Gun-Related Injuries — Continued

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8. Greensher J, Aronow R, Bass JL, et al. Injuries related to "toy" firearms: Committee on Accident and Poison Prevention. Pediatrics 1987;79:473–4.
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Lead Toxicity Among Bridge Workers, 1994

Following publication of blood lead level (BLL) surveillance results from the Connecticut Road Industry Surveillance Project (CRISP)* (*1*) in February 1995, CRISP staff were contacted by a primary-care physician in another state who monitors BLLs in bridge painters. After noting that some bridge workers with elevated BLLs had been evaluated in his clinic, the physician established a medical program to monitor lead-exposed bridge workers; all blood lead determinations were performed by an Occupational Safety and Health Administration (OSHA)-certified medical laboratory. This report summarizes BLL results from the physician's medical monitoring for March–December 1994, compares these findings with CRISP data, and indicates that the prevalence of elevated BLLs in bridge workers remains substantial.

During March–December 1994, the physician's monitoring database recorded BLLs from 373 bridge workers employed by 35 painting contractors in eight states†. Of the 225 bridge workers for whom information about specific occupation was available, 146 (65%) were employed as painters/sandblasters. Most (369 [99%]) of the 373 monitored workers were men. Of the 269 (72%) workers for whom age data were available, mean age was 35.7 years (range: 17–64 years). During this period, 168 (45%) of the workers had one BLL recorded, 84 (23%) had two, 65 (17%) had three, and 56 (15%) had four or more. The mean of the most recent BLL for these 373 workers was 27.2 μg/dL (standard deviation: 16.1 μg/dL; range: <2–72 μg/dL). More than half (194 [52%]) of the workers had a BLL >25 μg/dL, and 35 (9%) had a level ≥50 μg/dL (Table 1, page 919).

One of the national health objectives for the year 2000 is the elimination of occupational lead exposures associated with BLLs >25 μg/dL (objective 10.8) (*2*). The OSHA Interim Final Standard for Lead in Construction requires medical removal from further exposure of any employee with a BLL ≥50 μg/dL (*3*); the most recent BLL of 35 workers equaled or exceeded this level. The physician reported these levels to the respective employers and recommended medical removal of these workers.

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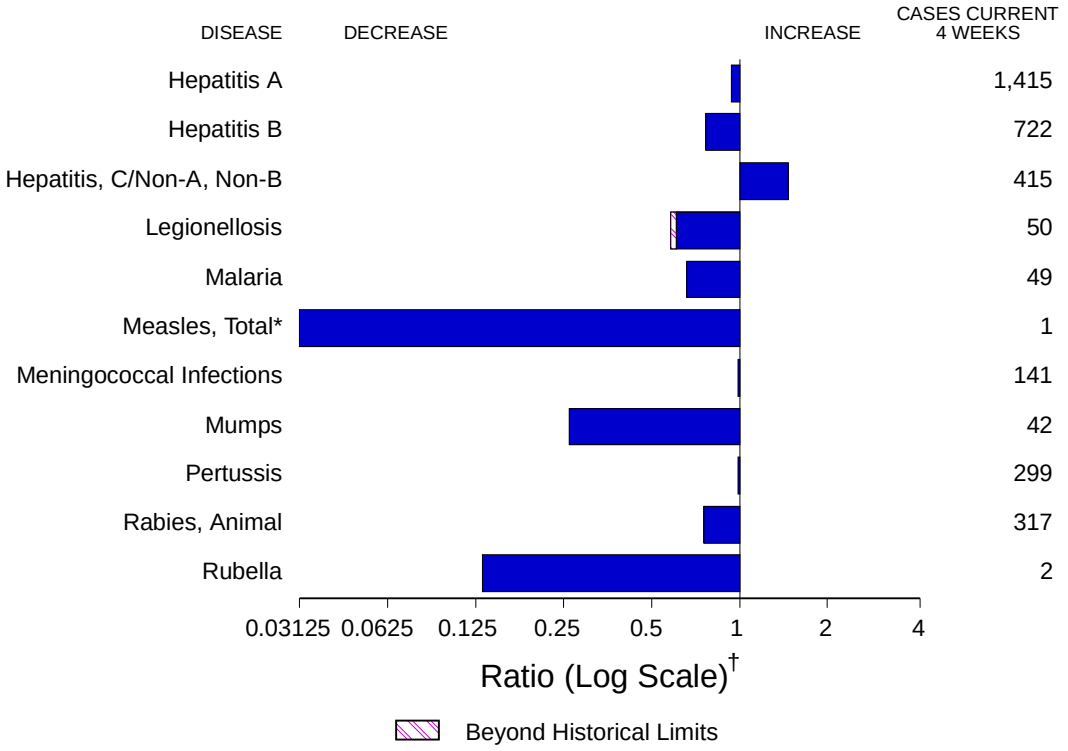
(Continued on page 919)

*CRISP is an ongoing statewide medical surveillance system in Connecticut, which is funded by CDC's National Institute for Occupational Safety and Health (NIOSH) and designed to prevent lead toxicity in bridge workers.
†Arkansas, Florida, Georgia, Kentucky, New Jersey, New York, Ohio, and Tennessee.

FIGURE I. Notifiable disease reports, comparison of 4-week totals ending December 9, 1995, with historical data — United States



*The large apparent decrease in the number of reported cases of measles (total) reflects dramatic fluctuations in the historical baseline.

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

TABLE I. Summary — cases of specified notifiable diseases, United States, cumulative, week ending December 9, 1995 (49th Week)

	Cum. 1995		Cum. 1995
Anthrax	-	Psittacosis	64
Brucellosis	83	Rabies, human	2
Cholera	16	Rocky Mountain Spotted Fever	556
Congenital rubella syndrome	6	Syphilis, congenital, age < 1 year†	469
Diphtheria	-	Tetanus	32
*Haemophilus influenzae**	1,086	Toxic shock syndrome	167
Hansen Disease	129	Trichinosis	26
Plague	7	Typhoid fever	309
Poliomyelitis, Paralytic	-		

*Of 1,061 cases of known age, 259 (24%) were reported among children less than 5 years of age.

†Updated quarterly from reports to the Division of STD Prevention, National Center for Prevention Services. This total through third quarter 1995.

-: no reported cases

TABLE II. Cases of selected notifiable diseases, United States, weeks ending December 9, 1995, and December 10, 1994 (49th Week)

Reporting Area	AIDS*	Gonorrhea		Hepatitis (Viral), by type						Legionellosis	
				A		B		C/NA,NB			
	Cum. 1995	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994
UNITED STATES	65,705	330,311	381,825	27,265	23,701	9,429	10,813	3,507	3,857	1,098	1,476
NEW ENGLAND	3,119	6,005	7,695	295	277	190	321	12	140	36	75
Maine	81	80	87	30	24	12	11	-	-	6	5
N.H.	87	108	104	11	17	20	27	12	11	2	-
Vt.	30	63	34	5	13	1	12	-	16	-	1
Mass.	1,339	2,733	3,084	129	102	83	175	-	93	23	52
R.I.	214	520	450	34	26	8	8	-	20	5	17
Conn.	1,368	2,501	3,936	86	95	66	88	-	-	N	N
MID. ATLANTIC	17,668	33,315	42,535	1,699	1,597	1,227	1,453	461	437	185	244
Upstate N.Y.	2,127	3,851	10,599	457	512	377	351	253	206	53	57
N.Y. City	9,225	11,818	15,006	775	621	369	376	1	4	5	7
N.J.	4,158	5,592	4,831	266	278	305	358	167	190	28	43
Pa.	2,158	12,054	12,099	201	186	176	368	40	37	99	137
E.N. CENTRAL	4,940	68,507	77,547	2,851	2,547	974	1,136	241	310	302	420
Ohio	1,017	19,058	20,678	1,681	1,061	102	157	15	23	145	191
Ind.	499	7,943	8,766	170	357	234	202	2	9	71	45
Ill.	2,054	19,281	23,342	479	584	202	292	64	78	22	41
Mich.	1,039	17,033	17,340	350	317	378	393	160	200	34	82
Wis.	331	5,192	7,421	171	228	58	92	-	-	30	61
W.N. CENTRAL	1,555	18,077	21,324	1,777	1,146	584	636	109	90	110	102
Minn.	347	2,609	3,321	176	227	63	63	4	17	6	3
Iowa	94	1,475	1,538	75	61	46	26	12	13	21	33
Mo.	713	10,573	11,609	1,217	586	394	484	67	29	53	41
N. Dak.	5	26	37	24	6	4	1	8	1	4	4
S. Dak.	18	207	221	79	37	2	2	1	-	4	1
Nebr.	101	757	1,060	54	121	31	29	6	13	14	14
Kans.	277	2,430	3,538	152	108	44	31	11	17	8	6
S. ATLANTIC	16,629	98,394	101,655	1,267	1,256	1,563	1,955	575	421	169	349
Del.	279	2,122	1,892	8	22	8	14	-	2	2	31
Md.	2,409	9,222	17,388	213	186	250	336	4	20	30	78
D.C.	976	4,548	6,724	21	27	19	52	-	1	5	7
Va.	1,400	9,601	12,771	207	176	107	128	18	25	20	14
W. Va.	116	631	785	24	22	53	45	43	43	4	4
N.C.	951	22,205	26,717	105	139	286	264	60	54	32	27
S.C.	868	11,780	12,296	44	39	49	32	16	10	30	16
Ga.	2,144	18,835	U	54	42	63	543	13	197	14	110
Fla.	7,486	19,450	23,082	591	603	728	541	421	69	32	62
E.S. CENTRAL	2,093	38,989	44,054	1,789	653	776	1,141	873	900	44	82
Ky.	267	4,631	4,897	41	162	65	75	23	30	10	9
Tenn.	843	13,086	14,637	1,458	295	607	982	848	852	24	44
Ala.	562	15,593	13,868	81	122	104	84	2	18	7	13
Miss.	421	5,679	10,652	209	74	-	-	-	-	3	16
W.S. CENTRAL	5,626	34,062	46,564	4,492	2,980	1,431	1,238	189	309	20	42
Ark.	243	4,655	6,270	607	187	75	32	5	7	3	8
La.	972	10,055	11,367	140	147	208	160	-	177	3	13
Okla.	256	4,955	4,497	1,172	358	205	128	74	56	6	11
Tex.	4,155	14,397	24,430	2,573	2,288	943	918	110	69	8	10
MOUNTAIN	2,071	7,631	9,629	3,914	4,852	768	633	332	428	107	93
Mont.	22	65	84	164	24	23	20	13	13	4	16
Idaho	43	134	85	338	357	95	72	-	67	2	2
Wyo.	15	49	84	101	29	26	23	148	161	12	5
Colo.	631	2,651	3,384	492	555	130	92	54	75	38	19
N. Mex.	155	945	1,027	760	1,054	276	202	42	45	4	4
Ariz.	635	2,868	3,080	1,213	1,992	103	87	46	30	12	16
Utah	143	131	297	645	610	77	81	12	18	17	7
Nev.	427	788	1,588	201	231	38	56	17	19	18	24
PACIFIC	12,004	25,331	30,822	9,181	8,393	1,916	2,300	715	822	125	69
Wash.	855	2,381	2,717	788	1,020	185	224	206	256	21	12
Oreg.	426	364	958	2,138	1,070	108	144	31	41	-	-
Calif.	10,441	21,132	25,628	6,050	6,042	1,583	1,892	473	520	99	53
Alaska	62	645	862	54	205	11	13	3	-	-	-
Hawaii	220	809	657	151	56	29	27	2	5	5	4
Guam	-	77	127	6	23	1	4	-	-	1	1
P.R.	2,189	550	463	89	81	489	377	18	188	-	-
V.I.	30	6	41	-	3	2	8	-	1	-	-
Amer. Samoa	-	35	31	6	9	-	-	-	-	-	-
C.N.M.I.	-	42	46	18	12	13	1	-	-	-	-

N: Not notifiable U: Unavailable -: no reported cases C.N.M.I.: Commonwealth of Northern Mariana Islands

*Updated monthly to the Division of HIV/AIDS Prevention, National Center for Prevention Services, last update November 30, 1995.

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending December 9, 1995, and December 10, 1994 (49th Week)

Reporting Area	Lyme Disease		Malaria		Measles (Rubeola)						Meningococcal Infections		Mumps	
					Indigenous		Imported*		Total					
	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	1995	Cum. 1995	1995	Cum. 1995	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994
UNITED STATES	8,857	11,987	1,194	1,043	-	261	-	26	287	889	2,743	2,548	780	1,350
NEW ENGLAND	2,003	2,712	47	71	-	8	-	2	10	27	132	123	11	25
Maine	34	27	7	6	-	-	-	-	-	5	11	22	4	3
N.H.	26	30	2	3	-	-	-	-	-	1	23	8	1	4
Vt.	9	16	1	3	-	-	-	-	-	3	11	4	-	-
Mass.	191	202	18	33	-	2	-	1	3	7	43	57	2	3
R.I.	285	471	4	9	-	5	-	-	5	7	-	-	1	3
Conn.	1,458	1,966	15	17	-	1	-	1	2	4	44	32	3	12
MID. ATLANTIC	5,681	7,413	334	226	-	7	-	5	12	223	307	276	112	110
Upstate N.Y.	2,810	4,564	64	54	-	1	-	-	1	26	98	90	25	31
N.Y. City	229	28	181	86	-	2	-	3	5	15	45	32	16	10
N.J.	1,366	1,483	64	50	-	4	-	2	6	173	76	56	17	13
Pa.	1,276	1,338	25	36	-	-	-	-	-	9	88	98	54	56
E.N. CENTRAL	87	524	132	101	-	13	-	4	17	102	368	369	169	245
Ohio	52	44	12	15	-	1	-	1	2	17	110	108	51	71
Ind.	20	18	17	13	-	-	-	-	-	1	51	50	10	7
Ill.	10	23	63	42	-	4	-	2	6	56	92	117	47	106
Mich.	5	31	26	28	-	6	-	1	7	25	70	57	61	47
Wis.	-	408	14	3	-	2	-	-	2	3	45	37	-	14
W.N. CENTRAL	271	283	26	45	-	2	-	-	2	170	186	164	48	67
Minn.	191	150	6	14	-	-	-	-	-	-	27	20	8	4
Iowa	15	16	2	5	-	-	-	-	-	7	30	20	10	16
Mo.	40	100	8	13	-	1	-	-	1	160	77	75	24	42
N. Dak.	-	-	2	1	-	-	-	-	-	-	2	1	1	4
S. Dak.	-	-	2	-	-	-	-	-	-	-	9	9	-	-
Nebr.	3	3	3	5	-	-	-	-	-	2	16	13	4	1
Kans.	22	14	3	7	-	1	-	-	1	1	25	26	1	-
S. ATLANTIC	524	792	234	222	-	11	-	1	12	73	511	373	98	196
Del.	23	105	1	3	-	-	-	-	-	-	6	5	-	-
Md.	291	299	61	80	-	-	-	1	1	4	35	35	20	63
D.C.	2	9	16	14	-	-	-	-	-	-	7	6	-	-
Va.	53	128	54	37	-	-	-	-	-	3	61	66	25	42
W. Va.	23	27	4	-	-	-	-	-	-	37	9	14	-	3
N.C.	83	77	17	11	-	-	-	-	-	3	82	51	16	36
S.C.	17	7	3	5	-	-	-	-	-	-	57	31	11	8
Ga.	14	120	37	34	-	2	-	-	2	4	106	76	10	9
Fla.	18	20	41	38	-	9	-	-	9	22	148	89	16	35
E.S. CENTRAL	55	43	26	31	-	-	-	-	-	28	175	183	21	29
Ky.	10	24	3	11	-	-	-	-	-	-	56	37	-	-
Tenn.	28	13	10	10	-	-	-	-	-	28	42	36	5	8
Ala.	10	6	10	9	-	-	-	-	-	-	42	74	4	12
Miss.	7	-	3	1	-	-	-	-	-	-	35	36	12	9
W.S. CENTRAL	112	126	48	62	-	31	-	3	34	19	335	315	53	238
Ark.	10	8	2	3	-	2	-	-	2	1	31	44	10	6
La.	7	2	5	9	-	17	-	1	18	1	50	40	13	32
Okla.	48	73	1	7	-	-	-	-	-	-	41	33	-	23
Tex.	47	43	40	43	-	12	-	2	14	17	213	198	30	177
MOUNTAIN	12	18	61	36	-	68	-	2	70	166	188	169	26	158
Mont.	-	-	3	-	-	-	-	-	-	-	4	6	1	-
Idaho	-	3	1	2	-	1	-	1	2	1	11	17	4	10
Wyo.	3	5	-	1	-	-	-	-	-	-	8	9	-	3
Colo.	1	1	26	16	-	26	-	-	26	20	45	37	2	4
N. Mex.	1	5	8	3	-	30	-	1	31	-	36	15	N	N
Ariz.	1	-	13	8	-	10	-	-	10	2	58	56	2	99
Utah	1	3	6	4	-	-	-	-	-	134	17	19	11	27
Nev.	5	1	4	2	-	1	-	-	1	9	9	10	6	15
PACIFIC	112	76	286	249	-	121	-	9	130	81	541	576	242	282
Wash.	10	4	21	30	-	16	-	4	20	4	90	89	15	19
Oreg.	14	6	21	16	-	-	-	1	1	2	101	131	N	N
Calif.	88	66	230	187	-	105	-	3	108	61	333	346	201	241
Alaska	-	-	4	2	-	-	-	-	-	10	13	3	13	4
Hawaii	-	-	10	14	-	-	-	1	1	4	4	7	13	18
Guam	-	-	-	-	U	-	U	-	-	228	3	-	4	7
P.R.	-	-	1	5	-	11	-	-	11	11	23	7	2	2
V.I.	-	-	-	-	U	-	U	-	-	-	-	-	2	4
Amer. Samoa	-	-	-	-	-	-	-	-	-	-	-	-	-	3
C.N.M.I.	-	-	1	1	U	-	U	-	-	29	-	-	-	2

*For imported measles, cases include only those resulting from importation from other countries.
N: Not notifiable U: Unavailable -: no reported cases

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending December 9, 1995, and December 10, 1994 (49th Week)

Reporting Area	Pertussis			Rubella			Syphilis (Primary & Secondary)		Tuberculosis		Rabies, Animal	
	1995	Cum. 1995	Cum. 1994	1995	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994	Cum. 1995	Cum. 1994
UNITED STATES	68	3,966	4,018	-	140	216	14,283	19,731	18,894	20,913	6,426	7,314
NEW ENGLAND	2	556	621	-	49	131	245	209	489	490	1,426	1,789
Maine	1	47	18	-	1	-	2	4	24	27	45	-
N.H.	1	54	88	-	1	-	1	4	18	14	148	199
Vt.	-	65	46	-	-	-	-	-	4	8	171	140
Mass.	-	359	423	-	7	125	65	88	265	258	395	695
R.I.	-	4	7	-	-	3	4	15	46	44	315	40
Conn.	-	27	39	-	40	3	173	98	132	139	352	715
MID. ATLANTIC	20	387	614	-	13	7	800	1,318	3,794	4,280	1,213	1,969
Upstate N.Y.	17	219	229	-	4	6	43	162	491	574	480	1,467
N.Y. City	-	40	176	-	8	-	368	569	1,974	2,460	-	-
N.J.	-	15	15	-	1	1	163	221	742	759	319	266
Pa.	3	113	194	-	-	-	226	366	587	487	414	236
E.N. CENTRAL	17	481	560	-	5	9	2,401	2,928	1,777	1,973	91	67
Ohio	5	158	150	-	-	-	848	1,105	259	318	12	4
Ind.	-	73	67	-	1	-	271	244	171	177	13	13
Ill.	12	128	104	-	1	1	834	1,020	911	994	15	21
Mich.	-	110	93	-	3	8	288	278	370	430	40	14
Wis.	-	12	146	-	-	-	160	281	70	54	11	15
W.N. CENTRAL	-	248	203	-	1	2	685	1,120	534	542	338	217
Minn.	-	127	87	-	-	-	37	45	124	123	24	19
Iowa	-	12	21	-	-	-	44	67	57	58	119	84
Mo.	-	54	42	-	-	2	567	942	217	232	23	27
N. Dak.	-	8	5	-	-	-	-	1	5	9	28	13
S. Dak.	-	12	24	-	-	-	-	2	22	25	96	39
Nebr.	-	12	11	-	-	-	11	11	21	19	5	-
Kans.	-	23	13	-	1	-	26	52	88	76	43	35
S. ATLANTIC	2	322	398	-	25	16	3,536	5,125	3,132	3,621	2,012	1,922
Del.	-	10	3	-	-	-	17	25	49	40	88	68
Md.	2	40	70	-	-	-	207	307	282	320	300	502
D.C.	-	6	10	-	-	-	100	203	98	104	11	3
Va.	-	31	36	-	-	-	550	772	283	292	433	412
W. Va.	-	-	5	-	-	-	10	9	68	76	112	74
N.C.	-	110	140	-	1	-	1,070	1,566	433	484	443	163
S.C.	-	27	14	-	1	-	554	762	301	366	119	172
Ga.	-	30	30	-	-	2	664	774	319	659	268	352
Fla.	-	68	90	-	23	14	364	707	1,299	1,280	238	176
E.S. CENTRAL	-	270	128	-	2	-	3,513	3,745	1,478	1,504	276	216
Ky.	-	24	60	-	-	-	195	200	292	302	28	26
Tenn.	-	207	22	-	1	-	868	985	372	519	92	71
Ala.	-	36	34	-	-	-	624	626	389	413	147	115
Miss.	-	3	12	N	N	N	1,826	1,934	425	270	9	4
W.S. CENTRAL	-	279	188	-	8	13	2,320	4,188	2,791	2,845	574	650
Ark.	-	41	28	-	1	-	466	452	304	243	50	36
La.	-	17	12	-	-	-	971	1,599	111	193	45	69
Okla.	-	30	27	-	-	4	182	148	330	224	29	37
Tex.	-	191	121	-	7	9	701	1,989	2,046	2,185	450	508
MOUNTAIN	10	542	504	-	5	5	202	230	593	555	162	148
Mont.	-	9	11	-	-	-	4	3	10	9	43	22
Idaho	2	101	87	-	-	-	-	2	14	11	3	3
Wyo.	-	1	-	-	1	-	1	2	4	8	25	19
Colo.	-	103	221	-	-	-	98	116	66	92	9	18
N. Mex.	5	144	32	-	-	-	31	21	72	66	6	8
Ariz.	2	151	115	-	3	-	35	45	300	212	50	56
Utah	1	28	35	-	1	4	4	11	37	51	15	13
Nev.	-	5	3	-	-	1	29	30	90	106	11	9
PACIFIC	17	881	802	-	32	33	581	868	4,306	5,103	334	336
Wash.	13	334	106	-	2	-	15	32	231	244	7	15
Oreg.	-	59	104	-	2	4	9	35	66	90	-	13
Calif.	4	429	573	-	24	25	556	794	3,769	4,459	323	275
Alaska	-	1	-	-	-	-	1	3	72	85	4	33
Hawaii	-	58	19	-	4	4	-	4	168	225	-	-
Guam	U	1	2	U	-	1	8	3	53	75	-	-
P.R.	-	15	3	-	-	-	289	298	195	189	47	74
V.I.	U	-	-	U	-	-	2	28	-	-	-	-
Amer. Samoa	-	-	1	-	-	-	-	1	5	4	-	-
C.N.M.I.	U	-	-	U	-	-	12	2	16	30	-	-

U: Unavailable -: no reported cases

TABLE III. Deaths in 121 U.S. cities,* week ending December 9, 1995 (49th Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	544	397	82	50	7	8	52
Boston, Mass.	144	103	18	17	3	3	14
Bridgeport, Conn.	38	23	12	1	1	1	1
Cambridge, Mass.	15	10	3	2	-	-	4
Fall River, Mass.	25	21	3	1	-	-	3
Hartford, Conn.	52	31	12	8	1	-	-
Lowell, Mass.	30	27	2	1	-	-	2
Lynn, Mass.	28	25	1	2	-	-	-
New Bedford, Mass.	25	19	4	2	-	-	3
New Haven, Conn.	48	38	3	4	2	1	5
Providence, R.I.	U	U	U	U	U	U	U
Somerville, Mass.	4	3	-	1	-	-	1
Springfield, Mass.	43	31	9	2	-	1	7
Waterbury, Conn.	34	26	3	5	-	-	2
Worcester, Mass.	58	40	12	4	-	2	10
MID. ATLANTIC	2,625	1,783	464	273	49	56	128
Albany, N.Y.	42	31	8	2	-	1	2
Allentown, Pa.	20	18	1	1	-	-	-
Buffalo, N.Y.	U	U	U	U	U	U	U
Camden, N.J.	50	36	7	-	3	4	3
Elizabeth, N.J.	33	22	9	2	-	-	1
Erie, Pa.§	38	31	6	1	-	-	1
Jersey City, N.J.	59	37	11	9	1	1	4
New York City, N.Y.	1,495	986	283	174	30	22	57
Newark, N.J.	78	35	16	22	2	3	14
Paterson, N.J.	29	15	6	3	-	5	1
Philadelphia, Pa.	400	268	65	50	8	9	22
Pittsburgh, Pa.§	39	30	8	-	1	-	5
Reading, Pa.	12	9	2	-	1	-	2
Rochester, N.Y.	135	112	12	6	2	3	11
Schenectady, N.Y.	24	21	2	1	-	-	-
Scranton, Pa.§	24	21	2	1	-	-	-
Syracuse, N.Y.	81	67	12	-	-	2	5
Trenton, N.J.	43	26	10	-	1	6	-
Utica, N.Y.	23	18	4	1	-	-	-
Yonkers, N.Y.	U	U	U	U	U	U	U
E.N. CENTRAL	2,005	1,389	361	166	43	44	126
Akron, Ohio	51	40	6	3	2	-	-
Canton, Ohio	48	37	6	4	-	1	2
Chicago, Ill.	396	250	74	48	15	7	37
Cincinnati, Ohio	86	57	17	7	1	4	8
Cleveland, Ohio	165	106	28	20	4	7	-
Columbus, Ohio	147	103	30	6	2	6	16
Dayton, Ohio	138	95	31	6	3	3	10
Detroit, Mich.	254	148	64	29	6	7	5
Evansville, Ind.	49	40	8	-	-	1	2
Fort Wayne, Ind.	53	42	8	3	-	-	2
Gary, Ind.	19	11	4	2	-	2	-
Grand Rapids, Mich.	64	48	9	7	-	-	5
Indianapolis, Ind.	U	U	U	U	U	U	U
Madison, Wis.	51	39	10	2	-	-	4
Milwaukee, Wis.	163	123	24	10	3	3	14
Peoria, Ill.	58	46	10	-	1	1	5
Rockford, Ill.	56	40	7	8	1	-	8
South Bend, Ind.	37	30	3	3	1	-	-
Toledo, Ohio	87	63	12	6	4	2	5
Youngstown, Ohio	83	71	10	2	-	-	3
W.N. CENTRAL	829	606	128	47	22	11	41
Des Moines, Iowa	61	47	7	6	1	-	6
Duluth, Minn.	20	15	3	2	-	-	1
Kansas City, Kans.	35	23	6	3	2	1	3
Kansas City, Mo.	141	93	23	5	4	1	7
Lincoln, Nebr.	33	28	4	1	-	-	1
Minneapolis, Minn.	161	117	27	10	4	3	8
Omaha, Nebr.	108	81	15	7	5	-	6
St. Louis, Mo.	119	83	22	5	4	5	9
St. Paul, Minn.	72	58	11	2	1	-	-
Wichita, Kans.	79	61	10	6	1	1	-

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
S. ATLANTIC	1,289	829	235	148	46	31	72
Atlanta, Ga.	209	129	46	23	9	2	5
Baltimore, Md.	222	129	41	41	8	3	17
Charlotte, N.C.	90	65	13	6	1	5	11
Jacksonville, Fla.	139	95	22	16	5	1	8
Miami, Fla.	97	55	22	15	5	-	-
Norfolk, Va.	68	49	9	5	1	4	3
Richmond, Va.	83	49	19	9	4	2	3
Savannah, Ga.	35	29	3	2	-	1	1
St. Petersburg, Fla.	69	54	5	3	1	6	3
Tampa, Fla.	174	127	26	12	5	4	17
Washington, D.C.	98	48	26	14	7	3	4
Wilmington, Del.	5	-	3	2	-	-	-
E.S. CENTRAL	570	364	121	48	18	16	27
Birmingham, Ala.	150	90	31	13	9	4	4
Chattanooga, Tenn.	83	54	17	7	3	2	5
Knoxville, Tenn.	46	31	14	1	-	-	5
Lexington, Ky.	57	32	16	6	-	3	2
Memphis, Tenn.	U	U	U	U	U	U	U
Mobile, Ala.	44	23	7	9	4	1	1
Montgomery, Ala.	54	37	12	3	1	1	1
Nashville, Tenn.	136	97	24	9	1	5	9
W.S. CENTRAL	1,526	932	314	184	54	42	94
Austin, Tex.	77	50	16	8	1	2	8
Baton Rouge, La.	47	31	5	6	2	3	-
Corpus Christi, Tex.	55	38	11	3	-	3	2
Dallas, Tex.	197	107	43	35	8	4	7
El Paso, Tex.	72	50	10	6	2	4	5
Ft. Worth, Tex.	124	77	25	10	6	6	7
Houston, Tex.	440	243	93	76	19	9	28
Little Rock, Ark.	57	37	13	3	2	2	8
New Orleans, La.	119	65	29	15	6	4	-
San Antonio, Tex.	215	141	47	18	6	3	18
Shreveport, La.	9	8	1	-	-	-	1
Tulsa, Okla.	114	85	21	4	2	2	10
MOUNTAIN	945	604	182	111	33	14	69
Albuquerque, N.M.	106	61	20	18	7	-	6
Colo. Springs, Colo.	56	39	7	9	1	-	2
Denver, Colo.	108	72	16	15	5	-	8
Las Vegas, Nev.	228	139	59	23	4	2	17
Ogden, Utah	19	15	3	-	-	1	1
Phoenix, Ariz.	171	106	33	19	4	9	16
Pueblo, Colo.	14	10	2	1	1	-	-
Salt Lake City, Utah	110	72	12	15	9	2	10
Tucson, Ariz.	133	90	30	11	2	-	9
PACIFIC	1,350	923	243	130	21	33	109
Berkeley, Calif.	30	22	4	3	-	1	2
Fresno, Calif.	91	64	20	4	2	1	14
Glendale, Calif.	U	U	U	U	U	U	U
Honolulu, Hawaii	70	50	15	3	1	1	7
Long Beach, Calif.	95	65	19	5	4	2	8
Los Angeles, Calif.	U	U	U	U	U	U	U
Pasadena, Calif.	37	28	6	3	-	-	2
Portland, Oreg.	146	105	30	7	-	4	8
Sacramento, Calif.	U	U	U	U	U	U	U
San Diego, Calif.	190	131	29	21	-	9	24
San Francisco, Calif.	154	83	32	35	3	1	5
San Jose, Calif.	190	142	30	11	2	5	10
Santa Cruz, Calif.	40	29	7	3	1	-	9
Seattle, Wash.	152	92	31	22	4	3	5
Spokane, Wash.	69	47	8	8	3	3	8
Tacoma, Wash.	86	65	12	5	1	3	7
TOTAL	11,683¶	7,827	2,130	1,157	293	255	718

*Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.
†Pneumonia and influenza.
§Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.
¶Total includes unknown ages.
U: Unavailable -: no reported cases

Lead Toxicity — Continued

Editorial Note: An estimated 90,000 bridges in the United States are coated with lead-based paints (*4*), which become a hazard to workers when these structures are refurbished or demolished. High exposures to lead among bridge workers were first documented in 1982 (*5*), and in 1992, personal exposures of a cohort of bridge workers to airborne lead ranged from 3690 μg/m^3 to 29,400 μg/m^3 for abrasive blasters and from 5 μg/m^3 to 6720 μg/m^3 for workers in other job categories (*6*). Despite such high exposures, bridge workers have typically accounted for only a small proportion of workers with elevated BLLs who are reported to lead registries, probably reflecting both a lack of medical monitoring of this worker population and underreporting of elevated results (*7*). In contrast, in Massachusetts, where blood lead monitoring has been required for workers involved in lead paint removal and structural painting since 1990, bridge painters have accounted for approximately one third of workers with BLLs ≥60 μg/dL and for whom specific industry/occupation information was available (*8*).

CRISP was initiated in 1990 to reduce lead exposure and toxicity in Connecticut bridge workers through the incorporation of worker protection measures into road construction contracts. During 1991–1994, mean BLLs among painters/blasters in Connecticut declined from 41.8 μg/dL to 16.6 μg/dL (*1*). However, in May 1993, OSHA promulgated the Interim Final Standard for Lead in Construction (*3*), which lowered the permissible lead exposure limit in the construction industry from 200 μg/m^3 to 50 μg/m^3 and implemented requirements for exposure assessment, respiratory protection, protective clothing and equipment, hygiene facilities and practices, medical surveillance, medical-removal protection, employee training, signs, and record keeping. Because of the overlap in the periods of implementation of CRISP and the OSHA Interim Standard, the independent effects of these interventions in reducing BLLs among Connecticut bridge workers cannot be determined.

The findings in this report indicate that, in other states, lead exposure and elevated BLLs are problems among bridge workers that persist despite the regulatory requirements of the OSHA standard. In contrast to the elevated BLLs observed among these workers, only a small proportion of the 949 Connecticut bridge workers monitored by CRISP during the same period had elevated BLLs (Table 1). The mean of the most recent BLL in Connecticut bridge workers monitored by CRISP during

TABLE 1. Blood lead levels (BLLs) in bridge workers monitored by a primary-care physician and the Connecticut Road Industry Surveillance Project (CRISP), March–December, 1994

BLL (μg/dL)	Primary-care physician's database*		CRISP data	
	No.	(%)	No.	(%)
<20	133	(36)	775	(82)
20–29	80	(21)	109	(11)
30–39	70	(19)	48	(5)
40–49	55	(15)	12	(1)
≥50	35	(9)	5	(1)
Total	**373**	**(100)**	**949**	**(100)**

*Worker population obtained from Arkansas, Florida, Georgia, Kentucky, New Jersey, New York, Ohio, and Tennessee.

Lead Toxicity — Continued

March–December 1994 was 11.7 μg/dL (standard deviation: 9.5 μg/dL; range: <5–56 μg/dL), less than half the mean[§] among the group of bridge workers in this report.

Data from CRISP differ from the data in this report because CRISP data are comprehensive and represent nearly all lead-exposed bridge workers in Connecticut, while the data in this report are not comprehensive, were not collected according to a specific sampling scheme, and may not be representative of all bridge workers in the eight states from which the specimens were obtained or generalizable to bridge workers in other states. Despite this limitation, the substantially lower proportion of workers with elevated BLLs—and generally lower BLLs—in the CRISP program suggests that a strategy like CRISP, which uses contract health and safety language that requires medical management with centralized data reporting and intervention, is independently effective in lowering BLLs. NIOSH and CRISP have initiated efforts to adapt the CRISP approach for implementation in other states.

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[§]The limit of detection for lead for BLLs obtained from the group of bridge workers in this report (2 μg/dL) was lower than that for workers monitored by CRISP (5 μg/dL). If the CRISP limit of detection had applied to BLLs obtained from the bridge workers in this report, their mean BLL would have changed only from 27.2 μg/dL to 27.3 μg/dL.

Work-Related Injuries Associated with Falls During Ice Storms — National Institutes of Health, January 1994

Although some environmental cold-related occupational health problems have been described previously (e.g., hypothermia and related thermal conditions) (*1*), the risks associated with pedestrian injuries related to surface ice are not well characterized. During January 18–31, 1994, freezing rain and record cold temperatures created icy conditions in the Washington, D.C., area that were sufficiently severe to prompt early or complete closure of the operations of the National Institutes of Health (NIH) and many other public- and private-sector organizations. During this period, the Occupational Medical Service (OMS) of NIH and a local hospital that provides most initial care for workplace-related problems among NIH employees noted a substantial increase in fall-related injuries. This report summarizes an analysis of OMS data regarding these injuries during January 18–31, 1994.

Falls During Ice Storms — Continued

OMS logs were reviewed for work-related acute musculoskeletal injuries sustained by NIH employees (total estimated: 18,000) during January 18–31. Additional details about diagnosis and disposition were obtained for each case from clinical charts and workers' compensation claims files. In June 1994, all injured employees were contacted by telephone to assess 1) the presence of persisting symptoms and/or need for ongoing medical care, and 2) lost work time attributable to the injury. For those unavailable by telephone, an attempt was made to obtain this information from clinical and compensation files.

During the 2-week period, OMS recorded 53 NIH employees with acute musculoskeletal injuries. Of these, 22 (42%) injuries were bruises and contusions; 24 (45%), strains or sprains; and seven (13%), fractures. When calculated as quarterly rates and compared with the first quarter of 1993, the type-specific rates during 1994 increased fourfold, 15-fold, and fivefold, respectively. Of the 53 injuries, 39 (74%) resulted from falls on ice on NIH campuses, including all seven fractures (four coccygeal and three upper extremity), 15 (63%) strain/sprains, and 17 (77%) bruises/contusions. Based on follow-up contact in June 1994, 12 (38%) of the 32 who had fallen on the ice and for whom current information could be obtained continued to have symptoms and to receive treatment. Based on referrals for outside medical care, bills paid, and work time lost, the overall direct cost attributable to the ice-related injuries among NIH employees was estimated to be $20,000.

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Editorial Note: The substantial increase in outdoor ice-related falls among NIH employees is consistent with reports for communities characterized by consistently severe winters or by only occasionally severe winter weather (*2,3*). However, because the comparison period in this report included a major blizzard (March 1993), the increased rates of fall-related injury during early 1994 highlighted the risks especially associated with icy conditions (*4,5*).

Although icy conditions persisted in the Washington, D.C., area during February 1994, the number of outdoor fall-related injuries on NIH campuses declined to predicted levels, probably reflecting the availability and spreading of dry sand by NIH grounds and maintenance staff and the clearing to dry pavement of outdoor parking areas and major walkways. In addition, coverage by local news media promoted awareness of the needs for appropriate foot-gear and avoiding unsanded or otherwise unmaintained areas. Prompt implementation of such measures during future icy conditions should reduce the occurrence of fall-related injuries.

An NIH requirement that information about occupational injuries sustained by NIH employees be recorded enabled the assessment of the incidence, severity, and estimated costs of the ice-related injuries described in this report. The establishment and maintenance of such occupational injury surveillance systems by employers permits assessment of the need for and effectiveness of injury intervention strategies.

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MORBIDITY AND MORTALITY WEEKLY REPORT

Outbreak of *Salmonella* Serotype Typhimurium Infection Associated with Eating Raw Ground Beef — Wisconsin, 1994

Despite previously publicized outbreaks of illness associated with and recommendations to avoid eating undercooked meat, some persons continue to eat undercooked or raw meat. This report summarizes the investigation of an outbreak of *Salmonella* serotype Typhimurium gastrointestinal illness in Wisconsin associated with eating contaminated raw ground beef during the 1994 winter holiday season.

On December 29, 1994, physicians in a group medical practice in Dodge County (1994 estimated population: 79,360), Wisconsin, reported to the Public Health Unit of the Dodge County Human Services and Health Department (DCHSHD) that during December 27–29 they had treated 17 patients with acute gastrointestinal illness characterized by diarrhea and abdominal cramps. At least 14 patients reported having eaten raw ground beef that was either plain or seasoned with onions and an herb mix during the 72 hours before illness onset. Stool samples for culture were obtained from 11 patients; *Salmonella* serotype Typhimurium that did not ferment tartrate was isolated from seven specimens. Based on these reports and findings, the DCHSHD issued a physician alert and press release that encouraged affected residents to report their illnesses and physicians to obtain stool cultures from case-patients. In addition, DCHSHD and the Bureau of Public Health, Wisconsin Division of Health (WDOH), initiated an investigation of this outbreak. A probable case of *Salmonella* infection was defined as diarrhea or abdominal cramps with onset during December 22, 1994–January 4, 1995, in a resident of or a visitor to Dodge County or any of the four contiguous counties. A confirmed case was defined as a stool culture positive for tartrate-negative *Salmonella* Typhimurium.

DCHSHD and WDOH identified 107 confirmed and 51 probable case-patients (Figure 1); of these, 17 (16%) were hospitalized. Predominant manifestations of illness included diarrhea (98%), abdominal cramps (88%), chills (77%), body aches (71%), fever (65%), nausea (60%), and bloody stools (43%). The ages of ill persons ranged from 2 years to 90 years; 62% were male.

To assess potential risk factors for illness, DCHSHD and WDOH conducted a case-control study including 40 case-patients who were randomly selected from the persons with a stool specimen culture positive for tartrate-negative *Salmonella* Typhimurium and 40 controls who were identified by random telephone digit dialing. The mean ages of cases and controls were similar (43 years for cases; 47 years for

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