

MMWR

MORBIDITY AND MORTALITY WEEKLY REPORT

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The Great American Smokeout, November 18, 1993

Since 1977, the American Cancer Society (ACS) has sponsored the Great American Smokeout to foster community-based activities that encourage cigarette smokers to stop smoking for at least 24 hours. These activities include distributing materials to interested schools, hospitals, businesses, and other organizations that discourage tobacco use; encouraging retail businesses not to sell tobacco products and restaurants and other businesses to be smoke-free for the day; and providing media coverage of prominent local citizens who have pledged to stop smoking for the day.

During the Great American Smokeout in 1992, an estimated 3.3 million (7.1%) smokers reported quitting, and 7.5 million (16.4%) reported reducing the number of cigarettes smoked on that day. Furthermore, an estimated 1.5 million (3.3%) smokers reported quitting smoking for 3–5 days after the Smokeout (1). Approximately 9.7 million packs of cigarettes were not smoked; thus an estimated \$17.8 million were not spent on cigarettes (1–3).

This year, the Great American Smokeout will be on Thursday, November 18. The overall goal of the Smokeout is to encourage cessation to show smokers that if they can quit for 24 hours, they can quit permanently. Information is available from local chapters of the ACS; for telephone numbers of these local chapters, telephone (800) 227-2345.

Reported by: American Cancer Society, Atlanta. Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.

References

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Effectiveness in Disease and Injury Prevention

Physician and Other Health-Care Professional Counseling of Smokers to Quit — United States, 1991

Physicians and other health-care professionals play a lead role in the prevention of tobacco smoking in the United States (1). In particular, health-care professionals can assist patients to stop smoking by counseling them about quitting (2,3). To monitor progress toward the national health objectives for the year 2000 on tobacco use (4), data from CDC's 1991 National Health Interview Survey—Health Promotion and Disease Prevention (NHIS-HPDP) supplement were used to estimate the prevalence of outpatient physician and other health-care professional counseling of smokers to quit. This report summarizes the results of that survey.

The NHIS-HPDP supplement collected information from a representative sample of the U.S. civilian, noninstitutionalized population aged ≥ 18 years regarding self-reported information on smoking and receipt of advice to quit. The overall response rate for the 1991 NHIS-HPDP was 87.7% (n=43,732). Participants who reported smoking cigarettes at any time during the preceding 12 months were asked the number of times during that period they had visited a doctor or other health-care professional in an outpatient setting and the number of visits during which they were advised to quit smoking by a doctor or other health-care professional. Doctor visits that occurred during overnight stays in hospitals were not counted. Data were adjusted for nonresponse and weighted to provide national estimates. Confidence intervals (CIs) were calculated using standard errors generated by the Software for Survey Data Analysis (SUDAAN) (5).

In 1991, an estimated 35.8 million (70.2% [95% CI= $\pm 1.0\%$]) of the 51.0 million persons who smoked during the preceding 12 months reported at least one outpatient visit with a physician or other health-care professional during that time. Of these, 11.2 million (31.4% [CI= $\pm 1.1\%$]) had had one visit, 10.7 million (29.9% [CI= $\pm 1.1\%$]) had had two or three visits, and 13.8 million (38.7% [CI= $\pm 1.2\%$]) had had four or more visits.

Overall, 12.8 million (37.2% [CI= $\pm 1.3\%$]) of the persons who had smoked reported having received any advice to quit from a health-care professional during the preceding 12 months. The likelihood of having been counseled to quit was directly related to the number of doctor visits (45.5% [CI= $\pm 2.0\%$] among persons with four or more visits compared with 28.1% [CI= $\pm 1.9\%$] among those with one visit). Rates of receiving counseling were slightly higher for women and persons aged 45–64 years than for men and persons aged < 45 years (Table 1). Rates were slightly lower for Hispanics than for white non-Hispanics but otherwise did not vary by race/ethnicity, education, or socioeconomic status.

Among persons who reported that they smoked at the time of the survey, the proportion who had received advice to quit increased with the number of cigarettes smoked per day (33.6% [CI= $\pm 2.1\%$] of those who smoked one to 14 cigarettes per day, 41.4% [CI= $\pm 2.1\%$] of those who smoked 15–24 per day, and 46.3% [CI= $\pm 3.0\%$] of those who smoked ≥ 25 per day). The likelihood of receiving advice to quit was greatest among persons who smoked ≥ 25 cigarettes per day and had had four or more visits during the year (55.2% [CI= $\pm 4.4\%$]).

Smokers — Continued

Reported by: Epidemiology Br, Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion; Div of Health Interview Statistics, National Center for Health Statistics, CDC.

Editorial Note: The findings in this report underscore that physicians and other health-care professionals are not yet maximizing their opportunities to counsel their patients who smoke to quit. These findings are consistent with previous reports indicating that patients who make multiple visits to the doctor—among whom the overall prevalence of health problems is increased—and patients who are heavier smokers are more likely to have received advice from their physician to quit (6). The inability of physicians and other health-care professionals to counsel all smokers to quit may reflect an

TABLE 1. Percentage of adult smokers* who reported receiving advice to quit from a physician or other health-care professional during the preceding 12 months, by number of visits, sex, age group, race/ethnicity, educational level, and socioeconomic status — United States, National Health Interview Survey–Health Promotion and Disease Prevention Supplement, 1991†

Category	No. of health-care professional visits						Any visit	
	1		2–3		≥4		%	(95% CI)
	%	(95% CI§)	%	(95% CI)	%	(95% CI)	%	(95% CI)
Sex								
Male	27.2	(±2.7)	35.8	(±3.4)	43.9	(±3.4)	35.2	(± 1.8)
Female	29.2	(±2.9)	36.6	(±2.7)	46.4	(±2.5)	38.9	(± 1.6)
Age group (yrs)								
18–24	18.0	(±4.8)	21.3	(±4.8)	42.9	(±6.1)	28.2	(± 3.2)
25–44	27.8	(±2.5)	37.6	(±3.0)	42.2	(±2.9)	35.7	(± 1.7)
45–64	34.8	(±4.1)	40.4	(±4.3)	52.0	(±3.8)	43.8	(± 2.5)
≥65	28.5	(±7.6)	36.7	(±7.5)	44.0	(±4.9)	38.8	(± 3.6)
Race/Ethnicity¶								
White, non-Hispanic	29.4	(±2.3)	36.6	(±2.5)	46.5	(±2.3)	38.2	(± 1.5)
Black, non-Hispanic	23.6	(±4.7)	35.9	(±5.9)	42.4	(±5.4)	34.4	(± 3.2)
Hispanic	24.5	(±8.2)	32.0	(±9.6)	36.2	(±8.8)	30.6	(± 5.1)
Asian/Pacific Islander**	—	—	—	—	—	—	34.4	(±12.1)
American Indian/ Alaskan Native**	—	—	—	—	—	—	41.4	(±14.3)
Education††								
Less than high school	27.8	(±4.7)	32.6	(±4.4)	47.8	(±3.9)	37.9	(± 2.7)
High school graduate	28.5	(±2.9)	36.2	(±3.4)	46.5	(±3.0)	37.6	(± 1.9)
Some college	29.2	(±4.2)	37.1	(±4.4)	42.4	(±4.2)	36.3	(± 2.5)
College graduate	25.4	(±4.8)	40.9	(±6.1)	41.2	(±5.5)	36.1	(± 3.3)
Socioeconomic status§§								
At or above poverty level	29.0	(±2.2)	36.9	(±2.4)	45.6	(±2.3)	37.5	(± 1.4)
Below poverty level	26.3	(±5.5)	33.5	(±5.9)	45.5	(±4.5)	37.7	(± 3.2)
Unknown	20.4	(±6.1)	31.4	(±7.9)	43.8	(±7.9)	32.5	(± 4.5)
Total	28.1	(±1.9)	36.2	(±2.2)	45.5	(±2.0)	37.2	(± 1.3)

* Persons aged ≥18 years who reported they had smoked during the preceding 12 months.

† Sample size=8778; excludes 369 respondents with an unknown number of doctor visits.

§ Confidence interval.

¶ Excludes 56 respondents in unknown, multiple, or other racial/ethnic categories.

** Not reported by number of visits because of insufficient sample sizes.

†† Excludes 384 respondents with unknown educational status.

§§ Poverty statistics are based on definitions developed by the Social Security Administration that include a set of income thresholds that vary by family size and composition.

Smokers — Continued

orientation in the United States toward tertiary rather than primary or secondary prevention (4). Despite these findings, the percentage of smokers who have ever been advised by a physician to quit increased from 26.4% in 1976 to 56.1% in 1991 (7; CDC, unpublished data, 1993). In addition, the prevalence of cigarette smoking among physicians has declined rapidly (8); physicians who do not smoke are more likely than those who do to provide advice to quit (6).

Physician self-reported rates of providing cessation advice to smokers are generally higher than those indicated by the NHIS-HPDP and range from 52% to 97% (4). Potential explanations for the differences in rates reported by smokers and physicians are that patients may be unable to recall cessation advice that they actually received, a discrepancy between what physicians and patients consider to be advice to quit smoking, and methodologic considerations related to the phrasing of questions to physicians and to smokers. Two potential limitations of the analysis in this report are: 1) because the smoking status of respondents at the time of the doctor visit was unknown, some respondents may not have been smoking at that time and thus were not candidates for advice; and 2) because the reason for the visit was not included in this analysis, some visits may have been for emergencies and other conditions for which counseling would not have been appropriate.

The difference in receipt of advice to quit among racial/ethnic groups may be influenced by social and cultural factors. For example, among some Hispanics, language barriers may have played a role in the failure to receive advice to quit.

One national health objective for the year 2000 is to increase to 75% the proportion of primary-care providers who routinely advise smokers to quit smoking (objective 3.16) (4). The NHIS-HPDP results indicated that during 1991 approximately 20 million smokers visited a health-care professional and did not receive advice to quit smoking. This finding suggests that, if every primary-care provider offered brief counseling to all of their smoking patients, an additional 1 million persons could be assisted to stop smoking each year (4). This approach is at least as cost-effective per year-of-life saved as other preventive medical practices (3).

The basic components of a brief counseling session include asking each patient about whether they smoke, advising all smokers to stop, and providing assistance to the patient in stopping (e.g., establishing a quit date and providing self-help materials), and arranging follow-up visits for support (9). Use of office reminders can increase both the provision of cessation advice by providers and the rate of quitting by their patients (4,9). When used as an adjunct to behavioral therapy, nicotine replacement is also helpful (10).

The achievement of long-term health and economic benefits of reducing the overall smoking rate in the United States will require continuing efforts to increase smoking-cessation rates. Physicians and other health-care professionals can maximize their effectiveness in encouraging their smoking patients to quit by taking advantage of every opportunity to provide brief but effective counseling. Self-help and other reference materials for smoking cessation, including information to assist doctors in helping their patients to quit, are available from the National Cancer Institute, telephone (800) 422-6237. Additional materials on smoking cessation are available from CDC, telephone (800) 232-1311.

*Smokers — Continued**References*

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3. Cummings SR, Rubin SM, Oster G. The cost-effectiveness of counseling smokers to quit. *JAMA* 1989;261:75–9.
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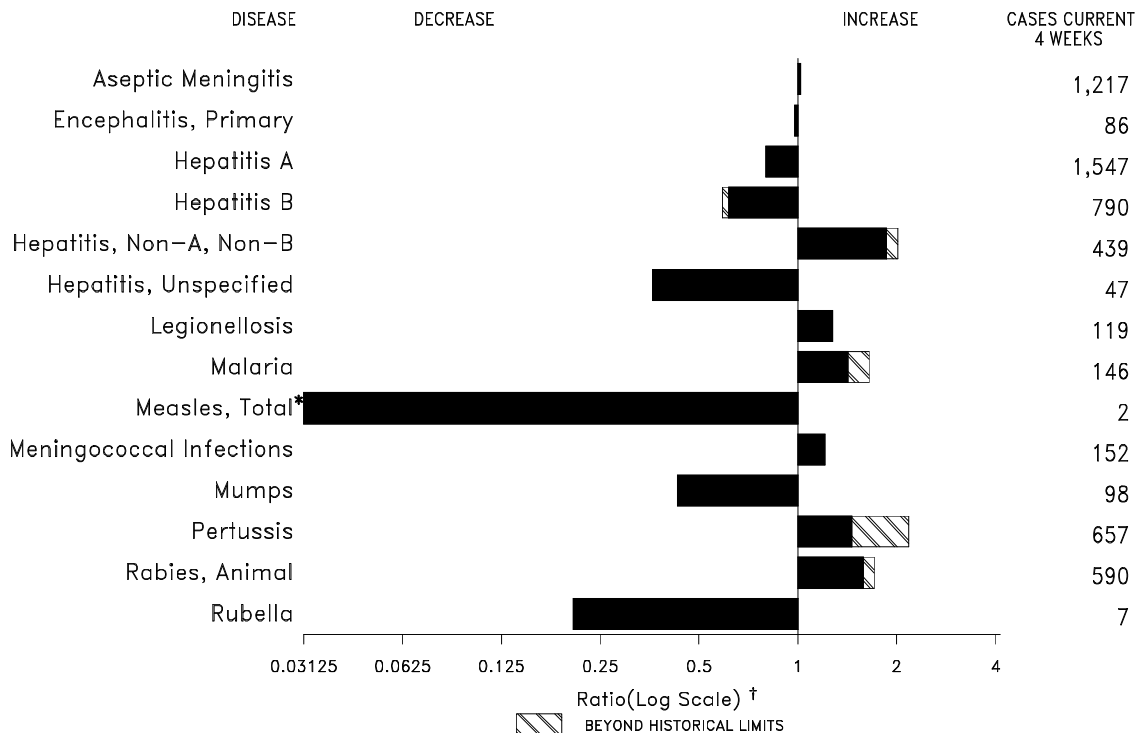
*Current Trends***Mortality Trends for Selected Smoking-Related Cancers and Breast Cancer — United States, 1950–1990**

During 1990, nearly 419,000 deaths (approximately 20% of all deaths) in the United States were attributed to smoking, including more than 150,000 deaths from neoplasms (1). Cigarette smoking remains the single most preventable cause of premature death in the United States (2). Based on current and past smoking patterns, the public health burden of smoking-related cancers is expected to continue during the next several decades. The death rate for smoking-related cancers varies by race; race reflects differing distributions of several risk factors for smoking-related cancers (e.g., high-risk behaviors) and is useful for identifying groups at greatest risk for smoking-related cancers. This report describes mortality trends for cancers (i.e., lung, oral cavity and pharynx, esophagus, and larynx) that are at least 70% attributable to smoking and other tobacco use (2) by race and sex. In addition, because lung cancer recently surpassed breast cancer as the leading cause of cancer deaths among women, death rates for lung cancer are compared with those for breast cancer.

Race- and sex-specific cancer deaths during 1950–1990 were determined using underlying cause-of-death data compiled by CDC's National Center for Health Statistics. Denominators for rates were derived from U.S. census population estimates for intercensal years and census enumerations for decennial years. Rates were standardized to the 1970 age distribution of the U.S. population and are presented for whites and

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FIGURE I. Notifiable disease reports, comparison of 4-week totals ending November 6, 1993, with historical data — United States



*The large apparent decrease in reported cases of measles(total) reflects dramatic fluctuations in the historical baseline. (Ratio (log scale) for week forty-four is 0.00541).

† Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary — cases of specified notifiable diseases, United States, cumulative, week ending November 6, 1993 (44th Week)

	Cum. 1993		Cum. 1993
AIDS*	83,485	Measles: imported	56
Anthrax	-	indigenous	221
Botulism: Foodborne	16	Plague	8
Infant	56	Poliomyelitis, Paralytic [§]	-
Other	2	Psittacosis	48
Brucellosis	79	Rabies, human	1
Cholera	17	Syphilis, primary & secondary	21,593
Congenital rubella syndrome	6	Syphilis, congenital, age < 1 year [¶]	1,493
Diphtheria	-	Tetanus	38
Encephalitis, post-infectious	143	Toxic shock syndrome	204
Gonorrhea	322,423	Trichinosis	14
<i>Haemophilus influenzae</i> (invasive disease) [†]	996	Tuberculosis	18,053
Hansen Disease	156	Tularemia	112
Leptospirosis	37	Typhoid fever	302
Lyme Disease	6,423	Typhus fever, tickborne (RMSF)	429

*Updated monthly; last update October 2, 1993.

[†]Of 938 cases of known age, 308 (33%) were reported among children less than 5 years of age.

[§]Two (2) cases of suspected poliomyelitis have been reported in 1993; 4 of the 5 suspected cases with onset in 1992 were confirmed; the confirmed cases were vaccine associated.

[¶]Reports through second quarter of 1993.

TABLE II. Cases of selected notifiable diseases, United States, weeks ending November 6, 1993, and October 31, 1992 (44th Week)

Reporting Area	AIDS*	Aseptic Meningitis	Encephalitis		Gonorrhea		Hepatitis (Viral), by type				Legionellosis	Lyme Disease
			Primary	Post-infectious			A	B	NA,NB	Unspecified		
			Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1992	Cum. 1993	Cum. 1993		
UNITED STATES	83,485	10,650	753	143	322,423	415,573	18,287	10,225	4,280	532	1,071	6,423
NEW ENGLAND	4,183	353	15	8	6,924	8,678	417	421	473	13	74	1,619
Maine	118	40	2	-	74	84	15	10	4	-	5	11
N.H.	83	46	-	2	65	98	33	101	388	3	6	59
Vt.	58	41	4	-	22	23	7	8	3	-	2	5
Mass.	2,210	144	7	4	2,613	3,132	198	223	70	10	43	163
R.I.	274	82	2	2	357	575	68	20	8	-	18	261
Conn.	1,440	-	-	-	3,793	4,766	96	59	-	-	-	1,120
MID. ATLANTIC	20,227	811	55	9	38,751	47,809	930	1,140	347	6	208	3,517
Upstate N.Y.	3,118	461	39	6	7,678	9,722	386	372	235	1	71	2,112
N.Y. City	10,941	104	1	-	10,337	17,193	177	121	1	-	3	3
N.J.	3,909	-	-	-	5,097	6,426	239	345	80	-	29	647
Pa.	2,259	246	15	3	15,639	14,468	128	302	31	5	105	755
E.N. CENTRAL	6,686	1,842	169	27	62,605	78,038	2,012	1,177	504	13	277	86
Ohio	1,286	657	61	4	19,139	23,608	250	160	35	-	143	36
Ind.	718	205	20	11	6,720	7,575	535	201	14	1	51	22
Ill.	2,423	407	36	3	16,290	24,937	682	220	62	5	17	11
Mich.	1,606	535	43	9	15,364	18,237	180	335	357	7	55	17
Wis.	653	38	9	-	5,092	3,681	365	261	36	-	11	-
W.N. CENTRAL	2,694	674	33	10	17,105	22,307	1,985	559	153	16	85	179
Minn.	579	92	12	-	2,141	2,633	376	62	10	4	2	88
Iowa	159	143	5	2	1,259	1,424	49	32	8	4	14	8
Mo.	1,466	210	2	8	9,779	12,512	1,236	394	112	8	23	38
N. Dak.	2	12	3	-	38	65	63	-	-	-	1	2
S. Dak.	22	19	6	-	193	152	16	-	-	-	-	-
Nebr.	164	25	1	-	476	1,418	174	17	8	-	38	4
Kans.	302	173	4	-	3,219	4,103	71	54	15	-	7	39
S. ATLANTIC	17,732	2,210	202	57	85,511	123,859	1,054	1,938	673	81	194	812
Del.	308	68	3	-	1,297	1,514	10	142	136	-	12	388
Md.	2,039	216	22	-	14,137	13,747	137	235	23	5	44	142
D.C.	1,181	33	-	-	3,998	5,223	11	38	1	-	14	2
Va.	1,273	278	37	7	10,179	13,568	123	121	32	36	8	64
W. Va.	66	32	101	-	570	727	21	33	29	-	4	48
N.C.	960	226	29	-	21,069	21,264	75	258	65	-	25	79
S.C.	1,269	28	-	-	9,153	9,515	17	46	4	1	19	9
Ga.	2,328	156	1	-	4,660	34,709	99	243	173	1	36	45
Fla.	8,308	1,173	9	50	20,448	23,592	561	822	210	38	32	35
E.S. CENTRAL	2,179	676	37	7	37,028	41,830	257	1,145	855	4	39	26
Ky.	275	291	13	6	4,167	4,066	96	71	14	-	15	7
Tenn.	897	160	8	-	10,307	13,211	79	975	827	3	16	16
Ala.	611	156	2	-	13,653	14,648	50	93	4	1	2	3
Miss.	396	69	14	1	8,901	9,905	32	6	10	-	6	-
W.S. CENTRAL	8,451	1,230	65	2	39,633	44,924	2,093	1,459	297	150	29	62
Ark.	327	56	1	-	7,953	6,399	46	52	4	2	4	2
La.	1,028	78	6	-	10,149	12,438	70	184	128	4	3	2
Okla.	648	1	7	-	3,423	4,729	157	278	105	10	12	22
Tex.	6,448	1,095	51	2	18,108	21,358	1,820	945	60	134	10	36
MOUNTAIN	3,375	647	29	5	9,330	10,777	3,491	538	308	71	62	20
Mont.	29	-	-	1	67	102	68	7	3	-	5	-
Idaho	58	11	-	-	145	97	241	60	-	3	1	2
Wyo.	33	6	-	-	71	49	12	27	98	-	6	9
Colo.	1,106	205	15	-	2,964	3,879	771	64	49	39	7	-
N. Mex.	267	118	4	2	811	803	331	195	99	3	5	2
Ariz.	1,136	170	8	-	3,374	3,755	1,228	76	13	12	13	-
Utah	231	62	1	1	305	286	712	51	30	13	10	2
Nev.	515	75	1	1	1,593	1,806	128	58	16	1	15	5
PACIFIC	17,958	2,207	148	18	25,536	37,351	6,048	1,848	670	178	103	102
Wash.	1,337	-	1	-	3,214	3,448	688	199	165	9	10	4
Oreg.	680	-	-	-	991	1,411	83	28	13	1	-	2
Calif.	15,586	2,071	142	18	20,306	31,467	4,529	1,593	479	165	85	95
Alaska	58	20	4	-	530	573	687	9	10	-	-	-
Hawaii	297	116	1	-	495	452	61	19	3	3	8	1
Guam	-	2	-	-	48	50	2	2	-	3	-	-
P.R.	2,338	52	-	-	441	192	72	339	81	2	-	-
V.I.	40	-	-	-	79	87	-	4	-	-	-	-
Amer. Samoa	-	-	-	-	40	43	18	-	-	-	-	-
C.N.M.I.	-	3	1	-	65	68	-	1	-	1	-	-

N: Not notifiable

U: Unavailable

C.N.M.I.: Commonwealth of Northern Mariana Islands

*Updated monthly; last update October 2, 1993.

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending November 6, 1993, and October 31, 1992 (44th Week)

Reporting Area	Measles (Rubeola)						Menin- gococcal infections	Mumps		Pertussis			Rubella		
	Malaria	Indigenous		Imported*		Total		1993	Cum. 1993	1993	Cum. 1993	Cum. 1992	1993	Cum. 1993	Cum. 1992
		Cum. 1993	1993	Cum. 1993	1993										
UNITED STATES	1,024	1	221	-	56	2,185	2,008	51	1,389	112	4,871	2,580	4	181	144
NEW ENGLAND	81	-	58	-	6	65	108	-	9	5	664	204	-	2	6
Maine	4	-	2	-	-	4	8	-	-	-	19	11	-	1	1
N.H.	6	-	2	-	-	13	14	-	-	1	237	49	-	-	-
Vt.	1	-	30	-	1	-	7	-	-	-	79	9	-	-	-
Mass.	41	-	14	-	4	21	59	-	2	-	253	96	-	1	-
R.I.	2	-	1	-	1	21	1	-	2	-	6	2	-	-	4
Conn.	27	-	9	-	-	6	19	-	5	4	70	37	-	-	1
MID. ATLANTIC	202	-	11	-	6	206	248	1	101	5	635	164	1	61	10
Upstate N.Y.	113	-	-	-	2	111	110	1	36	5	301	98	1	17	7
N.Y. City	24	-	5	-	2	56	19	-	2	-	7	16	-	22	-
N.J.	41	-	6	-	2	39	38	-	12	-	51	50	-	16	3
Pa.	24	-	-	-	-	-	81	-	51	-	276	-	-	6	-
E.N. CENTRAL	64	-	19	-	7	60	313	2	207	14	1,095	585	-	7	9
Ohio	14	-	5	-	3	6	89	-	68	8	411	91	-	1	-
Ind.	3	-	1	-	-	20	50	-	5	-	117	39	-	2	-
Ill.	33	-	5	-	-	17	88	-	54	-	267	45	-	1	8
Mich.	14	-	5	-	1	13	53	2	65	6	100	12	-	2	1
Wis.	-	-	3	-	3	4	33	-	15	-	200	398	-	1	-
W.N. CENTRAL	29	-	1	-	2	13	138	-	47	24	496	199	-	1	8
Minn.	9	-	-	-	-	12	14	-	2	24	296	33	-	-	-
Iowa	3	-	-	-	-	1	24	-	9	-	35	7	-	-	3
Mo.	7	-	1	-	-	-	50	-	28	-	124	97	-	1	1
N. Dak.	2	-	-	-	-	-	3	-	5	-	3	14	-	-	-
S. Dak.	2	-	-	-	-	-	6	-	-	-	8	14	-	-	-
Nebr.	4	-	-	-	-	-	14	-	2	-	14	10	-	-	-
Kans.	2	-	-	-	2	-	27	-	1	-	16	24	-	-	4
S. ATLANTIC	262	1	18	-	13	127	376	33	419	35	557	148	-	9	19
Del.	2	-	1	-	-	1	13	1	6	-	14	7	-	2	-
Md.	36	-	-	-	4	16	49	4	74	1	126	30	-	2	5
D.C.	11	-	-	-	-	-	5	-	1	-	12	1	-	-	-
Va.	31	-	-	-	4	15	43	3	29	1	59	10	-	-	-
W. Va.	2	-	-	-	-	-	12	-	16	-	8	9	-	-	1
N.C.	95	-	-	-	-	24	61	23	222	27	152	35	-	-	-
S.C.	7	-	-	-	-	29	31	-	15	3	68	10	-	-	7
Ga.	20	1	1	-	-	3	87	1	16	2	35	14	-	-	-
Fla.	58	-	16	-	5	39	75	1	40	1	83	32	-	5	6
E.S. CENTRAL	26	-	1	-	-	464	129	-	47	-	263	28	-	-	1
Ky.	4	-	-	-	-	447	21	-	-	-	29	1	-	-	-
Tenn.	10	-	-	-	-	-	35	-	13	-	165	8	-	-	1
Ala.	7	-	1	-	-	-	42	-	22	-	58	16	-	-	-
Miss.	5	-	-	-	-	17	31	-	12	-	11	3	-	-	-
W.S. CENTRAL	28	-	8	-	3	1,102	199	12	211	3	155	203	-	17	7
Ark.	3	-	-	-	-	-	19	-	4	-	10	15	-	-	-
La.	6	-	1	-	-	-	35	-	17	-	12	9	-	1	-
Okla.	6	-	-	-	-	11	27	-	11	3	91	28	-	1	-
Tex.	13	-	7	-	3	1,091	118	12	179	-	42	151	-	15	7
MOUNTAIN	33	-	5	-	1	35	157	1	61	11	374	369	-	10	8
Mont.	2	-	-	-	-	-	13	-	-	1	9	7	-	-	-
Idaho	1	-	-	-	-	-	13	-	5	1	113	41	-	2	1
Wyo.	-	-	-	-	-	1	3	-	2	-	1	-	-	-	-
Colo.	20	-	2	-	1	29	32	-	16	1	125	76	-	1	2
N. Mex.	5	-	-	-	-	2	4	N	N	2	38	96	-	-	-
Ariz.	1	-	2	-	-	3	72	-	13	-	48	114	-	2	2
Utah	1	-	-	-	-	-	13	-	4	6	36	33	-	4	1
Nev.	3	-	1	-	-	-	7	1	21	-	4	2	-	1	2
PACIFIC	299	-	100	-	18	113	340	2	287	15	632	680	3	74	76
Wash.	28	-	-	-	-	11	65	-	10	4	65	192	-	-	8
Oreg.	4	-	-	-	-	3	23	N	N	2	24	40	-	3	1
Calif.	258	-	89	-	7	58	229	2	246	9	526	409	3	43	44
Alaska	3	-	-	-	2	9	13	-	9	-	5	14	-	1	-
Hawaii	6	-	11	-	9	32	10	-	22	-	12	25	-	27	23
Guam	1	-	2	-	-	10	2	-	8	-	-	-	-	-	3
P.R.	-	-	241	-	-	411	8	-	3	-	9	12	-	-	1
V.I.	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-
Amer. Samoa	-	-	1	-	-	-	-	-	1	-	2	6	-	-	-
C.N.M.I.	-	-	-	-	1	2	-	-	13	-	1	1	-	-	-

*For measles only, imported cases include both out-of-state and international importations.

N: Not notifiable

U: Unavailable

† International

§ Out-of-state

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending November 6, 1993, and October 31, 1992 (44th Week)

Reporting Area	Syphilis (Primary & Secondary)		Toxic-Shock Syndrome	Tuberculosis		Tula- remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1993	Cum. 1992	Cum. 1993	Cum. 1993	Cum. 1992	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993
UNITED STATES	21,593	28,825	204	18,053	19,241	112	302	429	7,432
NEW ENGLAND	358	570	15	438	435	-	28	7	1,377
Maine	5	5	3	32	19	-	-	-	-
N.H.	29	35	5	9	16	-	2	-	119
Vt.	1	1	1	5	6	-	-	-	26
Mass.	114	282	5	236	241	-	20	7	580
R.I.	15	35	1	48	31	-	-	-	-
Conn.	194	212	-	108	122	-	6	-	652
MID. ATLANTIC	1,973	3,960	32	4,031	4,536	1	63	26	2,672
Upstate N.Y.	181	308	16	507	602	1	17	6	1,983
N.Y. City	959	2,223	1	2,285	2,599	-	26	-	-
N.J.	268	479	-	681	771	-	14	10	379
Pa.	565	950	15	558	564	-	6	10	310
E.N. CENTRAL	3,120	4,339	43	1,625	1,914	4	37	14	102
Ohio	991	705	12	270	280	-	7	9	6
Ind.	287	241	2	189	161	1	1	1	10
Ill.	937	1,923	8	696	985	2	21	2	20
Mich.	504	826	21	394	412	1	7	2	17
Wis.	401	644	-	76	76	-	1	-	49
W.N. CENTRAL	1,338	1,298	12	422	459	38	2	22	305
Minn.	61	88	2	59	133	-	-	1	40
Iowa	58	46	5	45	35	-	-	7	65
Mo.	1,097	978	2	216	201	15	2	10	21
N. Dak.	1	1	-	5	8	-	-	-	51
S. Dak.	1	-	-	12	20	17	-	3	41
Nebr.	10	24	-	18	20	3	-	-	10
Kans.	110	161	3	67	42	3	-	1	77
S. ATLANTIC	5,690	7,856	23	3,469	3,604	3	44	200	1,790
Del.	90	182	1	40	43	-	1	1	126
Md.	323	546	1	330	328	-	8	11	528
D.C.	287	332	-	141	91	-	-	-	16
Va.	540	622	7	356	304	-	4	10	341
W. Va.	13	17	-	64	76	-	-	6	80
N.C.	1,599	2,158	3	431	462	2	3	119	91
S.C.	835	1,071	-	341	335	-	-	10	140
Ga.	953	1,513	2	649	748	-	3	36	419
Fla.	1,050	1,415	9	1,117	1,217	1	25	7	49
E.S. CENTRAL	3,319	3,660	11	1,367	1,169	4	7	54	189
Ky.	306	145	3	318	327	1	2	8	18
Tenn.	827	1,006	4	424	283	2	2	32	72
Ala.	711	1,258	2	423	345	1	3	4	99
Miss.	1,475	1,251	2	202	214	-	-	10	-
W.S. CENTRAL	5,008	5,288	2	1,998	2,258	43	7	91	541
Ark.	651	748	-	148	180	26	-	7	37
La.	2,184	2,213	-	-	155	-	1	1	6
Okla.	334	348	2	137	133	13	1	79	63
Tex.	1,839	1,979	-	1,713	1,790	4	5	4	435
MOUNTAIN	205	303	13	431	501	13	10	15	158
Mont.	1	7	-	15	-	5	-	2	22
Idaho	-	1	1	12	21	-	-	-	6
Wyo.	8	3	-	4	-	3	-	10	19
Colo.	60	54	2	32	60	1	5	3	26
N. Mex.	24	38	1	59	64	1	2	-	9
Ariz.	91	151	1	197	218	-	2	-	57
Utah	9	8	6	28	65	2	1	-	4
Nev.	12	41	2	84	73	1	-	-	15
PACIFIC	582	1,551	53	4,272	4,365	6	104	-	298
Wash.	53	74	7	226	257	1	6	-	-
Oreg.	37	41	-	83	115	2	1	-	-
Calif.	478	1,424	46	3,701	3,714	3	94	-	280
Alaska	8	4	-	48	51	-	-	-	18
Hawaii	6	8	-	214	228	-	3	-	-
Guam	2	3	-	31	58	-	1	-	-
P.R.	443	290	-	185	200	-	-	-	40
V.I.	37	60	-	2	3	-	-	-	-
Amer. Samoa	-	-	-	2	-	-	1	-	-
C.N.M.I.	6	6	-	30	50	-	-	-	-

U: Unavailable

TABLE III. Deaths in 121 U.S. cities,* week ending
November 6, 1993 (44th Week)

Reporting Area	All Causes, By Age (Years)						P&I [†] Total	Reporting Area	All Causes, By Age (Years)						P&I [†] Total
	All Ages	≥65	45-64	25-44	1-24	<1			All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	681	505	94	55	16	11	57	S. ATLANTIC	1,302	805	282	163	24	26	72
Boston, Mass.	186	126	34	19	2	5	24	Atlanta, Ga.	139	81	30	21	1	6	4
Bridgeport, Conn.	45	35	7	1	2	-	2	Baltimore, Md.	198	122	41	29	5	1	20
Cambridge, Mass.	23	22	-	1	-	-	3	Charlotte, N.C.	98	65	20	12	1	-	5
Fall River, Mass.	24	23	-	-	1	-	1	Jacksonville, Fla.	114	68	28	12	3	3	8
Hartford, Conn.	103	71	16	7	5	4	5	Miami, Fla.	124	78	28	14	1	3	-
Lowell, Mass.	25	23	-	2	-	-	1	Norfolk, Va.	62	35	16	8	3	-	4
Lynn, Mass.	15	11	4	-	-	-	2	Richmond, Va.	75	45	22	5	3	-	2
New Bedford, Mass.	27	21	3	2	-	1	1	Savannah, Ga.	73	45	18	9	-	1	7
New Haven, Conn.	45	30	2	8	4	1	2	St. Petersburg, Fla.	78	58	9	8	-	3	1
Providence, R.I.	54	43	6	5	-	-	2	Tampa, Fla.	173	110	33	20	4	4	13
Somerville, Mass.	2	2	-	-	-	-	-	Washington, D.C.	145	81	31	25	3	5	8
Springfield, Mass.	39	23	10	5	1	-	7	Wilmington, Del.	23	17	6	-	-	-	-
Waterbury, Conn.	35	27	4	4	-	-	-	E.S. CENTRAL	825	542	171	54	29	26	53
Worcester, Mass.	58	48	8	1	1	-	7	Birmingham, Ala.	141	90	28	9	6	8	3
MID. ATLANTIC	2,516	1,633	486	265	79	53	119	Chattanooga, Tenn.	100	69	18	5	5	3	7
Albany, N.Y.	33	24	6	2	-	1	2	Knoxville, Tenn.	66	46	15	4	1	-	4
Allentown, Pa.	36	29	6	1	-	-	1	Lexington, Ky.	58	38	16	2	2	-	5
Buffalo, N.Y.	100	62	30	4	3	1	1	Memphis, Tenn.	189	119	42	11	7	10	19
Camden, N.J.	47	28	9	3	3	4	3	Mobile, Ala.	94	66	14	8	1	4	7
Elizabeth, N.J.	32	25	3	3	1	-	2	Montgomery, Ala.	46	35	7	2	1	1	-
Erie, Pa.§	41	30	8	2	-	1	-	Nashville, Tenn.	131	79	31	13	6	-	8
Jersey City, N.J.	42	24	13	5	-	-	1	W.S. CENTRAL	1,374	829	277	158	67	40	83
New York City, N.Y.	1,367	860	267	170	41	29	61	Austin, Tex.	69	36	21	9	3	-	3
Newark, N.J.	69	22	18	19	6	4	3	Baton Rouge, La.	42	26	4	8	1	3	2
Paterson, N.J.	25	16	2	2	3	2	3	Corpus Christi, Tex.	50	30	12	6	1	1	1
Philadelphia, Pa.	312	199	68	30	10	5	17	Dallas, Tex.	185	112	38	19	13	3	3
Pittsburgh, Pa.§	53	34	9	7	2	1	1	El Paso, Tex.	87	47	18	11	5	6	9
Reading, Pa.	11	7	3	1	-	-	1	Ft. Worth, Tex.	91	57	16	9	6	3	6
Rochester, N.Y.	142	112	17	6	5	2	13	Houston, Tex.	330	193	63	42	18	14	36
Schenectady, N.Y.	27	23	3	1	-	-	1	Little Rock, Ark.	52	28	15	4	3	2	4
Scranton, Pa.§	36	33	-	1	1	1	2	New Orleans, La.	127	76	18	22	7	1	-
Syracuse, N.Y.	83	59	15	5	2	2	6	San Antonio, Tex.	194	120	44	16	8	6	10
Trenton, N.J.	16	11	4	1	2	-	-	Shreveport, La.	50	40	6	3	-	1	5
Utica, N.Y.	15	11	1	1	2	-	-	Tulsa, Okla.	97	64	22	9	2	-	4
Yonkers, N.Y.	29	24	4	1	-	-	1	MOUNTAIN	824	568	140	68	26	22	63
E.N. CENTRAL	2,362	1,440	451	252	157	62	131	Albuquerque, N.M.	109	71	17	15	3	3	6
Akron, Ohio	38	29	5	1	3	-	-	Colo. Springs, Colo.	49	36	8	2	2	1	6
Canton, Ohio	32	23	8	1	-	-	-	Denver, Colo.	112	66	31	6	3	6	6
Chicago, Ill.	723	316	147	137	101	22	36	Las Vegas, Nev.	95	67	15	6	5	2	5
Cincinnati, Ohio	119	76	24	5	7	7	12	Ogden, Utah	30	24	4	1	-	1	6
Cleveland, Ohio	137	102	20	10	2	3	4	Phoenix, Ariz.	167	111	30	20	3	3	10
Columbus, Ohio	179	112	45	15	3	4	12	Pueblo, Colo.	38	33	3	2	-	-	2
Dayton, Ohio	134	95	29	6	4	-	13	Salt Lake City, Utah	116	78	14	12	7	5	18
Detroit, Mich.	211	114	47	27	17	6	2	Tucson, Ariz.	108	82	18	4	3	1	4
Evansville, Ind.	44	27	13	2	-	2	2	PACIFIC	1,835	1,268	310	161	53	40	125
Fort Wayne, Ind.	57	42	9	2	-	4	5	Berkeley, Calif.	16	12	1	1	-	2	1
Gary, Ind.	21	14	2	3	2	-	2	Fresno, Calif.	72	50	15	4	3	-	9
Grand Rapids, Mich.	38	29	5	2	-	2	8	Glendale, Calif.	33	25	7	1	-	-	6
Indianapolis, Ind.	204	144	36	15	7	2	17	Honolulu, Hawaii	80	63	9	6	1	1	9
Madison, Wis.	34	22	6	3	2	1	1	Long Beach, Calif.	87	59	13	6	5	4	6
Milwaukee, Wis.	125	91	18	13	2	1	12	Los Angeles, Calif.	426	281	71	55	12	4	18
Peoria, Ill.	46	32	8	1	2	3	1	Pasadena, Calif.	36	29	4	2	1	-	3
Rockford, Ill.	54	40	7	5	-	2	3	Portland, Ore.	119	93	11	11	3	1	6
South Bend, Ind.	24	15	7	-	2	-	1	Sacramento, Calif.	139	92	27	9	4	7	8
Toledo, Ohio	83	68	10	3	1	1	-	San Diego, Calif.	201	143	29	16	9	4	20
Youngstown, Ohio	59	49	5	1	2	2	2	San Francisco, Calif.	146	85	33	22	4	2	5
W.N. CENTRAL	750	556	111	48	15	20	27	San Jose, Calif.	184	128	32	8	6	10	19
Des Moines, Iowa	76	59	11	4	2	-	5	Santa Cruz, Calif.	28	23	4	1	-	-	1
Duluth, Minn.	23	19	3	-	-	1	3	Seattle, Wash.	136	86	30	12	4	4	3
Kansas City, Kans.	23	16	5	2	-	-	1	Spokane, Wash.	56	41	12	3	-	-	8
Kansas City, Mo.	102	75	16	9	1	1	5	Tacoma, Wash.	76	58	12	4	1	1	3
Lincoln, Nebr.	32	26	4	1	-	1	1	TOTAL	12,469 [†]	8,146	2,322	1,224	466	300	730
Minneapolis, Minn.	167	123	22	10	3	9	4								
Omaha, Nebr.	85	65	12	4	2	2	2								
St. Louis, Mo.	128	92	18	9	6	3	-								
St. Paul, Minn.	71	52	14	3	-	2	6								
Wichita, Kans.	43	29	6	6	1	1	-								

*Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

[†]Pneumonia and influenza.

[‡]Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

[§]Total includes unknown ages.

U: Unavailable.

Smoking-Related Cancers — Continued

blacks only because numbers for other racial/ethnic groups were too small for meaningful analysis.

From 1950 to 1990, the overall age-adjusted death rate for lung cancer increased from 13.0 to 50.3 per 100,000 population; for men and women, death rates increased approximately fourfold and sevenfold, respectively (Table 1). Death rates for men were consistently higher than those for women. The rate of increase in lung cancer mortality was higher for black men than for white men, and death rates for black men first surpassed those for white men in 1963. The rate of increase for men began to slow during the early 1980s, while the rate for women continued to increase sharply. The rate for lung cancer first surpassed that for breast cancer among white women in 1986 (27.5 versus 27.3, respectively) and among black women in 1990 (32.0 versus 31.7, respectively) (Figure 1).

From 1950 to 1990, the overall age-adjusted death rate for cancers of the oral cavity and pharynx decreased from 4.0 to 3.0 (Table 1). For white men, the rate decreased. However, for black men, the oral cancer death rate increased rapidly from 1950 through 1980 and subsequently decreased slightly; from 1980 through 1990, the rate was approximately twice as high as that for white men. Oral cancer death rates for women increased slightly over the 41-year period.

The overall age-adjusted death rate for cancer of the esophagus increased from 2.9 in 1950 to 3.5 in 1990 (Table 1). For white men, the rate increased 20%; for black men, the rate increased twofold during 1950–1980, then decreased slightly in 1990. The rate for black men was approximately three times higher than that for white men from the mid-1960s through 1990. During 1950–1990, the esophageal cancer death rate remained stable for white women and doubled for black women.

The overall age-adjusted death rate for cancer of the larynx remained stable from 1950 through 1990. Death rates remained stable for whites; however, rates increased 260% for black men and approximately 233% for black women.

Mortality from lung cancer has a substantial impact on the overall cancer death rate in the United States. From 1950 to 1990, the age-adjusted death rate for all cancers increased 10.8%, from 157.0 to 174.0. If lung cancer deaths had been excluded, however, the cancer death rate would have declined 14%, from 144.0 in 1950 to 123.7 in 1990.

Reported by: CC Boring, TS Squires, T Tong, CW Heath, MD, American Cancer Society. Div of Cancer Prevention and Control, and Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.

Editorial Note: The findings in this report indicate that, in the United States, the overall age-adjusted death rate for lung cancer increased nearly fourfold from 1950 to 1990; in contrast, the rates for three other smoking-related cancers (i.e., cancer of the oral cavity and pharynx, esophagus, and larynx) remained relatively stable. In addition, death rates for these three cancers were substantially lower than that for lung cancer.

The continued increase in lung cancer death rates primarily reflects patterns of cigarette smoking throughout this century (2–4). For white men born during 1911–1930, smoking prevalence peaked at approximately 67% in the 1940s and 1950s (4). Smoking prevalences for birth cohorts for later years peaked at lower levels, and overall prevalence among persons aged ≥ 18 years decreased sharply after 1960, reaching 27.4% in 1991 (4,5). For black men, smoking prevalence, while declining to 35.0% in 1991, has been higher than that for white men since 1965 (5). For women, smoking

Smoking-Related Cancers — Continued

TABLE 1. Age-adjusted death rates* for selected smoking-related cancers, by sex and race† — United States, selected years, 1950–1990

Type of cancer	1950	1955	1960	1965	1970	1975	1980	1985	1990
LUNG[§]									
Male									
White	21.9	30.4	38.2	47.3	57.7	64.8	70.4	71.8	73.6
Black	15.7	24.3	37.9	47.8	66.1	80.6	93.3	97.9	107.7
Total [¶]	21.6	30.0	38.2	47.4	58.2	65.8	71.9	73.4	75.6
Female									
White	4.9	5.1	5.6	7.5	11.1	15.5	21.1	26.8	32.1
Black	3.8	5.2	5.6	7.2	11.7	15.4	21.6	25.7	32.0
Total [¶]	4.8	5.1	5.6	7.5	11.1	15.4	21.0	26.4	31.8
Total[¶]	13.0	17.1	21.0	25.8	32.1	37.4	42.7	46.4	50.3
ORAL CAVITY AND PHARYNX**									
Male									
White	6.6	6.2	6.0	5.7	6.0	5.6	5.1	4.5	4.2
Black	4.8	4.7	7.4	6.4	7.6	8.7	11.0	9.4	9.8
Total [¶]	6.5	6.1	5.9	5.8	6.1	5.9	5.6	4.9	4.7
Female									
White	1.5	1.5	1.6	1.5	1.8	1.9	1.9	1.7	1.6
Black	1.9	1.6	1.4	1.9	2.2	2.2	2.4	2.2	2.2
Total [¶]	1.6	1.5	1.6	1.6	1.9	2.0	1.9	1.8	1.7
Total[¶]	4.0	3.7	3.7	3.5	3.7	3.7	3.5	3.2	3.0
ESOPHAGUS^{††}									
Male									
White	4.4	4.5	4.3	4.4	4.2	4.5	4.6	4.7	5.3
Black	7.6	7.9	10.0	11.9	12.6	15.0	16.1	15.1	14.4
Total [¶]	4.7	4.7	4.8	5.0	4.9	5.4	5.6	5.6	6.0
Female									
White	1.2	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2
Black	1.9	2.0	2.6	2.9	3.1	3.7	4.4	3.7	3.9
Total [¶]	1.2	1.2	1.2	1.3	1.3	1.4	1.5	1.4	1.5
Total[¶]	2.9	2.9	2.9	3.0	2.9	3.2	3.3	3.3	3.5
LARYNX^{§§}									
Male									
White	2.6	2.7	2.7	2.7	2.9	2.7	2.5	2.3	2.3
Black	1.9	2.4	3.2	3.3	3.8	4.4	5.0	4.9	5.0
Total [¶]	2.6	2.7	2.8	2.7	2.9	2.8	2.7	2.5	2.5
Female									
White	0.3	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4
Black	0.3	0.3	0.4	0.4	0.5	0.7	0.8	0.8	1.0
Total [¶]	0.3	0.2	0.2	0.3	0.3	0.4	0.5	0.5	0.5
Total[¶]	1.4	1.4	1.4	1.4	1.5	1.5	1.4	1.3	1.3

* Per 100,000 population, standardized to the 1970 age distribution of the U.S. population.

† Estimates are presented for whites and blacks only because numbers for other racial/ethnic groups were too small for meaningful analysis.

§ Includes malignancies of the lung, trachea, and bronchus. *International Classification of Diseases, Sixth Revision* (ICD-6; 1950–1957), codes 162, 163; *Seventh Revision* (ICD-7; 1958–1967), codes 162, 163; *Eighth Revision, Adapted for Use in the United States* (ICDA-8; 1968–1978), code 162; *Ninth Revision* (ICD-9; 1979–1990), code 162.

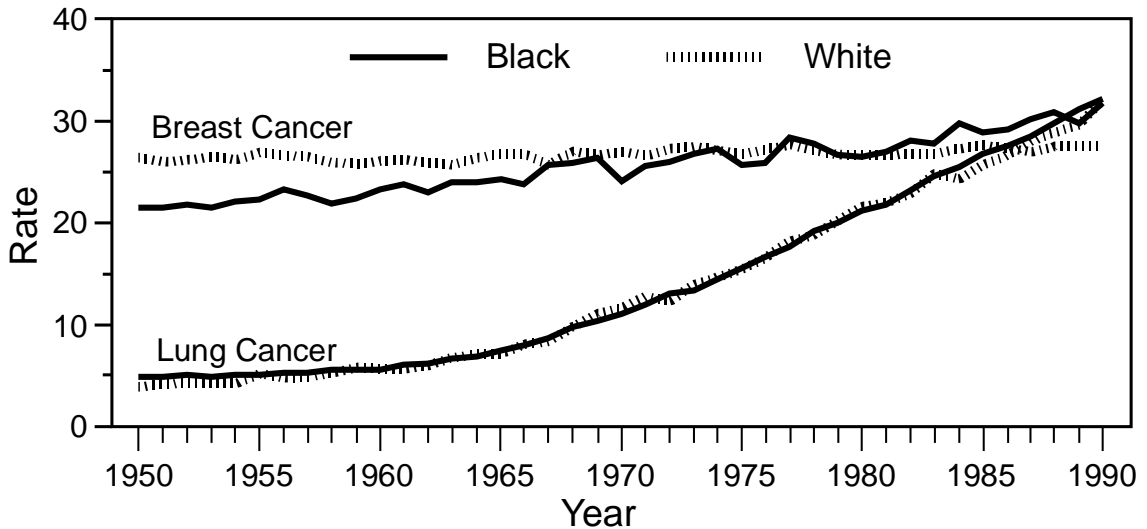
¶ Includes races other than black and white.

** Includes malignancies of the lip, oral cavity, and pharynx (ICD-6 and ICD-7, codes 140–148; ICDA-8 and ICD-9, codes 140–149).

†† ICD-6, ICD-7, ICDA-8, and ICD-9, code 150.

§§ ICD-6, ICD-7, ICDA-8, and ICD-9, code 161.

Smoking-Related Cancers — Continued

FIGURE 1. Age-adjusted lung and breast cancer death rates* for women, by race — United States, 1950–1990

*Per 100,000 women, standardized to the 1970 age distribution of the U.S. population.

prevalence peaked in the 1960s at approximately 44% for the 1931–1940 birth cohort and has declined since; in 1991, prevalence was 23.7% for white women and 24.4% for black women (4,5). The declines in smoking prevalences have resulted in a stabilization or decline in the lung cancer death rate for men aged <55 years and for women aged <45 years, respectively (6). Overall, the lung cancer death rate for men is expected to peak before the year 2000, then begin to decline (6); for women, the rate will probably continue to increase into the next century (6).

Lung cancer is the principal cause of cancer deaths for both sexes (6), and smoking accounts for approximately 87% of lung cancer deaths (2). Although the annual incidence of breast cancer exceeds lung cancer among both black and white women, the 5-year survival rate for lung cancer (13.0%) is substantially lower than for breast cancer (78.0%), accounting for the higher death rate for lung cancer (6).

Tobacco and alcohol use are the major determinants of cancers of the oral cavity and pharynx, esophagus, and larynx (3,7,8). For these cancers, incidence and death rates for smokers are lower than those for lung cancer. These variations may be at least partially explained by differential sites of deposit of carcinogens in tobacco smoke: up to 90% of aerosol particles in inhaled tobacco smoke are deposited in the lung (9). Differences in cancer rates by sex and by race can be at least partially attributed to variations in tobacco and alcohol use and differences in consumption of fruits and vegetables (3,7,8).

Cigar or pipe use increases the risk for cancers of the lung, oral cavity and pharynx, esophagus, and larynx (2). However, the prevalence of cigar and pipe smoking among both white and black men has decreased substantially since 1970 (CDC, unpublished data). Similarly, snuff and chewing tobacco use among men aged ≥ 50 years declined during 1970–1985 (10). Although the prevalence of snuff and chewing tobacco use

Smoking-Related Cancers — Continued

has increased among younger males, this trend is too recent to have any demonstrated effect on oral cancer rates (10).

In this analysis, the relation between socioeconomic status and race was not examined. Therefore, the extent to which the associations between race and death rates for smoking-related cancers reflect differences in distribution of socioeconomic status among the racial groups could not be determined.

Primary prevention activities that discourage tobacco-use initiation and encourage cessation can assist in preventing a substantial number of cancer deaths (2,4,10). Because many factors influence both smoking initiation and smoking cessation, multiple approaches are necessary (2), including 1) increasing comprehensive school-based health education, 2) reducing minors' access to tobacco products, 3) more extensive counseling by health-care providers about smoking cessation, 4) developing and enacting strong clean indoor-air policies and laws, 5) restricting and eliminating advertising aimed at persons aged <18 years, and 6) increasing tobacco excise taxes. In addition, reduction of alcohol use and increased consumption of fruits and vegetables can contribute to a substantial reduction in preventable cancer deaths (3).

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