

Section 2: The Ten Leading Health Indicators

The Leading Health Indicators represent the important determinants of health for the full range of issues in the 28 focus areas of *Healthy People 2010*. The Leading Health Indicators are a set of 10 high-priority public health issues in the United States. The indicators are intended to help everyone more easily understand how healthy we are as a Nation and which are the most important changes we can make to improve our own health, as well as the health of our families and communities. These specific objectives are used to track progress toward meeting *Healthy People 2010* goals. The Ten Leading Health Indicators are:

1. Physical Activity
2. Overweight and Obesity
3. Tobacco Usage
4. Substance Abuse
5. Responsible Sexual Behavior
6. Mental Health
7. Injury and Violence
8. Environmental Quality
9. Immunizations
10. Access to Health Care

Physical Activity

Regular physical activity is associated with lower death rates for adults of any age, even when only moderate levels of physical activity are performed. Regular physical activity throughout life is important for maintaining a healthy body, enhancing psychological well being, and preventing premature death.

Healthy People 2010 Objective 22-2:

Increase the proportion of adults who engage regularly, preferably daily, in moderate physical activity for at least 30 minutes per day.

Target: 30 percent.

In 2000, only 18.8 percent of DuPage County adults engaged in daily physical activity. In Illinois in 2000, 12.5 percent of adults engaged in regular and vigorous activity. DuPage County does not meet this HP 2010 Objective.

Healthy People 2010 Objective 22-7:

Increase the proportion of adolescents who engage in vigorous physical activity that promotes cardio-respiratory fitness 3 or more days per week for 20 or more minutes per occasion.

Target: 85 percent.

In 2003, 75 percent of high school students engaged in vigorous physical activity for 20 minutes three or more times per week. This percentage is short of meeting the HP 2010 national target of 85 percent. 82 percent of students participated in daily school physical education. 54 percent of high school students exercised to strengthen or tone muscles (such as push-ups, sit-ups or weight lifting) 3 or more days per week. 66 percent of high school students reported participating in at least one team sport during a 12-month period. DuPage County does not meet this HP 2010 Objective.

Overweight & Obesity

Overweight and obesity substantially raise the risk of illness from high blood pressure, high cholesterol, type 2 diabetes, heart disease and stroke, gallbladder disease, arthritis, sleep disturbances and problems breathing, and certain types of cancers. Obese individuals also may suffer from social stigmatization, discrimination, and lowered self-esteem.

Healthy People 2010 Objective 19-2:

Reduce the proportion of adults who are obese.

Target: 15 percent.

In 2000, 16 percent of DuPage County adults were obese or morbidly obese, defined as a BMI of 30 or more. DuPage County is very close to meeting the Target, however we still need improvement.

Healthy People 2010 Objective 19-3b:

Reduce the proportion of children and adolescents who are overweight or obese.

Target: 5 percent.

In 2003, 9 percent of all DuPage County high school students were overweight or obese. Overweight or obese was defined as having a Body Mass Index (BMI) greater than or equal to the 95th percentile of the growth chart. 4 percent of all females and 12 percent of all males were overweight or obese. 11 percent of females and 13 percent of males were *at risk* for becoming overweight. *At risk* was defined as having a BMI between the 85th and 95th percentile. The average female body mass index (BMI) was 21 and the average male BMI was 23. 54 percent of students (males and females combined) describe their body weight as 'about right'. DuPage County does not meet this HP 2010 Objective.

Tobacco Usage

Cigarette smoking is the single most preventable cause of disease and death in the United States. Smoking is a major risk factor for heart disease, stroke, lung cancer, and chronic lung diseases—all leading causes of death. Smoking results in more deaths each year in the United States than AIDS, alcohol, cocaine, heroin, homicide, suicide, motor vehicle crashes, and fires—combined.

Healthy People 2010 Objective 27-1a:

Reduce cigarette smoking by adults.

Target: 12 percent.

In DuPage County in 2000, 19.2 percent of adults were current cigarette smokers. Of adults that smoke some days or everyday, 6.6 percent consider themselves to be heavy smokers. 2.8 percent of DuPage County adults indicated they were current smokeless tobacco users. DuPage County does not meet this HP 2010 Target.

Healthy People 2010 Objective 27-2b:

Reduce cigarette smoking by adolescents.

Target: 16 percent.

In 2003, 16 percent of high school students smoked cigarettes at least once in the past 30 days. 11 percent smoked cigarettes everyday. Males (36 percent) are slightly more likely than females (33 percent) to report having tried tobacco. 36 percent of high school students first smoked at age 13 to 14 and 25 percent first smoked at age 15 to 16. Daily smoking and tobacco use increases with grade level, with seniors smoking greater numbers of cigarettes. 33 percent of high school students who smoked bought cigarettes at a store and 34 percent borrowed or 'bummed' cigarettes. DuPage County meets this Target, however we will still strive for improvement.

Substance Abuse

Alcohol and illicit drug use are associated with many of this country's most serious problems, including violence, injury, and HIV infection. Alcohol and illicit drug use are associated with child and spousal abuse; sexually transmitted diseases, including HIV infection; teen pregnancy; school failure; motor vehicle crashes; escalation of health care costs; low worker productivity; and homelessness. Alcohol and illicit drug use also can result in substantial disruptions in family, work, and personal life.

Alcohol abuse alone is associated with motor vehicle crashes, homicides, suicides, and drowning—leading causes of death among youth. Long-term heavy drinking can lead to

heart disease, cancer, alcohol-related liver disease, and pancreatitis. Binge drinking is a local and national problem.

Healthy People 2010 Objective 26-10a:

Increase the proportion of adolescents not using alcohol or any illicit drugs during the past 30 days.

Target: 89 percent.

In 2003, 70 percent of adolescents did not use alcohol or any illicit drugs within a 30-day period. 53 percent of high school students had tried alcohol. Males begin drinking at younger ages than females. The percentage reporting having tried alcohol increased with grade level, with 37 percent of freshmen, 45 percent of sophomores, 63 percent of juniors and 67 percent of seniors reporting having tried alcohol. 29 percent of high school students used alcohol during a 30-day period. Of this percent, males were more likely to binge drink than females (54 versus 46 percent). Seniors were the most frequent binge drinkers, with 35 percent reporting having consumed five or more drinks in a row in a one-month period and 4 percent doing so on 20 or more consecutive days. DuPage County does not meet this HP 2010 Target.

23.7 percent of DuPage County high school students ever used marijuana. Males were more likely to try marijuana at younger ages than females. 11 percent of high school students used marijuana in the past one-month period, and 33 percent of these students used it 20 times or more. 4.8 percent of students ever used cocaine, 1.5 percent ever used heroin, 2.8 percent ever used methamphetamines, 3.4 percent ever used ecstasy, and 2.3 percent ever used steroids.

Healthy People 2010 Objective 26-11c:

Reduce the proportion of adults engaging in binge drinking of alcoholic beverages during the past month.

Target: 6 percent.

In DuPage County in 2000, more than 16.4 percent of adults consumed five or more drinks on one occasion. Binge drinking in DuPage County had declined from 19.4 percent in 1996. However, the County rate was slightly higher than the state rate of 18.2 percent in 1996 and 16.3 percent in 2000. The DuPage percentage greatly exceeds the HP 2010 Target of 6 percent.

Responsible Sexual Behavior

Unintended pregnancies and sexually transmitted diseases (STDs), including infection with the human immunodeficiency virus that causes AIDS, can result from unprotected sexual

behaviors. Abstinence is the only method of complete protection. Condoms, if used correctly and consistently, can help prevent both unintended pregnancy and STDs.

Healthy People 2010 Objective 13-6a:

Increase the proportion of sexually active persons who use condoms.

Target: 50 percent (for unmarried females aged 18-44.)

In 2003, approximately 75 percent of sexually active high school students used a condom during their last sexual intercourse. Specific local data for unmarried females aged 18 – 44 is unavailable, so it cannot be determined if DuPage County meets this HP 2010 Target.

Healthy People 2010 Objective 25-11:

Increase the proportion of adolescents who abstain from sexual intercourse or use condoms if currently sexually active.

Target: 95 percent.

In 2003, 92 percent of DuPage County high school students abstained from sexual intercourse or used condoms if sexually active. 80 percent of students did not have intercourse. Approximately 75 percent of the sexually active high school students used a condom during their last intercourse. 32 percent of those who have had intercourse have not done so during the past three months. Of the 20 percent who have had intercourse, 51 percent were 15-16 years old when they had intercourse for the first time. 84 percent of students have had only one sexual partner. While DuPage County is close to meeting this Objective, we still require improvement.

Mental Health

Approximately 20 percent of the U.S. population is affected by mental illness during a given year; no one is immune. Of all mental illnesses, depression is the most common disorder. More than 19 million adults in the United States suffer from depression. Major depression is the leading cause of disability and is the cause of more than two-thirds of suicides each year.

Healthy People 2010 Objective 18-9b:

Increase the proportion of adults with recognized depression who receive treatment.

Target: 50 percent.

In DuPage County in 2000, 9.3 percent of adults indicated they felt downhearted or blue. 10.9 percent of adults accomplished less than they would like as a result of emotional problems. 14.8 of adults indicated they were somewhat or not satisfied with life. In 2000,

only 3.4 percent of DuPage County adults were being seen for mental health problems. While data to measure this Target is currently unobtainable, we are certain that improvements can be made in recognition and treatment of depression.

Injury and Violence

More than 400 Americans die each day from injuries due primarily to motor vehicle crashes, firearms, poisonings, suffocation, falls, fires, and drowning. The risk of injury is so great that most persons sustain a significant injury at some time during their lives.

Healthy People 2010 Objective 15-15a:

Reduce deaths caused by motor vehicle crashes.

Target: 9.2 percent.

Motor vehicle crashes are the most common cause of serious injury and the most common cause of death in the 15 to 24 age group. In DuPage County in 2000, there were 50 motor vehicle accident deaths, which accounted for 0.9 percent of all DuPage County deaths. This percentage of less than 1 percent is well below the HP 2010 Target of 9.2 percent.

When calculating age adjusted (2000 U.S. standard population) death rates, we find that 5.5 deaths occur from motor vehicle crashes per 100,000 persons. While these numbers may seem small, in 2000 motor vehicle accident deaths accounted for 1,496 years of potential life lost (YPLL) due to premature death.

Motor vehicle crashes are often predictable and preventable. Increased use of safety belts and reductions in driving while impaired are two of the most effective means to reduce the risk of death and serious injury of occupants in motor vehicle crashes.

Healthy People 2010 Objective 15-32:

Reduce homicides.

Target: 3 percent.

Because no other crime is measured as accurately and precisely, homicide is a reliable indicator of all violent crime. Occurrence of homicide in DuPage County is very low when compared to state and national rates. In 2000, the number of homicides was too low to calculate a rate (less than ten events.) In DuPage County in 1999 there were 16 homicides, for a statistically unreliable rate of 1.8 deaths per 100,000 population and YPLL of 778 years. In 2001, DuPage County again experienced 16 homicides. While homicide numbers fluctuate greatly, in 2000 the DuPage County percentage of homicides was well below the HP 2010 Target of 3 percent.

Environmental Quality

Healthy People 2010 Objective 8-1a:

Reduce the proportion of persons exposed to air that does not meet the U.S. Environmental Protection Agency's health-based standards for ozone.

Target: 0 percent.

Air Pollutant	1998	1999	2000	2001	2002	EPA Annual Standard
Ozone	.068	.075	.060	.071	NA	.08 ppm
Particulate Matter	23	15.6	15.3	15.5	14.7	15ug/m
Carbon Monoxide	NA	NA	NA	NA	NA	9 ppm
Nitrogen Dioxide	NA	NA	NA	NA	NA	.053 ppm
Sulfur Dioxide	.003	.003	.003	NA	NA	.03 ppm

Ozone and Particulate Matter are measures used to determine an area's Air Quality Index (AQI). According to the Illinois Environmental Protection Agency, the State has been experiencing an on-going trend of decreased levels of Ozone and Particulate Matter. DuPage area trends are variable over the last five years with Particulate Matter levels exceeding the EPA's Primary Annual Standard in three of the last five years.

The health effects of poor air quality are well documented. Air pollution continues to be a widespread public health and environmental problem in the United States, causing premature death, cancer, and long-term damage to respiratory and cardiovascular systems.

Healthy People 2010 Objective 27-10:

Reduce the proportion of nonsmokers exposed to environmental tobacco smoke.

Target: 45 percent.

During 2000, 40 percent of DuPage County adults were exposed to environmental tobacco smoke (ETS); therefore the DuPage County percentage is below the HP 2010 Target.

Poor air quality contributes to respiratory illnesses, cardiovascular disease, and cancer. For example, asthma can be triggered or worsened by exposure to ozone and ETS. In 2000, 5 percent of the DuPage County adult population had asthma and 3.8 percent had chronic lung disease (not including asthma) during the previous 12-month period.

Immunizations

Vaccines are among the greatest public health achievements of the 20th century. Immunizations can prevent disability and death from infectious diseases for individuals and can help control the spread of infections within communities.

Healthy People 2010 Objective 14-24a:

Increase the proportion of young children who receive all vaccines that have been recommended for universal administration for at least 5 years.

Target: 80 percent.

Local data is unavailable.

Healthy People 2010 Objective 14-29a, b:

Increase the proportion of noninstitutionalized adults who are vaccinated annually against influenza and ever vaccinated against pneumococcal disease.

Target: 90 percent.

Immunizations against influenza and pneumococcal disease can prevent serious illness and death. Pneumonia and influenza deaths together constitute the sixth leading cause of death in the United States and in DuPage County (year 2000). In 2000, 27.7 percent of DuPage County adults received a flu shot and 17.6 percent received a pneumonia vaccination. Using these figures, DuPage County does not meet the HP 2010 Target.

Access to Health Care

Healthy People 2010 Objective 1-1:

Increase the proportion of persons with health insurance.

Target: 100 percent.

Health insurance provides access to health care. Persons with health insurance are more likely to have a primary care provider and to have received appropriate preventive care. In 2000, 5.3 percent of the adult population had no health insurance. Of those with no health insurance coverage, 43.2 percent had no coverage for more than one year. DuPage County does not meet this HP 2010 Target.

Healthy People 2010 Objective 1-4a:

Increase the proportion of persons who have a specific source of ongoing care.

Target: 96 percent.

More than 40 million Americans do not have a particular doctor's office, clinic, health center, or other place where they usually go to seek health care or health-related advice. Even among privately insured persons, a significant number lacked a usual source of care or reported difficulty in accessing needed care due to financial constraints or insurance problems.

People aged 18 to 24 years were the most likely to lack a usual source of ongoing primary care. Only 80 percent of individuals below the poverty level and 79 percent of Hispanics had a usual source of ongoing primary care. In DuPage County in 2000, 12.3 percent of the adult population had no usual source of health care. DuPage County does not meet this HP 2010 Target.

Healthy People 2010 Objective 16-6a:

Increase the proportion of pregnant women who begin prenatal care in the first trimester of pregnancy.

Target: 90 percent.

In DuPage County in 2001, 87 percent of pregnant women began prenatal care in the first trimester of pregnancy. While we are very close to meeting this objective, we still need improvement.