

MORBIDITY AND MORTALITY WEEKLY REPORT

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Perspectives in Disease Prevention and Health Promotion

Workplace Smoking Survey — New York City

During the period May 16-23, 1986, employees of the New York City Department of Health (NYCDOH) participated in a survey regarding smoking practices and attitudes toward a workplace smoking policy. The survey was conducted to obtain baseline information for evaluating the impact of a smoking policy initiated by the mayor and scheduled to be implemented July 1, 1986. It was also intended to familiarize employees with the policy.

Questionnaires were completed by employees who volunteered to attend one of several NYCDOH meetings concerning the mayor's proposed legislation and pending executive order about smoking restrictions. Of the estimated 900 employees in the department's primary office building, 608 attended the meetings, and 496 completed the survey. Thus, 55% of the total employees and 82% of those attending the meetings completed the questionnaire. Of the respondents, 137 (28%) currently smoked cigarettes, eight (2%) smoked pipes or cigars, 333 (67%) were nonsmokers, and 18 (4%) did not answer this question. The female to male ratio of respondents was 2.5:1. Thirty-one percent of the males and 28% of the females were current smokers. Eighteen percent of the smokers smoked a pack or more of cigarettes per day. Sixteen percent of the cigarette smokers reported that they did not smoke at work. Fifty-nine percent of nonsmokers reported at least occasional exposure to tobacco smoke from others in the workplace; 56% of nonsmokers reported at least occasional exposure to tobacco smoke from the visiting public.

Regarding employee attitudes toward smoking in the workplace, 63% of all respondents (26% of smokers and 79% of nonsmokers) reported being annoyed when other employees smoked nearby. Of nonsmokers, 38% reported that, when exposed to tobacco smoke, they would like to ask smokers to stop but are hesitant to do so. Thirty-three percent of nonsmokers reported that they were able to work without noticing smoke. Twenty-nine percent reported that they try to move away when other employees smoke. Overall, 82% of the respondents (including 69% of smokers) indicated that smoking in the workplace should be either limited (65%) or banned (17%). Most respondents indicated that restricting smoking in the NYCDOH would have no adverse effect on relations among their co-workers (87%), on their job performance (94%), or on their office morale (90%). Of current smokers, 46% indicated they would quit or reduce their smoking if workplace smoking were restricted.

Smoking Survey — Continued

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Editorial Note: The control of smoking and tobacco smoke exposure in the workplace has become an important public health issue in the United States in recent years. No studies have yet quantified the nonsmoking worker's risk of lung cancer from chronic exposure to tobacco smoke in the workplace. However, numerous studies have documented that nonsmoking wives of smoking men have a risk of lung cancer that is between 14% and 34% higher than that of wives of nonsmoking men (1). In addition, it has been shown that employees exposed to sidestream tobacco smoke in the work environment are at greater risk of developing small airways dysfunction than are nonexposed employees (2). Small airways disease, which is the first pathological change seen in beginning smokers (3), may increase the risk of developing disabling chronic airways obstruction (4).

As a consequence of data such as these concerning the effects of sidestream tobacco smoke exposure, an increasing number of employers have instituted policies to control smoking in the workplace. While some policies and control measures have been adopted voluntarily, others have been required by legislative actions. There are already laws in 17 states and ordinances in at least 100 localities regulating workplace smoking (Office on Smoking and Health, unpublished data). In one recent national survey, 36% of 662 responding employers reported having established workplace smoking policies; an additional 2% planned to enact policies by the end of 1986, and 21% reported that policies were under consideration (5).

Despite the voluntary nature of the NYCDOH survey, the results are consistent with previously reported findings concerning employee knowledge, attitudes, and smoking practices in the workplace (6-10). Since this represents 55% of total NYCDOH employees, however, these results should be interpreted with caution. Smoking prevalence among respondents in this survey (28%) is similar to the estimates of national smoking prevalence (30%) (11). It is also similar to the prevalence reported for white collar workers (32% of females, 33% of males) (12) and for those in a surveyed private workplace (33%) (6).

In most surveys, the majority of respondents have approved of some limitation of smoking in the workplace (6-10). A nationwide survey commissioned by the American Lung Association (13) asked 1,540 randomly selected individuals whether companies should have a policy on smoking at work. Eighty-seven percent of all respondents—including 80% of smokers—indicated that smoking in the workplace should be limited. Surveys of employees at individual workplaces have provided similar support for smoking restrictions. For example, 74% of employees at a large health maintenance organization approved of a smoking prohibition policy 4 months after implementation of the policy (7). In another survey, 71% of all employees indicated that smoking in the immediate work area should be restricted (80% of non-smokers and 51% of smokers) (6).

Policies limiting smoking in the workplace not only protect nonsmokers from the health effects of passive smoking but also may encourage smokers to quit or reduce smoking. In one survey, 51% of the employees who smoked indicated that workplace smoking regulations might prompt them to reduce smoking or try to quit smoking completely (6). In the NYCDOH survey, the majority of participating employees were in favor of restricting smoking in the workplace.

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Smoking Survey — Continued

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*Epidemiologic Notes and Reports***Tularemia — New Jersey**

On December 3, 1985, a 67-year-old woman died from tularemia in a New Jersey hospital. She had been admitted 7 days previously with a metabolic acidosis secondary to combined dehydration and sepsis. On admission, she had an "unhealing sore" on the first finger of her right hand. Initial treatment included gentamicin and cefazolin, as well as insulin for uncontrolled, late-onset diabetes. After 3 days, the treatment was changed to streptomycin. Despite these measures, disseminated intravascular coagulation, respiratory failure, and hypotension developed, and the woman died.

The case history showed that on November 9, 1985, an 18-year-old neighbor had shot two rabbits behind his home in Gloucester County, New Jersey. After eviscerating the animals, he gave them to the patient and her 64-year-old husband, who skinned and froze the rabbits. During the summer, the young man had noticed several dead rabbits around his house and had attributed their deaths to insecticide that had been sprayed on local fields. One of the two rabbits he shot was noted to be losing its fur.

Two days after dressing out the rabbits, the young man became ill with an ulcerated hand lesion, axillary lymphadenopathy, and a fever. He was examined at the local hospital; no diagnosis was made, but he was treated with antipyretics. On November 23, his two neighbors—the recipients of the rabbits—were admitted to the local hospital. They both had sepsis and hand lesions. On November 26, following instructions from the hospital, the young hunter was started on streptomycin, and he recovered rapidly.

Tularemia — Continued

The woman's original titer for tularemia, drawn November 23, was less than 20. Her titer rose to 160 after 10 days. First samples from both men were drawn late in the disease. The hunter's first blood specimen was drawn on November 29, when his titer was 1,280. It was reported as 2,560 after 7 days. Blood specimens from the husband were drawn December 3, when his titer was 320, and the level rose to 1,280 after 14 days.

The two rabbits were sent to CDC for analysis. Cultures from the bone marrow of both animals grew *Francisella tularensis*.

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Editorial Note: Six cases of tularemia had been reported in New Jersey over the 5-year period prior to this outbreak. One case, in 1985, was also associated with rabbits. No tularemia deaths had been reported in the state in the previous 5 years.

The association between rabbits and human tularemia was first documented in 1913 (1), and rabbit contact was implicated in 90% of the more than 14,000 cases reported through

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TABLE I. Summary—cases specified notifiable diseases, United States

Disease	48th Week Ending			Cumulative, 48th Week Ending		
	Nov. 29, 1986	Nov. 30, 1985	Median 1981-1985	Nov. 29, 1986	Nov. 30 1985	Median 1981-1985
Acquired Immunodeficiency Syndrome (AIDS)	76	110	N	12,052	7,280	N
Septic meningitis	146	173	222	9,715	9,631	8,956
Encephalitis: Primary (arthropod-borne & unspec)	10	9	22	1,113	1,220	1,430
Post-infectious	-	1	2	93	112	83
Gonorrhea: Civilian	13,605	14,484	15,535	817,442	819,309	831,394
Military	218	216	240	15,544	19,346	22,245
Hepatitis: Type A	416	518	476	20,729	21,099	21,099
Type B	390	546	512	23,431	24,159	22,014
Non A, Non B	37	59	N	3,182	3,764	N
Unspecified	64	111	125	4,074	5,297	6,686
Legionellosis	11	20	N	733	713	N
Leprosy	4	4	4	228	342	221
Malaria	15	12	14	1,027	951	951
Measles: Total*	29	34	15	5,914	2,704	2,516
Indigenous	28	34	N	5,616	2,272	N
Imported	1	-	N	292	432	N
Meningococcal infections: Total	31	40	47	2,214	2,190	2,508
Civilian	31	40	47	2,212	2,183	2,493
Military	-	-	-	2	7	13
Mumps	167	52	67	4,878	2,709	3,044
Pertussis	37	65	36	3,943	3,275	2,150
Rubella (German measles)	3	4	11	477	601	914
Syphilis (Primary & Secondary): Civilian	425	463	521	24,840	24,817	28,595
Military	2	3	3	146	150	351
Toxic Shock syndrome	7	7	N	318	345	N
Tuberculosis	255	334	515	20,103	19,619	21,575
Tularemia	-	3	3	150	170	260
Typhoid fever	4	4	4	289	354	365
Typhus fever, tick-borne (RMSF)	2	4	5	735	675	949
Rabies, animal	44	68	90	4,992	4,982	5,602

TABLE II. Notifiable diseases of low frequency, United States

	Cum. 1986		Cum. 1986
Anthrax	-	Leptospirosis (Tex. 1)	37
Botulism: Foodborne	18	Plague	8
Infant (Tex. 1, Utah 1, Oreg. 1)	64	Poliomyelitis, Paralytic	1
Other	1	Psittacosis (Mich. 1)	88
Brucellosis	77	Rabies, human	-
Cholera	16	Tetanus (Tex. 1)	59
Congenital rubella syndrome	10	Trichinosis	31
Congenital syphilis, ages < 1 year	107	Typhus fever, flea-borne (endemic, murine) (Tex. 1)	46
Diphtheria	-		

*One of the 29 reported cases for this week was imported from a foreign country or can be directly traceable to a known internationally imported case within two generations.

**TABLE III. Cases of specified notifiable diseases, United States, weeks ending
November 29, 1986 and November 30, 1985 (48th Week)**

Reporting Area	AIDS	Aseptic Meningitis	Encephalitis		Gonorrhea (Civilian)		Hepatitis (Viral), by type				Legionel- losis	Leprosy
			Primary	Post-in- fectious			A	B	NA, NB	Unspeci- fied		
	Cum 1986	1986	Cum 1986	Cum 1986	Cum 1986	Cum 1985	1986	1986	1986	1986	1986	Cum 1986
UNITED STATES	12,052	146	1,113	93	817,442	819,309	416	390	37	64	11	228
NEW ENGLAND	479	10	29	3	22,013	20,879	12	41	-	11	1	8
Maine	20	-	2	-	789	1,067	1	1	-	-	-	-
NH	13	-	2	-	529	523	-	-	-	-	-	-
VT	5	2	4	2	246	307	-	-	-	1	1	-
Mass	254	1	5	-	7,983	8,636	2	30	-	10	-	8
RI	31	3	-	-	1,710	1,724	3	3	-	-	-	-
Conn	156	4	16	1	10,756	8,622	6	7	-	-	-	-
MID ATLANTIC	4,417	8	97	10	142,792	119,042	7	23	-	21	-	17
Upstate NY	487	3	35	6	17,218	16,772	3	8	-	-	-	1
N Y City	2,998	3	19	1	82,811	58,145	-	-	-	19	-	15
N J	664	2	10	-	18,120	17,856	4	15	-	2	-	-
Pa	268	-	33	3	24,643	26,269	-	-	-	-	-	1
E N CENTRAL	725	19	338	11	106,249	107,001	5	30	-	1	3	4
Ohio	154	9	130	3	27,344	29,345	2	22	-	-	3	-
Ind	59	7	79	3	11,380	11,479	1	2	-	1	-	-
Ill	347	-	50	4	25,340	25,109	-	-	-	-	-	4
Mich	127	3	53	1	34,685	30,751	2	6	-	-	-	1
Wis	38	-	26	-	7,248	10,317	-	-	-	-	-	-
W N CENTRAL	225	14	81	9	35,215	38,202	12	13	2	-	-	4
Minn	88	-	34	-	5,084	5,649	6	5	-	-	-	2
Iowa	18	2	26	-	3,602	4,114	-	-	-	-	-	-
Mo	72	9	2	-	17,429	18,423	1	8	1	-	-	-
N Dak	2	-	4	-	290	258	-	-	-	-	-	-
S Dak	2	-	11	-	720	736	2	-	1	-	-	-
Nebr	10	-	1	1	2,602	3,257	1	-	-	-	-	-
Kans	33	3	3	8	5,488	5,765	2	-	-	-	-	2
S ATLANTIC	1,735	17	144	37	211,254	214,043	32	113	13	5	2	3
Del	22	-	6	-	3,483	4,152	1	-	-	-	-	-
Md	183	3	31	1	25,081	27,216	-	2	1	-	-	-
D C	222	1	-	1	15,870	14,663	2	2	-	-	-	-
Va	137	2	40	1	17,520	17,866	4	7	2	1	2	1
W Va	7	1	45	-	2,053	2,419	-	4	1	-	-	-
N C	73	4	18	2	32,829	33,800	1	8	3	1	-	-
S C	47	-	-	-	17,943	20,199	6	22	-	-	-	-
Ga	266	2	-	1	35,232	41,607	6	21	-	-	-	-
Fla	778	4	4	31	61,243	52,121	12	47	6	3	-	2
ES CENTRAL	147	20	61	4	65,474	70,921	2	20	-	-	-	1
Ky	28	11	30	1	7,214	8,111	-	1	-	-	-	-
Tenn	70	2	8	1	24,787	27,279	1	10	-	-	-	-
Ala	25	7	22	2	19,225	21,251	1	8	-	-	-	1
Miss	24	-	1	-	14,248	14,280	-	1	-	-	-	-
W S CENTRAL	1,068	28	180	6	95,304	103,378	39	23	2	9	1	23
Ark	29	-	-	2	9,018	9,666	1	2	-	-	-	1
La	143	3	16	-	16,399	19,430	3	4	-	-	1	1
Okla	41	2	21	-	10,917	11,547	5	3	1	-	-	-
Tex	855	23	143	4	58,970	62,735	30	14	1	9	-	21
MOUNTAIN	323	5	38	1	24,150	25,954	77	37	2	5	1	13
Mont	4	-	1	1	633	746	1	1	-	-	1	-
Idaho	3	-	-	-	800	897	8	2	-	-	-	-
Wyo	4	-	2	-	500	594	-	-	-	-	-	-
Colo	156	1	5	-	6,208	7,553	4	5	-	2	-	3
N Mex	23	-	3	-	2,556	2,878	31	7	1	-	-	-
Ariz	80	4	18	-	7,783	7,911	32	18	-	3	-	7
Utah	18	-	7	-	1,029	1,259	-	3	-	-	-	1
Nev	35	-	2	-	4,641	4,116	1	1	1	-	-	2
PACIFIC	2,933	25	145	12	114,991	119,889	230	90	18	12	3	155
Wash	157	2	13	-	8,367	9,246	46	14	4	3	-	16
Oreg	58	-	-	-	5,051	5,950	25	8	4	-	-	-
Calif	2,656	21	124	12	98,190	100,250	151	68	9	8	3	105
Alaska	12	-	7	-	2,442	2,870	8	-	1	1	-	-
Hawaii	50	2	1	-	1,193	1,573	-	-	-	-	-	33
Guam	-	-	-	-	201	181	-	-	-	-	-	1
P R	139	-	5	1	2,237	2,912	-	1	-	-	-	7
VI	5	-	-	-	254	378	-	1	-	-	-	-
Pac Trust Terr	-	-	-	-	429	766	-	-	-	-	-	56
Amer Samoa	-	-	-	-	53	-	-	-	-	-	-	3

N Not notifiable

U Unavailable

**TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending
November 29, 1986 and November 30, 1985 (48th Week)**

Reporting Area	Malaria	Measles (Rubeola)					Menin- gococcal Infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported *		Total									
	Cum 1986	1986	Cum 1986	1986	Cum 1986	Cum 1985	Cum 1986	1986	Cum 1986	1986	Cum 1986	Cum 1985	1986	Cum 1986	Cum 1985
UNITED STATES	1,027	28	5,616	1	292	2,704	2,214	167	4,878	37	3,943	3,275	3	477	601
NEW ENGLAND	62	-	88	-	16	126	159	-	65	2	159	204	-	9	13
Maine	2	-	12	-	1	1	27	-	-	-	2	9	-	-	-
NH	3	-	43	-	-	-	6	-	14	1	82	112	-	1	3
Vt	2	-	-	-	-	-	19	-	4	-	3	3	-	1	-
Mass	32	-	24	-	13	118	45	-	14	1	42	47	-	4	6
RI	7	-	2	-	-	-	21	-	11	-	6	22	-	2	-
Conn	16	-	7	-	2	7	41	-	22	-	24	11	-	1	4
MID ATLANTIC	141	-	1,729	-	34	232	344	5	203	5	202	242	-	37	228
Upstate N Y	48	-	77	-	24	85	122	1	66	1	125	115	-	27	18
N Y City	31	-	723	-	4	79	70	-	29	-	10	29	-	5	185
NJ	37	-	905	-	4	28	30	1	51	2	20	11	-	5	11
Pa	25	-	24	-	2	40	122	3	57	2	47	87	-	-	14
E N CENTRAL	61	-	1,079	-	28	582	321	89	3,173	8	375	799	-	49	38
Ohio	19	-	-	-	10	60	132	4	132	8	167	117	-	1	-
Ind	2	-	27	-	11	57	34	-	40	-	35	201	-	-	1
Ill	16	-	699	-	4	346	74	84	2,412	-	36	74	-	38	20
Mich	20	-	75	-	-	60	69	1	339	-	35	48	-	8	16
Wis	4	-	278	-	3	59	11	-	250	-	99	359	-	2	1
W N CENTRAL	30	-	323	-	17	12	104	12	161	-	1,406	234	-	14	19
Minn	8	-	45	-	4	6	23	5	18	-	48	116	-	1	2
Iowa	1	-	133	-	1	-	11	7	57	-	19	31	-	1	1
Mo	12	-	26	-	6	3	34	-	24	-	22	32	-	1	7
N Dak	-	-	25	-	1	2	1	-	4	-	5	10	-	1	2
S Dak	2	-	-	-	-	-	5	-	1	-	14	5	-	-	-
Nebr	4	-	-	-	-	-	11	-	-	-	10	11	-	-	-
Kans	3	-	94	-	5	1	19	-	57	-	1,288	29	-	10	7
S ATLANTIC	122	27	775	-	56	340	403	7	242	5	749	535	2	11	52
Del	1	-	1	-	-	-	5	-	1	-	227	2	-	-	2
Md	14	-	26	-	9	115	46	1	26	-	164	311	-	-	6
D C	6	-	-	-	1	31	5	-	1	-	-	-	-	-	-
Va	32	-	36	-	24	28	71	1	44	-	41	20	-	-	2
W Va	4	-	2	-	-	33	4	-	48	1	26	4	-	-	9
N C	6	-	3	-	1	9	63	1	28	3	79	34	-	-	1
S C	6	-	274	-	-	3	44	1	15	-	18	2	-	-	3
Ga	13	-	79	-	14	8	58	-	28	-	132	92	-	-	-
Fla	40	27	354	-	7	113	107	3	51	1	62	70	2	11	29
E S CENTRAL	21	-	63	-	9	7	114	39	164	-	47	67	-	4	3
Ky	6	-	-	-	6	5	26	-	6	-	5	8	-	4	3
Tenn	1	-	57	-	1	1	37	39	153	-	16	26	-	-	-
Ala	10	-	1	-	1	-	37	-	4	-	25	26	-	-	-
Miss	4	-	5	-	1	1	14	-	1	-	1	7	-	-	-
W S CENTRAL	103	-	680	-	38	440	206	3	268	-	250	533	-	71	42
Ark	1	-	276	-	2	-	27	-	61	-	20	14	-	1	1
La	18	-	4	-	-	42	26	-	3	-	15	17	-	-	-
Okl	12	-	37	-	2	1	30	N	N	-	126	166	-	-	2
Tex	72	-	363	-	34	397	123	3	204	-	89	336	-	70	39
MOUNTAIN	38	-	302	-	29	541	104	3	248	4	273	220	-	24	6
Mont	1	-	-	-	8	137	10	1	6	-	20	10	-	2	-
Idaho	1	-	1	-	-	137	4	-	8	4	46	17	-	-	2
Wyo	-	-	-	-	-	5	2	-	-	-	4	1	-	1	-
Colo	12	-	2	-	8	15	19	1	17	-	66	87	-	1	-
N Mex	5	-	33	-	7	6	11	N	N	-	26	12	-	-	2
Ariz	13	-	252	-	6	241	22	-	193	-	65	40	-	2	1
Utah	3	-	12	-	-	-	10	-	15	-	42	53	-	15	-
Nev	3	-	2	-	-	-	26	1	9	-	4	-	-	3	1
PACIFIC	449	1	577	1	65	424	459	9	354	13	482	441	1	258	200
Wash	29	1	140	-	28	142	63	-	18	-	149	82	-	17	14
Oreg	19	-	7	-	4	5	36	N	N	2	14	50	-	4	2
Calif	400	-	403	1†	31	253	334	7	305	6	297	262	1	231	135
Alaska	-	-	-	-	-	-	14	2	8	1	5	30	-	-	1
Hawaii	1	-	27	-	2	24	13	-	23	4	20	17	-	6	48
Guam	1	-	4	-	1	11	1	-	4	-	-	-	-	4	3
P R	4	-	36	-	-	67	3	-	33	-	19	15	-	62	27
V.I.	-	-	-	-	-	10	-	-	17	-	-	-	-	-	-
Pac Trust Terr	-	-	-	-	-	-	1	-	11	-	-	-	-	2	-
Amer Samoa	-	-	2	-	-	-	-	-	5	-	-	-	-	1	-

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

N Not notifiable U Unavailable † International § Out-of-state

**TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending
November 29, 1986 and November 30, 1985 (48th Week)**

Reporting Area	Syphilis (Civilian) (Primary & Secondary)		Toxic- shock Syndrome	Tuberculosis		Tula- remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum 1986	Cum 1985	1986	Cum 1986	Cum 1985	Cum 1986	Cum 1986	Cum 1986	Cum 1986
UNITED STATES	24,840	24,817	7	20,103	19,619	150	289	735 +5	4,992
NEW ENGLAND	457	547	-	625	664	1	16	13	8
Maine	19	15	-	34	45	-	-	-	-
NH	10	38	-	23	21	-	-	2	1
Vt	9	7	-	16	8	-	-	-	2
Mass	246	270	-	347	391	1	13	4	-
RI	19	17	-	42	50	-	-	3	3
Conn	154	200	-	163	149	-	3	4	2
MID ATLANTIC	3,492	3,348	3	3,974	3,502	1	24	40 +5	634
Upstate N Y	170	244	-	576	600	-	4	20	81
N Y City	1,958	2,030	-	2,078	1,715	-	11	5	-
NJ	609	643	3	673	479	1	8	2	17
Pa	755	431	-	647	708	-	1	13	536
E N CENTRAL	792	917	-	2,379	2,394	1	23	46 -2	134
Ohio	117	135	-	419	410	-	9	40 -2	16
Ind	103	75	-	258	309	-	2	-	17
Ill	370	414	-	1,026	1,042	-	3	2	39
Mich	162	233	-	572	498	1	6	4	24
Wis	40	60	-	104	135	-	3	-	38
W N CENTRAL	198	218	-	585	560	41	9	48 +1	766
Minn	31	42	-	136	118	-	2	1	120
Iowa	8	18	-	46	53	1	-	1	177
Mo	104	121	-	289	270	30	6	24	67
N Dak	5	2	-	10	10	-	-	1	146
S Dak	9	6	-	28	31	3	-	6	170
Nebr	11	7	-	14	16	1	-	5	32
Kans	30	22	-	62	62	6	1	10	54
S ATLANTIC	7,455	7,113	-	4,048	4,031	12	45	330	1,263
Del	53	36	-	42	42	-	1	1	1
Md	423	461	-	289	360	2	15	29	559
D C	274	306	-	152	141	1	4	-	31
Va	316	282	-	344	406	3	10	51	189
W Va	20	25	-	115	102	-	3	10	53
N C	488	634	-	596	538	3	4	128	10
S C	646	743	-	516	489	-	-	70	64
Ga	1,391	1,287	-	668	677	3	-	39	193
Fla	3,844	3,339	-	1,326	1,276	-	8	2	163
E S CENTRAL	1,667	1,933	-	1,772	1,692	13	4	110 +1	354
Ky	65	65	-	404	414	5	-	22	100
Tenn	575	592	-	508	502	6	1	45	138
Ala	485	611	-	557	499	1	1	25	113
Miss	542	665	-	303	277	1	2	18	3
W S CENTRAL	4,867	5,743	1	2,541	2,508	67	29	137	685
Ark	243	308	-	343	292	49	-	16	155
La	847	1,008	-	393	369	1	1	1	22
Okla	137	178	-	235	236	12	2	103	57
Tex	3,640	4,249	1	1,570	1,611	5	26	17	451
MOUNTAIN	561	714	-	494	527	11	16	10	630
Mont	7	6	-	31	46	1	1	4	204
Idaho	14	7	-	23	25	-	-	2	9
Wyo	4	14	-	-	7	1	-	1	266
Colo	126	201	-	51	83	3	1	3	29
N Mex	68	120	-	92	83	1	1	-	6
Ariz	233	297	-	231	230	-	9	-	98
Utah	18	9	-	31	17	4	3	-	7
Nev	91	60	-	35	36	1	1	-	11
PACIFIC	5,351	4,284	3	3,685	3,741	3	123	1	518
Wash	152	99	1	202	204	1	3	-	5
Oreg	107	100	-	118	124	-	-	-	1
Calif	5,047	4,014	2	3,154	3,141	1	114	1	504
Alaska	10	4	-	46	95	1	1	-	8
Hawaii	35	67	-	165	177	-	5	-	-
Guam	1	2	-	34	38	-	1	-	-
P R	808	813	-	305	330	-	5	-	43
VI	1	3	-	1	1	-	-	-	-
Pac. Trust Terr	246	128	-	81	75	-	49	-	-
Amer Samoa	-	-	-	5	-	-	-	-	-

U Unavailable

**TABLE IV. Deaths in 121 U.S. cities.* week ending
November 29, 1986 (48th 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	552	397	98	31	8	18	42	S ATLANTIC	971	582	245	89	24	29	37
Boston, Mass	118	68	30	7	4	9	14	Atlanta, Ga	95	65	22	5	2	1	2
Bridgeport, Conn	40	29	8	3	-	-	1	Baltimore, Md	164	81	51	19	5	8	10
Cambridge, Mass	29	22	4	3	-	-	3	Charlotte, N.C.	61	40	12	6	3	-	1
Fall River, Mass	18	14	4	-	-	-	-	Jacksonville, Fla	58	41	15	2	-	-	1
Hartford, Conn §	64	46	11	4	2	1	2	Miami, Fla	86	55	19	8	2	2	2
Lowell, Mass	18	13	2	2	1	-	-	Norfolk, Va	52	37	13	2	-	-	1
Lynn, Mass	17	17	-	-	-	-	1	Richmond, Va	53	27	20	5	-	1	2
New Bedford, Mass	19	16	2	1	-	-	1	Savannah, Ga	24	12	8	2	-	2	2
New Haven, Conn.	50	30	10	7	-	3	5	St Petersburg, Fla	86	67	12	6	1	-	4
Providence, R.I.	32	27	3	1	-	1	2	Tampa, Fla	42	20	9	7	2	2	3
Somerville, Mass	9	5	4	-	-	-	1	Washington, D.C.	218	110	59	27	9	13	8
Springfield, Mass	42	38	3	1	-	-	4	Wilmington, Del	32	27	5	-	-	-	1
Waterbury, Conn.	31	24	4	2	-	-	5	E S CENTRAL	635	392	155	48	21	19	25
Worcester, Mass	65	48	13	-	1	3	3	Birmingham, Ala	101	60	26	11	3	1	1
MID ATLANTIC	2,617	1,714	531	263	56	53	121	Chattanooga, Tenn	39	26	10	2	-	1	2
Albany, N.Y.	50	32	7	7	3	1	2	Knoxville, Tenn	77	47	17	6	3	4	2
Allentown, Pa	23	18	5	-	-	-	-	Louisville, Ky	122	78	31	8	3	2	8
Buffalo, N.Y.	77	49	16	9	2	1	8	Memphis, Tenn	120	66	30	8	9	7	4
Camden, N.J.	25	15	4	4	1	1	2	Mobile, Ala	38	26	6	2	2	2	2
Elizabeth, N.J.	28	20	4	4	-	-	2	Montgomery, Ala	29	22	5	2	-	-	1
Erie, Pa †	37	27	6	1	1	2	4	Nashville, Tenn	109	67	30	9	1	2	5
Jersey City, N.J.	37	26	9	2	-	-	2	W S CENTRAL	968	563	242	98	33	32	32
N.Y. City, N.Y.	1,453	923	296	173	34	27	43	Austin, Tex	47	33	10	3	1	-	1
Newark, N.J.	40	25	9	5	-	1	-	Baton Rouge, La	17	8	6	1	2	-	-
Paterson, N.J.	38	12	10	7	2	7	3	Corpus Christi, Tex	30	18	8	3	-	1	1
Philadelphia, Pa	371	244	89	26	6	6	24	Dallas, Tex	154	81	47	21	4	1	2
Pittsburgh, Pa †	72	47	17	6	1	1	3	El Paso, Tex	41	25	11	3	-	2	4
Reading, Pa	31	24	5	2	-	-	2	Fort Worth, Tex	60	34	15	3	4	4	3
Rochester, N.Y.	114	88	16	4	4	2	10	Houston, Tex §	304	163	75	39	14	13	7
Schenectady, N.Y.	23	16	7	-	-	-	1	Little Rock, Ark	51	33	10	4	2	2	4
Scranton, Pa †	22	20	2	-	-	-	1	New Orleans, La	80	50	16	9	1	4	-
Syracuse, N.Y.	90	62	19	6	2	1	5	San Antonio, Tex	131	83	30	11	3	4	9
Trenton, N.J.	36	23	7	5	-	1	-	Shreveport, La	5	5	-	-	-	-	-
Utica, N.Y.	13	9	-	2	-	2	3	Tulsa, Okla	48	30	14	1	2	1	1
Yonkers, N.Y.	37	34	3	-	-	-	6	MOUNTAIN	517	331	114	37	17	18	18
E N CENTRAL	1,935	1,271	408	145	47	64	82	Albuquerque, N Mex	47	31	3	9	2	2	1
Akron, Ohio	29	24	3	2	-	-	-	Colo. Springs, Colo	31	21	2	2	3	3	1
Canton, Ohio	28	21	5	1	-	1	2	Denver, Colo	99	60	31	5	2	1	4
Chicago, Ill §	564	362	125	45	10	22	16	Las Vegas, Nev	73	43	23	4	3	-	2
Cincinnati, Ohio §	138	93	29	8	3	5	9	Ogden, Utah	17	10	5	-	1	1	-
Cleveland, Ohio	143	82	37	13	1	10	1	Phoenix, Ariz	126	78	28	10	4	6	5
Columbus, Ohio	175	104	44	16	7	4	12	Pueblo, Colo	21	16	3	2	-	-	3
Dayton, Ohio	75	48	18	6	1	2	2	Salt Lake City, Utah	39	25	8	1	2	3	-
Detroit, Mich	150	89	26	19	9	7	4	Tucson, Ariz	64	47	11	4	-	2	2
Evansville, Ind.	19	13	3	-	1	2	1	PACIFIC	1,491	1,007	266	124	41	46	92
Fort Wayne, Ind.	53	34	9	7	2	1	4	Berkeley, Calif	13	10	2	-	-	1	1
Gary, Ind.	13	6	4	2	1	-	1	Fresno, Calif	63	48	7	4	2	2	4
Grand Rapids, Mich	27	21	3	-	2	1	3	Glendale, Calif	22	17	4	1	-	-	1
Indianapolis, Ind.	133	90	30	9	3	1	4	Honolulu, Hawaii	49	27	14	4	2	2	8
Madison, Wis §	35	23	7	3	1	1	4	Long Beach, Calif	108	67	25	12	3	1	12
Milwaukee, Wis	97	73	18	3	1	2	5	Los Angeles, Calif	302	208	51	22	12	4	8
Peoria, Ill	31	25	3	-	-	-	3	Oakland, Calif §	59	42	10	4	2	1	2
Rockford, Ill	49	38	9	2	-	-	4	Pasadena, Calif	25	19	5	1	-	-	-
South Bend, Ind.	41	27	8	4	2	-	4	Portland, Ore	144	100	25	13	4	2	9
Toledo, Ohio	73	58	11	1	1	2	2	Sacramento, Calif	97	66	17	7	3	4	11
Youngstown, Ohio	62	40	16	4	1	1	1	San Diego, Calif	114	71	24	12	2	4	6
W N CENTRAL	758	520	143	52	22	21	31	San Francisco, Calif	141	85	29	19	1	6	4
Des Moines, Iowa §	56	43	11	2	-	-	3	San Jose, Calif	139	82	29	15	3	10	13
Duluth, Minn	17	14	2	1	-	-	-	Seattle, Wash	150	110	19	8	6	7	6
Kansas City, Kans	23	16	2	1	3	1	-	Spokane, Wash	44	40	2	-	1	1	7
Kansas City, Mo	131	88	25	10	3	5	7	Tacoma, Wash	21	15	3	2	-	1	-
Lincoln, Minn	27	22	4	-	-	1	1	TOTAL	10,444 ^{††}	6,777	2,202	887	269	300	480
Minneapolis, Minn	184	133	30	11	4	6	5								
Omaha, Nebr	58	35	12	6	2	3	2								
St. Louis, Mo	148	90	34	17	4	3	6								
St. Paul, Minn	60	46	9	-	4	1	2								
Wichita, Kans	54	33	14	4	2	1	5								

* 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.

§ Data not available. Figures are estimates based on average of past 4 weeks.

Tularemia — Continued

1944 (2). Although bloodsucking anthropod vectors have accounted for an increasing percentage of cases in more recent years, rabbits continue to be an important source of infection (3).

In the United States, wild rabbits of the genus *Sylvilagus* (cottontails, marsh rabbits, and swamp rabbits) present the greatest hazard (2). Jack rabbits and snowshoe hares are susceptible to tularemia but have rarely been implicated as direct sources of human infection. The domestic rabbit (*Oryctolagus cuniculus*) has not been documented as a source of human tularemia (2).

Exposure of the skin or conjunctiva to blood and other infectious tissue while skinning and dressing rabbits account for most cases. Ingestion of inadequately cooked meat has also been implicated. In some instances pulmonary tularemia has resulted from breathing aerosols generated while handling unopened rabbits or merely by poking at a dead rabbit with a stick (4,5). Indirect transmission from rabbits to humans may result from bites by pet animals or deerflies (6,7).

In 1939, the peak incidence year in the United States, 2,291 cases (17.5/1,000,000 population) were reported (2). Only 291 cases (1.2/1,000,000 population) were reported in 1984.

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Multiply Resistant Shigellosis in a Day-Care Center — Texas

Between October 10 and November 6, 1985, 15 children at a day-care center in Diboll, Texas, developed a diarrheal illness. *Shigella sonnei* was isolated from 10 ill children and from two of 19 asymptomatic children who were cultured on November 7. All isolates were colicin type 9, resistant to ampicillin, carbenicillin, streptomycin, cephalothin, and trimethoprim/sulfamethoxazole (TMP/SMX), and sensitive to tetracycline, nalidixic acid, chloramphenicol, and gentamicin. The attack rate was highest among the 12- to 22-month-old group. Family members of this group had the highest secondary attack rate (Table 1). No cases occurred among the 22 staff members. None of the children were hospitalized, but four of the five ill family members were.

The 89 children attending the center were cared for, by age group, in separate rooms. All groups except infants and toddlers had separate toilet and playground facilities. Infants and toddlers shared these facilities.

Shigellosis — Continued

Symptomatic children were excluded from the center until their diarrhea had resolved. Then they were permitted to return, without treatment or cultures, to their classrooms. Hand-washing and hygiene were emphasized; contact between age groups was limited; and the routine policy excluding food preparers from child care, particularly diaper-changing, was reinforced. No further cases were reported at the center after November 7, when this strategy was implemented.

During the following month, statewide surveillance for TMP/SMX-resistant *S. sonnei* infections detected an outbreak among kindergarteners in a town 100 miles away. Although this outbreak strain had the same colicin type and antimicrobial resistance profile as the Diboll strain, its plasmid content differed, and no direct connection between the two outbreaks was discovered.

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Editorial Note: Shigellosis in day-care centers can be difficult to control. Basic hygiene, exclusion of symptomatic persons, and routine antimicrobial therapy for all infected persons have been advocated as control measures (1). In the Texas outbreak reported here, antimicrobial therapy was not part of the control strategy because the strain was resistant to all drugs commonly used to treat shigellosis in children. Nonetheless, the straightforward control strategy in this well-designed day-care center was associated with the end of the outbreak, even though untreated convalescent children returned to the center and untreated asymptomatic carrier children remained there.

The elements contributing to this apparent success included vigorous emphasis on hand-washing among staff and children; routine exclusion of ill children; separate areas and staff for diapering and food-preparation; and separate rooms, toilets, and play-facilities for different age groups. There is some evidence that each element is important. Handwashing has been shown to reduce the incidence of diarrheal illness in day-care centers (2). In day-care centers in Houston, Texas, the incidence of diarrheal illness was significantly associated with the proportion of staff who changed diapers and also served or prepared food (3). The usefulness of separating children by age was suggested by uniform shigellosis attack rates observed across ages 0 to 5 years at a day-care center where the children were grouped together (4). Additional study of the efficacy and utility of these specific control measures is needed (5,6).

Providing day-care in isolation for convalescent children may limit the spread of shigellosis in the community. In one outbreak, in which children with shigellosis were rigidly excluded from a day-care center until negative cultures were obtained, the outbreak strain spread to a day-care center in an adjacent county (7). In another outbreak, at a center where isolation of

TABLE 1. Attack rates of shigellosis, by room assignment, among children < 5 years old attending a day-care center and their family members — Diboll, Texas, 1985.

Room assignment	Cases/Children	Attack rate (%)	Cases/Family members	Attack rate (%)
Infant	1/8	12	0/20	0
Toddler	6/10	60	4/31	13
Two-year-old	3/15	20	1/40	2
Three-year-old	4/10	40	0/29	0
Four-year-old	1/15	7	0/47	0
Total	15/58	26	5/167	3

Shigellosis — Continued

convalescent children was possible, treated, convalescent children without negative cultures were allowed to return to the day-care center, and there was no further spread of illness in either the center or the community (8). Further evaluation of convalescent day-care, with and without isolation, is needed before specific recommendations can be made.

To help day-care center directors, employees, and parents work with health departments to control disease in day-care centers, CDC has produced a training kit: "What To Do To Stop Disease in Child Day-Care Centers". This kit has been distributed to state health departments and licensing boards for distribution to licensed day-care centers. It also can be purchased for \$4.00 from the Government Printing Office, Superintendent of Documents, Washington, D.C., 20402. The GPO Stock Number is 017-023-00172-8.

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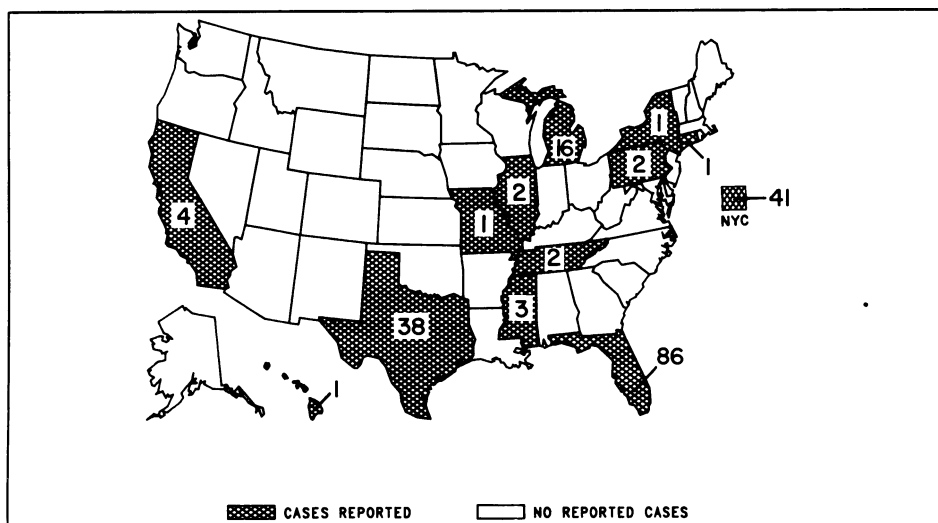
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Erratum: Vol. 35, No. 46

p. 714 The following reference replaces reference number 5 for the article entitled "Premature Mortality from Diabetes Mellitus—Use of Sentinel Health Event Surveillance to Assess Causes":

5. Tunbridge WM. Factors contributing to deaths of diabetics under fifty years of age. On behalf of the Medical Services Study Group and British Diabetic Association. *Lancet* 1981;2:569-72.

FIGURE I. Reported measles cases — United States, weeks 44-47, 1986



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The data in this report are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday.

The editor welcomes accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials. Such reports and any other matters pertaining to editorial or other textual considerations should be addressed to: ATTN: Editor, *Morbidity and Mortality Weekly Report*, Centers for Disease Control, Atlanta, Georgia 30333.

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