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Smoking Control Among Health-Care Workers — World No-Tobacco Day, 1993

In many countries, smoking prevalence among physicians has declined substantially since the 1950s (*1*). Preliminary data indicate that a maximum of 10% of physicians smoke in Australia, Canada, Norway, the United Kingdom, and the United States (*2*); in contrast, at least 40% of physicians in France, Italy, Japan, Spain, and Turkey are smokers (*1*). In the United States, smoking is generally less prevalent among physicians than among other health-care workers (HCWs) (*3*; CDC, unpublished data, 1993). Smoking by HCWs undermines the message to smokers that quitting is important, and HCWs who smoke are less likely to recognize their role as health educators and to counsel smokers about quitting (*4*). Because of their potential for preventing smoking among patients, HCWs may serve as role models by not smoking (*4*). Accordingly, the theme of the sixth World No-Tobacco Day to be held May 31, 1993, is "Health Services: Our Window to a Tobacco-Free World."

Each year, the objectives of World No-Tobacco Day are to encourage governments, communities, and groups worldwide to become aware of the hazards of tobacco use and to encourage all persons who use tobacco to quit for at least 24 hours. World No-Tobacco Day 1993 will emphasize the role health professionals play by not smoking and the need to ban smoking in all health-care facilities to provide smoke-free environments for patients and employees. Activities will include press releases, videotape presentations, and radio announcements by World Health Organization (WHO) experts on tobacco control.

The theme for World No-Tobacco Day 1992, "Tobacco-Free Workplaces: Safer and Healthier," emphasized the right of all persons to breathe smoke-free air (*5*). WHO's Tobacco or Health Program documented a variety of activities associated with World No-Tobacco Day 1992 in many countries, including a nationwide broadcast appealing to all workers to refrain from smoking at the workplace (Togo); a campaign by a Ministry of Health (Chile) to promote the active use of legislative measures against tobacco; a declaration by a government (Nepal) that government and semigovernment offices, public places, public transport, industries, and factories should be tobacco-free areas; prohibition of smoking in hotels and restaurants in one commu-

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nity during World No-Tobacco Day 1992 and quit-smoking competitions in local companies (Norway); and awarding of a WHO medal to a metropolitan government (Tokyo) for declaring a new municipal hall smoke-free (*2*).

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

Editorial Note: Legislation has been used in at least 60 countries to restrict smoking in health-care facilities (*2,5*). For example, several countries (e.g., Belgium, Brazil, Nigeria, Oman, Singapore, and Thailand) have adopted smoke-free policies in health-care facilities. In addition to legislative approaches, during 1992, the Joint Commission on Accreditation of Healthcare Organizations began requiring accredited hospitals in the United States to disseminate and enforce hospitalwide no-smoking policies (*6*). Smoke-free policies in health-care facilities provide an environment for encouraging smoking cessation by patients, preventing exacerbation of respiratory symptoms among patients, and reducing the risk of fires (*7*). Moreover, approximately 80% of smokers and 90% of all persons support limiting smoking in hospitals and physicians' offices (*8*).

Smoking-cessation activities by HCWs and the enactment of clean indoor air legislation are key components of tobacco control worldwide (*9*). In the United States, the national health objectives for the year 2000 identify the importance of HCWs counseling patients about smoking cessation and the need for smoke-free policies in health-care facilities (*10*). The goal of one objective (3.16) is to increase to at least 75% the proportion of primary-care and oral HCWs who routinely advise cessation and provide assistance and follow-up for patients who use tobacco. Nonsmoking HCWs are more likely to provide such advice and assistance (*4*). Another objective (3.12) recommends that each state enact comprehensive laws on clean indoor air that prohibit or strictly limit smoking in health-care facilities, other workplaces, and enclosed public places.

Additional information about World No-Tobacco Day 1993 is available from Richard Leclair, Office of Information and Public Affairs, Pan American Health Organization, telephone (202) 861-3457; or CDC's Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, telephone (404) 488-5705.

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International Notes

Influence of Religious Leaders on Smoking Cessation in a Rural Population — Thailand, 1991

Despite substantial increases in smoking and intensified marketing of tobacco products in developing countries (*1*), efforts to prevent tobacco use through community-based approaches have been limited (*2,3*). In Thailand, an estimated 9 million children will become smokers, and more than 2 million will die prematurely as adults from smoking-related illnesses (*1,4*). Because of these risks, the Department of Community and Social Medicine, Mae Sot General Hospital (MSGH), and the Field Epidemiology Training Program (FETP) of the Thai Ministry of Public Health recently assessed the impact of community-based smoking-prevention efforts initiated by religious leaders. This report describes this program and summarizes the assessment.

In 1987, a Buddhist abbot in the district of Mae Sot, Tak Province, implemented health-promotion activities by prohibiting smoking and posting warning signs with health messages in the temple area, mandating that all new monks abstain from smoking, and counseling smokers on the health hazards of smoking. Villagers were also requested not to smoke during Buddhist ceremonies anywhere in the village. To evaluate the impact of the monks' smoking-cessation efforts, the MSGH and the FETP conducted household surveys during March 1991 in one village (1990 population: 537) inhabited by monks actively involved in smoking-cessation efforts in their community (intervention village) and, during March and April 1991, in a nearby village (1990 population: 914) where no special smoking-cessation programs had been implemented (reference village). A questionnaire was developed based on World Health Organization guidelines for the conduct of tobacco-smoking surveys among adults (*5*). All villagers aged ≥15 years were eligible to be interviewed by trained health-care workers. To ensure a high response rate, interviews were conducted in the late afternoon and early evening to reach those who worked during the day, and households were revisited when eligible persons were absent at the time of the initial visit. Respondents were classified by smoking status (current, former, or never smokers) and duration of quit attempts (*3*).

A total of 372 (94.7%) of 393 eligible persons in the intervention village and 664 (95.7%) of 694 in the reference village participated in the survey. Although not statistically significant, the prevalence of current cigarette smoking was lower in the intervention village (155 [41.7%]) than in the reference village (318 [47.9%]). In the intervention village, 156 (41.9%) persons had never smoked, and 61 (16.4%) were former smokers: in the reference village, 260 (39.2%) had never smoked, and 86 (13.0%) were former smokers.

Of ever smokers in the intervention village, 61 (28.2%) were former smokers compared with 86 (21.3%) (p=0.06) of those in the reference village (Table 1). The

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proportion of former smokers who previously had quit smoking for >5 years was similar in both villages (13 [6.0%] in the intervention village and 19 [4.7%] in the reference village [p=0.5]). In comparison, the proportion of persons who had stopped smoking for 1–5 years was significantly greater in the intervention village (19.4% and 11.9%, respectively, [p=0.01]). The proportion of persons who had stopped smoking for ≥1 year (i.e., former smokers who might be less likely to relapse) was significantly greater in the intervention village (25.5%) than that in the reference village (16.6%) (p=0.01) (Table 1).

Both villages were similar when compared for distributions of duration of quitting among current smokers and the prevalence of those who had never considered quitting smoking (Table 1). However, the proportion of ever smokers who had considered quitting but never tried was lower in the intervention village (4.6%) than in the reference village (13.6%) (p=0.001) (Table 1). Therefore, the overall proportion of ever smokers who had tried to quit smoking was significantly higher in the intervention village (79.6%) than in the reference village (72.0%) (p=0.05).

In the intervention village, many (80.3%) of the former smokers cited the encouragement of a monk as an important reason for quitting smoking, compared with 25.6% of the reference village (p<0.001). In the intervention village, this reason was cited among former smokers (80.3%) more often than were suggestions from physicians and other health-care personnel (72.1%) or family members (62.3%).

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Editorial Note: Although the overall prevalence of smoking among adults in Thailand decreased from 30.1% in 1976 to 25.0% in 1988 (*4*), this risk behavior persists as a major problem in that country. In addition, lung cancer mortality increased from

TABLE 1. Quitting history of ever smokers in each village — Tak Province, Thailand, 1991

Quitting history	Intervention (N=216)		Reference (N=404)	
	No.	(%)	No.	(%)
Former smokers who had quit for >5 yrs	13	(6.0)	19	(4.7)
Former smokers who had quit for 1–5 yrs	42	(19.4)	48	(11.9)
Former smokers who had abstained for <1 yr	6	(2.8)	19	(4.7)
Current smokers who had last quit for >1 yr in the past	7	(3.2)	16	(4.0)
Current smokers who had last quit for 1–12 months in the past	20	(9.3)	46	(11.4)
Current smokers who had last quit for <1 month in the past	84	(38.9)	143	(35.4)
Current smokers who had never tried to quit but who had ever considered quitting smoking	10	(4.6)	55	(13.6)
Current smokers who had never tried to quit nor considered quitting smoking	34	(15.7)	58	(14.4)

Smoking Cessation — Continued

1.9 per 100,000 in 1977 to 2.6 per 100,000 in 1988. In 1985, health-care costs and lost future income due to smoking-attributable illnesses in Thailand were more than $280 million U.S. (*4*).

In some developing countries, health professionals, educators, and leaders have been effective in decreasing smoking among community members (*2,3*). The findings of this report suggest that health-education and health-promotion efforts by religious leaders in one community in Thailand may have contributed to a higher proportion of quit attempts and maintenance of abstinence in the intervention village. These efforts also may have increased awareness of the health consequences of smoking in the village. Although religious reasons for quitting or not smoking may not be primary determinants (*6,7*), this report suggests that religious leaders may play an important role in community-based smoking cessation in developing countries such as Thailand.

Smoking-control efforts in Thailand include 1) the formation of the National Committee for Control of Tobacco Use to administer a national smoking-control program through policy implementation and monitoring; 2) implementation of a total ban on cigarette advertising; 3) use of rotating warning labels on cigarette packages; and 4) health-education and health-promotion efforts to inform the public of the health hazards associated with cigarette smoking (*4,8*). Involving religious leaders in tobacco-use control, especially in rural areas, can assist in helping smokers break the addiction to nicotine through motivation and support of smokers in their attempts to quit. Such prevention efforts are relatively inexpensive and appropriate for developing countries and other settings in which resources are limited (*9*).

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School-Based Tobacco-Use Prevention — People's Republic of China, May 1989–January 1990

Tobacco consumption has increased markedly in the People's Republic of China (PRC) since the 1960s (*1,2*). In 1984, when the prevalence of cigarette smoking was 61% among men and 7% among women, approximately 250 million persons in PRC smoked tobacco products (*1*). In 1988, among junior high school students in PRC, 34% of boys and 4% of girls reported smoking at least occasionally (*3*). To increase public knowledge of the health consequences of cigarette smoking, promote healthier attitudes among elementary school students, and motivate fathers who smoke to quit, the Zhejiang Center for Health Education developed and implemented a school-based smoking-intervention program in the Jiangan district of Hangzhou from May 1989 through January 1990. This report summarizes an assessment of this program.

The Gongshu district of Hangzhou served as the reference site. The intervention group comprised 10,395 students in grades 1–7 from 23 primary schools and their fathers. The reference group comprised 9987 students in grades 1–7 from 21 primary schools and their fathers. Students' knowledge of the health consequences of tobacco use and attitudes about smoking were assessed through self-reported questionnaires administered to both the intervention and reference groups in May 1989 and January 1990. Responses to the questionnaires were graded, and average scores were calculated for each group.

In the intervention community, a tobacco-use prevention curriculum was incorporated into the health education programs in schools; the curriculum emphasized the harmful social and health consequences of tobacco use and the training of students in refusal skills. Schools were encouraged to implement smoking-control policies to severely limit or restrict smoking in schools, and teachers were encouraged to be nonsmoking role models. Students whose fathers smoked monitored their fathers' smoking status by asking them daily whether they had smoked, recording their fathers' responses daily in a chart, and submitting monthly reports of their fathers' daily smoking status to the schools.

For the baseline assessment, self-reported questionnaires measuring the fathers' smoking status were sent home with students to be completed by fathers and returned to school. Of the 9953 fathers in the intervention group, 6843 (68.8%) were current smokers at baseline, compared with 6274 (65.5%) of the 9580 fathers in the reference group. Cessation materials based on the stages of change theory (*4*) were developed and distributed to students in the intervention group to take home to their fathers. A letter, signed by the student, was sent to each father, asking him to quit smoking. In January 1990, fathers who had stopped smoking for 180 or more days, as indicated by the students' daily recordings, were visited by health educators to confirm their smoking status by direct interview.

Although preintervention scores were similar for the two groups (Table 1), at follow-up, scores of students in the intervention group were significantly higher than both the reference group follow-up scores and the intervention group baseline scores. Scores for the reference group were similar in May 1989 and January 1990.

Based on the daily recordings maintained by the students in the intervention group, in January 1990, 1037 (15.2%) fathers had not smoked cigarettes for 180 or more days. In comparison, based on the interviews of health educators, 800 (11.7%) fathers re-

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ported that they maintained cessation for that period. From May 1989 through January 1990, the reported smoking rate for fathers in the intervention group decreased from 68.8% to 60.7% ($p<0.05$) while the reported rate remained approximately the same among fathers in the reference group. Approximately 90% of the fathers in the intervention group who were smokers in May 1989 were reported to have quit smoking for at least 10 days. The 6-month cessation rate for fathers in the intervention group was 11.7% compared with 0.2% in the reference group (Table 2).

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TABLE 1. Comparison of students'* preintervention and postintervention scores regarding their knowledge of smoking and health issues — Hangzhou, People's Republic of China, May 1989–January 1990

Category	Intervention group†		Reference group§	
	No. students	Average score	No. students	Average score
Before intervention (May 1989)	1717	50.0	1027	46.2¶
After intervention (January 1990)	1717	89.8**	1027	51.1††§§

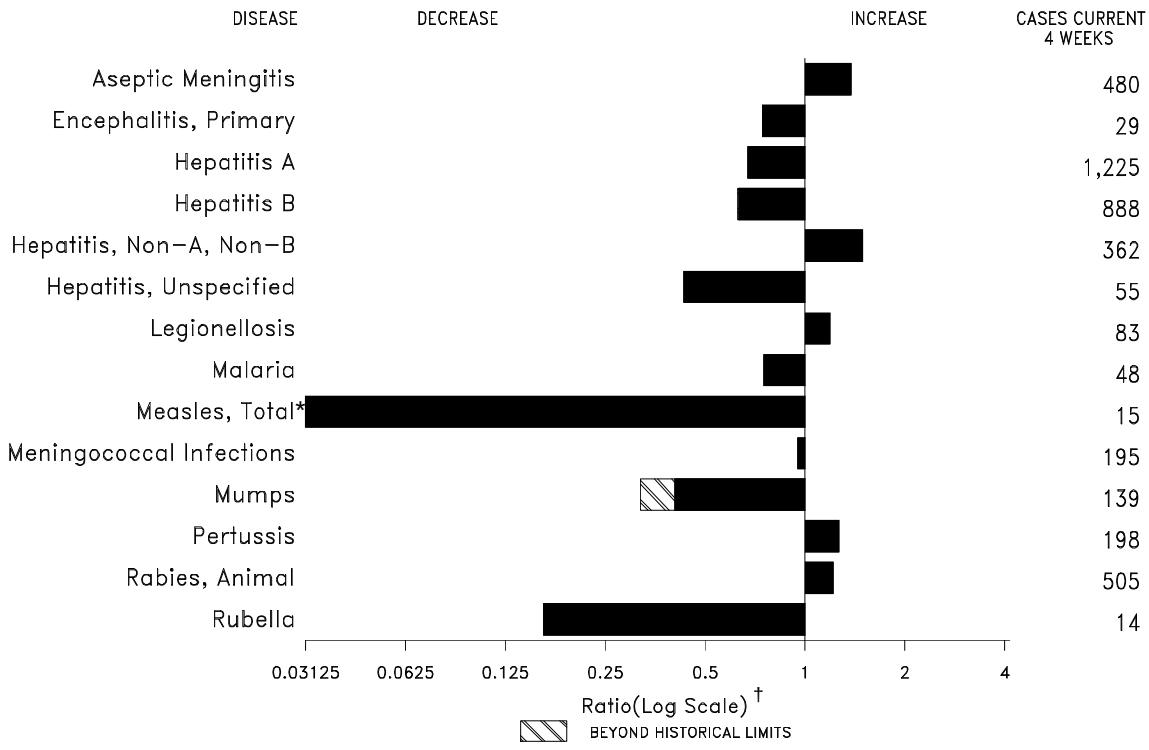
* Randomly selected from the population of students present in May 1989 and January 1990 in each village.
† Comprising 10,395 students in grades 1–7 from 23 primary schools and their fathers.
§ Comprising 9987 students in grades 1–7 from 21 primary schools and their fathers.
¶ Differences in average scores among students in the intervention and reference groups before intervention are not statistically significant ($p>0.05$).
** Differences in average scores among students in the intervention group before and after intervention are statistically significant ($p<0.05$).
†† Differences in average scores among students in the intervention and reference groups after intervention are statistically significant ($p<0.05$).
§§ Differences in average scores among students in the reference group after intervention are not statistically significant ($p>0.05$).

TABLE 2. Self-reported smoking and quitting status among fathers of students in grades 1–7 — Hangzhou, People's Republic of China, May 1989–January 1990

No. days did not smoke cigarettes	Intervention group*			Reference group†		
	No. current smokers§	Quitters		No. current smokers	Quitters	
		No.¶	(%)**		No.	(%)
10	6843	6191	(90.5)	6274	126	(2.0)
20	6843	4411	(64.5)			
30	6843	3339	(48.8)			
60	6843	2071	(30.3)			
180	6843	800	(11.7)	6274	14	(0.2)

* Comprised 10,395 students in grades 1–7 from 23 primary schools and their fathers (n=9953).
† Comprised 9987 students in grades 1–7 from 21 primary schools and their fathers (n=9580).
§ A person who smoked at least one cigarette per day during the 6 months preceding the interview.
¶ A person who had not smoked during the 6 months preceding the interview for the number of days indicated.
** The percentage of smokers who quit for at least the number of days indicated.

FIGURE I. Notifiable disease reports, comparison of 4-week totals ending May 15, 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 nineteen is 0.01710).

† 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 thehatched 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 May 15, 1993 (19th Week)

	Cum. 1993		Cum. 1993
AIDS*	45,854	Measles: imported	18
Anthrax	-	indigenous	100
Botulism: Foodborne	6	Plague	1
Infant	8	Poliomyelitis, Paralytic§	-
Other	2	Psittacosis	19
Brucellosis	23	Rabies, human	-
Cholera	9	Syphilis, primary & secondary	9,971
Congenital rubella syndrome	5	Syphilis, congenital, age < 1 year	-
Diphtheria	-	Tetanus	8
Encephalitis, post-infectious	68	Toxic shock syndrome	92
Gonorrhea	139,014	Trichinosis	7
Haemophilus influenzae (invasive disease)†	510	Tuberculosis	6,827
Hansen Disease	54	Tularemia	23
Leptospirosis	14	Typhoid fever	126
Lyme Disease	1,119	Typhus fever, tickborne (RMSF)	30

*Updated monthly; last update May 15, 1993.
†Of 465 cases of known age, 170 (37%) were reported among children less than 5 years of age.
§No cases of suspected poliomyelitis have been reported in 1993; 4 cases of suspected poliomyelitis were reported in 1992; 6 of the 9 suspected cases with onset in 1991 were confirmed; the confirmed cases were vaccine associated.

TABLE II. Cases of selected notifiable diseases, United States, weeks ending May 15, 1993, and May 9, 1992 (19th 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	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993
UNITED STATES	45,854	2,418	194	68	139,014	176,967	7,776	4,154	1,564	231	405	1,119
NEW ENGLAND	2,171	49	5	4	2,884	3,734	204	133	10	5	15	117
Maine	59	6	1	-	33	35	8	8	-	-	3	-
N.H.	60	4	-	1	16	44	5	13	3	-	-	7
Vt.	13	6	1	-	11	10	3	2	1	-	-	-
Mass.	1,197	26	3	3	1,062	1,397	116	98	3	5	10	34
R.I.	104	7	-	-	129	299	44	12	3	-	2	28
Conn.	738	-	-	-	1,633	1,949	28	-	-	-	-	48
MID. ATLANTIC	9,139	269	6	6	15,250	18,373	491	564	119	4	83	804
Upstate N.Y.	1,466	98	-	3	2,993	3,716	133	147	66	1	21	596
N.Y. City	4,860	99	1	-	3,355	6,327	175	117	1	-	3	3
N.J.	1,897	-	-	-	2,634	2,707	116	145	34	-	11	59
Pa.	916	72	5	3	6,268	5,623	67	155	18	3	48	146
E.N. CENTRAL	3,881	336	63	14	27,563	33,047	793	410	306	5	101	12
Ohio	662	101	21	3	7,883	10,150	124	95	27	-	59	10
Ind.	505	46	4	6	2,707	3,122	370	67	4	1	12	1
Ill.	1,272	75	13	-	9,206	10,161	201	75	18	2	3	1
Mich.	985	106	22	5	6,029	8,156	93	169	241	2	20	-
Wis.	457	8	3	-	1,738	1,458	5	4	16	-	7	-
W.N. CENTRAL	2,028	134	6	-	6,302	9,515	1,018	276	74	3	22	22
Minn.	359	36	3	-	320	1,070	158	25	2	2	-	3
Iowa	126	33	-	-	602	651	13	10	2	1	3	1
Mo.	1,210	27	-	-	3,875	5,213	663	210	55	-	7	3
N. Dak.	-	3	2	-	10	33	33	-	-	-	1	1
S. Dak.	20	7	1	-	91	69	9	-	-	-	-	-
Nebr.	100	2	-	-	141	552	102	7	7	-	9	-
Kans.	213	26	-	-	1,263	1,927	40	24	8	-	2	14
S. ATLANTIC	9,481	599	34	27	38,523	57,399	442	694	217	26	75	105
Del.	192	4	2	-	492	619	3	57	59	-	6	61
Md.	843	48	8	-	6,321	5,602	69	103	5	3	20	14
D.C.	479	18	-	-	2,082	2,793	2	12	-	-	8	2
Va.	726	71	10	3	3,939	6,829	54	60	17	7	2	7
W. Va.	18	5	6	-	225	324	2	15	12	-	-	2
N.C.	453	51	7	-	8,730	8,500	20	125	26	-	7	10
S.C.	672	4	-	-	3,413	4,125	5	13	-	1	6	1
Ga.	1,450	40	1	-	4,660	18,855	39	33	20	-	12	-
Fla.	4,648	358	-	24	8,661	9,752	248	276	78	15	14	8
E.S. CENTRAL	1,245	104	7	3	15,319	17,251	101	415	324	1	18	5
Ky.	147	50	3	3	1,682	1,802	55	38	4	-	7	2
Tenn.	496	17	3	-	4,783	5,460	17	331	313	-	9	1
Ala.	401	29	1	-	5,276	5,896	21	43	3	1	-	2
Miss.	201	8	-	-	3,578	4,093	8	3	4	-	2	-
W.S. CENTRAL	4,802	175	15	-	17,044	16,086	635	528	74	61	10	10
Ark.	201	11	-	-	2,916	3,168	17	23	2	-	-	1
La.	687	8	-	-	4,269	2,102	29	69	23	-	2	-
Okla.	423	-	3	-	1,362	1,792	39	83	20	5	7	5
Tex.	3,491	156	12	-	8,497	9,024	550	353	29	56	1	4
MOUNTAIN	2,480	133	9	3	3,958	4,360	1,602	233	113	42	42	3
Mont.	13	-	-	1	18	33	47	4	-	-	5	-
Idaho	43	4	-	-	57	48	80	18	-	1	1	-
Wyo.	27	1	-	-	30	17	7	7	31	-	5	2
Colo.	806	33	3	-	1,215	1,703	386	28	16	23	3	-
N. Mex.	197	19	3	2	355	322	121	101	35	1	1	-
Ariz.	851	54	2	-	1,480	1,406	543	36	9	7	9	-
Utah	175	5	1	-	129	78	394	17	18	10	5	1
Nev.	368	17	-	-	674	753	24	22	4	-	13	-
PACIFIC	10,627	619	49	11	12,171	17,202	2,490	901	327	84	39	41
Wash.	214	-	-	-	1,392	1,575	263	77	73	7	4	-
Oreg.	485	-	-	-	815	526	47	18	5	-	-	-
Calif.	9,825	584	46	11	9,615	14,652	1,851	793	243	75	32	40
Alaska	9	4	2	-	180	266	292	5	4	-	-	-
Hawaii	94	31	1	-	169	183	37	8	2	2	3	1
Guam	-	1	-	-	29	31	1	1	-	1	-	-
P.R.	1,212	20	-	-	169	61	19	82	17	1	-	-
V.I.	33	-	-	-	37	37	-	2	-	-	-	-
Amer. Samoa	-	-	-	-	10	13	8	-	-	-	-	-
C.N.M.I.	-	2	-	-	28	15	-	-	-	1	-	-

N: Not notifiable U: Unavailable C.N.M.I.: Commonwealth of Northern Mariana Islands

*Updated monthly; last update May 15, 1993.

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending May 15, 1993, and May 9, 1992 (19th Week)

Reporting Area	Malaria	Measles (Rubeola)					Menin-gococcal Infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported*		Total									
	Cum. 1993	1993	Cum. 1993	1993	Cum. 1993	Cum. 1992	Cum. 1993	1993	Cum. 1993	1993	Cum. 1993	Cum. 1992	1993	Cum. 1993	Cum. 1992
UNITED STATES	329	9	100	-	18	814	1,052	46	641	57	924	473	7	74	55
NEW ENGLAND	23	-	44	-	4	8	64	-	4	15	238	43	-	1	4
Maine	-	-	-	-	-	-	3	-	-	1	6	2	-	1	-
N.H.	2	-	-	-	-	1	7	-	-	7	140	15	-	-	-
Vt.	1	-	29	-	1	-	4	-	-	-	37	-	-	-	-
Mass.	10	-	7	-	2	5	35	-	1	-	38	22	-	-	-
R.I.	1	-	-	-	1	-	1	-	2	-	2	-	-	-	4
Conn.	9	-	8	-	-	2	14	-	1	7	15	4	-	-	-
MID. ATLANTIC	63	-	6	-	2	164	132	2	52	6	160	68	1	21	6
Upstate N.Y.	22	-	-	-	1	81	57	1	16	3	59	21	1	1	4
N.Y. City	24	-	2	-	-	31	19	-	-	-	10	8	-	14	-
N.J.	10	-	4	-	1	49	15	-	6	-	20	18	-	5	2
Pa.	7	-	-	-	-	3	41	1	30	3	71	21	-	1	-
E.N. CENTRAL	20	-	-	-	-	29	149	2	100	10	132	43	-	1	6
Ohio	5	-	-	-	-	5	48	-	44	2	85	11	-	1	-
Ind.	3	-	-	-	-	17	25	1	1	7	19	11	-	-	-
Ill.	10	-	-	-	-	5	45	-	23	-	12	7	-	-	6
Mich.	2	-	-	-	-	1	30	1	32	1	14	1	-	-	-
Wis.	-	-	-	-	-	1	1	-	-	-	2	13	-	-	-
W.N. CENTRAL	9	-	-	-	2	4	60	2	21	-	54	33	-	1	4
Minn.	2	-	-	-	-	3	2	-	-	-	22	13	-	-	-
Iowa	1	-	-	-	-	1	10	-	6	-	1	1	-	-	-
Mo.	2	-	-	-	-	-	25	2	10	-	15	10	-	1	1
N. Dak.	-	-	-	-	-	-	2	-	4	-	2	5	-	-	-
S. Dak.	2	-	-	-	-	-	2	-	-	-	1	2	-	-	-
Nebr.	1	-	-	-	-	-	3	-	1	-	4	2	-	-	-
Kans.	1	-	-	-	2	-	16	-	-	-	9	-	-	-	3
S. ATLANTIC	101	4	19	-	3	100	205	26	172	6	80	51	-	5	3
Del.	1	-	3	-	-	3	10	1	4	-	1	-	-	1	-
Md.	9	-	-	-	2	9	19	3	35	-	28	12	-	1	-
D.C.	5	-	-	-	-	-	4	-	-	-	1	-	-	-	-
Va.	6	-	-	-	1	6	17	-	13	1	7	4	-	-	-
W. Va.	2	-	-	-	-	-	6	2	6	3	6	2	-	-	-
N.C.	58	-	-	-	-	21	38	18	82	-	13	13	-	-	-
S.C.	-	-	-	-	-	29	17	-	13	-	5	7	-	-	-
Ga.	2	-	-	-	-	-	47	-	-	-	3	4	-	-	-
Fla.	18	4	16	-	-	32	47	2	19	2	16	9	-	3	3
E.S. CENTRAL	5	-	1	-	-	365	64	2	27	-	36	8	-	-	1
Ky.	-	-	-	-	-	348	13	-	-	-	3	-	-	-	-
Tenn.	1	-	1	-	-	-	13	-	9	-	21	5	-	-	1
Ala.	2	-	-	-	-	-	21	2	13	-	12	3	-	-	-
Miss.	2	-	-	-	-	17	17	-	5	-	-	-	-	-	-
W.S. CENTRAL	8	-	1	-	-	66	78	4	98	15	30	14	3	12	-
Ark.	2	-	-	-	-	-	8	-	3	1	2	5	-	-	-
La.	-	-	1	-	-	-	19	-	6	-	4	-	-	1	-
Okla.	3	-	-	-	-	4	6	-	2	1	11	9	-	1	-
Tex.	3	-	-	-	-	62	45	4	87	13	13	-	3	10	-
MOUNTAIN	9	-	2	-	-	6	96	4	32	2	61	81	-	3	2
Mont.	1	-	-	-	-	-	6	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	4	2	5	-	10	13	-	1	1
Wyo.	-	-	-	-	-	1	2	-	2	-	1	-	-	-	-
Colo.	6	-	2	-	-	5	14	-	8	-	21	20	-	-	-
N. Mex.	2	-	-	-	-	-	3	N	N	1	15	14	-	-	-
Ariz.	-	-	-	-	-	-	56	-	6	-	7	28	-	-	1
Utah	-	-	-	-	-	-	4	-	3	1	7	5	-	1	-
Nev.	-	-	-	-	-	-	7	2	8	-	-	1	-	1	-
PACIFIC	91	5	27	-	7	72	204	4	135	3	133	132	3	30	29
Wash.	5	-	-	-	-	7	29	-	7	2	15	38	-	-	-
Oreg.	2	-	-	-	-	-	16	N	N	-	-	11	-	1	1
Calif.	82	1	17	-	2	38	143	3	115	-	110	80	1	17	28
Alaska	-	-	-	-	-	9	9	-	5	-	1	-	-	1	-
Hawaii	2	4	10	-	5	18	7	1	8	1	7	3	2	11	-
Guam	1	U	-	U	-	10	1	U	6	U	-	-	U	-	-
P.R.	-	-	122	-	-	140	5	-	1	-	-	9	-	-	-
V.I.	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-
Amer. Samoa	-	-	1	-	-	-	-	-	-	-	2	6	-	-	-
C.N.M.I.	-	-	-	-	1	-	-	-	10	-	-	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 May 15, 1993, and May 9, 1992 (19th 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	9,971	12,734	92	6,827	7,196	23	126	30	2,640
NEW ENGLAND	156	243	7	126	109	-	9	2	475
Maine	2	-	1	7	9	-	-	-	-
N.H.	5	18	2	1	-	-	-	-	22
Vt.	-	1	-	2	2	-	-	-	12
Mass.	72	112	3	58	58	-	7	2	162
R.I.	7	14	1	23	-	-	-	-	-
Conn.	70	98	-	35	40	-	2	-	279
MID. ATLANTIC	938	1,812	18	1,506	1,806	-	37	2	945
Upstate N.Y.	84	146	10	150	226	-	7	-	685
N.Y. City	448	980	1	898	1,067	-	25	-	-
N.J.	135	257	-	220	271	-	3	2	142
Pa.	271	429	7	238	242	-	2	-	118
E.N. CENTRAL	1,582	1,763	31	743	743	3	14	1	18
Ohio	458	263	15	109	119	1	6	-	2
Ind.	143	77	1	69	66	1	1	-	-
Ill.	588	747	3	370	372	-	4	1	1
Mich.	256	377	12	166	155	1	3	-	-
Wis.	137	299	-	29	31	-	-	-	15
W.N. CENTRAL	627	486	6	138	156	5	2	2	125
Minn.	14	32	2	26	39	-	-	-	21
Iowa	32	12	3	12	13	-	-	-	22
Mo.	509	361	-	69	62	1	2	2	1
N. Dak.	-	1	-	2	3	-	-	-	30
S. Dak.	-	-	-	6	10	2	-	-	10
Nebr.	7	15	-	8	9	-	-	-	1
Kans.	65	65	1	15	20	2	-	-	40
S. ATLANTIC	2,637	3,589	9	1,081	1,374	1	13	5	691
Del.	52	85	-	10	18	-	1	-	54
Md.	143	280	-	146	109	-	3	-	207
D.C.	157	170	-	66	51	-	-	-	6
Va.	231	286	2	176	104	-	1	-	134
W. Va.	1	6	-	29	23	-	-	-	33
N.C.	715	854	3	134	190	-	-	4	23
S.C.	421	473	-	134	135	-	-	-	58
Ga.	439	760	-	246	306	-	1	1	156
Fla.	478	675	4	140	438	1	7	-	20
E.S. CENTRAL	1,328	1,719	4	480	391	3	2	3	37
Ky.	104	53	2	128	137	-	-	2	5
Tenn.	371	439	1	102	-	2	-	-	-
Ala.	317	750	1	172	142	1	2	-	32
Miss.	536	477	-	78	112	-	-	1	-
W.S. CENTRAL	2,226	2,122	1	604	633	8	2	15	195
Ark.	413	344	-	60	38	3	-	-	12
La.	914	909	-	-	26	-	1	-	-
Okla.	129	98	1	61	45	3	-	15	47
Tex.	770	771	-	483	524	2	1	-	136
MOUNTAIN	84	163	2	165	200	1	4	-	34
Mont.	-	2	-	5	-	-	-	-	7
Idaho	-	1	-	4	11	-	-	-	-
Wyo.	2	1	-	1	-	1	-	-	5
Colo.	28	22	1	8	17	-	3	-	-
N. Mex.	14	17	-	18	26	-	-	-	2
Ariz.	38	75	-	82	99	-	1	-	20
Utah	2	4	1	9	24	-	-	-	-
Nev.	-	41	-	38	23	-	-	-	-
PACIFIC	393	837	14	1,984	1,784	2	43	-	120
Wash.	22	44	1	90	109	1	2	-	-
Oreg.	44	20	-	35	33	-	-	-	-
Calif.	317	767	13	1,740	1,521	1	39	-	104
Alaska	2	2	-	14	34	-	-	-	16
Hawaii	8	4	-	105	87	-	2	-	-
Guam	-	2	-	27	34	-	-	-	-
P.R.	207	109	-	46	55	-	-	-	19
V.I.	19	23	-	2	3	-	-	-	-
Amer. Samoa	-	-	-	1	-	-	-	-	-
C.N.M.I.	1	4	-	13	12	-	-	-	-

U: Unavailable

TABLE III. Deaths in 121 U.S. cities,* week ending May 15, 1993 (19th Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	574	403	103	41	8	19	52
Boston, Mass.	138	83	29	15	2	9	12
Bridgeport, Conn.	47	35	8	3	-	1	2
Cambridge, Mass.	21	14	6	1	-	-	1
Fall River, Mass.	21	18	3	-	-	-	1
Hartford, Conn.	50	34	11	2	1	2	2
Lowell, Mass.	25	22	2	1	-	-	3
Lynn, Mass.	17	15	2	-	-	-	-
New Bedford, Mass.	27	19	4	3	-	1	2
New Haven, Conn.	48	30	11	4	1	2	5
Providence, R.I.	48	35	9	2	2	-	5
Somerville, Mass.	1	1	-	-	-	-	-
Springfield, Mass.	40	29	7	4	-	-	6
Waterbury, Conn.	27	15	5	4	2	1	2
Worcester, Mass.	64	53	6	2	-	3	11
MID. ATLANTIC	2,370	1,504	465	290	67	43	117
Albany, N.Y.	35	22	7	2	1	3	3
Allentown, Pa.	17	14	2	1	-	-	1
Buffalo, N.Y.	U	U	U	U	U	U	U
Camden, N.J.	48	27	15	3	2	1	-
Elizabeth, N.J.	21	13	4	3	1	-	-
Erie, Pa.§	42	34	6	2	-	-	5
Jersey City, N.J.	59	39	14	6	-	-	4
New York City, N.Y.	1,450	890	290	204	44	21	52
Newark, N.J.	58	26	12	18	2	-	2
Paterson, N.J.	16	13	1	2	-	-	-
Philadelphia, Pa.	200	131	45	15	5	4	21
Pittsburgh, Pa.§	94	70	9	6	7	2	7
Reading, Pa.	18	12	-	5	1	-	-
Rochester, N.Y.	106	75	25	3	2	1	12
Schenectady, N.Y.	22	17	4	1	-	-	-
Scranton, Pa.§	27	17	4	5	-	1	1
Syracuse, N.Y.	91	61	19	6	1	4	8
Trenton, N.J.	48	27	6	8	1	6	1
Utica, N.Y.	18	16	2	-	-	-	-
Yonkers, N.Y.	U	U	U	U	U	U	U
E.N. CENTRAL	2,251	1,385	437	247	118	64	155
Akron, Ohio	74	54	11	4	3	2	-
Canton, Ohio	26	22	3	1	-	-	6
Chicago, Ill.	512	216	101	106	77	12	27
Cincinnati, Ohio	95	57	25	10	-	3	6
Cleveland, Ohio	126	78	31	9	2	6	4
Columbus, Ohio	174	108	35	17	5	9	8
Dayton, Ohio	136	103	22	6	3	2	8
Detroit, Mich.	243	126	60	35	8	14	14
Evansville, Ind.	46	35	5	4	2	-	5
Fort Wayne, Ind.	59	44	6	5	2	2	1
Gary, Ind.	19	12	3	3	-	1	-
Grand Rapids, Mich.	78	64	5	4	1	4	15
Indianapolis, Ind.	138	87	35	8	4	4	18
Madison, Wis.	68	45	15	6	2	-	14
Milwaukee, Wis.	137	96	24	13	1	3	9
Peoria, Ill.	37	27	5	3	2	-	1
Rockford, Ill.	61	37	18	3	1	2	6
South Bend, Ind.	38	28	6	4	-	-	4
Toledo, Ohio	119	96	16	6	1	-	7
Youngstown, Ohio	65	50	11	-	4	-	2
W.N. CENTRAL	808	605	126	36	23	18	78
Des Moines, Iowa	58	46	5	4	1	2	6
Duluth, Minn.	27	26	1	-	-	-	-
Kansas City, Kans.	42	32	7	1	2	-	2
Kansas City, Mo.	116	85	18	6	3	4	5
Lincoln, Nebr.	44	32	10	2	-	-	3
Minneapolis, Minn.	201	145	37	9	4	6	12
Omaha, Nebr.	94	68	16	4	3	3	6
St. Louis, Mo.	109	82	12	7	7	1	30
St. Paul, Minn.	58	47	8	1	2	-	7
Wichita, Kans.	59	42	12	2	1	2	7
S. ATLANTIC	1,542	949	324	175	46	47	89
Atlanta, Ga.	183	117	33	24	6	3	6
Baltimore, Md.	315	202	60	44	6	3	31
Charlotte, N.C.	93	51	21	16	1	4	3
Jacksonville, Fla.	138	87	33	9	4	5	7
Miami, Fla.	107	61	26	12	5	3	-
Norfolk, Va.	68	39	18	5	3	3	6
Richmond, Va.	75	55	11	9	-	-	6
Savannah, Ga.	45	27	14	4	-	-	6
St. Petersburg, Fla.	70	52	7	7	1	3	2
Tampa, Fla.	156	99	40	8	6	2	17
Washington, D.C.	243	121	53	34	14	21	5
Wilmington, Del.	49	38	8	3	-	-	-
E.S. CENTRAL	775	526	157	55	22	15	58
Birmingham, Ala.	117	77	29	6	2	3	6
Chattanooga, Tenn.	84	60	16	3	4	1	2
Knoxville, Tenn.	75	47	17	9	2	-	4
Lexington, Ky.	59	41	15	1	1	1	9
Memphis, Tenn.	169	117	29	13	6	4	21
Mobile, Ala.	89	67	10	5	2	5	8
Montgomery, Ala.	66	45	13	5	3	-	1
Nashville, Tenn.	116	72	28	13	2	1	7
W.S. CENTRAL	1,076	696	195	103	51	28	57
Austin, Tex.	70	49	13	6	2	-	7
Baton Rouge, La.	43	30	7	2	4	-	2
Corpus Christi, Tex.	64	48	7	8	1	-	5
Dallas, Tex.	194	122	45	18	6	3	6
El Paso, Tex.	77	49	20	4	2	2	2
Ft. Worth, Tex.	95	62	16	7	4	6	7
Houston, Tex.	U	U	U	U	U	U	U
Little Rock, Ark.	59	33	15	4	5	2	2
New Orleans, La.	115	68	9	15	13	7	-
San Antonio, Tex.	189	123	32	21	6	7	9
Shreveport, La.	76	46	9	14	6	1	8
Tulsa, Okla.	94	66	22	4	2	-	9
MOUNTAIN	887	602	165	70	32	18	57
Albuquerque, N.M.	88	65	8	11	4	-	2
Colo. Springs, Colo.	48	34	9	3	2	-	2
Denver, Colo.	131	78	34	12	3	4	11
Las Vegas, Nev.	169	118	40	7	3	1	7
Ogden, Utah	27	16	8	3	-	-	1
Phoenix, Ariz.	160	107	25	13	9	6	13
Pueblo, Colo.	29	20	5	3	1	-	4
Salt Lake City, Utah	101	64	16	12	6	3	8
Tucson, Ariz.	134	100	20	6	4	4	9
PACIFIC	2,007	1,318	349	222	59	51	115
Berkeley, Calif.	19	13	3	1	1	1	3
Fresno, Calif.	68	46	11	7	1	3	9
Glendale, Calif.	25	20	5	-	-	-	1
Honolulu, Hawaii	72	44	12	8	4	4	7
Long Beach, Calif.	64	50	7	3	2	2	9
Los Angeles, Calif.	553	333	112	63	27	10	18
Pasadena, Calif.	20	15	1	2	1	1	1
Portland, Oreg.	130	97	12	13	3	5	4
Sacramento, Calif.	177	131	25	15	3	3	21
San Diego, Calif.	150	108	22	13	3	4	6
San Francisco, Calif.	155	80	38	35	-	2	-
San Jose, Calif.	217	133	42	23	9	10	23
Santa Cruz, Calif.	29	24	2	2	-	1	2
Seattle, Wash.	169	105	31	26	3	4	1
Spokane, Wash.	67	49	14	3	-	1	4
Tacoma, Wash.	92	70	12	8	2	-	6
TOTAL	12,290¶	7,988	2,321	1,239	426	303	778

*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.

Tobacco-Use Prevention — Continued

Editorial Note: Tobacco sales are a primary source of income for PRC (*5*), and transnational tobacco companies have aggressively employed Western-style advertisement and promotion practices (*1,5*) (e.g., billboard advertisement of foreign tobacco and sponsorship of sporting and recreational events by tobacco companies [*1,3*]). Foreign tobacco corporations also have established joint cigarette production factories with Chinese companies and are increasing local cigarette production (*1,5*).

Lung cancer mortality is one of the five leading causes of death and the leading cause of cancer-related death in PRC (*5*). By the year 2025, an estimated 900,000 lung cancer deaths and a total of 2 million smoking-related deaths will occur among Chinese men (*6,7*). In addition, an estimated 200 million children currently living in PRC will become smokers, and 50 million of them will die prematurely from smoking-attributable diseases (*6*). Therefore, widespread implementation of prevention and cessation programs and tobacco-control policies that target adolescents and their families are needed to reduce the present and future health burden of smoking in PRC.

The findings in this report suggest that school-based tobacco-use prevention curricula and policies are effective in increasing knowledge among students in PRC about the health consequences of tobacco use. Furthermore, by including fathers in prevention activities, these programs suggest an additional strategy for motivating adults to quit smoking. These findings are also consistent with the understanding that, in PRC, adolescent smoking behavior is correlated with familial smoking behaviors (*3*) and underscore the importance of involving families and peers in tobacco-use prevention programs.

The first tobacco law in PRC became effective on January 1, 1992, and regulates many aspects of the national tobacco monopoly, including distribution, licensing, sales, importation, and exportation. Numerous health provisions also were mandated, such as reducing tar and nicotine levels, requiring warning labels, and restricting smoking in public places (*5,8*). A national health education effort in PRC will emphasize the health hazards associated with smoking, coordinate research, disseminate materials, and institute a National Stop Smoking Day each year (*5*). With a population of more than one billion persons and limited resources for health promotion, outreach and education remain substantial challenges.

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Current Trends

Measles — United States, 1992

As of January 2, 1993 (week 53), local and state health departments reported a provisional total of 2200* measles cases for 1992 (*1*)—a 77% decrease from the 9643 cases reported for 1991 (*2*), and a 92% decrease from the 27,786 cases reported for 1990 (*3*). Cases were reported from 36 states and the District of Columbia. This provisional total is one of the lowest annual totals reported in the United States; fewer cases were reported only in 1982 (1714 cases) and 1983 (1497 cases) (*4*). This report summarizes epidemiologic characteristics of measles cases reported for 1992 and compares them with cases reported during 1989–1991.

From 1989 through 1992, the median age of persons reported with measles declined steadily (12.0 years in 1989, 5.7 years in 1990, 5.2 years in 1991, and 4.9 years in 1992), while the proportion of cases among infants increased. Of measles cases in 1992, 22.2% occurred among children <12 months of age, an increase from 19.2% in 1991 and 17.0% in 1990; 27.9% of reported cases were among children aged 1–4 years, compared with 30.1% for 1991. Persons aged ≥5 years accounted for 49.7% of reported cases, compared with 50.6% in 1991. A provisional total of three measles-associated deaths was reported in 1992 for Texas (two) and Alaska (one).

Texas and Kentucky reported the largest outbreaks (990 and 443 cases, respectively) during 1992. The outbreak in Texas continued the pattern of outbreaks reported during 1989–1991 affecting predominantly unvaccinated preschool-aged children (*2,3*). Seventy-one percent of cases in this outbreak were reported from Nueces and Hidalgo counties; the other cases were reported from 22 (9%) of 254 counties in the state. Most (75%) cases were among children aged <5 years; 35% of cases were among children <12 months of age. In comparison, in Kentucky, measles transmission occurred predominantly among children aged 5–19 years (218 cases [49%]). Fifty-one percent of cases from the Kentucky outbreak were reported from Jefferson County (Louisville); the remaining cases were reported from 34 (28%) of 120 counties in the state.

Reported by: State and local health depts. Div of Immunization,National Center for Prevention Svcs, CDC.

Editorial Note: During 1989–1991, a period of increased measles transmission, approximately 55,000 cases and 132 suspected measles-associated deaths were reported. However, from mid-October 1992 through January 1993, no outbreaks of measles (i.e., five or more epidemiologically related cases) were reported, suggesting that the measles resurgence in the United States has ended. During the first 18 weeks of 1993, 80 measles cases were reported, representing only 13% of the number reported for the same period during 1992. Possible explanations for the end of the measles resurgence include a decrease in susceptible populations following widespread transmission of the virus; improved vaccination coverage in the susceptible population; an overall decrease in the occurrence of measles in the Western Hemisphere (*5*); and the periodic cyclicity in measles transmission that has been noted since the prevaccine era.

*Final totals for measles reported in 1992 will be published later in 1993.

Measles — Continued

The magnitude of the recent resurgence is not likely to have substantially reduced susceptibility (*2*), even in cities with the highest incidence of measles. For example, retrospective surveys of school enterers in 15 cities indicated that coverage against measles ranged from 51% to 79% at the time of the second birthday (*6,7*); based on these findings, approximately 800,000–2 million U.S. children aged 12–23 months would be susceptible. However, during 1989–1992, approximately 9300 cases of measles were reported among children aged 12–23 months—a number insufficient to have substantially reduced overall susceptibility in this age group.

A reduction in measles susceptibility may have occurred through increased measles vaccination levels among preschool-aged children. From 1971 through 1985, the United States Immunization Survey (USIS) demonstrated that measles vaccine coverage among children aged 1–4 years ranged from 61% to 66% (CDC, unpublished data, 1986). By comparison, the National Health Interview Survey (NHIS) in 1991 targeted the same population as the USIS and documented measles vaccine coverage to be 78% among children aged 1–4 years—the highest level ever reported (CDC, unpublished data, 1993).

The estimates of increased vaccine coverage, based on the NHIS, are consistent with data indicating increased measles vaccine administration in the public sector. During 1991 and 1992, 1,358,117 and 1,344,901 doses, respectively, of measles vaccine were administered in public clinics to children aged 12–23 months—a 42% and 41% increase, respectively, when compared with 1988 (953,535 doses), the year before the measles resurgence (CDC, unpublished data, 1993). In addition, in 1992, provisional totals of reported mumps (2433) and rubella (147) (*1*) were the lowest since reporting began in 1968 and 1966, respectively, reflecting the contribution of increased vaccination with combined measles-mumps-rubella (MMR) vaccine.

In contrast to vaccination coverage for measles, mumps, and rubella, coverage against other diseases has not increased substantially. In particular, NHIS findings for 1991 indicated that only 66% of children aged 1–4 years had received three or more doses of diphtheria and tetanus toxoids and pertussis vaccine (DTP), and 51% had received three or more doses of oral poliovirus vaccine (OPV) (Table 1)—coverage

TABLE 1. Vaccination status among children 1–4 years of age — United States, selected years

Year	Antigen		
	Measles	DTP*	OPV†
1965§	33.2	73.9	73.9
1970§	57.2	76.1	65.9
1975§	65.5	75.2	64.8
1980§	63.5	66.3	58.8
1985§	60.8	64.9	55.3
1991¶	77.6	65.8	50.6

*Three or more doses of diphtheria and tetanus toxoids and pertussis vaccine.
†Three or more doses of oral poliovirus vaccine.
§Source: United States Immunization Survey, 1965–1985.
¶Source: National Health Interview Survey, 1991.

Measles — Continued

comparable to or lower than that reported in previous years. Overall, only 42% of preschool-aged children had received all age-appropriate vaccinations†, although this level may underestimate coverage because parents may have failed to recall some doses of multiple-dose vaccines (*8*). However, this level is substantially lower than the national health objective for the year 2000 of 90% complete series coverage by the second birthday (objective 20.11) (*9*).

Strategies to improve vaccination levels include 1) reducing barriers to vaccination (e.g., increasing the number of clinic hours when vaccinations are given and the availability of walk-in vaccination services); 2) taking advantage of all opportunities to vaccinate (e.g., simultaneous use of multiple vaccines whenever possible, excluding from vaccination only persons with valid contraindications); 3) using innovative vaccine delivery techniques (e.g., vaccination in hospital emergency departments); 4) increasing the number of children who return for vaccination at the appropriate age by improving follow-up and recall systems; and 5) providing education about vaccination to parents (*10*).

A major comprehensive childhood vaccination initiative is under way to improve levels among preschool-aged children. The principal components of this initiative are 1) improving the vaccine delivery infrastructure through increased federal funding for this purpose (e.g., increasing vaccination clinic personnel and hours of operation, particularly in the inner cities); 2) assuring universal access to vaccination services; and 3) assuring that computerized systems are established in each state for tracking the vaccination status of all children.

To sustain the decrease in transmission of measles in the United States, and to achieve similar results with other vaccine-preventable diseases, age-appropriate vaccination coverage efforts must be improved—particularly among preschool-aged children living in inner-city areas. Transmission of measles among preschool-aged children is likely to recur unless measles vaccine coverage is improved and age-appropriate vaccination is ensured.

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†Up-to-date for age was based on the recommended number of doses of DTP, OPV, and MMR vaccine as recommended by the Advisory Committee on Immunization Practices and the American Academy of Pediatrics plus a 30-day grace period. When the recommendation did not agree, the later recommended age was used.

Measles — Continued

10. CDC. Standards for pediatric immunization practices. Atlanta: US Department of Health and Human Services, Public Health Service, 1993.

Notices to Readers

NIOSH Alert: Request for Assistance in Preventing Falls and Electrocutions During Tree Trimming

CDC's National Institute for Occupational Safety and Health (NIOSH) periodically issues alerts on workplace hazards that have caused death, serious injury, or illness to workers. One such alert, *Request for Assistance in Preventing Falls and Electrocutions During Tree Trimming* (*1*) recently was released and is available to the public.* This alert describes eight representative incidents that resulted in five electrocutions and three fatal falls of tree trimmers and provides recommendations to prevent falls and electrocutions during tree trimming and cutting.

Data from the NIOSH National Traumatic Occupational Fatality database indicate that during 1980–1988, at least 181 workers involved in tree trimming and cutting (approximately 20 each year) died from injuries sustained at work. The two leading causes of death were electrocution (68 [38%] workers) and falls (52 [29%] workers). Recent NIOSH investigations conducted under the Fatal Accident Circumstances and Epidemiology program (now called the Fatality Assessment and Control Evaluation program) suggest that many tree trimmers and their employers lack training and knowledge of relevant Occupational Safety and Health Administration standards and may be unaware of the risks posed by inadequate or improper safety procedures and equipment.

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NIOSH Alert: Request for Assistance in Preventing Worker Injuries and Deaths Caused by Falls From Suspension Scaffolds

CDC's National Institute for Occupational Safety and Health (NIOSH) periodically issues alerts on workplace hazards that have caused death, serious injury, or illness to workers. One such alert, *Request for Assistance in Preventing Worker Injuries and Deaths Caused by Falls From Suspension Scaffolds* (*1*) was recently released and is available to the public.* This alert describes five incidents of fatal falls from suspension scaffolds that resulted in six deaths. All the incidents involved violations of Occupational Safety and Health Administration (OSHA) regulations for scaffolds. The alert provides recommendations, including OSHA regulations, to prevent serious injuries and fatal falls while working from suspension scaffolds.

* Single copies of this document are available without charge from the Information Dissemination Section, Division of Standards Development and Technology Transfer, NIOSH, CDC 4676 Columbia Parkway, Cincinnati, OH 45226; telephone (513) 533-8287 (1:00–4:30 p.m., Eastern time); fax (513) 533-8573.

Notices to Readers — Continued

A "suspension scaffold" is the term applied to one or more working platforms suspended by ropes or other means from an overhead structure; workers may die or be seriously injured if suspension scaffold equipment and fall-protection systems fail. During 1980–1985, falls from scaffolds accounted for 461 (17%) of 2705 fatal falls from elevations, second only to falls from buildings; a substantial proportion of these incidents involved suspension scaffolds. Recent investigations by NIOSH suggest that fatal falls result from defective scaffold equipment, improper installation or operation, improper training of workers, or failure to use appropriate personal fall-protection equipment.

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27th National Immunization Conference

CDC is sponsoring the 27th National Immunization Conference in Washington, D.C., June 14–18, 1993. The conference is designed for public health professionals involved in organizing and implementing immunization activities at state and local levels throughout the United States and its territories.

The goal of the conference is to provide information to assist public health professionals in reaching the national year 2000 objective of 90% vaccination levels in children by their second birthday. The conference will include updates on global immunization efforts, immunization action plans, assessment activities, vaccine safety, and adult immunization.

This year's conference will include workshops on writing vaccination program objectives, gaining legislative support, and building partnerships. The workshops are designed to help participants acquire the skills and knowledge needed for their evolving roles in the immunization effort.

Additional information is available from CDC's National Immunization Program, Mailstop E-52, 1600 Clifton Road, NE, Atlanta, GA 30333; telephone (404) 639-0528; fax (404) 639-0539.

Erratum: Vol. 42, No. 14

In the article "Use of Smokeless Tobacco Among Adults—United States, 1991," on page 263, the first sentence incorrectly reads "Consumption of moist snuff and other smokeless tobacco products in the United States almost tripled from 1972 through 1991 (*1*)." The sentence should read "Consumption of moist snuff in the United States almost tripled from 1972 through 1991 (*1*)."

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