The leading health indicators were identified by the U.S. Department of Health and Human Services as part of the Healthy People 2010 initiative to help focus the nation’s health agenda and provide a roadmap for promoting health and preventing illness, disability, and premature death.

These 10 measures were selected based on their relevance as major public health concerns, the availability of data to measure progress, and their ability to motivate action. They touch on the major determinants of health, including individual behaviors, environmental factors, and health system issues. Each indicator also relates to the two overarching goals of the Healthy People 2010 initiative:

- increasing the quality and years of healthy life by helping individuals gain knowledge, motivation, and opportunities to make informed decisions about their health; and
- eliminating health disparities within the population, including gender, race, ethnicity, education, income, disability, geographic location, or sexual orientation.

Sustainable gains in improving the leading health indicators will require commitments of state and local public health departments, other government agencies, health care professionals, community-based organizations, employers, and others. Health grantmakers also have important contributions to make as partners at the local, state, and national level. They can fund direct services, support communications campaigns, improve the integration of services, bring potential partners together, contribute to the developing knowledge base on effective programs, and build the capacity of organizations and individuals to improve community health.

The enclosed materials are intended to provide grantmakers with quick access to the most compelling data on each of the leading indicators. They also outline the many ways health foundations are already taking action. Although these articles were produced for GIH’s 2003 Annual Meeting on Health Philanthropy – The Leading Health Indicators: Measuring Progress, Taking Action – we are hopeful that they will serve as a lasting resource for grantmakers working to improve the nation’s health. Other materials relevant to the leading health indicators, including GIH’s Issue Brief, Issue Focus, and Findings series are available on-line at www.gih.org.

### LEADING HEALTH INDICATORS

- Physical Activity
- Overweight and Obesity
- Tobacco Use
- Substance Abuse
- Responsible Sexual Behavior
- Mental Health
- Injury and Violence
- Environmental Quality
- Immunization
- Access to Health Care
OVER OTHER GIH RESOURCES

➤ Overweight and Obesity
ISSUE BRIEF
Weighing in on Obesity: America's Growing Health Epidemic

ISSUE FOCUS
Weighing in on Obesity

➤ Tobacco Use
FINDINGS FROM THE GIH RESOURCE CENTER
Preventing Tobacco Use Among America's Children

➤ Substance Abuse
FINDINGS FROM THE GIH RESOURCE CENTER
The Dual Epidemics of Drug Use and HIV: The Case for Philanthropic Leadership on Needle Exchange
Partnering with Faith Communities: Building a Foundation for Substance Abuse Prevention and Intervention
Collaborating with Public Systems: Substance Abuse and Mental Illness in the Criminal Justice System

➤ Responsible Sexual Behavior
FINDINGS FROM THE GIH RESOURCE CENTER
The Changing Face of HIV/AIDS
HIV/AIDS and Youth: Moving Towards a Comprehensive Approach

➤ Mental Health
ISSUE BRIEF
Turning the Tide: Preserving Community Mental Health Services

VIEWS FROM THE FIELD
Putting Knowledge to Work for Mental Health by Laurie Garduque, The John D. and Catherine T. MacArthur Foundation

FINDINGS FROM THE GIH RESOURCE CENTER
Mental Health: New Opportunities for Collaboration
Overlooked and Underserved: Addressing Children's Mental Health Needs
Collaborating with Public Systems: Substance Abuse and Mental Illness in the Criminal Justice System

➤ Injury and Violence
FINDINGS FROM THE GIH RESOURCE CENTER
Growing Up Safe: Protecting Youth from Gun Violence

➤ Environmental Quality
ISSUE BRIEF
Progress and Peril: Examining Antibiotic Resistance and Systemic Contaminants

ISSUE FOCUS
Clearing the Air: Addressing Asthma in America

VIEWS FROM THE FIELD
People, Wildlife, and Ecosystems: Health for One, Health for All by Mark Jerome Walters, Harvard Medical School, Center for Health and the Global Environment

FINDINGS FROM THE GIH RESOURCE CENTER
Asthma: The Environmental Health Epidemic
Environmental Health: Intergenerational Challenges to Human Health and Health Funders

➤ Immunization
ISSUE BRIEF
Victims of Our Own Success: Will Immunization Remain the Paradigm of Effective Prevention?

ISSUE FOCUS
Childhood Immunization: Protecting Individuals and Communities

➤ Access to Health Care
ISSUE FOCUS
Expanding Access for the Uninsured: Building a Community Response
Filling the Gap: Strategies for Improving Oral Health
Access to Dental Health Services
Improving Access to Care: New Solutions to an Old Problem

FINDINGS FROM THE GIH RESOURCE CENTER
All Health Care is Local: Community Efforts to Cover the Uninsured
Shoring Up the Safety Net
Protecting Medicaid and SCHIP Enrollees
Enrolling Children in Public Health Insurance
Access to Better Health Care: A Universal Language
43 Million and Counting: Facing up to the Problem of the Uninsured
Building a Community Response to Access
Coming Together: Building a Force for Health System Reform at the Local Level
Filling the Gap: Grantmakers Respond to the Oral Health Crisis
Strengthening the Health Care Safety Net
Working for Health Care: Prospects for Expanding Employer-Based Coverage
A Bitter Pill to Swallow? Prescription Drug Coverage for Seniors
The Newcomer Challenge: Responding to the Health Care Needs for Immigrants
Getting Americans off of the couch and into the gym has been quite a challenge in recent years. Though the Surgeon General has identified physical activity as a top priority for improving overall health, waistlines in the U.S. continue to expand. Despite overwhelming evidence that even moderate physical activity can reduce the risk of multiple health conditions, approximately 35 percent of adolescents and 85 percent of adults do not participate in regular physical activity.

**Healthy People 2010 Targets**
- Increase the proportion of adolescents who participate in regular physical activity to 85 percent.
- Increase the proportion of adults who participate in regular physical activity to 30 percent.

**DATA: SCOPE AND TRENDS**
In the past decade, adults have become increasingly entrenched in sedentary daily routines, such as sitting at work, sitting in traffic, and sitting in front of computer monitors during most of their waking hours. And in many cases, it is getting harder for children to exercise as well. In recent years, many schools have moved away from offering physical education classes and extramural sports, instead targeting limited resources to academic programming. As a result, only 56 percent of high school students are enrolled in a physical education class. Outside of school, sedentary habits are also increasingly common, partially driven by the fact that more parents are in the workforce and unable to provide supervision. In many communities, children have no choice but to stay home where they can be safe, rather than play outside. In 1990, approximately one-third of adolescents watched five or more hours of television per day, up from just over 10 percent in 1970.

While this seems to be a universal problem, there are important disparities in the levels of physical activity among different population groups that are of concern. More women than men report having no leisure-time physical activity, inactivity is higher among African Americans and Hispanics than it is among whites, and people who are more affluent are more likely to be active than people who are less affluent. In addition, participation in physical activity declines as age or grade in school increases.

The major barriers most people face when trying to increase physical activity are time, access to convenient facilities, and safe environments in which to be active.

**IMPLICATIONS FOR HEALTH**
The 1996 Surgeon General’s report on physical activity and health reported that physical activity can reduce the risk of developing and dying from heart disease, diabetes, colon cancer, and high blood pressure. People who are not physically active, for example, are almost twice as likely to develop coronary heart disease as those who exercise regularly. Weight-bearing exercise increases muscle and bone strength and is important both to normal skeletal development among young people and to maintaining balance and agility among
LEADING HEALTH INDICATOR: PHYSICAL ACTIVITY

the elderly. There is also inconclusive evidence that physical activity may protect against other forms of cancer – breast cancer, for example – and chronic lower back pain.

On average, people who are physically active live longer than those who are not. Physical activity also helps older adults to maintain their functional independence.

OPPORTUNITIES FOR GRANTMAKERS

Physical activity is an area that many health grantmakers are moving into. The Robert Wood Johnson Foundation, the Mary Black Foundation, and the Moses Cone-Wesley Long Community Health Foundation, for example, are among the funders that have made physical activity a new strategic objective for their programming.

➤ Supporting physical activity in schools – Since children and teens spend such a large proportion of their time in school, working to expand physical activity in schools is an important contribution that grantmakers can make. The Kansas Health Foundation was a major force in changing the face of physical education in Kansas schools. Through a grant to the department of education, the foundation supported the development of a new physical education curriculum that deemphasizes team sports and focuses instead on keeping kids moving and developing skills to maintain a physically-active lifestyle. The program, which has been implemented in public high schools throughout the state, also incorporates physical activity into classroom learning.

The New York Community Trust has also been active in this area. To restore sports and physical education in public schools in New York, the trust has developed a network for physical education teachers to serve as a resource for schools and youth sports groups and has developed a leadership group to help recruit and train physical education and fitness personnel and identify resources to support school sports teams. The Moses Cone-Wesley Long Community Health Foundation in North Carolina purchased fitness equipment for 10 elementary schools and provided teacher training on use of the equipment. The MetLife Foundation provided a grant of $250,000 to assist the Centers for Disease Control and Prevention (CDC) in developing guides for parents and school personnel and administrators to promote physical activity among youth. The guides, to be produced by scientists and health educators at CDC, will outline practical strategies for encouraging young people to engage in physical activity and sports programs at home and in schools.

➤ Providing safe activities for children outside of school – Grantmakers can work with organizations in their communities to support recreational opportunities for kids and teens when they are not in school. The Skillman Foundation in Michigan, for example, is working to expand the number of facilities in Detroit that offer sports and supervised recreation. Using schools and religious facilities for after-school programs, the foundation is providing safe and active alternatives for leisure time. The Foundation for Seacoast Health in New Hampshire provides support for the Down Time Teen Center, which offers supervised activities for youth after school and on weekends. Grantmakers can also support programs for children during the summer months, when they have more free and unsupervised time. The Healthcare Foundation of New Jersey, for example, has offered summer swim programs for children, and many foundations offer scholarships to low-income children to attend summer recreational programs.

➤ Investing in equipment and facilities – Grantmakers can also invest in public facilities and equipment that make exercise accessible for whole communities. The Claude Worthington Benedum Foundation in Pennsylvania, for example, provided funding for equipment and expansion of a health clinic to serve as a communitywide fitness center. The Sisters of St. Joseph Charitable Fund in West Virginia funded the enclosure of an outdoor pool so that it could be used by the community year-round. The J. Marion Sims Foundation in South Carolina provided funding to the city to establish an adult fitness center in a municipal park. And The Dorothy Rider Pool Health Care Trust in Pennsylvania purchased play equipment for homeless children at a community center.

➤ Providing opportunities for population groups with special needs – Because many population groups face specific barriers that inhibit their ability to participate in physical activity, there is an important role for grantmakers in developing interventions that meet unique needs. The Robert Wood Johnson Foundation, for example, is testing model strategies to help people age 50 and older to incorporate physical activity into their daily routines. The Active for Life initiative will look at the effectiveness of both group-based exercise programs, as well as individually-tailored counseling supervised by telephone. St. David’s Foundation in Texas has funded wheelchair sports events for several years, offering monthly recreational events that expose youth in wheelchairs to a range of opportunities for physical development, including kayaking and water skiing. And the FISA Foundation in Pennsylvania supported the construction of a wheelchair-accessible nature trail.

➤ Creating systemic change – Grantmakers have also worked to create policy changes that facilitate physical activity. The Robert Wood Johnson Foundation, for example, is providing support to the National Conference of State Legislatures (NCSL) to identify promising state and local policies that promote walking and biking for physical activity and to propose a monitoring system for tracking such policies. NCSL will share information with legislators and staff in the 50 states and territories and develop a framework for providing states assistance in implementing such policies.
The U.S. is not winning the battle of the bulge. In fact, recent years have yielded dramatic increases in overweight and obesity in the nation. More than 60 percent of adults are overweight or obese, and at least 13 percent of children are overweight. This health epidemic has spiraled out of control and is seemingly getting worse. The health consequences are irrefutable, ranging from heightened risk for life-threatening conditions, including heart disease, diabetes, and some types of cancer, to diminished overall quality of life. Furthermore, recent reports of shortened life expectancy for overweight and obese individuals have underscored the long-term dangers of this chronic disease.

**Healthy People 2010 Targets**

- Reduce the proportion of children and adolescents who are overweight or obese to 5 percent.
- Reduce the proportion of adults who are obese to 15 percent.

**DATA: SCOPE AND TRENDS**

Overweight and obesity have reached epidemic proportions in the U.S. The most recent data available from the Centers for Disease Control and Prevention reveal that 35 percent of adults are overweight and an additional 26 percent are obese. Approximately 13 percent of children and adolescents are overweight. (Overweight and obesity are not measured separately for children.) Moreover, the prevalence of obesity has increased dramatically in the past several decades. Since the 1970s, the proportion of adults who are overweight or obese has grown by about 20 percent. Even more alarming, the proportion of children who are overweight has tripled over the same time period.

While the prevalence and growth of obesity are significant across genders, age groups, socioeconomic status, and ethnic groups, there are disparities in the impact of this epidemic. Racial differences are especially notable, with the prevalence of both overweight and obesity generally being higher for minorities than for whites. For example, almost 30 percent of African-American adults are obese, about one-quarter of Hispanic adults are obese, and only 18 percent of white adults are obese. Disparities are compounded when income is considered. For example, the proportion of adolescents from poor households who are overweight or obese is twice that of adolescents from middle- and high-income households.

While genetic factors certainly influence obesity, growing evidence points to environmental and behavioral factors related to diet and physical activity as the stronger determinants. The increasing proportion of meals eaten away from home, the growth in portion sizes, and the availability of high-calorie convenience foods all contribute to the fact that Americans are simply eating more. And at the same time that caloric intake is up, there has been a decrease in physical activity—all adults are increasingly entrenched in sedentary activities, and fewer children than ever are getting the recommended amounts of exercise.

**IMPLICATIONS FOR HEALTH**

Obesity has become an urgent concern in the health care community because people who are overweight or obese have an increased risk for developing diabetes, heart disease, hypertension, cancer, and many other chronic conditions.
LEADING HEALTH INDICATOR: OVERWEIGHT AND OBESITY

Furthermore, health problems that have previously been associated only with adults, such as type 2 diabetes and heart conditions, are increasingly prevalent among children who are overweight. As many as 300,000 premature deaths each year are already associated with overweight and obesity, and overweight and obesity may soon cause as much preventable disease and death as cigarette smoking.

In addition to being a crisis for personal health, overweight and obesity impose tremendous costs on the nation’s health care delivery system, with estimates for direct and indirect costs as high as $117 billion annually.

OCCUPATIONAL FOR GRANTMAKERS

While few grantmakers focus specifically on the issue of obesity, many have invested heavily in health promotion and population-based prevention programs. To have an impact on this emerging epidemic, grantmakers can apply the strategies and lessons from other programming areas to change the way that people make choices about eating and exercise and to create physical and social environments that support those healthy lifestyles.

➢ Promoting healthy eating and exercise – Grantmakers can conduct campaigns to raise obesity prevention as a health issue to be addressed by educators, community leaders, families, and health care providers. They can also invest in social marketing efforts to educate individuals about the benefits of weight loss by communicating messages and strategies that help effect behavioral change. The Paso del Norte Health Foundation, for example, has developed a multipronged approach that includes a media campaign to promote physical activity and a bilingual nutrition intervention program that promotes healthy food selection and preparation. The HealthCare Foundation for Orange County, through its work with a countywide task force, has sponsored such activities as a television turn-off campaign and a walk-to-school program. The Wellmark Foundation in Des Moines, Iowa, is supporting a community walking program and a public awareness campaign on the dangers of unhealthy eating and sedentary lifestyles.

➢ Supporting school-based education programs – School-based obesity programs offer the opportunity to reach a large number of children, especially younger children, on a daily basis for a number of years. They offer multiple opportunities through the physical education curriculum, extramural activities, health education, and the school lunch program. Because life-long health habits are generally established in childhood, schools provide an ideal setting to improve the nation’s health. As schools are targeting greater proportions of their limited resources toward academic programming, however, there is an increasing need for foundations to support health and physical education programs.

Complementing its health promotion efforts, the Paso del Norte Health Foundation is supporting an initiative that provides a standard health education curriculum through the region’s elementary schools. The Coordinated Approach to Child Health initiative was developed in partnership with area school districts to promote healthy eating habits and increased exercise levels in elementary school children. The program, which provides a standardized health promotion curriculum, has been implemented in more than 80 elementary schools and reaches approximately 52,000 students and their families.

➢ Creating environments that support exercise and healthy eating – Grantmakers can also support the efforts of community groups and local governments to implement environmental changes that enable people to make healthier choices. The Kate B. Reynolds Charitable Trust, through its SELF Improvement Program, is supporting multiple community-based programs that target populations at greatest risk for chronic disease. The diverse group of projects throughout the state includes such activities as analyzing policies of local schools for vending machines and school menus, purchasing ovens to replace fryers in school cafeterias, developing walking trails for residents of low-income neighborhoods, working with local vendors to increase low-fat and high-fiber foods for sale at their establishments, recruiting restaurants to participate in a program to increase the number of healthy items offered on their menus, and forming advisory committees at churches to provide nutritionally-appropriate food choices at church events.

➢ Incorporating obesity objectives into other prevention programming – Since prevention strategies related to obesity use many of the same techniques as other population-based prevention programs, grantmakers should also consider opportunities for integrating obesity prevention into existing programs that target families, schools, and communities. The Health Trust in San Jose, California, for example, is supporting the Boys and Girls Clubs to incorporate physical fitness training, nutrition, and education on the risks of becoming obese into their core services.

➢ Supporting advocacy efforts – Grantmakers are always supporting efforts to bring about changes in both public policy and industry practices. The California Wellness Foundation and The California Endowment, for example, are supporting efforts to build a statewide coalition of nutrition and fitness organizations working to prevent childhood obesity. The Strategic Alliance to Prevent Childhood Obesity successfully advocated for and is now monitoring implementation of setting nutrient standards for beverages, snacks, and side dishes sold in California schools. This law also prohibits the sale of soft drinks to elementary school students and limits the availability of these beverages to middle school students.
As the nation fights to breathe healthy in smoke-filled environments, smokers and nonsmokers alike continue to feel the ill effects of tobacco use. Each year, more than 400,000 lives are lost due to tobacco use, and 50,000 of these deaths are the result of second-hand smoke. Risks associated with tobacco use are well known - the potential for developing chronic lung and coronary heart disease; stroke; and cancer of the lungs, larynx, esophagus, mouth, and bladder. In 1999, 24 percent of adults and 35 percent of adolescents were cigarette smokers. The good news is tobacco use is declining among adults and high school students. If smoking continues to decrease at the current rate, the nation is on track to achieve the objectives set out in Healthy People 2010.

**Healthy People 2010 Targets**

- Reduce the proportion of adolescents who smoke to 16 percent.
- Reduce the proportion of adults who smoke to 12 percent.

**Cigarette Smoking 1998 – 1999**

- Adolescents Who Smoke, 1999: 16%
- Adults Who Smoke, 1998: 24%
- Target: 35%
- Cigarette Smoking, 1998 – 1999: 12%

**DATA: SCOPE AND TRENDS**

Preliminary data for 2001 indicate a decline among smoking in adults to just under 23 percent. The projected decline among high school students is even greater, with only 29 percent of high school students reporting that they have smoked during the previous 30 days. In fact, since 1993, smoking prevalence has declined across all age groups except those who are 18 to 24 years old. In addition, according to the 2000 National Health Interview Survey, 70 percent of adult smokers in the U.S. wanted to quit smoking, and 41 percent had actually tried to quit.

The bad news is that smoking remains higher among racial and ethnic minorities and among those with low incomes and low educational attainment. Among adults, American Indians and Alaska Natives are almost 50 percent more likely to smoke than average. Asians and Pacific Islanders are the least likely to smoke. People who are poor are also 50 percent more likely to smoke than middle- and high-income people. Those who are college graduates are the least likely to smoke.

There are also disparities in the recent decline in smoking. The percentage of smokers who have quit, for example, is highest among whites and lowest among African Americans.

**IMPLICATIONS FOR HEALTH**

Tobacco use continues to be a leading cause of death in the U.S., accounting for over 400,000 deaths annually. Most deaths are from lung cancer, heart disease, and respiratory conditions. The average number of years lost by adults who were smokers is about 14 years.

For younger people, smoking affects lung growth and results in increased frequency and severity of respiratory illness. It also impedes physical fitness and increases the resting heart rate. Young people who smoke are also more likely than nonsmokers to use other substances, such as alcohol, marijuana, and cocaine.

For pregnant women, smoking is linked to spontaneous abortions, low birthweight, sudden infant death syndrome, and birth defects. In all, smoking results in about 1,000 infant deaths annually. Even nonsmokers are at risk.

Secondhand smoke is especially threatening to children,
LEADING HEALTH INDICATOR: TOBACCO USE

Increasing the risk of asthma, bronchitis, and middle ear infections. More than 2 out of every 5 American children are exposed to secondhand smoke at home.

Opportunities for Grantmakers

➤ Leading tobacco prevention campaigns — Many foundations—from the national to the local level—have engaged in tobacco prevention campaigns. The American Legacy Foundation, for example, is supporting the Truth Campaign, a national tobacco prevention campaign developed by teens. Through its priority populations effort, the American Legacy Foundation is also supporting community-based programming. For example, it is funding development of a two-year, eight-part television series to increase the Washington, DC Latino community’s knowledge about tobacco-related health problems. Produced in conjunction with a local NBC affiliate and the Latino Council on Alcohol and Tobacco, the program is expected to reach about 70,000 viewers when it airs and will be distributed to community organizations in VHS format. Because most smokers initiate tobacco use before they turn 19, the campaign focuses on generating awareness of the dangers of tobacco use among teens and changing attitudes about the desirability of smoking. At the state level, The Health Foundation of Greater Indianapolis has supported the state department of health to develop and buy media advertising for the department’s tobacco prevention campaign.

➤ Supporting school-based programs to educate children — Grantmakers have funded a variety of school-based programs to address tobacco use among children and teens. For example, The Cleveland Foundation, through the Cleveland Clinic, has funded the Word of Mouth (WOM) tobacco prevention program targeting children in grades four through eight. WOM includes a school-based curriculum to help students understand the health effects of tobacco use, a traditional classroom program with trained health educators to guide lessons, and Web-based lessons that are adapted from traditional lesson plans. The Moses Cone-Wesley Long Community Health Foundation in North Carolina is currently supporting a voluntary smoking cessation course at each county school, alternatives to suspension classes that are offered to students with tobacco violations, and peer-led groups that are working to change student norms around tobacco use.

➤ Using athletic and cultural programs to deliver anti-tobacco messages — The Columbus Medical Association Foundation supported a program that recruited high school athletes to work with sixth graders to influence them to stay tobacco free. The Robert Wood Johnson Foundation worked with a National Football League (NFL) team to develop anti-smoking messages for stadium signs and for public service announcements that would be played during games. Free seats are also provided to certain students who pledge not to use tobacco or other substances. After the grant period, the foundation continued to support the team to provide replication assistance to other NFL teams.

Several foundations have found creative approaches to deliver anti-tobacco messages through cultural programming. The Northwest Health Foundation, for example, has supported a touring bilingual play that conveys anti-smoking messages to youth and adults. The foundation has also supported the tour of a musical comedy for elementary students on the consequences of smoking. Finally, the Moses Cone-Wesley Long Community Health Foundation supported interactive puppet skits for very young children on the dangers of tobacco use.

➤ Offering education and support to help smokers quit — The Blue Cross Blue Shield of Minnesota Foundation has developed a smoking cessation program that is targeted to the state’s Vietnamese community. The program includes smoking cessation classes for Vietnamese teens, outreach to enroll adults into the stop-smoking program, and home visits to support cessation efforts. The Wellmark Foundation in Iowa has also developed several targeted cessation programs—a worksite cessation program and one that targets women and men in their child-rearing years.

➤ Educating professionals — Grantmakers have also recognized the need to provide supports to health professionals as they work with patients to kick the habit. The Columbus Medical Association Foundation, for example, helped fund a local dental school’s effort to create a CD-ROM based tobacco cessation curriculum for dental students and practicing dentists. The Robert Wood Johnson Foundation collaborated with the federal Agency for Healthcare Policy and Research (the forerunner to the Agency for Healthcare Research and Quality) to disseminate new clinical practice guidelines on smoking cessation to various professional societies, including the American Academy of Pediatrics, American College of Obstetricians and Gynecologists, American Nurses Foundation, and the American Medical Women’s Foundation.

➤ Advocating policy change — Foundations at all levels have found roles in advocating for policy changes related to smoking. At the national level, The Robert Wood Johnson Foundation is supporting the National Center for Tobacco Free Kids, which educates the public and policymakers about the benefits of clean indoor air policies and tobacco tax increases. The Dorothy Rider Pool Health Care Trust in Pennsylvania is complementing its prevention work with efforts to influence state and local policymakers and training health care providers in tobacco-related advocacy.

Grantmakers have also been active in policy at the local level by getting restaurants to go smoke-free. The Columbus Medical Association in Ohio has been active in supporting public education and general advertising targeting restaurant owners and patrons to promote the voluntary provision of a smoke-free restaurant environment. The Robert Wood Johnson Foundation is also conducting a campaign that will target restaurant owners with messages about the health benefits of smoke-free restaurants.
DATA: SCOPE AND TRENDS

Since 1992, the proportion of youth using alcohol has remained stable at around 20 percent. Illicit drug use by youth has declined and is currently well below 1979’s all-time high rate of 16 percent. Still, 19 percent of youth report drinking alcohol, and 10 percent report using illicit drugs in the past 30 days. Of those using alcohol, 8 percent reported binge drinking, and 3 percent were heavy drinkers.

A substantial proportion of the adult population uses alcohol, with 44 percent reporting consumption of 12 or more alcoholic drinks in the past year. Among drinkers, nearly half report being intoxicated at least once in the past year, and 17 percent report binge drinking at least once a month. The rate of binge drinking is highest among young adults age 18 to 25 – nearly one third are binge drinkers.

The proportion of adults using illicit drugs has stayed stable at around 6 percent of all adults. Illicit drug use is higher among men than among women, and rates in urban areas are higher than in rural areas.

Alcohol and illicit drug use affects all population groups, regardless of race, culture, or socioeconomic status, with alcohol being the most commonly-used substance across all groups. For adolescents, white and Hispanic adolescents are more likely than African-American adolescents to use alcohol and illicit drugs.

IMPLICATIONS FOR HEALTH

Alcohol and illicit drug use create serious health and safety risks, not only for those using alcohol or drugs, but also for their families, friends, and communities. Risks include motor vehicle crashes, drowning, and other injuries; sexually-transmitted diseases; and suicide. Long-term heavy drinking can increase risks for heart disease, cancer, and liver disease, while long-term drug use can lead to chronic depression, sexual dysfunction, and psychosis.

Alcohol use during pregnancy can also cause fetal alcohol syndrome, a leading cause of preventable mental retardation.

Healthy People 2010 Targets
- Increase the proportion of adolescents not using alcohol or any illicit drugs during the past 30 days.
- Reduce the proportion of adults using any illicit drug during the past 30 days.
- Reduce the proportion of adults engaging in binge drinking of alcoholic beverages during the past month.

Use of Alcohol and/or Illicit Drugs 1994–1998

LEADING HEALTH INDICATOR: SUBSTANCE ABUSE

Alcohol and illicit drug use can cause serious damage to family, work, and personal relationships. They are associated with child and spousal abuse, school failure, low worker productivity, and homelessness, among other things. The social and economic tolls are also high, with the costs of alcohol and drug abuse in 1995 standing at $276 billion, or more than $1,000 for every person in the U.S.

OPPORTUNITIES FOR GRANTMAKERS

Many grantmakers are working to address substance abuse by changing private behavior and public attitudes about alcohol and illicit drugs, as well as by improving alcohol and drug abuse treatment systems.

➤ Preventing alcohol and drug use – Many health grantmakers support efforts to keep young people alcohol- and drug-free. Baptist Community Ministries is among those targeting young children for prevention efforts, supporting an age-appropriate prevention curriculum, known as Healthy Lifestyle Choices, for grade school students in Louisiana. The curriculum first teaches children about self-esteem, decision-making, goal setting, communications skills, and stress management, then expands into personal health and safety subjects such as the risks of using alcohol and drugs.

Others are supporting social and recreational activities that provide youth with alcohol- and drug-free alternatives. For example, Kansas Health Foundation and the Phoenixville Community Health Foundation in Pennsylvania provide grants to local schools for alcohol- and drug-free celebrations following proms and other high school events. Grantmaker efforts also help parents develop the confidence and skills to talk with their children about alcohol and drugs. For example, the Comprehensive Health Education Foundation in Seattle sponsored Can We Talk?, a series of free workshops that helped parents learn how to talk to their children about difficult issues such as drugs and alcohol, sex, and violence.

Binge drinking on college campuses has reached epidemic proportions, causing many deaths and injuries among college students each year. To combat this serious problem, The MetLife Foundation supported the expansion of Facts on Tap, a national alcohol and drug abuse prevention initiative that is educating and informing college students about alcohol and the consequences of binge drinking.

Part of The Health Foundation of Greater Cincinnati’s work focuses on getting information on best practices in prevention programming into the hands of community-based providers, including congregations, civic groups, and youth-serving organizations. It created the Assistance for Substance Abuse Prevention Center as an ongoing technical assistance source for its service area.

➤ Ensuring access to treatment – Each year, between 13 million and 16 million Americans need substance abuse treatment. But only 20 percent end up receiving treatment, and as many as half of the people in treatment abandon their programs prematurely. The Robert Wood Johnson Foundation’s $9.5 million Paths to Recovery initiative aims to reduce the time that people seeking treatment need to wait before being admitted to an appropriate program and increase retention rates among those participating in treatment programs. The initiative is accomplishing these goals by encouraging treatment providers to measure the effectiveness of their programs and implement proven techniques for improving services.

Some health grantmakers are working to increase treatment capacity for specific populations. For example, one of three major substance abuse initiatives of The Charles and Helen Schwab Foundation focuses on treatment services for adolescents. The foundation is conducting two major studies: one describing the status of adolescent substance abuse treatment services in California and the other examining adolescent residential treatment facilities in the Bay Area. Both reports will look at best practices and system of care needs and will help to inform policymakers and potential grantmakers. In another example, the Kate B. Reynolds Charitable Trust provided funds to hire a bilingual certified substance abuse counselor to treat the increasing number of low-income Hispanic patients in need of substance abuse counseling in a six-county region of northeastern North Carolina.

Substance abuse is an important contributor to homelessness, and some health grantmakers are working to increase the availability of treatment for this vulnerable population. For example, Alliance Healthcare Foundation in San Diego supported the development of a new program to provide detoxification services and transitional housing to homeless women with alcohol and drug problems, while the Northwest Health Foundation supported a collaboration of six nonprofit organizations that together offer a continuum of alcohol and drug outreach, intervention, and treatment services for homeless youth.

➤ Educating health care providers, educators, and others – Some health grantmakers are working to educate physicians, teachers, and other professionals about drug and alcohol abuse and how to identify and help individuals with substance abuse problems. The Josiah Macy, Jr. Foundation provided funding to a New York City medical school for the development of a curriculum that brings together information about bio-medical approaches for treating addiction with information about community treatment approaches (for example, 12-step models such as Alcoholics Anonymous). The foundation also supported efforts to increase diversity in the substance abuse field by providing funding for substance abuse training for medical students from racial and ethnic minority groups. In an effort to enhance substance abuse services for children and youth involved with the child welfare system, The New York Community Trust funded joint training among substance abuse treatment and child welfare providers. The MetroWest Community Health Foundation supported a training program for school personnel in one Massachusetts community to help them recognize the signs of substance abuse, respond appropriately, and provide case management and other assistance to help students and their families access services. In another example, the Consumer Health Foundation awarded funds to a behavioral managed care organization in Washington, DC to help it educate providers and their patients about substance abuse treatment options available through Medicaid and other sources.
Fostering responsible sexual behavior involves both personal and community-based approaches. Individual sexual responsibility includes being able to understand and weigh the risks of sexual activity, taking responsibility for outcomes of sexual action, recognition and tolerance for the diversity of sexual values within a community, and respect for oneself and one’s partner. Likewise, the community has a duty to its residents to foster an environment that values responsible sexual behavior. This includes ensuring access to developmentally- and culturally-appropriate sex education and health care, the latitude to make appropriate reproductive health decisions, and respect for differences in sexual beliefs.

Encouraging responsible sexual behavior involves promoting abstinence among adolescents and condom use among those that are currently sexually active.

**DATA: SCOPE AND TRENDS**

Consequences of risky sexual behavior include unintended pregnancies and sexually-transmitted diseases (STDs), including HIV/AIDS.

➤ **Unintended Pregnancies**: Half of all pregnancies in the U.S. were unplanned at the time of conception. Almost half of these unintended pregnancies end in abortion. Although rates of unintended pregnancies have been declining in the U.S., rates remain high among teenagers, particularly minorities. Nearly 1 million teenage girls have unintended pregnancies each year. The pregnancy rate for white teenagers age 15 to 19 is 94 per 1,000, while the rates for African Americans and Latinas are 170.4 and 148.7, respectively.

➤ **Sexually-Transmitted Diseases**: Over 25 diseases are spread through sexual contact, and an estimated 15 million new STD cases are reported each year (with 4 million of them occurring in adolescents). One in five people in the U.S. currently has an STD, and at least one in four will contract an STD at some point in his or her life. Despite the prevalence of STDs, these diseases have been termed the hidden epidemic. Many STDs are difficult to track because they can go undetected for long periods due to their asymptomatic nature. Prevalence trends vary among STDs; while syphilis and chlamydia rates have declined in recent years, gonorrhea, herpes, and human papillomavirus (HPV) are on the rise. In fact, HPV is now the most common STD, with 20 million currently infected and 5.5 million cases occurring annually.

➤ **HIV/AIDS**: In a relatively short period of time, HIV/AIDS has become the most well-known STD, both nationally and globally. Since the first reported case in 1981, its numbers have reached epidemic proportions. In the U.S. alone, 850,000 to 950,000 people are currently living with HIV, and since the epidemic began, an estimated 21.8 million people have died of AIDS worldwide. While advances in
LEADING HEALTH INDICATOR: RESPONSIBLE SEXUAL BEHAVIOR

Education the public about prevention geared toward adolescents and women, but some foundations are working in many ways to promote education and extreme vigilance. Since most unintended pregnancies occur in adolescents, many foundations have targeted pregnancy prevention campaigns toward youth. For example, The California Wellness Foundation is currently working to curb teenage pregnancy through its 10-year, $60 million Teenage Pregnancy Prevention priority area. This initiative has four main components that focus on the following approaches: research, community action, public education and policy advocacy, and professional and leadership development. An independent evaluator is currently working with grantees to periodically inform them of the program’s ongoing progress and make recommendations for improvement. The Claude Worthington Benedum Foundation funded a statewide media campaign targeted toward 10 to 16 year olds. The purpose of this campaign was to encourage youth to delay sexual initiation and encourage community support for abstaining from sexual activity.

➤ Policy and advocacy – Some foundations are using policy and advocacy strategies to promote reproductive rights and responsible behavior. When allocating its resources, The Health Foundation of Greater Indianapolis, Inc. decided to move away from media and prevention campaigns to focus its efforts on advocacy and educating local policymakers. It awarded a grant in 2002 to provide advocacy services for people living with HIV. Funding will enable the local primary care association to offer grassroots training to HIV patients to enable them to advocate for themselves in their communities, in the legislature, and in the health care system. Comprehensive sexuality education, which teaches both abstinence and broader prevention strategies, has been shown to be an effective approach. Despite this, certain welfare reform laws and emerging programs mandate abstinence-only education. In response, the Public Welfare Foundation has made grants to promote comprehensive sexuality education and reproductive choice.

➤ Recognizing the importance of men in promoting reproductive health – While women have traditionally been the focus of sexual health programs, some foundations are realizing the benefits of reaching out to men. The New York Community Trust provided funding for a health center to provide services to underserved men, the first in its area designed specifically for young men and boys. The center offers physical exams, screening and treatment for sexually-transmitted diseases, family planning, mental health counseling, and referrals for a primarily Latino clientele. The Rhode Island Foundation funded a program that supported young fathers and fathers-to-be. By providing life skills training, education, and employment readiness training, the program promoted responsibility in assuming their roles as fathers.

IMPLICATIONS FOR HEALTH

Sexual health greatly affects both mental and physical well-being. An unintended pregnancy can lead to immense emotional distress, particularly if it comes at a time when a woman is not able to handle the financial and social constraints of being a mother. Physically, a sexually-transmitted disease can lead to infertility; certain cancers; liver disease; chronic pelvic pain; pelvic inflammatory disease; and, in some cases, death. Diagnosis with one STD can also increase the susceptibility of being infected with another, particularly HIV/AIDS.

In economic terms, adolescent pregnancy is estimated to cost between $7 billion and $15 billion annually, while STDs and their complications are conservatively estimated at $17 billion. Lack of educational attainment, missed work days, and reduced quality of life are just a few of the many indirect costs associated with unintended pregnancies and STDs.

OPPORTUNITIES FOR GRANTMAKERS

Health foundations are working in many ways to promote responsible sexual behavior, from multimillion-dollar teenage pregnancy prevention campaigns to funding access to reproductive health services for the underserved. Most programs are geared toward adolescents and women, but some foundations are beginning to see the benefits of calling on men to be responsible sexual partners.

➤ Educating the public about prevention – Much of the work surrounding reproductive health has focused on educating the public about reducing the risk of unsafe sexual practices. Pregnancy and sexually-transmitted diseases are fully preventable and can be avoided through comprehensive education and extremes.
Mental health is a state of successful performance of mental function, while mental disorders are health conditions that are characterized by alterations in thinking, mood, or behavior. In recent decades, dramatic progress has been made in the treatment of mental disorders, making the promise of recovery real for many of those coping with mental illness. Mental disorders are among the most common of the chronic diseases affecting the U.S. population, affecting an estimated one in five Americans. Efforts to improve mental health and address mental disorders can focus on encouraging people to seek help when problems first occur and addressing the distress and dysfunction associated with these conditions.

Mental Health
Promoting Prevention, Treatment, and Recovery

DATA: SCOPE AND TRENDS

Mental disorders affect Americans of all ages. Among children, one in five between the ages of 9 and 17 has a diagnosable mental disorder in any given year, and about 5 percent of children and adolescents are extremely impaired by mental, behavioral, and emotional disorders. The statistics are similar for adults: 22 percent of adults age 18 to 64 are affected by mental disorders or co-occurring mental and addictive disorder each year, with about 5 percent experiencing serious mental illness. Among older adults, 25 percent of those age 65 and older experience mental disorders that are not part of normal aging. Among the most common mental disorders are affective disorders (such as major depression and bipolar disorder), schizophrenia, and anxiety disorders (such as panic disorder, obsessive-compulsive disorder, posttraumatic stress disorder, and phobia). About 6.5 percent of women and 3.3 percent of men experience serious mental illness each year, while around 1 percent of both men and women have bipolar disorder each year. Schizophrenia affects more than 2 million people in the U.S. annually. Anxiety disorders are the most common mental disorders, striking as many as 19 million people in the U.S. annually.

Although mental disorders can affect anyone, there are some differences among population groups in vulnerability for particular disorders. For example, more women than men experience major depression and anxiety disorders, while schizophrenia occurs more often in men than in women. Studies of differences in the incidence and prevalence of mental disorders among racial and ethnic groups are limited and often inconclusive. What is clear, however, is that individuals with mental disorders who are members of racial and ethnic minority groups often experience greater barriers to treatment and are more likely to receive inadequate treatment.

IMPLICATIONS FOR HEALTH

Mental disorders are among the most disabling of conditions, ranking with heart disease and cancer as top causes of disability. In fact, one mental disorder—major depression—is the leading cause of disability among adults in the United States and the cause of more than two-thirds of all suicides each year.
Some mental disorders are preventable, and many are treatable. But the majority of those with mental disorders either does not receive any treatment or receives inadequate treatment. For example, in 1997, only 23 percent of adults diagnosed with depression received treatment, even though depression is treatable for most people. Untreated mental disorders not only cause unnecessary suffering for individuals and their families, they also result in productivity losses and disability insurance payments that totaled $74.9 billion in 1996.

**OPPORTUNITIES FOR GRANTMAKERS**

Grantmakers of all types and sizes are making a difference in the lives of individuals with mental disorders, their families, and their communities. Some are increasing access to treatment and other services, while others are working to develop more effective services and systems.

➢ **Ensuring access to services for seniors** – Until recently, mental disorders among seniors were largely unrecognized and untreated. This is changing, in part because of the work of health grantmakers to improve mental health services for older adults. HCR Manor Care Foundation, Inc. in Toledo, Ohio, for example, is helping maintain the emotional well-being, independence, and safety of elders by supporting a project that uses geriatric social workers and elder peer counselors to provide in-home mental health counseling. The Health Trust in San Jose, California is also increasing access to services through its support for a partial hospitalization program for older patients with psychiatric disorders. The foundation funded support groups for patients who no longer required day treatment but still needed a structured group environment to support healthy functioning in the community and prevent relapse.

Other grantmakers support research or training as a means of improving mental health services for older adults. The New York Community Trust funded a study to evaluate the effectiveness of services designed to reduce depression in home-bound seniors. The results of the study are being used to develop more effective care plans. In another approach to improving services, The Retirement Research Foundation in Chicago, Illinois provided funding to help a mobile health team add mental health treatment to the package of services it provides to homeless people, while the San Angelo Health Foundation in Texas provided funds to purchase vehicles and other equipment needed to transport mental health patients in crisis. In another example, the United Methodist Health Ministry Fund in Hutchinson, Kansas helped build an outdoor playground at a mental health center that will be used for play therapy, as well as for outdoor recreation for children in the center’s behavioral and mental health programs.

➢ **Reducing disparities** – Grantmakers are working to address the barriers to care often encountered by members of racial and ethnic minority groups. In one example, The California Endowment supported the implementation of *The Circle of Care*, a holistic system of care for Native Americans with mental illnesses in the San Francisco Bay area. After obtaining input from the community on the development of the model, the project will provide individual, group, and family counseling that is based on Native American traditions and cultural practices. In other examples, the Jessie B. Cox Charitable Trust supported the development of community-based programs to meet the needs of the Southeast Asian community in the greater Boston area, and the Maurice Faulk Medical Fund in Pittsburgh, Pennsylvania supported the production of a 60-minute training video on cultural competence in race and ethnicity for mental health professionals.

➢ **Improving local service systems** – Health grantmakers are building local capacity by funding new programs and supporting needed infrastructure improvements. For example, the Jenkins Foundation in Richmond, Virginia provided start-up support for emergency psychological services to children who have witnessed or experienced an act of trauma or violence. The Michael Reese Health Trust in Chicago, Illinois provided funding to help a mobile health team add mental health treatment to the package of services it provides to homeless people, while the San Angelo Health Foundation in Texas provided funds to purchase vehicles and other equipment needed to transport mental health patients in crisis. In another example, the United Methodist Health Ministry Fund in Hutchinson, Kansas helped build an outdoor playground at a mental health center that will be used for play therapy, as well as for outdoor recreation for children in the center’s behavioral and mental health programs.
Unintentional injuries and violence extract a high price from American society. About 400 people, including 55 children and teenagers, die from injuries everyday. Each year, millions more sustain injuries that are serious and sometimes lifechanging. Efforts to decrease the toll of injury and violence can focus on: reducing violence among youth and adults; reducing the incidence of specific types of injuries, such as head and spinal cord injuries, firearm-related injuries, and injuries from maltreatment and abuse; improving personal safety through use of seat belts, helmets, smoke alarms, and other protective measures; and improving systems for identifying and eliminating health and safety risks.

DATA: SCOPE AND TRENDS

Most people sustain at least one significant injury during their lifetimes from motor vehicle crashes, falls, fires, guns, poisonings, or other causes. In the U.S., 1 death in 17 is due to injury. In 1997, more than 50,000 of the 146,000 deaths due to injury were from intentional injuries. Nearly 20,000 people died as a result of homicide, and almost 31,000 were classified as suicides. Homicide and suicide are the second and third leading causes of death among teenagers age 15 to 19. The elderly are also at especially high risk for suicide.

Millions of Americans experience unintentional injuries each year. In 1995, 29 million people went to an emergency room because of an unintentional injury, and in 1997, over 92,000 people died from unintentional injuries. Motor vehicle accidents account for almost half of all unintentional injuries and kill approximately 42,000 people annually. Death rates are highest for the youngest drivers (age 15 to 24 years), followed by drivers age 75 and older. In 1997, almost 40 percent of traffic fatalities were alcohol related. Data from 1995 indicate that the highest intoxication rates in fatal crashes were found among drivers age 21 to 24.

Although injury and violence affect people from all walks of life, members of racial and ethnic minority groups experience higher rates of unintentional and intentional injury and death. For example, African-American, Hispanic, and American Indian children are at higher risk for home fire deaths, while American Indian and Alaskan Native adults experience higher death rates from motor vehicle crashes, fires, and drownings. African-American youth age 15 to 24 suffer disproportionately from intentional injuries, experiencing a homicide rate that is nearly 14 times higher than the rate experienced by their white, non-Hispanic counterparts.

IMPLICATIONS FOR HEALTH

For people 44 years of age or younger, intentional and unintentional injuries are the leading cause of death, surpassing cancer by about three to one. Although the proportion of deaths due to injuries falls for people over the age of 44, older people who suffer injuries are more likely to die from those injuries than are younger people.

Many people who suffer injuries recover completely, but some are left with lifelong disabilities. For example, each year, an estimated 230,000 people are hospitalized for traumatic brain injury and survive, but 80,000 are left with disabilities. Costs for all injuries in the late 1990s (including direct medical care, rehabilitation, and lost productivity) were estimated at more than $441 billion.
OPPORTUNITIES FOR GRANTMAKERS

Most injuries and deaths from accidents or violence are preventable, and many health grantmakers are working to reduce injuries and violence in their communities. The following examples highlight only a few of the strategies they are using.

➤ Preventing violence among young people and adults – School shootings in recent years have emphasized the need to prevent violence among young people. The California Wellness Foundation has made a major commitment to preventing youth violence. The foundation supports a range of violence prevention efforts, including: the Street Poets United program that trains currently and formerly incarcerated youth to be gang and violence prevention educators; peer mediation training for youth in elementary and middle schools; core operating support for community-based violence prevention programs; and support for research, policy development, and advocacy related to gun violence.

Other grantmakers addressing youth violence include: the Moses Cone-Wesley Long Community Health Foundation in North Carolina, which funded a test of a new group therapy protocol for middle school youth at risk for violence and aggression; Rose Community Foundation, which supported leadership development among youth interested in reducing gun violence; Comprehensive Health Education Foundation, which supported education for middle and high school students to help them avoid dating violence and sexual assault; and the Joyce Foundation, which funded a national child advocacy organization’s efforts to reduce gun-related injuries and deaths in children and youth.

The Quantum Foundation and The California Endowment are examples of foundations that are working to prevent violence that is grounded in racial, cultural, religious, and other biases. The Quantum Foundation is combatting the development of prejudiced attitudes and behaviors in young children by supporting an anti-bias curriculum that uses Sesame Street characters to promote understanding and respect, while The California Endowment is supporting efforts to increase dialogue among various religious and ethnic groups and investing in programs and activities that promote understanding and tolerance.

➤ Addressing violence in the home – Grantmakers are also active in efforts to eliminate violence in the home, whether aimed at children or adults. For example, the Sisters of Mercy of North Carolina Foundation, Inc. provided startup funding for a domestic violence resource center for victims of domestic violence and their children and also supported a home visitation program to support and educate families at risk of child abuse and neglect. The Blue Cross Blue Shield of Michigan Foundation focused on repeat domestic violence offenders, funding an intervention program that aims to reduce recidivism by teaching repeat offenders alternatives to violence. The Archstone Foundation has addressed the issue of elder abuse by providing support to the National Committee for the Prevention of Elder Abuse, as well as community-based efforts to prevent and intervene in elder abuse situations.

Because beliefs about child-rearing, discipline, and family roles are often embedded in cultural traditions, grantmakers are helping tailor abuse prevention efforts to the needs of specific communities. The New York Community Trust, for example, supported a center for abused women and others of Korean descent that offers health, mental health, employment, and social services. In other examples, The HealthCare Foundation for Orange County supported the production of a Vietnamese version of a popular guide for new parents produced by a local child abuse prevention organization, while The Lucile Packard Foundation for Children’s Health funded a program that teaches Pacific Islanders in two California communities about nonphysical disciplinary techniques and laws regarding child abuse.

➤ Preventing injury among the elderly – Injury prevention is a critical issue for the elderly, as falls at home and in health care settings can be the demarcation line between self-sufficiency and dependency. In fact, half of all older adults hospitalized for hip fractures cannot return home or live independently after their injuries. The Archstone Foundation funded the Center for Successful Aging at California State University (Fullerton) to develop and implement a community-based balance assessment and mobility enhancement program through senior centers and other adult education sites to prevent falls among the elderly. Over three years, programs were offered at no cost to 18 senior centers in Orange County, California. The Horizon Foundation’s Aging in Place initiative includes a fall prevention component. Education activities include sponsoring fall prevention screenings at senior centers and at events where older adults gather, as well as wide distribution of a pamphlet that helps seniors determine if they are at risk for falls and tells them where they can get help to reduce their risk. Older adults who are concerned about their risk receive a fall prevention assessment to help determine how that risk can be reduced. If home repairs or modifications would help reduce the risk of falls, the client is referred to Our House, another foundation-sponsored effort, to have the work done on his or her home.

➤ Promoting motor vehicle safety – Because motor vehicle crashes account for so many injuries and deaths each year, many grantmakers are working to improve motor vehicle safety. In one example, the Wellmark Foundation in Iowa recently funded a local child passenger safety and injury prevention program that will support a community child passenger safety coalition; training for health care workers, educators, law enforcement personnel, and others; public awareness activities; car seat safety checks; and distribution of car seats. The Robert Wood Johnson Foundation has funded many projects addressing drunk driving, including support for state Mothers Against Drunk Driving coalitions and projects to reduce high-risk drinking and drunk driving among teens and college students.
Protecting and ensuring the quality of the environment has been a focus of public health from its early days. Efforts to ensure clean air, safe food handling, effective management of sewage and municipal waste, and controlling vector-borne illnesses have contributed significantly to improvements in the public’s health. There is still much more to be done to improve environmental quality; air pollution, substandard housing, and other environmental factors continue to threaten health for many individuals.

DATA: SCOPE AND TRENDS

During the 1990s, progress in improving environmental quality was mixed. Childhood lead poisoning rates declined, while asthma rates continued to climb to an epidemic level. Professional and public awareness campaigns, screening measures for at-risk individuals, and community efforts to clean up contaminated areas collectively contributed to the reduction of blood lead levels (BLLs) in children. In 1984, between 2 million and 3 million children age 6 months to 5 years old had BLLs at or above levels that can affect vital organs in the brain. By the early 1990s, fewer than 900,000 children had BLLs above the current standard for identifying children at risk. Since the mid-1980s, however, asthma, which can be triggered or worsened by poor air quality, has increased in the U.S. The overall death rate from asthma increased 55 percent between 1980 and 1993, and for children it increased 67 percent.

Research has linked race and socioeconomic status to increased risk of exposure to environmental contaminants and poor health outcomes. A disproportionate number of Latinos, Asian Americans, and Pacific Islanders continue to live in areas that fail to meet U.S. Environmental Protection Agency (EPA) standards for air quality, as compared with the general population. African-American children have been found to be three times more likely than white children to be hospitalized for asthma and asthma-related conditions and four to six times more likely to die from asthma. The environmental justice movement was started in the early 1980s to address these and other disparities in environmental quality. Protestors around the country mobilized when the state of North Carolina attempted to dump 6,000 truckloads of toxic chemicals in a predominantly rural African-American county. Communities today are still struggling with these injustices and are working to keep their communities and their homes safe.

IMPLICATIONS FOR HEALTH

Environmental factors play a pivotal role in human development, health, and disease. Poor environmental quality is directly responsible for 25 percent of preventable illnesses worldwide, with diarrheal diseases and respiratory infections topping the list. Most types of cancers are associated with
environmental, rather than genetic, factors, such as alcohol, radiation, dietary habits, toxic chemicals, viral infections, and tobacco smoke. Some issues that affect overall environmental quality, and ultimately health, include air quality, water quality, pesticides and toxic waste, and healthy homes and communities.

- Air pollution has been linked to increasing the incidence of birth defects, lung cancer, and acute asthma cases. In the U.S., air pollution is estimated to be associated with 50,000 premature deaths.
- Water supply systems strive to provide drinking water free of disease-causing biological and chemical agents. While most outbreaks involve only a few individuals, some can affect an entire community and may be associated with birth defects and certain types of cancers.
- Pesticides and toxic waste are particularly dangerous to those with high exposure, such as agricultural workers and farmers. Children are also at risk because of their small size; those exposed to pesticides have a five to six times greater chance of developing childhood leukemia and brain cancer.
- Many families are exposed to toxins in their homes through lead-based paint on walls, their proximity to toxic waste sites, and exposure to hazardous cleaning products. In 1996, 2 million poison exposures were reported; residences were the sites of exposure in 91 percent of the cases.

**OPPORTUNITIES FOR GRANTMAKERS**

Foundations do not have to have an environmental mission to contribute to improving environmental quality. While some health foundations have taken on environmental health as a priority area, there are still many opportunities for foundations to get involved in this area in large and small ways.

- **Increasing public knowledge** – Foundations can make valuable contributions by educating the public and increasing awareness. Simple actions to large-scale campaigns can have profound effects on the environment. Some communities have sponsored “walk-to-work” and/or “bike-to-work” days in tandem with continuing efforts to promote carpooling. These simple messages remind people of the personal role they play in ensuring a healthy environment. For example, the Sierra Health Foundation funded a study to inform Sacramento-area residents on the relationship between poor air quality and adverse health conditions. The survey showed that one-third of households in the area experienced unhealthy air, particularly in the summer months.

- **Fostering responsibility among the health care industry** – The Health Care Without Harm (HCWH) campaign was started as a result of EPA findings that the health care industry itself was a major source of pollution and a threat to health. Originally started with 28 founding organizations, the campaign has now grown to over 360 organizations in 40 countries. Projects range from supporting local campaigns to oppose medical waste incinerators and reforming local hospitals to educating the broader public about dioxin and endocrine disrupting chemicals and the health care industry’s contribution to these problems. The Jennifer Altman Foundation, a primary supporter of HCWH, has engaged nurses, hospital personnel, and breast cancer advocates to encourage them to take action in their respective roles in the health care system. Another supporter, The Nathan Cummings Foundation, is working not only to engage the U.S. health care system in adopting environmentally-sustainable practices, but also to make it an ally in encouraging other industries to do the same.

- **Advocacy and policy change** – Foundations can fund advocacy efforts to improve both large- and small-scale policy change. The New York Community Trust supported efforts to organize a coalition to change state policy on brownfields – vacant, industrial properties that are shunned by potential developers because of actual or suspected contamination. Policies encouraging developers, investors, and insurers to clean up and reclaim the land without excessive costs encourage economic revitalization. This grant was used to develop educational materials and recruit upstate allies, meet with editorial boards and reporters, and ensure that the legislature had the constituent pressure to create and fund a comprehensive cleanup strategy. The Boston Foundation provided funding for the Clean Buses for Boston initiative, which advocates for the conversion of dirty diesel buses to cleaner alternatives. The foundation mobilized inner-city youth to develop a campaign to reduce hazardous emissions from idling buses that frequent their neighborhoods. This came as a response to alarming and increasing rates of asthma and other respiratory conditions in their neighborhoods.

- **Providing access to clean air and water** – Several standards are in place to ensure access to clean air and water. Not all communities have the resources to enforce these standards, however. The Paso del Norte Health Foundation funded a $1.7 million dollar initiative to improve the quality of local drinking water. The program, When Water Works for Health, provides school-based education and community-based outreach efforts to address problems with sanitation and purification of drinking water. The foundation has also supported other efforts to improve water quality and sanitation in disadvantaged communities with no access to luxuries such as running water and a sanitation system. The foundation has funded the installation of water tanks in homes without running water and promotoras (outreach workers) to teach community members how to purify and protect their drinking water. Paso del Norte Health Foundation has also worked with county officials to connect unincorporated areas to water and waste management services.
Immunization is one of the greatest public health achievements of modern times. In the U.S. today, immunizations effectively prevent 10 childhood diseases. They also help control the spread of other infections, such as influenza, within communities.

Despite this success, new challenges and reduced resources are weakening the nation’s immunization system, increasing the likelihood of disease outbreaks. Questions have been raised about the value and safety of specific vaccines, including the possibility of links between vaccines and specific conditions – including autism, cerebral palsy, and sudden infant death syndrome. Although most of the scientific community agrees that such risks are quite small compared to the overall benefit, these questions underscore the need for balanced, accurate information about vaccines and the diseases they prevent.

A newer concern is the potential threat of infectious diseases being used as weapons of mass destruction. The possibility of a purposefully-induced smallpox epidemic has forced federal and state governments to prepare for the mass administration of the smallpox vaccine and created new needs to educate and train health care workers to identify a disease that had not been seen in this country for many years. Potential mass vaccination for smallpox has also sparked controversy over who should receive the shot and any potential mild to severe side effects.

DATA: SCOPE AND TRENDS

The Centers for Disease Control and Prevention (CDC) recommends that to be protected against 10 preventable childhood illnesses, children born in the U.S. should receive 12 to 16 doses of vaccine by age two. Vaccine recommendations will likely change in the future as new vaccines are developed, including combinations that may reduce the number of needed shots.

Childhood immunization rates in the United States are generally high for each recommended immunization during the first two years of life, except for the hepatitis B and varicella vaccines. Geographic and economic differences, however, contribute to vaccine disparities in terms of availability and provision. For example, in 1998, only 70 percent of children age 19 months to 35 months from the lowest-income households received the combined series of recommended vaccines, compared with 77 percent of children from higher-income households.

Immunization recommendations for adults 65 and older include an annual influenza vaccine, as well as a one-time pneumococcal disease vaccine. Rates for both vaccines are lower for African-American and Hispanic adults than whites. Barriers to adult immunization include lack of knowledge that vaccines are needed, public misconceptions about vaccines, and lack of vaccine recommendations from health care providers.

IMPLICATIONS FOR HEALTH

Immunizations protect both individuals and communities from infectious diseases. The current level of protection against infectious disease in the U.S. depends on what
immunologists and epidemiologists refer to as community immunity. Maintaining community immunity is critical to protecting the public from infectious disease. When levels of immunization within a community drop too low to stop viruses and bacteria from spreading, epidemics result. For example, between 1989 and 1991, the U.S. experienced a resurgence of measles, with more than 55,000 reported cases – mainly among children less than 5 years old – more than 11,000 hospitalizations, and 125 deaths.

Immunization rates for adults are not as high as those achieved for children. The health effects, however, are just as critical. Influenza and pneumonia deaths are the sixth leading cause of death in the country. Each year, influenza is responsible for 110,000 hospitalizations and 20,000 deaths. Pneumonia causes 10,000 to 14,000 deaths annually.

**OPPORTUNITIES FOR GRANTMAKERS**

Grantmakers are supporting efforts to fully immunize Americans. Through investments in research and development, public education, immunization registries, and many other areas, grantmakers can significantly contribute to improving the public’s health.

- **Speeding development and delivery of new vaccines**

  Today, researchers are working to find vaccines for numerous diseases, including meningitis, hookworm, cancer, and AIDS.

  Grantmaker support of these efforts is critical to speeding the development and delivery of vaccines in the U.S. and abroad.

  The Bill and Melinda Gates Foundation has committed $100 million toward the delivery of several new vaccines that protect children against respiratory, diarrheal, and liver disease.

  The foundation also supports efforts to ensure that children in poor countries have access to life-saving vaccines.

  In cooperation with the University of California, San Francisco, the California HealthCare Foundation is supporting the first and second phases of development of a vaccine against valley fever. The project goal is to bring a safe and effective candidate vaccine to phase three clinical trials by 2004.

  The Northwest Health Foundation has also funded vaccine development. In 2001, the foundation provided a grant to the Oregon Health Sciences University to develop and test a vaccine for cytomegalovirus, a major infectious disease in the U.S.

- **Educating the public and professionals**

  Immunization has been so successful that many people today have little firsthand knowledge of the diseases they prevent and their devastating effects. As a result, the public tends to take for granted the enormous protective benefits of vaccines.

  Continued education of the general public and health care professionals about the benefits of immunization is critical to maintaining community immunity.

  The Josiah Macy, Jr. Foundation supported development of a videotape to help health care professionals educate parents about immunization and to address concerns about vaccine safety with parents. The videotape is provided free of charge to doctors’ offices and has also been piloted as a potential teaching tool in other care settings. The Cumberland Pediatric Foundation has also focused on keeping the patients and providers informed of immunization issues. The foundation alerts pediatricians to new developments and breaking news stories on immunization via a fax-based rapid information network. It has also organized information forums with pediatricians, vaccine manufacturers, and local news media to help disseminate balanced and accurate information on immunization issues.

  The National Network for Immunization Information (NNii) is a national nonprofit organization that provides the public, health professionals, policymakers, and the media with immunization information to help them understand vaccine issues and to make informed decisions. With support from The Robert Wood Johnson Foundation, NNii conducted a national survey examining perceptions and knowledge about immunizations and vaccine-preventable diseases among parents, legislators, and physicians.

  The survey’s findings challenge those working in this area to develop educational interventions that provide parents and practitioners with accurate and timely information about vaccine safety and efficacy.

  NNii has also received support from The Annie E. Casey Foundation and the Jewish Healthcare Foundation.

- **Supporting immunization registries**

  Following a measles epidemic in which 120 people, mostly infants, died, The Robert Wood Johnson Foundation launched the All Kids Count (AKC) program in 1991. AKC is a national network of demonstration projects designed to develop and implement community-based immunization registries for infants and toddlers.

  For parents, these registries consolidate all the vaccines a child has received into one reliable list; provide a free copy of a child’s immunization history for school, day care, or camp entry requirements; help ensure a child’s immunizations are up to date; and provide reminders of immunizations due or missed.

  For communities, immunization registries help control vaccine-preventable diseases, sustain immunization rates or increase rates in pockets of need, and identify high-risk or under-immunized populations.

  Some foundations are working in collaboration with government agencies to improve immunization rates.

  For example, The Healthcare Foundation of New Jersey awarded a grant to the New Jersey Department of Health and Senior Services to develop a computerized immunization tracking system.

- **Partnering to improve immunization rates**

  Ensuring that children and adults receive recommended immunization requires a joint effort between the public and private sectors. Grantmakers can play an important role as facilitators and conveners in bringing stakeholders together.

  For example, in 1996, The Colorado Trust funded a five-year initiative to develop and implement strategies for ensuring that all Colorado children are fully immunized against infectious disease.

  The foundation convened and funded a statewide task force to examine immunization rates and come up with recommendations to improve them. Subsequently, the Colorado Children’s Immunization Coalition was launched to implement the task force’s strategies.
Ensuring access to care continues to be a challenge for our nation’s health system. Approximately 38 million Americans are uninsured, and an even greater number lack a regular source of care. Nearly 40 percent of those with health insurance report gaps in coverage that prevent them from getting health care when they need it.

Financial, structural, and personal barriers can hinder all access to health care. Financial barriers include not having health coverage, not having enough money to pay for needed services, or not having the ability to cover services outside an insurance plan. While states have been actively expanding coverage to low-income children through Medicaid and the State Children’s Health Insurance Program, other population groups – such as low-income working families, adults without dependent children, and undocumented immigrants – remain largely uncovered. Furthermore, the current economic downturn and strained state budgets have put recent gains in insurance coverage in jeopardy.

Structural barriers pertaining to the health care system, such as a lack of primary care providers or other health care professionals can also hinder access. Personal obstacles may include language barriers or not knowing when or where to seek care.

Data: Scope and Trends

Insurance coverage is a key determinant of access to health services. Research has repeatedly shown that the uninsured are less likely to receive regular preventive and primary care, such as immunizations or prenatal care.

Even among those with coverage, a significant portion lack a usual source of care or report difficulty accessing needed services because they cannot afford to pay cost sharing, their plan did not fully cover their needs, or other problems. Individuals age 18 to 24 are most likely to lack a usual source of care. Over the past decade, the proportion of people 65 years and under with health insurance remained constant at about 85 percent. Disparities, however, exist. About 33 percent of adults living below the federal poverty level are without health coverage. Racial and ethnic minorities are also less likely to have insurance. In 1997, approximately one in three Hispanic adults was without coverage. Mexican Americans had the highest rate of uninsurance at 40 percent.

Access barriers also exist for those with coverage. This reflects geographic availability of care, as well as social and cultural factors. For example, African-American Medicare beneficiaries are more likely to report trouble getting care than their peers; those living in rural areas are more likely to defer getting care due to cost.

Implications for Health

Being uninsured impacts an individual’s health status, as well as his or her economic opportunities. The uninsured are less likely to receive preventive care and more likely to seek care in an emergency department, be diagnosed at more advanced stages of disease, or receive less therapeutic care, such as prescription drugs. According to the U.S. Department of Health and Human Services, having health coverage has been found to reduce mortality rates between 10 percent and 15 percent. At the same time, better health can help improve educational attainment and annual earnings.
OPPORTUNITIES FOR GRANTMAKERS

Grantmakers are responding to the access crisis with innovative approaches to providing care to the uninsured. They are enrolling eligible children and adults in public insurance programs, funding health services research, supporting safety net providers that serve the uninsured, and funding advocacy.

➤ Expanding insurance coverage – The Robert Wood Johnson Foundation’s Communities in Charge program and the W.K. Kellogg Foundation’s Community Voices program are helping broad-based community consortia design and implement new delivery systems that manage care, promote prevention and early intervention, and integrate services using a variety of models. Several grantees of the Community Voices and Communities in Charge programs are complementing delivery system reform with efforts to expand private coverage. The Denver Health Community Voices grantee, for example, has initiated a subsidy program that targets low-income, small businesses newly offering insurance coverage to workers. The program covers a percentage of the premiums. The California Endowment also supports efforts to expand coverage. It is working in collaboration with local organizations to increase enrollment in health coverage programs such as Medi-Cal and Healthy Families in central and south Los Angeles, east Los Angeles, El Monte, and the east San Fernando Valley. The goal of this five-year, $20 million program is to increase access to health coverage through outreach and enrollment, coalition building, policy and advocacy, and public awareness activities. At the local level, the Alliance Healthcare Foundation has been bringing together community and business leaders who are committed to improving access to health care for the uninsured in San Diego. The main focus of its initiative has been to develop an insurance product for low-income workers that subsidizes operational costs and premiums through an existing health plan. The foundation also works to inform, educate, and promote the expansion of health coverage for the county’s uninsured residents.

➤ Facilitating system change – Foundations have also helped their communities implement systemwide reform. The Jewish Healthcare Foundation, for example, has been a key player in creating the Coordinated Care Network of Pittsburgh. The network has developed a model to finance and deliver health care to the uninsured by selling preventive care management and disease management services to health maintenance organizations. Cost savings from reduced utilizations are used to offer primary care, mental health and substance abuse treatment, dental services, and dozens of other programs to the uninsured. Through its Improving Access to Health Care initiative, the Consumer Health Foundation in Washington, DC is working to improve access to quality health care services, including primary care, specialized care, prevention, and health promotion services. The initiative includes work in the areas of consumer education and empowerment, provider education and training, and health system change. Funded projects focus on strategies that are consumer focused and community based; address the needs of the vulnerable consumers; recognize and address racial, ethnic, and socioeconomic disparities in health status; and promote a regional perspective and approach to addressing health issues. Three- to five-year grants ranging from $25,000 to $50,000 have been given each year since 1997.

➤ Advocating for access – A number of foundations are working to increase access for low-income individuals and empower communities through advocacy. With support from The California Wellness Foundation, People and Congregations Together (PACT) successfully advocated on behalf of residents of San Joaquin County and secured an additional $2 million to increase availability of health care services. Specifically, the funds will be used to hire five health outreach workers who are linguistically and culturally reflective of Hmong, Latino, African-American, and Filipino communities; purchase three transportation vans to bring residents to health care facilities; and purchase a mobile health unit that can bring services to isolated members of the county. PACT staff and community residents develop possible solutions to health care issues and organize public meetings attended by residents, community leaders, and the county health department director and staff.

Working for reform at the state level, the Rose Community Foundation helped launch the Colorado Consumer Health Initiative. This organization educates Coloradans about health care; builds strong, diverse coalitions as a voice for consumers; develops and promotes solutions that increase access to health care for all; strengthens and supports patient protections; and supports efforts that decrease the number of uninsured people in Colorado. The Public Welfare Foundation has also supported the initiative.

➤ Convening stakeholders and supporting community planning – Foundations can provide leadership in their communities by acting as conveners for community stakeholders and by supporting needs assessments and planning processes that lay the groundwork for coordinated responses. The Assisi Foundation, for example, led the development of a coordinated approach to improve access in Memphis, Tennessee. By funding community assessment tools, regional planning meetings, and financial and legal analyses, the foundation paved the way for the formation of the Memphis Community Access Coalition, which coordinates medical care for the uninsured. At the state level, the Rhode Island Foundation worked with the Rhode Island Department of Health to survey more than 3,000 businesses about the health insurance they provide to their employees. The foundation subsequently convened government and business leaders, advocates, and health care provider groups, and it will be codirecting a two-year effort to develop solutions for the state’s uninsured.

➤ Supporting safety net providers – Foundations have long been active in strengthening the capacity of providers who make up a community’s safety net. The Health Foundation of Greater Cincinnati, for example, is funding a network of safety net providers to implement shared services arrangements – creating more efficient ways for providers to manage ongoing services, reduce operational costs, and enhance the quality of services delivered to patients. Shared services include clinical and administrative services such as billing and claims processing, utilization management, and patient tracking. Assisting nonprofit hospitals and other health care organizations is a funding priority for The Duke Endowment. In 1999, The Duke Endowment provided a $221,580 grant for the start up of a community free clinic in Southport, North Carolina. The foundation has continued to support the clinic and recently provided a three-year grant to enable the organization to expand its services.