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**Current Trends** 

## Recreational Boating Fatalities Ohio, 1983-1986

Currently, more than 60 million people engage in recreational (noncommercial) boating activities in the United States, compared with 45 million in 1975 (1). Because of the potential for death associated with the sport, the Ohio Department of Health reviewed data on recreational boating-related fatalities in Ohio for the 4-year period 1983-1986. Analysis was based on data from the Division of Watercraft's Boating Accident Reporting (BAR) system (2). This system requires the operator of a numbered vessel involved in a boating mishap (incident) to file a report if the incident results in: 1) loss of life, 2) personal injury requiring medical treatment beyond first aid, 3) complete loss of the vessel, or 4) damage to the vessel and other property exceeding \$200.00. Only incidents resulting in loss of life were analyzed because reporting appeared to be most thorough for this category.

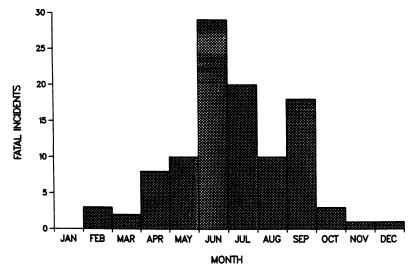
There were 107 recreational boating incidents resulting in 124 fatalities during the years 1983-1986. Twenty-six incidents were reported in 1983; 29, in 1984; 25, in 1985; and 27, in 1986. One hundred (93%) of these involved only one boat. The remaining seven were two-boat collisions involving more than one boat operator. For collisions, data were analyzed only for the operator of the boat in which the fatality occurred.

Most fatal incidents (69%) occurred on Friday, Saturday, or Sunday, and 73% occurred between June 1 and September 30 (Figure 1). Fatal incidents occurred most often during the afternoon and early evening (56% between noon and 8:00 p.m.), while 9% occurred between midnight and 4:00 a.m. Although fatal incidents occurred in 50 of Ohio's 88 counties during the 4-year period, 44 of 107 incidents (41%) occurred within the jurisdiction of the eight counties bordering Lake Erie.

The boat operators involved ranged from 14 to 74 years of age; the mean age was 36.3 years. Operators had varied boating experience, but over 50% had >100 hours of experience on the water (Table 1). Alcohol use was noted in eight (7.5%) of the 107 reports. This information generally came from the investigating officials' reports and was based either on the testimony of witnesses or on direct physical evidence, such as the presence of alcoholic beverage containers. Confirmatory evidence, such as blood-alcohol levels, was usually not available.

The greatest number of fatalities involved motorboats (Table 2). However, fatality rates were higher for incidents involving smaller boats, such as canoes and rowboats.

**Boating Fatalities – Continued** 



## FIGURE 1. Fatal boating incidents, by month - Ohio, 1983-1986

TABLE 1. Recreational boating fatalities, by operator experience - Ohio, 1983-1986

	Fatal	Events
<b>Operator Experience</b>	No.	(%)
<20hrs.	21	(26.6)
20-100hrs.	16	(20.3)
101-500hrs.	19	(24.0)
>500hrs.	23	(29.1)
Unknown	28	-
Total	107	(100.0)

## TABLE 2. Recreational boating fatalities, by type of boat - Ohio, 1983-1986

Boat Type	Registered Boats*	No. Fatai Incidents	No. Fatalities	Death Rate⁺
Motorboats (Open, Cabin, Sail)	983,600	60	70	7.1
Sail Only	86,018	4	5	5.8
Rowboats	89,647	13	13	14.5
Canoes/Kayaks	168,148	17	18	10.7
Miscellaneous	59,281	11	16	27.0
Unknown	-	2	2	_
Total	1,386,694	107	124	8.8 <sup>s</sup>

\*Totals for 1983-1986.

<sup>†</sup>Per 100,000 registered boats.

<sup>5</sup>Death rate excludes fatalities for which type of boat involved was unknown.

#### **Boating Fatalities – Continued**

The highest overall fatality rate was in the miscellaneous group, which includes inflatable boats and rafts, small plastic vessels, jet skis, houseboats or pontoon boats, and vessels not otherwise classified.

Nine different types of incidents led to fatalities. Capsizing accounted for 42% of them, and falls overboard accounted for 29%. Activities at the time of incident included cruising (38%), drifting (17%), and fishing (15%). One death was associated with water skiing, and none involved racing.

Reported by: JK Hopewell, Div of Watercraft, Ohio Dept of Natural Resources; T Halpin, MD, MPH, State Epidemiologist, Ohio Dept of Health. Div of Field Svcs, Epidemiology Program Office; Div of Injury Epidemiology and Control, Center for Environmental Health, CDC.

**Editorial Note:** Sports and recreational injuries are an important source of serious injuries and death in the United States. Almost 90% of all recreational boating deaths result from drowning, with the remaining 10% attributable to falls, burns, and other causes (3). In 1983, approximately 1,100 drownings involved recreational boats (4). In 1985, 1,116 deaths were associated with recreational boats (2). With the intention of increasing the public's awareness of boating safety and available resources, the National Safe Boating Council\* sponsors National Safe Boating Week each year. This year it is the week of June 7-13.

Studies suggest that boat-operator experience and courses on boating safety may reduce the risk of mishaps (1,2). In the Ohio study, nearly one-third of the operators reported <20 hours of boating experience. Neither boating courses nor boating experience, however, have been formally evaluated for their effectiveness in preventing boating mishaps and injuries.

Unlike motor-vehicle operators, recreational boaters are generally not required to be licensed, and many have received no formal training in boat operation and safety procedures (5). However, operators of recreational boats are required to be familiar with laws and regulations, and enforcement of these laws can play an important role in preventing boating injuries.

Previous reports have identified alcohol use as a major contributing factor to deaths associated with recreational boating (1,3,5,6). An estimated one-third to two-thirds of recreational boating fatalities each year may involve alcohol (5). The low rates of apparent alcohol involvement in Ohio (7.5%) may be due to underreporting. Since 1970, Ohio has prohibited anyone under the influence of alcohol from operating a vessel. The law was expanded in 1986 to permit enforcement officials to require blood-alcohol testing of boat operators if there are reasonable grounds to believe they are under the influence of alcohol. While most states have a law prohibiting persons under the influence of alcohol from operating a vessel, less than half of these laws define legal intoxication. In addition, enforcement of these laws varies from state to state. The Ohio law has not been evaluated for its effectiveness in reducing the number of deaths and incidents associated with alcohol use.

The U.S. Coast Guard, which is responsible for overseeing the BAR system, estimates that it receives reports on nearly all fatal boating incidents. However, it also estimates that <10% of nonfatal incidents are reported (2). Information contained in these reports is provided primarily by the boat operator and is supplemented by the investigating state or local official.

<sup>\*</sup>The U.S. Coast Guard has a toll-free Boating Safety Hotline: (800)368-5647. Information about National Safe Boating Week or the Council can be obtained by writing: Secretary, National Safe Boating Council, Inc., c/o Commandant (G-BBS-4), U.S. Coast Guard Headquarters, Washington, D.C. 20593.

#### Boating Fatalities - Continued

Because of limited data, this study did not evaluate information about the victim or about the operators and vessels not involved in fatalities. Ohio is one of the few states requiring registration of all watercraft. However, certain types of boats, such as canoes and rubber rafts, may be underregistered, and the recreational boating fatality rates may be disproportionately high for these.

Potential prevention efforts aimed toward reducing recreational boating mishaps and deaths include: 1) a licensing procedure for recreational boat operators similar to that for motor vehicle operators; 2) completion of an approved boating safety course prior to boat registration; 3) improved enforcement of current laws, such as those restricting alcohol use and requiring personal flotation devices; 4) stiffer penalties for operating under the influence of alcohol; and 5) courses in swimming and rescue procedures.

References

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- 4. National Safety Council. Accident facts. Chicago: National Safety Council, 1986.
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- 6. National Safety Council. Accident facts. Chicago: National Safety Council, 1984.

## Epidemiologic Notes and Reports

## Update: Creutzfeldt-Jakob Disease in a Patient Receiving a Cadaveric Dura Mater Graft

CDC and the Food and Drug Administration (FDA) have investigated a case of Creutzfeldt-Jakob disease (CJD) in a 28-year-old woman who died 22 months after receiving a lyophilized, irradiated human cadaveric dura mater graft. They found that the most likely source of the disease was the graft, LYODURA<sup>®</sup> (Lot 2105), produced by B. Braun Melsungen AG, Federal Republic of Germany (1). The CDC/FDA investigators were unable to obtain the identity of the donor of the implicated graft or to trace the disposition of other tissues from this donor. A representative of the producer of LYODURA<sup>®</sup> reported that the company does not maintain records identifying donors and mixes dura from multiple donors during processing of a single lot. As a result of this investigation, FDA issued a Safety Alert on April 28, 1987, recommending disposal of all LYODURA<sup>®</sup> from packages bearing a 4-digit lot number beginning with the digit "2" (the code for material packaged in 1982) as well as all unmarked LYODURA<sup>®</sup> (2).

CDC conducted a telephone survey of 10 other known producers of dura mater used in the United States. All reported maintaining records that allow identification and tracing of each donor of a particular lot of product and of the recipient institution. In addition, it was found that these producers process dura from each donor individually so that there is no contact with or co-mingling of dura from different donors.

#### Creutzfeldt-Jakob Disease - Continued

Reported by: Center for Devices and Radiological Health, Food and Drug Administration. Hospital Infections Program, Div of Viral Diseases, Center for Infectious Diseases, CDC.

**Editorial Note**: Because of the differences between the processing of LYODURA<sup>®</sup> and of other products, LYODURA<sup>®</sup> may carry a higher risk of transmitting CJD than other dura mater products used in the United States. As indicated in the FDA Safety Alert, current procedures used to sterilize human dura mater are not adequate to inactivate the CJD agent, and even the most stringent donor screening cannot exclude asymptomatic prepatent carriers of CJD (2). Thus, the use of any human dura mater product carries some risk of transmission of CJD, and procedures that minimize the risk are important. Alternatives to these products, such as autologous fascia or synthetic materials, are available.

The potential for human tissue products to transmit infectious agents has been documented for several procedures other than this single case in a recipient of a dura mater graft. There have been reports of presumed transmission of rabies and CJD by corneal transplantation (3,4), of human immunodeficiency virus (HIV) by organ transplantation (5), and of hepatitis B and HIV by artificial insemination (6,7).

The methods of production and distribution of human tissue products are not routinely subjected to FDA inspection and approval. Health care providers are urged to use human tissue products that have been handled according to strict guidelines such as those established by the American Association of Tissue Banks (8). In addition, hospitals should maintain records so that infections associated with human tissue products can be linked with specific lot numbers of these products.

#### References

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## **Current Trends**

### Potential Increased Demand for Lead Testing As a Result of Recent HUD Regulations

A recent U.S. Department of Housing and Urban Development (HUD) regulation may increase the demand for lead screening in state and local health departments. A tenant who had lived in HUD-supported housing brought suit against HUD as a result of lead poisoning acquired by a child from leaded paint within the housing unit. The

#### Lead Testing - Continued

court ruled in favor of the plaintiff. The case was appealed, and a higher court directed HUD to publish rules and regulations for the systematic inspection and abatement of the lead paint hazard in housing owned or supported by HUD. The rules governing public housing (1) and the regulations for eliminating lead-based paint hazards in Federal Housing Authority (FHA) single family and multifamily housing were subsequently published in the Federal Register (2).

The new policy requires HUD to notify tenants of low-income public housing projects owned by public housing authorities (PHAs) (which are supported by HUD) and constructed before 1978 that the property may contain lead-based paint. Tenants must also be informed of the necessary precautions for avoiding poisoning from lead-based paint, of the symptoms of and treatment for lead poisoning, and of the need for blood-lead screening for children <7 years of age as well as where to go for screening.

(Continued on page 331)

	21	st Week End	ing	Cumulat	ive, 21st We	ek Ending
Disease	May 30, 1987	May 24, 1986	Median 1982-1986	May 30, 1987	May 24, 1986	Median 1982-1986
Acquired Immunodeficiency Syndrome (AIDS)	81	282	N	7,007	5,047	N
Aseptic meningitis	89	95	92	1,846	1,775	1,638
Encephalitis: Primary (arthropod-borne						
& unspec)	12	13	16	314	313	361
Post-infectious	5	4	4	32	45	45
Gonorrhea: Civilian	11,154	16,008	16,008	315,914	333,189	334,973
Military	224	380	406	6,675	6,417	8,889
Hepatitis: Type A	400	495	439	9,910	8,950	8,950
Туре В	400	548	433	10,068	10,238	9,854
Non A, Non B	57	80	N	1,227	1,412	N
Unspecified	51	92	120	1,316	1,991	2,186
Legionellosis	13	9	N	303	230	N
Leprosy	5	5	6	84	112	109
Malaria	18	24	18	289	306	298
Measles: Total*	141	196	82	1,975	3,037	1,264
Indigenous	134	189	N	1,731	2,909	N
Imported	_7	6	N	244	123	N
Meningococcal infections: Total	55	47	50	1,450	1,310	1,393
Civilian	55	47	48	1,449	1,308	1,379
Military Mumps			1	1	4 - 2	6
Pertussis	234	211	68	7,964	1,712	1,712
Rubella (German measles)	36	95	29	683	1,063	715
Syphilis (Primary & Secondary): Civilian	13 432	35 397	30 548	169 13,206	238	339
Military	432	2	340	73	10,275 86	11,351 142
Toxic Shock syndrome	5	11	Ń	121	149	142 N
Tuberculosis	315	444	449	7.936	8,103	8.311
Tularemia	2	1	445	42	26	47
Typhoid Fever	8	Å	3	115	101	132
Typhus fever, tick-borne (RMSF)	15	23	13	62	91	98
Rabies, animal	91	102	116	1.992	2,280	2,280

#### TABLE I. Summary - cases specified notifiable diseases, United States

TABLE II. Notifiable diseases of low frequency, United States

	Cum. 1987		Cum. 1987
Anthrax Botulism: Foodborne Infant Other Brucellosis (Minn. 1, Mo. 1, Okla. 2) Cholera Congenital rubella syndrome Congenital syphilis, ages < 1 year Diphtheria	3 19 41 3	Leptospirosis Plague Poliomyelitis, Paralytic Paittacosis Rabies, human Tetanus (Ala. 1) Trichinosis Typhus fever, flea-borne (endemic, murine)	8 2 - 34 - 11 24 10

\*Five of the 141 reported cases for this week were imported from a foreign country or can be directly traceable to a known internationally imported case within two generations.

······	1	Aseptic	Encephalitis			F F	lepatiti	(Viral), by	type	Legionel-		
Reporting Area	AIDS	Menin- gitis	Primary	Post-in- fectious		orrhea ilian)	A	В	NA,NB	Unspeci- fied	Legionel- losis	Leprosy
	Cum. 1987	1987	Cum. 1987	Cum. 1987	Cum. 1987	Cum. 1986	1987	1987	1987	1987	1987	Cum. 1987
UNITED STATES	7,007	89	314	32	315,914	333,189	400	400	57	51	13	84
NEW ENGLAND	296	4	13	1	10,524	7,168	7	23	-	1	1	6
Maine N.H.	11 8	-	1	-	314 181	383 195	-	-	-	:	:	2
Vt.	4	-	2	-	80	106	-	-	-	-		-
Mass. R.I.	179 24	2	6 3	1	3,908 854	3,246 734	4 2	13 1	-	1	1	3
Conn.	24 70	2	1	-	5,187	2,504	1	9	-		-	1
MID. ATLANTIC	2,135	3	38	3	49,101	55,442	4	9	2	-		5
Upstate N.Y.	298	3	15	2	6,530	6,412	4	9	2	•	-	2
N.Y. City N.J.	1,198 457	:	4	:	25,479 6,435	31,876 7,314	-	-	-	-	:	5
Pa.	182	-	15	1	10,657	9,840	-	-	-	-	-	-
E.N. CENTRAL	456	13	79	2	44,797	45,245	27	45	1	4	2	2
Ohio Ind.	71 32	7	34 3	2	9,794 3,834	10,378 4,911	2	23 4	-	2	1	1
ma. III.	236	1	9	-	13,210	11,472	8	4	1	-	-	
Mich.	82	4	27	-	14,301	13,592	17	14	-	2	-	-
Wis.	35	-	6	-	3,658	4,892	-	-	-	-	-	1
W.N. CENTRAL	159	2	15 9	-	13,003	14,564	27 8	19	5 2	•	3	
Minn. Iowa	44 11	-	1	-	2,047 1,229	2,104 1,488	-	8	-	-	-	-
Mo.	71	-	-	-	6,629	7,464	12	9	2	-	2	•
N. Dak. S. Dak.	1	-	:	:	123 250	127 301	1	:	1	:	1	:
Nebr.	10	2	3	-	796	935	6	2	-	-		-
Kans.	21	-	2	-	1,929	2,145	-	-	-	•	-	•
S. ATLANTIC	1,150	14	45	13	82,930	83,195	18	102	15	12	2	5
Del. Md.	9 152	3 1	1 7	1 3	1,233 9,811	1,354 9,942	1 2	1	4	1	1	2
D.C.	174	-	-	-	5,659	6,645	1	1	-	•	-	-
Va. W. Va.	86 7	5	18 5	1	6,106	6,931 952	3	15 1	-	4	-	-
N.C.	48	-	8	-	617 12,591	13,875	2	20	2	1	-	
S.C.	30	-	-	-	6,822	7,475	-	11	-	-	-	1
Ga. Fla.	173 471	5	6	8	14,349 25,742	12,445 23,576	9	22 23	4 5	2 4	1	2
E.S. CENTRAL	77	4	18	3	23,426	27,709	4	9	1			-
Ky.	16	-	9	1	2,394	3,204	2	1	-	-	-	-
Tenn.	2	1	3	:	8,157	10,892	1	3	-	-	•	-
Ala. Miss.	51 8	2 1	6	2	7,513 5,362	7,839 5,774	1	3	1		-	-
W.S. CENTRAL	664	16	31	2	36,544	41,432	61	46	6	11	4	4
Ark.	18	-	-	ī	3,556	3,794	-		-		-	-
La. Okla.	100 29	2	5 9	1	6,795 3,957	7,208 4,873	2	4	1	-	3	-
Tex.	517	14	17	-	22,236	25,557	59	42	5	11	1	4
MOUNTAIN	178	7	10	1	8,510	10,009	82	27	9	6	-	
Mont.	2	1	-	-	197	269	1	2	ĩ	1	-	-
Idaho Wyo.	3	-	:	:	309 168	320 239	5 4	4	-	:	-	-
Colo.	81	1	1	-	1,837	2,646	13	3	2	4	-	-
N. Mex. Ariz.	15 37	4	17	:	914	1,046	8	2	1		-	-
Ariz. Utah	3/	4	-	1	2,998 267	3,383 434	41 9	12 1	5	1	-	:
Nev.	26	1	1	-	1,820	1,672	1	2	-	-	-	-
PACIFIC	1,892	26	65	7	47,079	48,425	170	120	18	17	1	62
Wash. Oreg.	99 49	-	6	1	3,333 1,778	3,840 1,913	32 12	27 20	4	2	1	2
Calif.	1,699	26	56	6	40,810	40,904	124	70	13	13	-	49
Alaska	6 39	-	2		754	1,220	2	1	-	2	-	-
Hawaii	39	•	1	-	404	548	-	2	-	-		11
Guam P.R.	48	1	-	1	77 909	49 902	-	1	-	-	-	-
V.I.	~	:	-	-	96	902 87	:			-		5
Pac. Trust Terr.	:	:	:	-	186	121	•	-	-	-	•	38
Amer. Samoa	-	-	-	-	38	14	-	•	-	-	-	-

## TABLE III. Cases of specified notifiable diseases, United States, weeks ending May 30, 1987 and May 24, 1986 (21st Week)

N: Not notifiable

	Malaria			les (Ru		_	Menin- gococcal	Mu	mps		Pertuss	is	Rubella		
Reporting Area	Cum.	Indig 1987	enous Cum.	Impo 1987	Cum.	Total Cum.	Infections Cum.	1987	Cum.	1987	Cum.	Cum.	1987	Cum.	Cum
	1987	1007	1987	1307	1987	1986	1987	1307	1987	1907	1987	1986	1907	1987	1986
UNITED STATES	289	134	1,731	7	244	3,037	1,450	234	7,964	36	683	1,063	13	169	238
NEW ENGLAND	20	3	76	4	107	16	128	2	18	1	18	60	-	1	5
Maine N.H.	1	1	3 57	- §	88	:	6 13	-	6	-	1 2	2 24	-	1	1
Vt.	-	i	2	2	12		8	-	2	-	3	24	-	-	i
Mass.	9	•	1	-	4	15	63	-	1	-	4	16	-	-	-
R.I. Conn.	4 6	1	13	2†	1	1	11 27	2	2 7	1	- 8	1 15	-	-	2
MID. ATLANTIC	26	57	332										-	-	
Upstate N.Y.	11	5/	332	1	40 8	1,025 17	165 59	6 4	128 56	7 6	96 74	97 66	-	7 5	26 18
N.Y. City	3	57	295	1†	12	176	11	-			/ <b>*</b>	3	-	1	5
N.J. Pa.	7 5	:	6 20	-	3	821	34	-	35	1	5	6	-	1	3
		-		•	17	11	61	2	37	-	17	22	-	-	-
E.N. CENTRAL Ohio	11 5	3	168 1	-	16	604	180	89	4,560	-	77	177	-	19	28
Ind.	2	-		-	4	:	67 20	3 15	63 605		26 1	67 19	-	-	-
III.	1	3	81	-	12	366	28	66	2,216	-	5	21	-	18	24
Mich. Wis.	3	:	23	-	-		53	5	591	-	25	20	-	1	3
	•		63	-	-	234	12	-	1,085	-	20	50	-	-	1
W.N. CENTRAL Minn.	10.	13	113	-	13	145	68	74	1,051	-	38	50	-	1	7
lowa	5 2	7	7	-	11	26 1	23	29	615	-	8	20	•	-	•
Mo.	3	6	106	-	i	9	19	31 1	308 15	-	6 13	9 4	-	1	i
N. Dak.	•	-	-	-	-	14	1	-	6	-	1	2	-	-	
S. Dak. Nebr.	:	-	•	-	-	1	1	13	64	-	2	3	-	-	-
Kans.		-	-	-	1	94	19	-	2 41	:	8	2 10	-	-	6
S. ATLANTIC	51	_	44	-	5	386	244	27		10			-		
Del.	1	-			-	300	244	37	168	10	149	433 210	-	11 1	1
Md.	11	-	-	-	-	25	22	-	13	1	3	86	-	2	-
D.C. Va.	6 10	-	-	-	1	33	5	-					-	-	-
W. Va.	-	-		-	-	33	39	3 3	51 23	1 3	34 32	13 5	•	1	•
N.C.	7	-	1	-	1	2	31	-	4	1	59	17	-	-	:
S.C. Ga.	3 2	-	-	-	-	301	25	-	11	:	-	7	-	-	-
Fla.	11	-	43	-	3	8 14	48 70	30 1	36 30	4	17 4	69 26	-	1 6	1
E.S. CENTRAL	4	_	2		•	3	66			-			-		
Ky.	ī	-	-	-	-	3	12	9	1,074 202	1	10 1	18 1	-	2	1
Tenn.	1	-	-	-	-	1	23	9	855	1	2	5	-	-	
Ala. Miss.	2	:	2	•	-	-	25	-	17	-	5	12	-	-	-
	-			-	•	2	6	-	-	-	2	•	-	-	-
W.S. CENTRAL Ark.	20 1	35	170	1	2	415	100	7	628	1	42	30	3	5	49
La.	-	-	-	-	-	282	10 10	-	281 185	-	2 9	2 4	1	2	-
Okla.	3			-	1	10	15	N	Ň	1	31	24	-	-	:
Tex.	16	35	170	1†	1	123	65	7	162	-	-	-	2	3	49
MOUNTAIN	10	14	336	-	14	204	52	6	148	1	61	98	-	15	5
Mont. Idaho	1	10	74	-	1	1	- 4	-	4	1	3	5	-	-	-
Wyo.	-	-	-	-	2		4	-	3	:	18 2	26 1	-	1	-
Colo.	1	:	5	-	-	6	16	-	23	-	17	22	-		
N. Mex. Ariz.	6	2	254 3	-	9	20	3	N	N	-	3	9	-	-	-
Utah		-	-	-	1	177	20 6	5 1	110 6	-	17 1	24	-	4	1
Nev.	2	-	-	-	1	-	š	:	ž	-		11	:	9	1
PACIFIC	137	9	490	1	47	239	447	4	189	15	192	100	10		
Wash.	8	-	1	-	-	52	56	-	28	1	27	38	10	108	116 3
Oreg. Calif.	4 122	- 9	2		33	2	18	N	N	-	14	8		1	-
Alaska	3	9	487 -	1†	10	165	364	3	144 5	4	78	51	6	75	111
Hawaii	-	-	-	•	4	20	5	1	12	10	2 71	1	4	32	-
Guam	-		2	-		3	3		4			-	+		2
P.R.	1	-	404	•	-	18	2	:	5	1	12	5	i	1	2
V.I. Pag. Truct Tour	-	-	-	•	•	•	-	-	8	-	•	-		2	58
Pac. Trust Terr. Amer. Samoa	:	-	1	•	-	1	1	•	4	•	1	-	-	1	-
	-	-	-	•	•	1	-	-	3	•	•	-	-	-	-

## TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending May 30, 1987 and May 24, 1986 (21st Week)

\*For measles only, imported cases includes both out-of-state and international importations. N: Not notifiable

U: Unavailable <sup>†</sup>International <sup>§</sup>Out-of-state

Reporting Area	Syphilis (Primary&	(Civilian) Secondary)	Toxic- shock Syndrome	Tuber	culosis	Tula- remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1987	Cum. 1986	1987	Cum. 1987	Cum. 1986	Cum. 1987	Cum. 1987	Cum. 1987	Cum. 1987
UNITED STATES	13,206	10,275	5	7,936	8,103	42	115	62	1,992
NEW ENGLAND	208	203	-	259	269	-	9	1	2
Maine N.H.	1 2	13	-	15	25	-	-	-	ī
Vt.	1	76	-	5 4	10 9	•	-	-	-
Mass.	103	99	-	142	124	-	7	1	-
R.I. Conn.	5 96	13 65	-	23 70	19 82	-	1	-	1
MID. ATLANTIC	2,331	1.436	_	1,432	1,641	-	12	1	
Upstate N.Y.	89	69	-	225	251	-	5	-	155 11
N.Y. City	1,619	804	-	695	787	-	-	-	-
N.J. Pa.	268 355	286 277	-	250 262	312 291	:	7	-	4 140
E.N. CENTRAL	385	409	2	937	1,005	1	17	7	63
Ohio	48	53	2	183	170	i	6	ż	
Ind. III.	25	50	-	90	119	-	4	-	7
Mich.	212 75	222 60	-	360 268	454 212	:	4	-	25 8
Wis.	25	24	-	36	50	-	1	-	23
W.N. CENTRAL	58	104	1	228	238	11	7	1	425
Minn.	6	18	-	60	55	•	2	-	104
lowa Mo	.9	5	-	10	21	3	2 3	:	132
Mo. N. Dak.	27	55 2	-	121	121	7	3	1	19 56
S. Dak.	5	ī	-	ġ	10	-	-	-	76
Nebr.	7	8	1	11	4	:	-	-	12
Kans.	4	15	-	16	23	1	-	-	26
S. ATLANTIC Del.	4,464	2,982	-	1,617	1,544 19	3 1	9	17	540
Md.	39 243	16 192	-	15 142	111		2	5	- 191
D.C.	135	140	-	49	53	-	-	-	23
Va.	109	177	-	160	142	1	1	-	161
W. Va. N.C.	253	8 201	-	48 158	47 203	i	1	1 2	23 2
S.C.	296	279	-	145	171	-	:	6	27
Ga.	643	513	-	248	229	-	:	2	81
Fla.	2,741	1,456	-	652	569	•	4	1	32
E.S. CENTRAL	816	669	-	639	710 176	2 1	1	9	168
Ky. Tenn.	6 353	29 261	-	166 163	201		1	6	81 51
Ala.	203	237	-	211	240	-	-	1	36
Miss.	254	142	-	99	93	1	-	2	-
W.S. CENTRAL	1,712	2,173	-	910	979	13	7	23	294
Ark. La.	83 300	101 355	-	96 104	115 171	5 1	1	1	70 5
Okla.	72	64	-	88	95	ż	2	22	10
Tex.	1,257	1,653	-	622	598	-	4	-	209
MOUNTAIN	288	236	-	185	180	8	3	2	164
Mont. Idaho	7 3	2	-	8 16	7 5	1	-	2	86
Wyo.	1	4	-	10	-	1	-	-	38
Colo.	44	73	-	-	15	1	-	-	
N. Mex. Ariz.	30 143	26	-	37 108	40 82	1	3	-	1
Utah	9	96 4	-	6	82 16	3 1	-	-	35 1
Nev.	51	31	-	10	15	-	-	-	3
PACIFIC	2,944	2,063	2	1,729	1,537	4	50	1	181
Wash.	31	51	2	92	86	2	2	-	-
Oreg. Calif.	104 2,801	43 1,951	-	49 1,480	53	2	-	-	
Alaska	2	- 1,901	-	1,480	1,295 24	:	46	1	180 1
Hawaii	6	18	-	81	79	-	2	-	-
Guam	2	1	-	4	30	-	-	-	-
P.R. V.I.	409	333	-	113	119	-	•	-	29
v.i. Pac. Trust Terr.	83	130	-	1 74	1 13	:	- 9	-	•
Amer. Samoa	2	100	-	/4	3	-	э	•	-

# TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending May 30, 1987 and May 24, 1986 (21st Week)

U: Unavailable

#### TABLE IV. Deaths in 121 U.S. cities,\* week ending May 30, 1987 (21st Week)

Reporting Area		All Cau				(Years)				T	All Ca	uses, B	y Age	(Years)		
NEW BOLLAND         674         475         130         41         15         13         45         S. ATLANTIC         1.073         621         272         104         28         43         17         55           Bridgeport, Conn.         38         12         3         1         6         13         Atlanta, Ga.         148         69         35         24         3         17         55           Fall River, Mass.         20         23         6         -         -         3         Baltimore, M.d.         20         24         40         17         4         74         17         55           Fall River, Mass.         30         23         6         -         -         1         Jackannille, Fils.         68         42         18         2         1         -         1         Jackannille, Fils.         68         42         18         5         2         2         1         -         1         1         2         5         5         10         11         2         -         -         1         33         22         5         2         2         1         -         -         1         Wackanning, No.         11<	Reporting Area		≥65	45-64	25-44	1-24	<1		ReportingArea		≥65	45-84	25-44	1-24	<1	Total
Boston, Mass. inj2 126 38 14 6 18 - 1 3 Bettimore, Md. 200 124 46 17 93 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 17 91 07 24 11 12 07 17 18 07 124 11 12 07 17 18 07 124 11 14 04 07 124 14 14 07 12 14 14 14 07 12 14 14 14 14 14 14 14 14 14 14 14 14 14	NEW ENGLAND	674	475	130	41	15	13	45		<u> </u>						L
Bridgeport, Conn. 38 28 8 1 - 1 3 Battimore, M.d. 200 124 49 7 4 7 0 Fall River, Mass. 20 23 1 2 3 Fall River, Mass. 30 23 6 - 1 4 Jackaonville, Fia. 118 66 32 13 4 - 4 Marni, Fia. 69 42 18 6 2 1 4 Novel, Mass. 30 23 4 2 1 - 1 Novel, Mass. 30 23 4 2 1 - 1 Sevannoh, Ga. 31 14 22 2 2 2 2 1 New Bedford, Mass. 30 29 4 2 1 - 1 Sevannoh, Ga. 31 14 22 2 2 2 2 1 New Bedford, Mass. 30 29 4 1 - 1 Withington, Del. 23 16 7 1 Without, Or. 41 28 8 3 1 1 2 1 - 5 ES. CENTRAL 668 428 144 9 27 20 34 Mitor, N.Y. 43 10 4 6 4 2 2 Allentow, P.a. 25 17 8 1 Nover, N.Y. 43 10 4 6 4 2 2 Allentow, P.a. 25 17 8 1 Sevannoh, Ga. 31 10 4 6 4 2 2 Allentow, P.a. 25 17 8 1 Moreater, Mass. 54 40 11 2 1 - 5 ES. CENTRAL 668 428 144 9 27 20 34 Birminghan, Ala. 77 45 10 4 6 4 2 2 Allentow, P.a. 25 17 8 1 Moreater, Mass. 54 10 1 2 1 5 Es. CENTRAL 668 428 144 9 27 20 34 Birminghan, Ala. 77 45 10 4 6 4 2 2 Allentow, P.a. 25 17 8 1 Moreater, M.J. 37 19 5 6 1 0 Chattanooga, Tenn. 174 103 39 16 6 10 13 Chattanooga, Tenn. 174 103 39 16 6 10 13 Moreater, N.J. 38 16 8 10 7 - 1 1 Nashville, Tenn. 119 71 29 9 6 4 4 1 4 2 3 Newerk, N.J. 38 16 8 10 7 - 1 1 Nashville, Tenn. 119 71 29 9 6 4 4 1 2 3 Strandon, P.A. 33 12 6 1 6 3 1 5 5 3 3 31 60 W.S. CENTRAL 1, 156 698 24 115 52 40 44 N.Y. City, N.Y. 1347 869 259 155 33 31 60 W.S. CENTRAL 1, 156 693 24 11 4 2 1 Moreater, N.J. 38 16 8 10 3 1 5 10 4 1 1 - 2 Houten, N.A. 38 22 6 1 7 - 7 1 3 Strandon, P.A. 38 22 6 1 6 3 1 2 4 2 1 1 Moreater, N.Y. 121 64 73 10 4 1 1 - 2 Houten, N.K. 41 26 6 3 6 13 6 3 2 Contanoo, N.J. 48 73 10 4 1 1 - 2 Houten, N.K. 41 26 6 3 6 13 6 3 2 Contanoo, N.J. 48 73 10 4 1 1 - 2 Houten, N.M. 21 14 2 1 2 2 2 1 7 7 7 3 Strandon, P.A. 22 5 5 2 2 1 7 7	Boston, Mass.					ĕ										38
Lamanage, Mass. 28 23 1 2 - 3 Charlotte, N.C.5 92 58 20 9 2 3 4 4 4 4 4 4 4 4 2 2 - 1 2 Karving, Fia. 68 4 3 15 5 - 2 1 7 5 4 5 7 7 8 4 7 4 4 1 5 2 1 2 2 1 2 3 4 7 4 4 4 5 2 7 7 7 5 2 4 5 7 7 4 5 7 7 4 5 7 7 4 5 7 7 4 5 7 7 4 5 7 7 4 5 7 7 4 5 7 7 4 5 7 7 4 5 7 7 4 5 7 7 4 5 7 7 7 5 7 7 6 6 7 7 6 6 7 7 6 6 7 7 6 7 7 6 7 7 6 7 7 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7												48				10
Hartford, Conn. 59 41 15 1 1 1 2 2 1 2 1 2 1 2 1 2 1 2 1 2 1					2	-		3	Charlotte, N.C.§		58	20		2		4
Lowell, Mess. 30 21 6 3 - 1 1 mortalit, Va. 65 35 10 4 5 2 1 1 1 1 mortalit, Va. 65 35 10 4 5 2 1 1 2 3 1 1 1 1 mortalit, Va. 65 35 10 4 5 2 2 1 1 1 1 1 Sevannah, Ga. 31 14 12 2 1 2 1 2 3 1 2 3 1 1 1 2 3 1 3 1 14 12 2 1 2 1 2 3 1 2 3 1 2 3 1 3 14 12 2 1 2 1 2 3 1 2 3 1 2 3 1 3 14 12 2 1 2 1 2 3 1 2 3 1 3 14 12 2 1 2 1 2 3 1 3 14 12 2 1 2 1 2 3 1 3 14 12 2 1 2 1 2 3 1 3 14 12 2 1 2 1 2 3 1 3 14 12 2 1 2 1 2 3 1 3 14 12 2 1 2 1 2 3 16 7 1 1 2 3 16 7 1 1 2 3 16 7 1 1 1 3 3 16 10 1 4 6 4 2 2 1 3 1 1 3 1 1 3 1 1 1 3 1 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					-			-								4
Lynn, Mass. 22 17 5 1   michain Kays. 91 33 23 2 2 2 1 2 1 New Badford, Mess. 30 23 4 2 1 - 1   Savannah, Ga. 31 14 12 2 1 2 3 3 New Haven, Conn. 57 36 10 9 1 1 2   Savannah, Ga. 31 14 12 2 1 2 1 2 3 Somarvills, Mass. 7 6 1																:
New Bedford, Mass.         30         23         4         2         1         Semannik, Gs.         11         34         32         2         4         2         3           Providence, RI, Somerville, Mass.         50         34         11         2         3         -         3         Tampa, Fis.         66         43         15         5         -         2         3           Workertor, Mass.         54         0         1         1         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         11         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         - <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td></td> <td>•</td> <td>Norfolk, Va.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2</td> <td></td>					-	-		•	Norfolk, Va.						2	
New Haven, Conn.         57         36         10         9         1         1         2         St. Petersburg, File.         60         40         10         1         2         2         7           Somerville, Mass.         7         6         1         -         -         -         Washington, D.C.         145         66         42         15         5         -         2         4           Workster, Mass.         54         40         21         2         2         2         2         2         2         2         2         2         2         3         10         4         6         4         2           Workster, N.N.         12         2         5         5         6         10         Chattanooga, Tenn.         52         7         13         6         1         15           Burfalo, N.Y.         112         6         7         3         8         2         1         1         6         13         13         16         6         14         14         14         14         14         14         14         14         14         14         14         14         14         14	New Bedford, Mass.				2	1	-	•	Savannah Ga						2	
Providence, H.I.         50         34         11         2         3         -         3         Tampa, Fia.         66         43         15         5         -         2         4           Somarville, Mass.         34         329         6         2         -         1         2         Wilnington, D.C.         145         68         428         14         49         27         0         34           Worcester, Mass.         54         40         11         2         1         5         55         56         110         Chattanucoga, Tenn.         86         65         13         6         1         1         5         5         5         5         10         Chattanucoga, Tenn.         86         53         1         1         5         2         2         4         1         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4 <td>New Haven, Conn.</td> <td>57</td> <td>36</td> <td>10</td> <td>9</td> <td></td> <td>1</td> <td>ż</td> <td>St. Petersburg, Fla.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td>	New Haven, Conn.	57	36	10	9		1	ż	St. Petersburg, Fla.						-	
Springfield, Mess.         38         29         6         2         -         1         2         Wilnington, Dut.         100         3         16         7         16         7         16         7         16         7         16         7         16         7         16         7         16         7         16         7         16         7         16         7         16         7         16         7         16         7         16         7         16         7         16         7         16         7         1         1         3         2         7         16         66         11         3         1         15         36         1         36         1         36         1         1         16         1         16         17         1         1         16         16         17         16         17         17         17         17         17         17         17         17         17         17         17         17         17         17         17         17         17         17         17         17         17         17         17         17         17         17         17	Providence, R.I.				2	3	-	3						-	2	
Waterbury, Conn.         41         28         6         3         1         1         3         Minimgion, Den.         23         0         7         2         7         7         3           Worcester, Mass.         54         40         11         1         1         5         ES. CENTRAL.         668         428         14         49         27         03         4           MID. ATLANTC         2.669         1.783         522         252         55         56         110         Introport, Ala.         67         33         10         4         6         4         2         3           Allentown, Pa.         25         17         8         2         -         1         Mobile, Ala.         21         7         7         5         2         -         -         3           Carden, N.J.         29         24         1         -         -         1         Mobile, Ala.         21         7         1         2         -         -         -         -         -         -         -         -         -         3         115         52         44         1         -         -         -         3					-	-	-	-	Washington, D.C.				18	5	12	
Worcester, Mass.         54         40         11         2         1         -         5         E.S. CENTRAL         668         428         144         49         27         20         34           MID. ATLANTR         2.669         1.783         522         252         55         110         Grantano, Divide, Tan.         52         37         10         3         2         -         3           Albarw, N.Y.         57         17         8         2         2         1         Monyulia, Fan.         36         65         13         6         1         1         4         66         23         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4         4 </td <td></td> <td></td> <td></td> <td></td> <td>3</td> <td>1</td> <td></td> <td></td> <td>Wilmington, Del.</td> <td>23</td> <td>16</td> <td>7</td> <td>-</td> <td>•</td> <td>-</td> <td>1</td>					3	1			Wilmington, Del.	23	16	7	-	•	-	1
HID. ATLANTIC       2.669       1.783       522       252       55       66       Birmingham, Ala.       67       43       10       4       6       4       2       -       I       Birmingham, Ala.       65       13       10       3       2       -       1       Birmingham, Ala.       65       13       10       3       3       10       3       2       -       1       Knoxville, Fenn.       55       37       10       3       3       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10																34
Albanov, N.Y.       57       41       11       3       2	MID ATLANTIC	2 660	1 702	522	252			-							4	2
Allentövn, Pa. 25 17 8 1 1 Luby Min. 20 00 13 0 4 1 1 2 Buffalo, N.Y. 112 67 33 8 2 1 1 1 4 Carnden, N.J. 29 22 5 1 1 Montgomer, Ala. 52 36 14 2 3 Erie, Pa. 33 27 4 2 1 1 Jarrey City, N.J. 56 38 10 7 - 1 1 Neshville, Tenn. 119 71 29 9 6 4 4 N.Y. City, N.Y. 1, 347 869 259 155 33 31 60 W.S. CENTRAL 1, 156 695 254 115 52 40 44 N.Y. City, N.Y. 1, 347 869 259 155 33 31 60 W.S. CENTRAL 1, 156 695 254 115 52 40 44 N.Y. City, N.Y. 1, 347 869 279 17 30 4 8 15 Paterson, N.J. 46 27 14 3 1 1 - Baton Rouge, La. 50 34 25 1 4 1 - 1 - 1 Paterson, N.J. 46 27 14 3 1 1 - Baton Rouge, La. 134 72 32 17 6 7 6 Paterson, N.J. 46 27 14 3 1 1 - 2 10 Paterson, N.J. 46 27 14 3 1 1 - 2 10 Paterson, N.J. 46 27 14 3 1 1 - 2 10 Paterson, N.J. 46 27 14 3 1 1 - 2 10 Paterson, N.J. 46 27 14 3 1 1 - 2 2 Schenectady, N.Y. 30 24 4 1 1 2 3 2 Schenectady, N.Y. 30 24 4 1 1 2 2 3 Schenectady, N.Y. 30 24 4 1 1 2 2 3 Schenectady, N.Y. 30 24 4 1 1 2 2 3 4 2 6 N.Y. City R.Y. 117 82 23 4 2 6 Syracuse, N.Y. 117 82 23 4 2 6 Syracuse, N.Y. 21 15 2 3 1 - 1 Syracuse, N.Y. 21 15 2 3 1 - 1 ENCENTRAL 2,102 1,401 413 156 64 68 Cance, N.Y. 21 15 2 3 - 1 ENCENTRAL 2,102 1,401 413 156 64 68 Cance, N.Y. 21 15 2 3 - 1 Shrewson, Col. 121 69 17 7 6 22 4 Chicago, Illis 5 15 5 1 2 3 - 1 Shrewson, Col. 121 69 17 7 6 22 4 Chicago, Ohio 138 87 34 10 3 4 13 Las Vegas, Nev. 107 57 30 12 7 1 3 3 EVACENTRAL 2,102 1,401 413 156 64 55 1 4 4 2 1 1 Detroit, Mich. 239 149 47 24 9 10 2 2 16 0 Chicago, Cilli 5 64 18 3 4 2 1 - 1 Detroit, Mich. 239 149 47 24 9 10 2 2 16 2 5 1 Detroit, Mich. 239 149 47 24 9 10 2 2 16 0 Chicago, Cilli 5 64 18 5 4 3 4 2 1 Prowneyre, Ind. 47 38 5 1 2 1 2 1 2 PACIFIC 1,109 17 7 6 22 4 4 Cincinneti, Ohio 118 87 74 1 3 2 1 2 2 7 18 3 Miwaulee, Mich. 29 21 6 2 2 16 0 Colus Apring, Colo. 25 20 5 1 Detroit, Mich. 239 149 47 24 9 10 2 2 16 1 4 4 10 6 4 - 6 Cancer, Calif. 11 8 1 1 - 1 1 Detroit, Mich. 239 149 47 24 9 10 2 2 16 1 4 10 1 6 4 - 6 Cancer, Calif. 13 8 9 1 - 3 3 Miwaulee, M						20		110	Chattanooga, Tenn.							
Buffalo, N.Y. 112 67 33 8 2 2 6 1 Vernmins, Tr., 1, 24 00 25 7 6 4 1 1 1 2 1 7 7 5 2 1 1 1 Montgomery, Ala. 52 36 14 2					-	-		i	Knoxville, Lenn.							
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Jereso (Try, N.J., 56 38 10 7 - 1 1 [PashTome, Fern. 113 /1 23 9 0 4 4 4 4 Newsrt, N.J., 347 869 259 155 33 31 60 (W.S. CENTRAL, 1,156 695 254 115 52 40 44 1 4 4 2 - 1 1 Phildelphia, Pa. 393 274 77 30 4 8 15 Corpus Christi, Tex. 41 24 11 4 2 1 Phitaburgh, Pa. 76 54 18 4 - 3 Dallas, Fex. 134 72 32 17 6 7 6 7 6 Reading, Pa. 44 31 9 - 2 2 3 El Paso, Tex. 41 24 41 1 4 2 3 Teraton, N.Y. 30 24 4 1 1 - 2 Houston, Tex. 50 38 176 74 34 13 11 - 2 Schenectady, N.Y. 30 24 4 1 1 - 2 Houston, Tex. 50 38 176 74 34 13 11 7 7 5 Screnton, Pa. 26 20 3 3 1 Little Rock, Ark. 58 32 14 9 1 2 4 Schenectady, N.Y. 30 24 4 1 1 - 2 Houston, Tex. 5 308 176 74 34 13 11 7 5 Screnton, Pa. 26 20 3 3 1 Shreveport, La. 69 50 11 5 1 2 4 Vonkers, N.Y. 21 15 2 3 1 - 1 Shreveport, La. 69 50 11 5 1 2 4 4 70 hors, N.Y. 29 26 2 1 2 Tules, Okla. 82 57 15 5 2 3 7 7 E.N. CENTRAL 2,102 1,401 413 156 64 68 65 MOUNTAIN 666 405 134 58 31 38 26 Acron, Ohio 63 42 11 5 2 3 - 1 Shreveport, La. 69 50 11 5 1 2 4 Charon, Ohio 63 42 11 5 2 3 - 1 Shreveport, La. 69 50 11 5 1 2 4 Charon, Ohio 63 42 11 5 2 3 - 1 Colo. Springs, Colo. 31 25 5 2 3 - 2 2 Charon, Ohio 18 67 26 14 5 4 4 Ogden, Utah, Ariz, 133 26 5 - 2 2 - 2 4 Charon, Ohio 118 67 26 15 5 4 40 02 17 7 7 3 3 2 6 3 - 7 1 3 Colo. 75 7 30 12 7 1 3 2 Charon, Ohio 124 96 22 6 5 5 4 MOUNTAIN 666 405 134 58 31 38 26 Acron, Ohio 124 96 22 6 5 5 4 MOUNTAIN 666 405 134 68 34 - 1 3 2 - 1 Colo. Springs, Colo. 31 69 32 17 7 7 3 3 2 - 2 - 2 4 Charon, Ohio 124 96 22 6 5 5 4 MOUNTAIN 666 405 134 68 34 - 2 1 7 7 7 3 1 2 - 2 - 2 4 Charon, Ohio 124 96 22 6 5 5 4 MOUNTAIN 666 405 134 68 3 4 2 1 7 7 3 3 2 - 1 Colo. Springs, Colo. 31 69 32 17 7 7 3 2 - 2 - 2 4 Charon, Ohio 124 96 22 6 5 5 4 MOUNTAIN 666 405 134 58 31 38 26 3 - 1 - 3 4 4 2 3 2 - 2 - 2 4 4 4 4 - 4 - 4 4 4 - 4 - 4 -						1	-	:	Montgomery, Ala.	52	36	14	2	-	-	
N.Y. City, N.Y. 1,347 869 259 155 33 31 60 W.S. CENTRAL 1,156 695 254 115 52 40 44 94 94 95 16 8 10 3 1 5 Austin, Tex. 50 34 3 7 4 2 5 8 aton Rouge, La. 50 34 3 7 4 2 5 8 aton Rouge, La. 36 25 6 4 1 - 1 1 94 15 8 1 3 1 1 - 2 10 aton, Tex. 41 24 11 4 2 7 Pittaburgh, Pa. 76 54 18 4 - 3 2 3 El Paso, Tex. 44 26 6 3 6 3 2 2 3 coherester, N.Y. 121 94 15 8 1 3 3 Fort Worth, Tex. 50 308 176 74 34 13 11 7 3 5 cherenctory, NY. 30 24 4 1 1 - 2 1 Houston, Tex. 5 308 176 74 34 13 11 7 5 3 cherenctory, NY. 30 24 4 1 1 - 2 1 Houston, Tex. 5 308 176 74 34 13 11 7 5 5 cherenctory, NY. 30 24 4 1 1 - 2 1 Houston, Tex. 5 308 176 74 34 13 11 7 5 5 cherenctory, NY. 31 20 8 3 - 1 Little Rock, Ark. 58 32 14 9 1 2 4 1 7 tenton, NJ. 31 20 8 3 - 1 S fort Worth, Tex. 5 8 308 110 4 4 6 6 11 2 - 1 Trenton, NJ. 31 20 8 3 - 1 S forewort, La. 69 50 11 5 1 2 4 1 Yonkers, NY. 29 26 2 1 - 2 1 S a A 1 New Orleane, La. 110 65 26 6 11 2 - 1 Shreveport, La. 69 50 11 5 1 2 4 1 Yonkers, NY. 29 26 2 1 - 2 1 Little, Okla. 82 57 15 5 2 2 3 7 1 Little, Okla. 82 57 15 5 2 2 3 7 1 Little, Okla. 82 57 15 5 2 2 3 - 2 1 Colo. 2010 TAIN 686 405 134 58 31 38 26 Atron, Ohio 63 42 11 5 2 3 - 1 Colo. 5prings, Colo. 31 22 5 2 2 - 2 2 Chicago, III.5 5 4 362 122 4 5 10 2 1 6 Derver, Colo. 121 69 17 7 6 22 4 2 Colicayed Nie 13 36 6 4 3 2 Colimbus, Ohio 138 87 34 10 3 4 13 Las Vegas, Nev. 107 57 30 12 7 1 3 2 Colicaveland, Ohio 116 67 26 5 5 4 Phoenix, Ariz. 131 68 32 17 7 7 3 3 12 7 1 3 2 Colimbus, Ohio 124 86 22 6 5 5 4 Phoenix, Ariz. 131 68 32 17 7 7 3 3 12 7 1 3 2 Payton, Ohio 124 86 22 6 5 5 4 1 2 1 2 PAC/ICIC 1 89 10, 109 232 161 65 42 8 3 1 4 2 1 1 4 2 4 4 4 5 4 4 3 2 2 4 4 2 1 5 1 2 3 2 10 6 - 2 2 4 2 2 5 5 1 1 Dervint, Mich. 239 149 47 24 9 10 2 SatLake City, Uteh 33 26 4 3 2 2 4 2 Colimbus, Ohio 124 86 22 6 5 5 4 10 2 1 6 7 3 6 18 5 4 3 4 2 1 3 4 10 4 4 5 0 1 6 5 4 4 3 4 2 1 3 4 10 4 4 4 5 0 1 4 7 3 5 10 1 1 - 1 1 Licaon, Ariz. 95 62 18 9 2 4 4 2 5 1 1 Dervint, Mich. 239 149 47 24 9 10 2 SatLake City, Uteh 33 26 4 3 2 2 4 2 5 5 2						•			Nashville, Tenn.	119	71	29	9	6	4	4
Newski, N.J.         39         16         8         00         3         1         5         Austin, Tex.         50         34         3         7         4         2         5           Paterson, N.J.         46         27         14         3         1         -         Baton Rouge, La.         36         25         6         4         1         -         -         -           Phitaburgh, Pa.         76         54         18         4         -         -         3         Dellas, Tex.         14         22         17         6         7         6         6         3         2         7         6         7         6         7         6         7         7         30         4         8         15         Corpus Christi, Tex.         41         24         1.1         4         2         -         -         3         Fort Worth, Tex.         308         176         74         34         13         11         7         Scaroton, Pa.         26         20         3         -         -         1         Uite Rok, Ark.         50         51         5         3         2         7         Tenton, N.J.         12	N.Y. City, N.Y.					33			W.S. CENTRAL	1,156	695	254	115	52	40	44
Paterson, N.J.       46       27       14       3       1       Image and the second	Newark, N.J.					ĩ				50			7		2	
Pittsburgh, Pa.       76       54       18       4       -       -       3       Dailas, Tex.       134       72       32       17       6       7       6         Beading, Pa.       44       31       15       8       1       -       2       33       Fort Worth, Tex.       84       46       22       11       1       4       2         Schenestady, N.Y.       30       24       41       1       -       2       Houston, Tex.       58       32       14       9       1       2       4         Schenestady, N.Y.       31       20       23       4       2       6       4       New Orleans, La.       100       65       6       11       7       6       7       6       7       6       7       6       7       7       7       7       7       7       7       7       8       32       11       15       1       2       4       4       6       100       11       13       13       38       26       13       38       31       38       26       31       38       26       31       33       2       2       2       2       <	Paterson, N.J.		27		3	1	1	-							-	1
Beading, Pa.       44       51       9       2       2       3       E Paso, Tex.       44       26       6       3       6       3       2       2       3       Fort Worth, Tax       84       46       22       11       1       4       2         Schenestady, N.Y.       30       24       4       1       1       -       1       Sthereort, La.       58       32       14       9       1       2       4         Schenestady, N.Y.       31       20       8       3       -       1       Sthereort, La.       58       32       14       9       1       2       4         Vices, N.Y.       11       52       3       1       -       1       Sthereort, La.       69       50       11       5       1       2       4         Yonkers, N.Y.       29       26       2       1       -       2       Titise, Okta.       80       55       5       3       2       8       Canno, Ohio       63       42       14       3       38       26       4       Aron, Ohio       13       82       6       5       5       4       Opden, Utah       30						4									-	-
Röchestär, N.Y.       121       34       15       6       1       -       1       -       2       Houston, Tex. 5       308       176       74       34       13       1       7         Screneton, Pa.       26       20       3       1       -       1       1       1       2       Houston, Tex. 5       308       176       74       34       13       11       7         Screneton, Pa.       26       20       3       1       -       1       Houston, Tex. 5       308       176       74       34       13       11       7         Streneton, N.J.       31       20       8       3       -       1       San Antonio, Tex. 140       64       64       64       64       64       65       51       5       2       3       7         E.N. CENTRAL       2,102       1,401       413       156       64       68       65       MOUNTAIN       666       405       134       58       31       38       26         Cohicon, Dio       23       410       3       413       22       10       Cohospringe, Colo.       31       25       2       2       2       2					4											
Schenectady, N.Y.       30       24       4       1       1       -       2       Houston, Tex.s.       308       176       74       34       13       11       7         Screnton, Pa.       26       20       3       3       -       1       Little Rock, Ark.       58       3214       9       1       2       4         Syracuse, N.Y.       117       82       23       4       2       6       4       New Orleans, La.       100       65       26       6       11       2       4         Yonkers, N.Y.       21       15       2       3       -       -       1       San Antonio, Tex.       140       88       34       10       4       4       6         Chicago, III.s       564       362       125       45       10       22       16       Abuquerque, N. Mex.       80       55       15       5       3       2       8         Calmon, Ohio       18       87       34       10       3       4       10       14.       4       03       26       4       3       -       -       2       2       2       2       2       2       2	Rochester N V	121	31			2	2		Fort Worth, Tex							
Scranton, Pa       26       20       3       3       -       -       1       Little Rock, Ark.       58       32       14       9       1       2       4         Syracuse, NY.       117       82       23       4       2       6       4       New Orleans, La.       100       65       26       6       11       2       -         Trenton, N.J.       31       20       8       3       -       1       San Antonio, Tex.       140       88       34       10       4       4       6         Vonkers, N.Y.       21       15       2       3       -       1       Shreveport, La.       69       50       11       5       1       2       4         Centon, Ohio       63       42       11       5       2       3       -       1       Colo.       121       69       17       7       6       22       4       2       -       2       2       -       2       2       -       2       4       2       -       2       4       2       14       3       4       4       0       0       3       2       5       2       -									Houston, Tex.§			74				7
Trenton, N.J.       10       10       10       10       10       10       4       4       6         Utica, N.Y.       21       15       2       3       1       -       1       Shreepont, La.       69       50       11       5       1       2       3       7         E.N. CENTRAL       2,102       1,401       413       156       64       68       65       MOUNTAIN       666       405       134       58       31       38       26         Akron, Ohio       63       42       11       5       2       3       -       1       Colo. Springs, Colo.       31       25       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2 <td< td=""><td>Scranton, Pa.</td><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td><td>Little Rock, Ark.</td><td>58</td><td></td><td></td><td></td><td>1</td><td>2</td><td></td></td<>	Scranton, Pa.					-			Little Rock, Ark.	58				1	2	
Utics, N.Y.       21       15       2       3       1       -       1       Shreveport, La.       69       50       11       5       1       2       4         Yonkers, N.Y.       29       26       2       1       -       -       2       Tulas, Okla.       82       57       15       5       2       3       7         E.N. CENTRAL       2,102       1,401       413       156       64       68       65       MOUNTAIN       666       405       134       58       31       38       26       Albuquerque, N. Mex.       80       55       15       5       3       2       8       Colo. Springs, Colo.       121       69       17       7       6       22       4       Colo. Springs, Colo.       121       69       17       7       6       22       4       2       1       3       4       13       Las Vegaes, Nev.       107       57       30       12       7       1       3       3       26       4       3       26       8       3       4       2       1       2       2       4       2       15       5       1       1       3       4 <t< td=""><td></td><td></td><td></td><td></td><td></td><td>2</td><td>6</td><td>4</td><td>New Orleans, La.</td><td></td><td></td><td></td><td></td><td></td><td></td><td>:</td></t<>						2	6	4	New Orleans, La.							:
Yonkers, N.Y.       29       26       2       1       -       2       Tulss, Ökla.       82       57       15       5       2       3       7         E.N. CENTRAL       2,102       1,401       413       156       64       68       65       MOUNTAIN       666       405       134       58       31       38       26         Akron, Ohio       63       42       11       5       2       3       7       666       405       134       58       31       38       26         Cincinnati, Ohio       138       87       34       10       3       13       Las Vegas, Nev.       107       77       6       22       4       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       3       3       3       4       2						:		•								
E.N. CENTRAL       2.102       1.401       413       156       64       686       656       405       134       58       31       38       26         Akron, Ohio       63       42       11       5       2       3       -       -       1       Colo. Springs, Colo.       121       69       17       7       6       22       4         Chicago, III.5       564       362       125       54       10       22       16       Colo. Springs, Colo.       121       69       17       7       6       22       4         Cincinnati, Ohio       138       87       34       10       3       4       13       Las Vegas, Nev.       107       57       30       12       7       7       3         Columbus, Ohio       124       86       22       6       5       4       Phoenix, Ariz.       131       68       32       17       7       7       3         Detroit, Mich.       239       149       47       24       9       10       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2 <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td></td>						1										
Akron, Ohio       63       42       11       5       2       3       -       1       Clouguerque, N. Mex.       80       55       15       5       3       2       8         Canton, Ohio       26       19       4       3       -       -       1       Colous Springs, Colo.       31       22       5       2       2       -       2       4         Chicago, Ill.å       564       362       125       45       10       3       4       13       Las Vegas, Nev.       107       57       30       12       7       1       3         Cleveland, Ohio       116       67       26       14       5       4       4       Ogden, Utah       33       26       4       3       -       -       2       Columbus, Ohio       119       79       27       8       3       2       Puelo, Colo.       25       20       5       -       -       1       1       3       2       2       Salt Lake City, Utah       43       26       8       3       4       2       1       1       -       1       1       1       1       1       1       1       1       1       <	• • •					-		-								
Canton, Ohio       26       19       4       3       -       -       1       Colo. Springs, Colo.       31       22       5       2       2       -       2         Chicago, III.\$       564       362       125       45       10       22       16       Denver, Colo.       121       69       17       7       6       22       4         Cincinnati, Ohio       116       67       26       14       5       4       4       Cgden, Utah       33       26       4       3       -       -       2         Columbus, Ohio       119       79       27       8       3       2       -       -       -       1       3       26       4       3       -       -       -       1       2       1       1       1       1       -       -       -       2       2       5       2       4       2       2       -       -       -       2       2       5       2       4       2       2       -       -       1       1       1       1       1       1       1       1       1       1       1       1       1       1 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>65</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>								65								
Chicago, III.5       564       362       125       45       10       22       16       Denver, Colo.       121       69       17       7       6       22       4         Cincinnati, Ohio       138       87       34       10       3       4       13       Las Vegas, Nev.       107       57       30       12       7       1       3         Cleveland, Ohio       124       86       22       6       5       4       Phoenix, Ariz.       131       68       32       17       7       7       3         Detroit, Mich.       239       149       47       24       9       10       2       Salt Lake City, Utah       43       26       8       3       4       2       1         Veraville, Ind.       47       35       10       1       1       1       Tocon, Ariz.       95       62       18       9       2       4       2         Gary, Ind.       11       3       4       2       1       2       Pacelif.       11       8       1       1       1       1       1       1       1       1       1       1       1       1       1       <						2	3	-							- 1	
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\*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. The sume of characteria is consting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week

Theoremonia and innuenza. Theoremonia and innuenza. Theoremonia and innuenza. Theoremonia and innuenza. Complete counts will be available in 4 to 6 weeks. Theoremonia and innuenza. Complete counts will be available in 4 to 6 weeks. Theoremonia and innuenza. Theoremonia and innuenza.

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

### Lead Testing - Continued

If a child's blood lead is elevated ( $\ge 25\mu g/dl$ ), the tenant is urged to notify the PHA. In both housing units and child-care facilities owned and operated by the PHA, all chewable surfaces and areas where paint is flaking must be tested for leaded paint. When lead-based paint is found, it is to be removed, and parents are to be directed to the local public health agency for laboratory and testing services and for medical follow-up, as appropriate.

Reported by: Div of Environmental Hazards and Health Effects, Center for Environmental Health, CDC.

**Editorial Note:** Testing for blood lead requires that blood be sent to a laboratory qualified to analyze both blood lead and erythrocyte protoporphyrin. Although many state and local health departments have ongoing lead screening programs, others, especially those in the western part of the country, are not screening children routinely. Children found to have lead toxicity should be referred for medical follow-up. In addition, the source of lead should be identified through an environmental investigation, and the hazard, abated. Otherwise, the child should be moved into a lead-free environment. This HUD regulation is likely to increase the demand for blood-lead and erythrocyte protoporphyrin testing and medical and environmental follow-up.

#### References

- 1. US Department of Housing and Urban Development. Lead-based paint hazard elimination in public and Indian housing. Federal Register 1986;51(Aug 1):27774-92.
- US Department of Housing and Urban Development. Lead-based paint hazard elimination in certain FHA single family and multifamily housing programs. Federal Register 1987;52 (Jan 15):1876-96.

## Topics in Minority Health

## Tuberculosis Among Asians/Pacific Islanders - United States, 1985

In 1985, 22,201 tuberculosis cases were reported to CDC, for a rate of 9.3 cases per 100,000 U.S. population (1). Two thousand five hundred and thirty (11.4%) of the 22,170 patients for whom race was known were Asians/Pacific Islanders (2). The rate for this group was 49.6/100,000, which is 8.7 times higher than the 1985 rate of 5.7/100,000 for the white population in the United States (3).

Two thousand five hundred and twenty-five of these Asian/Pacific Islander patients resided in 330 (10.5%) of the nation's 3,138 counties (Figure 1). Of these, 1,151 (45.6%) were in California; 174 (6.9%) were in Hawaii; 164 (6.5%) were in New York; 143 (5.7%) were in Texas; 135 (5.3%) were in Illinois; and 763 (30.2%) were in 43 other states and the District of Columbia.

The country of origin was reported for 2,357 of these patients. Of these, 2,207 (93.6%) were foreign-born: this group included 643 (27.3%) from Kampuchea, Laos, and Vietnam; 595 (25.2%) from the Republic of the Philippines; 346 (14.7%) from the Republic of Korea; 226 (9.6%) from the People's Republic of China; and 397 (16.8%) from other countries. Refugees from Kampuchea, Laos, and Vietnam who arrived in the United States during the period 1975-1985 and had disease diagnosed in 1985 had an estimated incidence rate of 75.2/100,000 (572 cases among 760,900 refugees). Those who arrived in 1984 and had disease diagnosed in 1985 had an incidence rate of 310/100,000 (161 cases among approximately 52,000 refugees).

#### Tuberculosis - Continued

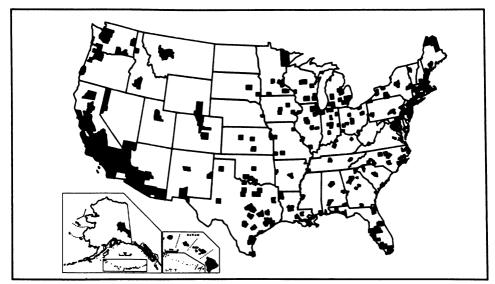
Tuberculosis developed within the first year of U.S. residency for 40.3% of all foreign-born Asians/Pacific Islanders with known date of arrival. Disease developed among an additional 8.7% within the second year of residency (Figure 2). There was little variation in this observation among the major groups of immigrants.

Because preventive therapy is indicated for all infected persons <35 years of age, analysis by age was performed. Age was known for 2,529 of the Asian/Pacific Islander patients. Of these 2,529, 1,126 (44.5%) were <35 years of age when their disease was reported. Information on the date of arrival in the United States was available on 1,879 (85.1%) of the 2,207 foreign-born patients. Of these, 826 (44.0%) were <35 years of age at the time of diagnosis in 1985. An additional 182 (9.7%) were <35 years of age when they arrived in the United States.

#### Reported by: Div of Tuberculosis Control, Center for Prevention Svcs, CDC.

**Editorial Note:** From 1980 to 1985, the Asian population in the United States grew from 3.5 million to an estimated 5.1 million (2). A large proportion of today's U.S. Asian/Pacific Islander population are immigrants or refugees from areas with a high prevalence of tuberculous infection. Refugees from Kampuchea, Laos, and Vietnam are routinely screened for tuberculosis in overseas camps, and patients with active tuberculosis are required to complete a 6-month course of directly observed chemotherapy before entering the United States (4). Therapy consists of treatment with three antituberculosis drugs (isoniazid [INH], rifampin, and ethambutol) for the full 6 months and supplemental administration of pyrazinamide during the first 2 months. The benefits of using such a fully supervised multidrug regimen are 1) a rapid reduction in infection; 2) a high rate of completion of therapy and of cure; 3) a short duration of treatment; 4) a high success rate even in the presence of initial drug resistance, which is reportedly high among this population (5); and 5) a low risk of acquired drug resistance (6).

## FIGURE 1. Counties reporting tuberculosis among Asians/Pacific Islanders — United States, 1985

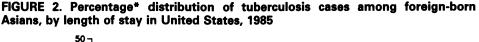


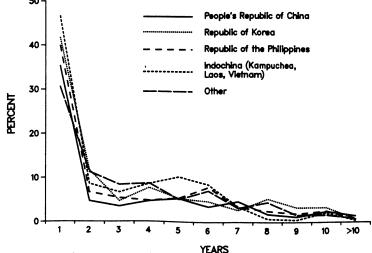
#### Tuberculosis - Continued

In 1985, tuberculosis among Asians/Pacific Islanders occurred almost entirely among foreign-born persons. Almost half of all tuberculosis cases among Asians/ Pacific Islanders were reported from California, and an additional one-quarter were from four other states. Nevertheless, cases have been reported from all but two states. In 1980, a large influx of refugees into the United States from Southeast Asia caused national tuberculosis morbidity to increase (7). When the number of refugees entering the United States decreased, the national trend resumed its previous decline. While the proportion of total tuberculosis cases represented by this group decreased from 5.3% for the period 1979-1980 to 2.9% in 1985, the risk of tuberculosis among refugees recently arriving from Kampuchea, Laos, and Vietnam (310/100,000) is higher than it was in 1980 (231/100,000) (7).

Nearly half of all Asians/Pacific Islanders with tuberculosis were <35 years of age. By comparison, 14% of non-Hispanic white patients with tuberculosis were <35 (3). Furthermore, more than half of the foreign-born patients arrived in the United States when they were <35 years of age – the age group within which preventive therapy is routinely recommended for persons with tuberculous infection (8). Irrespective of country of origin, close to 50% of foreign-born Asians/Pacific Islanders with tuberculosis became ill within the first 2 years after their arrival.

These findings suggest that half of all tuberculosis cases among Asians/Pacific Islanders would be potentially preventable if refugees and immigrants were given tuberculin skin tests and offered preventive therapy according to current guidelines ( $\mathcal{B}$ ) shortly after arrival in the United States. Because noncompliance may lead to failures in preventive therapy among refugees ( $\mathcal{P}$ ), particular attention should be given to health education and other means of encouraging compliance, such as directly observed therapy ( $1\mathcal{D}$ ). Because of the risk of overdosage with self-administered therapy (11), directly observed therapy should be used for refugees and immigrants with a history of depression or suicidal tendencies. Failures in preventive





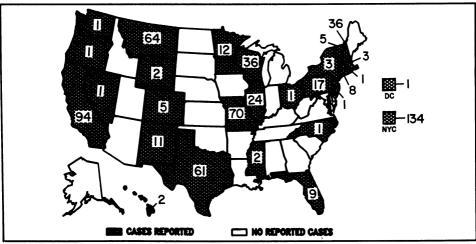
\*Average percentage of cases reported per year.

#### Tuberculosis - Continued

therapy among Southeast Asian refugees may occur because of the high prevalence of resistance to INH in this population (6,9). For this reason, the development of alternative regimens of preventive therapy is crucial to improving disease prevention efforts among refugees and other persons from countries where infection with INH-resistant organisms is common (12).

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#### FIGURE I. Reported measles cases - United States, weeks 17-20, 1987

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