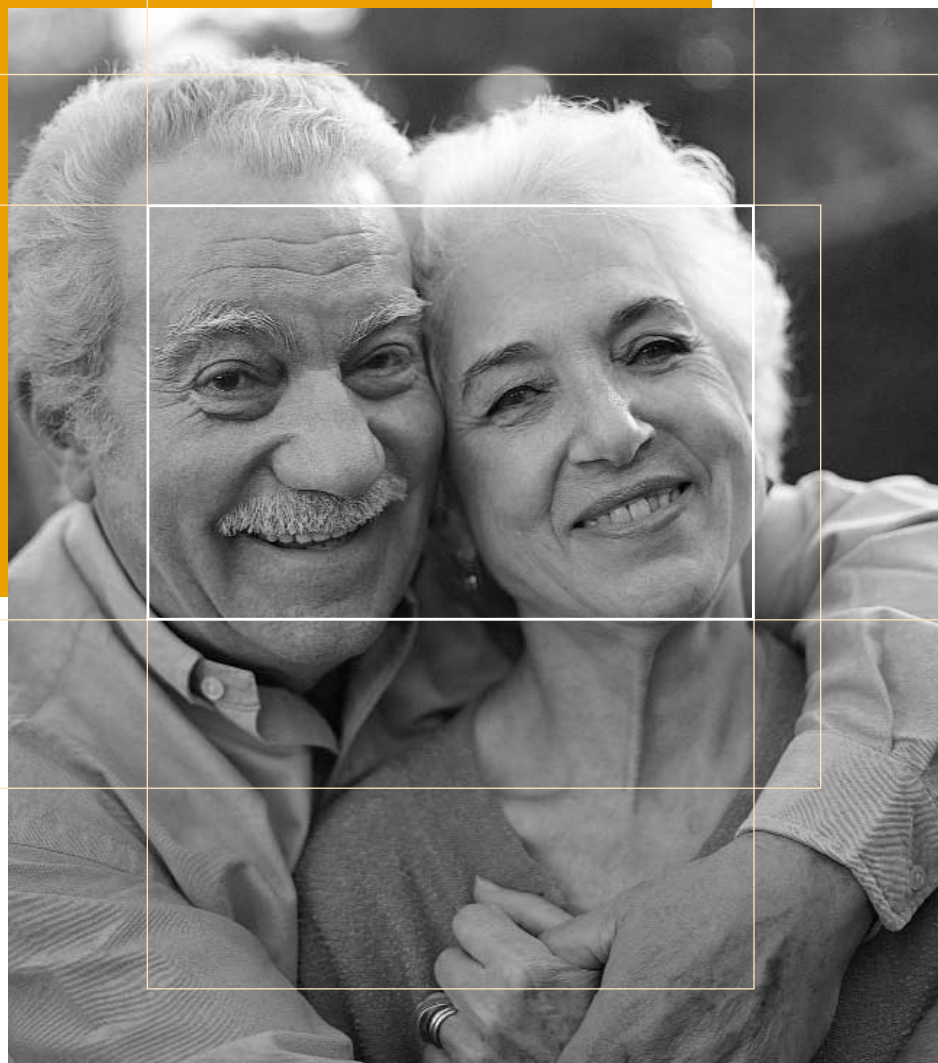


# Cancer Facts & Figures for Hispanics/Latinos 2003-2005







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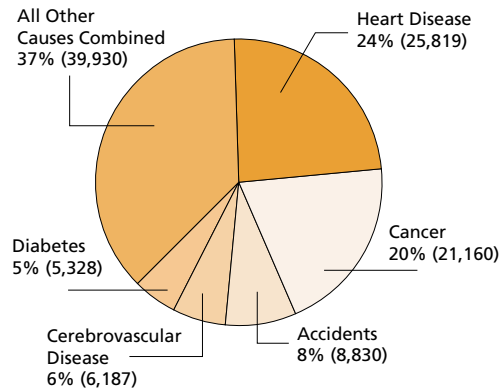
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# Cancer Statistics for Hispanics/Latinos

In 2000, approximately 35.3 million Hispanics comprised about 12.5% of the total United States population,<sup>1</sup> a sharp increase from 9% in 1990, making Hispanics the nation's fastest growing minority group.<sup>2</sup> US Hispanics, or Latinos\*, trace their ancestry to the following countries or regions: Mexico (66%), Puerto Rico (9%), Cuba (4%), Central or South America (15%), or other Spanish cultures (6%).<sup>3</sup> Within the United States, Hispanics residing in the West and South are mainly of Mexican origin; those in the Southeast are mainly Cuban; and those in the Northeast are mainly Puerto Rican.<sup>3</sup> Cancer occurrence can vary across these groups because of regional, behavioral, or genetic differences. Furthermore, Hispanics' risk of cancer can differ based on whether they are US or foreign-born, country of origin or heritage, degree of acculturation (degree to which individuals have adopted the prevalent US culture), and socioeconomic status.

Cancer is a group of diseases characterized by uncontrolled growth and spread of abnormal cells. Among

**Figure 1:**  
Causes of Death in Hispanics, All Ages, US, 2000



Source: National Vital Statistics Report available at [http://www.cdc.gov/nchs/data/nvsr/nvsr50/nvsr50\\_16.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr50/nvsr50_16.pdf)

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**Table 1:**  
Cancer Incidence and Mortality Rates and Ratios Comparing Hispanics to Non-Hispanics

**Incidence rates and ratios,\* 1995-1999†**

	Male			Female		
	Hispanic	Non-Hispanic	Ratio	Hispanic	Non-Hispanic	Ratio
Prostate	120.5	159.2	0.8	-	-	-
Female breast	-	-	-	83.5	147.3	0.6
Lung and bronchus	42.0	81.5	0.5	22.2	54.0	0.4
Colon and rectum	43.8	64.1	0.7	29.4	47.2	0.6
Stomach	16.6	10.2	1.6	9.2	4.3	2.1
Liver and intrahepatic bile duct	12.0	5.9	2.0	5.0	2.4	2.1
Cervix	-	-	-	16.3	7.8	2.1
Gallbladder	1.2	0.8	1.5	3.4	1.3	2.6

\* Ratios calculated as Hispanic incidence divided by non-Hispanic incidence.

† Age-adjusted to the year 2000 population standards; incidence rates calculated using SEER\*Stat software, and include data from the following SEER registries: San Francisco, Connecticut, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, and Los Angeles.

**Mortality rates and ratios,‡ 1995-1999§**

	Male			Female		
	Hispanic	Non-Hispanic	Ratio	Hispanic	Non-Hispanic	Ratio
Prostate	21.6	31.6	0.7	-	-	-
Female breast	-	-	-	17.2	28.7	0.6
Lung and bronchus	36.9	81.7	0.5	13.7	43.3	0.3
Colon and rectum	16.4	26.2	0.6	10.3	18.3	0.6
Stomach	9.1	6.1	1.5	5.2	2.9	1.8
Liver and intrahepatic bile duct	9.4	5.6	1.7	4.3	2.6	1.7
Cervix	-	-	-	3.7	2.6	1.4
Gallbladder	0.7	0.5	1.4	1.7	0.9	1.9

‡ Ratios calculated as Hispanic mortality divided by non-Hispanic mortality.

§ Age-adjusted to the year 2000 population standards; mortality rates calculated using SEER\*Stat software, and include data from all states except Oklahoma due to incomplete death certificates.

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\* The terms "Hispanics" and "Latinos" are used interchangeably to refer to the same ethnic group. Therefore, in this document, health-related information using the term "Hispanics" includes and applies to "Latinos."

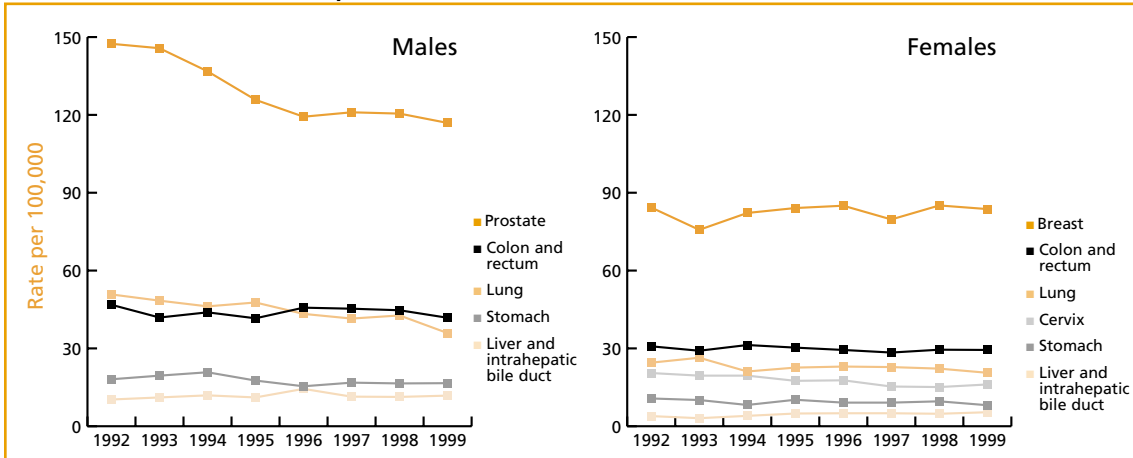
Hispanic adults, cancer is the second leading cause of death, following heart disease (Figure 1).<sup>4</sup> This report provides current statistics on cancer occurrence, risk factors for cancer, and trends in screening for cancer among Hispanics. Comparison of cancer rates between racial and ethnic groups, particularly those involving groups other than whites or blacks, should be interpreted with caution because ethnicity and race are not always classified uniformly in medical records, death certificates, and the US decennial census. Also, datasets including cancer statistics or risk factors and behaviors for some racial and ethnic groups are

limited to recent years only. Furthermore, the geographic areas reporting Hispanic incidence data may not accurately reflect the experience of minority groups throughout the United States. Comparisons made between Hispanics and non-Hispanics consider only ethnicity and do not describe potential racial differences.

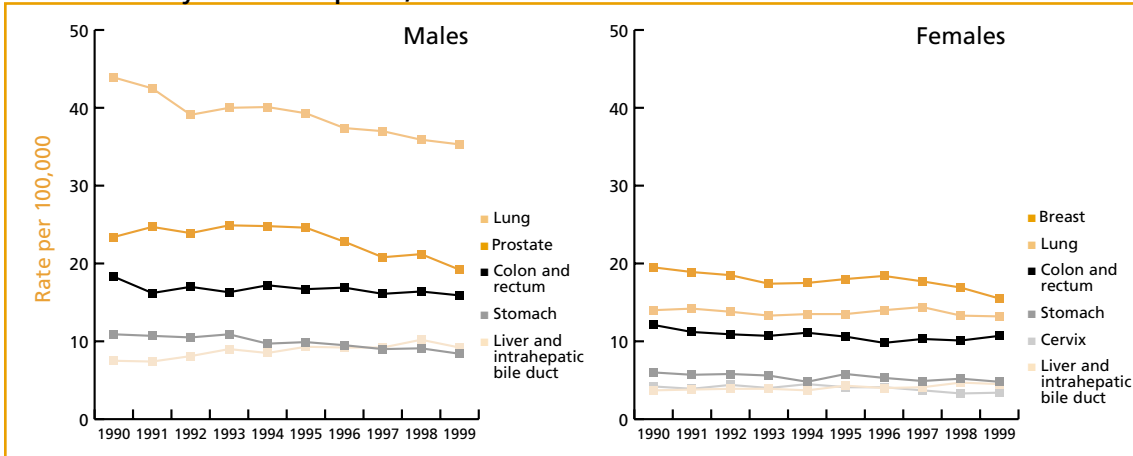
Table 1 shows the differences in cancer burden between Hispanics and non-Hispanic whites in the US. For the most common cancer sites, incidence and death rates among people of Hispanic origin are lower

**Figure 2:**  
Annual Age-adjusted Incidence and Mortality Rates from Specific Cancers in Hispanics

**Cancer Incidence Rates in Hispanics, 1992-1999\***



**Cancer Mortality Rates in Hispanics, 1990-1999\***



\* Age-adjusted to the year 2000 population standards; incidence and mortality rates calculated using SEER\*Stat software; incidence rates include data from the following SEER registries: San Francisco, Connecticut, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, and Los Angeles, and mortality rates include data from all the states with the following exclusions due to incomplete death certificates in certain states and years: Louisiana (1990), New Hampshire (1990-1992), Oklahoma (1990-1997).

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than among non-Hispanics (Table 1).<sup>5</sup> In contrast, for cancers of the stomach, liver, and cervix, rates are higher in Hispanics than in non-Hispanic whites. Americans of Hispanic descent experience a cancer burden similar to that seen in countries from which they emigrated. Compared to rates in the United States, the incidence rates of breast, colon and rectum, lung, and prostate cancers are lower in Puerto Rico, Cuba, and Central and South American countries than in the United States, but rates of cervical, liver, and stomach cancers are higher.<sup>6,7</sup> However, there is some evidence that among Hispanics who migrate to the United States, subsequent generations have cancer rates which approach the rates of non-Hispanics.<sup>8-10</sup> Cancer incidence and mortality trends for the cancer sites listed in Table 1, excluding gallbladder, are shown in Figure 2.

### New Cases

About 67,400 new cancer cases are expected to be diagnosed among Hispanics in 2003 (Figure 3). The most commonly diagnosed cancers among Hispanic men will be prostate, colon and rectum, and lung, and among Hispanic women will be breast, colon and rec-

tum, and lung. For all cancer sites during 1992-1999, the age-adjusted incidence rate per 100,000 population in Hispanics was 393.1 in men and 290.5 in women, compared to 576.6 in non-Hispanic white males and 438.2 in non-Hispanic white females. Over this 8-year time period, cancer incidence rates among Hispanics decreased an average of 1.6% each year, a larger decrease than among white non-Hispanics (0.8% per year).<sup>5</sup> The rate of decline in Hispanics was higher in males (2.8%) than in females (0.6%).

### Deaths

About 22,100 Hispanics are expected to die from cancer in 2003. The death rate from all cancers combined is lower among Hispanics than among non-Hispanic whites.<sup>5</sup> For all cancer sites during 1992-1999, the age-adjusted death rate per 100,000 population in Hispanics was 163.7 in men and 105.7 in women, compared with 262.5 in non-Hispanic white males and 173.5 in non-Hispanic white females. The cancer death rates during the same time period among Hispanics decreased, on average, 1.2% each year, a somewhat larger decrease than seen among white non-Hispanics (0.7% per year).<sup>5</sup>

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## Selected Cancers

### Female Breast

**New Cases:** Breast cancer is the most commonly diagnosed cancer among Hispanic women; an estimated 11,000 Hispanic women are expected to be diagnosed in 2003. The rate of new breast cancer cases diagnosed among Hispanic women during 1992-1999 remained stable, while white non-Hispanic women showed an annual increase of 1.3% per year.<sup>5</sup> Although breast cancer is diagnosed approximately 40% less often among women of Hispanic origin, it is more frequently diagnosed at a later stage than when found in non-Hispanic women.<sup>11-15</sup> Historically lower utilization of cancer screening tests, such as mammography, among Hispanic women may contribute to later diagnosis, when the disease is more advanced.

**Deaths:** An estimated 1,600 deaths from breast cancer are expected to occur among Hispanic women in 2003. Breast cancer is the leading cause of cancer death among Hispanic women (unlike in non-Hispanic

white women, in which lung cancer is the most common).<sup>16</sup> The average annual drop of 1.8% in the rate of breast cancer deaths during 1992-1999 among Hispanic women was smaller than the decrease in white non-Hispanic women (2.6% per year).

### Colon & Rectum

**New Cases:** An estimated 7,000 Hispanic men and women are expected to be diagnosed with cancers of the colon and rectum in 2003. Colorectal cancer is the third most commonly diagnosed cancer in Hispanics. During 1992-1999 colorectal cancer rates did not significantly change.

**Deaths:** An estimated 2,300 deaths from colorectal cancer are expected to occur among Hispanics in 2003. Colorectal cancer is the third leading cause of cancer death among Hispanic women; it ties with prostate as the second deadliest cancer among Hispanic men. The death rates due to colorectal cancer in Hispanic

**Figure 3:**  
**Leading Sites of New Cancer Cases\* and Deaths Among Hispanics, 2003 Estimates†**

**Cancer Cases by Site and Sex**

Males		Females	
Number	Percent	Number	Percent
Prostate	8,500 27	Breast	11,000 30
Colon & rectum	3,700 12	Colon & rectum	3,300 9
Lung & bronchus	2,300 7	Lung & bronchus	2,200 6
Stomach	1,400 5	Uterine cervix	2,100 6
Kidney & renal pelvis	1,400 5	Uterine corpus	1,900 5
Urinary bladder	1,200 4	Thyroid	1,600 4
Liver & intrahepatic bile duct	1,200 4	Ovary	1,500 4
Non-Hodgkin lymphoma	1,100 4	Non-Hodgkin lymphoma	1,300 4
Testis	900 3	Stomach	900 2
Brain & other nervous system	800 3	Pancreas	900 2
<b>TOTAL MALE</b>	<b>31,100 100</b>	<b>TOTAL FEMALE</b>	<b>36,300 100</b>

**Cancer Deaths by Site and Sex**

Males		Females	
Number	Percent	Number	Percent
Lung & bronchus	2,600 22	Breast	1,600 16
Colon & rectum	1,200 10	Lung & bronchus	1,300 13
Prostate	1,200 10	Colon & rectum	1,100 11
Liver & intrahepatic bile duct	900 8	Pancreas	600 6
Stomach	800 7	Liver & intrahepatic bile duct	500 5
Pancreas	700 6	Stomach	500 5
Non-Hodgkin lymphoma	500 4	Non-Hodgkin lymphoma	500 5
Kidney & renal pelvis	500 4	Ovary	500 5
Urinary bladder	300 3	Uterine corpus	300 3
Brain & other nervous system	300 3	Brain & other nervous system	300 3
<b>TOTAL MALE</b>	<b>12,000 100</b>	<b>TOTAL FEMALE</b>	<b>10,100 100</b>

\* Excludes basal and squamous cell skin cancer and in situ carcinomas except urinary bladder. Estimates of new cases are projected based on incidence rates from the National Cancer Institute, Surveillance, Epidemiology, and End Results program, 1992-1999.

† Estimates are rounded to the nearest 100. Estimates of deaths are projected based on mortality statistics from the National Center for Health Statistics, 1993-1999, which included Hispanic deaths from all states except Oklahoma.

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men and women decreased on average 0.7% each year during 1992-1999, compared with a 1.8% annual decline in white non-Hispanics.

**Lung & Bronchus**

**New Cases:** An estimated 4,500 Hispanics are expected to be diagnosed with lung cancer in 2003. Cancer of the lung is the fourth most commonly diagnosed cancer among Hispanic men and women combined. Because of traditionally lower rates of cigarette smoking among Hispanics, lung cancer rates were approximately 50% lower than those in non-Hispanics between 1992 and 1999. During those years, there was a significant decrease in the rates of new cases among Hispanic men and women of 3.1% per year, on average.<sup>5</sup>

**Deaths:** An estimated 3,900 deaths from lung cancer are expected to occur among Hispanics in 2003. Lung cancer is the leading cause of cancer death among Hispanic men; it ranks second among Hispanic

women. From 1992 to 1999, death rates from lung cancer declined among Hispanic men, on average, 1.9% per year; whereas the death rates for Hispanic women did not decrease significantly. The decline in death rates among men most likely resulted from decreases in the prevalence of smoking over the past 30 years. Declines were not as pronounced in women because the smoking patterns of women lag behind those of men.

**Prostate**

**New Cases:** An estimated 8,500 Hispanic men are expected to be diagnosed with prostate cancer in 2003, making it the most commonly diagnosed cancer among Hispanic men. During 1992-1999, prostate cancer rates among Hispanics were approximately 25% lower than the rates among non-Hispanics. Among Hispanics, an average annual decrease of 3.4% was seen, compared to a decrease of 4.6% among non-Hispanic whites.

**Deaths:** An estimated 1,200 deaths from prostate cancer are expected to occur among Hispanic men in 2003, making prostate cancer the second leading cause of cancer death. Among men approximately the same number of deaths occur from prostate and colorectal

cancer. The annual death rate during 1992-1999 was 22.6 men per 100,000. The death rate dropped 3.8% per year on average in Hispanic men, compared with an average annual decrease of 3.5% in white non-Hispanics.

## Cancer Sites with Higher Rates in Hispanics

Cancers of the stomach, liver, and uterine cervix are more common in developing countries, most notably in Central and South American countries. In the United States, the incidence and mortality rates of stomach, uterine cervix, liver and biliary tract cancers are higher among Hispanics than non-Hispanic whites, and are especially high among first generation migrants to the US.<sup>8,17</sup>

### Stomach

Stomach cancer is more prevalent throughout much of Central and South America than in the United States. Diets rich in smoked foods, salted meat or fish, and pickled vegetables and low in fresh vegetables have been associated with an increased risk of stomach cancer.<sup>18</sup> *H. pylori* infection, another risk factor for stomach cancer, is more common among those of lower socioeconomic status, particularly if they live in crowded or high-density living conditions.<sup>19</sup> In the United States, the rates of stomach cancer incidence are at least 75% higher in Hispanics than in non-Hispanic whites. In 2003, approximately 2,300 Hispanics will be diagnosed with stomach cancer, and an estimated 1,300 Hispanics will die from the disease.

### Liver and Intrahepatic Bile Duct

Liver cancer is strongly associated with chronic infections from hepatitis B virus (HBV) or hepatitis C virus (HCV).<sup>20</sup> HBV is preventable through vaccination, but there is not yet a vaccine for HCV. In the US, vaccination against Hepatitis B is now recommended for all newborns, for all children under age 18 who have not been vaccinated, and for adult members of high risk groups (intravenous drug users, persons with multiple sexual partners, health care workers).<sup>21</sup> Alcohol intake and consumption of aflatoxin-contaminated grains are also risk factors.<sup>22</sup> Hispanics experience a 60% higher death rate from liver cancer compared with

non-Hispanics.<sup>5</sup> In 2003, approximately 1,800 Hispanics will be diagnosed with liver cancer, and about 1,400 previously diagnosed Hispanics will die.

### Cervix

Women in Mexico, Central America, and South America experience approximately triple the cervical cancer incidence and mortality rates of women in the United States.<sup>7</sup> Hispanic women residing in the United States have twice the cervical cancer incidence rate of non-Hispanic whites.<sup>5,23</sup> Certain variants of human papilloma virus (HPV) are associated with increased risk of cervical cancer. Among women in the United States, those born in Mexico have higher prevalence of HPV.<sup>24</sup> A vaccine to prevent infection by HPV is currently under development.<sup>25</sup> The death rate from cervical cancer is 40% higher among Hispanic women than among other groups.<sup>5</sup> In 2003, about 2,100 Hispanic women will be diagnosed with cervical cancer; also in 2003, an estimated 200 Hispanic women will die from the disease.

### Gallbladder

Worldwide, the highest incidence rates of gallbladder cancer are found among Mexican Americans, and the highest mortality rates are in South America.<sup>26</sup> Among those populations with elevated rates, women are diagnosed more often than men. An important risk factor for gallbladder cancer is chronic gallstones, which can result from hereditary factors affecting cholesterol secretion in the bile, and this genetic susceptibility may be more common among Hispanics. Obesity, hormonal factors, and diet may also be associated with increased risk of gallbladder cancer.<sup>27</sup> In the US, Hispanic females experience over twice the incidence rates of non-Hispanic white women and Hispanic men (Table 1).

# Risk Factor Statistics

## Risk Factor Statistics

Variations in cancer risk factors (such as cigarette smoking) or screening behaviors (such as Pap tests for cervical cancer) between Hispanics and other population groups may be due to cultural differences or socioeconomic factors. While recognizing this diversity, looking at risk factors and screening data in broad population groups may allow us to identify public health needs (such as increased access for Hispanics to smoking cessation programs) that can be further targeted to appropriate populations within the broader grouping.

## Tobacco Use

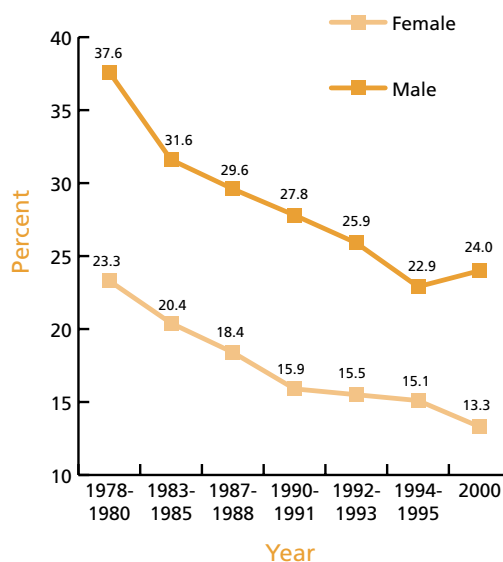
Tobacco use is the most preventable cause of premature death in the United States and is responsible for about 30% of all cancer deaths. Most lung cancers, as well as a large fraction of cancers of the lip, oral cavity, pharynx, larynx, esophagus, pancreas, cervix, urinary bladder, and kidney, can be attributed to cigarette smoking.<sup>28</sup>

**Adult Tobacco Use:** In 2001, approximately 22.8% of all adults were current cigarette smokers; among Hispanic adults, 16.0% were identified as current cigarette smokers.<sup>29</sup> The percentage of Hispanic smokers has decreased since 1978 (Figure 4), although a slight increase is shown in the most recent period for males. Further reduction of smoking prevalence among Hispanics requires an understanding of the cultural, ethnic, and social issues. Members of lower socioeconomic groups are more likely to smoke.<sup>30</sup> One-fifth of all Hispanics live in poverty, which is almost twice the national poverty rate.<sup>31</sup> Smoking during pregnancy is less prevalent among Hispanic women than in non-Hispanic women; Hispanic mothers who did smoke while pregnant were mainly those who did not complete high school.<sup>32</sup> Hispanics born in the United States are more likely to smoke than those who are foreign-born.<sup>33</sup> In an effort to market to minority populations, tobacco companies promote and advertise their products disproportionately to certain racial/ethnic groups, including Hispanics, often with the use of cultural symbols and designs.<sup>34</sup>

According to a report from the Surgeon General in 1998, members of racial ethnic groups are less likely than whites to participate in cessation programs or to receive advice on quitting from health care providers.<sup>35</sup> For smoking cessation programs to succeed among Hispanics, they should be language appropriate, considerate of cultural values, and mindful of potential pressures facing Hispanics.<sup>35</sup> A better understanding of communication systems within the Hispanic community will allow successful implementation of intervention programs.<sup>36</sup>

**Youth Tobacco Use:** It is estimated that among current adult cigarette smokers, over 80% began smoking before they reached age 18.<sup>37</sup> According to Youth Risk

**Figure 4:**  
Trends in the Percentage of Current Cigarette Smokers\*, Hispanic Adults 18+, by Gender, US, 1978-2000

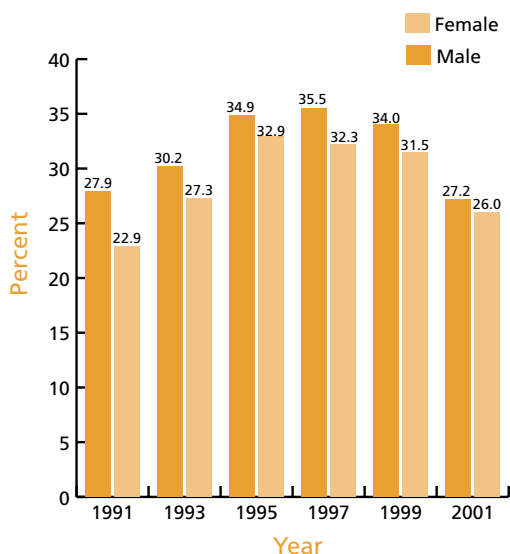


\* For 1978-1991, current cigarette smokers include persons who reported smoking at least 100 cigarettes in their lives and who reported at the time of survey that they currently smoked. For 1992-1995 and 2000, current cigarette smokers include persons who reported smoking at least 100 cigarettes in their lives and who reported at the time of survey that they currently smoked every day or on some days.

Source: National Health Interview Survey, 1978-2000, National Center for Health Statistics, Centers for Disease Control and Prevention

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**Figure 5:**  
Trends in the Percentage of Current Cigarette Smokers\*, Hispanic High School Students, US, 1991-2001



\* Smoked cigarettes on one or more of the 30 days preceding the survey.

Source: Youth Risk Behavior Surveillance System, 1991, 1993, 1995, 1997, 1999, 2001. National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention

American Cancer Society, Surveillance Research, 2003

Behavior Surveillance System (YRBSS) data from the past decade, the proportion of Hispanic students who admitted to being current smokers peaked at 32.9% in 1995 for females and 35.5% in 1997 for males, but then dropped to 26.0% and 27.2% in 2001 for females and males, respectively (Figure 5). Also in 2001, the proportion of students who had tried cigarette smoking, at least for one or two puffs, was similar between Hispanics (69.3%) and white non-Hispanics (64.8%). However, only 7.3% of the Hispanic youths smoked cigarettes frequently, while 17.2% of the white non-Hispanic youths reported frequent smoking.<sup>38</sup> Factors influencing the differing smoking habits may include basic cultural differences as well as differences in the affordability and accessibility of cigarettes.<sup>39, 40</sup> Hispanics who do not complete a high school education are more likely to smoke than their more educated peers.<sup>35</sup> Adolescent Hispanic females were less likely to smoke if they had the advantage of a strong and supportive family network.<sup>41</sup>

## Overweight, Obesity, and Physical Activity

**Overweight and Obesity:** An estimated 22.9% of adults in the United States are obese.<sup>29</sup> Obesity is asso-

**Table 2:**  
Definitions of Overweight and Obesity, by Height and Body Weight

### Body Mass Index for Adults

Different measures are used to determine whether a person is considered normal weight, overweight, or obese, taking into account height. A common scale is the body mass index (BMI), or ratio of weight (in kilograms) to height (in meters, squared). For adults aged 20 years and older, overweight is defined as a BMI of 25.0 to 29.9 kg/m<sup>2</sup>; obesity is defined as a BMI of 30.0 kg/m<sup>2</sup> or greater.

This table relates BMI to pounds and inches rather than kilograms and meters. BMI corresponds to an individual's height (in the left column) and weight category (in pounds). An adult aged 20 or older is considered overweight or obese if his or her weight falls within the corresponding area of the table. For example, a 5'4 woman is considered overweight if she weighs between 145 and 173 pounds. She is considered obese if she weighs 174 pounds or more. A 5'10 man is considered overweight if he weighs between 174 and 206 pounds and obese if he weighs 207 pounds or more.

Height (feet, inches)	Body weight (pounds)	
	Overweight*	Obese†
6'4"	205	246
6'3"	200	240
6'2"	194	233
6'1"	189	227
6'0"	184	221
5'11"	179	215
5'10"	174	207
5'9"	169	203
5'8"	164	197
5'7"	159	191
5'6"	155	186
5'5"	150	180
5'4"	145	174
5'3"	141	169
5'2"	136	164
5'1"	132	158
5'0"	128	153
4'11"	124	148
4'10"	119	143

\*Overweight defined as Body Mass Index (BMI) of 25-29.9 kg/m<sup>2</sup>.  
†Obesity = BMI ≥ 30 kg/m<sup>2</sup>.

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ciated with an increased risk of several chronic diseases, including cancers of the endometrium, breast, prostate, and colon.<sup>42, 43</sup> The federal guidelines for the definitions of overweight and obese are shown in Table 2. Obesity is on the rise among Hispanics, particularly for Hispanic women.<sup>44</sup> According to self-reported data from 1997-1998, 66.2% of Hispanic men and 56.6% of Hispanic women were overweight, compared with 62.7% and 43.4% of non-Hispanic white men and women, respectively.<sup>45</sup>

**Physical Activity:** Studies have shown that participation in regular physical activity helps to control body weight and may decrease the risk of colon and breast cancers.<sup>42, 46, 47</sup> In 2001, 35.8% of Hispanic adults did not have any form of leisure time physical activity, compared to only 22.9% of white non-Hispanic adults (Table 3). Among Hispanic high school students, 68.8% of the males and 52.4% of the females participated in vigorous physical activity on three or more days a week in 2001 (Table 4).

**Table 3:**  
Participation in Physical Activity\*, Adults, by Race and Gender, United States, 2001

	% Hispanic	% White, non-Hispanic	% Black, non-Hispanic
<b>No leisure-time physical activity</b>			
Total	35.8	22.9	33.2
Male	32.5	20.5	29.1
Female	38.3	24.9	38.8
<b>Moderate physical activity†</b>			
Total	43.6	47.9	38.8
Male	44.8	50.9	41.4
Female	40.6	45.2	33.1
<b>Vigorous physical activity‡</b>			
Total	23.9	25.0	21.2
Male	28.3	30.6	27.2
Female	16.7	20.5	15.1

\* Based on median value of participating states (50 US states, District of Columbia, and Puerto Rico) with 50 or more respondents in a racial or ethnic group. Estimates exclude missing, don't know/not sure, or refused responses.

† Activity (such as brisk walking, bicycling, vacuuming, or gardening) that caused small increases in breathing or heart rate at least 30 minutes five times a week OR activity (such as running, aerobics, or heavy yardwork) that caused large increases in breathing or heart rate at least 20 minutes three times a week.

‡ Activity (such as running, aerobics, or heavy yardwork) that causes large increases in breathing or heart rate at least 20 minutes three or more times per week.

Source: Behavioral Risk Factor Surveillance System Public Use Data Tape 2001, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, 2002. American Cancer Society, Surveillance Research, 2003

**Table 4:**  
Participation in Physical Activity Among Hispanic and non-Hispanic High School Students, by Gender, US, 2001

	Hispanic	White non-Hispanic	Black non-Hispanic
<b>Participation in vigorous physical activity*</b>			
Total	60.5	66.5	59.7
Males	68.8	73.7	72.4
Females	52.4	59.8	47.8
<b>Participation in moderate physical activity†</b>			
Total	22.1	27.3	20.1
Males	25.9	29.8	23.7
Females	18.5	24.7	16.5
<b>No vigorous or moderate physical activity‡</b>			
Total	11.2	8.2	12.9
Males	9.3	6.2	8.4
Females	13.0	10.2	16.9

\* Activities that caused sweating and hard breathing for >20 minutes on >3 of the 7 days preceding the survey.

† Activities that did not cause sweating or hard breathing for >30 minutes on >5 of the 7 days preceding the survey.

‡ Had not participated in either vigorous physical activity for >20 minutes or moderate physical activity for >30 minutes on any of the 7 days preceding the survey.

Source: Youth Risk Behavior Surveillance System, 2001, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention.<sup>48</sup>

American Cancer Society, Surveillance Research, 2003

# Use of Screening Tests

Screening tests can detect some types of cancer early, at a stage when it is often highly curable. Screening can actually prevent some cancers from occurring, through the identification and removal of precancerous lesions. Screening can greatly improve the chances of cure, may extend life, reduce the extent of treatment needed, and improve quality of life for cancer patients.

Hispanic women are traditionally the least likely of racial and ethnic groups to use preventive services such as Pap tests, mammography, and clinical breast exams.<sup>49-52</sup> In the past, underuse of these tests may have contributed to poorer survival for cervical cancer and breast cancer among Hispanic women. Continuation of social support programs which specifically target minority populations may further improve participation in screening examinations.<sup>50</sup> Furthermore, improvements in the health care system are needed; almost one-third of all Hispanics have no health insurance,<sup>29</sup> greatly limiting their access to cancer screening and medical care.

## Breast and Cervical Cancer Screening

In a 2000 survey, the prevalence of mammography use

in the previous twelve months among Hispanic women 40 and older was 65.4%, which was higher than in previous years and closer to the proportions among white non-Hispanic (62.9%) and black non-Hispanic (66.7%) women (Table 5). In 2001, the proportion of women who had a Pap test in the past three years was 83.4% among Hispanics, compared with 87.2% among whites and 88.8% among blacks. Barriers to cancer screening among Hispanics include fear of cancer, embarrassment, or a lack of knowledge about cancer.<sup>53</sup> However, cultural differences may not be as important as originally thought; lack of insurance and low income create greater obstacles to screening than ethnicity does.<sup>54-58</sup>

## Colorectal Screening

The estimated percentage of Hispanics being screened for colon cancer was low in 2000. Only 15.4% were estimated to have had a fecal occult blood test (FOBT) in the past year, compared with 24.1% among whites and 21.6% among blacks; 31.2% of Hispanics were estimated to have had a sigmoidoscopy or colonoscopy in the past 5 years, compared with 39.2% among whites and 35.3% among blacks.

**Table 5:**  
Cancer Screening Examinations\*, Adults, by American Cancer Society Guidelines, 2000 and 2001

	%Hispanic	%White, non-Hispanic	%Black, non-Hispanic
<b>Breast cancer, 2000</b>			
Mammogram <sup>†</sup>	65.4	62.9	66.7
Clinical breast exam (CBE) <sup>‡</sup>	65.1	68.8	69.9
Mammogram & CBE <sup>§</sup>	53.5	56.0	54.8
<b>Cervical cancer, 2000</b>			
Pap test <sup>¶</sup>	83.4	87.2	88.8
<b>Colon &amp; rectum cancer, 2001</b>			
Fecal occult blood test <sup>#</sup>	15.4	24.1	21.6
Flexible sigmoidoscopy or colonoscopy <sup>**</sup>	31.2	39.2	35.3
<b>Prostate cancer, 2001</b>			
Prostate-specific antigen test <sup>††</sup>	46.0	58.2	57.6
Digital rectal exam <sup>‡‡</sup>	41.4	57.4	49.5

\* Based on median value of participating states (50 US states, District of Columbia, and Puerto Rico) with 50 or more respondents in a racial or ethnic group. Estimates exclude missing, don't know/not sure, or refused responses.

† A mammogram within the past year for women 40 and older.

‡ A clinical breast exam within the past year for women 40 and older.

§ Both a mammogram and clinical breast exam within the past year for women 40 and older.

¶ A Pap test within the past three years for women 18 and older.

# A fecal occult blood test using a home kit within the past year for adults 50 and older.

\*\* A flexible sigmoidoscopy or colonoscopy within the past five years for adults 50 and older.

†† A prostate-specific antigen test within the past year for men 50 and older.

‡‡ A digital rectal exam within the past year for men 50 and older.

Source: Behavioral Risk Factor Surveillance System Public Use Data File 2000, 2001, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, 2001, 2002

American Cancer Society, Surveillance Research, 2003

# Screening Guidelines

## For the Early Detection of Cancer in Asymptomatic People

Site	Recommendation
<b>Breast</b>	<ul style="list-style-type: none"> <li>• Yearly mammograms are recommended starting at age 40 and continuing for as long as a woman is in good health.</li> <li>• Clinical breast exam should be part of a periodic health exam, about every three years for women in their 20s and 30s, and every year for women 40 and older.</li> <li>• Women should know how their breasts normally feel and report any breast change promptly to their health care providers. Breast self-exam is an option for women starting in their 20s.</li> <li>• Women at increased risk (e.g., family history, genetic tendency, past breast cancer) should talk with their doctors about the benefits and limitations of starting mammography screening earlier, having additional tests (i.e., breast ultrasound and MRI), or having more frequent exams.</li> </ul>
<b>Colon &amp; rectum</b>	<p>Beginning at age 50, men and women should follow one of the examination schedules below:</p> <ul style="list-style-type: none"> <li>• A fecal occult blood test (FOBT) every year</li> <li>• A flexible sigmoidoscopy (FSIG) every five years</li> <li>• Annual fecal occult blood test and flexible sigmoidoscopy every five years*</li> <li>• A double-contrast barium enema every five years</li> <li>• A colonoscopy every 10 years</li> </ul> <p><i>*Combined testing is preferred over either annual FOBT, or FSIG every 5 years, alone. People who are at moderate or high risk for colorectal cancer should talk with a doctor about a different testing schedule.</i></p>
<b>Prostate</b>	<p>The PSA test and the digital rectal examination should be offered annually, beginning at age 50, to men who have a life expectancy of at least 10 years. Men at high risk (African American men and men with a strong family history of one or more first-degree relatives diagnosed with prostate cancer at an early age) should begin testing 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.</p>
<b>Uterus</b>	<p><b>Cervix:</b> Screening should begin approximately three years after a woman begins having vaginal intercourse, but no later than 21 years of age. Screening should be done every year with regular Pap tests or every two years using liquid-based tests. At or after age 30, women who have had three normal test results in a row may get screened every 2-3 years. However, doctors may suggest a woman get screened more often if she has certain risk factors, such as HIV infection or a weak immune system. Women 70 years and older who have had three or more consecutive normal Pap tests in the last 10 years may choose to stop cervical cancer screening. Screening after total hysterectomy (with removal of the cervix) is not necessary unless the surgery was done as a treatment for cervical cancer.</p> <p><b>Endometrium:</b> The American Cancer Society recommends that all women should be informed about the risks and symptoms of endometrial cancer, and strongly encouraged to report any unexpected bleeding or spotting to their physicians. Annual screening for endometrial cancer with endometrial biopsy beginning at age 35 should be offered to women with or at risk for hereditary nonpolyposis colon cancer (HNPCC).</p>
<b>Cancer-related checkup</b>	<p>For individuals undergoing periodic health examinations, 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.</p>

American Cancer Society guidelines for early cancer detection are assessed annually in order to identify whether there is new scientific evidence sufficient to warrant a re-evaluation of current recommendations. If evidence is sufficiently compelling to consider a change or clarification in a current guideline or the development of a new guideline, a formal procedure is initiated. Guidelines are formally evaluated every 5 years regardless of whether new evidence suggests a change in the existing recommendations. There are nine steps in this procedure, and these "guidelines for guideline development" were formally established to provide a specific methodology for science and expert judgment to form the underpinnings of specific statements and recommendations from the Society. These procedures constitute a deliberate process to insure that all Society recommendations have the same methodological and evidence-based process at their core. This process also employs a system for rating strength and consistency of evidence that is similar to that employed by the Agency for Health Care Research and Quality (AHCRO) and the US Preventive Services Task Force (USPSTF).

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# Sources of Statistics

**New Cancer Cases (Incidence):** The estimated numbers of new US cancer cases among Hispanics in 2003 were calculated by fitting the estimated numbers of cancer cases that occurred each year in the US from 1992 through 1999 to a statistical forecasting model. The estimated numbers of US cases from 1992 through 1999 were calculated using cancer incidence from the regions of the US included in the Surveillance, Epidemiology, and End Results (SEER) program of the National Cancer Institute, and population data collected by the US Bureau of the Census.

**Incidence Rates:** Incidence rates are defined as the number of people per 100,000 population who develop disease during a given period of time. Incidence data for the report were collected by the SEER program along with the population data collected by the US Bureau of the Census. All incidence rates in this publication are age-adjusted to the 2000 US standard population.

**Cancer Deaths:** The estimated numbers of US cancer deaths among Hispanics in 2003 were calculated by fitting the number of cancer deaths from 1993 through 1999 to a statistical forecasting model. Data on the number of deaths are obtained from the National Center for Health Statistics (NCHS) of the Centers for Disease Control and Prevention.

**Death Rates:** Death rates are defined as the number of people per 100,000 dying of a disease during a given period of time. Death rates were reported by the SEER program using data on cancer deaths from the National Center for Health Statistics along with population data from the US Bureau of the Census. All death rates in this publication are age-adjusted to the 2000 US standard population.

**Behavioral Risk Factor Surveillance System (BRFSS):** The BRFSS is an annual survey of the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion and has been conducted since 1984. The survey is designed to provide state prevalence estimates on behavioral risk factors, such as cigarette smoking. Data are gathered through monthly,



computer-assisted telephone interviews of adults aged 18 years or older living in households in a state or US territory.

**National Health Interview Survey (NHIS):** The NHIS is an annual survey of the Centers for Disease Control and Prevention, National Center for Health Statistics and has been conducted since 1957. The survey is designed to provide national prevalence estimates on personal, socioeconomic, demographic, and health characteristics of US adults. Data are gathered through a computer-assisted personal interview of adults aged 18 years or older living in US households.

**Youth Risk Behavior Surveillance System (YRBSS):** The YRBSS is a biennial survey of the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion and has been conducted since 1991. The survey is designed to provide national, state, and local prevalence estimates on health risk behaviors among youth and young adults who attend public and private high schools. Data are gathered through a self-administered questionnaire, which was completed during a required subject or class period.

# Age Adjustment to the Year 2000 Standard

Epidemiologists use a statistical method called “age-adjustment” to compare groups of people with different age compositions. For example, without adjusting for age, it would be inaccurate to compare the cancer rates of the state of Florida, which has a large elderly population, to that of Alaska, which has a younger population. This is especially true when examining cancer rates, since cancer is generally a disease of older people. Without adjusting for age, it would appear that the cancer rates for Florida are much higher than Alaska. However, once the ages are adjusted, it appears their rates are similar.

Starting with this issue of *Cancer Facts & Figures for Hispanics/Latinos 2003-2005*, we used the most recent US census (2000) as the baseline for our age-adjustment. This is a change from previous issues and other statistics we have published. Prior to this,

our statistics were based on the 1970 census. This change follows federal agencies that publish statistics. The change will also require a recalculation of age-adjusted rates for previous years to allow valid comparison between current and past years.

The impact of this change on the rate of a particular cancer will vary depending on the ages at which that particular cancer generally occurs. For all cancers combined, the average annual age-adjusted incidence rate for 1995-1999 will increase approximately 20% when adjusted to the Year 2000 Standard compared to the Year 1970 Standard. For example, the incidence of colon cancer, which occurs mostly in older age groups, will increase by up to 25% using the Year 2000 Standard. This change is the result of increased representation of older ages in the Year 2000 Standard compared to the Year 1970 Standard.

The purpose of shifting to the Year 2000 Standard is to more accurately reflect contemporary incidence and mortality rates, given the aging of the US population. On average, Americans are living longer because of the decline in infectious and cardiovascular diseases. Our longer life span is allowing us to reach the age when cancer and other chronic diseases become more common. Using the year 2000 Standard in age-adjustment instead of 1970 Standard allows age-adjusted rates to be closer to the actual, unadjusted rate in the population.



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