

# MMWR

## MORBIDITY AND MORTALITY WEEKLY REPORT

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### Epidemiologic Notes and Reports

#### **Human Rabies — Pennsylvania**

The second case of human rabies occurring in the United States in 1984 was diagnosed September 21, in Danville, Pennsylvania. The patient, a 12-year-old male resident of Williamsport, Pennsylvania, had no history of exposure to a known rabid animal.

He was in good health until September 14, when he complained of a runny nose and sore throat. He was feverish and had teeth-chattering chills and drenching sweats. Later that day, he refused to eat, choking when he finally attempted to eat, and he was unable to swallow antipyretics. The next day, he felt somewhat better, but he was still unable to eat. On September 16, he complained of being chilly, hungry, and thirsty. The following morning, he suddenly developed muscle spasms and had difficulty breathing. When his mother attempted to take him to the hospital, he tried to run away.

On September 17, at the emergency room of a local hospital, the patient was agitated; his temperature was 39.4 C (103 F); and he appeared dehydrated. Diaphoresis, mydriasis, generalized hyperreflexia, and fasciculations of all muscle groups were noted. The admitting diagnosis was fever with dehydration. Hyperthyroidism, sepsis, and drug intoxication were ruled out shortly after admission. On September 18, after rehydration, he showed no changes. He refused to swallow liquids and expectorated all secretions. The diagnosis of rabies was considered, and contact isolation was instituted. Lumbar puncture was traumatic, revealing 149 white blood cells/mm<sup>3</sup> and 17,560 red blood cells/mm<sup>3</sup>. Cardiac arrhythmias, including premature atrial and ventricular beats, were noted. His extremities became cold, and blood pressure was sometimes difficult to auscultate. He was transferred to a referral center, where physical examination revealed him to be both diaphoretic and shivering, intermittently responsive to commands, and at other times yelling inappropriately and violently. This became particularly marked when cool breezes, such as from an oxygen canula, crossed his face. He frequently gagged and expectorated. Periods of lucidity alternated with hallucinations and disorientation, and he exhibited facial grimaces and fasciculations. A skin biopsy from the nape of the neck performed on September 20 and examined at CDC on September 21 was positive for rabies by immunofluorescent staining. On September 23, the patient became less responsive, failing to follow commands to open his eyes. He was intubated because of expectoration of large amounts of foamy saliva and episodes of respiratory depression. On the morning of September 26, he became almost completely unresponsive, with only occasional grimaces to pain and asymmetric and sluggishly reactive pupils. Chest radiograph revealed consolidation of the left lower lung field and patchy densities in the right lung fields. An episode of bradycardia occurred. Further neurologic deterioration occurred, and the patient died after an episode of asystole on September 29.

*Human Rabies — Continued*

Sera and cerebrospinal fluid from September 20, were negative for rabies neutralizing antibodies using the rapid fluorescent focus inhibition test performed at CDC. The definitive diagnosis was based on the positive fluorescent antibody of the neck biopsy and later isolation of rabies virus from the saliva.

Although the mid-Atlantic raccoon rabies epizootic now involves Pennsylvania, no rabid animals have been found since 1978 in the county where the patient lived. Testing of numerous terrestrial animals, including raccoons, failed to detect any animal rabies. For 1984, only one animal with rabies, a bat, has been reported from those counties adjacent to where the patient lived.

Monoclonal antibody analysis of the rabies virus isolated from the patient's saliva did not reveal the characteristic antigenic patterns found in rabies isolates from raccoons and other terrestrial mammals in the mid-Atlantic states. The similarity between this isolate and those obtained from insectivorous bats common to the eastern United States suggests a bat as the origin of this isolate, but an identical isolate has not been obtained (1). Further analyses and comparison of this isolate with virus isolates from rabid bats in the Pennsylvania area are under way.

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**Editorial Note:** This patient's classic hydrophobia, aerophobia, and furious behavior resulted in the early suspicion of rabies and early institution of proper isolation measures even in the absence of a history of rabies exposure. Although an exposure history can be identified in most cases of rabies, no exposure has been identified in nine (20%) of the 45 cases occurring in the United States from 1960 to the present (2). This case did not appear to have been acquired from a wild terrestrial mammal, and, to date, no case of human rabies has been associated with the mid-Atlantic raccoon rabies epizootic.

The absence of a known history of exposure, in conjunction with the impending hunting season, resulted in an unprecedented demand for preexposure immunization among many Pennsylvania hunters, trappers, and other outdoors enthusiasts. However, only professional trappers and hunters in rabies-endemic areas who are regularly exposed to potentially rabid animals should receive preexposure prophylaxis; the population at large, including individuals in rabies epizootic areas, does not require rabies preexposure prophylaxis (3). Sports trappers and hunters are at little risk of an inapparent exposure.

All hunters and trappers in rabies-endemic areas handling animals, such as raccoons, foxes, and skunks, known to be involved in endemic epizootic rabies problems should use care, especially when skinning animals, to avoid exposures (bites and contamination of mucous membranes and open wounds with potentially infectious materials [saliva and brain tissue]). The use of gloves is recommended when wild mammals are handled. Any bite or non-bite exposure should be treated promptly with local-wound care and should be reported to appropriate local or state health officials. The animal head should be maintained at refrigerator temperature (approximately 4 C [39 F]) pending instructions on the need for testing.

Preexposure prophylaxis does not eliminate the need for postexposure prophylaxis. The use of rabies postexposure prophylaxis should be based on individual evaluations of each exposure and examination of the animal that was the source of the exposure after consultation with appropriate local and state health authorities. Rabies in humans is very rare in the United States, with an average of only two cases per year since 1960 (2), and no case has occurred in a person who has received the recommended postexposure treatment.

*Human Rabies — Continued**References*

1. Smith JS, Sumner JW, Roumillat LF, Baer GM, Winkler WG. Antigenic characteristics of isolates associated with a new epizootic of raccoon rabies in the United States. *J Infect Dis* 1984;149:769-74.
2. Anderson LJ, Nicholson KG, Tauxe RV, Winkler WG. Human rabies in the United States, 1960 to 1979: epidemiology, diagnosis, and prevention. *Ann Intern Med* 1984;100:728-35.
3. ACIP. Rabies prevention—United States, 1984. *MMWR* 1984;33:393-402, 407-8.

*Current Trends***Paralytic Poliomyelitis — United States, 1982 and 1983**

As of June 1984, 21 patients with paralytic poliomyelitis had been reported to CDC with onset of illness in 1982 and 1983.\* Nine of the patients had onset in 1982, and 12, in 1983. All 21 cases were classified as vaccine-associated, using both epidemiologic and laboratory classifications (1,2) (Tables 1 and 2). One case occurred in a 22-year-old unimmunized individual with no history of contact with a trivalent oral poliomyelitis vaccine (OPV) recipient before onset of his illness. Although his case was classified epidemiologically as endemic, not vaccine-associated, a vaccine-like poliovirus type 2 was isolated from his stool.

Eight cases occurred among OPV recipients. All were associated with the first OPV dose, and seven were 2 months to 4 months of age, the recommended age for the first OPV dose.

\*These reported cases comprise the "Best Available Paralytic Poliomyelitis Case Count," i.e., they are clinically and epidemiologically compatible with poliomyelitis with residual neurologic deficit 60 days after onset of initial symptoms (or death).

**TABLE 1. Epidemiologic classifications of paralytic poliomyelitis**

- 
- I. EPIDEMIC: occurring with epidemiologic linkage to other cases
    - A. Oral poliovirus vaccine (OPV) not received 4-30 days before onset of illness.
    - B. OPV received 4-30 days before onset of illness.
  - II. ENDEMIC: occurring without epidemiologic linkage to other cases
    - A. No history of receiving OPV or of contact with an OPV recipient as defined in B and C below.
    - B. OPV received 4-30 days before onset of illness.
    - C. Onset of illness 4-60 days after OPV was fed to a recipient in contact with patient *and* contact occurred within 30 days before onset of illness.
      1. Household contact—vaccine recipient and patient regularly share the same home for sleeping.
      2. Community contact or nonhousehold contact.
  - III. IMPORTED
 

Disease develops in U.S. resident who has traveled outside the United States in areas with known endemic or epidemic poliomyelitis.
  - IV. IMMUNE DEFICIENT
 

Documented immunodeficiency of any type.
-

*Paralytic Poliomyelitis — Continued*

Vaccine-like polioviruses were isolated from the stools of all eight patients; five had poliovirus 3; one, poliovirus 2; one, both polioviruses 2 and 3; and one, polioviruses 1 and 3.

Six cases occurred among household contacts of OPV recipients; five were parents of first-dose recipients of OPV; one was a 4½-month-old unimmunized sibling (Table 3). One of the six household-contact patients had another child in the same household who was a second-dose recipient of OPV. Two of the ill parents had no histories of immunization against poliomyelitis; the remaining three were all partially immunized<sup>†</sup> against poliomyelitis. Vaccine-like poliovirus isolates were obtained from four of the six contact cases; of the remaining two, one was serologically confirmed.

Three cases occurred among nonhousehold contacts of OPV recipients. The two with onset reported in 1982 were both children; one had contact with a playmate who had received his third OPV dose; and the other had contact with a babysitter's child who had received her second OPV dose. The nonhousehold contact patient reported in 1983 was a 31-year-old unimmunized man who had contact with a nephew who had received his first OPV dose. Overall, seven (78%) of the OPV-contact patients were associated with the vaccinees' first doses of OPV (Table 3).

Three cases were classified as occurring in immune-deficient individuals. Two developed paralysis after receiving their first OPV doses, and the third developed paralysis after the fourth dose. The immunodeficiency in each case was diagnosed in retrospect after the onset of paralytic poliomyelitis. None of the cases were immunosuppressed because of drug therapy.

<sup>†</sup>All had received less than the full primary course of three OPV doses or four doses of inactivated poliomyelitis vaccine (IPV). One had received one dose of monovalent poliomyelitis vaccine (MOPV); one had received three doses of MOPV; and the third had received three doses of IPV and one dose of MOPV.

**TABLE 2. Epidemiologic classification of reported poliomyelitis cases — United States, 1982-1983**

Epidemiologic classification	1982	1983	Total
I. EPIDEMIC			
A. No OPV	0	0	0
B. OPV received	0	0	0
II. ENDEMIC			
A. Not vaccine-associated	1*	0	1
B. OPV recipient	2	6	8
C. OPV contact			
1. Household	3	3	6
2. Nonhousehold	2	1	3
III. IMPORTED	0	0	0
IV. IMMUNE DEFICIENT	1	2	3 <sup>†</sup>
<b>Total</b>	<b>9</b>	<b>12</b>	<b>21</b>

\*Vaccine-like poliovirus was isolated from patient's stool.

<sup>†</sup>Immunodeficiency diagnosed in retrospect in all cases after the onset of poliomyelitis.

*Paralytic Poliomyelitis — Continued*

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**Editorial Note:** Before widespread use of vaccine in the 1950s, the number of paralytic poliomyelitis cases reached over 20,000 per year. However, fewer than 25 cases have been reported annually for the last 10 years. With the reduction of naturally occurring poliovirus circulation in the United States, the epidemiology of paralytic poliomyelitis has changed to include a substantial proportion of vaccine-associated cases. Better classification of cases is aided by new laboratory methods that provide more accurate characterization of poliovirus isolates (1,2). Since 1978, these methods have been systematically applied to isolates obtained from patients with endemic disease. The first years that all reported cases of paralytic poliomyelitis appeared vaccine-associated, either epidemiologically or by laboratory characterization of poliovirus isolates, were 1982 and 1983.

Vaccine-associated poliomyelitis has been rare but predictable with widespread use of OPV. During 1972-1983, 278.8 million OPV doses were distributed in the United States. During this same period, 87 vaccine-associated cases in apparently immunologically normal individuals were reported. Thirty-two occurred among vaccine recipients (one case per 8.7 million OPV doses distributed), and 55 cases occurred among household and nonhousehold contacts of vaccinees (1 case per 5.1 million doses distributed).

Because the number of susceptible vaccine recipients or contacts of recipients is not known, the true risk of vaccine-associated poliomyelitis is impossible to determine precisely. The ratio of cases to the number of OPV doses distributed roughly measures the overall risk of vaccine-associated poliomyelitis and demonstrates to a prospective OPV recipient or a contact the overall rarity of OPV-associated disease.

The Immunization Practices Advisory Committee continues to recommend OPV as the vaccine of choice for primary immunization of children in the United States when the benefits and risks for the entire population are considered (3). The choice of OPV as the preferred polio vaccine has also been made by the Committee on Infectious Diseases of the American Academy of Pediatrics (4) and a special expert committee of the Institute of Medicine, National Academy of Sciences (5).

*References*

1. van Wezel AL, Hazendonk AG. Intratypic serodifferentiation of poliomyelitis virus strains by strain-specific antisera. *Intervirology* 1979;11:2-8.
2. Nottay BK, Kew OM, Hatch MH, Heyward JT, Objieski JF. Molecular variation of type 1 vaccine-related and wild polioviruses during replication in humans. *Virology* 1981;108:405-23.
3. ACIP. Poliomyelitis prevention. *MMWR* 1982;31:22-6, 31-4.

**TABLE 3. Vaccine-associated paralytic poliomyelitis, by OPV dose — United States, 1982 and 1983**

OPV dose no. in recipients*	Recipient cases	Household-contact cases	Community contact cases
1*	8	6 <sup>†</sup>	1
2	0	0	1
3	0	0	1
<b>Total</b>	<b>8</b>	<b>6</b>	<b>3</b>

\*Excludes cases in immune-deficient individuals.

<sup>†</sup>One of these persons had contact with two children who had received first and second OPV doses.

*Paralytic Poliomyelitis — Continued*

4. American Academy of Pediatrics. Report of the Committee on Infectious Diseases. 19th ed. Evanston, Illinois: American Academy of Pediatrics, 1982.
5. Nightingale EO. Recommendations for a national policy on poliomyelitis vaccination. *N Engl J Med* 1977;297:249-53.

*Epidemiologic Notes and Reports*

### Lead Poisoning-Associated Death from Asian Indian Folk Remedies — Florida

In January 1984, a 9-month-old Asian Indian boy died in Florida of lead poisoning that resulted from ingestion of folk remedies. The case report follows.

The infant, born in April 1983 in Massachusetts, moved with his family to Lake County, Florida, when he was 6 months old. He was under the care of a local physician and developed

*(Continued on page 643)*

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

Disease	45th Week Ending			Cumulative, 45th Week Ending		
	Nov. 10, 1984	Nov. 12, 1983	Median 1979-1983	Nov. 10, 1984	Nov. 12, 1983	Median 1979-1983
Acquired Immunodeficiency Syndrome (AIDS)*	67	64	N	3,688	1,743	N
Aseptic meningitis	110	260	227	6,935	11,108	8,272
Encephalitis: Primary (arthropod-borne & unspec.)	16	19	28	1,014	1,629	1,337
Post-infectious	1	1	1	80	81	81
Gonorrhea: Civilian	10,406	18,146	18,146	718,570	782,625	868,348
Military	351	600	600	17,981	21,192	23,905
Hepatitis: Type A	257	418	488	18,185	18,503	21,727
Type B	328	449	435	22,090	20,670	17,736
Non A, Non B	42	67	N	3,182	2,936	N
Unspecified	98	124	218	4,649	6,320	8,984
Legionellosis	8	17	N	572	644	N
Leprosy	-	5	3	195	210	191
Malaria	15	10	15	852	706	931
Measles: Total**	1	10	27	2,419	1,375	2,804
Indigenous	1	3	N	2,139	1,103	N
Imported	-	7	N	280	272	N
Meningococcal infections: Total	34	43	53	2,318	2,365	2,365
Civilian	34	43	52	2,313	2,350	2,350
Military	-	-	-	5	15	15
Mumps	28	70	83	2,517	2,879	4,694
Pertussis	26	35	30	1,951	2,070	1,486
Rubella (German measles)	1	15	16	679	878	2,149
Syphilis (Primary & Secondary): Civilian	309	563	563	23,728	28,126	26,766
Military	4	2	5	259	345	334
Toxic Shock syndrome	3	5	N	410	367	N
Tuberculosis	312	440	474	18,396	20,217	23,400
Tularemia	3	4	2	268	259	233
Typhoid fever	3	3	9	307	404	450
Typhus fever, tick-borne (RMSF)	14	6	6	820	1,072	1,072
Rabies, animal	55	72	94	4,661	5,371	5,514

**TABLE II. Notifiable diseases of low frequency, United States**

	Cum. 1984		Cum. 1984
Anthrax	1	Plague	30
Botulism: Foodborne (Ky. 1)	17	Poliomyelitis: Total	3
Infant	79	Paralytic	3
Other	6	Psittacosis	78
Brucellosis (Colo. 1)	105	Rabies, human	2
Cholera	-	Tetanus (Ga. 1)	53
Congenital rubella syndrome	4	Trichinosis	61
Diphtheria	1	Typhus fever, flea-borne (endemic, murine)	28
Leptospirosis (Ala. 1)	27		

\*The 1983 reports which appear in this table were collected before AIDS became a notifiable condition.

\*\*There were no cases of internationally imported measles reported for this week.

TABLE III. Cases of specified notifiable diseases, United States, weeks ending  
November 10, 1984 and November 12, 1983 (45th Week)

Reporting Area	AIDS Cum. 1984	Aseptic Mening- itis 1984	Encephalitis		Gonorrhoea (Civilian)		Hepatitis (Viral), by type				Legionel- losis 1984	Leprosy Cum 1984
			Primary Cum. 1984	Post-in- fectious Cum. 1984	Cum. 1984	Cum. 1983	A 1984	B 1984	NA,NB 1984	Unspeci- fied 1984		
UNITED STATES	3,688	110	1,014	80	718,570	782,625	257	328	42	98	8	195
NEW ENGLAND	120	4	45	2	20,114	20,004	15	52	1	13	-	10
Maine	-	-	-	-	864	990	-	-	-	-	-	-
N.H.	2	1	7	-	633	639	-	3	-	-	-	-
Vt.	1	-	5	-	327	384	2	-	-	-	-	-
Mass	67	1	21	-	8,556	8,540	8	30	1	13	-	-
R.I.	6	1	-	-	1,401	1,112	2	4	-	-	-	6
Conn.	44	1	12	2	8,333	8,339	3	15	-	-	-	4
MID ATLANTIC	1,634	16	119	9	96,884	99,836	43	55	2	5	-	36
Upstate N.Y.	141	10	40	7	15,573	16,701	3	12	-	5	-	3
N.Y. City	1,196	-	11	-	37,289	39,231	13	5	-	-	-	31
N.J.	215	-	26	-	17,273	18,714	13	24	2	-	-	-
Pa.	82	6	42	2	26,749	25,190	14	14	-	-	-	2
E.N. CENTRAL	159	22	288	18	102,056	113,726	13	35	10	4	5	6
Ohio	20	6	92	9	26,561	29,476	7	13	5	-	3	2
Ind	23	-	75	-	11,051	10,904	3	-	1	4	-	-
Ill	80	6	27	6	22,642	33,089	-	-	-	-	-	2
Mich	26	10	60	-	30,330	30,163	3	22	4	-	2	2
Wis	10	-	34	3	11,472	10,094	-	-	-	-	-	-
W.N. CENTRAL	36	7	87	3	35,840	36,930	10	14	3	-	-	3
Minn	9	1	37	-	5,366	5,131	4	2	2	-	-	2
Iowa	2	-	29	-	3,887	4,014	-	1	-	-	-	1
Mo	20	3	11	-	17,156	18,103	-	7	-	-	-	-
N Dak	-	-	-	-	344	395	-	-	-	-	-	-
S Dak	-	2	2	1	847	916	5	1	-	-	-	-
Nebr	3	-	1	-	2,662	2,408	1	3	1	-	-	-
Kans	2	1	7	2	5,578	5,963	-	-	-	-	-	-
S ATLANTIC	494	10	155	17	179,143	202,055	13	51	11	6	1	8
Del	5	-	1	-	3,442	3,694	-	-	1	-	-	-
Md	42	-	28	-	20,744	26,075	-	2	2	-	-	1
D.C.	77	1	-	-	13,161	13,864	-	-	-	-	-	1
Va	33	1	28	5	17,573	18,391	-	2	1	1	-	4
W Va	4	-	36	-	2,375	2,228	-	1	-	-	-	-
N.C.	11	2	31	7	29,743	31,480	1	9	1	-	-	-
S.C.	8	-	4	-	18,989	18,772	-	3	-	-	1	-
Ga	51	1	2	2	28,722	41,019	4	16	1	1	-	1
Fla	263	5	25	3	44,394	46,532	8	18	5	4	-	1
E.S. CENTRAL	23	27	51	7	66,103	65,829	4	21	2	3	-	-
Ky	10	7	13	-	7,865	7,753	2	1	-	2	-	-
Tenn	6	7	16	1	26,745	27,106	-	14	2	1	-	-
Ala	5	11	19	5	20,194	20,272	1	4	-	-	-	-
Miss	2	2	3	1	11,299	10,698	1	2	-	-	-	-
W.S. CENTRAL	259	13	90	4	97,658	109,456	91	66	5	55	2	19
Ark	1	-	-	2	8,851	8,627	2	4	2	1	-	1
La	38	-	8	-	21,814	20,897	10	11	1	-	-	1
Okla	10	1	19	1	10,778	12,618	18	3	1	1	-	-
Tex	210	12	63	1	56,215	67,314	61	48	1	53	2	17
MOUNTAIN	58	6	32	11	23,928	24,972	47	24	4	10	-	8
Mont	-	-	2	-	920	1,035	-	-	-	-	-	-
Idaho	-	-	-	-	1,148	1,115	1	1	-	-	-	-
Wyo.	1	-	-	-	642	659	3	-	-	-	-	-
Colo.	30	2	10	-	6,871	6,991	16	4	-	6	-	-
N. Mex	1	-	-	-	2,914	3,052	3	-	1	-	-	-
Ariz	13	4	11	3	6,619	7,103	18	12	2	2	-	6
Utah	7	-	9	8	1,143	1,198	2	3	-	-	-	1
Nev.	6	-	-	-	3,671	3,819	4	4	1	2	-	1
PACIFIC	905	5	147	9	96,844	109,817	21	10	4	2	-	105
Wash.	46	1	8	-	7,610	8,582	3	2	-	1	-	3
Oreg.	7	-	-	-	5,794	5,862	17	5	4	1	-	1
Calif.	839	U	136	9	79,286	90,497	U	U	U	U	U	86
Alaska	1	-	-	-	2,468	2,825	1	2	-	-	-	-
Hawaii	12	4	3	-	1,686	2,051	-	1	-	-	-	15
Guam	-	U	-	-	103	118	U	U	U	U	U	-
P.R.	51	-	3	2	2,922	2,489	11	10	-	3	-	5
V.I.	-	-	-	-	406	266	-	-	-	-	-	-
Pac. Trust Terr.	-	U	-	-	-	-	U	U	U	U	U	-

N: Not notifiable

U: Unavailable

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending  
November 10, 1984 and November 12, 1983 (45th Week)

Reporting Area	Measles (Rubeola)						Meningococcal Infections	Mumps		Pertussis			Rubella		
	Malaria	Indigenous		Imported *		Total									
	Cum. 1984	1984	Cum. 1984	1984	Cum. 1984	Cum. 1983		Cum. 1984	1984	Cum. 1984	1984	Cum. 1984	Cum. 1983	1984	Cum. 1984
UNITED STATES	852	1	2,139	-	280	1,375	2,318	28	2,517	26	1,951	2,070	1	679	878
NEW ENGLAND	46	-	94	-	12	20	161	-	83	1	58	67	-	20	15
Maine	-	-	-	-	-	-	1	-	26	-	2	5	-	1	-
N.H.	-	-	33	-	3	3	9	-	16	-	9	9	-	1	4
Vt.	6	-	2	-	5	-	29	-	5	-	23	8	-	5	5
Mass.	26	-	49	-	-	8	65	-	17	1	17	35	-	18	6
R.I.	4	-	-	-	-	-	15	-	19	-	3	5	-	-	-
Conn.	10	-	10	-	4	9	42	-	9	-	4	5	-	-	-
MID ATLANTIC	135	-	119	-	43	116	393	2	293	2	178	349	-	223	144
Upstate N.Y.	27	-	25	-	13	16	127	1	85	2	101	111	-	99	29
N.Y. City	43	-	90	-	20	70	79	1	27	-	7	56	-	103	86
N.J.	36	-	4	-	3	27	75	-	132	-	12	19	-	17	3
Pa.	29	-	-	-	7	3	112	-	49	-	58	163	-	4	26
E.N. CENTRAL	78	-	617	-	75	703	377	6	967	2	436	467	1	90	127
Ohio	19	-	3	-	6	87	126	-	465	-	72	144	-	2	2
Ind.	3	-	2	-	1	406	47	-	59	-	229	55	-	5	25
Ill.	27	-	179	-	1	202	81	-	177	-	25	158	-	53	54
Mich.	15	-	411	-	54	7	76	6	180	2	30	39	1	22	17
Wis.	14	-	22	-	13	1	47	-	86	-	80	71	-	8	29
W.N. CENTRAL	24	-	48	-	8	8	146	2	104	2	123	131	-	39	41
Minn.	7	-	44	-	3	1	30	-	6	1	16	47	-	4	9
Iowa	2	-	-	-	-	-	22	1	24	-	12	6	-	1	-
Mo.	8	-	4	-	-	1	44	-	10	-	20	23	-	-	-
N. Dak.	1	-	-	-	-	-	2	-	2	-	-	2	-	3	-
S. Dak.	1	-	-	-	-	-	6	-	-	-	9	8	-	-	-
Nebr.	3	-	-	-	-	-	13	-	4	-	13	3	-	-	-
Kans.	2	-	-	-	5	6	29	1	58	1	53	42	-	31	32
S. ATLANTIC	118	-	19	-	33	205	479	3	187	-	152	246	-	23	96
Del.	4	-	-	-	-	-	3	-	2	-	2	5	-	-	-
Md.	30	-	8	-	14	10	36	-	40	-	13	31	-	1	3
D.C.	1	-	-	-	5	-	8	-	-	-	-	-	-	-	-
Va.	29	-	1	-	4	23	58	-	17	-	15	50	-	-	2
W. Va.	1	-	-	-	-	-	5	1	39	-	11	9	-	-	-
N.C.	11	-	-	-	1	1	76	2	19	-	33	28	-	-	10
S.C.	2	-	-	-	-	4	55	-	5	-	1	14	-	-	1
Ga.	14	-	1	-	1	8	91	-	22	-	17	66	-	2	13
Fla.	26	-	9	-	8	159	149	-	43	-	60	43	-	20	67
E.S. CENTRAL	10	-	4	-	2	6	129	-	53	-	14	33	-	20	19
Ky.	1	-	1	-	-	1	49	-	11	-	2	14	-	14	18
Tenn.	2	-	-	-	2	-	32	-	17	-	7	8	-	-	-
Ala.	7	-	3	-	-	5	33	-	6	-	1	5	-	3	1
Miss.	-	-	-	-	-	-	15	-	19	-	4	6	-	3	-
W.S. CENTRAL	75	1	541	-	25	78	253	12	156	11	314	426	-	61	114
Ark.	-	1	9	-	-	13	46	1	8	1	17	23	-	3	-
La.	9	-	8	-	-	29	47	-	-	-	8	11	-	-	10
Okla.	9	-	-	-	8	1	24	N	N	-	236	310	-	-	-
Tex.	57	-	524	-	17	35	136	11	148	10	53	82	-	58	104
MOUNTAIN	26	-	113	-	32	18	77	3	234	6	118	224	-	21	30
Mont.	2	-	-	-	-	3	2	-	8	-	19	1	-	-	3
Idaho	2	-	-	-	23	10	8	-	9	-	7	16	-	1	8
Wyo.	-	-	-	-	-	1	3	-	2	-	6	6	-	2	4
Colo.	7	-	-	-	6	3	28	2	25	6	45	133	-	2	1
N. Mex.	1	-	88	-	-	-	8	N	N	-	9	13	-	1	-
Ariz.	9	-	-	-	1	1	16	1	175	-	23	24	-	4	6
Utah	5	-	25	-	2	-	7	-	11	-	7	31	-	7	7
Nev.	-	-	-	-	-	-	5	-	4	-	2	-	-	4	1
PACIFIC	340	-	584	-	50	221	303	-	440	2	558	127	-	182	292
Wash.	13	-	138	-	15	28	48	-	49	2	314	16	-	1	9
Oreg.	12	-	-	-	-	10	45	N	N	-	30	9	-	2	14
Calif.	311	U	287	U	31	179	202	U	354	U	138	95	U	173	267
Alaska	-	-	-	-	-	2	7	-	13	-	1	4	-	1	1
Hawaii	4	-	159	-	4	2	1	-	24	-	75	3	-	5	1
Guam	1	U	83	U	2	2	1	U	5	U	-	-	U	2	-
P.R.	4	-	1	-	-	94	4	-	163	-	1	13	-	16	7
V.I.	-	-	-	-	-	5	-	-	5	-	-	-	-	-	2
Pac. Trust Terr.	-	U	-	U	-	-	-	U	-	U	-	-	U	-	-

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

N Not notifiable U Unavailable <sup>1</sup>International <sup>§</sup>Out-of-state

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending  
November 10, 1984 and November 12, 1983 (45th Week)

Reporting Area	Syphilis (Civilian) (Primary & Secondary)		Toxic- shock Syndrome	Tuberculosis		Tula- remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1984	Cum. 1983		1984	Cum. 1984				
UNITED STATES	23,728	28,126	3	18,396	20,217	268	307	820	4,661
NEW ENGLAND	461	602	-	559	617	7	18	5	46
Maine	9	19	-	27	31	-	-	-	12
N.H.	14	21	-	25	31	-	-	-	16
Vt.	1	3	-	8	10	-	-	-	-
Mass.	263	384	-	311	327	7	15	4	10
R.I.	19	19	-	45	54	-	-	-	-
Conn.	155	156	-	143	164	-	3	1	8
MID ATLANTIC	3,180	3,676	-	3,346	3,585	1	49	25	461
Upstate N.Y.	256	345	-	537	567	-	12	8	97
N.Y. City	1,933	2,134	-	1,345	1,415	1	14	3	-
N.J.	570	713	-	748	757	-	17	3	34
Pa.	421	484	-	716	846	-	6	11	330
E.N. CENTRAL	1,136	1,483	1	2,405	2,730	8	52	59	200
Ohio	206	391	-	430	432	-	9	39	24
Ind.	120	106	-	291	305	-	7	7	21
Ill.	421	704	-	993	1,173	8	21	10	71
Mich.	322	204	1	547	676	-	7	3	21
Wis.	67	78	-	144	144	-	8	-	63
W.N. CENTRAL	323	339	-	559	645	80	10	51	680
Minn.	84	128	-	92	135	1	3	1	79
Iowa	11	22	-	56	59	-	-	6	136
Mo.	162	124	-	284	326	42	5	16	60
N. Dak.	9	2	-	11	6	-	-	-	134
S. Dak.	1	11	-	22	36	34	-	5	182
Nebr.	15	15	-	29	21	-	-	5	41
Kans.	41	37	-	65	62	3	2	18	48
S. ATLANTIC	6,949	7,618	-	3,858	4,009	7	38	387	1,373
Del.	18	31	-	50	56	-	-	1	6
Md.	440	459	-	380	315	-	2	29	757
D.C.	286	331	-	155	164	1	6	-	-
Va.	367	514	-	384	430	1	8	53	193
W. Va.	17	25	-	119	123	-	-	7	39
N.C.	741	755	-	580	608	1	1	167	25
S.C.	673	491	-	456	381	-	1	78	58
Ga.	1,059	1,346	-	587	678	4	7	47	172
Fla.	3,348	3,666	-	1,147	1,254	-	13	5	123
E.S. CENTRAL	1,742	1,910	-	1,738	1,818	6	8	89	222
Ky.	90	156	-	410	460	-	2	18	50
Tenn.	460	516	-	505	546	5	2	46	73
Ala.	585	745	-	508	459	-	2	15	99
Miss.	607	493	-	315	353	1	2	10	-
W.S. CENTRAL	5,780	7,189	1	2,158	2,488	116	19	187	927
Ark.	180	171	-	250	297	82	-	33	98
La.	1,062	1,476	-	288	401	7	1	4	55
Okla.	187	180	1	202	226	19	4	118	93
Tex.	4,351	5,362	-	1,418	1,564	8	14	32	681
MOUNTAIN	552	585	1	500	567	33	13	13	258
Mont.	3	7	-	17	42	3	1	8	109
Idaho	22	27	-	27	30	8	-	1	11
Wyo.	4	12	-	3	12	1	-	3	20
Colo.	145	136	-	65	85	6	5	1	42
N. Mex.	79	160	-	94	99	2	3	-	11
Ariz.	198	148	1	227	220	4	3	-	43
Utah	18	21	-	34	37	4	-	-	6
Nev.	83	94	-	33	42	5	1	-	16
PACIFIC	3,605	4,724	-	3,273	3,758	10	100	4	494
Wash.	120	174	-	170	215	2	3	-	3
Oreg.	102	123	-	135	162	2	2	1	1
Calif.	3,306	4,344	U	2,713	3,106	6	87	2	482
Alaska	6	12	-	65	69	-	1	1	8
Hawaii	71	71	-	190	206	-	7	-	-
Guam	-	-	U	5	7	-	-	-	-
P.R.	683	849	-	340	413	-	4	-	58
V.I.	10	17	-	3	2	-	3	-	-
Pac. Trust Terr.	-	-	U	-	-	-	-	-	-

U. Unavailable

TABLE IV. Deaths in 121 U.S. cities,\* week ending  
November 10, 1984 (45th Week Ending)

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	
<b>NEW ENGLAND</b>	628	422	137	35	15	19	36	<b>S. ATLANTIC</b>	1,179	731	268	95	48	37	63
Boston, Mass.	199	112	54	18	5	10	16	Atlanta, Ga.	133	82	33	11	3	4	3
Bridgeport, Conn.	34	21	8	4	1	-	-	Baltimore, Md.	169	96	45	22	5	1	4
Cambridge, Mass.	26	21	4	1	-	-	4	Charlotte, N.C.	68	46	13	5	3	1	4
Fall River, Mass.	22	18	3	-	-	-	-	Jacksonville, Fla.	77	44	23	5	4	1	4
Hartford, Conn.	60	46	11	1	-	2	7	Miami, Fla.	102	54	21	14	10	3	2
Lowell, Mass.	20	9	10	-	-	-	-	Norfolk, Va.	92	36	15	3	4	2	5
Lynn, Mass.	19	17	2	-	1	-	-	Richmond, Va.	92	57	19	11	2	3	14
New Bedford, Mass.	25	20	4	-	-	1	1	Savannah, Ga.	31	26	3	1	1	-	1
New Haven, Conn.	31	19	3	4	3	2	-	St. Petersburg, Fla.	116	102	10	3	-	1	11
Providence, R.I.	58	40	13	2	3	-	3	Tampa, Fla.	60	34	15	-	5	6	5
Somerville, Mass.	11	5	4	1	1	-	-	Washington, D.C.	215	118	55	18	9	15	6
Springfield, Mass.	38	30	5	2	-	1	1	Wilmington, Del.	56	36	16	2	2	-	4
Waterbury, Conn.	36	28	7	1	-	-	3	<b>E.S. CENTRAL</b>	721	437	180	46	32	23	27
Worcester, Mass.	49	36	9	1	1	2	-	Birmingham, Ala.	106	64	24	7	5	6	-
<b>MID ATLANTIC</b>	2,595	2,087	266	86	56	76	113	Chattanooga, Ga.	48	29	12	4	3	1	6
Albany, N.Y.	55	38	8	3	3	3	1	Knoxville, Tenn.	67	43	16	5	1	2	1
Allentown, Pa.	18	14	4	-	-	-	-	Louisville, Ky.	113	76	22	6	5	4	10
Buffalo, N.Y.	144	94	31	10	3	5	10	Memphis, Tenn.	169	107	34	12	7	6	5
Camden, N.J.	45	27	15	1	2	-	4	Mobile, Ala.	62	42	12	3	5	-	4
Elizabeth, N.J.	25	21	3	1	-	-	1	Montgomery, Ala.	40	21	16	2	1	-	-
Erie, Pa.†	50	39	9	1	-	1	5	Nashville, Tenn.	116	55	44	7	5	5	1
Jersey City, N.J.	41	31	5	2	1	2	-	<b>W.S. CENTRAL</b>	1,237	703	312	105	59	56	57
N.Y. City, N.Y.‡	1,367	1,251	11	20	31	31	50	Austin, Tex.	54	29	13	7	3	1	9
Newark, N.J.	60	31	15	10	2	2	7	Baton Rouge, La.	20	14	4	2	-	-	-
Paterson, N.J.	26	15	8	1	1	-	-	Corpus Christi, Tex.	45	29	13	2	-	-	2
Philadelphia, Pa.†	307	188	70	20	8	21	13	Dallas, Tex.	194	113	53	15	7	6	5
Pittsburgh, Pa.†	57	38	16	3	-	-	2	El Paso, Tex.	74	42	23	3	3	3	5
Reading, Pa.	27	23	4	-	-	-	2	Fort Worth, Tex.	112	55	20	9	7	21	8
Rochester, N.Y.	120	86	19	7	3	5	6	Houston, Tex.	265	140	64	33	15	13	7
Schenectady, N.Y.	36	24	11	-	1	-	-	Little Rock, Ark.	41	27	10	2	1	1	1
Scranton, Pa.†	22	18	4	-	-	-	-	New Orleans, La.	123	69	33	14	7	-	-
Syracuse, N.Y.	98	70	22	3	1	2	4	San Antonio, Tex.	162	89	40	12	14	7	10
Trenton, N.J.	33	25	5	3	-	-	1	Shreveport, La.	70	46	21	1	-	2	4
Utica, N.Y.	26	23	1	-	-	2	1	Tulsa, Okla.	77	50	18	5	2	2	6
Yonkers, N.Y.	38	31	5	1	-	1	4	<b>MOUNTAIN</b>	639	417	124	47	31	20	36
<b>E.N. CENTRAL</b>	2,177	1,521	380	123	60	84	69	Albuquerque, N.Mex	82	55	17	6	3	1	6
Akron, Ohio	63	48	13	-	1	1	-	Colorado Springs, Colo.	45	30	9	2	2	2	6
Canton, Ohio	46	34	8	4	-	-	1	Denver, Colo.	113	78	16	12	3	4	4
Chicago, Ill. §	457	408	5	9	12	14	12	Las Vegas, Nev.	76	42	15	9	6	4	5
Cincinnati, Ohio	118	76	30	5	7	-	9	Ogden, Utah	14	9	3	1	1	-	-
Cleveland, Ohio	169	107	39	11	2	10	1	Phoenix, Ariz.	152	86	38	12	11	5	4
Columbus, Ohio	131	77	27	14	4	9	3	Pueblo, Colo.	17	15	2	-	-	-	2
Dayton, Ohio	104	65	29	2	4	4	3	Salt Lake City, Utah	53	40	8	-	1	4	1
Detroit, Mich.	281	163	71	24	9	14	6	Tucson, Ariz.	87	62	16	5	4	-	8
Evansville, Ind.	54	38	8	3	4	1	3	<b>PACIFIC</b>	1,827	1,225	352	127	73	43	83
Fort Wayne, Ind.	55	39	10	3	1	2	1	Berkeley, Calif.	20	11	6	1	2	-	-
Gary, Ind.	18	13	3	-	2	-	2	Fresno, Calif.	72	57	9	5	1	-	4
Grand Rapids, Mich.	72	50	13	5	1	3	5	Glendale, Calif.	25	21	4	-	-	-	1
Indianapolis, Ind.	160	106	30	14	3	7	5	Honolulu, Hawaii	64	44	9	4	3	4	7
Madison, Wis.	37	19	11	1	2	4	1	Long Beach, Calif.	93	53	30	1	5	4	2
Milwaukee, Wis.	132	95	26	8	3	-	6	Los Angeles, Calif.	497	334	99	36	21	1	12
Peoria, Ill.	50	34	7	2	1	6	4	Oakland, Calif.	78	47	14	7	2	8	5
Rockford, Ill.	41	23	15	3	-	-	4	Pasadena, Calif.	51	35	6	4	4	2	3
South Bend, Ind.	32	25	3	1	1	2	-	Portland, Ore.	123	83	27	7	6	-	7
Toledo, Ohio	86	55	19	7	2	3	2	Sacramento, Calif.	124	91	19	10	3	1	11
Youngstown, Ohio	71	46	13	7	1	4	1	San Diego, Calif.	122	69	27	11	8	6	11
<b>W.N. CENTRAL</b>	749	515	148	31	14	41	53	San Francisco, Calif.	147	93	26	18	4	6	1
Des Moines, Iowa	69	53	10	2	-	4	8	San Jose, Calif.	164	111	31	12	5	5	11
Duluth, Minn.	17	11	4	1	1	-	2	Seattle, Wash.	161	113	30	8	6	4	3
Kansas City, Kans.	39	28	6	2	3	3	2	Spokane, Wash.	53	38	11	1	2	1	3
Kansas City, Mo.	133	90	29	4	3	7	7	Tacoma, Wash.	33	25	4	2	1	1	2
Lincoln, Nebr.	27	18	4	3	2	-	3	<b>TOTAL</b>	11,752 <sup>††</sup>	8,058	2,167	695	388	399	537
Minneapolis, Minn.	83	60	12	5	1	5	7								
Omaha, Nebr.	88	60	19	2	1	6	10								
St. Louis, Mo.	153	105	32	7	1	8	5								
St. Paul, Minn.	65	41	16	2	2	4	1								
Wichita, Kans.	75	49	16	3	3	4	8								

\* 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 4 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.

**TABLE V. Years of potential life lost, deaths, and death rates, by cause of death, and estimated number of physician contacts, by principal diagnosis, United States**

Cause of morbidity or mortality (Ninth Revision ICD, 1975)	Years of potential life lost before age 65 by persons dying in 1982*†	Estimated mortality June 1984		Estimated number of physician contacts June 1984*¶
		Number*§	Annual Rate/100,000*§	
ALL CAUSES (TOTAL)	9,429,000	165,640	854.3	105,400,000
Accidents and adverse effects (E800-E949)	2,367,000	8,710	44.9	6,400,000
Malignant neoplasms (140-208)	1,809,000	37,070	191.2	1,600,000
Diseases of heart (390-398, 402, 404-429)	1,566,000	60,960	314.4	5,800,000
Suicides, homicides (E950-E978)	1,314,000	3,960	20.4	—
Cerebrovascular diseases (430-438)	256,000	12,180	62.8	600,000
Chronic liver disease and cirrhosis (571)	252,000	2,170	11.2	100,000
Pneumonia and influenza (480-487)	118,000	4,610	23.8	600,000
Chronic obstructive pulmonary diseases and allied conditions (490-496)	114,000	5,870	30.3	1,000,000
Diabetes mellitus (250)	106,000	2,890	14.9	3,200,000
Prenatal care*				2,900,000
Infant mortality*††		3,100	10.4 /1,000 live births	

\*For details of calculation, see footnotes for Table V, *MMWR* 1984;33:2.

†Years of potential life lost for persons between 1 year and 65 years old at the time of death are derived from the number of deaths in each age category as reported by the National Center for Health Statistics, *Monthly Vital Statistics Report (MVSRI)*, Vol. 31, No. 13, October 5, 1983.

‡National Center for Health Statistics, *Monthly Vital Statistics Report (MVSRI)*, Vol. 33, No. 7, October 22, 1984, pp. 8-9.

¶IMS America *National Disease and Therapeutic Index (NDTI)*, Monthly Report, June 1984, Section III.

††MVSRI Vol. 33, No. 6, September 20, 1984, p. 1.

### *Lead Poisoning — Continued*

normally until he was 8 months old. In December 1983, he became lethargic and less responsive and stopped crawling. Within a few weeks, the behavioral abnormalities worsened, and he refused bottle-feeding, and began to have tremors. On January 5, 1984, the infant was examined by a physician for an ear infection, and the behavioral changes were noted. On January 9, the infant had seizures at his home and was taken to the hospital emergency room. During a lumbar puncture, he became apneic and was transferred to another hospital. The lumbar puncture ruled out meningitis as the cause of his neurologic signs. A computerized tomography scan suggested a midline cerebellar mass with enlargements of the third and lateral ventricles in the brain. On January 10, he underwent an operation for decompression of

*Lead Poisoning — Continued*

the posterior fossa. During the operation, apparent necrotic tissue was excised from the cerebellum. The infant died the next day.

Postmortem examination revealed severe lead poisoning as the underlying cause of death. High concentrations of lead were found in the blood, urine, liver, and kidneys (Table 4). Lead lines were seen in radiographs of the long bones.

The source of lead could not be identified in the house or environment on examination. However, the parents disclosed that they had regularly given the baby folk remedies from India since he was 2 months old. The parents provided samples of three folk remedies for analysis by the Florida Department of Health and Rehabilitative Services. All three contained lead (Table 5). The highest concentration (1.6%) was in ghasard, a brown powder given once daily as a tonic.

*Reported by ML Colgrove, M Zinion, Nursing Dept, JM Atkinson, MD, Lake County Public Health Unit, Tavares, T Collins, MD, District 3, Gainesville, L Maslund, MW Clark, MD, WF Hamilton, MD, Office of the Medical Examiner, District 8, Gainesville, NP Chopra, MD, Lake County, CL Bush, Office of Laboratory Svcs, JJ Witte, MD, JJ Sacks, MD, Acting State Epidemiologist, Florida Dept of Health and Rehabilitative Svcs; Div of Field Svcs, Epidemiology Program Office, Special Studies Br, Chronic Diseases Div, Center for Environmental Health, CDC.*

**Editorial Note:** Lead poisoning should be suspected in every infant and child with developmental problems, behavioral abnormalities, or neurologic symptoms. Signs of acute lead encephalopathy include coma, seizures, bizarre behavior, ataxia, apathy, incoordination, vomiting, alteration in consciousness, and subtle loss of recently acquired skills (1). Lead encephalopathy is a medical emergency and requires prompt diagnosis and treatment. One or more of the above signs and a blood-lead concentration of 70  $\mu\text{g}/\text{dl}$  or higher are sufficient for diagnosis. Lumbar puncture is usually not required for diagnosis of acute lead encephalopathy and may pose a risk to the patient when intracranial pressure is elevated. Treatment consists of chelation with 2,3-dimercaptopropanol (BAL—British anti-lewisite) and edathamil calcium disodium ( $\text{CaNa}_2\text{-EDTA}$ ) (1).

At blood-lead concentrations of 50  $\mu\text{g}/\text{dl}$  or higher, lead poisoning can produce the following symptoms: decreased play activity, lethargy, anorexia, sporadic vomiting, intermittent abdominal pain, and constipation. Children with lead poisoning should be treated on an emergency basis, since they may develop acute encephalopathy (1).

Lead-containing folk remedies have been reported as the cause of lead poisoning in Mexican-Hispanic and Hmong children (2-4). This report of lead-containing folk remedies from India raises the concern that lead may be present in folk remedies from other parts of the world. Hmong folk remedies have also been found to contain arsenic and mercury (4), and they have been suspected of causing arsenic poisoning in several adults (5). Other heavy metals, therefore, may also be present in some Indian folk remedies.

Health-care providers need to be sensitive to the cultural beliefs and practices of ethnic groups. In their native countries, these groups may have used traditional foods and remedies.

**TABLE 4. Laboratory findings of lead poisoning at postmortem examination**

Laboratory test	Concentration	Normal range*
Blood lead	214 $\mu\text{g}/\text{dl}$	0-30 $\mu\text{g}/\text{dl}$
Urine lead	173 $\mu\text{g}/\text{dl}$	0-50 $\mu\text{g}/\text{dl}$
Liver lead	62 $\mu\text{g}/\text{g}$	0.21-0.55 $\mu\text{g}/\text{g}$
Kidney lead	12 $\mu\text{g}/\text{g}$	0.1-0.6 $\mu\text{g}/\text{g}$
Urine coproporphyrin	4 $\text{mg}/\text{l}$	0.04-0.26 $\text{mg}/\text{l}$

\*Normal ranges for reporting laboratory.

*Lead Poisoning — Continued*

Parents often give these substances to their infants and children to help their growth and development or to treat them for minor illnesses. Often, the parents acquire the substances from relatives and friends, and they do not suspect the substances may be harmful. If symptoms persist, they may give even larger amounts, inadvertently causing further illness.

Testing for lead toxicity can be done simply and relatively inexpensively by determining blood concentrations of lead and erythrocyte protoporphyrin (EP). Determining the EP level is a good screening test for lead exposure, since an elevated EP level usually indicates iron deficiency or lead toxicity (6). If lead poisoning is suspected, however, both EP and blood-lead levels should be determined without delay.

Lead poisoning can be prevented by removing the child from exposure to lead. In the United States, the most common source of lead that causes symptomatic poisoning is deteriorating lead-based paint in older houses. Other potential sources—including occupations and hobbies that result in exposure to lead; food stored in imported, glazed pottery; and folk remedies—should also be investigated. It is very important that the source or sources of lead be identified and removed from the child's environment.

Based on recommendations by CDC's Ad Hoc Advisory Committee on Childhood Lead Poisoning Prevention, CDC is revising the guidelines for lead screening in young children. The new guidelines recommend EP screening of all children between 9 months and 6 years of age. A child with an EP level of 35  $\mu\text{g}/\text{dl}$  or higher should have a repeat EP test, a blood-lead test, and a hematocrit or hemoglobin test. Lead toxicity—defined as a blood-lead level of 25  $\mu\text{g}/\text{dl}$  or higher, along with an EP level of 35  $\mu\text{g}/\text{dl}$  or higher—requires further medical evaluation and environmental investigation to identify the source(s) of lead. These new guidelines will be distributed in the form of a CDC statement to health departments and health-care providers. More details will be included in a future issue of *MMWR*.

*References*

1. Piomelli S, Rosen JF, Chisolm JC, Graef JJ, Jr. Management of childhood lead poisoning. *J Pediatr* 1984;105:523-32.
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6. CDC. Preventing lead poisoning in young children: a statement by the Center for Disease Control. Atlanta, Georgia: Center for Disease Control, 1978.

**TABLE 5. Lead concentrations in Asian Indian folk remedies**

Name	Description	Lead concentration (parts per million)
Ghasard	Brown powder given as tonic once daily.	16,000
Bala Goli	Round, flat, black bean dissolved in "gripe" water given as tonic every morning. Gripe water is used for stomach ache.	25
Kandu	Red powder used to treat stomach ache.	6.7

## Current Trends

### Nonpolio Enterovirus Surveillance — United States, January-October 1984

Through October 1984, 896 nonpolio enterovirus (NPEV) isolates have been reported in the United States through CDC's enterovirus surveillance system. This is substantially lower than the 1,415 isolates reported for the same period in 1983. The five most frequently reported NPEV types this year have been Echovirus 9 (170/896; 19.0%), Echovirus 30 (91/896; 10.2%), Coxsackievirus B5 (89/896; 9.9%), Echovirus 11 (72/896; 8.0%), and Coxsackievirus A9 (69/896; 7.7%). The five most common NPEV types in each of the U.S. regions are listed in Table 6.

*Reported by Respiratory and Enterovirus Br, Div of Viral Diseases, Center for Infectious Diseases, CDC.*

**Editorial Note:** Earlier this year, it was predicted that five NPEV types (Echoviruses 9 and 7 and Coxsackieviruses A9, B4, and B5) would be frequently isolated in the United States based on early isolation data from three U.S. regions (1). To date, these types make up 421 (47.0%) of 896 of all reported NPEV isolates, and all five types have been among the 10 most commonly reported types in the United States this year. In years (such as 1984) when fewer than 1,800 enteroviruses are reported, a retrospective CDC study demonstrated that fewer than half of all NPEV reported are predictable; in years with 1,800 or more enteroviruses reported, over 69% of reported NPEV can be predicted.

#### Reference

1. CDC. Enterovirus surveillance—United States, 1984. MMWR 1984;33:388.

**TABLE 6. Five most commonly isolated nonpolio enterovirus types, by region — United States, January-October 1984**

New England	Mid Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Cox B5	Cox B5	Echo 30	Echo 9	Echo 30	Echo 6	Echo 9	Cox B5	Echo 7
Echo 9	Cox A9	Cox B5	Echo 11	Echo 9	Echo 7	Echo 7	Echo 6	Echo 30
Cox B2	Cox B2	Echo 4	Cox B5	Cox B5		Echo 11	Echo 11	Cox A9
Echo 11	Echo 9	Cox A9	Echo 31	Cox B2		Cox B4	Cox A9	Echo 6*
Echo 7*	Echo 11	Echo 4		Cox A9		Cox A9	Echo 17	Echo 11*
Echo 24*								Echo 24*
Echo 30*								

\*Equal number of isolates in this region.

#### Erratum: Vol 33, No. 44

- p. 621.** In the article, "Impact of Policy and Procedure Changes on Hospital Days among Diabetic Nursing-Home Residents—Colorado," the p value at the end of the fourth sentence in the fourth paragraph on page 622 should be: (p > 0.05). Also, on page 623, the last word on the second line of the title for Figure 1 should be: preintervention.

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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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