

HEALTH

U.S. Health Expenditures, 1960-2005

Source: Health, United States, 2007, National Center for Health Statistics, U.S. Dept. of Health and Human Services

	1960	1970	1980	1990	1995	2000	2003	2004	2005
Amount in billions									
National health expenditures	\$27.5	\$74.9	\$253.9	\$714.0	\$1,016.5	\$1,353.3	\$1,733.4	\$1,858.9	\$1,987.7
Percent distribution									
Health services and supplies	90.6%	89.6%	92.1%	93.4%	93.7%	93.4%	93.6%	93.5%	93.6%
Personal health care	84.7	84.0	84.8	85.1	85.0	84.2	83.4	83.5	83.6
Hospital care	33.3	36.8	39.8	35.2	33.5	30.8	30.3	30.5	30.8
Professional services	30.2	27.6	26.5	30.4	31.1	31.5	31.3	31.3	31.3
Physician and clinical services	19.4	18.7	18.5	22.1	21.7	21.3	21.2	21.2	21.2
Other professional services	1.4	1.0	1.4	2.5	2.8	2.9	2.8	2.8	2.9
Dental services	7.1	6.2	5.2	4.4	4.4	4.6	4.4	4.4	4.4
Other personal health care	2.2	1.7	1.3	1.3	2.3	2.7	2.9	2.9	2.9
Nursing home and home health	3.2	5.7	8.4	9.1	10.3	9.3	8.6	8.5	8.5
Home health care ¹	0.2	0.3	0.9	1.8	3.0	2.3	2.2	2.3	2.4
Nursing home care ¹	2.9	5.4	7.5	7.4	7.3	7.0	6.4	6.2	6.1
Retail outlet sales of medical products	18.0	14.0	10.1	10.4	10.0	12.6	13.2	13.2	13.0
Prescription drugs	9.7	7.3	4.7	5.6	6.0	8.9	10.1	10.2	10.1
Other medical products	8.2	6.6	5.4	4.7	4.0	3.7	3.2	3.0	2.9
Government administration and net cost of private health insurance	4.4	3.7	4.8	5.5	5.7	6.0	7.1	7.3	7.2
Government public health activities ²	1.5	1.9	2.5	2.8	3.0	3.2	3.0	2.8	2.8
Investment	9.4	10.4	7.9	6.6	6.3	6.6	6.4	6.5	6.4
Research ³	2.5	2.6	2.1	1.8	1.8	1.9	2.1	2.1	2.0
Structures and equipment	6.9	7.8	5.7	4.9	4.5	4.7	4.4	4.4	4.4
Average annual percent change from previous year shown									
National health expenditures	—	10.5%	13.0%	10.9%	7.3%	5.9%	8.1%	7.2%	6.9%
Health services and supplies	—	10.4	13.3	11.0	7.4	5.8	8.2	7.2	7.0
Personal health care	—	10.4	13.1	10.9	7.3	5.7	7.8	7.3	7.1
Hospital care	—	11.6	13.9	9.6	6.3	4.1	7.5	7.9	7.9
Professional services	—	9.5	12.5	12.4	7.9	6.2	7.9	7.0	7.0
Physician and clinical services	—	10.1	12.9	12.8	7.0	5.5	8.5	7.4	7.0
Other professional services	—	6.6	17.1	17.5	9.5	6.5	7.5	7.4	7.8
Dental services	—	9.1	11.1	9.0	7.1	6.9	4.8	6.0	6.3
Other personal health care	—	7.3	10.1	11.4	19.2	10.0	8.7	5.7	7.3
Nursing home and home health	—	17.2	17.5	11.8	9.9	3.8	6.1	6.2	7.3
Home health care ¹	—	14.5	26.9	18.1	19.4	0.0	11.1	12.3	11.1
Nursing home care ¹	—	17.4	16.8	10.7	7.1	5.2	4.5	4.1	6.0
Retail outlet sales of medical products	—	7.8	9.4	11.2	6.6	10.8	9.5	7.0	5.4
Prescription drugs	—	7.5	8.2	12.8	8.6	14.7	10.6	8.6	5.8
Other medical products	—	8.1	10.6	9.5	4.0	3.9	6.1	2.1	3.9
Government administration and net cost of private health insurance	—	8.6	16.0	12.4	8.2	6.9	16.6	10.3	5.7
Government public health activities ²	—	12.8	16.5	12.0	9.2	7.0	0.8	0.6	7.7
Investment	—	11.7	9.9	9.0	6.1	6.9	7.4	7.3	5.7
Research ³	—	10.9	10.8	8.9	7.7	6.9	10.1	6.7	4.6
Structures and equipment	—	11.9	9.5	9.1	5.5	6.8	6.2	7.6	6.3

Note: Numbers may not add to totals because of rounding. (1) Freestanding facilities only. (2) Includes personal care services delivered by government public health agencies. (3) Excludes R&D expenditures of drug companies and other manufacturers and suppliers of medical equip. and supplies

Health Coverage for Persons Under 65, by Characteristics, 1984-2006

Source: Health, United States, 2007, National Center for Health Statistics, U.S. Dept. of Health and Human Services

	PRIVATE INSURANCE				MEDICAID ¹				NOT COVERED ²			
	1984	2000 ³	2004	2006	1984	2000 ³	2004	2006	1984	2000 ³	2004	2006
Total	76.8	71.5	68.8	66.3	6.8	9.5	12.5	14.0	14.5	17.0	16.4	17.0
Percent of each population group												
Age												
Under 18 years	72.6	66.6	63.2	59.4	11.9	19.6	26.4	29.9	13.9	12.6	9.2	9.5
18-44 years	76.5	70.5	67.3	65.0	5.1	5.6	7.7	8.6	17.1	22.4	23.5	24.6
45-64 years	83.3	78.7	77.1	75.2	3.4	4.5	5.5	6.3	9.6	12.6	12.8	13.2
Race and Hispanic origin^{4,5}												
White, non-Hispanic	79.9	75.7	71.4	69.1	4.6	7.1	10.4	11.8	13.6	15.4	16.1	16.7
Black, non-Hispanic	58.1	55.9	53.9	51.3	20.5	21.2	24.9	26.6	19.9	19.5	17.6	18.1
All Hispanic	55.7	47.8	41.7	40.0	13.3	15.5	22.5	23.1	29.5	35.6	34.4	35.0
Percent of poverty level⁴												
Below 100%	32.2	25.2	21.8	21.4	33	38.4	45	45.8	33.9	34.2	31.0	30.2
100-149%	62.2	41.7	39.0	35.5	7.7	20.7	27.1	29.4	27.2	34.9	30.8	31.2
150-199%	77.2	58.5	52.5	50.3	3.2	11.5	16.9	18.0	17.3	27.0	27.2	28.0
200% or more	91.5	85.7	84.2	83.1	0.6	2.3	3.5	4.1	6.0	10.1	10.2	10.5
Geographic region⁴												
Northeast	80.5	76.3	74.0	70.8	8.6	10.6	13.0	16.8	10.2	12.2	11.8	11.2
Midwest	80.6	78.8	76.3	71.7	7.4	8.0	10.4	13.9	11.3	12.3	12.4	13.4
South	74.3	66.8	64.1	61.8	5.1	9.4	12.4	12.9	17.7	20.5	19.9	21.1
West	71.9	66.5	64.1	64.6	7.0	10.4	14.4	13.8	18.2	20.7	18.9	18.8

Note: Data based on household interviews of a sample of the civilian noninstitutionalized population. Percents do not add to 100 because other types of health insurance (e.g., Medicare, military) are not shown and persons with both private insurance and Medicaid appear in both sections. (1) Includes Medicaid and other public assistance. In 2006, the age-adjusted percent of the population under 65 covered by Medicaid was 11.3%; 1.2% were covered by state-sponsored health plans and 1.6% were covered by State Children's Health Insurance Program (SCHIP). (2) Includes persons not covered by private insurance, Medicaid or other public assistance, Medicare, or military plans. (3) A change in the questionnaire in 1997 prevents direct comparison. (4) Age adjusted. (5) Changed reporting methods make percentages for race before 1999 not strictly comparable with those from 1999 on.

Drug Use in the General U.S. Population, 2007

Source: Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Dept. of Health and Human Services

According to the Substance Abuse and Mental Health Services Administration's 2007 National Survey on Drug Use and Health, an estimated 114,275,000 Americans 12 years of age and older (46.1%) had used an illicit drug at least once during their lifetimes, 14.4% had used one during the previous year, and 8.0% had used one in the most recent month. The rate of current illicit drug use (in the past month) in 2007 was 10.4% for men; for women it was 5.8%. An estimated 29.7% of Americans 12 or older (73.5 mil) had used

an illicit drug other than marijuana at least once in their life. The overall rate of illicit drug use between 2006 and 2007 remained relatively steady. The Substance Abuse and Mental Health Services Administration's Drug Abuse Warning Network (DAWN) reported 1.45 mil drug abuse or misuse related episodes in hospital emergency departments in the coterminous U.S in 2005. Cocaine was a factor in 31% of these. Alcohol in combination with illegal drug use was a factor in 14%.

Illicit Drug Use Among Persons 12 or Older, 2002-2007

Source: 2007 National Survey on Drug Use & Health, Substance Abuse and Mental Health Services Admin. (SAMHSA), U.S. Dept. of Health and Human Services.

(Numbers in thousands)

Drug	2002		2004		2005		2006		2007	
	No.	%	No.	%	No.	%	No.	%	No.	%
Used In lifetime.										
Illicit drugs	108,255	46.0	110,057	45.8	112,085	46.1	111,774	45.4	114,275	46.1
Illicit drugs other than marijuana	70,300	29.9	70,657	29.4	71,822	29.5	72,906	29.6	73,494	29.7
Used in past month										
Illicit drugs	19,522	8.3	19,071	7.9	19,720	8.1	20,357	8.3	19,857	8
Illicit drugs other than marijuana	8,777	3.7	8,247	3.4	8,963	3.7	9,615	3.9	9,270	3.7
Used in past year										
Illicit drugs	35,132	14.9	34,807	14.5	35,041	14.4	35,775	14.5	35,692	14.4
Marijuana and hashish	25,755	11.0	25,451	10.6	25,375	10.4	25,378	10.3	25,085	10.1
Illicit drugs other than marijuana	20,423	8.7	19,658	8.2	20,109	8.3	21,254	8.6	21,144	8.5
Cocaine	5,902	2.5	5,658	2.4	5,523	2.3	6,069	2.5	5,738	2.3
Crack	1,554	0.7	1,304	0.5	1,381	0.6	1,479	0.6	1,451	0.6
Heroin	404	0.2	398	0.2	379	0.2	560	0.2	366	0.1
Hallucinogens	4,749	2.0	3,878	1.6	3,809	1.6	3,956	1.6	3,762	1.5
LSD	999	0.4	592	0.2	563	0.2	666	0.3	620	0.3
PCP	235	0.1	210	0.1	164	0.1	187	0.1	137	0.1
Ecstasy	3,167	1.3	1,915	0.8	1,960	0.8	2,130	0.9	2,132	0.9
Inhalants	2,084	0.9	2,255	0.9	2,187	0.9	2,218	0.9	2,080	0.8
Nonmedical use of psychotherapeutics	14,680	6.2	14,643	6.1	15,172	6.2	16,482	6.7	16,280	6.6
Pain relievers	10,992	4.7	11,256	4.7	11,815	4.9	12,649	5.1	12,466	5
OxyContin®	NA	NA	1,213	0.5	1,226	0.5	1,323	0.5	1,422	0.6
Tranquilizers	4,849	2.1	5,068	2.1	5,249	2.2	5,058	2.1	5,282	2.1
Stimulants	3,181	1.4	2,918	1.2	2,771	1.1	3,791	1.5	2,998	1.2
Sedatives	981	0.4	737	0.3	750	0.3	926	0.4	864	0.3

NA = Not available/applicable.

Drug Use: America's High School Seniors, 1975-2007

Source: Monitoring the Future, Univ. of Michigan Inst. for Social Research and National Inst. on Drug Abuse

Class of:	1975	1980	1985	1990	1995	2000	2003	2004	2005	2006	2007	2006-07 change ⁷
Marijuana/hashish	47.3%	60.3%	54.2%	40.7%	41.7%	48.8%	46.1%	45.7%	44.8%	42.3%	41.8%	-1.2%
Inhalants ¹	—	17.3	18.1	18.5	17.8	14.2	11.2	10.9	11.4	11.1	10.5	-5.4
Amyl & butyl nitrites	—	11.1	7.9	2.1	1.5	0.8	1.6	1.3	1.1	1.2	1.2	0.0
Hallucinogens ²	—	15.6	12.1	9.7	12.7	13.0	10.6	9.7	8.8	8.3	8.4	1.2
LSD	11.3	9.3	7.5	8.7	11.7	11.1	5.9	4.6	3.5	3.3	3.4	3.0
PCP	—	9.6	4.9	2.8	2.7	3.4	2.5	1.6	2.4	2.2	2.1	-4.5
Ecstasy	—	—	—	—	—	11.0	8.3	7.5	5.4	6.5	6.5	0.0
Cocaine	9.0	15.7	17.3	9.4	6.0	8.6	7.7	8.1	8.0	8.5	7.8	-8.2
Crack	—	—	—	3.5	3.0	3.9	3.6	3.9	3.5	3.5	3.2	-8.6
Heroin ³	2.2	1.1	1.2	1.3	1.6	2.4	1.5	1.5	1.5	1.4	1.5	7.1
Other narcotics ⁴	9.0	9.8	10.2	8.3	7.2	10.6	13.2	13.5	12.8	13.4	13.1	-2.2
Amphetamines ^{4,5}	22.3	26.4	26.2	17.5	15.3	15.6	14.4	15.0	13.1	12.4	11.4	-8.1
Methamphetamine	—	—	—	—	—	7.9	6.2	6.2	4.5	4.4	3.0	-31.8
Crystal Meth.	—	—	—	2.7	3.9	4.0	3.9	4.0	4.0	3.4	3.4	0.0
Barbiturates ⁴	16.9	11.0	9.2	6.8	7.4	9.2	8.8	9.9	10.5	10.2	9.3	-8.8
Methaqualone ⁴	8.1	9.5	6.7	2.3	1.2	0.8	1.0	1.3	1.3	1.2	1.0	-16.7
Tranquilizers ⁴	17.0	15.2	11.9	7.2	7.1	8.9	10.2	10.6	9.9	10.3	9.5	-7.8
Alcohol ⁶	90.4	93.2	92.2	89.5	80.7	80.3	76.6	76.8	75.1	72.7	72.2	-0.7
Cigarettes	73.6	71.0	68.8	64.4	64.2	62.5	53.7	52.8	50.0	47.1	46.2	-1.9
Steroids	—	—	—	2.9	2.3	2.5	3.5	3.4	2.6	2.7	2.2	-18.5

— Data not available. (1) Adjusted for underreporting of amyl and butyl nitrites. (2) Adjusted for underreporting of PCP. (3) Reflects use with or without injection. (4) Includes only drug use that was not under a doctor's orders. (5) Data for 1990-2007 are not directly comparable to prior years. (6) Data for 1995-2007 are not directly comparable to prior years. (7) In percentage points.

Cancer Prevention

Source: American Cancer Society, 1599 Clifton Road NE, Atlanta, GA 30329-4251; phone: (800) 227-2345

PRIMARY PREVENTION: Modifiable determinants of cancer risk.

Smoking	Lung cancer mortality rates are about 23 times higher for current male smokers, and 13 times higher for current female smokers, than for those who have never smoked. Smoking accounts for about 30% of all cancer deaths in the U.S. Tobacco use is responsible for nearly 1 in 5 deaths in the U.S. Smoking is associated with cancer of the lung, mouth, nasal cavities, pharynx, larynx, esophagus, stomach, pancreas, uterine cervix, kidney, bladder, and myeloid leukemia.
Nutrition and Diet	Risk for colon, breast (among postmenopausal women), kidney, prostate, and endometrial cancers increases in obese people. While a diet high in fat may be a factor in the development of certain cancers, the link between obesity and cancer is more the result of an imbalance between caloric intake and energy expenditure than fat per se. Eating 5 or more servings of fruits and vegetables each day, and eating other foods from plant sources (especially grains and beans), may reduce risk for many cancers. Physical activity can help protect against some cancers.
Sunlight	Many of the 1 million skin cancers that are diagnosed annually in the U.S. could have been prevented by protection from the sun's rays. Epidemiological evidence shows that sun exposure is a major factor in the development of melanoma and that the incidence rates are increasing around the world.
Alcohol	Heavy drinking, especially when accompanied by cigarette smoking or smokeless tobacco use, increases risk of cancers of the mouth, larynx, pharynx, esophagus, and liver. Studies have also noted an association between regular alcohol consumption and an increased risk of breast cancer.
Smokeless Tobacco	Use of chewing tobacco or snuff increases risk of cancers of the mouth and pharynx. The excess risk of cancer of the cheek and gum may reach nearly 50-fold among long-term snuff users.
Estrogen	Estrogen replacement therapy (ERT) to control menopausal symptoms can increase the risk of endometrial cancer. However, adding progesterone to estrogen (hormone replacement therapy, or HRT) helps to minimize this risk. Most studies suggest that long-term use (5 years or more) of HRT after menopause increases the risk of breast cancer, and recent studies suggest that risks from taking HRT exceed benefits. The benefits and risks of the use of HRT or ERT by menopausal women should be discussed carefully by the woman and her doctor.
Radiation	Excessive exposure to ionizing radiation can increase cancer risk. Medical and dental X rays are adjusted to deliver the lowest dose possible without sacrificing image quality. Excessive radon exposure in the home may increase lung cancer risk, especially in cigarette smokers.
Environmental Hazards	Exposure to various chemicals (including benzene, asbestos, vinyl chloride, arsenic, and aflatoxin) increases risk of various cancers. Risk of lung cancer from asbestos is greatly increased when combined with smoking.

Cancer-Detection Guidelines

SECONDARY PREVENTION: Steps to diagnose a cancer or precursor as early as possible after it has developed.

In addition to indicated screening for cancers of the breast, colon, and rectum, prostate, and uterine cervix, a cancer-related checkup should include health counseling and, depending on a person's age, might include examinations for cancers of the thyroid, oral cavity, skin, lymph nodes, testes, and ovaries, as well as for some nonmalignant diseases. Special tests for certain cancer sites for individuals at average risk are recommended as outlined below:

Breast Cancer	Women should start getting annual mammograms beginning at age 40. Women who are at increased risk because of family history, genetic predisposition, or past breast cancer should discuss the benefits and limitations of initiating screening at an earlier age. Clinical breast exam should be part of a periodic health exam, about every 3 years for women in their 20's and 30's, and every year for women 40 and older. Women should be aware of any changes in their breasts and report these promptly to their health care provider.
Cervical Cancer	Women should begin cervical cancer screening about 3 years after they begin having vaginal intercourse, but no later than when they are 21 years old. Screening should be done every year with the regular Pap test or every 2 years using the newer liquid-based Pap test. Beginning at age 30, women who have had 3 normal Pap test results in a row may get screened every 2 to 3 years. Women who have certain risk factors such as diethylstilbestrol (DES) exposure before birth, HIV infection, or a weakened immune system due to organ transplant, chemotherapy, or chronic steroid use should continue to be screened annually. Another reasonable option for women over 30 is to get screened every 3 years (but no more frequently) with either the conventional or liquid-based Pap test, <i>plus</i> the HPV DNA test. Women 70 years of age or older who have had 3 or more normal Pap tests in a row and no abnormal Pap test results in the last 10 years may choose to stop having cervical cancer screening. Women with a history of cervical cancer, DES exposure before birth, HIV infection or a weakened immune system should continue to have screening as long as they are in good health. Women who have had a total hysterectomy (removal of the uterus and cervix) may also choose to stop having cervical cancer screening, unless the surgery was done as a treatment for cervical cancer or precancer. Women who have had a hysterectomy without removal of the cervix should continue to follow the guidelines above.
Colorectal Cancer	Beginning at age 50, both men and women should follow one of these testing schedules: <ul style="list-style-type: none"> • Yearly fecal occult blood test; or flexible sigmoidoscopy every 5 years; or • yearly fecal occult blood test plus flexible sigmoidoscopy every 5 years; or • colonoscopy every 10 years; or • double-contrast barium enema every 5-10 years. <p>Note: Persons known to be at increased risk for colorectal cancer (due to inflammatory bowel disease, personal or family history, etc.) need to begin screening at an early age and may need more frequent screening.</p>
Endometrial Cancer	For women with or at high risk of hereditary nonpolyposis colon cancer (HNPCC), annual screening including endometrial biopsy should be obtained beginning at age 35.
Prostate Cancer	The prostate specific antigen (PSA) test and the digital rectal examination should be offered annually, beginning at age 50, by men who have a 10-year life expectancy. Men at high risk such as African-American men and men with a strong family history of one or more first-degree relatives (father, brother, or son) diagnosed with prostate cancer at an early age, should start getting tested at age 45. For both men at average risk and high risk, information should be provided about what is known and what is uncertain about the benefits and limitations of early detection and treatment of prostate cancer so that they can make an informed decision about testing.
Skin Cancer	Adults should practice skin self-exam regularly. Suspicious lesions and moles should be evaluated promptly by a physician.

Estimated Calorie Requirements¹

Estimated amounts of calories, rounded to the nearest 200, needed to maintain energy balance for various gender, age groups, and levels of physical activity.

	Age (years)	Moderately ³			Male	Age (years)	Moderately ³		
		Sedentary ²	Active	Active ⁴			Sedentary ²	Active	Active ⁴
Child Female	2-3	1,000	1,000-1,400	1,000-1,400		4-8	1,400	1,400-1,600	1,600-2,000
	4-8	1,200	1,400-1,600	1,400-1,800		9-13	1,800	1,800-2,200	2,000-2,600
	9-13	1,600	1,600-2,000	1,800-2,200		14-18	2,200	2,400-2,800	2,800-3,200
	14-18	1,800	2,000	2,400		19-30	2,400	2,600-2,800	3,000
	19-30	2,000	2,000-2,200	2,400		31-50	2,200	2,400-2,600	2,800-3,000
	31-50	1,800	2,000	2,200		51+	2,000	2,200-2,400	2,400-2,800
	51+	1,600	1,800	2,000-2,200					

(1) Based on median height and weight for ages up to age 18 years and Body Mass Index (BMI) of 21.5 for adult females and 22.5 for adult males. (2) Engaging only in minimal activities associated with ordinary day-to-day life. (3) Includes physical activity equivalent to walking 1.5 to 3 miles per day at 3-4 mph. (4) Includes physical activity equivalent to walking more than 3 miles per day at 3-4 mph.

Calories Used During Physical Activity

Source: U.S. Dept. of Agriculture

Amounts of calories burned during physical activities are estimates for a 154-pound person. The more an individual weighs the more calories he or she will burn up with the same degree of exercise.

Moderate physical activities	In 1 hour	In 30 min.	Vigorous physical activities	In 1 hour	In 30 min.
Hiking	370	185	Running/jogging (5 miles per hour) . . .	590	295
Light gardening/yard work	330	165	Bicycling (more than 10 miles per hour)	590	295
Dancing	330	165	Swimming (slow freestyle laps)	510	255
Golf (walking and carrying clubs)	330	165	Aerobics	480	240
Bicycling (less than 10 miles per hour)	290	145	Walking (4½ miles per hour)	460	230
Walking (3½ miles per hour)	280	140	Heavy yard work (e.g., chopping wood)	440	220
Weight training (general light workout).	220	110	Weight lifting (vigorous effort)	440	220
Stretching	180	90	Basketball (vigorous)	440	220

Finding Your Target Heart Rate

Source: Carole Casten, EdD, *Aerobics Today*; Peg Jordan, RN, Aerobics and Fitness Assoc. of America

The target heart rate is the heartbeat rate a person should have during aerobic exercise (such as running, fast walking, cycling, or cross-country skiing) to get the full benefit of the exercise for cardiovascular conditioning.

First, determine the intensity level at which one would like to exercise. A sedentary person may want to begin an exercise regimen at the 60% level and work up gradually to the 70% level. Athletes and highly fit individuals must work at an 85% or higher level to receive benefits. Second, calculate the target heart rate. One common way is by using the American College of Sports Medicine Method.

To obtain cardiovascular fitness benefits from aerobic exercise, it is recommended that an individual participate in an aerobic activity at least 3-5 times a week for 20-30 minutes per session, although cardiac patients and very sedentary individuals can obtain benefits with shorter periods (15-20 minutes). Generally, training changes occur in 4-6 weeks, but they can occur in as little as 2 weeks.

Using the American College of Sports Medicine Method to calculate one's target heart rate, an individual should subtract his or her age from 220, then multiply by the desired intensity level of the workout. Then divide the answer by 6 for a 10-second pulse count. (The 10-second pulse count is useful for checking whether the target heart rate is being achieved during the workout. One can easily check one's pulse—at the wrist or side of the neck—counting the number of beats in 10 seconds.)

For example, a 20-year-old wishing to exercise at 70% intensity would employ the following steps:

Maximum Heart Rate	220 - 20 = 200
Target Heart Rate	200 x .70 = 140
10-second Pulse Count	140/6 = 23

To work at the desired level of intensity, this 20-year-old would strive for a target heart rate of 140 beats per minute, or a 10-second pulse count of 23.

Overweight, Obesity, and Healthy Weight in the U.S.¹, 1960-2004

Source: National Center for Health Statistics, National Health and Nutrition Examination Survey

	1960-62	1971-74	1976-80	1988-94	1999-2002	2001-2004
Percent of population						
Overweight²						
Both sexes ^{3, 4}	44.8%	47.7%	47.4%	56.0%	65.2%	66.0%
Male	49.5	54.7	52.9	61.0	68.8	70.7
Female ³	40.2	41.1	42.0	51.2	61.7	61.4
Obese⁵						
Both sexes ^{3, 4}	13.3	14.6	15.1	23.3	31.1	32.1
Male	10.7	12.2	12.8	20.6	28.1	30.2
Female ³	15.7	16.8	17.1	26.0	34.0	34.0
Healthy weight⁶						
Both sexes ^{3, 4}	51.2	48.8	49.6	41.7	32.9	32.2
Male	48.3	43.0	45.4	37.9	30.2	28.1
Female ³	54.1	54.3	53.7	45.3	35.6	36.2

NOTE: Percents do not sum to 100 because the percent of persons with BMI less than 18.5 is not shown and the percent of persons with obesity is a subset of the percent with overweight. Height was measured without shoes; two pounds were deducted from data for 1960-62 to allow for weight of clothing. (1) In persons age 20-74, age-adjusted to 2000 standard population group; Data based on measured height and weight of a sample of the civilian noninstitutionalized population. (2) Body mass index (BMI) greater than or equal to 25. (3) Excludes pregnant women. (4) Includes persons of all races and Hispanic origins. (5) Body mass index (BMI) greater than or equal to 30. (6) BMI of 18.5 to less than 25. See pg. 153 for tables to calculate BMI.

VITAL STATISTICS

Recent Trends in Vital Statistics

Source: National Center for Health Statistics, U.S. Dept. of Health and Human Services; latest years available

Births

An estimated 4,315,000 babies were born in the U.S. in 2007, a rise from 4,269,000 births in 2006. The birth rate increased to 14.3 per 1,000 total population, up from the record low of 13.9 in 2002.

The fertility rate (number of live births per 1,000 women aged 15-44 years) rose to an estimated 69.2 for 2007, up from the 2006 rate of 68.7; this marked the highest rate since 1993, but was still low by historical standards.

Deaths

The number of deaths during 2007 was estimated at 2,415,000 according to provisional data, down from 2,416,000 in 2006. The death rate in 2007 decreased to 8.0 per 1,000 population from 8.1 in 2006. The infant death rate was 6.6 deaths under 1 year per 1,000 live births in 2007, down from 6.7 in 2006.

Natural Increase

As a result of natural increase (the excess of births over deaths), an estimated 1,900,000 persons were added to the population in 2007. The rate of increase jumped to 6.3 per 1,000 population from 6.2 for 2006.

Marriages

An estimated 2,205,000 marriages were performed in 2007, compared to 2,193,000 in 2006. The provisional marriage rate for 2007 (7.3 per 1,000 population) was down from the 2006 rate of 7.4. Louisiana has suspended its marriage count since Hurricane Katrina.

Divorces

The divorce rate in 2007 stayed at 3.6 per 1,000 population according to provisional data. Data are incomplete, however. The NCHS no longer includes divorce data for California, Georgia, Hawaii, Indiana, Louisiana, and Minnesota.

Births and Deaths in the U.S., 1960-2007

Source: National Center for Health Statistics, U.S. Dept. of Health and Human Services

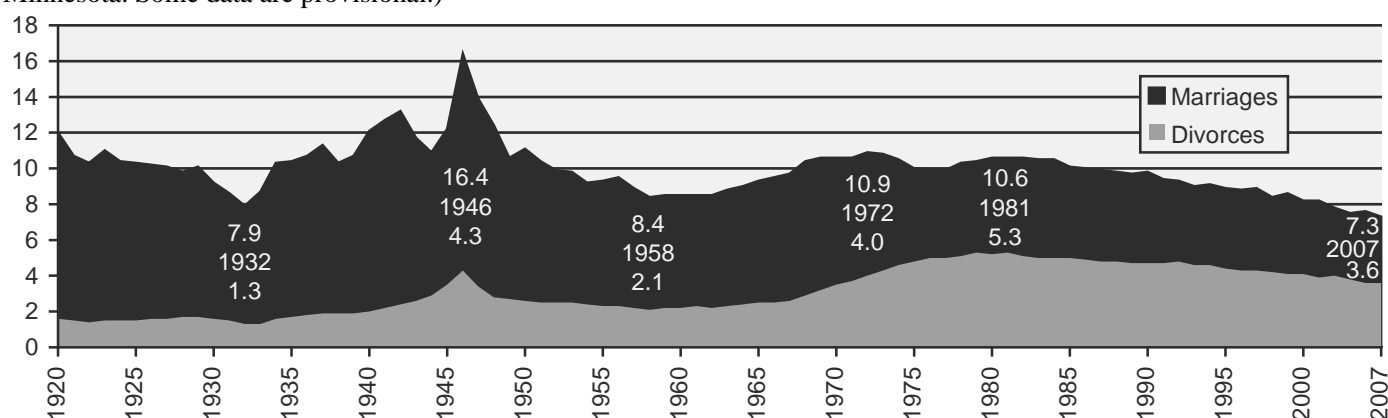
BIRTHS					DEATHS					BIRTHS					DEATHS				
Year	Total number	Rate	Total number	Rate	Year	Total number	Rate	Total number	Rate	Year	Total number	Rate	Total number	Rate	Year	Total number	Rate	Total number	Rate
1960	4,257,850	23.7	1,711,982	9.5	1998	3,941,553	14.3	2,337,256	8.5	2006	4,269,000 ^P	14.3 ^P	2,416,000 ^P	8.1 ^P	2007	4,315,000 ^P	14.3 ^P	2,415,000 ^P	8.0 ^P
1970	3,731,386	18.4	1,921,031	9.5	1999	3,959,417	14.2	2,391,399	8.6	2007	4,315,000 ^P	14.3 ^P	2,415,000 ^P	8.0 ^P					
1980	3,612,258	15.9	1,989,841	8.8	2000	4,058,814	14.4	2,403,351	8.5										
1990	4,092,994	16.7	2,148,463	8.6	2001	4,025,933	14.1	2,416,425	8.5										
1992	4,049,024	15.8	2,175,613	8.5	2002	4,021,726	13.9	2,443,387	8.5										
1993	4,000,240	15.4	2,268,553	8.7	2003	4,089,950	14.1	2,448,288	8.4										
1994	3,952,767	15.0	2,278,994	8.7	2004	4,112,052	14.0	2,397,615	8.2										
1995	3,899,589	14.6	2,312,132	8.7	2005	4,138,349	14.0	2,448,017	8.3										
1996	3,891,494	14.4	2,314,690	8.6															
1997	3,880,894	14.2	2,314,245	8.5															

P = provisional data. **NOTE:** Statistics cover only events occurring within the U.S. and exclude fetal deaths. Rates per 1,000 population; enumerated as of Apr. 1 for census years; estimated as of July 1 for all other years. Beginning 1970 statistics exclude births and deaths occurring among nonresidents of the U.S. Data include revisions. Birth and death rates for years in the 1990s revised on basis of the 2000 Census.

Marriage and Divorce Rates, 1920-2007

Source: National Center for Health Statistics, U.S. Dept. of Health and Human Services

The U.S. marriage rate dipped during the Depression and peaked sharply just after World War II; the trend after that has been more gradual. The divorce rate generally rose from the 1920s through 1981, when it peaked at 5.3 per 1,000 population, before declining somewhat. The graph below shows marriage and divorce rates since 1920. (2006-07 divorce rates were calculated excluding data and populations from the non-reporting states California, Georgia, Hawaii, Indiana, Louisiana, and Minnesota. Some data are provisional.)



U.S. Median Age at First Marriage, 1890-2006

Source: Bureau of the Census, U.S. Dept. of Commerce

Year ¹	Men	Women	Year ¹	Men	Women	Year ¹	Men	Women	Year ¹	Men	Women	Year ¹	Men	Women
1890	26.1	22.0	1950	22.8	20.3	1985	25.5	23.3	1995	26.9	24.5	2001	26.9	25.1
1900	25.9	21.9	1960	22.8	20.3	1990	26.1	23.9	1996	27.1	24.8	2002	26.9	25.3
1910	25.1	21.6	1965	22.8	20.6	1991	26.3	24.1	1997	26.8	25.0	2003	27.1	25.3
1920	24.6	21.2	1970	23.2	20.8	1992	26.5	24.4	1998	26.7	25.0	2004	27.4	25.3
1930	24.3	21.3	1975	23.5	21.1	1993	26.5	24.5	1999	26.9	25.1	2005	27.1	25.3
1940	24.3	21.5	1980	24.7	22.0	1994	26.7	24.5	2000	26.8	25.1	2006	27.5	25.9

(1) Figures after 1940 based on pop. 15 to 54 years in Current Population Survey data; earlier figures based on decennial censuses.

Nonmarital Childbearing in the U.S., 1970-2006

Source: National Center for Health Statistics, U.S. Dept. of Health and Human Services

	1970	1975	1980	1985	1990	1995	2000	2001	2002	2003	2004	2005	2006
Births to unmarried mothers (1,000s) ..	399	448	666	828	1,165	1,254	1,347	1,349	1,366	1,416	1,470	1,527	1,642
Race of mother													
	Percent of live births to unmarried mothers												
All races	10.7	14.3	18.4	22.0	28.0	32.2	33.2	33.5	34.0	34.6	35.8	36.9	38.5
White	5.5	7.1	11.2	14.7	20.4	25.3	27.1	27.7	28.5	29.4	30.5	31.7	—
Black	37.5	49.5	56.1	61.2	66.5	69.9	68.5	68.4	68.2	68.2	68.8	69.3	—
American Indian or Alaska Native	22.4	32.7	39.2	46.8	53.6	57.2	58.4	59.7	59.7	61.3	62.3	63.5	64.6
Asian or Pacific Islander	—	—	7.3	9.5	13.2	16.3	14.8	14.9	14.9	15.0	15.5	16.2	16.3
Hispanic origin (selected states) ^{1,2}	—	—	23.6	29.5	36.7	40.8	42.7	42.5	43.5	45.0	46.4	48.0	49.9
White, non-Hispanic (selected states) ¹	—	—	9.5	12.4	16.9	21.2	22.1	22.5	23.0	23.6	24.5	25.3	26.6
Black, non-Hispanic (selected states) ¹	—	—	57.2	62.0	66.7	70.0	68.7	68.6	68.4	68.5	69.3	69.9	70.7
Maternal age													
	Percent distribution of live births to unmarried mothers												
Under 20 years	50.1	52.1	40.8	33.8	30.9	30.9	28.0	26.6	25.4	24.3	23.7	23.1	22.7
20-24 years	31.8	29.9	35.6	36.3	34.7	34.5	37.4	38.2	38.6	38.8	38.5	38.3	38.1
25 years and over	18.1	18.0	23.5	29.9	34.4	34.7	34.6	35.2	35.9	36.9	37.8	38.6	39.2
Race of mother													
	Live births per 1,000 unmarried women 15-44 years of age³												
All races and origins	26.4	24.5	29.4	32.8	43.8	44.3	44.0	43.8	43.7	44.9	46.1	47.5	—
White ⁴	13.9	12.4	18.1	22.5	32.9	37.0	38.2	38.5	38.9	40.4	41.6	43.0	—
Black ⁴	95.5	84.2	81.1	77.0	90.5	74.5	70.5	68.2	66.2	66.3	67.2	67.8	—
Hispanic origin (selected states) ^{1,2}	—	—	—	—	89.6	88.7	87.2	87.8	87.9	92.2	95.7	100.3	—
White, non-Hispanic	—	—	—	—	—	28.1	28.0	27.8	27.8	28.6	29.4	30.1	—

— Data not available. (1) Data for Hispanics and non-Hispanics are affected by expansion of the reporting area for an Hispanic-origin item on the birth certificate and by immigration. The states in the reporting area increased from 22 in 1980, to 23 and the District of Columbia in 1983, 48 and DC by 1990, and 50 and DC by 1993. (2) Includes mothers of all races. (3) Rates computed by relating births to unmarried mothers, regardless of mother's age, to unmarried women 15-44 years of age. (4) For 1970 and 1975, birth rates are by race of child.

Number, Ratio, and Rate of Legal Abortions in U.S., 1970-2004

Source: Centers for Disease Control, *Abortion Surveillance, U.S., 2004*

Year	Legal Abortions	Ratio ¹	Rate ²	Year	Legal Abortions	Ratio ¹	Rate ²	Year	Legal Abortions	Ratio ¹	Rate ²
1970	193,491	52	5	1982	1,303,980	354	24	1994	1,267,415	321	21
1971	485,816	137	11	1983	1,268,987	349	23	1995	1,210,883	311	20
1972	586,760	180	13	1984	1,333,521	364	24	1996	1,225,937	315	21
1973	615,831	196	14	1985	1,328,570	354	24	1997	1,186,039	306	20
1974	763,476	242	17	1986	1,328,112	354	23	1998 ³	884,273	264	17
1975	854,853	272	18	1987	1,353,671	356	24	1999 ³	861,789	256	17
1976	988,267	312	21	1988	1,371,285	352	24	2000 ³	857,475	245	16
1977	1,079,430	325	22	1989	1,396,658	346	24	2001 ⁴	853,485	246	16
1978	1,157,776	347	23	1990	1,429,247	344	24	2002 ⁴	854,122	246	16
1979	1,251,921	358	24	1991	1,388,937	338	24	2003 ⁵	848,163	241	16
1980	1,297,606	359	25	1992	1,359,146	334	23	2004 ⁵	839,226	238	16
1981	1,300,760	358	24	1993	1,330,414	333	23				

(1) Number of abortions per 1,000 live births. (2) Number of abortions per 1,000 women aged 15-44 years. (3) Without estimates for AK, CA, NH, and OK. (4) Without estimates for AK, CA, and NH. (5) Without estimates for CA, NH, and WV.

Sexual Behavior in the U.S.

Data released by the National Center for Health Statistics in 2005 show that about 90% of U.S. men and women 18-44 years of age think of themselves as heterosexual; 2.3% of men and 1.3% of women as homosexual; and 1.8% of men and 2.8% of women as bisexual. However, 6.2% of men 18-44 years of age reported ever having had sex with another male as of 2002 (up from 2.3% in 1991) and 11.5% of women reported ever having had a sexual experience with another woman (up from 4.1% in 1992).

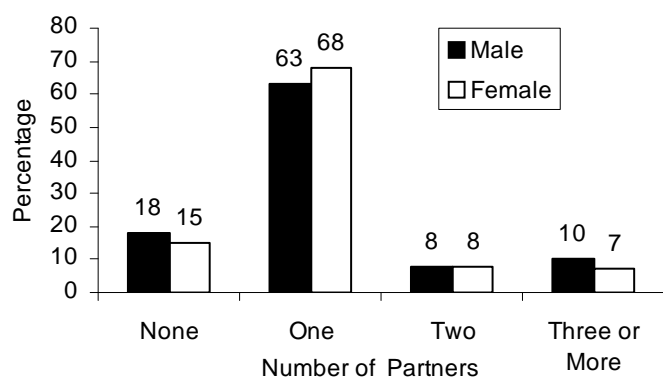
Ten percent of males age 15-44 had never had sex with a female, but this percentage varied greatly with age: more than half (52%) of males age 15-17 had never had sex with a female, but only 1.8% of males age 40-44 had not done so.

Percentages were slightly lower for women, with only 8.4% of females age 15-44 having never had sex with a male, with specific percentages ranging from 50.2% for females age 15-17 to only 1.3% for females age 40-44.

Among men age 15-44 who had sex with at least one partner in the previous year, 39% reported using a condom in their most recent sexual encounter (24% of married men and 65% of never-married men). Among women, only 22% reported using a condom (13% of married and 42% of never-married women). Condom use was also more frequent among younger men and women: in the 15-19 age group, 66% of males and 44% of females used a condom in their most recent sexual encounter.

Median Number of Opposite-Sex Partners in Past Year

Source: National Center for Health Statistics, *Sexual Behavior and Selected Health Measures, 2002*
Note: U.S. males and females 15-44 years of age



Median Number of Opposite-Sex Partners in Lifetime

Source: National Center for Health Statistics, *Sexual Behavior and Selected Health Measures, 2002*

