



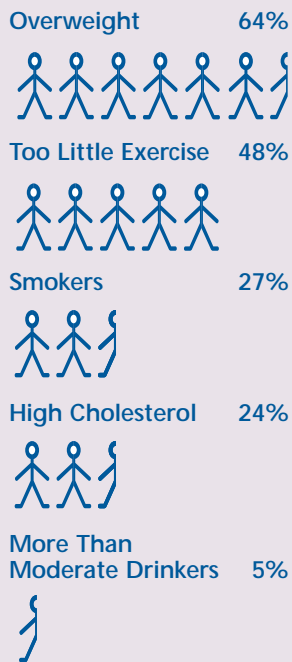
At Risk

Developing chronic conditions later in life

Almost 100 million Americans have chronic conditions, and millions more will develop them as America ages.¹ Some individuals are at risk for chronic conditions because of factors that cannot be modified, such as genetic predisposition, gender, and age. Risk factors related to health behaviors, however, can be modified. The majority of adults approaching their later years have risk factors for chronic conditions because of their health-related behaviors.

HOW BIG IS THE RISK?

PERCENT OF 51 TO 61 YEAR OLDS WITH MODIFIABLE RISK FACTORS



SOURCE: National Academy on an Aging Society analysis of data from the 1992 *Health and Retirement Study*.

Risk factors alone can affect health and quality of life. Adults who have modifiable risk factors for common chronic conditions—but do not have the conditions—are less healthy and more limited in their daily activities than those who are not at risk. Individuals who modify their health-related behaviors can reduce the risk of developing chronic conditions and enhance the quality of their lives.

The prevalence of risk factors among adults approaching their later years is alarmingly high

Older adults are increasingly at risk for chronic conditions simply because of their age. The vast majority of the population age 51 to 61—89 percent—have at least one modifiable risk factor, and almost one-fifth—19 percent—have three or more modifiable risk factors.

- Almost two-thirds of the population are overweight, and more than one-third of those who are overweight are obese.
- About half of the population does not engage in light physical activity three or more times a week. This is a conservative estimate. The Centers for Disease Control and Prevention recommends vigorous physical activity at least three times a week. Some 87 percent of the population fail to meet this recommendation.
- Smoking is also a major threat to health. Over one-quarter of adults age 51 to 61 smoke cigarettes, but almost two-thirds—63 percent—have smoked cigarettes at some point in their lives.

WHAT DOES IT MEAN TO BE AT RISK?

This *Profile* examines five modifiable risk factors related to health behaviors among people age 51 to 61 who do not have any of five well-known chronic conditions associated with five modifiable risk factors: hypertension, heart disease, diabetes, cancer and stroke. The five risk factors are:

- Being overweight (defined as having a body mass index above 25)
- Not exercising enough (defined as not engaged in light physical activity three or more times a week)
- Smoking cigarettes
- Having high cholesterol
- Consuming more than two alcoholic drinks a day

Individuals with three or more of these five risk factors are considered part of the population “at risk” for chronic conditions.

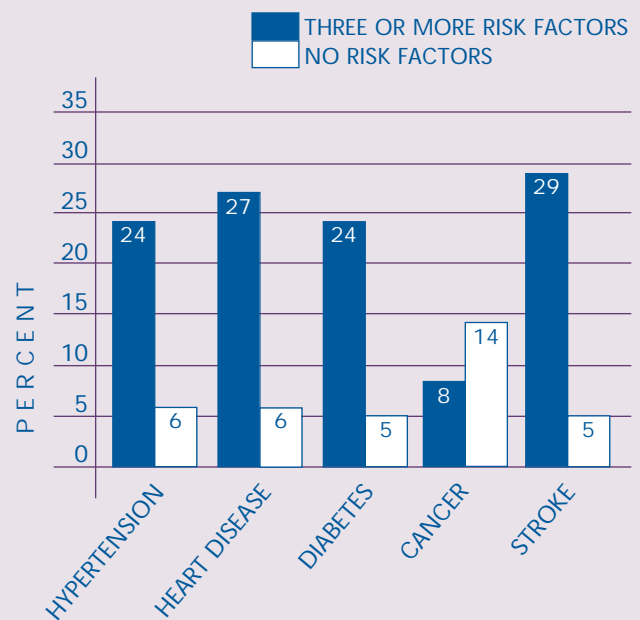
Most people with common chronic conditions have modifiable risk factors

Most modifiable risk factors are associated with the development of five well-known chronic conditions—hypertension, heart disease, diabetes, cancer, and stroke—among adults age 51 to 61 (see Figure 1).² Hypertension is the most common, affecting 40 percent of people age 51 to 61.

A very small proportion of people with any one of the five chronic conditions have no risk factors. About one-quarter of people with either hypertension, heart disease, diabetes, or stroke have three or more risk factors (see Figure 2). Lack of exercise and being overweight are the most common risk factors. For example, 76 percent of people with hypertension and 72 percent of people with heart disease are overweight.

FIGURE 2

Proportion of Older Adults with Selected Chronic Conditions, by Risk Status



SOURCE: National Academy on an Aging Society analysis of data from the 1992 Health and Retirement Study.

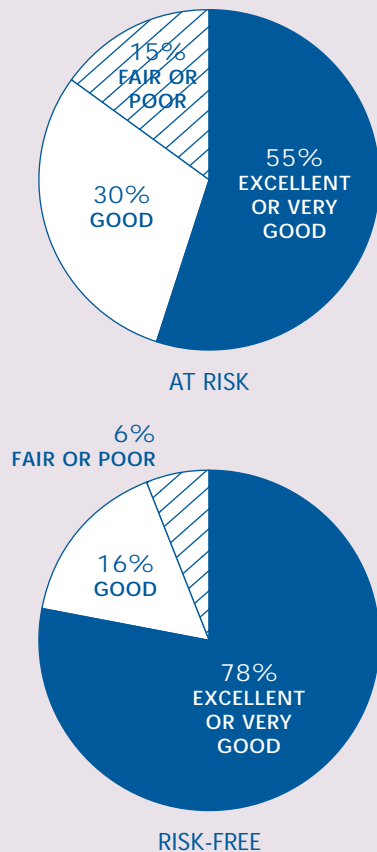
FIGURE 1

Chronic Conditions Associated with Modifiable Risk Factors

	HYPERTENSION	HEART DISEASE	DIABETES	CANCER	STROKE
Overweight	■	■	■	■	■
Too little exercise	■	■	■	■	■
Currently smokes	■	■	■	■	■
High cholesterol	■	■	■		■
More than moderate alcohol consumption	■	■	■	■	■

SOURCES: Hypertension: National Heart, Lung, and Blood Institute. Heart disease and stroke: American Heart Association, U.S. Department of Agriculture, and U.S. Department of Health and Human Services. Diabetes: U.S. Department of Agriculture and U.S. Department of Health and Human Services. Cancer: American Cancer Society.

FIGURE 3
Self-Reported Health Status of Older Adults, by Risk Status



SOURCE: National Academy on an Aging Society analysis of data from the 1992 Health and Retirement Study.

THE HEALTH AND FINANCIAL RISKS OF OBESITY ARE LARGE

Overweight and obese individuals are more likely to die prematurely than individuals who are not overweight. The association between excess weight and an increased risk of dying from heart disease or cancer is especially clear. Obesity is second only to smoking as the leading cause of preventable death in the U.S. Currently, about one in five U.S. adults is obese.³

The cost to the U.S. health system of treating obesity and its resulting complications exceeded \$99 billion in 1995.⁴ Obesity accounts for approximately 5 percent of total direct health care costs in the U.S.⁵

The population at risk is less healthy than the risk-free population

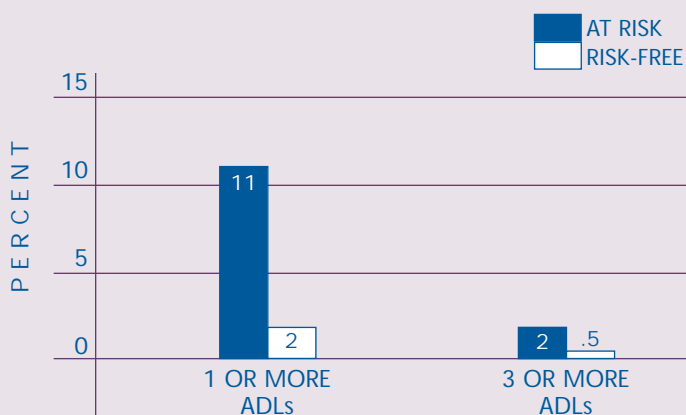
People who are at risk for chronic conditions are more likely to report their health as fair or poor than those who are not at risk. Similarly, over half—55 percent—of the population at risk reports being in excellent or very good health. In comparison, an overwhelming 78 percent of the risk-free population is in excellent or very good health (see Figure 3).

Given that the population at risk is less healthy than the risk-free population, it is not surprising that a larger proportion of people at risk spent days in bed than people not at risk. For example, 8 percent of the population at risk report spending five or more days in bed in the past year, compared to just 5 percent of the risk-free population.

The population at risk is more disabled than the risk-free population

Adults at risk for chronic conditions are much more limited in their activities of daily living, or ADLs, such as bathing, dressing, eating, using the toilet, walking, and getting in and out of bed, than adults without any risk factors (see Figure 4).

FIGURE 4
Proportion of Older Adults with Limitations in ADLs, by Risk Status



SOURCE: National Academy on an Aging Society analysis of data from the 1992 Health and Retirement Study.

The population at risk is less socially active than the risk-free population

Adults at risk for chronic conditions are less socially active, both formally and informally, than risk-free adults. Participation in organized social events, such as volunteer work and religious services, is less common among adults at risk than among adults who are risk-free. For example, 15 percent of the population at risk, compared to 24 percent of the risk-free population, volunteer in their communities (see Figure 5).

Not only do people at risk have fewer good friends in their neighborhood, they also socialize less frequently with their neighbors than those who are risk-free. For example, just over one-quarter—26 percent—of adults at risk, compared to almost one-third—31 percent—of risk-free adults, socialize with their neighbors on a weekly basis (see Figure 5).

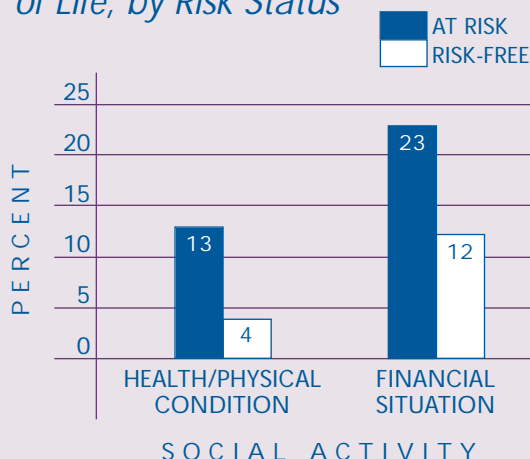
Quality of life is lower for the at-risk population compared to the risk-free population

The population at risk for chronic conditions is less satisfied with several aspects of their life compared to the risk-free popula-

tion. The largest disparity between the two populations is related to dissatisfaction with health or physical condition (see Figure 6). This likely contributes to a difference in satisfaction with “life as a whole.”

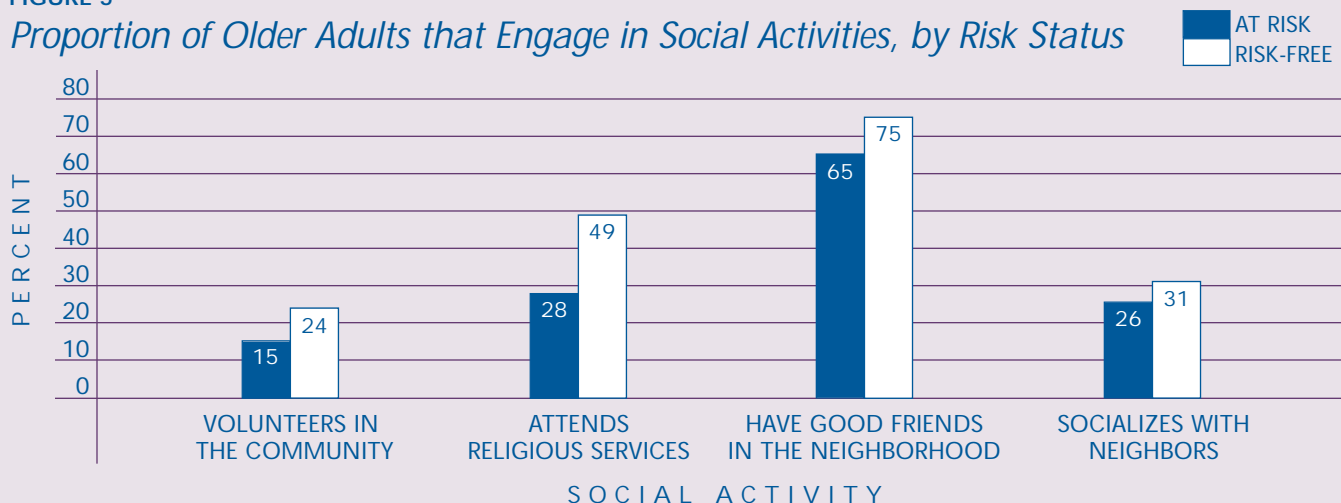
Given the lower level of satisfaction among the at-risk population, it is not surprising that this population has more symptoms of depression than the risk-free population. Some 38 percent of the at-risk population report symptoms of depression, compared to just less than one-quarter—24 percent—of the risk-free population.

FIGURE 6
Proportion of Older Adults Dissatisfied with Various Aspects of Life, by Risk Status



SOURCE: National Academy on an Aging Society analysis of data from the 1992 Health and Retirement Study.

FIGURE 5
Proportion of Older Adults that Engage in Social Activities, by Risk Status



SOURCE: National Academy on an Aging Society analysis of data from the 1992 Health and Retirement Study.

Decisions regarding work are related to risk status

Being at risk for chronic conditions does not have much of an impact on decisions about whether or not to work. Among 51 to 61 year olds, some 28 percent of those at risk are unemployed, compared to 27 percent of the risk-free population.

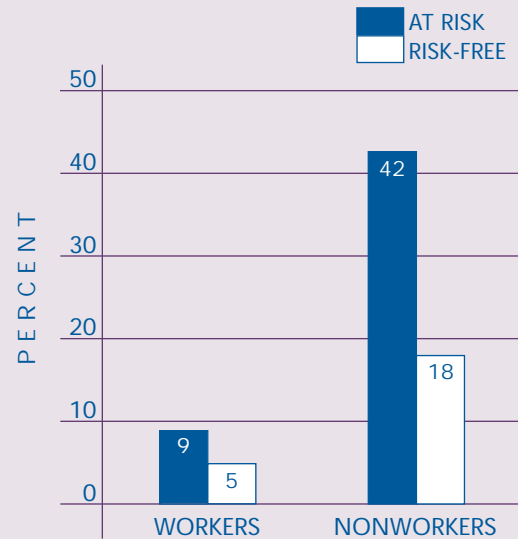
Decisions regarding the type or amount of work individuals do, however, appear to be related to risk status. Whether they are employed or not, the proportion of people at risk who are limited in the amount or type of paid work they can do is higher for the population at risk than for the risk-free population. Among nonworkers, for example, 42 percent of those at risk, compared to 18 percent of the risk-free population, say they are limited by a health condition (see Figure 7).

Retirement decisions also reflect the negative impact of risk factors

Risk status appears to play some role in retirement decisions. Some 11 percent of the population at risk, compared to 8 percent of the risk-free population, are completely retired.

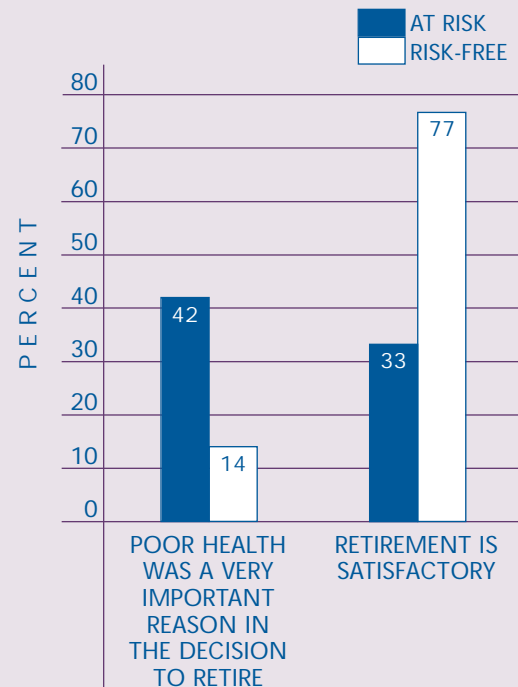
Poor health often plays a large role in a person's decision to retire, and may lead to early retirement. Among completely retired individuals, some 42 percent of those at risk report that poor health was a very important reason in their decision to retire, compared to just 14 percent of those who are risk-free. Satisfaction in retirement is also much lower for the at-risk population, compared to the risk-free population (see Figure 8). And a smaller proportion—40 percent—of those at risk wanted to retire compared to those who are risk-free—62 percent.

FIGURE 7
Proportion of Older Adults with Chronic Conditions Limited in Work, by Risk Status



SOURCE: National Academy on an Aging Society analysis of data from the 1992 Health and Retirement Study.

FIGURE 8
Attitudes About Retirement Among Older Adults, by Risk Status



SOURCE: National Academy on an Aging Society analysis of data from the 1992 Health and Retirement Study.

FIGURE 9

Description of Three Populations

	AT RISK (%)	RISK-FREE (%)	GENERAL POPULATION (%)
GENDER			
Male	50	36	47
Female	50	64	53
RACE			
White	84	89	79
Black	12	8	17
MARITAL STATUS			
Married/lives with a partner	76	78	76
Separated/divorced, widowed, never married	24	22	24
EDUCATION			
Less than high school	29	16	29
High school or more	71	84	71
HOUSEHOLD INCOME			
<\$20,000	21	14	23
\$50,000+	38	50	38

SOURCE: National Academy on an Aging Society analysis of data from the 1992 Health and Retirement Study.

The risk-free population differs from the general population

The profile of the population at risk for chronic conditions is similar to that of the general population. It is interesting to note, however, that the risk-free population is very different from the general population. The risk-free population includes substantially more women and whites, for example. The risk-free population is also better educated and more financially secure than the general population (see Figure 9).

1. The Robert Wood Johnson Foundation. (1996). *Chronic Care in America: A 21st Century Challenge*. Princeton, NJ.
2. Hypertension: National Heart, Lung, and Blood Institute. (1997). *The Sixth Report of the National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure*. Prepared by the National High Blood Pressure Education Committee.
- Heart disease and stroke: American Heart Association. (1998). *1999 Heart and Stroke Statistical Update*. Dallas, TX: American Heart Association.
- U.S. Department of Agriculture and U.S. Department of Health and Human Services. (1995). *Nutrition and Your Health: Dietary Guidelines for Americans* (4th ed.).
- Diabetes: U.S. Department of Agriculture and U.S. Department of Health and Human Services. (1995).
- Cancer: American Cancer Society. (1998). *Cancer Risk Report*. Atlanta, GA: American Cancer Society.
3. Calle, E., M. Thun, J. Petrelli, C. Rodriguez, and C. Heath. (1999). "Body-mass Index and Mortality in a Prospective Cohort of U.S. Adults." *The New England Journal of Medicine*; 341(15): 1097-1105.
4. Wolf, A., and G. Colditz. (1998). "Current Estimates of the Economic Cost of Obesity in the United States." *Obesity Research*; 6: 97-106.
5. Wolf and Colditz. (1998). Allison, D., R. Zanolli, and K. Narayan. (1999). "The Direct Health Care Costs of Obesity in the United States." *American Journal of Public Health*; 89: 1194-1199.

ABOUT THE **PROFILES**

This series, *Challenges for the 21st Century: Chronic and Disabling Conditions*, is supported by a grant from the Robert Wood Johnson Foundation. This *Profile* was written by Lee Shirey with assistance from Laura Summer. It is the fourth in the series. Previous *Profiles* include:

1. Chronic Conditions: A challenge for the 21st century
2. Hearing Loss: A growing problem that affects quality of life
3. Heart Disease: A disabling yet preventable condition

The National Academy on an Aging Society is a Washington-based nonpartisan policy institute of The Gerontological Society of America. The Academy studies the impact of demographic changes on public and private institutions and on the economic and health security of families and people of all ages.

ABOUT THE DATA

Unless otherwise noted, the data presented in this *Profile* are from Wave 1 of the Health and Retirement Study (HRS). The HRS provides information on the community-dwelling population age 51 to 61 in 1992. The HRS data set is sponsored by the National Institute on Aging and conducted by the Institute for Social Research at the University of Michigan.



NATIONAL ACADEMY ON AN AGING SOCIETY

1030 15th Street NW, Suite 250, Washington, DC 20005

PHONE 202-408-3375 FAX 202-842-1150

E-MAIL info@agingsociety.org WEBSITE www.agingsociety.org

