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The State of Aging and Health in America 2004



About this Series of Reports:

The State of Aging and Health in America 2004 is the third annual volume in a series that presents a snapshot of the entire health and aging landscape in the United States or another area of the world. The reports are produced by the Merck Institute of Aging & Health (MIAH) and various partnership organizations that are recognized leaders in the aging field. Previous partners include the Gerontological Society of America and the Pan American Health Organization.

These reports are the signature publication of MIAH, and they present the most current information and statistics, often commissioned specifically for the report, on the health of older adults.

MIAH is a non-profit organization, funded by the Merck Company Foundation, and located in Washington, DC. The organization is dedicated to improving the health and independence of older adults around the world through information and education. It is especially concerned with the education of primary care physicians in geriatrics. The Institute currently funds projects in the United States, Europe and Latin America.

Executive Summary

"As the nation's health protection agency, CDC strives to help older adults come to realize that poor health or disabilities are not inevitable consequences of aging. *The State of Aging and Health in America 2004* is an important tool for all professionals striving to ensure that older adults achieve their full life expectancy."

— Julie Louise Gerberding, MD, MPH, Director, Centers for Disease Control and Prevention

"In the United States, 20% of all Americans, or about 70 million people, will have passed their 65th birthday by 2030. The demographic tidal wave is coming. Aging in the 21st century, however, is more than just a matter of numbers. The average 75-year-old has three chronic conditions and uses five prescription drugs. Older adults also have unique challenges and different medical needs than younger adults. Consequently, it is not enough to be aware of the demographic imperative; we must also be prepared for it. That is exactly what this publication is designed to help us do. This report presents information and recommendations on what policy makers, practicing physicians and patients can and must do to ensure not just longer lives but better lives for Americans. It presents specific calls to action to help promote good health, prevent chronic disease and postpone disability for older adults. Most of all, this report forces us to realize that we must face our demographic challenge with sustained attention and significant action."

— Patricia P. Barry, MD, MPH, Executive Director, Merck Institute of Aging & Health

"The mission of the Gerontological Society of America is to bring together research, education and practice to improve the quality of life as we age. That very same idea echoes throughout *The State of Aging and Health in America 2004*. This report shows that if we, as a nation, are to help older adults not simply survive, but thrive, we must increase research, intensify education and improve practice in geriatrics. This report will also fill a unique niche on any bookshelf, in that it is simultaneously reference book, *Blueprint* and roadmap. In terms of transforming the promise of active aging into reality for all Americans, this publication points out where we are, where we must go and, through its thoughtful calls to action, how to get there. Perhaps, above all, this report provides further hope that Browning was correct when he wrote, 'Come grow old with me, the best is yet to be.' The Gerontological Society of America is proud to be a part of this year's publication."

— Terrie Fox Wetle, PhD, President, Gerontological Society of America

The Merck Institute of Aging & Health (MIAH), the Centers for Disease Control and Prevention (CDC) and the Gerontological Society of America (GSA) are releasing this report to assess the health status of the growing number of older Americans and to make recommendations to improve the mental and physical health of all Americans in their later years.

This report is divided into six sections. Two sections offer report cards—one at the national level and one for individual states and the District of Columbia—that show whether older Americans are meeting specific health targets set in *Healthy People 2000*. The other four sections examine issues that are critical to improving our ability to meet these targets. The following is a brief description of each of the report's six main sections:

An Introduction to the Health of Older Americans

More Americans are living longer, and the proportion of the U.S. population that is age 65 or older is growing rapidly. Life expectancy increased dramatically during the past century, from 47 years for Americans born in 1900 to 77 years for those born in 2001. These same factors—improved medical care and prevention efforts—that are partly responsible for the dramatic increases in life expectancy have also produced a major shift in the leading causes of death in the United States in the past century, from infectious diseases and acute illnesses to chronic diseases and degenerative illnesses.

The tragedy of the leading chronic disease killers is that they are often preventable. Although the risk of disease and disability clearly increases with age, poor health is not an inevitable consequence of aging. Adopting healthier behaviors—regular physical activity, a healthy diet and a smoke-free lifestyle—and getting regular screenings (mammograms and colonoscopies, for example) can dramatically reduce a person's risk for many chronic diseases, including the leading causes of death and disability.

The National Report Card on Healthy Aging

The national report card presents data on 15 indicators related to older adult health status, health behaviors, preventive care and screening, and injuries. These indicators were chosen because they are each modifiable and present a comprehensive picture of older adult health:

- Physically unhealthy days
- Frequent mental distress
- Oral health: Complete tooth loss
- Disability
- No leisure-time physical activity
- Eating five or more fruits and vegetables daily

- Obesity
- Current smoking
- Flu vaccine in past year
- Pneumonia vaccine
- Mammogram within past two years
- Ever had a sigmoidoscopy or colonoscopy
- Up-to-date on select preventive services
- Cholesterol screening
- Hip fracture hospitalizations

The national report card shows the most current data for each indicator and assigns a grade of “pass” or “fail” based on *Healthy People 2000* targets.

The State-by-State Report Card on Healthy Aging

The report card for the 50 states and the District of Columbia presents, for each indicator, the best- and worst-ranked states and the number of states that met each target. The report card shows mixed progress since *The State of Aging and Health in America 2002* report was released and considerable variation among the states in meeting the targets.

Spotlight: Physical Activity and Older Americans

Regular physical activity is a critical element of an overall healthy lifestyle, which can extend years of independent living, reduce disability and improve the quality of life of older people. However, our knowledge of the benefits of physical activity for older adults has not yet been fully turned into action. The challenge, and the opportunity, is to make physical activity more accessible to older adults of all ages, abilities and interests.

Our Nation's Health Care Workforce: Is it Ready for the Graying of America?

Beginning in 2012, nearly 10,000 Americans will turn 65 every day, and by 2030 20% of the population will have passed their 65th birthday. The aging of America, however, is more than a matter of numbers. The average 75 year old has three chronic conditions and uses five different prescription drugs; older patients also have unique health care challenges and different medical needs than younger adults. Unfortunately, America's health care workforce lacks the training to provide appropriate care at the present time, and it is wholly unprepared for the coming senior boom. There are far too few health care providers specifically trained in geriatrics; moreover, there is a gap between what many primary care providers know, and what they need to know, to optimally treat older patients.

Addressing this problem requires immediate attention and action at the national level and calls for:

- Increasing the funding for geriatric training
- Quickly incorporating new research into practice
- Adopting new practices to achieve change
- Enlisting the support of professional organizations to affect change
- Recruiting new people into geriatrics
- Enhancing the skills of community practitioners
- Developing interest in geriatrics across clinical disciplines
- Increasing geriatric education in health care at all levels

State Examples

Across the United States, states are engaged in innovative efforts to improve the health and quality of life of older Americans. Four examples of these efforts are included in this report: Kansas, Maine, North Carolina, and Washington.

Goals for Improving the Health of Older Americans:

- To achieve the national goals for reducing health risk behaviors
- To increase opportunities for all older Americans to reap the benefits of regular physical activity
- To encourage states and communities to adopt innovative methods to promote healthy aging among the adults they serve

To assist in meeting these goals, MIAH, CDC and GSA have included Calls to Action on the following topics related to older adult health:

- Monitoring recent physical health
- Addressing frequent mental distress
- Improving oral health
- Promoting healthy behaviors
- Increasing the use of clinical preventive services
- Implementing a national falls prevention plan
- Increasing physical activity among older adults
- Preparing our health care workforce for an aging society

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An Introduction to the Health of Older Americans

THE U.S. POPULATION IS AGING. The United States is in the midst of a longevity revolution. Life expectancy increased dramatically during the past century, from 47 years for Americans born in 1900 to 77 years for those born in 2001.¹ Not only are more Americans living longer, but the proportion of the U.S. population that is age 65 years and older is also growing. That growth will increase rapidly as baby boomers, those born between 1946 and 1964, begin to reach age 65 in 2011. Since 1900, the U.S. population has tripled, but the number of older adults has increased 11-fold, from 3.1 million in 1900 to 35 million in 2000. By 2030, when all of the baby boomers have reached age 65, the number of older Americans is expected to reach 71 million, or roughly 20% of the U.S. population.²

The dramatic gain in life expectancy in the 20th century was, in large measure, due to improved sanitation, better medical care and increased use of preventive health services. A key challenge for the 21st century will be to ensure that these added years are quality years.

Chronic Diseases Are Now the Leading Causes of Death

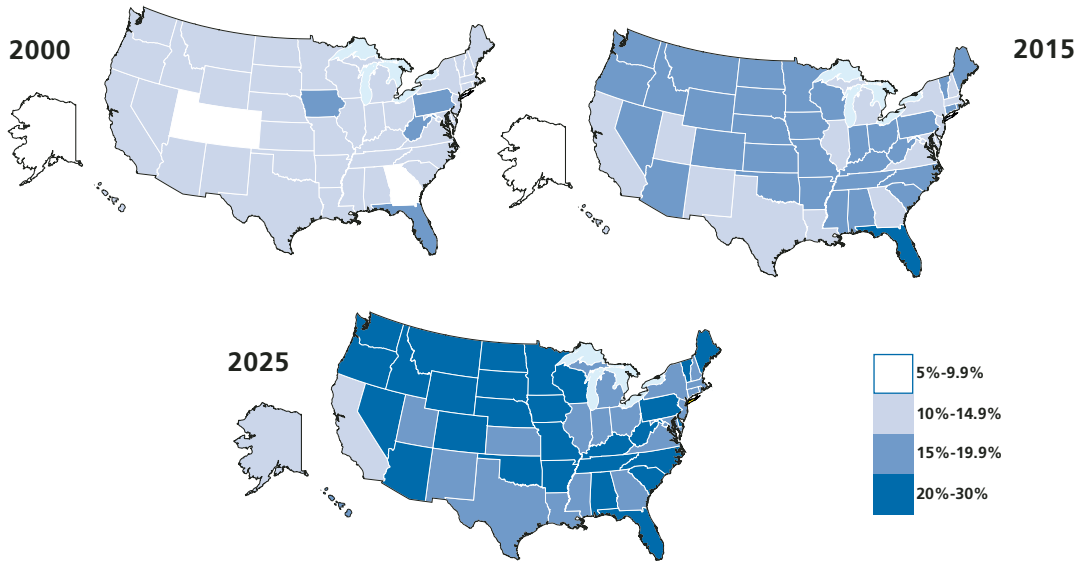
The same factors—improved medical care and prevention efforts—that are largely responsible for the dramatic increases in life expectancy have also produced a major shift in the leading causes of death in the United States in the past century, from infectious diseases and acute illnesses to chronic diseases and degenerative illnesses.² In 1900, the leading killers of all age groups in the United States were pneumonia and influenza, tuberculosis, and gastritis and enteritis.³ In 2000, the top three causes of death for all ages were heart disease (30% of all deaths), cancer (23%) and stroke (7%).⁴ These same

three chronic diseases were also the leading causes of death among Americans age 65 and older in 2000, accounting for 60% of all deaths in this age group (Figure 2).⁴

The tragedy of these leading killers is that they are often preventable. Although the risk of disease and disability clearly increases with advancing age, poor health is not an inevitable consequence of aging. Three behaviors—smoking, poor diet and physical inactivity—were the actual causes of almost 35% of U.S. deaths in 2000.⁵ These behaviors often underlie the development of the nation's leading chronic disease killers: heart disease, cancer, stroke and diabetes. Adopting healthier behaviors—regular physical activity, a healthy diet and a smoke-free lifestyle—and getting regular screenings (mammograms and colonoscopies, for example) can dramatically reduce a person's risk for most chronic diseases, including the leading causes of death.⁶

f.1

THE PERCENTAGE OF THE U.S. POPULATION AGE 65 AND OVER WILL DRAMATICALLY INCREASE IN THE NEXT 20 YEARS



Source: US Bureau of the Census, 2003

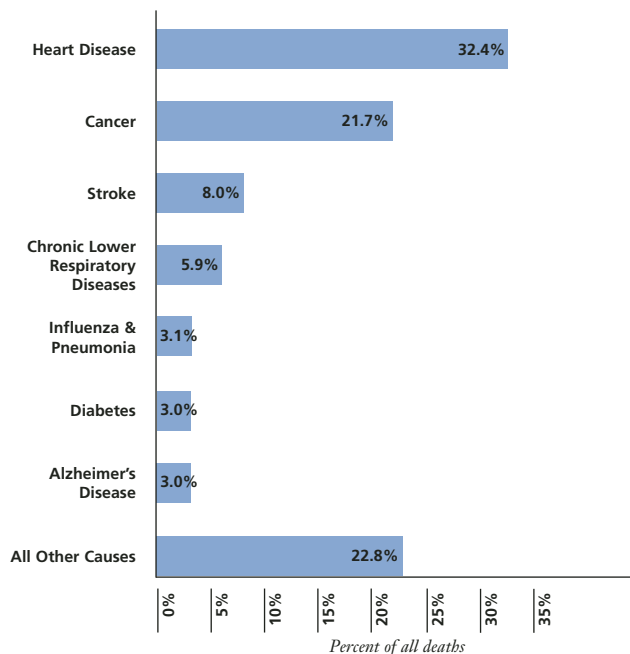
Chronic Diseases Cause Pain and Disability and Increase Health Care Costs

Deaths are only part of the picture of the burden of chronic diseases among older Americans. These conditions can cause years of pain, disability, and loss of function and independence before resulting in death. Currently, at least 80% of older Americans are living with at least one chronic condition, and 50% have at least two.² Diabetes, for example, with its deadly and debilitating complications, affects approximately one in five Americans age 65 and older, and the aging of the U.S. population, in conjunction with the obesity epidemic, will only intensify its impact. The number of adults age 75 and older with diabetes is projected to increase from about 1 million in 2000 to more than 4 million in 2050.²

In addition to the hardships that chronic diseases impose on individuals and their families, these diseases are a major contributor to health care costs. Over two-thirds of current health care costs are for treating chronic illnesses; among older Americans, almost 95% of health care expenditure is for chronic diseases.⁷ Alzheimer's disease alone, for example, costs the nation more than \$50 billion each year in Medicare and Medicaid expenditures. As the population ages and this devastating disease becomes more prevalent, these costs are projected to rise by as much as 54% by 2010.⁸

f.2

IN 2001, CHRONIC DISEASES WERE THE LEADING CAUSES OF DEATH AMONG U.S. ADULTS AGE 65 AND OVER



Source: CDC, National Center for Health Statistics, National Vital Statistics Report, 2002

The burden of many chronic diseases and conditions—especially hypertension, diabetes and cancer—varies widely by race and ethnicity. For example, among adults age 65 and older in 2000–2001, 65% of Blacks had hypertension, compared with 49% of Hispanic Americans and 47% of Whites.⁹ Twenty-five percent of Hispanic

Americans and 23% of Blacks had diabetes, compared with 14% of Whites.⁹ Twenty-two percent of Whites had some form of cancer, compared with 10% of Hispanic Americans and Blacks.⁹

Chronic Diseases Diminish Quality of Life for Older Adults

Among older adults, chronic diseases and their related activity limitations are a major health problem, and these conditions often reduce seniors' health-related quality of life. The percentage of older adults who report very good or excellent health decreases with age. Data from the 2001 National Health Interview Survey (NHIS) indicated that 43% of men and women aged 65 years and older reported very good or excellent health, compared with 34% of those age 75–84 and only 28% of those 85 or older.¹⁰

The same NHIS data showed that the percentage of older adults who reported very good or excellent health varied by race. Among adults aged 65 years and older, for example, 40% of Whites but only 25% of Blacks reported very good or excellent health (Figure 4).

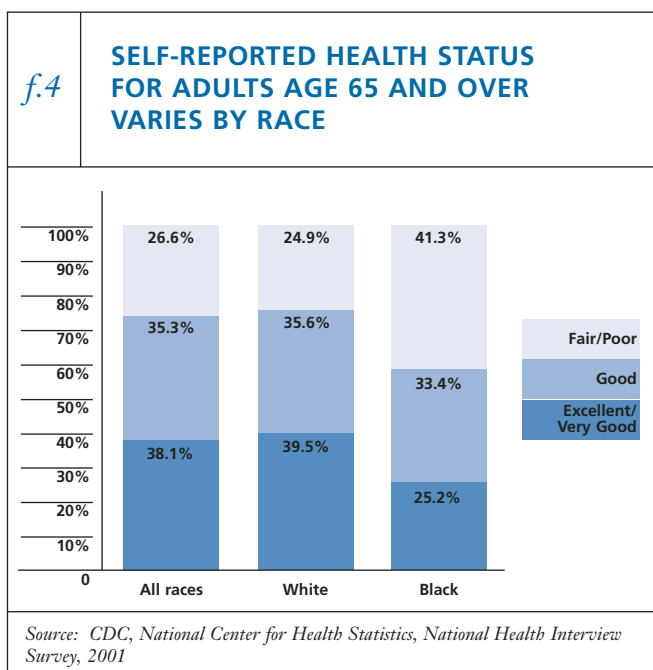
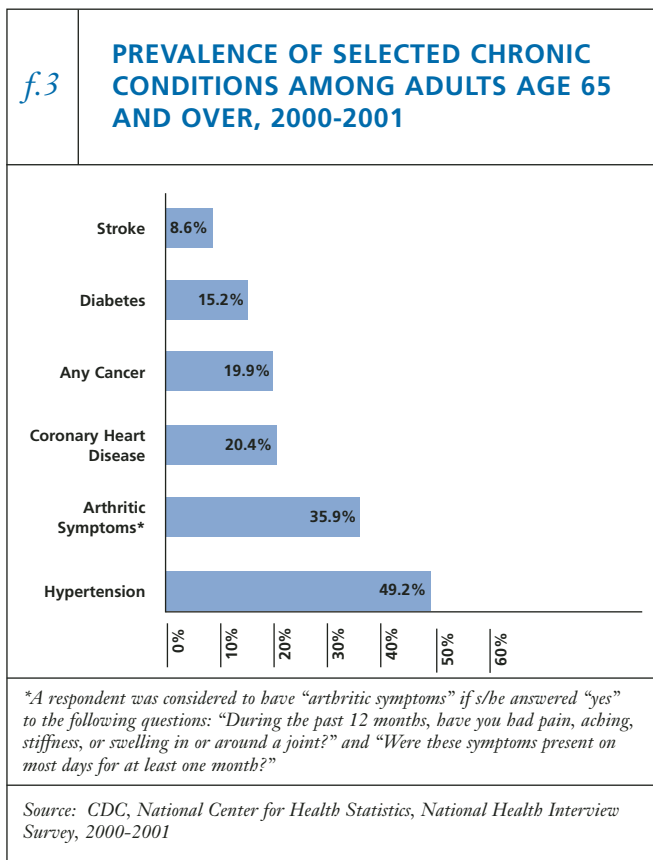
The Challenges of Preserving the Health of an Aging Society

The increase in lifespan and the growing burden of chronic diseases among older Americans have created several new challenges. Chief among these are health care costs, an increase in the number of Americans who serve as caregivers to family members, the complexities of managing multiple medications, and greater long term care needs. Meeting these challenges is critical to ensuring that the years that Americans can look forward to are also quality years.

Health Care Costs

The increasing number of Americans age 65 or older has the potential to greatly increase the nation's already high health care costs:

- The cost of providing health care for one person age 65 or older is three to five times greater than the cost for someone younger than 65.²
- By 2030, health care spending will increase by 25% simply because the population will be older, and this is before inflation or new technologies are taken into account.¹¹
- Medicare spending has grown more than seven-fold in the past two decades, from \$33.9 billion in 1980 to \$252.2 billion in 2002, and is projected to double again by 2012.¹²



Caregiving

Nearly 79% of people who need long-term care live at home or in community settings rather than in institutions. In 1997, about 22 million U.S. households (roughly one in every four households) were involved in caring for someone age 50 or older, and this number is expected to rise to 39 million households by 2007.¹³

Fifty-nine percent of the adult U.S. population either is or expects to be a family caregiver. The value of the services that family caregivers provide for “free” is estimated to be \$257 billion a year.¹³ Although caregiving has its rewards, which usually include increased satisfaction with the level of care that the loved one is receiving, providing these services creates additional health and social burdens:

- Of those who provide at least 21 hours of care a week for a family member or friend, 61% have suffered from depression.¹⁴
- Older caregivers who have a history of chronic illness themselves and caregiving-related stress have a 63% higher death rate than their peers who are not caregivers.¹⁴
- American businesses lose between \$11 billion and \$29 billion each year as a result of employees caring for family members age 50 and older.¹⁴

Medications Management

Especially when combined with a healthy lifestyle, medications can lessen the burden of illness and disability on individuals, their families and society. When appropriately prescribed, administered and monitored, medications are a cost-effective way to help older adults maintain health, recover from illness or control symptoms of chronic disease.

Despite these potential benefits, medication for older adults poses several serious challenges, including the following:

- People age 65 and older make up 13% of the U.S. population, yet they account for 34% of all prescription medications and 30% of all nonprescription medications. Because older adults often take numerous medications

prescribed by multiple providers, their risk for adverse reactions to a medication or combination of medications is greater than that of younger, healthier adults.¹⁵

- Among older adults, adverse reactions such as dizziness, numbness, dehydration, loss of appetite, nausea and diarrhea can have more dramatic consequences than among younger adults. These consequences can include falls, depression, confusion, hallucinations, and malnutrition.¹⁵
- Because the aging process affects how an older person’s body absorbs, uses and eliminates medications, older people are at risk of being given medications or dosages that are inappropriate for their age.¹⁵
- Memory impairment and sensory changes such as vision loss that often occur among older adults can create additional challenges for correctly adhering to complex medication regimens.¹⁵

Long Term Care

Perhaps the greatest challenges for both families and our society are those associated with long term care needs.

In 1997, more than 1.4 million older Americans, or 4% of the older population, were in nursing homes. The likelihood of being in a nursing home increases as people get older: in 1997, 13% of the nursing home population was age 65–74, 33% was age 75–84, and 46% was age 85 or older.¹³

The costs of long term care are expected to continue increasing as the population ages. However, public health programs that decrease disability among older Americans and help them maintain their independence offer opportunities to lessen these increases.

Twentieth-century advances in our knowledge of the critical factors in protecting and promoting health have given us many opportunities for overcoming these challenges. The health indicators presented in the following chapters point the way to these opportunities. By working to meet the goals for each of these key indicators, our nation can help ensure that all of its citizens can look forward not just to living long, but to living well.

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The National Report Card on Healthy Aging

This section reports on 15 indicators related to older adult health status, behaviors, preventive care and screening, and injuries. These indicators were chosen because they are each modifiable and present a comprehensive picture of older adult health. The report card in Table 1 shows the most current data for each indicator and assigns a grade of “pass” or “fail” based on *Healthy People 2000* targets. The rest of the section describes the indicators in greater detail.

Health Status Indicators

Indicator 1: Physically unhealthy days

- CDC’s Behavioral Risk Factor Surveillance System (BRFSS) collects data on physically unhealthy days, defined as the overall number of days during the previous 30 days when the respondent reported that his/her physical health (which includes physical illness and injury) was not good.
- The high prevalence of chronic diseases and their related activity limitations among older adults has been linked with a decrease in health-related quality of life.³ BRFSS data from 1993-2001 show that the average number of physically unhealthy days in the last 30 days reported by respondents increased significantly with age, from 1.9 days among those aged 18-24 years to 5.2 days for those aged 65 and older. Older women reported roughly one more unhealthy day per month than men. Factors associated with fewer unhealthy days included having a college degree, being employed, having never smoked, and having some level of physical activity.⁴

CALL TO ACTION:

MONITORING RECENT PHYSICAL HEALTH

Older adults report many more physically unhealthy days than younger adults. Many of these unhealthy days are due to the pain and discomfort associated with chronic diseases and conditions that increase with age, including arthritis, back and neck pain, diabetes, cardiovascular disease and cancer.¹ Clinicians, family members and others who have contact with older adults should be aware that the aches, pains and physical ailments of older adults are typically more common in the winter months of January, February and March than in the summer months of June, July and August – perhaps in part due to the increase of influenza and the relative lack of physical activity in those months. Self-reports of poor physical health can be a marker for identifying physical illnesses that are undiagnosed or that require better management by either the clinician or the patient. Periodic monitoring of physically unhealthy days was recently found to be useful in evaluating the effectiveness of a nutritional-support home-delivered meals program for home-bound older adults in Canada, demonstrating that brief measures of perceived health are a feasible and cost-effective option for evaluating programs for older adults.²

TABLE 1. THE NATIONAL REPORT CARD ON HEALTHY AGING: HOW HEALTHY ARE AMERICA'S SENIORS?

Indicator	Data for Persons Age 65 or Older* (Data Year)	Healthy People 2000 Target	Grade (pass/fail)†	Healthy People 2010 Target
Health Status				
1. Physically unhealthy days (mean number of days in past month)	5.5 (2001)	‡	‡	‡
2. Frequent mental distress (%)§	6.3 (2000-2001)	‡	‡	‡
3. Oral health: Complete tooth loss (%)	22.4 (2002)	20	Fail	20
4. Disability (%)f	30.8 (2001)	‡	‡	‡
Health Behaviors				
5. No leisure time physical activity in past month (%)	32.9 (2002)	22	Fail	20
6. Eating 5+ fruits and vegetables daily (%)	32.4 (2002)	50	Fail	N/A¶
7. Obesity (%)#	19.5 (2002)	‡	‡	15
8. Current smoking (%)	10.1 (2002)	15	Pass	12
Preventive Care & Screening				
9. Flu vaccine in past year (%)	68.6 (2002)	60	Pass	90
10. Ever had pneumonia vaccine (%)	63.0 (2002)	60	Pass	90
11. Mammogram within past 2 years (%)	77.2 (2002)	60	Pass	70
12. Ever had sigmoidoscopy or colonoscopy (%)	58.3 (2002)	40	Pass	50
13. Up to date on select preventive services (%)**				
Men	34.4 (2002)	‡	‡	‡
Women	33.4 (2002)	‡	‡	‡
14. Cholesterol checked within past 5 years (%)	85.4 (2001)	75	Pass	80
Injuries				
15. Hip fracture hospitalizations (per 100,000 persons)	525 (men) 1127 (women) 877 (total) (2002)	607 (total)	Fail	474 (men) 416 (women) N/A (total) ††

* Data for Indicators 1-14 were collected by CDC's Behavioral Risk Factor Surveillance System (BRFSS). Data for Indicator 15, hip fracture hospitalizations, come from CDC's National Center for Health Statistics, National Hospital Discharge Survey. See Appendix for a full description of these data sources.

† Grade is based on the attainment of Healthy People 2000 targets. See Appendix for a full description of Healthy People 2000 and Healthy People 2010 targets.

‡ Indicators 1, 2, 4, and 13 are more recently developed measures and, as such, do not have Healthy People 2000 targets. Data related to Indicator 7, obesity, were combined with the overweight category in Healthy People 2000 and, therefore, obesity has no individual Healthy People 2000 target.

§ Frequent mental distress is defined as having had 14 or more mentally unhealthy days in the previous month. Data from the 2000 and 2001 BRFSS are combined here to get a sufficient sample size.

f Disability was defined on the basis of an affirmative response to either of the following two questions on the 2001 BRFSS: "Are you limited in any way in any activities because of physical, mental or emotional problems?" or "Do you now have any health problem that requires you to use special equipment, such as a cane, wheelchair, a special bed, or a special telephone?"

¶ Healthy People 2010 segments the nutrition target into multiple categories of fruits and vegetables. See Appendix for a full description of this change.

Healthy People 2000 defined a target for overweight, but not obesity. Because current standards separate these two conditions, obesity data are included in this report. The Healthy People 2010 definition of obesity is a body mass index (BMI) of >30 kg/m².

** For men, three services are included: flu vaccine in past year, ever had a pneumonia vaccine, and ever had sigmoidoscopy or colonoscopy. For women, these same three services plus a mammogram within past two years are included.

†† Healthy People 2010 has separate hip fracture hospitalization targets for men and women, and no target for the total number.

Summary of Findings:

- The nation has met targets for 6 of the 10 indicators in this report that are measured by Healthy People 2000.
- In 2002, the target for pneumonia vaccination was reached.

Indicator 2: Frequent mental distress

- To assess general mental health status, the BRFSS asks respondents for the number of days in the past 30 days that their mental health was not good because of stress, depression and problems with emotions. Respondents who report 14 or more days of poor mental health are defined as having frequent mental distress (FMD). This 14-day minimum period is selected because a similar period is often used by health care providers and researchers as a marker for clinical depression and anxiety disorders, and a longer duration of reported symptoms is associated with a higher level of activity limitation.⁵
- The presence of frequent mental distress varies by race and ethnicity (Figure 5). Individuals of Asian/Pacific Islander descent have a much lower prevalence of FMD compared with other racial and ethnic groups, while Hispanic Americans have the highest prevalence.
- Unlike physical health, mental health seems to improve with age. BRFSS data from 1993-2001 show that 10.5% of adults aged 18-24 years reported frequent mental distress, whereas FMD was reported by only about 6% of adults aged 65 years and older. Some researchers attribute this improvement to more personal and social resources, better coping skills, and stronger social and spiritual supports among older Americans.

Indicator 3:

Oral health: Complete tooth loss

- The percentage of older adults who have lost all of their natural teeth has declined substantially since the 1950s, when more than half of adults older than age 65 were toothless.^{9,10} This decline is the result of enormous improvements in the field of oral health in the last 50 years, including community water fluoridation, advanced dental technology, better oral hygiene, and more frequent use of dental services (Figure 6).
- Despite this increase in tooth retention, almost a quarter of Americans aged 65 and older in 2002 had lost all of their teeth. Tooth loss among older adults is more common in some parts of the country (e.g., Appalachia) and among groups defined by certain socioeconomic, racial/ethnic and health characteristics, including having an annual income of less than \$15,000, having less than a high school education, having diabetes and being a non-Hispanic black.

CALL TO ACTION:

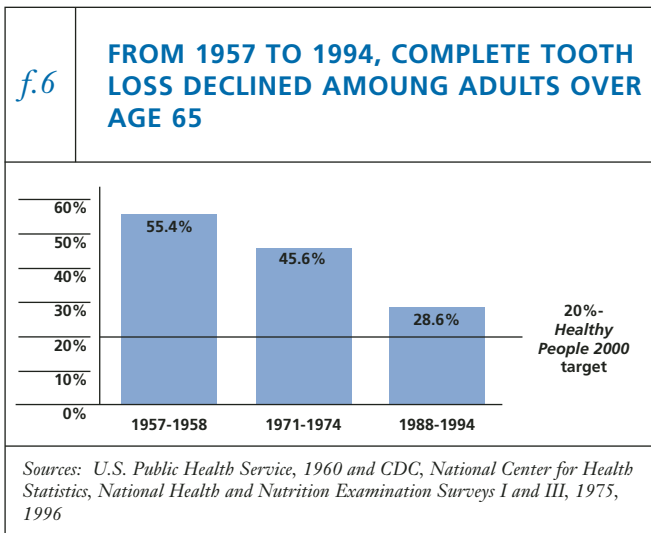
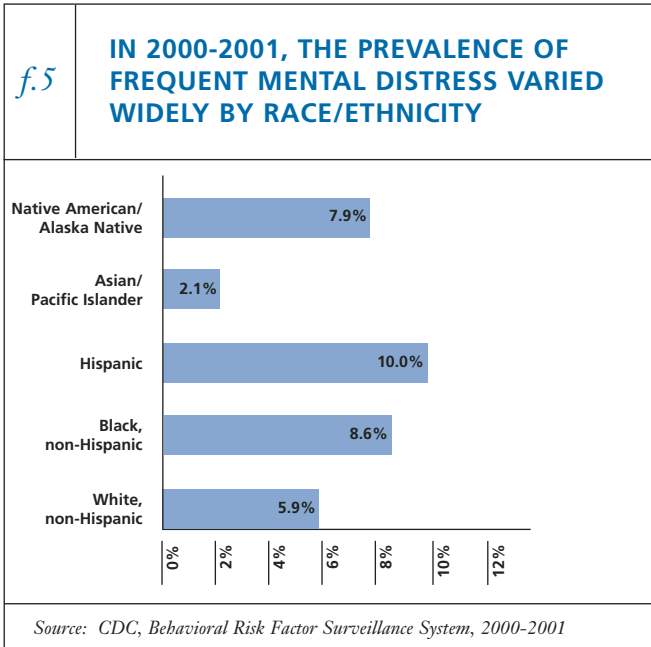
ADDRESSING FREQUENT MENTAL DISTRESS

Although older adults usually report fewer mental health problems than do younger people, many still suffer from unnecessary mental distress.⁶ Some older adults have untreated or inadequately treated mental conditions and could benefit from diagnosis by a health professional and full access to the best available mental health treatment. Others who find themselves suffering from loneliness, lacking resources to overcome health-related activity limitations, or living in a difficult family or community situation could lessen their distress by getting involved with group support, self-care, and other community-based social service programs.

Self-reports of mental distress should be monitored as an indicator of the overall burden of mental health problems in older populations. Although mental distress is undesirable by itself, it has also been associated with unhealthy and risky behaviors that can inhibit recovery from an illness or cause new physical or mental health problems.⁷ Clinicians, social workers, and others who have contact with older adults could help to identify those who might be suffering from mental distress by periodically asking them how their mental (as well as physical) health has been lately. They could also help these older persons by alerting them to situations that could trigger frequent mental distress and informing them of mental health and social services that are provided by their particular health insurance or medical provider, the Veterans Administration, the aging services network supported by the Administration on Aging (AOA), the Substance Abuse and Mental Health Services Administration (SAMHSA), United Way organizations, AARP, and other health and social service organizations.

Recently, SAMHSA, AOA and the National Council on the Aging partnered to create a toolkit for organizations that provide services to older adults, such as senior centers, adult day care services, nutrition programs, state agencies, health and social service programs, and faith-based initiatives. Called *Get Connected! Linking Older Adults with Medication, Alcohol and Mental Health Resources*, the toolkit introduces service providers to substance abuse and misuse issues and mental health problems among older adults. The toolkit also outlines a five-step process for establishing a program, developing resources, conducting education sessions and planning future programming.⁸ To order the *Get Connected!* toolkit, contact SAMHSA's National Clearinghouse for Alcohol and Drug Information call (800) 729-6686 (English and Spanish) or 1-(800) 487-4889 (TDD), or e-mail info@health.org. Ask for GCKIT.

- Older adults who have retained their natural teeth remain at risk for the two oral diseases most prevalent in all age groups: dental caries (cavities) and periodontal disease. About 30% of adults with their natural teeth have untreated dental caries, and about 25% of older adults have lost tooth-supporting structures because of advanced periodontal disease.



Indicator 4: Disability

- In this report, disability is defined as an affirmative response to either of the following two questions asked in the 2001 BRFSS: “Are you limited in any way in any activities because of physical, mental or emotional problems?” or “Do you now have any health problem that requires you to use special equipment, such as a cane, wheelchair, a special bed or a special telephone?”

- Older adults are particularly affected by disability: the overall rate of disability in the United States is 18%; however, among Americans age 65 and older, rates of disability increase to 30.8%.
- Although people with disabilities report poor health more often than those without disabilities,¹¹ disability does not necessarily equate to poor health.¹²

CALL TO ACTION: IMPROVING ORAL HEALTH

Practices such as drinking fluoridated water, carefully brushing and flossing teeth, and getting regular professional oral health care have been shown to be instrumental in maintaining and improving oral health. These measures are the only ways that older adults can avoid losing their teeth or requiring extensive treatment to curb infection and restore tooth function. Rates of these conditions vary widely among older people of different socioeconomic backgrounds, and this variation offers strong evidence that many older adults have not benefited fully from improvements in preventing and controlling oral diseases.

The following guidelines can help all older adults improve their oral health and lower their risk for dental decay and tooth loss:

- Drink fluoridated water and use fluoride toothpaste. Fluoride provides protection against dental decay at all ages.
- Practice good oral hygiene. Careful tooth brushing and flossing to reduce dental plaque can help prevent periodontal disease.
- Get professional oral health care. Professional care helps to maintain the overall health of the teeth and mouth and helps to detect precancerous or cancerous lesions early in their development.
- Avoid tobacco. Smokers have a seven times greater risk of developing periodontal disease than non-smokers. Spit tobacco containing sugar also increases the risk of dental decay.
- Limit alcohol. Drinking excessive amounts of alcohol is a risk factor for oral and throat cancers. Alcohol and tobacco used together are the primary risk factors for these cancers.
- Get dental care before undergoing chemotherapy or radiation to the head or neck. These therapies can damage or destroy oral tissues and can cause severe mucosal inflammation and ulcers, loss of salivary function, rampant decay and bone destruction.

- Disability among older adults, as measured by limitations in instrumental activities of daily living, has declined since the early 1980s.¹³

**CALL TO ACTION:
PROMOTING HEALTHY BEHAVIORS AMONG
OLDER ADULTS**

The current gap between life expectancy and healthy years of life can be narrowed. Research shows that simple behavioral changes can improve the health condition of older adults.¹⁴ These improvements in health can be achieved through a combination of practicing healthful behaviors, effectively identifying disease, modifying health risks, and managing chronic conditions. An important way to promote healthy behaviors among older adults is to improve patient-provider communication and to provide time for counseling and referral regarding lifestyle modifications, so that older adults can adopt or maintain these behaviors. To reach these goals, providers need more time to provide counseling and ready access to community resources from the public health and aging services networks on lifestyle interventions. In particular, older adults with disabilities such as vision problems and literacy difficulties require special attention. Many of these challenges could be addressed through general systems improvement recommended for primary care, improved communications and identification of community resources.¹⁵

Health Behavior Indicators

Indicator 5: Physical activity

- Few factors contribute as much to successful aging as having a physically active lifestyle. Being physically active helps older people remain mobile and independent. In fact, regular physical activity can help prevent or control many of the health problems that often reduce the quality and length of life of older adults, including obesity, arthritis, high blood pressure, diabetes, osteoporosis, stroke, depression and colon cancer.
- Older people do not need to engage in strenuous physical activity to improve their health. Daily walking, alone or in conjunction with other leisure-time activities such as gardening, offers many health benefits.¹⁶
- Despite the proven health benefits of physical activity, data from the 2002 BRFSS show that one-third of adults age 65 and older do not engage in leisure time physical activities.

Indicator 6: Eating five or more fruits and vegetables daily

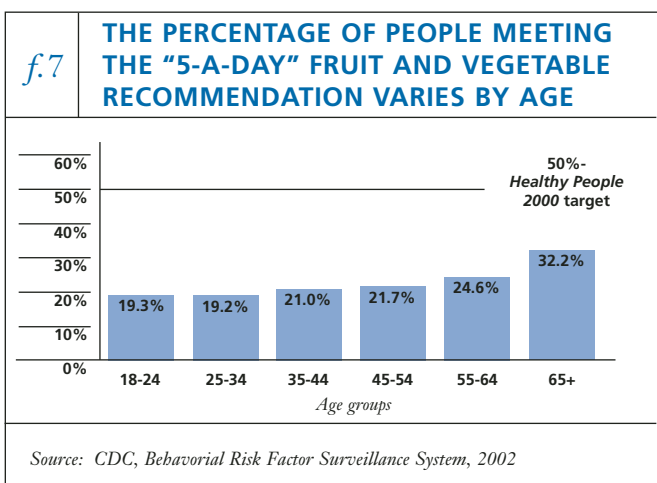
- Eating a diet rich in fruits and vegetables may help reduce the risk of some cancers and other chronic conditions, such as diabetes and cardiovascular disease.
- Compared with other age groups, a higher proportion of older Americans are eating five or more fruits and vegetables daily, but they are still not meeting the *Healthy People 2000* target (Figure 7).

Indicator 7: Obesity

- Maintaining a healthy body weight is important to older adults' health because being obese is associated with a greater risk of chronic diseases such as cardiovascular disease and diabetes. Obesity can also worsen conditions such as arthritis.
- An individual whose body mass index (BMI) is greater than or equal to 30kg/m² is classified as obese.
- BRFSS data show that the prevalence of obesity among adults age 65 and older increased from approximately 12% in 1990 to 19% in 2002.¹⁷

Indicator 8: Current smoking

- An estimated 46.2 million adults in the United States smoke cigarettes even though this single behavior will result in death or disability for half of all regular smokers. Cigarette smoking is responsible for more than 440,000 premature deaths each year in the United States.¹⁸
- Although most older adults who were regular smokers have quit smoking, about 10% of Americans older than age 65 still smoked cigarettes in 2002.
- Even elderly smokers who quit can gain significant health benefits. For example, a smoker's risk of heart disease begins to fall almost immediately after quitting, regardless of how long that person has smoked.¹⁹

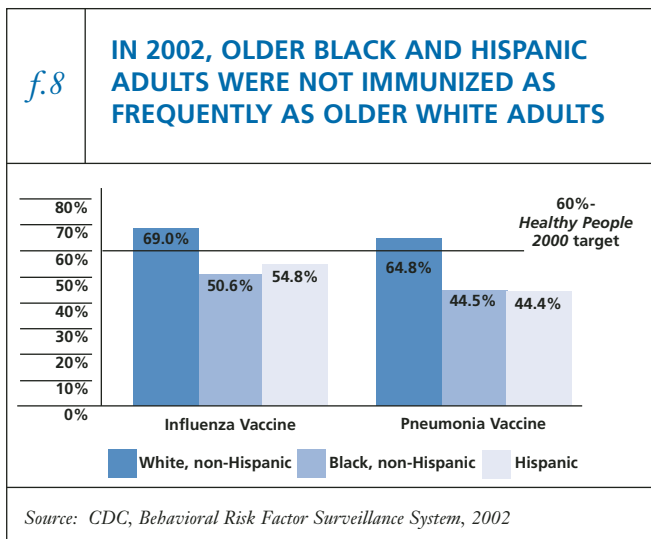


Preventive Care and Screening Indicators

Indicator 9: Flu vaccine in past year

Indicator 10: Ever had pneumonia vaccine

- Although influenza and pneumonia can largely be prevented through vaccination, these two diseases still kill thousands of older adults each year. Of the roughly 36,000 deaths due to influenza each year during the 1990s, 90% were among people age 65 or older. In 1998, an estimated 3,400 adults age 65 or older died as a result of invasive pneumococcal disease.
- The *Healthy People 2000* targets of vaccinating 60% of noninstitutionalized older Americans against influenza and 60% against pneumonia appear to have been met nationally; however, vaccination rates vary significantly among different racial and ethnic groups. Older Black and Hispanic American adults are immunized for these two diseases much less frequently than their White counterparts (Figure 8).



Indicator 11: Mammogram within past two years

- Mammography is the best available method to detect breast cancer in its earliest, most treatable stage, several years before a lump can be felt.²¹
- Timely mammography screening among women older than age 40 could prevent approximately 17% of all deaths from breast cancer, and this reduction in risk increases as women get older.²²
- Seventy-five percent of all diagnosed cases of breast cancer are among women aged 50 years of age and older.²¹ Even though mammograms for women age 65 and older are covered by Medicare, in 2002 more than

CALL TO ACTION: INCREASING THE USE OF CLINICAL PREVENTIVE SERVICES

Broader use of clinical preventive services is one of the keys to preserving and extending the health of older Americans. Medicare covers many essential clinical preventive services for older adults, including immunization for influenza and pneumococcal disease and screening for the early detection of selected cancers (e.g., breast, cervical and colorectal cancers), diabetes, cardiovascular disease, osteoporosis and glaucoma. These services, coupled with appropriate follow-up, are effective in preventing disease or detecting disease in the early stages, when treatment is more effective.

Because research has shown that older adults are motivated by health care providers' recommendations for screening and immunization, better educating seniors on recommended preventive measures is essential.²⁰ Community organizations can promote and facilitate access to preventive measures by hosting health fairs and "Immunization Days" where older people live and congregate and by widely publicizing the benefits and local availability of immunization and screening services.

A variety of players—health care providers, aging services providers, public health agencies, hospitals, nursing agencies, health insurance programs, faith-based institutions, senior centers, and community-based organizations—all have key roles in ensuring that older Americans benefit from these services. Communities should ensure that they have a designated focal point for coordinating and facilitating the efforts of these important community players in increasing the use of preventive services.

One example of a successful coordinating effort is the Sickness Prevention Achieved through Regional Collaboration (SPARC) program. SPARC coordinates and nurtures a regional network of providers and organizations that implement local strategies for increasing access to clinical preventive services. Partners include representatives of local hospitals, medical practices, public health agencies, social service organizations and community advocacy groups. SPARC serves as the bridge between medicine and public health. Although it does not directly provide services, SPARC helps medical practices more effectively provide preventive services, helps make prevention measures more widely available, and helps establish local accountability for the delivery of care. For more information, visit www.sparc-health.org.

20% of women in this age group had not had a mammogram within the past two years.

Indicator 12: Colorectal cancer screening

- Colorectal cancer is the second-leading cause of cancer death in the U.S.²³ Early detection through screening greatly increases the chances of survival and is covered by Medicare for adults age 65 and older.
- The data included in this report are graded against the *Healthy People 2000* goals, which used the target of “at least 40% of people age 50 and older who have ever received a sigmoidoscopy.” Current screening recommendations from the U.S. Preventive Services Task Force, however, are more comprehensive for adults age 50 and older who are at average risk. For this population, routine screening with one or a combination of the following tests is recommended: a fecal occult blood test (FOBT) annually, a flexible sigmoidoscopy every 5 years, a double-contrast barium enema every 5 years, and a colonoscopy every 10 years.²⁴

Indicator 13: Up-to-date on select preventive services

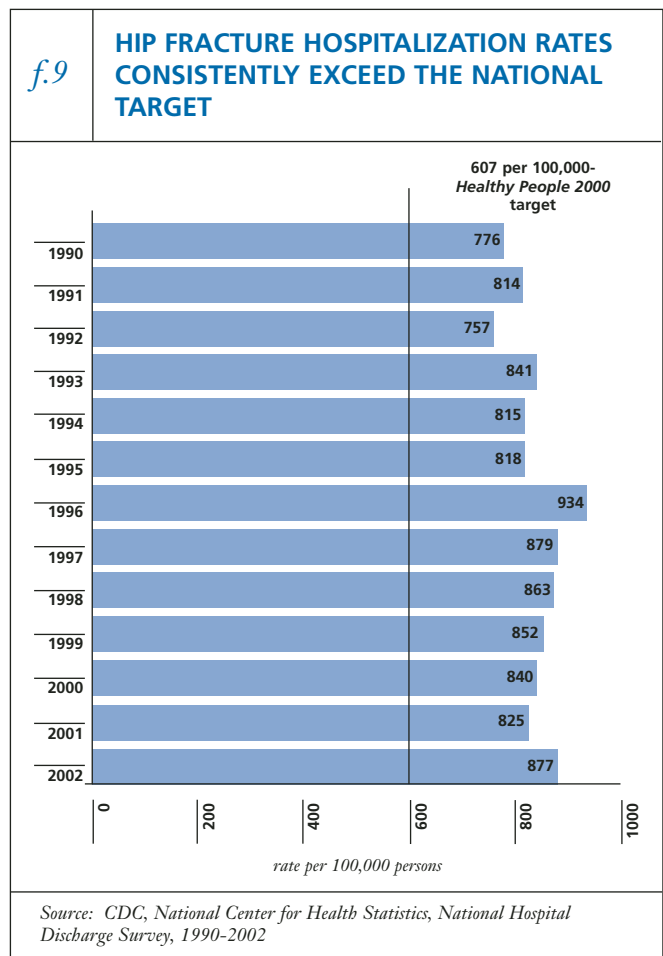
- The “up-to-date” indicator presents a composite picture of the preventive care and screening behaviors of older adults. Indicators 9 - 12 measure the use of selected clinical preventive services that are covered by Medicare and recommended for adults age 65 and older (mammography is covered for women only). While each is independently important, older adults need to use all of them, not just one or two, to protect their health.
- Many older Americans are not getting the benefits of immunizations and cancer screening, medicine’s most effective tools for preventing some of the leading causes of death. Although these services are covered by Medicare, in 2002 only one third of older Americans received these measures on the recommended schedule.

Indicator 14: Cholesterol screening

- Because high serum cholesterol is a major risk factor for coronary heart disease (CHD), which is the leading cause of illness and death among older men and women, periodic cholesterol screening is an essential component of preventive health care.
- Lowering the cholesterol levels of older adults who have CHD can prolong and improve the quality of their lives and reduce their risk of heart attack or stroke. For older adults without CHD, lowering cholesterol levels reduces the high risk that it will develop.²⁵

Indicator 15: Hip fracture hospitalizations

- Hip fracture, the most serious type of all fall-related fractures, is a leading contributor to death, disability, and reduced quality of life among older adults.^{26, 27} Up to 25% of hip fracture patients die within one year.²⁸ For those who survive, hip fractures often substantially reduce the ability to remain independent.²⁹
- In 2002, there were more than double the number of hospitalizations for hip fractures for women than men (1,127 hospitalizations per 100,000 persons for women, compared with 525 hospitalizations per 100,000 persons for men).
- From 1990 to 2002, hospitalization rates for hip fracture varied from year to year, but always remained significantly above the *Healthy People 2000* target of 607 per 100,000 (Figure 9).



CALL TO ACTION: IMPLEMENTING A NATIONAL FALLS PREVENTION PLAN

Recognizing the need for a national strategy for preventing falls among older adults, the Archstone Foundation and the Home Safety Council recently funded the National Council on the Aging's Center for Healthy Aging to spearhead a *Falls Free Summit* to develop and advance a national action plan. A Steering Committee of nationally recognized experts in the field are working with key stakeholders from public health, communities, researchers, policy makers, medical professionals, businesses, and consumers to reach consensus on goals and to commit to specific strategies.

The development of a national plan to prevent falls and related injuries is just the first step. To ensure older adults benefit from this important work, implementation will require a broad partnership among stakeholder groups.

Selected Additional Resources

For additional information on the indicators described above, please refer to the following internet-based resources (please see the Spotlight: Physical Activity and Older Adults section for resources related to physical activity):

Healthy People 2000 and Healthy People 2010
www.healthypeople.gov

Health-Related Quality of Life
www.cdc.gov/hrqol

Oral Health
www.cdc.gov/OralHealth/index.htm

Disability
www.cdc.gov/ncbddd/dh/default.htm
www.asaging.org/media/pressrelease.cfm?id=8

Nutrition and Obesity
www.cdc.gov/nccdphp/dnpa/nutrition.htm
www.cdc.gov/nccdphp/dnpa/obesity/index.htm
www.5aday.gov
www.nal.usda.gov/fnic/etext/000002.html
www.smallstep.gov
www.niddk.nih.gov/health/nutrit/pubs/choose.htm

Tobacco
www.cdc.gov/tobacco
www.cancer.org
www.lungusa.org

Immunizations
www.cdc.gov/nip
www.asaging.org/media/pressrelease.cfm?id=38

Cancer Screening
www.cdc.gov/health/cancer.htm
www.cancer.org

Cholesterol Screening
www.cdc.gov/cvh

Falls Prevention
www.cdc.gov/ncipc/duip/spotlite/falls.htm
www.asaging.org/media/pressrelease.cfm?id=9

Healthy Aging
www.cdc.gov/aging

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The State-by-State Report Card on Healthy Aging

This section includes the report card for the 50 states and the District of Columbia. Table 2 presents, for each indicator, the best- and worst-ranked states and how many states met each target. Table 3 displays the most current data for each indicator by state, ranks the states, and assigns a grade of either “pass” or “fail” to each state based on *Healthy People 2000* targets.

TABLE 2. STATE-BY-STATE REPORT CARD ON HEALTHY AGING

Indicator	Data Year*	Healthy People 2000 Target	Number of States Meeting Target [†]	Worst Ranked State	Best Ranked State
Health Status					
1. Physically unhealthy days (mean number of days in past month)	2001	‡	‡	West Virginia (8.6)	Hawaii (3.0)
2. Frequent mental distress (%) [§]	2000-2001	‡	‡	Kentucky (11.8)	Iowa (4.0)
3. Oral health: Complete tooth loss (%)	2002	20	15	Kentucky (42.5)	California, Hawaii (13.2)
4. Disability (%) ^f	2001	‡	‡	Kentucky (39.1)	Hawaii (21.2)
Health Behaviors					
5. No leisure time physical activity in past month (%)	2002	22	2	Tennessee (47.9)	Hawaii (19.5)
6. Eating 5+ fruits and vegetables daily (%)	2002	50	0	Louisiana (21.0)	Virginia (41.3)
7. Obesity (%) [¶]	2002	‡	‡	Michigan (25.2)	Hawaii (11.7)
8. Current smoking (%)	2002	15	48	Kentucky (16.9)	Utah (4.8)
Preventive Care & Screening					
9. Flu vaccine in past year (%)	2002	60	47	Florida (57.0)	Minnesota (76.6)
10. Ever had pneumonia vaccine (%)	2002	60	37	DC (48.0)	North Dakota (72.5)
11. Mammogram within past 2 years (%)	2002	60	51	Oklahoma (68.4)	Rhode Island (85.8)
12. Ever had sigmoidoscopy or colonoscopy (%)	2002	40	51	Nebraska (47.1)	Minnesota (75.3)
13. Up to date on select preventive services (%) [#]					
Male	2002	‡	‡	Missouri (25.9)	Minnesota (50.7)
Female	2002	‡	‡	Louisiana (24.7)	Minnesota (50.1)
14. Cholesterol checked within past 5 years (%)	2001	75	51	Idaho (77.2)	DC (92.9)
Injuries**					

Summary of Findings:

There is considerable variation among the states for each indicator, and mixed progress has been made since *The State of Aging and Health in America 2002* report was released:

- No states met all the targets.
- Hawaii was most often the ranked in the top five.
- Thirty-seven states met the target for pneumonia vaccine this year, compared to only 1 state in the 2002 report.
- All states are now meeting the colorectal cancer screening goal in *Healthy People 2000*.
- Variation among states can be significant. For example, in California and Hawaii, which tied to rank best in the category of permanent tooth loss, only 13.2% of older adults had lost all of their teeth—while Kentucky ranked last in that category, with 42.5% of older adults experiencing complete tooth loss.

* Data for Indicators 1-14 were collected by CDC's Behavioral Risk Factor Surveillance System (BRFSS). See Appendix for a full description of this data source.

† Includes 50 states and the District of Columbia.

‡ Indicators 1, 2, 4, and 13 are more recently developed measures, and as such, do not have Healthy People 2000 targets. Data related to Indicator 7, Obesity, were combined with the Overweight category in Healthy People 2000, and therefore Obesity has no individual target.

§ Frequent mental distress is defined as having had 14 or more mentally unhealthy days in the previous month. Data from the 2000 and 2001 BRFSS are combined here to get a sufficient sample size.

f Disability was defined on the basis of an affirmative response to either of the following two questions on the 2001 BRFSS: "Are you limited in any way in any activities because of physical, mental, or emotional problems?" or "Do you now have any health problem that requires you to use special equipment, such as a cane, wheelchair, a special bed, or a special telephone?"

¶ Healthy People 2000 defined a target for overweight, but not obesity. Because current standards separate these two conditions, obesity data are included in this report.

For men, three services are included: flu vaccine in past year, ever had a pneumonia vaccine, and ever had sigmoidoscopy or colonoscopy. For women, these same three services plus a mammogram within past two years are included.

** There are no state-level data for Indicator 15, hip fracture hospitalizations.

TABLE 3. STATE-BY-STATE REPORT CARD ON HEALTHY AGING*

	Physically Unhealthy Days (mean number of days in past month) 2001		Frequent Mental Distress† (%) 2000-2001		Oral Health: Complete Tooth Loss (%) 2002			Disability† (%) 2002			No Leisure-Time Physical Activity (%) 2002				
	Data	Rank	Grade	Data	Rank	Grade	Data	Rank	Grade	Data	Rank	Grade			
	N/A‡		N/A‡					N/A‡							
Alabama	7.7	49		9.0	49		29.9	42	Fail	37.9	48		36.3	39	Fail
Alaska	3.7	2		6.0	18		24.4	32	Fail	29.1	14		32.5	24	Fail
Arizona	5.9	40		7.3	38		19.4	12	Pass	33.3	38		26.9	7	Fail
Arkansas	7.7	49		7.7	46		29.2	41	Fail	37.8	47		38.2	42	Fail
California	5.1	12		5.9	17		13.2	1	Pass	29.7	17		25.8	6	Fail
Colorado	5.7	33		6.8	35		18.7	10	Pass	25.4	4		25.5	5	Fail
Connecticut	5.1	12		5.2	9		15.9	5	Pass	27.8	9		31.1	17	Fail
Delaware	5.5	24		6.3	28		25.0	36	Fail	23.6	3		33.9	29	Fail
Dist. of Columbia	5.2	17		8.3	47		16.7	7	Pass	27.5	7		33.4	27	Fail
Florida	4.7	5		5.9	16		20.9	18	Fail	26.3	5		35.8	36	Fail
Georgia	5.8	38		6.7	32		31.7	44	Fail	27.9	10		36.2	38	Fail
Hawaii	3.0	1		4.4	3		13.2	1	Pass	21.2	1		19.5	1	Pass
Idaho	4.9	8		6.3	29		22.0	24	Fail	30.0	18		29.1	9	Fail
Illinois	4.9	8		6.4	30		23.7	30	Fail	32.0	31		38.8	46	Fail
Indiana	6.4	44		5.7	13		24.3	31	Fail	32.2	33		38.4	44	Fail
Iowa	4.7	5		4.0	1		21.1	21	Fail	29.5	16		34.3	30	Fail
Kansas	5.2	17		6.3	26		22.4	26	Fail	28.4	12		31.8	20	Fail
Kentucky	5.7	33		11.8	51		42.5	51	Fail	39.1	51		38.8	46	Fail
Louisiana	5.3	21		6.8	34		31.9	45	Fail	30.9	23		40.6	50	Fail
Maine	5.3	21		7.7	45		30.1	43	Fail	31.2	26		36.3	39	Fail
Maryland	5.2	17		5.8	15		19.5	14	Pass	30.3	19		31.7	19	Fail
Massachusetts	5.8	38		7.4	39		22.7	27	Fail	31.1	24		32.0	22	Fail
Michigan	5.7	33		5.7	13		18.5	8	Pass	32.2	34		33.5	28	Fail
Minnesota	5.3	21		4.3	2		14.2	3	Pass	29.4	15		21.3	2	Pass
Mississippi	7.5	48		6.1	20		34.2	48	Fail	38.4	50		38.6	45	Fail
Missouri	5.5	24		6.1	19		26.0	40	Fail	30.8	22		39.6	48	Fail
Montana	4.4	3		4.9	7		20.9	18	Fail	31.4	27		30.2	15	Fail
Nebraska	4.5	4		6.3	25		25.3	37	Fail	32.1	32		29.7	12	Fail
Nevada	5.6	31		7.6	42		20.5	16	Fail	31.9	30		30.0	14	Fail
New Hampshire	4.8	7		4.7	5		21.5	22	Fail	28.5	13		31.3	18	Fail
New Jersey	5.0	11		6.2	22		20.0	15	Pass	23.4	2		31.8	20	Fail
New Mexico	6.3	43		8.3	48		24.7	35	Fail	33.6	39		29.3	11	Fail
New York	5.9	40		7.5	41		18.5	8	Pass	32.6	36		35.5	33	Fail
North Carolina	7.1	47		7.6	43		32.4	46	Fail	34.2	42		39.9	49	Fail
North Dakota	5.1	12		4.7	6		22.9	28	Fail	31.5	28		29.9	13	Fail
Ohio	5.2	17		5.4	12		23.5	29	Fail	27.6	8		35.7	35	Fail
Oklahoma	6.8	45		6.7	33		32.9	47	Fail	35.8	44		38.2	42	Fail
Oregon	5.6	31		6.2	23		18.8	11	Pass	37.8	46		24.2	4	Fail
Pennsylvania	5.7	33		5.2	10		25.3	37	Fail	30.6	21		35.2	32	Fail
Rhode Island	5.5	24		7.4	39		22.2	25	Fail	26.8	6		35.6	34	Fail
South Carolina	6.2	42		7.6	43		24.6	33	Fail	31.1	24		29.2	10	Fail
South Dakota	5.5	24		6.2	21		24.6	33	Fail	34.1	41		32.9	26	Fail
Tennessee	5.1	12		4.6	4		35.6	49	Fail	28.3	11		47.9	51	Fail
Texas	5.5	24		6.9	37		19.4	12	Pass	30.5	20		34.6	31	Fail
Utah	4.9	8		6.2	24		14.5	4	Pass	32.4	35		32.7	25	Fail
Vermont	5.5	24		6.9	36		21.6	23	Fail	31.7	29		32.3	23	Fail
Virginia	6.9	46		6.3	26		21.0	20	Fail	33.9	40		36.6	41	Fail
Washington	5.7	33		5.4	11		16.5	6	Pass	37.7	45		23.3	3	Fail
West Virginia	8.6	51		10.0	50		41.3	50	Fail	38.3	49		36.1	37	Fail
Wisconsin	5.1	12		6.6	31		20.5	16	Fail	32.9	37		27.7	8	Fail
Wyoming	5.5	24		5.2	8		25.5	39	Fail	34.5	43		30.7	16	Fail

* Grades based on the attainment of Healthy People 2000 targets. See Appendix for full description of these targets.

† Defined in Table 2.

‡ Indicators 1, 2, 4, and 13 are more recently developed measures, and as such, do not have Healthy People 2000 targets. Data related to Indicator 7, obesity, were combined with the overweight category in Healthy People 2000, and therefore obesity has no individual Healthy People 2000 target.

NOTE: Rankings are based on the relative numeric scores for each indicator, with a ranking of "1" representing the greatest achievement.

Source: CDC Behavioral Risk Factor Surveillance System. See Appendix for full description of this data source.

	Eating 5 or More Fruits and Vegetables Daily (%) 2001			Obesity [†] (%) 2002			Current Smoking (%) 2002			Flu Vaccine in Past Year (%) 2002			Ever Had Pneumonia Shot (%) 2002		
	Data	Rank	Grade	Data	Rank	Grade	Data	Rank	Grade	Data	Rank	Grade	Data	Rank	Grade
						N/A‡									
Alabama	28.4	40	Fail	21.4	35		12.0	38	Pass	64.8	42	Pass	58.5	42	Fail
Alaska	31.9	29	Fail	23.8	48		15.7	50	Fail	69.5	22	Pass	59.8	38	Fail
Arizona	35.8	9	Fail	14.7	4		9.7	22	Pass	69.7	21	Pass	68.0	6	Pass
Arkansas	32.0	28	Fail	18.0	16		11.1	34	Pass	69.0	25	Pass	58.7	41	Fail
California	35.6	10	Fail	19.1	22		9.9	24	Pass	71.5	15	Pass	66.7	10	Pass
Colorado	33.0	21	Fail	13.2	2		9.1	14	Pass	73.3	10	Pass	68.1	5	Pass
Connecticut	36.0	8	Fail	17.6	13		9.4	16	Pass	71.4	17	Pass	64.5	18	Pass
Delaware	26.2	46	Fail	23.6	47		9.8	23	Pass	71.5	15	Pass	64.3	19	Pass
Dist. of Columbia	40.7	2	Fail	22.7	40		10.1	25	Pass	58.7	49	Fail	48.0	51	Fail
Florida	33.3	19	Fail	17.2	11		9.2	15	Pass	57.0	51	Fail	57.2	45	Fail
Georgia	26.9	45	Fail	22.4	38		10.8	31	Pass	59.3	48	Fail	57.3	44	Fail
Hawaii	24.7	48	Fail	11.7	1		7.3	3	Pass	73.9	4	Pass	59.5	39	Fail
Idaho	35.1	12	Fail	17.1	10		8.4	8	Pass	65.1	40	Pass	57.5	43	Fail
Illinois	29.0	38	Fail	23.5	46		11.8	37	Pass	61.1	45	Pass	56.7	47	Fail
Indiana	31.0	30	Fail	20.7	30		11.5	36	Pass	66.3	35	Pass	61.2	34	Pass
Iowa	33.3	19	Fail	23.3	44		7.1	2	Pass	73.5	9	Pass	66.2	12	Pass
Kansas	29.3	36	Fail	18.5	18		10.6	28	Pass	68.6	27	Pass	62.1	31	Pass
Kentucky	28.2	41	Fail	22.0	37		16.9	51	Fail	65.7	38	Pass	56.6	49	Fail
Louisiana	21.0	51	Fail	25.1	50		11.0	32	Pass	57.3	50	Fail	56.3	50	Fail
Maine	38.8	3	Fail	19.0	20		7.6	4	Pass	73.8	6	Pass	66.8	9	Pass
Maryland	36.5	6	Fail	16.1	7		12.0	38	Pass	65.9	36	Pass	63.4	23	Pass
Massachusetts	35.1	12	Fail	18.8	19		8.6	10	Pass	72.6	12	Pass	63.4	23	Pass
Michigan	33.0	21	Fail	25.2	51		8.6	10	Pass	67.7	31	Pass	63.0	26	Pass
Minnesota	33.4	18	Fail	19.5	26		8.6	10	Pass	76.6	1	Pass	70.4	3	Pass
Mississippi	22.9	49	Fail	20.8	31		14.0	47	Pass	63.0	44	Pass	58.9	40	Fail
Missouri	29.1	37	Fail	21.4	35		12.1	40	Pass	68.7	26	Pass	60.8	36	Pass
Montana	29.5	34	Fail	13.8	3		12.8	44	Pass	67.7	31	Pass	67.3	8	Pass
Nebraska	28.1	42	Fail	21.2	34		10.6	28	Pass	68.2	28	Pass	61.3	33	Pass
Nevada	27.7	43	Fail	20.8	31		15.3	49	Fail	60.3	47	Pass	65.0	14	Pass
New Hampshire	37.6	4	Fail	17.4	12		9.4	16	Pass	72.3	13	Pass	63.8	20	Pass
New Jersey	33.8	16	Fail	16.3	8		9.5	19	Pass	69.1	24	Pass	63.1	25	Pass
New Mexico	29.5	34	Fail	16.7	9		11.4	35	Pass	66.6	33	Pass	62.7	29	Pass
New York	32.8	23	Fail	22.7	40		10.7	30	Pass	64.7	43	Pass	62.4	30	Pass
North Carolina	26.0	47	Fail	22.9	43		14.0	47	Pass	68.1	29	Pass	63.0	26	Pass
North Dakota	32.8	23	Fail	23.4	45		8.2	6	Pass	73.9	4	Pass	72.5	1	Pass
Ohio	28.7	39	Fail	22.8	42		12.3	41	Pass	66.6	33	Pass	63.7	21	Pass
Oklahoma	22.0	50	Fail	17.9	15		11.0	32	Pass	72.7	11	Pass	65.5	13	Pass
Oregon	33.9	15	Fail	15.8	6		9.4	16	Pass	68.0	30	Pass	65.0	14	Pass
Pennsylvania	33.7	17	Fail	24.7	49		9.6	21	Pass	70.5	20	Pass	63.5	22	Pass
Rhode Island	37.1	5	Fail	19.3	24		8.6	10	Pass	73.7	7	Pass	67.6	7	Pass
South Carolina	30.5	33	Fail	20.4	29		10.1	25	Pass	69.4	23	Pass	64.9	17	Pass
South Dakota	32.4	26	Fail	18.0	16		8.5	9	Pass	74.2	2	Pass	56.7	47	Fail
Tennessee	32.1	27	Fail	19.0	20		12.6	43	Pass	71.6	14	Pass	61.4	32	Pass
Texas	34.1	14	Fail	22.5	39		12.9	46	Pass	61.0	46	Pass	56.9	46	Fail
Utah	32.7	25	Fail	19.4	25		4.8	1	Pass	71.1	18	Pass	65.0	14	Pass
Vermont	35.4	11	Fail	19.2	23		7.6	4	Pass	73.6	8	Pass	66.3	11	Pass
Virginia	41.3	1	Fail	19.7	28		10.2	27	Pass	65.3	39	Pass	60.8	36	Pass
Washington	30.6	32	Fail	17.8	14		9.5	19	Pass	65.1	40	Pass	63.0	26	Pass
West Virginia	27.7	43	Fail	20.9	33		12.3	41	Pass	65.8	37	Pass	61.2	34	Pass
Wisconsin	36.4	7	Fail	19.6	27		8.3	7	Pass	74.0	3	Pass	70.6	2	Pass
Wyoming	30.9	31	Fail	15.6	5		12.8	44	Pass	70.6	19	Pass	68.2	4	Pass

TABLE 3. CONTINUED

	Mammogram in Past 2 Years (%) 2002			Ever Had Sigmoidoscopy or Colonoscopy [†] (%) 2002			Up-to-date on Select Preventive Services (men) (%) 2002			Up-to-date on Select Preventive Services (women) (%) 2002			Cholesterol Check in past 5 years (%) 2001		
	Data	Rank	Grade	Data	Rank	Grade	Data	Rank	Grade	Data	Rank	Grade	Data	Rank	Grade
									N/A‡			N/A‡			
Alabama	80.1	15	Pass	55.4	32	Pass	32.5	34		31.0	37		85.4	25	Pass
Alaska	76.6	33	Pass	68.6	3	Pass	26.4	50		44.3	2		82.6	38	Pass
Arizona	81.0	11	Pass	62.2	13	Pass	46.4	3		35.5	17		85.6	24	Pass
Arkansas	68.4	50	Pass	50.9	44	Pass	33.9	29		31.6	34		83.2	35	Pass
California	80.7	12	Pass	62.2	13	Pass	43.9	8		38.5	11		82.6	38	Pass
Colorado	75.2	35	Pass	61.0	19	Pass	45.4	4		32.5	29		82.2	41	Pass
Connecticut	81.9	7	Pass	63.3	10	Pass	42.5	10		39.6	6		86.7	16	Pass
Delaware	83.3	2	Pass	62.8	11	Pass	37.5	19		37.7	12		86.4	18	Pass
Dist. of Columbia	82.7	5	Pass	71.4	2	Pass	29.1	43		31.8	32		92.9	1	Pass
Florida	81.8	8	Pass	61.2	17	Pass	33.4	32		34.3	23		91.2	4	Pass
Georgia	77.5	25	Pass	57.9	27	Pass	30.4	41		28.9	43		81.2	44	Pass
Hawaii	72.4	42	Pass	48.2	49	Pass	32.7	33		32.1	31		92.2	2	Pass
Idaho	70.3	46	Pass	56.1	31	Pass	31.2	40		31.2	36		77.2	51	Pass
Illinois	78.0	22	Pass	52.2	41	Pass	27.3	47		28.1	46		83.8	33	Pass
Indiana	72.9	40	Pass	50.5	45	Pass	29.9	42		27.3	49		84.6	31	Pass
Iowa	76.7	31	Pass	57.5	29	Pass	36.3	22		38.9	9		82.5	40	Pass
Kansas	80.1	15	Pass	53.8	36	Pass	40.8	14		29.4	40		83.2	35	Pass
Kentucky	77.2	26	Pass	51.7	42	Pass	31.5	38		27.0	50		86.4	18	Pass
Louisiana	79.6	18	Pass	48.4	48	Pass	28.4	46		24.7	51		89.3	7	Pass
Maine	82.8	4	Pass	57.9	27	Pass	41.6	12		33.4	26		87.9	13	Pass
Maryland	77.6	24	Pass	63.9	9	Pass	44.6	6		29.3	41		89.9	6	Pass
Massachusetts	82.3	6	Pass	61.1	18	Pass	41.2	13		37.7	12		89.2	8	Pass
Michigan	79.4	19	Pass	65.9	6	Pass	42.3	11		34.4	22		87.6	14	Pass
Minnesota	81.2	9	Pass	75.3	1	Pass	50.7	1		50.1	1		81.2	44	Pass
Mississippi	69.4	47	Pass	53.1	38	Pass	26.5	49		29.6	39		81.2	44	Pass
Missouri	72.6	41	Pass	50.2	46	Pass	25.9	51		31.7	33		83.2	35	Pass
Montana	73.8	39	Pass	58.9	23	Pass	36.2	23		39.5	7		80.0	49	Pass
Nebraska	73.9	38	Pass	47.1	51	Pass	27.1	48		29.2	42		80.6	48	Pass
Nevada	76.9	29	Pass	58.3	26	Pass	32.3	36		35.0	20		84.9	29	Pass
New Hampshire	79.7	17	Pass	59.6	21	Pass	36.5	21		35.5	17		85.1	28	Pass
New Jersey	74.8	36	Pass	56.4	30	Pass	34.4	26		34.6	21		88.2	12	Pass
New Mexico	71.9	43	Pass	55.4	32	Pass	37.8	18		31.5	35		83.8	33	Pass
New York	77.7	23	Pass	59.7	20	Pass	39.9	17		28.5	44		88.5	11	Pass
North Carolina	81.1	10	Pass	53.5	37	Pass	37.1	20		35.2	19		86.4	18	Pass
North Dakota	78.7	21	Pass	64.1	8	Pass	45.1	5		40.9	4		86.1	21	Pass
Ohio	77.1	27	Pass	52.5	40	Pass	31.4	39		33.6	24		85.4	25	Pass
Oklahoma	68.4	50	Pass	50.2	46	Pass	35.4	25		27.8	47		84.7	30	Pass
Oregon	83.0	3	Pass	66.3	5	Pass	34.0	27		42.2	3		78.6	50	Pass
Pennsylvania	77.0	28	Pass	55.4	32	Pass	34.0	27		33.5	25		87.5	15	Pass
Rhode Island	85.8	1	Pass	62.3	12	Pass	40.7	15		39.5	7		91.5	3	Pass
South Carolina	80.5	13	Pass	59.3	22	Pass	40.0	16		36.6	15		88.6	9	Pass
South Dakota	76.5	34	Pass	51.5	43	Pass	32.5	34		27.8	47		84.1	32	Pass
Tennessee	74.3	37	Pass	52.7	39	Pass	33.5	31		30.8	38		85.7	22	Pass
Texas	70.6	45	Pass	58.5	25	Pass	29.1	43		32.3	30		85.7	22	Pass
Utah	70.8	44	Pass	61.7	16	Pass	43.6	9		32.8	27		81.4	42	Pass
Vermont	78.9	20	Pass	62.2	13	Pass	46.5	2		37.7	12		85.3	27	Pass
Virginia	76.7	31	Pass	58.8	24	Pass	32.3	36		32.7	28		86.6	17	Pass
Washington	76.8	30	Pass	66.6	4	Pass	36.1	24		38.7	10		80.9	47	Pass
West Virginia	69.3	48	Pass	48.2	49	Pass	28.6	45		28.5	44		90.1	5	Pass
Wisconsin	80.3	14	Pass	65.4	7	Pass	44.4	7		40.6	5		81.4	42	Pass
Wyoming	69.0	49	Pass	55.4	32	Pass	33.6	30		35.6	16		88.6	9	Pass

* Grades based on the attainment of Healthy People 2000 targets. See Appendix for full description of these targets.

† Defined in Table 2.

‡ Indicators 1, 2, 4, and 13 are more recently developed measures, and as such, do not have Healthy People 2000 targets. Data related to Indicator 7, obesity, were combined with the overweight category in Healthy People 2000, and therefore obesity has no individual Healthy People 2000 target.

NOTE: Rankings are based on the relative numeric scores for each indicator, with a ranking of "1" representing the greatest achievement.

Source: CDC Behavioral Risk Factor Surveillance System. See Appendix for full description of this data source.



Spotlight: Physical Activity and Older Americans

Regular physical activity can have substantial physical and mental health benefits for people of all ages. However, our knowledge of the benefits of physical activity for older adults has not yet been fully translated into action.¹

Benefits of Physical Activity

Physical Health Benefits

A strong body of scientific evidence shows that physical activity can help older people maintain their health and functional abilities. The following are examples of these benefits:

- Regular physical activity can help reduce a person's risk for cardiovascular disease by increasing levels of high-density lipoprotein (HDL) cholesterol, sometimes called the "good cholesterol." Middle-aged and older men and women who are regularly active have significantly higher HDL cholesterol levels than those who are sedentary.¹
- Regular physical activity can help prevent the development of diabetes, high blood pressure, and colon cancer and can reduce a person's risk of dying prematurely.²
- Balance training can help to prevent falls among older people by helping them maintain and improve their balance.³
- Regular physical activity helps maintain healthy bones and muscles. It can also help to increase joint mobility and improve the functional capacity of people with osteoarthritis.²

Mental Health Benefits

Just as physical activity can reduce the risk of coronary heart disease, type 2 diabetes, colon cancer, and other chronic diseases and disabilities, it can also reduce the risk of distress, anxiety and depression that may accompany these conditions. Physical activity can also help alleviate symptoms of depression and anxiety from other causes and improve the quality of life of older adults by enhancing their psychological well-being.² According to *Mental Health: A Report of the Surgeon General*, 8%–20% of older adults in the community and up to 37% in primary health care settings have symptoms of depression.⁴

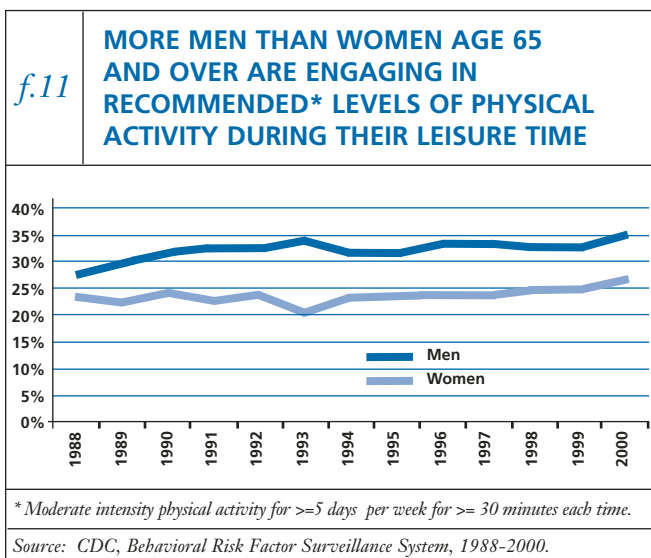
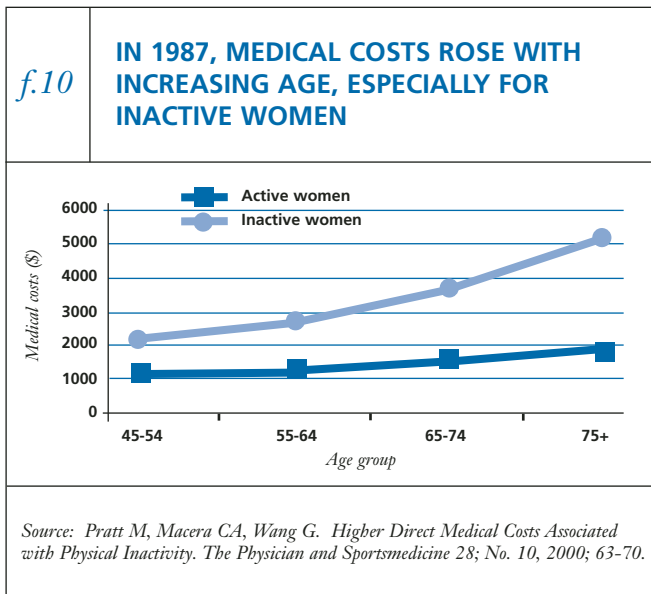
Social support, a key component of good mental health, has been consistently associated with being regularly physically active, and this relationship seems to be reciprocal: social support from friends and family members may help older people be more physically active, and being physically active can help older people build their social networks.

There is also evidence that higher levels of physical activity and physical fitness are associated with better cognitive functioning, including more efficient processing necessary to perform complex cognitive tasks. However, research is needed to determine to what extent these scientific findings relate to the performance of routine daily activities among older adults.^{5,6}

Financial Benefits

The many benefits of physical activity for older adults extend beyond better health, improved functioning, and increased quality of life to include significantly reduced health care costs. Increasing physical activity could reduce direct medical costs by \$77 billion annually (in 2000 dollars). Inactive adults have significantly higher direct medical costs than active adults, and the costs associated with physical inactivity increase with age, especially for women (Figure 10).⁷ According to data from the 1987 National Medical Expenditures Survey, inactive women 45 years of age and older had at least double the health care costs of their active counterparts.⁸

The impact of a lack of physical activity on medical care costs is likely to grow as a result of an aging population, unless trends in physical activity change.



Among adults age 65 years and older, 95% of all health care spending is for chronic diseases such as diabetes, heart disease and stroke, cancer and arthritis. Because physical activity can help prevent and control many of these conditions, increasing physical activity among older Americans has potential for reducing the financial burden of chronic diseases.

In addition, fall-related injuries among older people cost the nation more than \$20 billion each year. By 2020, the total annual cost of these injuries is expected to reach \$32.4 billion.⁶ By improving balance and muscle strength, physical activity can reduce an older person's risk of falling and thus further reduce medical costs.^{1,3}

Trends in Physical Activity

CDC's Behavioral Risk Factor Surveillance System (BRFSS) data show that the percentage of older adults who meet the recommended level of physical activity (i.e., 30 minutes of moderate intensity activity, such as brisk walking, five or more days per week) increased modestly from 1988 to 2000 but is still relatively low (Figure 11). The percentage of men age 65 years and older who met the recommended level increased from 27.6% in 1988 to 35.1% in 2000. Women had consistently lower levels of recommended activity than men and showed less of an increase over time (from 23.4% in 1988 to 26.6% in 2000). These data suggest that, while all older adults could benefit from increased levels of physical activity, initially focusing interventions on older women could help to reduce the disparity between the sexes.

Levels of Physical Activity in Selected Local Areas

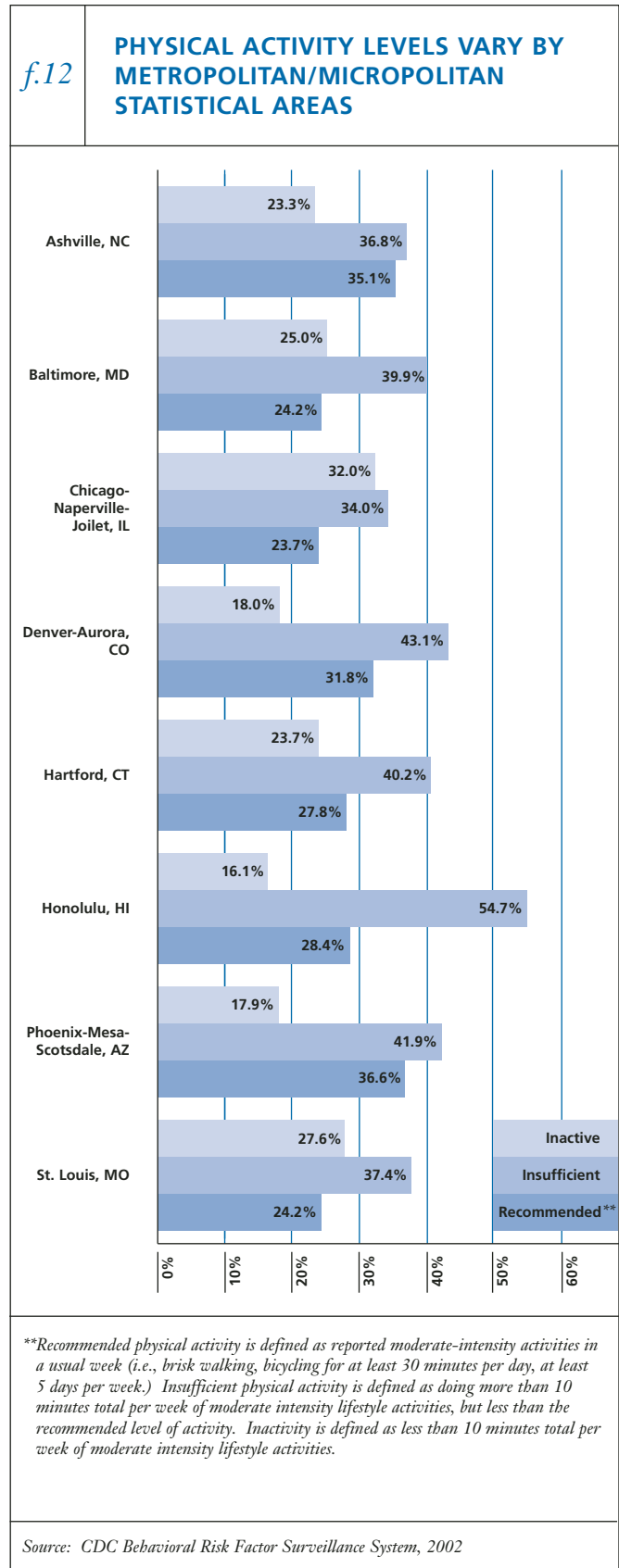
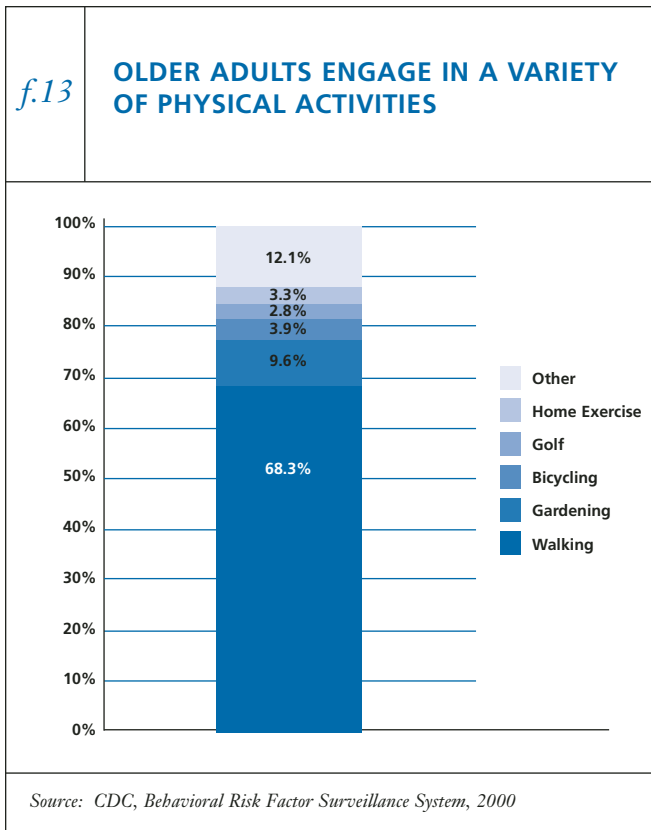
The BRFSS recently developed the Selected Metropolitan/Micropolitan Area Risk Trends (SMART) project, which provides local-level data that can be used to track trends, identify health issues in the community, and develop and evaluate health programs and policies. The data available through this project include the levels of physical activity among adults in participating metropolitan/micropolitan statistical areas (MMSAs).

Figure 12 shows the levels of physical activity (recommended, insufficient, and inactive) among older adults in a selected group of geographically diverse MMSAs that asked the physical activity questions in 2002. Among these eight selected areas, Phoenix-Mesa-Scottsdale, AZ, had the highest percentage (43.2%) of older adults meeting recommended levels of physical activity, and St. Louis, MO, had the lowest percentage

(27.5%). The highest percentage of inactive seniors (30.3%) was found in the Chicago-Naperville-Joliet, IL MMSA, whereas Phoenix-Mesa-Scottsdale and Honolulu each had only 14.7% of seniors reporting inactivity.

Activity Patterns

The 2000 BRFSS asked respondents to report the two physical activities or exercises that they had participated in the most during the past month. Nearly 70% of physically active older adults reported walking as the type of physical activity or exercise they had spent the most time doing during the past month. The next most common physical activities were gardening (reported by 9.6%), bicycling (3.9%), home exercises (3.3%), and golf (2.8%). About 12% of older adults reported participating in other types of activities, which included aerobics classes, swimming, weight lifting, running/jogging and tennis (Figure 13). These data can help planners in health departments, area agencies on aging, senior centers, community agencies and other organizations as they decide what types of physical activity programs to offer older adults.



CALL TO ACTION: INCREASING PHYSICAL ACTIVITY **Strategies to increase physical activity among older adults**

Despite ample evidence of the benefits of regular physical activity for older adults, most seniors do not achieve recommended levels of physical activity. The challenge, and the opportunity, is to make physical activity more accessible to older adults of all ages, abilities and interests.

In 2001, the *National Blueprint: Increasing Physical Activity Among Adults Age 50 and Older*¹ (www.agingblueprint.org) was released as a joint effort of many organizations. The publication was sponsored by AARP, the American College of Sports Medicine, the American Geriatrics Society, CDC, the National Institute on Aging, and the Robert Wood Johnson Foundation; approximately 50 other organizations provided input and support. This planning document provides background information on the importance of physical activity, identifies barriers to increasing physical activity among older adults and recommends numerous strategies for overcoming these barriers and helping older adults be more physically active.

In 2002, *National Blueprint* partners prioritized the strategies and selected 18 of them (the top three in six different program areas). National organizations have been selected to take the lead for each strategy as tactics are developed and implemented over the next 12 to 24 months. These are described in a new document, *Strategic Priorities for Increasing Physical Activity Among Adults Age 50 and Over: The National Blueprint Consensus Conference Summary Report*, which is available at www.agingblueprint.org/StrategicPriorities.cfm.⁹

While these 18 nationally-focused strategies are being implemented, there remain additional strategies from the initial *Blueprint* document that states, communities, program planners, researchers, policy makers and health care providers can put into practice to increase physical activity among their own populations. The following is a sampling of what can be done at the local level:

Research Strategies

- Identify barriers to walking for adults age 50 and older, determine why these barriers exist, and develop specific recommendations for how to overcome them.

Home and Community Strategies

- Establish partnerships among health, aging, urban/community planning, transportation, environmental groups, recreation, social services and the private sector. Encourage these groups to work

together to define, create, promote and sustain communities that support lifelong physical activity.

Workplace Strategies

- Provide financial incentives for employers to incorporate facilities that offer opportunities for physical activity into their corporate land-use plans.
- Communicate to business leaders the benefits of physical activity for older workers, especially those that support management goals (e.g. cost-savings, reduced employee absenteeism).

Medical Systems Strategies

- Identify community resources (e.g., YMCAs/YWCAs, certified trainers, fitness clubs, etc.) that are quality sources of information related to physical activity for midlife and older adults, and share this information through medical settings.

Policy/Advocacy Strategies

- Channel tools and funds to communities so they can implement actions to increase physical activity among residents age 50 and older.
- Provide funding to community organizations to make physical activity opportunities more readily accessible and available to low-income populations.

PROGRAMS THAT WORK

As part of the *Blueprint* project, a variety of national-level activities have been initiated to identify programs that successfully increase seniors' levels of physical activity. For example, in 2002, the National Council on the Aging's (NCOA) Center for Healthy Aging, with support from the Robert Wood Johnson Foundation, conducted a national competition to identify best practices in physical activity programming. After a thorough review, 10 programs were awarded \$1,000 and a certificate of achievement. For more information on this project, please visit www.healthyagingprograms.org.

1. Lifetime Fitness Program

One of the 10 programs selected by NCOA was the Seattle/King County, WA-based Lifetime Fitness Program. This evidence-based physical activity program provides seniors with low-cost fitness classes taught by certified fitness instructors. The one-hour classes meet three times per week in ongoing, five-week sessions. The classes include strength training with wrist and ankle weights, as well as aerobics, stretching, and balancing exercises. The program is designed to be safe and effective for seniors with a wide range of physical abilities. This

program began as a partnership between Senior Services of Seattle/King County, Group Health Cooperative of Puget Sound, and the University of Washington Health Promotion Research Center, but now is being replicated in sites across the U.S. Studies have shown a marked improvement in participants' physical and social functioning, as well as a decline in areas such as pain, fatigue and depression.¹⁰ For information on this program, visit their website: www.seniorservices.org/wellness/replication.htm.

2. PACE: People with Arthritis Can Exercise

PACE is an exercise program that was developed by the Arthritis Foundation specifically for people with arthritis. It uses gentle activities to help increase joint flexibility and range of motion to maintain muscle strength. Two levels of PACE, basic and advanced, are available to address the varying levels of fitness and limitation among those with arthritis. PACE participants have experienced such benefits as increased functional ability, increased self-care behaviors, decreased pain and decreased depression.¹¹

Trained leaders are required to implement this course. For help in identifying trained leaders in your area or for information on how to become a trained leader, contact the Arthritis Program Director at the state health department or the state/local Arthritis Foundation Chapter. (For a listing of directors by state, visit www.chronicdisease.org/NEW/cdd_members.htm. For a listing of chapters, visit www.arthritis.org.)

3. Exercise: A Guide from the National Institute on Aging

The National Institute on Aging has developed a manual and companion video that guides older adults through safe and effective endurance, strength training, balance and flexibility exercises. The program can be completed on an individual basis or in a group setting. The 80-page manual is available online for free, or may be ordered along with the video for a cost of \$7.00. The video features Margaret Richard, star of PBS' exercise show *Body Electric*. A Spanish language version is also available. For more information, visit www.nia.nih.gov/exercisebook/index.htm.

Selected Additional Resources

For additional information on the importance of physical activity and programs for older adults, please refer to the following internet-based resources:

AARP Get Movin' at 50 Plus

www.aarp.org/learn/course/Articles/a2003-06-13-keepactivedescription.html

Administration on Aging's *You Can!* Program

www.aoa.gov/youcan/

American Association for Active Lifestyles and Fitness (AAALF) Training and Encouraging Senior Activity (TESA) Project

www.aahperd.org/aaalf/template.cfm?template=tesa.html

American Society on Aging/CDC Media Backgrounder on Physical Activity

www.asaging.org/media/pressrelease.cfm?id=40

Arthritis Foundation PACE Program

www.arthritis.org/events/getinvolved/ProgramsServices/PACE.asp

Boston University *Strong For Life* Program

www.bu.edu/roybal/products/life.html

CDC Division of Nutrition and Physical Activity *Growing Stronger* Program

www.cdc.gov/nccdphp/dnpa/physical/growing_stronger/index.htm

CHAMPS: Community Healthy Activities Model Program for Seniors

www.ucsf.edu/champs/

Healthier U.S.

www.healthierUS.gov

Lifetime Fitness Program

www.seniorservices.org/wellness/replication.htm

National Blueprint: Increasing Physical Activity Among Adults Age 50 and Older

www.agingblueprint.org

NCOA Best Practices in Physical Activity Programming

www.healthyagingprograms.org

NIA *Exercise Guide for Older Adults*

www.nia.nih.gov/exercisebook/index.htm

***Silver Sneakers* Program**

www.silversneakers.com

Texas Department on Aging's *Texercise* Program

www.texercise.com

Chronic Disease Directors Association

www.chronicdisease.org

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Our Nation's Health Care Workforce: Is it Ready for the Graying of America?

By 2030, 20% of all Americans will be age 65 or older. Unfortunately, America's health care workforce is unprepared for the coming senior boom. There are too few health care providers specifically trained in geriatrics; moreover, there is a gap between what many primary care providers know, and what they need to know, to optimally treat older patients. Addressing this problem requires immediate attention and action at the national level.

The Graying of America

Starting in 2012, nearly 10,000 Americans will turn 65 every day. The total number of Americans over age 65 and eligible for Medicare will double to over 70 million within this generation, while the population over age 85 will increase nearly five-fold, to almost 19 million, by mid-century. Obviously, the "baby boom" will soon become the "senior boom."

The aging of America, however, is more than a simple matter of numbers. As noted in the 2002 *State of Aging & Health in America* and other sources, older adults use more health care services than any other age group. Americans over age 65 today are only 13% of the population, but account for half of physicians' visits and half of all hospital stays. The average 75 year old has three chronic conditions and uses five different prescription drugs. Older patients also have unique health challenges and different medical needs than younger adults.

Health Care Workforce: A Growing Need

Unfortunately, there is often a gap between what many health care providers know, and what they need to know, to optimally treat older patients. For example, a 2002

Merck Institute of Aging & Health (MIAH) survey of 250 practicing primary care physicians found that only half believe their colleagues can adequately treat even common geriatric problems.

Only a small proportion of practicing health care providers have had any formal training in geriatrics. Out of 650,000 practicing physicians in the U.S., less than 9,000 are geriatricians, or about 2.5 geriatricians per 10,000 elderly, and that number is expected to fall to about 6,000 in the near future. Fewer than 3% of current medical students take any elective geriatric courses. Additionally, only 720 pharmacists, out of 200,000, have geriatric certification. A 1997 survey of 600 nursing baccalaureate programs showed that only 23% of schools required a single course in geriatrics, and less than one-half of one percent of nurses have advanced certification in geriatrics. Among social workers, only 5% identify their primary practice area as geriatrics.

The shortage of qualified providers is only part of the story. Too few geriatric specialists exist to train others. The majority of educational curricula, including nursing, pharmacy, medicine and dentistry, do not require geriatric training. Only 600 medical school faculty, out of 100,000, list geriatrics as their primary specialty. Geriatricians comprise only one-half of one percent of

all medical educators in the U.S., which represents the largest educational training gap in any field. Additionally, 60% of nursing schools have no geriatric faculty.

Despite these numbers, there are a few encouraging recent trends. In family medicine, 92% of all residency programs in 2002 reported geriatrics as part of their required curriculum. Many medical schools now have departments or divisions of geriatrics within departments of family medicine or internal medicine. All medical schools also currently have a contact person for geriatric medicine.

Even with these somewhat encouraging statistics, the current Medicare system, with low reimbursement rates for geriatric primary care, may discourage young physicians from entering the field; these doctors are choosing more

lucrative, procedure-driven specialties. Also, many physicians still see geriatrics as something “extra” not “essential,” despite the demographic imperative.

Overall, the healthcare workforce lacks the training to provide appropriate care at the present time, and it is wholly unprepared for the graying of America. Despite efforts to improve the situation, there is still an immediate and continuing crisis. Demographic trends and an ever expanding geriatric knowledge base demand not only attention but immediate action.

Given the urgency, many individuals and organizations, both public and private, have been working for years to fund geriatric research, training, and education, and to ensure geriatric training for all health care professionals.

CALL TO ACTION: PREPARING OUR HEALTH CARE WORK FORCE FOR AN AGING SOCIETY

In April 2003, many of the leaders in the field of geriatrics met in Washington, DC to discuss and recommend solutions to the shortage of healthcare workers specifically trained in geriatrics. This landmark conference*, *Bridging the Workforce Gap for our Aging Society*, was sponsored by MIAH, the Department of Veterans Affairs (VA), the National Institute on Aging (NIA), and the Health Resources and Services Administration (HRSA).

The following recommendations were largely provided and suggested by the conference participants. They are primarily targeted to practicing primary care physicians, because studies have shown they are usually the first line of treatment for older adults. These recommendations should be considered a viable national blueprint for helping older adults in the U.S. enjoy optimal health care.

1. Increase Funding for Training

Federal funding for geriatric research is over 50 times that provided for geriatric training. Geriatric research cannot help a single person unless it is translated into practice.

2. New Research Must be Incorporated

Research that leads to advances in the prevention and treatment of debilitating diseases must be incorporated into practice quickly. Federal agencies should participate in and encourage timely dissemination of new research findings into clinical practice.

3. New Practices for Achieving Widespread Change Must be Adopted

Medicare performance measurement systems must thoroughly audit both quality of geriatric care and the use of evidence-based best practices. They must also create incentives, such as additional provider reimbursements, for improvements in the quality of geriatric care. We also need new structures and systems to measure the effectiveness of local and individual approaches to changing provider behavior, and therefore improving geriatric care.

4. Professional Organizations Must Help Affect Change

Organizations currently involved in evidence-based education need to coordinate their efforts. Credentialing organizations need to offer professional development programs for practitioners.

5. New People Must be Recruited to Geriatrics

Providing incentives, such as loan repayment, could encourage more health professional students to choose

geriatrics. Additionally, the paradigm of aging as being synonymous with “old and sick” must be changed; this could help attract practitioners to geriatric fields. Media campaigns could be utilized to create a more positive picture of aging.

6. The Skills of Community Practitioners Must be Enhanced

Geriatric information resources must be developed that address specific geriatric syndromes and conditions, and therefore, provide convenient access to specialized information for health care providers. A broad coalition of geriatric advocates must advance a national agenda that stresses geriatric professional development and quality improvement that is linked to certification and higher Medicare reimbursement.

7. Interest in Geriatrics Must be Developed across Clinical Disciplines

Geriatric specialists must work to build bridges with other disciplines, helping to foster interdisciplinary approaches as well as increasing knowledge of best-practice geriatrics care.

8. Geriatric Education in Health Care Must be Increased at All Levels

Medical schools must initiate exposure to geriatrics by requiring geriatric education. Residency programs must also do more to incorporate geriatrics into training.

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State Examples

Kansas ElderCount: County, AAA, and State-Level Data Available for Action

Kansas ElderCount is a collection of three geographic levels of data: county, area agency on aging, and state. The purpose of the data is to describe the well-being of older adults in Kansas. These data were collected to enhance public policy, program planning and general understanding of the health and socioeconomic status of older adults. Data were collected at the county level because the smaller the geography, the more useful the data for policy and planning purposes. Older populations in urban and rural counties in Kansas are very different, and reporting state-level data would only mask these important differences.

Staff at the Center on Aging worked with a 32-person statewide advisory committee to identify and locate the best indicators and secure county-level data for the year 2000. Data are also presented for the 11 area agencies on aging in Kansas. The 36 indicators are grouped into five categories: population, economics, health, community living and nursing homes. The number and percentage of adults in the county and state are reported for each indicator. Counties are grouped into quintiles to illustrate how each county compares with the other 104 counties in the state on each indicator.

Kansas State Senator Sandy Praeger secured funding from the Kansas Health Foundation and the Milbank Memorial Fund to produce this 172-page booklet in 2002, which is also available on the Internet at www2.kumc.edu/coa/eldercount. Having a State Senator champion this project opened many doors of cooperation. Other project partners included the Kansas Department on Aging, the Kansas Task Force on Long Term Care Services and the Center on Aging at the University of Kansas Medical Center.

Kansas was unable to obtain county-level data on all of the indicators that it would have liked to include. In particular, data were not available on abuse, neglect and exploitation of older adults; projections of growth of the population aged 65 years and older; and data describing the differences between the number of people receiving community-based services and the number needing them.

Kansas hopes to fill in many of these data gaps when the book is eventually updated. In the meantime, this report provides vital data for public policy and planning decisions to prepare for the growth in the elder population in Kansas, as in other states, in the coming decades.

Maine Elder Women's Health Indicator Framework

In the spring of 2001, the Maine Bureau of Health (BOH) received a small grant from the Health Resource and Services Administration's Office on Women's Health, Region 1. The goals of the project were:

- To develop a set of indicators for monitoring the health status of Maine's elder women
- To identify data sources for these indicators and to gather baseline data
- To identify opportunities for collaboration between BOH and the Bureau of Elder and Adult Services
- To formulate recommendations for programs and policies to improve the health status of Maine's elder women

This project culminated with the report *Assessing and Monitoring the Health Status of Maine's Elder Women: the Elder Women's Health Indicators Project*. It is a starting point, or place to begin the process of systematically assessing and monitoring elder women's health so that interventions can be targeted, improvements can be measured and policies can be formulated to ensure focused approach to improving the health of Maine's elder women.

The framework for and content of this report were designed for state policy makers and decision makers and professionals in public health and elder services as well as a general audience. The intent was to keep the framework as user-friendly as possible and to use language that would communicate to the general public but to be specific enough to remain useful to public health and social service professionals. The state-level data used throughout the report come primarily from the Maine Department of Human Services, Bureau of Health, Office

of Data, Research and Vital Statistics; the Behavioral Risk Factors Surveillance System; Maine Hospital Discharge Data; and the 2000 U.S. Census.

Response to the report has been very positive. Focusing on health indicators for elder women highlights a population that needs increased attention. To obtain the report, contact Sharon Leahy-Lind, Women's Health Coordinator, Bureau of Health, Maine Department of Human Services at 207-287-4577 or e-mail: sharon.leahy-lind@maine.gov.

A Healthy Profile of Older North Carolinians

The proportion of older adults that make up North Carolina's population has increased in recent years, and this increase is expected to continue for decades to come. Currently, about 28% of North Carolinians are age 50 or older, and this proportion is projected to be 35% by 2030. To compile a picture of the health of older adults in North Carolina, the North Carolina State Center for Health Statistics, the North Carolina Division of Aging, and the Older Adult Health Branch of the North Carolina Division of Public Health, published *A Health Profile of Older North Carolinians* in 2003. This report uses North Carolina data from the Behavioral Risk Factor Surveillance System surveys, death certificates, cancer registries and hospital discharges.

The report covers the following major health topics among older adults: general health status and well-being, health care access, health-related risk behaviors, heart disease, stroke, cancer, chronic respiratory disease, Alzheimer's disease, influenza and pneumonia, diabetes, motor vehicle injuries, suicide, arthritis, mental health and osteoporosis/hip fractures. To capture the wide range of ages that can fall within the "older adult" category, the report groups data into four age groups: 50–64, 65–74, 75–84, and 85 and above. In addition, with the exception of the hospital discharge data, data are broken down by race and sex, two factors that can greatly influence a person's health status and health care.

The report provides a concise statistical picture of the burden of health problems among older adults in North Carolina. Although it does not discuss specific programs for reducing these health problems, it provides health and aging professionals and policy makers with a blueprint for prioritizing the health needs of older adults and for designing and establishing programs and guidelines to meet these needs.

North Carolina's 17 area agencies on aging are using the publication to create a new four-year plan that includes healthy aging issues. Universities, hospitals, and

county departments on aging have used the data in the report to develop grants and request funding to address problems among the older populations that they serve. Aging advocacy groups, including AARP and Senior Tarheel Legislatures, are using the information for policy planning initiatives. Additionally, senior and community centers have held healthy aging workshops to discuss the data in the report with health care professionals and the general public. The report is available on the Internet at www.schs.state.nc.us/SCHS/.

Healthy Aging in Washington State—The Need for Action

Healthy Aging in Washington State—the Need for Action was developed by the Washington (WA) State Department of Health (DOH) primarily to raise awareness among policy makers, employers, agencies and organizations about the aging of Washington's population and the potential social, health and cost implications for the coming years. The document provides guidance for policy and environmental changes at the state, community and work site levels to help people 45 years of age and older adopt and maintain healthy behaviors to prevent or delay the onset of age-related chronic conditions. The major data and policy resources used included the U.S. Census, WA Office of Financial Management, WA BRFSS, WA Center for Health Statistics, health reports by various DOH programs, the *Washington State Plan for Nutrition & Physical Activity*, and the *Guide to Community Preventive Services*.

The booklet has attracted the attention of a full spectrum of groups with an interest in aging issues, from a small neglected senior center in a rural area to the Governor's Chief of Staff. Partners around the state have used the booklet to inform program design and the development of a state plan and training curriculum for care providers, to help educate the public and health care providers, and to increase awareness of aging issues among agency senior staff, policy makers and elected officials.

This call to action emphasizes the need for population-based primary prevention of aging-related disease and injury to improve health and quality of life and reduce health care costs in the coming decades. The booklet and healthy aging messages for the public are available on line at www.doh.wa.gov/cfh/OHP/stepstohealthyaging.htm.



Appendix

Major Data Sources and Technical Information

CDC's Behavioral Risk Factor Surveillance System

For the past two decades, CDC's Behavioral Risk Factor Surveillance System (BRFSS) has helped states survey U.S. adults to learn about the wide range of personal behaviors that affect their health. The BRFSS has focused primarily on four behaviors: physical activity, nutrition, tobacco use, and the use of proven preventive services (such as cancer screenings), all of which have a tremendous impact on the rates of the nation's leading killers. The BRFSS describes these personal health behaviors in terms of how common they are, whether they are increasing over time, and which populations might be most at risk. The information gathered through this state-based telephone survey system is essential to national, state, and local public health agencies as they monitor the need for and the effectiveness of various public health interventions.

While the BRFSS is one of the most useful tools for assessing the health of the older adult population, it has at least three limitations. First, BRFSS excludes people who don't have land line telephones or are in institutions (e.g. nursing homes). Second, people who are severely impaired may not be adequately represented because of the functional capacity required to participate in the survey. Third, the data included in the BRFSS are all self-reported and therefore have not been confirmed by a health care provider.

The BRFSS is administered and supported by the Division of Adult and Community Health, National Center for Chronic Disease Prevention and Health Promotion, CDC. For more information, please visit www.cdc.gov/brfss.

CDC's National Hospital Discharge Survey

The National Hospital Discharge Survey (NHDS), which has been conducted annually since 1965, is a national probability survey designed to meet the need for information on characteristics of inpatients discharged from non-Federal, short-stay hospitals in the United States. The NHDS collects data from approximately

270,000 inpatient records acquired from a national sample of about 500 hospitals. Only hospitals with an average length of stay of fewer than 30 days for all patients, general hospitals and children's general hospitals are included in the survey. The survey excludes federal, military, and Department of Veterans Affairs hospitals, as well as hospital units of institutions (such as prison hospitals) and hospitals with fewer than six beds staffed for patient use.

The NHDS is administered and supported by the Hospital Care Statistics Branch, National Center for Health Statistics, CDC. Data are disseminated annually through published documents, public-use data tapes, data diskettes, CD-ROMs, and downloadable files. For more information, please visit www.cdc.gov/nchs/about/major/hdasd/nhds.htm.

CDC's Data Warehouse on Trends in Health and Aging

With support from the National Institute on Aging, CDC's National Center for Health Statistics (NCHS) has created the Data Warehouse on Trends in Health and Aging, a Web-based, user-friendly tool that provides access to up-to-date information on the health of older Americans. This system is designed to show trends in health-related behaviors, health status, health care use and health care costs among older adults. A data dissemination tool called *Beyond 20/20*[®] is used to retrieve and display customized tables of health information on older men and women of various ages, races, and ethnicities.

For more information, please visit www.cdc.gov/nchs/agingact.htm.

TABLE 4. REPORT CARD INDICATORS AND HEALTHY PEOPLE TARGETS

Indicator	Healthy People 2000 Target	Healthy People 2010 Target
Health Status		
1. Physically unhealthy days	No target specified	No target specified
2. Frequent mental distress	No target specified	No target specified
3. Oral health: Complete tooth loss	No more than 20% of adults age 65+ who have lost all of their natural teeth	No more than 20% of adults age 65+ who have lost all of their natural teeth
4. Disability	No target specified	No target specified
Health Behavior		
5. No leisure time physical activity in past month	No more than 22% of adults age 65+ with no leisure-time physical activity	No more than 20% of adults age 18+ with no leisure-time physical activity
6. Eating 5+ fruits & vegetables daily	At least 50% of people age 65+ who eat 5+ fruits and vegetables a day	Target redefined: fruits and vegetables separated into multiple categories
7. Obesity	Combined with the "Overweight" category; No more than 20% of people age 20+ who are overweight (BMI>=27.3)	No more than 15% of adults age 20+ who are obese (BMI>= 30)
8. Current smoking	No more than 15% of adults age 18+ who smoke	No more than 12% of adults age 18+ who smoke
Preventive Care and Screening		
9. Flu vaccine in past year	At least 60% of adults age 65+ who had a flu shot within the past year	At least 90% of adults age 65+ who had a flu shot within the past year
10. Ever had pneumonia vaccine	At least 60% of adults age 65+ who have ever received a pneumonia vaccine	At least 90% of adults age 65+ who have ever received a pneumonia vaccine
11. Mammogram within past 2 years	At least 60% of women age 70+ who had a mammogram within the past 2 years	At least 70% of women age 40+ who had a mammogram within the past 2 years
12. Ever had sigmoidoscopy or colonoscopy	At least 40% of adults age 50+ who have ever received a sigmoidoscopy	At least 50% of adults age 50+ who have ever received a sigmoidoscopy
13. Up-to-date on select preventive services	No target specified	No target specified
14. Cholesterol checked within past 5 years	At least 75% the proportion of adults age 18+ who have had their cholesterol checked in the past 5 years	At least 80% the proportion of adults age 18+ who have had their cholesterol checked in the past 5 years
Injuries		
15. Hip fractures	No more than 607 hospitalizations per 100,000 persons for hip fractures for adults age 65+	No more than 416 hospitalizations per 100,000 persons for women age 65+; no more than 474 hospitalizations per 100,000 persons for men age 65+

Source: www.healthypeople.gov (accessed July 26, 2004)

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