as major biological and social differences exist between men and women, so women as a group are made up of many disparate and often overlapping subgroups. These subgroups can be described in any number of ways: racial, ethnic, social, economic, physical, and psychological. In considering women's issues and health-related needs, one should consider these factors:

- The cyclic variability of women of reproductive age
- The changes in women throughout their life span as adolescents, pregnant women, premenopausal women, postmenopausal women, and older women
- The special needs of women of varying racial, ethnic, cultural, socioeconomic, and demographic backgrounds

Mindfulness of women's diversity ensures thorough and equitable analysis of the issues that affect women's lives.

Recognizing the heterogeneity of women is important for understanding the factors that may influence causes, diagnoses, progression, and treatment of disease. These differences create a need for tailored approaches to the delivery of health education and healthcare services. Some women are systematically mistreated or have their needs ignored; examples include women with disabilities or rare diseases, women in prison, and lesbians. This marginalization often prevents their different perspectives from being considered. Certain subgroups of women, such as elderly women, black women, and Hispanic women, are having significant success at getting their voices heard. These women have organized to create a collective voice that is having influence in health-related decision making. The recognition of heterogeneity among women requires an approach to women's health care that addresses a diverse population.

- Women are not a homogenous population.



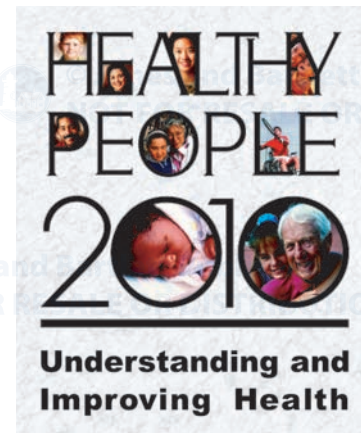
Political Dimensions

There are a number of players in the health system, including government agencies, international agencies, national health education associations, hospitals, and volunteer groups. The federal health infrastructure starts with the Secretary of Health. The Assistant Secretary for Health, who is the principal advisor to the Secretary on public health and scientific issues, is supported by the Surgeon General. The Surgeon General has numerous responsibilities, including protecting and advancing the health of the nation through educating the public; advocating for effective disease prevention and health promotion programs and activities; and providing a highly recognized symbol of national commitment to protecting and improving the public's health. Reports, workshops, conferences, and calls to action from the Surgeon General on various issues, including the adverse health consequences of smoking, nutrition and health, mental health, violence, overweight and obesity, suicide, and sexual health, have heightened awareness of important public health issues and generated major public health initiatives. One of these initiatives, Healthy People 2010, grew out of the 1979 Surgeon General's Report, *Healthy People—The Surgeon General's Report on Health Promotion and Disease Prevention*. Healthy People 2010 is a set of national disease prevention and health promotion objectives for the United States to achieve over the first decade of the new century. States, communities, and professional organizations can use Healthy People 2010 as a basis on which to develop programs to improve health.

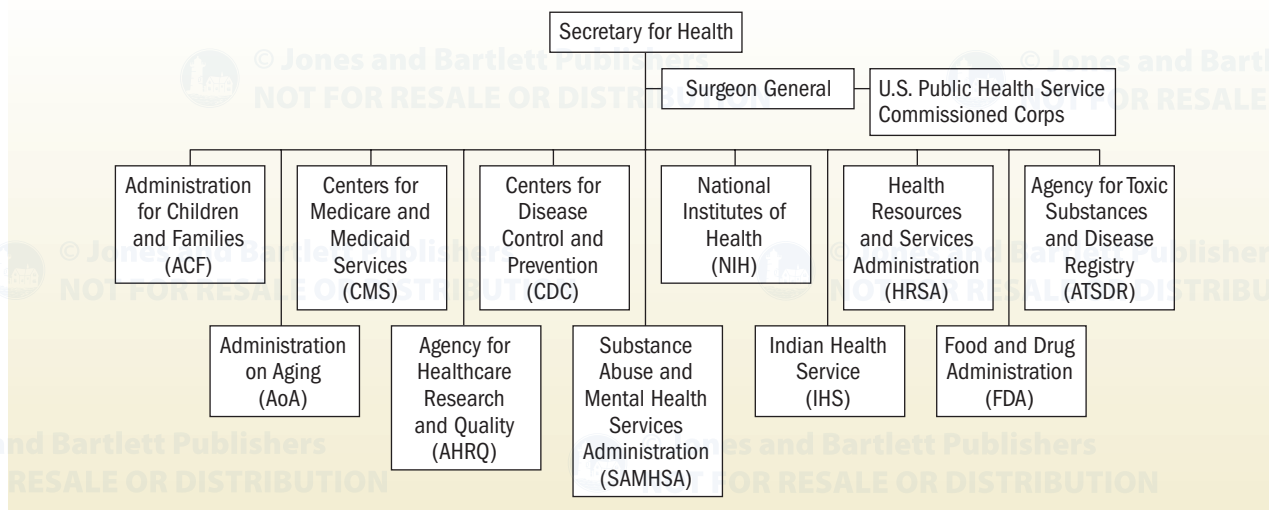
The Department of Health and Human Services (HHS) is the U.S. government's principal health agency and includes more than 300 programs. HHS works with state, local, and tribal governments and provides funding for a number of services offered at the local level. The department's programs are administered by 11 HHS operation divisions, including eight agencies in the U.S. Public Health Service and three human service agencies (Figure 3.1).

The eight agencies of the U.S. Public Health Service have differing mandates:

- *National Institutes of Health (NIH)*. NIH is the world's premier medical research organization, supporting some 35,000 research projects nationwide in diseases such as cancer, Alzheimer's disease, diabetes, arthritis, cardiovascular disease, and AIDS.
- *Food and Drug Administration (FDA)*. FDA assures the safety of foods and cosmetics, and the safety and efficacy of pharmaceuticals, biological products, and medical devices.
- *Centers for Disease Control and Prevention (CDC)*. Working with states and other partners, CDC provides a system of health surveillance to monitor and prevent disease outbreaks, implement disease prevention strategies, and maintain national health statistics.
- *Agency for Toxic Substances and Disease Registry (ATSDR)*. ATSDR helps prevent exposure to hazardous substances from waste sites on the U.S. Environmental Protection Agency's National Priorities List, and it develops toxicological profiles of chemicals found at these sites.



Healthy People 2010 is a set of national disease prevention and health promotion objectives for the United States to achieve in the first decade of the century.

**Figure 3.1****The U.S. Department of Health and Human Services (DHHS).**

- *Indian Health Service (IHS)*. The IHS provides health services to nearly 1.5 million American Indians and Alaska Natives of 557 federally recognized tribes in 35 states.
- *Health Resources and Service Administration (HRSA)*. HRSA provides access to essential health services for people who are poor, who are uninsured, or who live in rural and urban neighborhoods where health care is scarce. Working in partnership with many state and community organizations, HRSA also supports programs that ensure healthy mothers and children, increase the number and diversity of healthcare professionals in underserved communities, and provide supportive services for people fighting human immunodeficiency virus (HIV) infection and acquired immunodeficiency syndrome (AIDS) through the Ryan White Care Act.
- *Substance Abuse and Mental Health Services Administration (SAMHSA)*. SAMHSA works to improve the quality and availability of substance abuse prevention, addiction treatment, and mental health services. This agency provides funding to the states to support and maintain substance abuse and mental health services through federal block grants.
- *Agency for Healthcare Research and Quality (AHRQ)*. AHRQ supports research designed to improve the quality of health care, reduce its cost, improve patient safety, address medical errors, and broaden access to essential services. It provides evidence-based information on healthcare outcomes; quality; and cost, use, and access.

The Assistant Secretary for Health oversees these eight health agency divisions of HHS as well as the Commissioned Corps, a uniformed service of more than 6,000 health professionals who serve at HHS and other federal agencies. The Surgeon General is head of the Commissioned Corps.

The HHS also includes three human service agencies:

- *Center for Medicare and Medicaid Services (CMS)*. CMS administers the Medicare and Medicaid programs, which provide health care to approximately one in every four Americans. Medicare provides health insurance for more than 41 million elderly and disabled Americans. Medicaid, a joint federal–state program, provides health coverage for more than 44 million low-income individuals, as well as nursing home coverage for low-income elderly people. The Children’s Health Insurance Program covers more than 4.2 million children.
- *Administration for Children and Families (ACF)*. ACF is responsible for some 60 programs that promote the economic and social well-being of families, children, individuals, and communities. This agency administers the state–federal welfare program, the national child support enforcement system, and the Head Start program.
- *Administration on Aging (AoA)*. AoA supports a nationwide aging network, providing services to the elderly, such as home meal delivery and transportation services, that enable them to remain independent.

Economic Dimensions

Individual behaviors and environmental factors are responsible for approximately 70% of all premature deaths in the United States. Developing and implementing policies and preventive interventions that effectively address these determinants of health can reduce the burden of illness, enhance quality of life, and increase longevity. Also, preventive care is often significantly less expensive than medical intervention. By changing individual behavior, such as modifying diet and increasing exercise, individuals can have a huge impact on defraying healthcare costs down the road. For example, according to the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), obesity costs America \$123 billion in direct and indirect costs.¹ Much of these costs could be averted by making health behavior choices that would lead to weight loss (Figure 3.2).

Total costs associated with diseases are often significantly less for people who take part in preventive care measures, as disease is often detected at earlier stages. For example, according to the American Cancer Society, the five-year survival rate for cervical cancer detected at the earliest invasive stage is 92%. The costs and associated morbidity of treating women with early cellular changes, or minor cervical cancers, is significantly lower than that associated with treating women for invasive disease. Total costs should be considered in terms of both true financial costs and human costs counted in pain, suffering, and anxiety.

Health insurers have grown to understand the economic value of health promotion and preventive care, and they recognize their importance by increasingly covering these services. Many insurers now offer some benefit for joining a health club, or provide some payment for alternative therapy services such as massage or chiropractic adjustments.

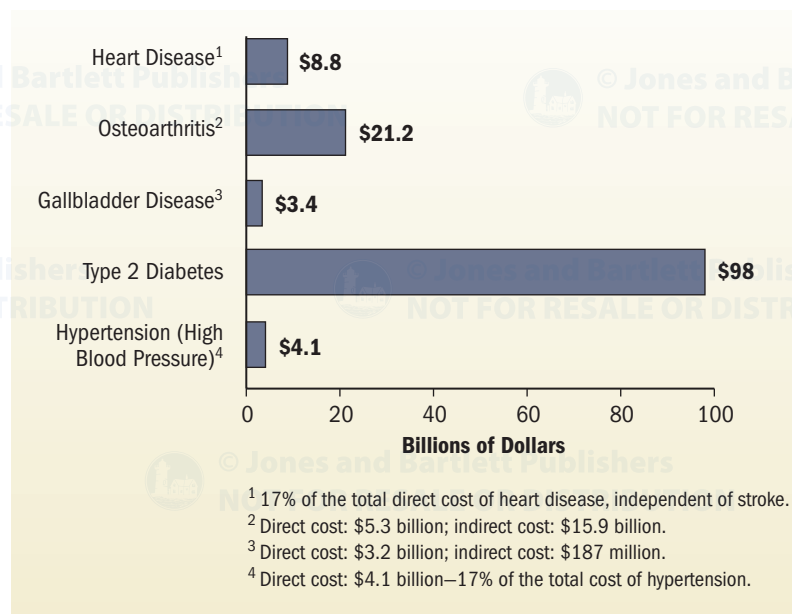
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Cost Benefits of Prevention Programs

Some examples from the National Center for Chronic Disease Prevention and Health Promotion show the cost benefits of prevention programs:

- One quality-adjusted year of life is saved for the cost of a smoking cessation program (\$1,109 to \$4,542).
- For each \$1 spent on a school HIV, other sexually transmitted disease (STD), and pregnancy prevention program, roughly \$2.65 is saved on medical and social costs.
- For every \$1 spent on preconception care programs for women with diabetes, \$1.86 can be saved by preventing birth defects among their offspring.
- A mammogram every two years for women aged 50–69 years costs only about \$9,000 per year of life saved.
- For the cost of 100 Papanicolaou (Pap) tests for low-income elderly women, about \$5,907 and 3.7 years of life are saved.

Source: United States Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. Available at <http://www.cdc.gov/nccdphp/index.htm>.

**Figure 3.2**

Cost burden of obesity-related conditions to society and the health industry.

Source: The Endocrine Society and The Hormone Foundation. (2004). *The Endocrine Society Weighs In: A Handbook of Obesity in America* 43. Available at <http://www.obesityinamerica.org>. Reprinted with permission.

Important Terms

Epidemiology is the study of patterns of disease in the population. It is concerned with the frequency and types of disease in groups of people and the factors that influence the distribution of disease. The following list defines some of the terms used to describe the epidemiology of a given disease within a population:

- **Incidence:** new cases of a condition that occur during a specified period of time.
- **Prevalence:** the total number of people affected by a given condition at a point in time or during a period of time.
- **Mortality rate:** the incidence of death in a given population during a particular time period. It is calculated by dividing the number of deaths in a population by the total population.
- **Morbidity rate:** the incidence of illness in a given population during a particular time period. Morbidity rate is calculated in a similar manner to mortality rate.

Rates of incidence and prevalence are used to determine changes in the impact that a condition or disease is having on the population and to understand the relative effects of one condition versus another. Morbidity and mortality rates can be cal-

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Important Epidemiological Terms

Measures of Morbidity (illness)

$$\text{Incidence} = \frac{\text{number of new cases of a disease during a given period of time}}{\text{total population at risk}}$$

$$\text{Prevalence} = \frac{\text{number of existing cases of a disease at a given point in time}}{\text{total population at risk}}$$

Measures of Mortality (death)

$$\text{Mortality rate} = \frac{\text{number of deaths in a population in a given period of time}}{\text{total population}}$$

culated across the entire population or within a specific subpopulation, such as age, gender, or race, to show relevant variations across those groups.

Health education is defined as “any combination of learning experiences designed to facilitate voluntary adaptation of behavior conducive to health.”² One of the principal facets of health education is its voluntary nature. Health education can cover any issue of health, including prenatal care, screening for cancer, or recognizing signs of a stroke. By contrast, health promotion is defined as “the combination of educational and environmental supports for actions and conditions of living conducive to health.”² While health education deals with the voluntary actions of people in terms of decision making, values, and perceptions, health promotion deals with enabling factors on a societal level. The objective of health promotion is to enable people to make informed decisions regarding behaviors and actions related to health with societal, political, and environmental support. For health promotion to be effective, it must include the component of health education. Health promotion deals primarily with lifestyle and chronic disease factors, such as smoking, drinking, use of primary care medical facilities, and sexual activity.

Many diseases and conditions are a result of lifestyle factors, such as poor nutrition or smoking, and are therefore preventable. Through health promotion efforts, people are increasingly learning to make more informed decisions regarding lifestyle behaviors and disease prevention practices. Prevention is practiced at three different levels—primary, secondary, and tertiary.

- **Primary prevention** is prevention of disease by reducing exposure to a risk factor that may lead to the disease. Primary preventive measures include healthy nutrition, regular physical activity, cessation of smoking, and safe sexual practices.
- **Secondary prevention** refers to early detection and prompt treatment of disease. Screening tools such as mammography and cervical cancer screening are considered examples of secondary prevention because they may detect disease

before it spreads, thereby preventing further complications or disease progression. The use of medications and lifestyle behaviors to control chronic diseases that cannot be prevented, such as diabetes or asthma, are also examples of secondary prevention.

- **Tertiary prevention**, which takes place once a disease has advanced, involves alleviating pain, providing comfort, halting progression of an illness, and limiting disability that may result from disease. It consists of rehabilitation in situations where a person can work on restoring certain functions, such as those lost after suffering a stroke.

Primary prevention is largely the responsibility of the healthcare consumer. Secondary prevention requires both the guidance of the healthcare provider and the compliance of the consumer. Tertiary prevention remains a goal of both healthcare providers and caregivers.

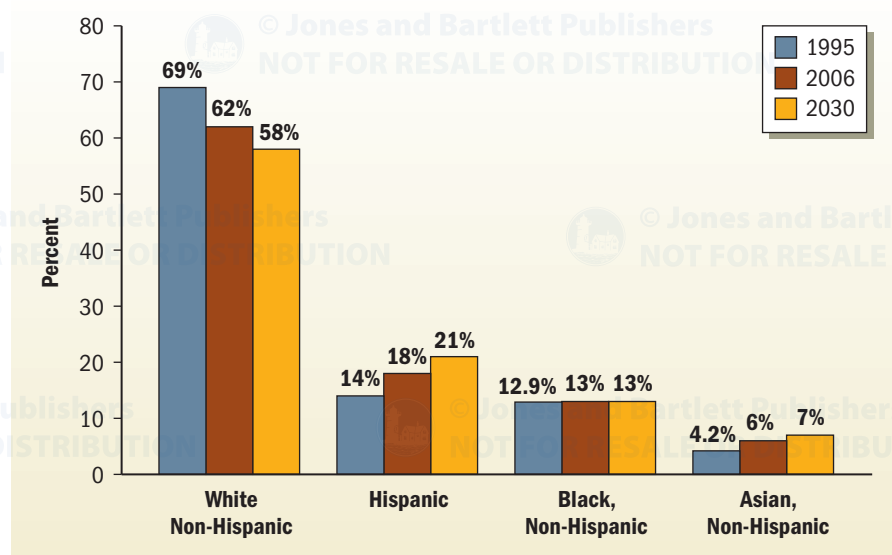
The Diversity of Women

Throughout the United States, the diversity of the population, in terms of race and ethnicity, continues to evolve. This changing diversity is seen particularly with the growth of the Hispanic and Asian American sectors of the population, as well as increased numbers of people of mixed racial backgrounds. By 2030, 1 in 5 American women will be of Hispanic heritage, and 1 in 14 will be Asian (Figure 3.3). Significant diversity exists among women based on age as well. By 2030, 1 in 4 American women will be over the age of 65.³ With the majority of the elderly population in the United States being women, the needs of the elderly represent a significant women's health issue.

Figure 3.3

Projected U.S. population by race and Hispanic origin, 1995–2030.

Source: U.S. Census Bureau. (2004). U.S. interim projections by age, sex, race, and Hispanic origin. Available at <http://www.census.gov/ipc/www/usinterimproj/>.



Women's increased educational attainment adds to the diversity of the population. Educated women tend to be more educated healthcare consumers. Differing education levels create heterogeneity among women, as women with little or no education and women with advanced education may have differing health and health education needs. The increased number of women in the workforce also presents new opportunities in women's health, providing another venue for disseminating health education information to women. Women work in a variety of settings, creating differences in their healthcare needs. For example, women working at home, in factories, in offices, in agriculture, and in retail will encounter different work-related health issues.

Another area of diversity relates to the many ways and stages of life in which women choose to become mothers. Many women are delaying marriage and family to focus on careers, and thus are having children in their later years. This trend creates new issues surrounding childbirth, fertility, and parenting that target women in their thirties, forties, and fifties as opposed to solely focusing on women in their twenties. Other women are having children at younger ages, becoming teenage mothers. These women are either working to raise children alone or having their parents take a leadership role in childrearing responsibilities by raising their grandchildren. Some women choose not to have children, instead pursuing careers and other opportunities.

Diversity also is reflected in women of different sexual orientation. Health concerns specific to lesbian women are often overlooked, leaving many women without proper guidance and medical attention. Lesbians share many health concerns and risks with heterosexual women, but misconceptions about the health needs of lesbians by healthcare providers and lesbians themselves often create barriers to receiving adequate care. Both lesbians and healthcare providers often believe that women who have sex with women do not need cervical cancer screening, routine gynecological care, or contraception to protect them from sexually transmitted diseases (STDs), including HIV/AIDS. Other barriers to health care may include homophobia among providers and lack of health insurance coverage, as many lesbians are unable to share their partner's benefits or are eligible for less complete benefit coverage than a heterosexual spouse would be.⁴

Incarcerated women face special health-related challenges. Many have unmet medical needs that relate to drug addictions, mental health, and reproductive health.⁵ Women in prison complain of "lack of regular gynecological and breast exams and argue that their medical concerns are often dismissed or overlooked." Many women in prison are survivors of physical and sexual abuse, putting them at increased risk for high-risk pregnancies, HIV/AIDS, hepatitis C, and cervical cancer. Pregnant incarcerated women face significant hurdles.⁶

Women with disabilities also contribute to the landscape of diversity and stand out as having been the focus of less research and clinical attention than is warranted. Physical barriers, such as inaccessible facilities or examination equipment, present major problems for these women in obtaining adequate health care. Communication barriers may pose a problem if a patient has visual, hearing, or verbal disabilities.



By 2030, one in five American women will be of Hispanic heritage.

Women with disabilities, as well as uninformed healthcare professionals, may have the misconception that they are less likely to acquire diseases or infections. Many times, healthcare providers focus on the woman's disability and associated issues, rather than on basic routine healthcare needs.⁷ Whether a woman's disability is a mobility, vision, hearing, speech, or cognitive challenge, greater levels of research, support, and compassion are needed to adequately address her health concerns.

The heterogeneity of women as reflected in differences of race, ethnicity, socioeconomic status, geographic location, sexual orientation, country of origin, and employment status contributes to the diversity of women's needs. As the medical community has begun to embrace the diversity of women, significant emphasis has been placed on health promotion and disease prevention efforts targeted toward specific populations of women.

Global Health Issues for Women

Women from countries outside the United States have health needs specific to their cultures and socioeconomic status. In developing countries, the health needs of women are extensive and often differ from the needs of American women. According to *The World Health Report 2004*, a report from the World Health Organization (WHO), 10 factors globally account for more than 40% of the disease burden worldwide⁸ (Table 3.1). Behavioral and environmental risk factors that are major contributors to death and disease worldwide include the following:

- Underweight
- Unsafe sex
- High blood pressure
- Tobacco consumption
- Alcohol consumption
- Unsafe water, sanitation, and hygiene
- Iron deficiency
- Indoor smoke from solid fuels
- High cholesterol
- Obesity

All ages are at risk for **underweight**, but this condition is most prevalent among children younger than five years of age.

Unsafe sex closely follows underweight as a risk factor and is the major factor in the spread of HIV/AIDS. HIV/AIDS is now the world's fourth leading cause of death. More than 19 million women are living with the disease, the majority of whom reside in Africa. In 2002, 2 million women were infected with HIV worldwide and 1.2 million died from AIDS.⁹ AIDS is a devastating disease that is affecting both adults and children and wreaking havoc on already fragile health systems in many of the countries most dramatically affected.

Table 3.1 Leading Causes of Disease Burden for Males and Females Aged 15 Years and Older, 2002

Males	% DALYs	Females	% DALYs
1 HIV/AIDS	7.4	1 Unipolar depressive disorders	8.4
2 Ischemic heart disease	6.8	2 HIV/AIDS	7.2
3 Cerebrovascular disease	5.0	3 Ischemic heart disease	5.3
4 Unipolar depressive disorders	4.8	4 Cerebrovascular disease	5.2
5 Road traffic injuries	4.3	5 Cataracts	3.1
6 Tuberculosis	4.2	6 Hearing loss, adult onset	2.8
7 Alcohol use disorders	3.4	7 Chronic obstructive pulmonary disease	2.7
8 Violence	3.3	8 Tuberculosis	2.6
9 Chronic obstructive pulmonary disease	3.1	9 Osteoarthritis	2.0
10 Hearing loss, adult onset	2.7	10 Diabetes mellitus	1.9

Note: DALYs are disability-adjusted life years, a measure used to calculate the total amount of healthy life lost to a given cause.

Source: *The World Health Report 2004.*

Many of the pharmaceutical treatments for the disease are very expensive and are produced in the United States and other developed countries. Significant debate is currently focusing on how to provide those people in most need with access to these life-saving medicines at reduced costs. Private companies are working with both non-governmental organizations (NGOs) and governments to address the issue. The World Bank defines NGOs as “private organizations that pursue activities to relieve suffering, promote the interests of the poor, protect the environment, provide basic social services, or undertake community development.” In wider usage, the label NGO can be applied to any nonprofit organization that is independent from government, including a large charity, community-based self-help group, research institute, church, professional association, or lobbying group.

Risk factors caused by exposure to harmful substances, such as tobacco, or risk factors influenced by unhealthy eating, such as high blood pressure, high cholesterol, and obesity, affect people throughout the world. The conditions they produce are often considered diseases of excess, though they affect people in low-resource settings as well as their counterparts in wealthy communities. Environmentally caused diseases, such as cholera and tuberculosis, are often caused by people not having access to clean water or regular trash removal, and lack of regulations providing bacteria-free meat and food sources. People in developed countries often take for granted the infrastructures that make these systems available and reliable in their countries. In contrast, many developing countries have no system in place for sanitation and often use the same polluted water sources for bathing, drinking, and washing clothes. Parasitic infections from contaminated water and

food sources are major causes of morbidity and mortality in countries throughout the world. Increasing access to preventive care, vaccinations, safe drinking water, and proper sanitation has been a primary focus of global health initiatives. The World Health Organization and various NGOs have played leadership roles in trying to effect change in countries that do not have adequate resources.

In almost every country in the world, women are the primary caregivers for children and elderly family members. Although family composition varies from culture to culture, women consistently shoulder the burden of reproduction and feeding, clothing, and caring for children and elderly across the world. The health risks associated with motherhood in developing countries are astronomically higher than those experienced by women in more developed countries. Iron deficiency, one of the most prevalent nutrient deficiencies in the world, most severely affects young children and their mothers because of the high iron demands of infant growth and pregnancy. Regular sources of iron, such as meat, fish, and beans, are not often available to families living in developing countries. Indoor smoke from solid fuels also directly affects women in developing countries because they are inside cooking for their families and working in the home far more often than men. In developing countries, about 700 million people—mainly women and children in poor rural areas—inhale harmful smoke from burning wood and other fuels. They are increasingly at risk from acute respiratory infections, especially pneumonia.¹⁰ According to the World Health Organization:

In some communities, inequality of girl children and women is the transcending risk factor that explains the prevalence not only of maternal mortality and morbidity, but also of higher vulnerability of girls to childhood mortality. Risk factors like malnutrition of girl children resulting in anemia, and early marriage resulting in premature pregnancy, can be traced to the fact that women do not enjoy the status and significance in their communities that men enjoy ... Barriers to improving women's health are often rooted in social, economic, cultural, legal and related conditions that transcend health considerations. Social factors, such as lack of literacy and of educational or employment opportunities, deny young women alternatives to early marriage and early child-bearing, and economic and other means of access to contraception. Women's vulnerability to sexual and other abuses, in and out of marriage, increases risks of unsafe pregnancy and motherhood.¹¹

By creating guidelines for prevention and developing health promotion programs, practitioners, policy makers, and healthcare activists are encouraging women both in the United States and abroad to become empowered and knowledgeable healthcare consumers.



- Health risks and concerns change as a woman develops from a child to an adolescent, from a young adult to an older adult.

Stages of Life

Health risks and concerns change as a woman ages during her life span. Certain factors remain constant at any age: good nutrition, regular physical activity, and adequate sleep are essential for health at all stages of life. Healthy living also encom-

passes avoidance of harmful substances, such as tobacco, drugs, and excessive alcohol. Mental health is equally as important as physical health. Maximizing mental health requires recognizing signs and symptoms of mental health threats, such as depression, drug or alcohol abuse, and physical or mental abuse. In addition, healthy sexuality and responsible sexual behavior are important for a woman's overall health. Healthy sexuality is expressed throughout life by exploring one's sexuality in adolescence, establishing long-term intimate relations in adulthood, and maintaining sexual pleasure in the senior years.

Health risks and concerns change as a woman develops from a child to an adolescent, and then from a young adult to an older adult. Aspects of health promotion must be accompanied by methods of disease prevention. The risk of disease often varies throughout life, and, therefore, the methods of prevention differ depending on one's age as well as multiple other factors. Table 3.2 highlights the major primary preventive measures that should be taken throughout one's life span. Nevertheless, the need for one practice remains constant for all women: Women should learn, understand, and listen to their bodies and empower themselves by becoming informed healthcare consumers.

Adolescence

The transition from childhood to adolescence is a time of major change. Adolescence begins with the onset of puberty and continues until the approximate age of 17, when adult physical development is generally realized. During adolescence, a girl is transformed into a woman and begins to form her identity and sense of independence. As girls set off on this journey, they face a host of issues that threaten their physical and mental well-being. It is important for parents to provide guidance and



Adolescence is a time when friends become an important influence in a girl's life.

Table 3.2 Primary Preventive Measures Throughout the Life Span

Avoid alcohol, drugs, and tobacco.
Consume a healthy diet.
Participate in regular physical activity.
Learn appropriate and effective weight-management techniques.
Practice safe behaviors, such as using seat belts, wearing motorcycle and bicycle helmets, not driving under the influence of alcohol, and not riding with someone under the influence of alcohol.
Learn nonviolent measures to achieve conflict resolution.
If engaging in sexual activity, use condoms to reduce the risk of STDs, HIV/AIDS, and pregnancy.
Maintain an overall sense of well-being through stress reduction techniques, relaxation methods, socializing with friends and family, and seeking counseling if needed.
Strive to balance work, school, family, friends, and time for oneself.

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Challenges of Adolescence

Increased independence from parents
 Adjustment to sexual maturation
 Establishment of new and changing relationships with peers
 Decisions regarding educational and career goals
 Developing a sense of self-identity

Threats During Adolescence

Smoking and substance abuse
 Sexually transmitted diseases, including HIV/AIDS
 Pregnancy and decisions regarding keeping the baby or having an abortion
 Unhealthy eating behaviors and poor body image leading to eating disorders
 Unhealthy quest for thinness

Source: Benderly, B. L., for the Institute of Medicine. (1977). *In her own right: The Institute of Medicine's guide to women's health issues*. Washington, DC: National Academy Press.

support during this time and to help their children make appropriate decisions. Adolescents should be encouraged to learn on their own and begin to understand how to take responsibility for oneself and one's actions.

Puberty is a process that encompasses changes in nearly every aspect of development, from physical to intellectual maturation. During this period in life, girls begin to differ in appearance from boys. Secondary sexual characteristics appear, such as widening hips, breast development, height and weight gain, and bodily hair growth. Perspiration and body odor increase, and vaginal discharge creates a new awareness of sexuality for girls. Menstruation, the onset of a woman's reproductive capability, also begins. As these changes occur, adolescents begin to separate from their parents and assume greater independence. Their friends emerge as important factors in their lives, and teens may display rebelliousness. Peer pressure often becomes a strong influence in decisions that teenagers make and may be a factor in their self-esteem and self-perception. Adolescent girls often focus on and define themselves through their relationships with both friends and romantic interests. Their concerns often revolve around popularity, attractiveness, and body weight. They face many challenges as they adjust to their sexual maturation and their increased independence.¹²

Specific Health Concerns for Adolescents

In the United States, the top four causes of death for female adolescents age 15 to 19 are accidents (unintentional injuries), malignant neoplasms, assault (homicide), and intentional self-harm (suicide) (see Table 3.3). Mortality rates for boys in the same age group are more than twice as high as for girls.¹³ Behaviors such as not using seat belts, not wearing motorcycle helmets and bicycle helmets, riding with a driver who has been drinking alcohol, and driving after drinking

Table 3.3 Leading Causes of Death for Females, 2002*

10–14 Years	Rate	15–19 Years	Rate	20–24 Years	Rate
Accidents	5.3	Accidents	21.8	Accidents	18.4
Malignant neoplasms (cancer)	2.2	Malignant neoplasms (cancer)	3.0	Assault	4.6
Congenital and chromosomal abnormalities	1.0	Assault	2.9	Malignant neoplasms (cancer)	4.2
Assault	0.8	Suicide	2.4	Suicide	3.5
Suicide	0.6	Heart disease	1.3	Heart disease	2.1
Heart disease	0.6	Congenital and chromosomal abnormalities	1.0	Congenital and chromosomal abnormalities	1.1
Chronic respiratory disease	0.4	Flu and pneumonia	0.3	HIV	0.6
Flu and pneumonia	0.3	Pregnancy and childbirth	0.3	Pregnancy and childbirth	0.6
Septicemia	0.3	Septicemia	0.3	Cerebrovascular disease	0.5
Cerebrovascular disease	0.3	Diabetes	0.3	Diabetes	0.5

Source: Anderson, R. N., and Smith, B. L. (2004). Deaths: leading causes for 2002. *National Vital Statistics Reports*, vol. 53, no. 17. Hyattsville, MD: National Center for Health Statistics.

*Rates are per 100,000 population in selected group.

alcohol are responsible for many of the injuries that result in death. Homicide is the second leading cause of death for adolescents age 15 to 19 years and the third leading cause of death for adolescents age 10 to 14 years.¹⁴ Current statistics show that guns kill 10 to 12 children (ages 0–19) in the United States every day on average. Two or three of these children take their own lives, and the other deaths are homicides or unintentional injuries. In contrast, in the developing world, major health issues for young people currently focus on infections, diarrheal diseases, and other communicable diseases like tuberculosis.

Although many adolescents display moody behavior and signs of rebelliousness (normal behaviors during the teenage years), this should not be confused with depression, a significant concern during adolescence. As girls reach adolescence, there is a noted increase in the rate of depression and the rate of suicide attempts. At any given time, between 10% and 15% of children and adolescents have some symptoms of depression. After age 15, depression is two times as common in girls and women as in boys and men.¹⁵ Suicide is the third leading cause of death for adolescents aged 15–19 years and the fourth leading cause of death for younger adolescents.¹⁶ In the Youth Risk Behavior Surveillance survey, 19% of students had seriously considered attempting suicide and 8.8% of students had attempted suicide. Of the students surveyed, girls were more likely than boys to have considered attempting suicide (23.6% versus 14.2%) and more likely to actually attempt suicide (11.5% versus 5.4%).¹⁶

Trying new behaviors is a key aspect of the period of adolescence and is essential for healthy development; however, risky behaviors may lead to negative health consequences. Sexual experimentation is one example of a behavior that has potentially life-altering consequences. Sexual relations often occur before adolescents have gained experience and skills in self-protection, before they have acquired adequate information about STDs, and before they have access to health services and supplies (such as condoms). This problem is often amplified in developing countries, where girls typically have even less access to health care and information. Each year, approximately 1 million teenagers become pregnant, though teen pregnancy rates have been steadily dropping for much of the 1990s and into the 2000s.¹⁷ According to the National Center for Health Statistics, increased condom use, the adoption of the effective injectable and implantable contraceptives, and the leveling off of teen sexual activity are some of the factors believed to be driving this downturn in teen pregnancies.

Despite these positive trends, only 57.9% of students who were currently sexually active reported that they had used a condom during their last act of sexual intercourse,¹⁶ putting themselves at risk for various STDs, including HIV infection. Approximately 3 million cases of STDs occur annually among teenagers.¹⁸ HIV infection is the seventh leading cause of death among persons age 15 to 24 years in the United States, but its incidence varies greatly among races. Chlamydia infection during adolescence is more likely to result in pelvic inflammatory disease and, as a consequence, lead to infertility.

Globally, more than half of all new HIV infections affect members of the 15–24 age group. According to UNAIDS, “7,000 girls and women become infected with

It's Your Health



Tattoos

The following advice has been prepared by professional tattooists working with local, state, and national health authorities.

1. Always insist that *you* see your tattooist remove a new needle and tube set-up from a sealed envelope immediately prior to your tattoo.
2. Be certain that *you* see your tattooist pour a new ink supply into a new disposable container.
3. Make sure your artist puts on a new pair of disposable gloves before setting up tubes, needles, and ink supplies.
4. Satisfy yourself that the shop furnishings and tattooist are clean and orderly in appearance—much like a *medical facility*.
5. Feel free to question the tattooist about any of his or her sterile procedures and isolation techniques. Take time to observe the tattooist at work and do not hesitate to inquire about his or her *experience and qualifications* in the tattoo field.
6. If the tattooist is a qualified professional, he or she will have no problem complying with standards above and beyond these simple guidelines.
7. If the artist or studio does not appear up to these standards or if the person becomes evasive when questioned, seek out a different professional tattooist.

Source: Alliance of Professional Tattooists, www.safe-tattoos.com. Reprinted with permission.

HIV every day. In South Africa, Zambia, and Zimbabwe, young women (aged 15–24) are 5 to 6 times more likely to be infected than young men of the same age.¹⁹ In one study in Zambia, more than 12% of the 15- and 16-year-olds seen at antenatal clinics were already infected with HIV. Girls appear to be especially vulnerable to infection. Although statistics from Uganda show that, in some areas, infection rates among teenage girls have dropped 50% since 1990, incidence rates are still six times higher in these girls than in boys of the same age.²⁰

Substance use is another risky behavior with which some adolescents begin to experiment. Alcohol and drug use are detrimental activities on their own (see Chapter 13), but they also lead to other situations that may compromise one's health. According to the Youth Risk Behavior Surveillance Survey (YRBS), more than 13% of high school students reported having driven a vehicle after drinking alcohol, and more than 30% have ridden with a driver who had been drinking.¹⁶ Alcohol and drug use also can lead to unsafe sex. Another harmful behavior that can cause illness later in life is smoking. Most adults who smoke regularly began the habit as adolescents and consequently are at greatest risk of diseases attributed to smoking. According to the YRBS, 40% of students in grades 9–12 reported having tried cigarettes and 35% were engaging in current cigarette use.¹⁶

Recently there has been a dramatic increase in overweight and obesity among adolescents (Figure 3.4). Obese children are at risk for type 2 diabetes, low self-esteem, and many other adverse health outcomes. According to the Youth Risk Behavioral Survey 2003, 43.8% of students in the United States are trying to lose weight.

Other behaviors that have become popular with adolescents are tattooing and piercing. These activities hold inherent risks of infection and have been associated with more serious complications. Increasingly, people are choosing to have body parts such as the lips, eyebrows, septums, or genitalia pierced, in addition to the more standard ear piercing. These piercings increase risks of infections, scarring, and nerve damage. Individuals can minimize the risks associated with these behaviors by choosing experienced professionals who uphold high safety and cleanliness standards. For more information, individuals can contact organizations like the Association of Professional Piercers and the Alliance of Professional Tattooists, which have created tattoo, piercing, and jewelry guidelines. In many cases, primary care physicians have ear-piercing kits and can perform the service in the safety of a clinical setting. To further ensure safety, anyone getting either a piercing or a tattoo should be fully sober.

Preventive Behaviors

Many of the common health risks and challenges facing adolescents are linked to the health-related behaviors that adolescents choose to adopt. These damaging behaviors include smoking, alcohol and drug use, unhealthy dietary behaviors,

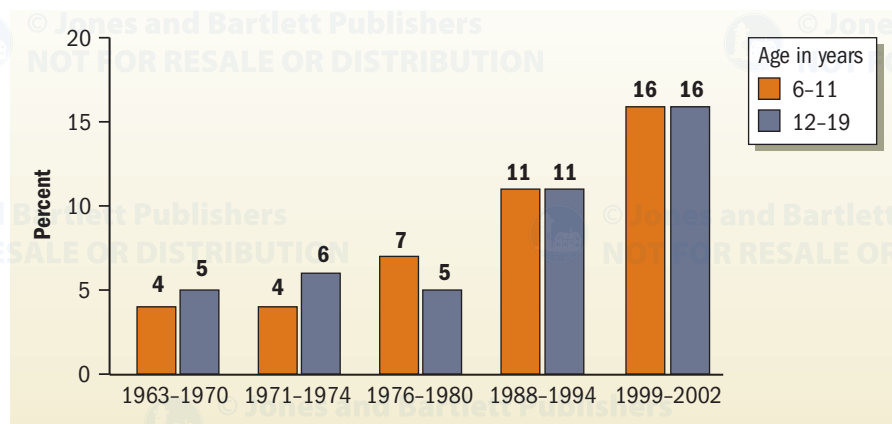


Figure 3.4

Prevalence of overweight among children and adolescents ages 6-19 years.

Results from 1999-2002 National Health and Nutrition Examination Survey (NHANES), using measured heights and weights, indicate that 16% of children and adolescents ages 6-19 years are overweight. This represents a 45% increase from the overweight estimates of 11% obtained from NHANES III (1988-1994).

Note: Excludes pregnant women starting with 1971-1974. Pregnancy status not available for 1963-1965 and 1966-1970. Data for 1963-1965 are for children 6-11 years of age; data for 1966-1970 are for adolescents 12-17 years of age, not 12-19 years.

Source: CDC/NCHS, NHES, and NHANES.

It's Your Health



Piercing

These guidelines will help you pick your piercer and piercing studio and can aid you in having a safe piercing experience.

1. *Does the studio seem clean?* A good studio should have five separate areas: counter, waiting room, piercing room, bathroom, and enclosed sterilization room. All areas should be immaculate and staff should be neat and clean.
2. *Ask to see the autoclave (steam sterilizer) and spore tests. This is essential.* “Dry heat” and/or chemical soaks are NOT considered adequate for sterilization. A spore test, run regularly, is the only way to know whether the autoclave is working properly.
3. *Does the shop reuse or resterilize needles?* All needles should be sterile, single use and individually packaged, and should be opened while you are present. Make sure your piercer has an approved sharps container and uses it.
4. *See the piercing rooms and set-up.* Ask if you can watch the piercer set up for a piercing. During preparation, the piercer should first wash and glove his or her hands. The equipment should be sealed in individual sterilized packages and placed on a tray. The piercer should change gloves if he or she touches anything in the room other than you and the sterile equipment. If you are not satisfied with the set-up, walk away!
5. *Is the studio using ear-piercing guns?* A number of states have made it illegal to use a gun for body piercings, and with good reason. Most ear guns cannot be sterilized in an autoclave and therefore don't meet the criteria for APP piercers' use of sterile disposable equipment.
6. *Check the studio's jewelry selection.* When referring to size of jewelry, two measurements apply. The width (of a ring) or length (of a bar) is called the “diameter” of the jewelry. The thickness of the jewelry is the “gauge.” The smaller the gauge number, the thicker the jewelry. As a general rule, jewelry no thinner than 14 gauge should be used below the neck. Jewelry for initial piercings should be made of material that will not react with the body: implant grade stainless steel and titanium; gold (14K or higher); or platinum. Earring studs should never be used for anything other than earlobes.
7. *Ask questions of the staff and the piercer.* When responding to questions, do they seem knowledgeable? Ask the piercer how long he or she has been piercing and how the piercer learned the trade. Make sure the piercer is well informed. Look at his or her piercings and peruse the piercing photo portfolio. Do you like what you see? If not, leave.
8. *Does the studio have an after-care sheet?* All professional studios should give you an after-care sheet explaining how to take care of your piercing. Read this sheet BEFORE you have the piercing done! If it tells you to clean your piercing with harsh soap, ointment, alcohol or hydrogen peroxide, the studio is not keeping up with the industry standards.
9. *Ask your friends where they got pierced.* Does their piercing look like a piercing you would want? Did they have any problems or infection during healing? Was the staff at the piercing studio able to help them if they had any complications? Would they get pierced there again?
10. *Listen to your instincts.* If you don't feel comfortable with the studio or the piercer, don't get your piercing done by them. Don't feel embarrassed; just leave.
11. *Does the studio have a license to operate?* Many cities and states require that studios and piercers be licensed. In most cases, the license means that the studio meets minimum requirements and has passed some sort of inspection. To find out if your area has established standards and inspections, call your local health department.
12. *Is the piercer recognized by the APP?* Members of the Association of Professional Piercers agree to uphold minimum standards of cleanliness and jewelry quality set forth by the membership of the organization. All APP members will have a membership certificate, usually hanging on the studio wall. It will have an expiration date on it; make sure it is current.

Source: The Association of Professional Piercers, www.safepiercing.org. 2006. Reprinted with permission.

inadequate physical activity, and risky sexual behaviors. Many of them contribute to today's major killers, such as heart disease, cancer, and injuries.

Two especially important aspects of health promotion for adolescents are regular physical activity and good nutrition. There are numerous benefits of regular physical activity, as discussed in Chapter 9. According to the CDC, in 2001, 31%

of high school students did not engage in vigorous physical activity on a regular basis.²¹ More than 84% of young people eat too much fat, and more than 91% eat too much saturated fat. Only one in five young people eats the recommended five daily servings of fruits and vegetables. Fifty-one percent of children and adolescents eat less than one daily serving of fruit, and 29% eat less than one daily serving of vegetables that are not fried.²² In the United States, almost half of high school students are trying to lose weight (43.8%), with girls' rates being almost twice that of boys (59.3% versus 29.1%).²³

Although all of the essential nutrients are important for good health, the mineral calcium is especially important for young girls. Girls need to consume adequate amounts of calcium to develop good bone health and protect themselves from osteoporosis in their later years. Unfortunately, many adolescent girls become concerned about their widening hips and weight gain, and consequently they follow diets that lack sufficient nutrients. The average calcium intake of adolescent girls is about 800 mg per day, considerably less than the Recommended Dietary Allowance for adolescents of 1,200 mg per day.²⁴ Even more devastating are the numbers of teenage girls who develop eating disorders as a result of poor body image, unhealthy eating habits, and dangerous purging behaviors (discussed further in Chapters 9 and 12).

Heavy sun exposure during early life has been strongly correlated with an increased lifetime incidence of both **melanoma** and **nonmelanoma** skin cancers. Tanned skin remains fashionable, however, and most teenagers continue to regularly visit beaches or tanning salons. A recent major study of more than 10,000 young people found that sunscreen use was low (about 35%), but was likely to be higher among girls than boys. At least one sunburn during the previous summer was reported in 83% of survey respondents, and three or more sunburns were reported in 36% of survey respondents. About one-tenth of teenagers indicated use of tanning beds. This use was mostly among girls and increased in prevalence as the girls approached age 18.²⁵

Generally, adolescence is a period of good health; however, millions of teens suffer from the special health concerns for adolescents mentioned above. The cognitive development occurring during adolescence assists many teenagers in considering the future and understanding the consequences of their present behaviors on their future health. Therefore, it is an excellent time for healthcare providers to provide parents with guidance for encouraging health promotion in their children and to offer adolescents a sense of self-empowerment by encouraging them to make healthy and sensible choices (Table 3.4).

Young Adulthood

As adolescents become adults, they generally become independent of their parents and gain rights that were not afforded to them as children. The age of adulthood is often confusing considering that one can vote and can enlist in the military service at the age of 18, yet cannot legally drink alcohol until age 21. Postsecondary school and the high financial burdens associated with advanced education keep many people dependent on their parents well into their twenties. Nevertheless, as



Many young women avoid routine health examinations.

Table 3.4 Secondary Preventive Measures for Adolescents

<p>Pap test three years after onset of sexual activity or by age 21.</p> <p>Annual STD screening for sexually active adolescents.</p> <p>HIV screening for high-risk adolescents with their consent.</p> <p>Annual preventive services visit to screen for depression, risk of suicide, abuse (emotional, physical, and sexual), eating disorders, learning or school problems, and drug use.</p> <p>Physical exam recommended at least once between ages 11 and 14, once between 15 and 17, and once between 18 and 21.</p> <p>Annual screening for high blood pressure, cholesterol (if risk factors are present), and tuberculin test (PPD) if risk factors are present.</p> <p>Annual screening for anemia if any of the following risk factors are present: heavy menstruation, chronic weight loss, nutritional deficit, or excessive athletic activity.</p>
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a woman ages, her increased independence and inevitable increase in age bring new health challenges and risks.

For some women, the first stage of young adulthood occurs in college. College can be an extension of adolescence in the sense that many women continue to experiment with new behaviors and explore their sense of self. Other women begin to turn their focus toward choosing a career path. Some find that the freedom of being away from home allows them to engage in behaviors that were not permitted in high school. Young women experience many of the same health threats that affected them as adolescents, including drug and alcohol use, smoking, violence (such as date rape), risky sexual behaviors, poor nutrition, and lack of exercise. For those women who graduate from high school and then directly enter the workforce or begin parenting, as well as for women after graduation from college, different health challenges await.

Specific Health Concerns for Young Adults

Until the age of 24, unintentional injuries, homicide, malignant neoplasms (cancer), suicide, and diseases of the heart are the five leading causes of death for females, in that order. For women ages 25 to 44, cancer tops the list of causes of death, diseases of the heart moves up to third, and HIV is fourth for females of all races.²⁶ The top causes of death vary significantly by race, however, as seen in Table 3.5. **Chronic diseases**, in contrast to **acute diseases**, are diseases or conditions that are not short-lived. They generally last longer than several weeks and often persist for the remainder of a person's life. Although chronic diseases are generally thought of as afflictions of the elderly, the reality is that they are not limited to any age group. Chronic diseases that affect young adults include cancer, cardiovascular disease, diabetes, and **autoimmune diseases**. Autoimmune diseases that primarily affect women include lupus and multiple sclerosis (MS).

In developing countries, young adult women are at high risk from reproductive health-related disease and infectious disease. The top causes of death for young adult women in developing countries in this age group are six infectious diseases:

Table 3.5 Leading Causes of Death in White, Black, and Hispanic Females, Age 25–44

White Females, 25–34	Black Females, 25–34	Hispanic Females, 25–34
1. Unintentional injuries	1. HIV	1. Unintentional injuries
2. Malignant neoplasms	2. Unintentional injuries	2. Malignant neoplasms
3. Suicide	3. Heart disease	3. Assault
4. Heart disease	4. Malignant neoplasms	4. HIV
5. Assault	5. Assault	5. Heart disease
6. HIV	6. Diabetes	6. Suicide
7. Cerebrovascular disease	7. Cerebrovascular disease	7. Cerebrovascular disease
8. Congenital anomalies	8. Suicide	8. Pregnancy and childbirth
9. Diabetes	9. Anemias	9. Influenza and pneumonia
10. Influenza and pneumonia	10. Pregnancy and childbirth	10. Congenital anomalies
White Females, 35–44	Black Females, 35–44	Hispanic Females, 35–44
1. Malignant neoplasms	1. Malignant neoplasms	1. Malignant neoplasms
2. Unintentional injuries	2. Heart disease	2. Unintentional injuries
3. Heart disease	3. HIV	3. Heart disease
4. Suicide	4. Unintentional injuries	4. HIV
5. Chronic liver disease and cirrhosis	5. Cerebrovascular disease	5. Cerebrovascular disease
6. Cerebrovascular disease	6. Assault	6. Chronic liver disease and cirrhosis
7. Diabetes	7. Diabetes	7. Assault
8. Assault	8. Chronic liver disease and cirrhosis	8. Suicide
9. HIV	9. Septicemia	9. Diabetes
10. Chronic lower respiratory diseases	10. Chronic lower respiratory diseases	10. Septicemia

Source: Anderson, R. N. (2002). Deaths: leading causes for 2000. *National Vital Statistics Reports*, vol. 50, no. 16. Hyattsville, MD: National Center for Health Statistics.

- Pneumonia
- Tuberculosis
- Diarrheal diseases
- Malaria
- Measles
- HIV/AIDS

Young adulthood can be rewarding as well as stressful. During this time, many women are developing or seeking long-term intimate relationships. They may be starting a family and having children. Women may be defining their career path, developing within their career, or still searching for the right career. Many women face obstacles along the way, such as lack of adequate child care and the juggling of family and work responsibilities. Women with disabilities may encounter new



■ Women with disabilities will face many challenges as they enter adulthood and the working world.

challenges as they enter the workforce, including discrimination from employers and employees, lack of accessibility throughout the workplace, and adjustment to new tasks. Some women find it difficult to cope as their friends transition into different stages of life while they feel as if they are standing still. Managing stress and maintaining emotional well-being are important for achieving a healthy perspective.

While women and men report similar levels of stress, causes of stress and coping mechanisms often differ between women and men. A recent study of 1,600 Americans, called *The Tension Tracker 2002*, found that women are more apt to attribute stress to family and health issues than are men. Most women surveyed (52%) were personally concerned about the effect of stress on their health and 30% (versus 24% of men) said that they found it “very challenging” to manage the stress and tension they confront. Men were more likely than women to report watching more television (42% versus 36%) and drinking alcohol (29% versus 18%) as a way of dealing with the stress in their lives. Women report either increased eating of “comfort foods” or decreased contact with the stressor as common strategies of coping.²⁷

Alcohol and drug abuse affect the lives of many young women, including women who have children. An estimated 6 million children younger than 18 years of age have a parent who has used illicit drugs in the past month. Marijuana is the drug used most often by parents. Heavy drinking, defined as consumption of five or more drinks at one time on at least three occasions in the past 30 days, was reported by 5.2 million parents (3% of mothers and 14% of fathers).²⁸

Young women deal with a host of health-related issues associated with dating and sexual relationships, including sexual violence, STDs, and pregnancy. Consider these statistics:

- Almost 18% of the women in the United States have been the victim of rape or attempted rape that occurred at some point during their lives.
- In college, one in four female students is a rape survivor; experts estimate about 60% of the victims in reported rapes know their assailant.
- Of the estimated 333 million new cases of STDs that occur in the world every year, at least 111 million occur in young people under 25 years of age.
- According to Planned Parenthood International, nearly 4 in 10 pregnancies are unplanned.
- The WHO estimates that between 8 and 30 million unplanned pregnancies result from inconsistent or incorrect use of contraceptive methods, or from method-related failure.

Women who desire to have children may find themselves facing fertility problems or other complications regarding pregnancy or childbearing. Infertility leads to a host of other issues, including physical and emotional stress, financial burdens, and the anxiety and discomfort that often accompany fertility tests and treatment (see Chapter 6). Women with disabilities may face attitudinal barriers from health-care providers as well as friends and family members who feel they should not have

children. Lesbians who want to have children may run into opposition while they explore options for sperm donors or adoption agencies.

Preventive Behaviors

Because many chronic diseases can be prevented at least partially by behavioral changes, it is important for a young woman to continue following a healthful diet, participate in regular physical activity, avoid smoking and drug abuse, and moderate her intake of alcohol. Secondary preventive measures, such as screenings for cancer, Pap and HPV tests, and blood pressure screenings, are essential during this time as well (see **It's Your Health**).

As in all stages of life, positive mental well-being is essential for a young woman's overall health. Finding ways to cope with stress and addressing any mental health issues will help to establish a more balanced sense of well-being. Physical activity, healthy relationships with an intimate partner as well as close friends, and participation in enjoyable activities are all effective ways of reducing stress.

Young adulthood is often a time when women are meeting and dating new people as they try to establish long-term intimate relationships. As such, they must face the extremely difficult challenge of not putting themselves in risky situations, while simultaneously living their lives as independent and open individuals. It is not healthy for women to consider themselves victims or targets for violence at all times, but education about how to avoid compromising situations and how to fight off an attack if it should occur can help women to maintain their independence and peace of mind while dating.

During this period of life, some women may have multiple sexual partners or be sexually involved with someone who has multiple partners. These women are at high risk for contracting STDs if they do not protect themselves by using barrier contraception methods. Most sexually transmitted infections, such as chlamydia and gonorrhea, can cause irritating and often painful symptoms immediately and cause harmful downstream health issues. (See Chapter 7.)

In addition, many women in their twenties and thirties experience pregnancy for the first time. Roughly half of all pregnancies are unplanned, causing a host of anxieties and choices for many women. Whether in a relationship or dealing with a pregnancy on her own, an unplanned pregnancy can be an enormously stressful experience. Seeking advice and counseling from friends, family, healthcare providers, and knowledgeable reproductive health agencies can assist women with their decision-making process.

For a woman who is planning to become pregnant, proper nutrition and consumption of essential vitamins and minerals like folic acid serve as important measures to prevent birth defects. For a woman who is sexually active and does not want to become pregnant, effective birth control becomes a very important preventive health behavior. Other lifestyle choices become significant preventive health choices as well, such as wearing sunblock, reducing unnecessary stress, and making sure that routine medical appointments are made. In the case of skin cancers, routine visits to the dermatologist or primary care physician for full body checks



Physical activity is important for both physical and mental well-being.

It's Your Health

Preventive Services Throughout a Woman's Life

Mammograms. Have a mammogram every one to two years starting at age 40.

Cervical cancer screening. Have a Pap test every one to three years if you have been sexually active or are older than 21. If you are 30 or older, you can have a Pap test and HPV test together.

Cholesterol checks. Have your cholesterol checked regularly starting at age 45. If you smoke, if you have diabetes, or if heart disease runs in your family, start having your cholesterol checked at age 20.

Blood pressure. Have your blood pressure checked at least every two years.

Colorectal cancer tests. Have a test for colorectal cancer starting at age 50. Your doctor can help you decide which test is right for you. If you have a family member who has had colon cancer, you should begin screening earlier and should consult your doctor.

Diabetes tests. Have a test to screen for diabetes if you have high blood pressure or high cholesterol.

Depression. If you've felt "down," sad, or hopeless, and have felt little interest or pleasure in doing things for two weeks straight, talk to your doctor about whether he or she can screen you for depression.

Osteoporosis tests. Have a bone density test at age 65 to screen for osteoporosis (thinning of the bones). If you are between the ages of 60 and 64 and weigh 154 pounds or less, talk to your doctor about whether you should be tested.

Chlamydia tests and tests for other sexually transmitted diseases. Have a test for chlamydia if you are 25 or younger and sexually active. If you are older, talk to your doctor to see whether you should be tested. Also, talk to your doctor to see whether you should be tested for other sexually transmitted diseases.

Immunizations. Stay up-to-date with your immunizations:

- Have a flu shot every year if available.
- Have a tetanus-diphtheria shot every 10 years.
- Talk to your doctor about whether you need hepatitis B shots.

Don't smoke. If you do smoke, talk to your doctor about quitting. You can take medicine and get counseling to help you quit. Make a plan and set a quit date. Tell your family, friends, and co-workers you are quitting. Ask for their support. If you are pregnant and smoke, quitting now will help both you and your baby.

Eat a healthy diet. Eat a variety of foods, including fruits, vegetables, animal or vegetable protein (such as meat, fish, chicken, eggs, beans, lentils, tofu, or tempeh), and grains (such as rice). Limit the amount of saturated fat you eat.

Be physically active. Walk, dance, ride a bike, rake leaves, or do any other physical activity you enjoy. Start small and work up to a total of 20–30 minutes most days of the week.

Stay at a healthy weight. Balance the number of calories you eat with the number you burn off by your activities. Remember to watch portion sizes. Talk to your doctor if you have questions about what or how much to eat.

Drink alcohol only in moderation. If you drink alcohol, one drink a day is safe for women, unless you are pregnant. If you are pregnant, you should avoid alcohol completely. Because researchers don't know how much alcohol will harm a fetus, it's best not to drink any alcohol while you are pregnant.

Source: *Preventive Services.* AHRQ Publication No. APPI03-0008. Current as of January 2004.



Many women no longer choose to begin their families in their twenties.

are important for all women, but vital for women with fair skin or a family history of skin cancer.

Midlife

As women move into their forties, many have completed their families and either remain at home or continue working outside of the home. Some have established productive careers, whereas others struggle to find and maintain a job with decent wages, advancement opportunities, and a satisfactory work environment. Women in this stage of life are often busy raising children, possibly caring for elderly parents, and working to keep their relationships healthy. As they reach their fifties and sixties, many must deal with the mortality of their parents as well as their own aging. Some may be fearful of getting older, whereas others are looking forward to retirement. A scenario that is becoming more common is the raising of grandchildren by grandparents, often women in their fifties and sixties. The parents of these children, for various reasons, have left the responsibility of childrearing with the grandparent, creating a different dimension of aging for these women.

Thanks to trends toward increasing physical fitness and greater access to effective medical treatment, many women discover midlife to be an ideal time to focus on themselves. They realize some of the benefits of the healthier lifestyles they have adopted over the past 20 years and consequently find their retirement years to be filled with physical activity, travel, healthy sexuality, and relaxation.

Specific Health Concerns for Women During Midlife

Between the ages of 45 and 64, the top five causes of death for women are chronic diseases. Cancer, heart disease, cerebrovascular disease, chronic obstructive pulmonary disease, and diabetes are all conditions that benefit from behavioral changes (Table 3.6). In developing countries, the leading causes of death for women in this age group are a mix of infectious diseases, diseases of the reproductive system, and chronic diseases. Chronic diseases such as cancer and heart disease are

increasingly dominant causes of death for women in this age group in developing countries as well.

Menopause, the cessation of the menstrual cycle, is a significant transition for women during their midlife years (see Chapter 8). For some women, menopause is a welcome change, eliminating their menstrual cycle and the need for contraception. Other women experience numerous health concerns associated with menopause and have difficulty finding an effective therapy. Women entering menopause today are encountering more confusion than in the past due to recent controversy surrounding hormone replacement therapy (HRT), which has limited the medical options for dealing with the distressing side effects of menopause. Women in perimenopause may find themselves experiencing discomfort during sex or lack of libido.

As women live longer and many postpone marriage, some are finding themselves sandwiched between the demands of their children and their parents. Due

Table 3.6 Leading Causes of Death in White, Black, and Hispanic Women, Age 45–64

White Females, 45–54	Black Females, 45–54	Hispanic Females, 45–54
1. Malignant neoplasms	1. Malignant neoplasms	1. Malignant neoplasms
2. Heart disease	2. Heart disease	2. Heart disease
3. Unintentional injuries	3. Cerebrovascular disease	3. Unintentional injuries
4. Cerebrovascular disease	4. Diabetes	4. Diabetes
5. Diabetes	5. HIV	5. Cerebrovascular disease
6. Chronic liver disease and cirrhosis	6. Unintentional injuries	6. Chronic liver disease and cirrhosis
7. Chronic lower respiratory diseases	7. Chronic lower respiratory diseases	7. HIV
8. Suicide	8. Chronic liver disease and cirrhosis	8. Viral hepatitis
9. Influenza and pneumonia	9. Nephritis	9. Assault
10. Septicemia	10. Septicemia	10. Chronic lower respiratory diseases
White Females, 55–64	Black Females, 55–64	Hispanic Females, 55–64
1. Malignant neoplasms	1. Malignant neoplasms	1. Malignant neoplasms
2. Heart disease	2. Heart disease	2. Heart disease
3. Chronic lower respiratory diseases	3. Diabetes	3. Diabetes
4. Cerebrovascular disease	4. Cerebrovascular disease	4. Cerebrovascular disease
5. Diabetes	5. Nephritis	5. Chronic liver disease and cirrhosis
6. Unintentional injuries	6. Chronic lower respiratory diseases	6. Unintentional injuries
7. Chronic liver disease and cirrhosis	7. Septicemia	7. Nephritis
8. Septicemia	8. Hypertension and hypertensive renal disease	8. Chronic lower respiratory diseases
9. Influenza and pneumonia	9. Unintentional injuries	9. Influenza and pneumonia
10. Nephritis	10. Chronic liver disease and cirrhosis	10. Septicemia

Source: Anderson, R. N. (2002). Deaths: leading causes for 2000. *National Vital Statistics Reports*, vol. 50, no. 16. Hyattsville, MD: National Center for Health Statistics.



Significant controversy and confusion remain over the use of hormone replacement therapy and dietary supplements for perimenopause and menopause.

to difficult economic times, more children are living at home to attend college, and an increasing number of adult children are returning home after a divorce or loss of job. These “boomerang” children are changing the dynamics of life for many women in their middle years who assumed their children would grow up, leave home, and live as independent, self-supporting adults. Instead, many women must deal with a child at home again precisely at the time when their caregiver roles increase for their own parents.

Preventive Behaviors

Healthful eating, regular physical activity, and avoidance of smoking are all primary preventive measures that should be continued through all stages of life. As a woman ages, secondary preventive measures, such as mammograms and colonoscopies, become extremely important to ensure early detection of disease and, consequently, timely treatment. Methods of prevention are listed in Table 3.7.

As in other stages of life, maintaining mental wellness is of significant importance in midlife. Women who are caregivers for children, elderly relatives, or both often find themselves suffering from severe stress, depression, and anxiety. Many of these women may see the effects spill over from their home life into their work life. Finding support groups, seeking professional help, and establishing time to take care of oneself are effective means for improving the mental health of many women.

Discussing options with a healthcare provider can help improve sexual functioning and desire, if necessary. Many women may still require contraception for preventing pregnancy or STDs if they are not in a mutually monogamous relationship.

The Senior Years

There is significant growth in the elderly population, with women constituting a large sector of the senior population. During the twentieth century, advances

It's Your Health**Contributors to Improved Life Expectancy for Women**

Identification, treatment, eradication, and control of some infectious and parasitic diseases.

Better prenatal and antenatal care.

More efficient, effective methods for assisting childbirth.

Greater awareness, identification, and control of threats to health and ways to promote and maximize health.

Improved protection from environmental and workplace toxins and hazards.

Table 3.7 Secondary Preventive Measures for Women During Midlife

Annual screening for high blood pressure.

Periodic height and weight measurement to monitor for overweight and obesity.

Clinical breast examinations yearly.

Periodic screening for high cholesterol levels, at least once every five years.

Behavioral assessment to detect depression and other problems.

Annual fecal occult blood test plus sigmoidoscopy every five years or colonoscopy every 10 years or barium enema every 5–10 years; a digital rectal examination should also be performed at the time of screening—for adults age 40 years and older with a family history of colorectal cancer and all adults age 50 years and older.

Annual mammography for women at high risk beginning at age 35 and for all women after age 50. Some authorities recommend screening mammograms every one to two years for women 40 to 49 years of age.

Annual Pap test or HPV test; after three or more consecutive normal exams, the Pap test may be performed less frequently in low-risk women at the discretion of the patient and clinician.

Counseling about the benefits and risks of postmenopausal hormone replacement therapy.

Bone density measurements for women at risk of osteoporosis.



■ Living a healthy life from childhood on may lead to fulfilling and enjoyable senior years.

in research, medicine, and public health had a significant positive impact on life expectancy in the United States. In 1900, the average life expectancy at birth for women was 48.3 years. By 2002, it had increased to 79.9 years, compared with 74.5 years for men (Figure 3.5).²⁹ Life expectancy also has increased for women at age 65 and 85. On average, women who live to age 65 can expect to live to age 84.5; those who live to 85 can anticipate living to age 92.³ The increase in life expectancy at these ages is partly due to decreased mortality rates, specifically from heart disease and stroke. Despite decreases in mortality rates, heart disease remains the number one killer of women in the United States for women age 65 and older (Figure 3.6).

Life expectancy also varies by race. In 2000, life expectancy at birth was five years longer on average for white women than for black women. These differences become less extreme as women age, however. By age 65, white women live an average of 1.8 years longer than black women; by age 85, life expectancy for black women is nearly equal that for white women; and by age 90, life expectancy for black women is actually higher than that for white women.²⁹ By 2030, one in four American women will be older than 65.² The population over the age of 85 is growing especially quickly and is projected to more than double from nearly 4 million in 1995 to more than 8 million in 2030. In 2050, an estimated 18 million people over the age of 85 will live in the United States, accounting for 4.6% of the U.S. population. The aging of the population presents a unique challenge to society in general and healthcare practitioners in particular, as it creates yet another facet of diversity within the population of women.

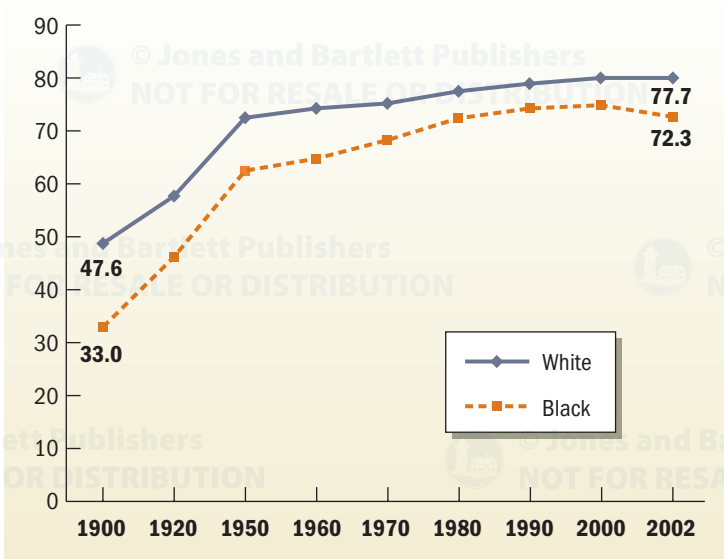


Figure 3.5

Life expectancy for black women and white women, 1900–2002.

Source: National Center for Health Statistics. (2004). *Health, United States 2004 with Chartbook on Trends in the Health of Americans*. Hyattsville, MD.

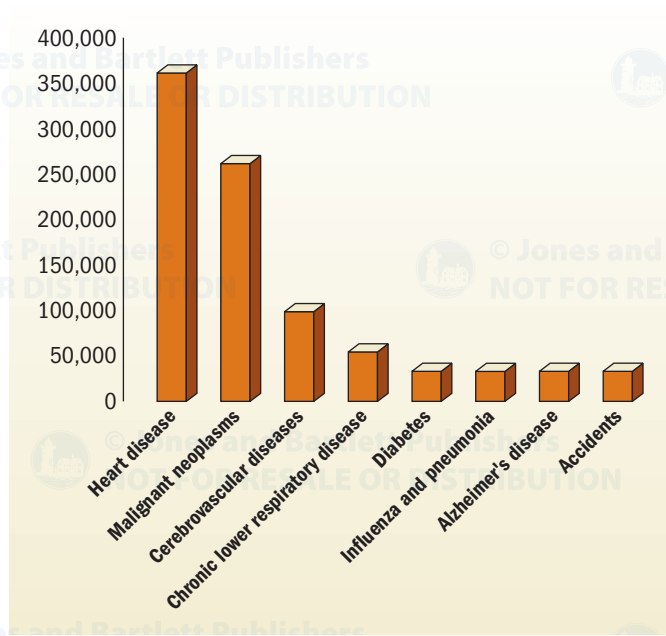


Figure 3.6

Leading causes of death in women in the United States, 2002.

Source: Anderson, R.N. (2002). Deaths: leading causes for 2000. *National Vital Statistics Reports*, vol. 50, no. 16. Hyattsville, MD: National Center for Health Statistics.

Specific Health Concerns During the Senior Years

The years after age 65 represent a wide spectrum of health issues. Many women remain healthy into their nineties and beyond. Other women find themselves struggling with continual health issues as they age. From the age of 65 on, chronic diseases are the leading cause of death for women in the United States.³ For women age 65–74, the five leading causes of death are malignant **neoplasms**, heart disease, chronic lower respiratory diseases, cerebrovascular disease, and diabetes. For women age 75–84, heart disease moves up to number one as the leading cause of death. For women age 85 and older, heart disease remains the number one killer, but Alzheimer's disease and influenza and pneumonia move into the top five causes of death, surpassing chronic lower respiratory diseases and diabetes. Chronic obstructive lung disease, largely caused by tobacco use or exposure, is a leading cause of death and disability worldwide.

Diseases such as osteoporosis and arthritis may also create difficulty for women in maintaining their independence. Fall-related fractures are a major concern for anyone, but they can be extremely detrimental to a woman whose bone health is suffering (see Chapter 11). Arthritis can make it difficult for a woman to perform daily activities, such as opening jars, lifting objects, bending to pick up an item that has fallen, or lifting herself from the toilet seat. A woman also may begin having problems with vision or hearing, creating new challenges in performing everyday tasks and maintaining independent living.

A major health concern related to aging is the side effects or drug interaction effects that can occur when women take multiple drugs, often for multiple conditions. Healthcare providers are not always aware of harmful drug interactions, and women may find themselves being given additional medications to treat side effects caused by their original medications. Harmful effects of drug interaction may include, but are not limited to, abnormal heart rate and/or rhythm, depression, dizziness and imbalance, constipation, blood pressure increase, and confusion.

The loss of a spouse may factor into a woman's well-being as she ages, too. The number of women who are widowed doubles after the age of 65. Learning to cope with grief and loss is essential for physical and mental well-being. Maintaining independence and fostering social relationships may help women deal with feelings of grief, sadness, and loneliness.

Diagnosable depression, however, is not the same as sadness, grief, or the emotional effects of loss. Depression is a significant health concern for aging women and may result from medication interactions, chronic disease, pain, or loneliness; it should not be viewed as a normal part of aging. An estimated 6% of Americans age 65 and older suffer from diagnosable depression in any given year. Older adults also are disproportionately more likely to commit suicide; although adults age 65 and older make up only 13% of the U.S. population, they accounted for 19% of all suicides in 1997.

Today, women most frequently bear the responsibility of caring for their parents or loved ones when they need help. Women account for more than 80% of the family caregivers for chronically ill elders, and 73% of these women caregivers are



■ A major health concern related to aging is the side effects of taking multiple drugs.

It's Your Health

Evaluating Health Information on the Web

1. Who runs the site?

Any good health-related Web site should make it easy for you to learn who is responsible for the site and its information. Web addresses ending in “.gov” denote a federal government-sponsored site; “.edu” is for educational institutions; “.org” was once limited to nonprofit organizations but now may be used by commercial Web sites.

2. Who pays for the site?

It costs money to run a Web site. The source of a site's funding should be clearly stated or readily apparent. Does it sell advertising? Is it sponsored by a drug company? The source of funding can affect what content is presented, how the content is presented, and what the site owners want to accomplish on the site.

3. What is the purpose of the site?

Check the “About This Site” link, which appears on many sites. The purpose of the site should be clearly stated and should help you evaluate the trustworthiness of the information.

4. Where does the information come from?

Many health/medical sites post information collected from other Web sites or sources. The original source should be clearly labeled and the site should describe the evidence that the material is based on. Medical facts and figures should have references (such as an article in a medical journal). Also, opinions or advice should be clearly set apart from information that is “evidence-based” (that is, based on research results).

5. How is the information selected?

Is there an editorial board? Do people with excellent medical qualifications review the material before it is posted?

6. How current is the information?

Web sites should be reviewed and updated on a regular basis, and a review date should be clearly posted. Even if the information has not changed, you want to know that the site owners have reviewed it recently to ensure that it is still valid.

7. How does the site choose links to other sites?

Web sites usually have a policy about how they establish links to other sites. Some medical sites take a conservative approach and don't link to any other sites; some link to any site that asks or pays for a link; others only link to sites that have met certain criteria.

8. What information about you does the site collect, and why?

Web sites routinely track the paths that visitors take through their sites to determine which pages are being used; however, many health Web sites ask you to “subscribe” or “become a member.” Any credible health site asking for personal information should tell you exactly what it will and will not do with your data. Be certain that you read and understand any privacy policy or similar language on the site, and don't sign up for anything that you are not sure you fully understand.

9. How does the site manage interactions with visitors?

There should always be a way for you to contact the site owners with problems, feedback, and questions. If the site hosts chat rooms or other online discussion areas, it should tell visitors what the terms of using this service are. Are chats or discussions moderated? If so, by whom and why? It is always a good idea to spend time reading the discussion without joining in, so you feel comfortable with the environment before becoming a participant.

Source: Adapted from *Ten Things to Know about Evaluating Medical Resources on the Web*, National Cancer Institute, 2002.

65 or older.³⁰ The value of services provided by caregivers is estimated to be \$257 billion per year, which is roughly twice the amount actually spent annually in the United States on home care and nursing home services.³¹ Some women may experience cognitive decline, and depression as a result of being the primary caregiver for a partner, relative, or friend. Healthcare providers also need to be aware of the prevalence of abuse within the elderly population and help provide protection when a woman is unable to or afraid to protect herself (see Chapter 14).

As women age, their skin becomes thinner, loses some of its elastic quality, suffers injury more easily, and heals more slowly. Women who have spent a lot of time in the sun during their lives often experience the development of skin cancers at this stage of their lives. Most skin cancers can be removed safely and easily with a simple procedure. If left untreated, however, they can pose a very serious health risk. Proper attention to skin care throughout life can prevent serious consequences as women age.

Sexuality also remains an issue for older women. Although many healthcare providers do not view their patients as sexual beings at this age, many women continue to desire sexual relations and may need advice for maintaining healthy sexuality as they age. A study conducted by the American Association of Retired People (AARP) reported that 44% of women 75 years of age or older believe that “a satisfying sexual relationship” is important to their quality of life.³² This issue is discussed in more depth in Chapter 4.

Preventive Behaviors

The early senior years can be a time of relaxation and fulfillment for women who are fortunate enough to have achieved financial stability, who have maintained their physical and mental health, and who are surrounded by loving family and friends. Other women may be less fortunate and experience considerable concerns regarding their future. Planning for one’s future and maintaining one’s health from childhood on may help women to have an easier time in their later years.

- Flu immunizations significantly reduce the chance of an older woman getting influenza or pneumonia.



As throughout life, good nutrition, exercise, and avoidance of harmful substances continue to provide protection from harmful diseases in old age. Regular healthcare screening and preventive checkups are essential, as is continual monitoring for drug interactions and signs or symptoms that may signal a health concern. Getting a flu vaccination and paying close attention to colds and minor illnesses can help keep a woman safe from pneumonia and influenza (Table 3.8). Women should also take extra special care of their skin as they age, using proper moisturizers and barriers to protect against skin breakdown. In addition, women should get bone density screenings to make sure that they are not at risk for developing osteoporosis.

Informed Decision Making

To take personal responsibility for their own health and wellness, all women should educate themselves about their health status. Integrating primary prevention methods into one's daily life can make a significant difference in both present and future health (see Self-Assessment 3.1). By understanding their own secondary prevention needs, such as the appropriate screening methods for women at certain ages, women can better inform their healthcare providers about their health status and demand the healthcare services that they require and deserve.

Table 3.8 Secondary Preventive Measures for Seniors

Annual screening for high blood pressure.
Cholesterol screening every three to five years or as recommended by the healthcare provider.
Periodic height and weight measurement to monitor for overweight and obesity.
Clinical breast examinations yearly or as recommended by one's healthcare provider.
Initial assessment of cognitive function and monitoring of changes as part of a routine preventive visit.
Behavioral assessment to detect depression and other problems.
Annual fecal occult blood test plus sigmoidoscopy every 5 years or colonoscopy every 10 years or barium enema every 5 to 10 years; a digital rectal examination should also be performed at the time of screening.
Routine mammography screening as recommended by the healthcare provider.
Pap and HPV test every three years or as recommended by the healthcare provider.
Periodic evaluation for hearing loss and visual acuity.
Thyroid-stimulating hormone test every three to five years.
Bone mineral density test as recommended by the healthcare provider; counseling on fall prevention.
Annual influenza and pneumococcal pneumonia vaccines.

Self-Assessment 3.1

Rate Your Preventive Practices

Answer the following questions:

1. Do you eat a healthful diet consisting of the appropriate servings of fruits and vegetables, grains, protein, vitamins, and minerals?
2. Do you participate in moderate-intensity physical activity at least four days a week?
3. Do you get enough sleep so that you do not feel tired throughout the day?
4. Do you avoid using tobacco products and drugs?
5. If you consume alcohol, do you do so in moderation?
6. If you are sexually active, do you use condoms or other barrier contraceptives to protect against STDs?
7. Do you employ methods to reduce stress, find time to socialize with friends and relax, and maintain an overall sense of mental wellness?
8. Do you practice safe behaviors, such as using seat belts, wearing motorcycle and bicycle helmets, not driving under the influence of alcohol, and not riding with someone under the influence of alcohol?
9. Do you use nonviolent methods of conflict resolution?
10. Do you receive routine preventive care from a healthcare provider?

The more questions to which you answered “yes,” the better off you are! If you answered “no” to any questions, try to change that behavior to achieve a better state of overall health.

In recent years, the Internet has evolved into a valuable resource for women who are seeking health information. Yet the quality of health information on Web sites is extremely variable and difficult to assess. Evaluating the information can be a significant challenge, even for an experienced Web user. Being able to identify the validity of the material in a given Web site is crucial, as it could potentially affect health outcomes for millions of people. Most content on the Web is posted without any form of approval or review for accuracy and reliability, or it is posted by a company having a financial stake in the information being communicated (for example, pharmaceutical firms or physicians offering specific surgical procedures). A number of organizations are working to credential health-related Web sites, by providing “stamps of approval” so that consumers can have independent validation that the content is valid; however, this practice is not widespread across cyberspace. In the absence of these content authentication measures, healthcare consumers must often rely on their own common sense and judgment. Following some basic guidelines will help women evaluate the quality of information they find online. In addition, women should understand that open communication with their physicians is their right. Better communication between physicians and patients can improve both the quality of the care women receive and their health promotion knowledge base.

Summary

Primary prevention is the first step toward health promotion and disease prevention for women at all stages of their lives. Many women have already taken the first steps by reclaiming their bodies and taking responsibility for their own health; however, many women remain unable or unwilling to make these changes.

There are different preventive health actions a woman can take at different points in her life. Many tests and behaviors are specifically indicated starting at a given age. Becoming familiar with the appropriate health promotion and prevention activities across a woman's life span is especially valuable. Women can empower themselves by recognizing the central role that proper access to health care

Profiles of Remarkable Women



Shirley Temple Black (1928–)

Shirley Temple began life as an actress—the star of more than 40 motion pictures before she turned 12 years old. She exhibited her talents in her song-and-dance routines, most notably in her signature song “On the Good Ship Lollipop,” which sold a half million copies and earned Temple an Academy Award. Temple acted in numerous films, including *Little Miss Marker*, *The Little Colonel* (with Bill “Bojangles” Robinson), *Our Little Girl*, *Curly Top*, and *The Littlest Rebel*. Working for Fox Studio, Temple became a marketing dream with Shirley-endorsed products ranging from dresses, to cereal, to soup, to dolls. Temple continued acting as a teenager and young adult with well-known actors, but at 21 and already divorced, she decided to leave Hollywood to vacation in Hawaii. There, she met her second husband, Charles Black.

Known throughout her childhood as an ambassador of goodwill, it was a natural progression for her to dedicate her adult life to public service. In 1969, she was appointed by Richard Nixon as the U.S. representative to the United Nations. She also served as a U.S. delegate to many international conferences and summits on cooperative treaties and human environment. In 1972, at the age of 44, Shirley Temple Black found a lump on her breast. She postponed a biopsy to attend government talks in the Soviet Union as the special assistant to the Chairman of the Presidential Council on Environmental Health. After her biopsy showed a malignancy, Black underwent a simple mastectomy. To face her illness, she went public with her disease and received numerous letters of support.

Her breast cancer did not slow her down in terms of her work, however. From 1974 to 1976, Black worked as Ambassador to the Republic of Ghana. In 1976, she became the first female White House Chief of Protocol under Gerald Ford. She later served as a foreign affairs officer in the State Department for Ronald Reagan and as an Ambassador to Czechoslovakia under George H. W. Bush. Her diplomatic skills have made her a success in the political arena as well as in the business sector. She has lent her expertise to major corporations by contributing as a member of the corporate board of directors for such companies as Del Monte, Bancal Tri-State, Fireman's Fund Insurance, and Walt Disney Productions. Her professional activities include numerous board and council memberships, including the Council on Foreign Relations, the Council of American Ambassadors, the World Affairs Council, the United States Commission for UNESCO, and the U.S. Citizen's Space Task Force. She is also the cofounder of the International Federation of Multiple Sclerosis Societies.

Shirley Temple Black has received honorary doctorates from University of Santa Clara and Lehigh University, a Fellowship from College of Notre Dame, and a Chubb Fellowship from Yale University.

for them and their families plays in creating stability in their lives. Around the world, a woman's quality of life is threatened by inequities in access to proper health care, specifically preventive services, medical treatments, surgical interventions, family planning, or proper maternal and child health. These services are essential to women who seek to lead active, healthy, and happy lives at all stages of life.

In addition, across the world, women tend to be the main healthcare observers and resource attainers in the family. Women who are better educated about their and their family's healthcare needs can have a major impact on the well-being of their family and community.

Communities, healthcare providers, workplaces, and educators need to effectively reach underserved women with healthcare services and education. Women must also work to educate one another about the important health-related information that they learn throughout their lives, so as to expand the rich network of communication from which women around the world benefit. By improving access to health care for all women and providing appropriate guidelines for care to both healthcare providers and consumers, women will be better equipped for remaining healthy throughout their life span.

Topics for Discussion

1. How can parents, healthcare providers, and health educators encourage adolescents to follow healthy behaviors? How can they convince adolescents that their present behaviors will have a significant impact on their future health?
2. What are some ways in which you can improve your health? Are there preventive practices from which your parents can benefit that they are not practicing?
3. How do the health needs of women in developing countries differ from those of women in the United States? How are they similar?
4. What are some preventive measures for lesbians? for physically challenged women?
5. Some health behaviors are detrimental to well-being. Should policies such as restricting smoking or mandating bicycle helmets be mandatory or voluntary?

Web Sites

Administration on Aging: <http://www.aoa.gov>

Administration for Children and Families: <http://www.acf.dhhs.gov>

Agency for Healthcare Research and Quality: <http://www.ahrq.gov>

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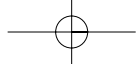
- Centers for Disease Control and Prevention: <http://www.cdc.gov>
 Centers for Medicare and Medicaid Services: <http://www.cms.hhs.gov>
 Food and Drug Administration: <http://www.fda.gov>
 Health Resources and Services Administration: <http://www.hrsa.gov>
 Healthy People 2010: <http://www.healthypeople.gov>
 Indian Health Service: <http://www.ihs.gov>
 National Institutes of Health: <http://www.nih.gov>
 Office of the Surgeon General: <http://www.surgeongeneral.gov>
 Substance Abuse and Mental Health Services Administration: <http://www.samhsa.gov>
 U.S. Department of Health and Human Services: <http://www.hhs.gov>
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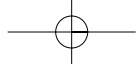
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