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Effectiveness in Disease and Injury Prevention

Impact of New Legislation on Needle and Syringe Purchase and Possession — Connecticut, 1992

Human immunodeficiency virus (HIV) and other bloodborne pathogens are transmitted among injecting-drug users (IDUs) through the reuse and sharing of contaminated needles and syringes (NSs) (*1*). Of the 689 acquired immunodeficiency syndrome (AIDS) cases reported in Connecticut in 1992, 413 (60%) were associated with injecting-drug use. To help reduce IDUs' use of contaminated NSs, Connecticut enacted laws effective July 1, 1992, that allow the purchase without a prescription of up to 10 NSs at one time in pharmacies and the possession of up to 10 clean NSs.* Before this date, purchase and possession of NSs without a prescription had been illegal in Connecticut. This report presents preliminary information from the first 5 months of an ongoing evaluation to determine whether the new laws affected pharmacy-based NS sales, IDUs' reported knowledge of the laws and places to obtain NSs, and law enforcement officers' risk for needlestick injuries.

Investigation of Pharmacy-Based NS Sales

In June 1992, eight pharmacies in Hartford, a city of 139,739 (1990 U.S. Census), were enrolled in a sentinel surveillance system to monitor pharmacy-based NS sales. For 1992, the annual incidence of AIDS in Hartford was 86 cases per 100,000 residents. All sentinel pharmacies were located in neighborhoods where injecting-drug use was reported to be prevalent. Monthly prescription and nonprescription NS sales for each participating pharmacy were monitored beginning July 1992.

By November 1992, six (75%) of the eight pharmacies were selling nonprescription NSs. The number of nonprescription NSs sold by these pharmacies increased steadily each month through October 1992 (480 in July; 856, August; 1143, September; and 1560, October).

In the two pharmacies not selling nonprescription NSs in November, pharmacists reported they had sold nonprescription NSs when the law went into effect, but cited IDU-related incidents (i.e., a used syringe was found on a shelf and an IDU disrupted business) in their pharmacy as the reason for now refusing to sell.

*Connecticut General Statutes, Sections 21a-65, 21a-240, 21a-267, 1992. Under the new laws, pharmacies are permitted, but not required, to sell NSs without a prescription.

Needle and Syringe Legislation — Continued

IDUs' Knowledge of Laws and Places to Obtain NSs

During August–November 1992, staff members at three HIV counseling and testing sites, two correctional facilities, and two drug-treatment centers in Connecticut interviewed active IDUs using a standard questionnaire. Active IDUs were defined as persons who reported using a needle or syringe to inject drugs into their veins, into their muscles, or under their skin during June 1992 and who reported using injected drugs during the 30 days preceding the interview. IDUs were asked about their knowledge of the new laws and NS-purchasing practices during the 30 days preceding the interview and during the 30 days before the laws became effective.

Of 124 active IDUs, 68 (55%) reported they were aware they could both purchase and possess clean NSs. An additional 26 (21%) IDUs were aware they could legally purchase NSs but did not know they could legally possess them. Thirteen (59%) of the 22 IDUs who were not aware of either law were men interviewed in correctional facilities.

More IDUs reported purchasing NSs from a pharmacy during August–October (51 [41%]) than during June (23 [19%]). This change included 27 IDUs who began purchasing from a pharmacy and two IDUs who reported not purchasing from a pharmacy after the new laws went into effect ($p<0.001$, sign test, matched-pair analysis). Those purchasing NSs during June may have been IDUs with diabetes, made illegal pharmacy purchases, or recalled inaccurately their purchasing during that time. Fewer IDUs reported purchasing NSs on the street during August–October (73 [59%]) than during June (92 [74%]); four IDUs reported they began purchasing and 24 reported they did not purchase on the street ($p<0.001$, sign test). However, of all methods to obtain NSs, purchases on the street (59%) were reported more often than purchases from pharmacies (41%). The prevalence of NS sharing was unchanged—during both periods, approximately 36% of IDUs reported at least one episode of NS sharing.

In November 1992, four focus groups were held in Hartford with a total of 34 active IDUs to address issues regarding NS use and purchasing practices. Participants reported that many IDUs changed their NS-purchasing practices in July and began purchasing from pharmacies. Approximately two thirds of the IDUs attending the meetings were aware that clean NS possession was legal and reported they were now more likely to carry NSs with them on the street. Focus group participants reported that NS-sharing episodes were less frequent after the new laws went into effect.

Law Enforcement Officers' Risk for Needlestick Injuries

To determine whether Hartford police officers were at greater risk for needlestick injuries after the new laws went into effect—because IDUs reported that they were more likely to carry NSs on the street—Occupational Safety and Health Administration-mandated reports of occupational injuries and illnesses were reviewed for reports of needlestick injury among police officers. Needlestick injury rates among officers were similar during the 3 months before and after July 1 (two needlestick injuries in 423 arrests for opium, cocaine, or NS possession versus one in 478 arrests, respectively).

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Needle and Syringe Legislation — Continued

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Editorial Note: In July 1991, the National Commission on AIDS recommended removing legal barriers to the purchase and possession of NSs as part of a strategy for reducing the spread of HIV among IDUs unable or unwilling to enter drug treatment (*2*). Statutes in 44 states and the District of Columbia place criminal penalties on the possession and distribution of NSs (drug paraphernalia laws), and the sale of NSs without a medical prescription are prohibited in 10 states and the District of Columbia (needle prescription laws) (*3*). Although IDUs in some localities have begun to clean their NSs and to decrease NS sharing in response to the AIDS epidemic (*4,5*), NS sharing continues, reflecting the limited availability of NSs and the established practices of injecting-drug use (*5–7*).

Because the number and proportion of HIV infections related to injecting-drug use in Connecticut are high, efforts to prevent HIV infection among IDUs and their sex partners have been broad and include street outreach and drug-treatment–based education to encourage safer sex and injection practices, comprehensive drug treatment, HIV counseling and testing, and legalizing the availability of sterile NSs. In July 1990, the Connecticut legislature legalized needle exchange in New Haven, and in May 1992, the legislature approved and funded additional needle-exchange programs in Hartford and Bridgeport. Connecticut legislators also amended the state's needle prescription and drug paraphernalia statutes. Legalizing over-the-counter purchase of up to 10 NSs potentially expanded IDUs' access to sterile needles to include pharmacies in Connecticut that might choose to sell nonprescription NSs. Allowing possession of up to 10 clean NSs might encourage IDUs to carry their own NSs, thereby decreasing the likelihood of unsafe NS sharing.

A follow-up questionnaire survey of active IDUs is being conducted to determine whether the behaviors reported in these preliminary findings have changed and to better characterize NS-purchasing practices, NS ownership, and patterns of NS usage as IDUs' knowledge of the new laws becomes more widespread. One issue being explored is the discrepancy between questionnaire results indicating that no change occurred in NS-sharing practices while focus groups indicated that NS-sharing episodes decreased. The increase in the number of nonprescription NSs sold by sentinel pharmacies in Hartford probably reflects NS purchasing by IDUs but might also represent a shift from prescription to nonprescription sales to persons with diabetes or those who use NSs for medical purposes. To better define pharmacists' knowledge, attitudes, and practices regarding nonprescription NS sales, pharmacists will be interviewed in person and be surveyed by mail during 1993.

References

1. Schoenbaum EE, Hartel D, Selwyn PA, et al. Risk factors for human immunodeficiency virus infection in intravenous drug users. N Engl J Med 1989;321:874–9.
2. National Commission on Acquired Immune Deficiency Syndrome. The twin epidemics of substance use and HIV. Washington, DC: National Commission on Acquired Immune Deficiency Syndrome, July 1991:10–1.
3. Gostin L. The needle-borne epidemic: causes and publichealth responses. Behavioral Sciences and the Law 1991;9:287–304.
4. CDC. Coordinated community programs for HIV prevention among intravenous-drug users—California, Massachusetts. MMWR 1989;38:369–74.

Needle and Syringe Legislation — Continued

5. Selwyn PA, Feiner C, Cox CP, Lipshutz C, Cohen RL. Knowledge about AIDS and high-risk behavior among intravenous drug users in New York City. AIDS 1987;1:247–54.
6. DesJarlais DC, Friedman SR, Sotheran JL, Stoneburner R. The sharing of drug injection equipment and the AIDS epidemic in New York City: the first decade. In: Battjes RJ, Pickens RW, eds. Needle sharing among intravenous drug abusers: national and international perspectives. Washington, DC: US Department of Health and Human Services, Public Health Service, Alcohol, Drug Abuse, and Mental Health Administration, 1988. (NIDA research monograph no. 80).
7. Grund JPC, Kaplan CD, Adriaans NFP. Needle sharing in the Netherlands: an ethnographic analysis. Am J Public Health 1991;81:1602–7.

Epidemiologic Notes and Reports

Tetanus Fatality — Ohio, 1991

In August 1991, the Ohio Department of Health received a report of a fatal case of tetanus. This report summarizes the investigation of this case.

On July 21, 1991, an 80-year-old woman sought treatment in the emergency department of a hospital in central Ohio because of a stiff jaw and dysphagia. On examination, she had slightly slurred speech and difficulty opening her mouth but no difficulty breathing. A wood splinter from a forsythia bush had been lodged in her left shin approximately 1 week; the wound site was erythematous and draining purulent material. The emergency room physician diagnosed tetanus and admitted the woman to the hospital. Treatment included tetanus immune globulin (3000 units) and tetanus toxoid (0.5 cc) and intravenous clindamycin because of a reported history of penicillin allergy.

The patient had no history of any previous tetanus vaccinations. She had been treated at an undetermined time in the 1960s for an infected wound associated with a fractured ankle. In addition, she had sought medical care periodically for treatment of hypertension and other medical problems.

The patient's clinical status gradually deteriorated, and mechanical ventilation was required because of increasing generalized rigidity. During the ensuing 2-week period, she was treated for tremors, muscle spasms, abdominal rigidity, apnea, pneumonia, and local infection from her leg wound. Despite aggressive treatment, the patient died on August 5.

As a result of this case, a public health nurse, serving as part of the Occupational Health Nurses in Agricultural Communities (OHNAC) project*, instituted community-wide educational activities to increase tetanus vaccination coverage among adults. Following these educational efforts, from August 1991 through July 1992, the number of adults receiving tetanus vaccination from the county health department increased 51%† over the previous 12 months (79 vaccinations compared with 52, respectively).

*OHNAC is a national surveillance program conducted by CDC's National Institute for Occupational Safety and Health that has placed publichealth nurses in rural communities and hospitals in 10 states (California, Georgia, Iowa, Kentucky, Maine, Minnesota, New York, North Carolina, North Dakota, and Ohio) to conduct surveillance of agriculture-related illnesses and injuries that occur among farmers and farm workers and their family members. These surveillance data are used to reduce the risk for occupational illness and injury in agricultural populations.

†The 51% increase in vaccinations may underestimate the total effect of this intervention because it does not include persons who obtained vaccinations from private physicians or from providers in neighboring counties.

Tetanus — Continued

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Editorial Note: The risk for tetanus is greater in older (aged ≥60 years) persons who lack protective levels of antitoxin (*1,2*). Although tetanus is preventable through adequate vaccination, 117 cases of tetanus were reported to CDC during 1989 and 1990 (*3*). Supplemental information available for 110 of these cases indicates the case-fatality rate was 24%. Of 109 persons for whom age was known, 63 were aged ≥60 years. Of the 37 persons in this age group for whom vaccination status was known, 34 (92%) were inadequately vaccinated (CDC, unpublished data, 1992).

Tetanus toxoid is a highly effective vaccine. Protective levels of serum antitoxin are generally maintained for at least 10 years in properly vaccinated persons (*4*). After completion of the primary vaccination series, booster doses of tetanus toxoid, combined with diphtheria toxoid (as Td) every 10 years are recommended by the Advisory Committee on Immunization Practices, the American College of Physicians, the American Academy of Family Physicians, and the American Academy of Pediatrics.

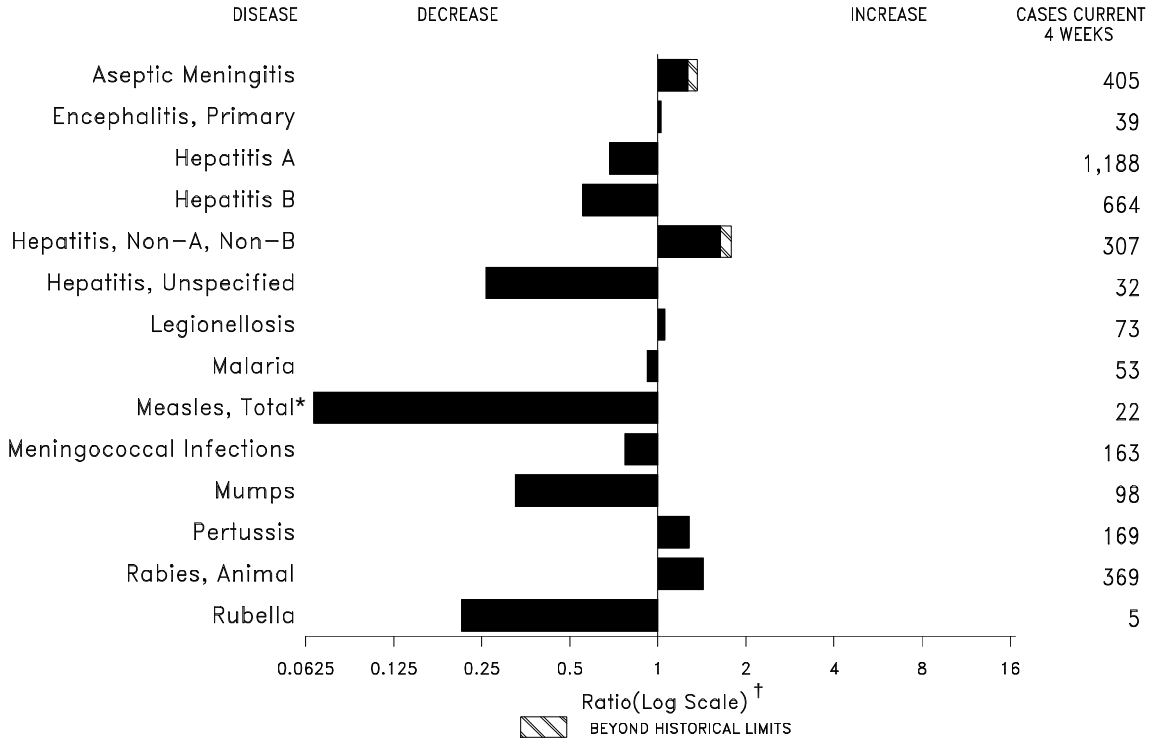
This report and others underscore the consequences of missed opportunities for vaccination (*3*). Although the patient in this report had numerous prior contacts with the health-care system, she had no history of vaccinations against tetanus. Of the 57 persons with tetanus in 1989 and 1990 for whom vaccination status was known, 45 (79%) reported ever having received ≤2 doses of tetanus toxoid. In addition, of the 12 who had sought medical care for their injuries and for whom tetanus toxoid was indicated, 11 were not vaccinated (*3*).

Wounds such as that described in the patient in this report are common in persons with tetanus and may not be considered sufficiently severe by the person to warrant a visit to a health-care provider. In 1989 and 1990, only 27 (31%) of 86 persons with tetanus and a clear antecedent acute injury sought medical treatment for their wounds (*3*). Therefore, internists, family practitioners, occupational physicians and other primary health-care providers who treat adults should use every opportunity to review the vaccination status of their patients and administer Td and other indicated vaccines as appropriate.

References

1. CDC. Tetanus—Rutland County, Vermont, 1992. MMWR 1992;41:721–2.
2. CDC. Summary of notifiable diseases, United States, 1991. MMWR 1992;40(no. 53):47.
3. Prevots R, Sutter RW, Strebel PM, Cochi SL, Hadler S. Tetanus surveillance—United States, 1989–1990. In: CDC surveillance summaries (December 11). MMWR 1992;41(no. SS-8):1–9.
4. ACIP. Diphtheria, tetanus, and pertussis: recommendations for vaccine use and other preventive measures—recommendations of the Immunization Practices Advisory Committee (ACIP). MMWR 1991;40(no. RR-10).

FIGURE I. Notifiable disease reports, comparison of 4-week totals ending February 27, 1993, with historical data — United States



*The large apparent decrease in 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 thehatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary — cases of specified notifiable diseases, United States, cumulative, week ending February 27, 1993 (8th Week)

	Cum. 1993		Cum. 1993
AIDS*	4,278	Measles: imported	3
Anthrax	-	indigenous	32
Botulism: Foodborne	-	Plague	-
Infant	7	Poliomyelitis, Paralytic§	-
Other	1	Psittacosis	12
Brucellosis	7	Rabies, human	-
Cholera	2	Syphilis, primary & secondary	4,156
Congenital rubella syndrome	1	Syphilis, congenital, age < 1 year	-
Diphtheria	-	Tetanus	2
Encephalitis, post-infectious	22	Toxic shock syndrome	34
Gonorrhea	56,281	Trichinosis	5
Haemophilus influenzae (invasive disease)†	180	Tuberculosis	1,913
Hansen Disease	13	Tularemia	9
Leptospirosis	9	Typhoid fever	51
Lyme Disease	334	Typhus fever, tickborne (RMSF)	18

*Updated monthly; last update January 30, 1993.
†Of 172 cases of known age, 65 (38%) were reported among children less than 5 years of age.
§No cases of suspected poliomyelitis have been reported in 1993; 4 cases of suspected poliomyelitis were reported in 1992; 6 of the 9 suspected cases with onset in 1991 were confirmed; all were vaccine associated.

TABLE II. Cases of selected notifiable diseases, United States, weeks ending February 27, 1993, and February 22, 1992 (8th Week)

Reporting Area	AIDS*	Aseptic Meningitis	Encephalitis		Gonorrhea		Hepatitis (Viral), by type				Legionellosis	Lyme Disease
			Primary	Post-infectious			A	B	NA,NB	Unspecified		
	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1992	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993
UNITED STATES	4,278	952	81	22	56,281	72,352	2,981	1,460	618	80	163	334
NEW ENGLAND	195	21	4	-	1,367	1,680	110	78	1	1	6	35
Maine	8	2	1	-	10	12	3	-	-	-	1	-
N.H.	8	1	-	-	9	29	2	11	-	-	-	5
Vt.	3	2	-	-	9	1	3	1	-	-	-	-
Mass.	102	14	3	-	503	627	61	58	1	1	5	9
R.I.	4	2	-	-	69	126	31	8	-	-	-	8
Conn.	70	-	-	-	767	885	10	-	-	-	-	13
MID. ATLANTIC	948	89	2	3	5,349	6,295	155	171	32	3	34	238
Upstate N.Y.	160	43	-	1	542	17	53	45	14	1	5	138
N.Y. City	677	5	-	-	1,541	3,476	10	1	-	-	-	-
N.J.	100	-	-	-	1,102	1,075	63	61	13	-	5	12
Pa.	11	41	2	2	2,164	1,727	29	64	5	2	24	88
E.N. CENTRAL	333	141	23	4	11,128	14,206	388	170	121	1	54	4
Ohio	85	61	10	-	4,156	4,642	75	43	10	-	31	4
Ind.	59	21	2	-	1,254	1,417	234	38	2	-	11	-
Ill.	118	14	2	-	2,978	4,732	39	12	1	-	-	-
Mich.	51	41	8	4	2,158	2,850	38	76	107	1	12	-
Wis.	20	4	1	-	582	565	2	1	1	-	-	-
W.N. CENTRAL	86	50	2	-	2,568	3,731	533	112	27	2	11	9
Minn.	19	4	2	-	320	470	55	6	1	-	-	1
Iowa	13	16	-	-	276	246	5	4	2	1	-	-
Mo.	39	12	-	-	1,312	2,241	366	89	17	1	3	-
N. Dak.	-	1	-	-	5	15	10	-	-	-	-	-
S. Dak.	1	1	-	-	29	35	7	-	-	-	-	-
Nebr.	3	1	-	-	-	8	64	2	6	-	6	-
Kans.	11	15	-	-	626	716	26	11	1	-	2	8
S. ATLANTIC	977	234	14	10	16,074	26,822	182	222	80	15	20	32
Del.	15	2	-	-	216	267	1	21	28	-	4	23
Md.	142	19	5	-	2,591	2,612	27	50	3	1	10	1
D.C.	106	5	-	-	1,094	1,271	1	4	-	-	3	1
Va.	13	35	4	2	1,013	3,298	28	20	1	5	-	3
W. Va.	3	4	4	-	103	150	-	3	2	3	-	1
N.C.	60	15	1	-	4,061	2,650	8	24	9	-	1	2
S.C.	55	1	-	-	1,037	1,775	2	6	-	-	-	-
Ga.	131	19	-	-	2,229	10,581	22	19	19	-	2	-
Fla.	452	134	-	8	3,730	4,218	93	75	18	6	-	1
E.S. CENTRAL	195	63	3	-	6,699	7,213	43	170	174	-	10	1
Ky.	16	30	-	-	716	759	23	19	3	-	2	-
Tenn.	107	13	3	-	1,927	2,087	10	132	168	-	6	1
Ala.	57	17	-	-	2,482	2,767	8	17	3	-	-	-
Miss.	15	3	-	-	1,574	1,600	2	2	-	-	2	-
W.S. CENTRAL	603	24	5	-	7,512	6,221	131	93	13	6	5	2
Ark.	16	6	-	-	823	1,057	8	8	1	-	-	1
La.	140	-	-	-	1,690	1,145	6	10	5	-	-	-
Okla.	38	-	3	-	406	725	12	15	6	1	5	1
Tex.	409	18	2	-	4,593	3,294	105	60	1	5	-	-
MOUNTAIN	103	41	4	3	1,565	1,629	585	84	39	19	13	-
Mont.	-	-	-	1	13	12	15	2	-	-	-	-
Idaho	2	2	-	-	14	20	50	6	-	1	1	-
Wyo.	1	-	-	-	8	5	3	2	9	-	2	-
Colo.	4	11	2	-	491	647	174	11	9	13	1	-
N. Mex.	10	11	1	2	166	125	46	31	11	-	-	-
Ariz.	31	12	1	-	535	528	175	21	5	3	2	-
Utah	17	-	-	-	45	26	116	3	4	2	1	-
Nev.	38	5	-	-	293	266	6	8	1	-	6	-
PACIFIC	838	289	24	2	4,019	4,555	854	360	131	33	10	13
Wash.	26	-	-	-	579	611	62	20	16	1	1	-
Oreg.	23	-	-	-	216	177	27	12	3	-	-	-
Calif.	776	277	22	2	3,088	3,561	642	325	109	31	8	13
Alaska	3	3	2	-	78	120	107	1	-	-	-	-
Hawaii	10	9	-	-	58	86	16	2	3	1	1	-
Guam	-	-	-	-	8	18	-	-	-	-	-	-
P.R.	127	8	-	-	73	1	6	29	3	-	-	-
V.I.	30	-	-	-	18	12	-	1	-	-	-	-
Amer. Samoa	-	-	-	-	5	5	3	-	-	-	-	-
C.N.M.I.	-	2	-	-	9	5	-	-	-	-	-	-

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

*Updated monthly; last update January 30, 1993.

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending February 27, 1993, and February 22, 1992 (8th Week)

Reporting Area	Malaria	Measles (Rubeola)					Menin-gococcal Infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported*		Total									
	Cum. 1993	1993	Cum. 1993	1993	Cum. 1993	Cum. 1992	Cum. 1993	1993	Cum. 1993	1993	Cum. 1993	Cum. 1992	1993	Cum. 1993	Cum. 1992
UNITED STATES	109	6	32	-	3	171	330	25	215	29	325	159	-	15	24
NEW ENGLAND	17	4	19	-	-	4	24	-	1	-	66	7	-	1	4
Maine	-	-	-	-	-	-	2	-	-	-	3	-	-	1	-
N.H.	2	-	-	-	-	-	4	-	-	-	51	4	-	-	-
Vt.	-	4	16	-	-	-	2	-	-	-	6	-	-	-	-
Mass.	9	-	-	-	-	2	15	-	-	-	3	3	-	-	-
R.I.	1	-	-	-	-	-	-	-	1	-	1	-	-	-	4
Conn.	5	-	3	-	-	2	1	-	-	-	2	-	-	-	-
MID. ATLANTIC	14	-	-	-	-	33	47	7	27	11	73	36	-	2	3
Upstate N.Y.	7	-	-	-	-	8	18	2	9	2	26	14	-	-	2
N.Y. City	2	-	-	-	-	7	3	-	-	-	-	1	-	-	-
N.J.	3	-	-	-	-	18	7	-	1	-	11	15	-	1	1
Pa.	2	-	-	-	-	-	19	5	17	9	36	6	-	1	-
E.N. CENTRAL	10	-	-	-	-	4	45	5	45	9	52	19	-	-	5
Ohio	3	-	-	-	-	3	12	3	23	7	39	1	-	-	-
Ind.	2	-	-	-	-	-	13	-	-	2	7	5	-	-	-
Ill.	3	-	-	-	-	-	12	-	6	-	-	5	-	-	5
Mich.	2	-	-	-	-	-	7	2	16	-	5	1	-	-	-
Wis.	-	-	-	-	-	1	1	-	-	-	1	7	-	-	-
W.N. CENTRAL	1	-	-	-	-	-	17	-	6	2	16	15	-	1	1
Minn.	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-
Iowa	1	-	-	-	-	-	2	-	2	-	-	1	-	-	-
Mo.	-	-	-	-	-	-	7	-	3	1	8	7	-	1	-
N. Dak.	-	-	-	-	-	-	-	-	1	-	1	2	-	-	-
S. Dak.	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-
Nebr.	-	-	-	-	-	-	-	-	-	-	3	2	-	-	-
Kans.	-	-	-	-	-	-	8	-	-	1	3	-	-	-	1
S. ATLANTIC	24	2	4	-	2	23	64	5	26	1	15	15	-	1	2
Del.	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Md.	4	-	-	-	1	1	3	1	8	1	8	7	-	-	-
D.C.	4	-	-	-	-	-	2	-	-	-	-	-	-	-	1
Va.	1	-	-	-	1	4	6	2	9	-	1	2	-	-	-
W. Va.	-	-	-	-	-	-	1	-	2	-	1	-	-	-	-
N.C.	9	-	-	-	-	-	10	-	-	-	-	4	-	-	-
S.C.	-	-	-	-	-	-	5	-	1	-	-	-	-	-	-
Ga.	2	-	-	-	-	-	24	-	-	-	3	-	-	-	-
Fla.	3	2	4	-	-	18	12	2	6	-	2	2	-	1	1
E.S. CENTRAL	2	-	-	-	-	69	27	2	8	-	5	1	-	-	-
Ky.	-	-	-	-	-	53	6	-	-	-	-	-	-	-	-
Tenn.	-	-	-	-	-	-	9	-	3	-	1	-	-	-	-
Ala.	1	-	-	-	-	-	9	2	5	-	4	1	-	-	-
Miss.	1	-	-	-	-	16	3	-	-	-	-	-	-	-	-
W.S. CENTRAL	3	-	1	-	-	13	15	-	34	-	7	8	-	1	-
Ark.	1	-	-	-	-	-	2	-	2	-	-	3	-	-	-
La.	-	-	1	-	-	-	3	-	4	-	-	-	-	-	-
Okla.	1	-	-	-	-	-	2	-	2	-	7	5	-	1	-
Tex.	1	-	-	-	-	13	8	-	26	-	-	-	-	-	-
MOUNTAIN	5	-	3	-	-	-	25	2	22	6	26	14	-	2	-
Mont.	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	1	-	3	3	3	4	-	1	-
Wyo.	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-
Colo.	3	-	2	-	-	-	2	1	4	3	11	6	-	-	-
N. Mex.	2	-	-	-	-	-	2	N	N	-	9	4	-	-	-
Ariz.	-	-	1	-	-	-	16	1	10	-	2	-	-	-	-
Utah	-	-	-	-	-	-	1	-	3	-	-	-	-	1	-
Nev.	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-
PACIFIC	33	-	5	-	1	25	66	4	46	-	65	44	-	7	9
Wash.	1	-	-	-	-	7	6	1	6	-	2	5	-	-	-
Oreg.	1	-	-	-	-	-	8	N	N	-	-	4	-	1	-
Calif.	30	-	1	-	-	9	48	2	35	-	59	34	-	4	9
Alaska	-	-	-	-	-	9	3	-	2	-	-	-	-	1	-
Hawaii	1	-	4	-	1	-	1	1	3	-	4	1	-	1	-
Guam	-	U	-	U	-	4	-	U	1	U	-	-	U	-	-
P.R.	-	19	37	-	-	21	4	-	-	-	-	2	-	-	-
V.I.	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-
Amer. Samoa	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-
C.N.M.I.	-	-	-	-	-	-	-	2	4	-	-	-	-	-	-

*For measles only, imported cases include both out-of-state and international importations.
N: Not notifiable U: Unavailable † International § Out-of-state

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending February 27, 1993, and February 22, 1992 (8th Week)

Reporting Area	Syphilis (Primary & Secondary)		Toxic-Shock Syndrome	Tuberculosis		Tula-remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1993	Cum. 1992	Cum. 1993	Cum. 1993	Cum. 1992	Cum. 1993	Cum. 1993	Cum. 1993	Cum. 1993
UNITED STATES	4,156	5,035	34	1,913	2,221	9	51	18	811
NEW ENGLAND	72	106	4	21	17	-	6	2	178
Maine	2	-	-	3	-	-	-	-	-
N.H.	-	7	1	-	-	-	-	-	3
Vt.	-	-	-	-	-	-	-	-	3
Mass.	40	39	3	1	14	-	4	2	49
R.I.	2	6	-	-	-	-	-	-	-
Conn.	28	54	-	17	3	-	2	-	123
MID. ATLANTIC	334	651	6	383	490	-	4	1	261
Upstate N.Y.	21	35	2	28	67	-	-	-	180
N.Y. City	249	346	-	246	284	-	2	-	-
N.J.	48	89	-	57	76	-	1	1	62
Pa.	16	181	4	52	63	-	1	-	19
E.N. CENTRAL	575	730	12	230	265	2	5	-	3
Ohio	199	95	7	30	50	-	2	-	-
Ind.	48	36	1	17	22	1	1	-	-
Ill.	160	356	-	143	122	-	1	-	-
Mich.	122	120	4	28	62	1	1	-	-
Wis.	46	123	-	12	9	-	-	-	3
W.N. CENTRAL	224	202	3	25	62	1	-	-	46
Minn.	14	12	1	-	24	-	-	-	13
Iowa	15	2	1	5	4	-	-	-	5
Mo.	170	156	-	12	24	1	-	-	1
N. Dak.	-	1	-	-	1	-	-	-	8
S. Dak.	-	-	-	2	4	-	-	-	1
Nebr.	-	1	-	2	-	-	-	-	1
Kans.	25	30	1	4	5	-	-	-	17
S. ATLANTIC	1,234	1,463	4	263	388	-	9	2	246
Del.	21	35	-	-	5	-	-	-	22
Md.	65	110	-	53	47	-	3	-	69
D.C.	128	85	-	8	21	-	-	-	3
Va.	87	97	-	-	20	-	1	-	55
W. Va.	6	1	-	8	11	-	-	-	9
N.C.	369	342	1	51	56	-	-	2	4
S.C.	110	208	-	36	44	-	-	-	18
Ga.	217	327	-	107	68	-	1	-	66
Fla.	231	258	3	-	116	-	4	-	-
E.S. CENTRAL	549	640	1	118	140	2	-	3	10
Ky.	49	20	-	43	43	-	-	2	1
Tenn.	161	165	1	-	-	1	-	-	-
Ala.	132	265	-	57	53	1	-	-	9
Miss.	207	190	-	18	44	-	-	1	-
W.S. CENTRAL	1,022	600	-	99	125	2	-	10	52
Ark.	104	83	-	16	13	1	-	-	2
La.	375	295	-	-	-	-	-	-	-
Okla.	63	36	-	-	15	-	-	10	7
Tex.	480	186	-	83	97	1	-	-	43
MOUNTAIN	30	92	-	53	41	-	1	-	8
Mont.	-	2	-	-	-	-	-	-	1
Idaho	-	1	-	-	4	-	-	-	-
Wyo.	1	-	-	-	-	-	-	-	2
Colo.	9	17	-	-	-	-	-	-	-
N. Mex.	7	7	-	-	14	-	-	-	2
Ariz.	13	36	-	36	17	-	1	-	3
Utah	-	1	-	8	-	-	-	-	-
Nev.	-	28	-	9	6	-	-	-	-
PACIFIC	116	551	4	721	693	2	26	-	7
Wash.	10	17	-	36	30	-	-	-	-
Oreg.	8	6	-	7	5	-	-	-	-
Calif.	97	526	4	636	611	2	26	-	-
Alaska	-	-	-	2	12	-	-	-	7
Hawaii	1	2	-	40	35	-	-	-	-
Guam	-	1	-	1	10	-	-	-	-
P.R.	73	14	-	-	12	-	-	-	8
V.I.	11	9	-	1	1	-	-	-	-
Amer. Samoa	-	-	-	-	-	-	-	-	-
C.N.M.I.	-	1	-	1	4	-	-	-	-

U: Unavailable

TABLE III. Deaths in 121 U.S. cities,* week ending February 27, 1993 (8th Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	804	592	135	50	13	14	85
Boston, Mass.	201	137	38	16	3	7	27
Bridgeport, Conn.	55	44	5	4	1	1	7
Cambridge, Mass.	22	19	3	-	-	-	1
Fall River, Mass.	31	24	6	-	-	1	2
Hartford, Conn.	78	52	13	8	3	2	5
Lowell, Mass.	36	30	5	1	-	-	4
Lynn, Mass.	17	12	4	1	-	-	-
New Bedford, Mass.	40	29	10	1	-	-	2
New Haven, Conn.	55	41	7	3	3	1	5
Providence, R.I.	56	44	6	4	2	-	11
Somerville, Mass.	7	5	2	-	-	-	1
Springfield, Mass.	62	48	12	2	-	-	7
Waterbury, Conn.	52	40	7	5	-	-	5
Worcester, Mass.	92	67	17	5	1	2	8
MID. ATLANTIC	3,078	2,097	532	325	65	59	172
Albany, N.Y.	43	35	5	1	1	1	3
Allentown, Pa.	22	18	3	1	-	-	-
Buffalo, N.Y.	111	79	25	3	3	1	4
Camden, N.J.	48	28	10	4	1	5	2
Elizabeth, N.J.	48	36	8	4	-	-	-
Erie, Pa.§	32	20	10	-	1	1	1
Jersey City, N.J.	56	31	16	4	2	3	4
New York City, N.Y.	2,127	1,449	353	262	32	31	126
Newark, N.J.	63	27	14	12	6	4	3
Paterson, N.J.	37	19	5	3	3	7	2
Philadelphia, Pa.	U	U	U	U	U	U	U
Pittsburgh, Pa.§	99	63	20	6	9	1	4
Reading, Pa.	12	8	2	2	-	-	1
Rochester, N.Y.	123	92	18	9	3	1	7
Schenectady, N.Y.	30	20	6	3	-	1	-
Scranton, Pa.§	25	21	3	1	-	-	3
Syracuse, N.Y.	94	71	15	4	1	3	6
Trenton, N.J.	35	24	8	1	2	-	2
Utica, N.Y.	24	20	1	2	1	-	1
Yonkers, N.Y.	49	36	10	3	-	-	3
E.N. CENTRAL	2,262	1,453	434	198	93	84	135
Akron, Ohio	67	48	11	3	2	3	-
Canton, Ohio	52	40	11	1	-	-	6
Chicago, Ill.	357	147	77	63	46	24	15
Cincinnati, Ohio	118	82	16	7	5	8	12
Cleveland, Ohio	155	91	39	17	6	2	3
Columbus, Ohio	192	134	38	13	2	5	14
Dayton, Ohio	106	80	16	7	1	2	5
Detroit, Mich.	265	136	68	37	17	7	6
Evansville, Ind.	45	35	7	2	-	1	4
Fort Wayne, Ind.	66	52	5	5	-	4	3
Gary, Ind.	24	13	7	4	-	-	1
Grand Rapids, Mich.	69	55	9	1	2	2	3
Indianapolis, Ind.	210	144	35	19	4	8	20
Madison, Wis.	37	29	3	4	1	-	3
Milwaukee, Wis.	136	100	25	5	1	5	12
Peoria, Ill.	54	38	9	4	2	1	3
Rockford, Ill.	59	44	11	1	-	3	11
South Bend, Ind.	50	41	9	-	-	-	3
Toledo, Ohio	126	87	27	3	3	6	9
Youngstown, Ohio	74	57	11	2	1	3	2
W.N. CENTRAL	774	570	127	41	18	17	54
Des Moines, Iowa	52	40	10	2	-	-	3
Duluth, Minn.	27	21	4	2	-	-	1
Kansas City, Kans.	22	12	7	2	1	-	2
Kansas City, Mo.	125	90	20	11	2	2	6
Lincoln, Nebr.	28	22	4	2	-	-	2
Minneapolis, Minn.	209	153	31	12	7	6	25
Omaha, Nebr.	70	51	12	3	1	3	7
St. Louis, Mo.	93	70	13	4	3	3	-
St. Paul, Minn.	69	49	14	-	3	3	4
Wichita, Kans.	79	62	12	3	1	-	4
S. ATLANTIC	1,513	906	314	183	69	41	81
Atlanta, Ga.	203	122	40	27	9	5	11
Baltimore, Md.	245	141	54	37	9	4	18
Charlotte, N.C.	90	50	19	11	6	4	6
Jacksonville, Fla.	121	71	33	9	4	4	7
Miami, Fla.	92	52	10	20	7	3	1
Norfolk, Va.	56	35	12	3	3	3	2
Richmond, Va.	87	52	19	12	1	3	6
Savannah, Ga.	50	32	12	2	1	3	2
St. Petersburg, Fla.	70	50	8	5	3	4	1
Tampa, Fla.	176	125	31	11	7	2	19
Washington, D.C.	291	153	69	44	19	6	8
Wilmington, Del.	32	23	7	2	-	-	-
E.S. CENTRAL	767	537	132	57	22	19	63
Birmingham, Ala.	158	109	25	10	6	8	7
Chattanooga, Tenn.	89	66	14	6	1	2	6
Knoxville, Tenn.	72	55	11	3	2	1	7
Lexington, Ky.	73	51	10	7	2	3	9
Memphis, Tenn.	177	120	33	17	5	2	19
Mobile, Ala.	17	13	3	-	-	1	-
Montgomery, Ala.	55	43	10	2	-	-	6
Nashville, Tenn.	126	80	26	12	6	2	9
W.S. CENTRAL	1,631	1,021	297	197	62	53	115
Austin, Tex.	73	44	17	9	3	-	9
Baton Rouge, La.	50	33	10	6	-	1	1
Corpus Christi, Tex.	48	41	5	1	-	1	2
Dallas, Tex.	236	134	44	39	5	14	6
El Paso, Tex.	74	50	11	9	2	2	5
Ft. Worth, Tex.	125	76	31	14	3	1	12
Houston, Tex.	357	213	59	47	23	14	30
Little Rock, Ark.	85	54	15	8	4	4	10
New Orleans, La.	79	53	14	8	1	3	-
San Antonio, Tex.	233	145	40	32	10	6	17
Shreveport, La.	135	78	30	14	7	6	9
Tulsa, Okla.	136	100	21	10	4	1	14
MOUNTAIN	935	638	163	85	23	26	95
Albuquerque, N.M.	105	74	18	9	1	3	5
Colo. Springs, Colo.	47	36	6	4	1	-	4
Denver, Colo.	143	87	21	21	5	9	11
Las Vegas, Nev.	148	99	35	11	2	1	11
Ogden, Utah	17	14	3	-	-	-	2
Phoenix, Ariz.	191	118	33	20	10	10	37
Pueblo, Colo.	31	25	4	1	-	1	3
Salt Lake City, Utah	112	82	18	7	4	1	13
Tucson, Ariz.	141	103	25	12	-	1	9
PACIFIC	2,347	1,614	401	224	55	38	161
Berkeley, Calif.	25	16	7	2	-	-	1
Fresno, Calif.	65	44	12	7	1	1	4
Glendale, Calif.	28	22	3	3	-	-	2
Honolulu, Hawaii	99	68	17	11	1	2	12
Long Beach, Calif.	119	85	15	11	6	2	15
Los Angeles, Calif.	675	459	108	72	21	4	24
Pasadena, Calif.	31	22	3	2	1	3	3
Portland, Oreg.	128	92	22	11	-	3	9
Sacramento, Calif.	186	135	32	10	6	3	16
San Diego, Calif.	234	151	43	26	5	5	27
San Francisco, Calif.	172	115	27	28	1	1	6
San Jose, Calif.	207	141	43	16	2	5	23
Santa Cruz, Calif.	29	25	4	-	-	-	3
Seattle, Wash.	171	113	36	14	2	6	3
Spokane, Wash.	61	44	8	3	4	2	7
Tacoma, Wash.	117	82	21	8	5	1	6
TOTAL	14,111¶	9,428	2,535	1,360	420	351	961

*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.

Current Trends

Comparison of Early and Late Latent Syphilis — Colorado, 1991

Latent syphilis (i.e., the presence of serological evidence for syphilis without clinical manifestations) is divided into early latent ([EL] less than 1-year's duration) and late latent ([LL] more than 1-year's duration) stages (*1*). LL syphilis, which is often associated with low nontreponemal test (e.g., rapid plasma reagin [RPR]) titers and is presumed to have been acquired in the distant past, is not routinely included in syphilis surveillance reports and analyses. Although a separate classification of "unknown latent syphilis" has been proposed (*1*), in practice, duration is unknown for nearly all syphilis cases that are classified as LL. This report compares EL and LL syphilis cases in Colorado during 1991 and demonstrates substantial overlap in their characteristics.

Colorado EL and LL syphilis cases reported in 1991 were abstracted for information on age, sex, racial/ethnic group, and serologic test results (RPR). Persons aged ≥60 years with RPR titers ≤16 were not included among LL cases, because these are usually closed administratively without investigation by disease-control staff.

Serologic and demographic data were available for 33 (94%) of 35 EL and 92 (91%) of 101 LL cases reported in 1991. Females composed 17 (52%) EL and 35 (38%) LL cases. Blacks composed 13 (39%) EL and 28 (30%) LL cases; whites composed seven (21%) EL and 28 (30%) LL cases; Hispanics composed 30% of both EL and LL cases.

Of patients with EL syphilis, 27 (82%) had RPR titers ≥8; 40 (43%) patients with LL syphilis also had RPR titers ≥8 (Figure 1). The percentage of cases with RPR titers ≥32 was 42% for EL and 18% for LL. The median age group was 25–29 years for EL and 30–34 years for LL patients. Of patients with EL syphilis, 28 (85%) were aged ≤39 years; 70 (76%) patients with LL syphilis were also in this age range (Figure 2). Based on the combination of both RPR titer ≥8 and age ≤39 years, 32 (35%) patients with LL syphilis were similar to the majority of EL patients.

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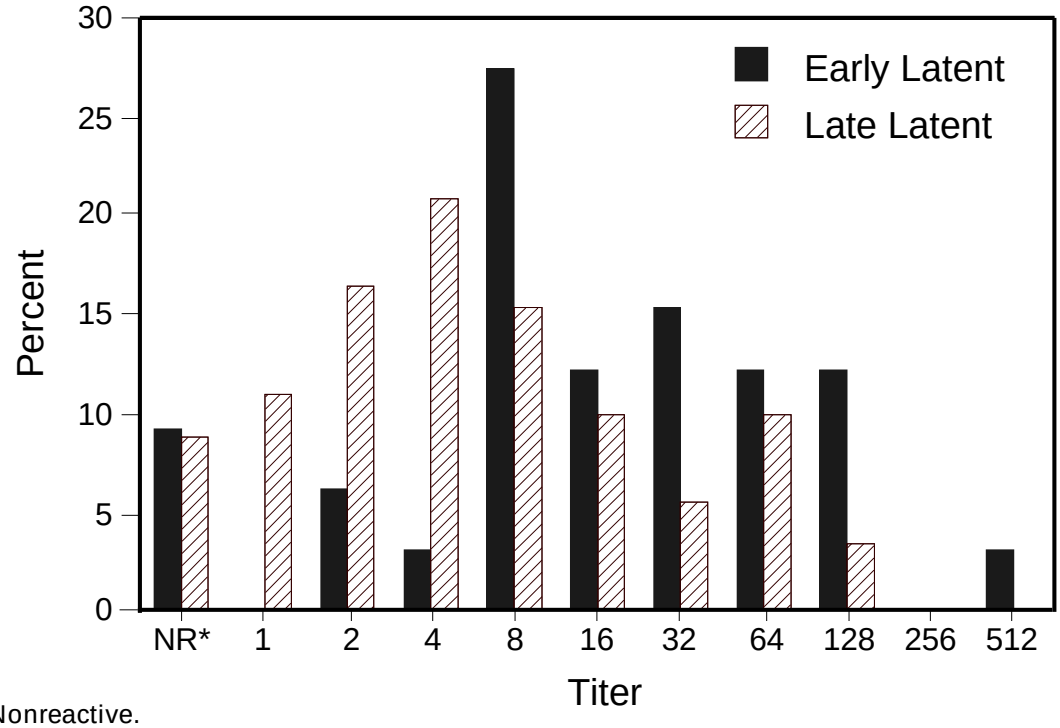
Editorial Note: The division of latent syphilis into early and late stages is based on treatment and public health considerations; a previous study of untreated syphilis indicated that most secondary relapses (mucocutaneous lesions) occurred during the first year after infection (*2*). In the United States, since the 1960s, the early latent stage has been defined as 1 year from the onset of infection. In practice, latent syphilis is classified as EL with evidence that a person acquired infection during the previous 12 months based on 1) a nonreactive serologic test for syphilis or a fourfold rise in titer from a previous serologic test for syphilis during the previous 12 months; 2) a history of symptoms consistent with primary or secondary syphilis without a history of treatment in the previous 12 months; or 3) a history of sexual exposure to a partner with confirmed or presumptive primary, secondary, or early latent syphilis and no history of treatment during the previous 12 months. If none of these criteria are met, a case of latent syphilis is classified as LL; the duration of infection is usually unknown.

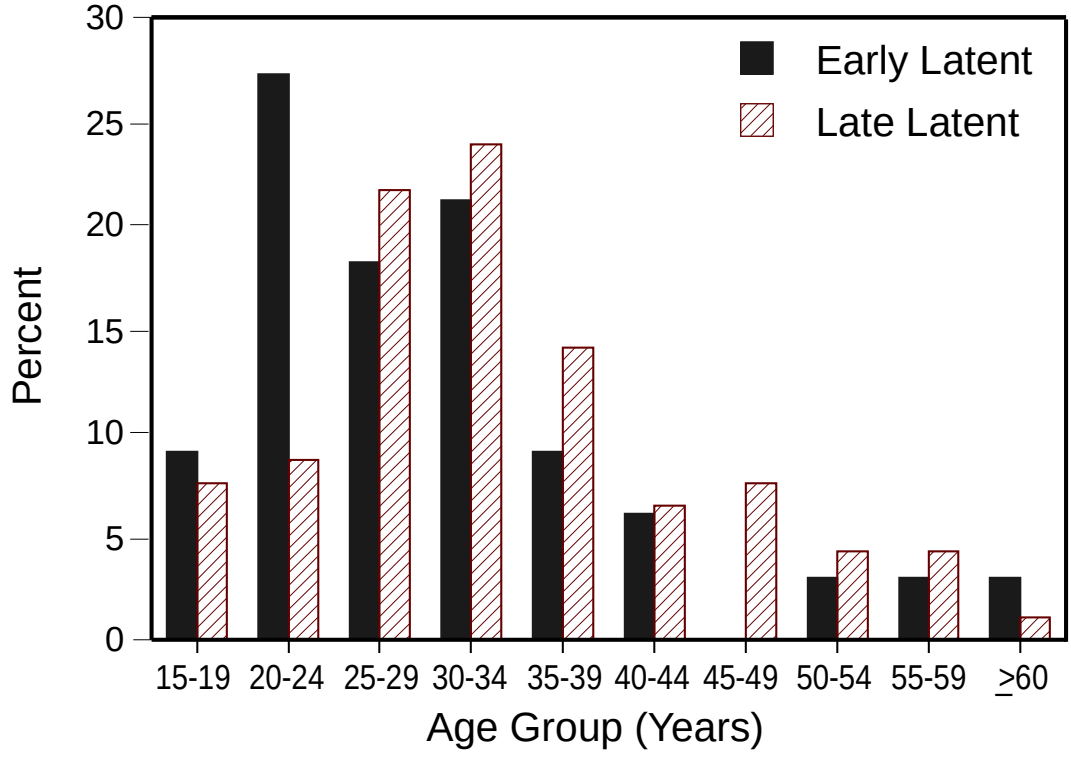
Syphilis — Continued

FIGURE 1. Rapid plasma reagin titer distribution in persons with early and late latent syphilis — Colorado, 1991



*Nonreactive.

FIGURE 2. Age distribution of persons with early and late latent syphilis — Colorado, 1991



Syphilis — Continued

Public health surveillance for syphilis is based on reported cases of primary and secondary (P&S) or early (P&S plus EL) syphilis. Because a substantial proportion of persons with infectious P&S syphilis do not seek medical attention despite symptoms (*3*), reporting that includes EL cases presumably reflects the true incidence of syphilis during the previous 12 months more accurately than does reporting of P&S syphilis alone. The findings in this report that the age and serologic titer patterns of LL and EL syphilis patients are similar suggest that a substantial number of LL case-patients may have acquired infection during the previous 12 months, even though information was inadequate to classify these cases as EL. Based on these findings, the actual number of EL cases in Colorado could be more than twofold greater than what is recognized.

Limitations in knowledge about the natural history of nontreponemal test titers in untreated syphilis precludes use of these tests to assess duration of infection. Although peak titers are reached during the first year of untreated infection, data on their rate and variability of subsequent decline are limited (*4*).

For monitoring morbidity trends and evaluating control programs, the category P&S syphilis may be optimal, especially when focusing on patients voluntarily seeking care with signs or symptoms (*5*). The detection of EL and LL syphilis cases is more dependent on active case-finding conducted by STD programs, including partner notification and serologic screening. Although the division of latent syphilis cases into EL and LL stages has been useful for treatment and partner notification, the findings in this report suggest this classification is problematic for use in surveillance.

References

1. CDC. Case definitions for public health surveillance. MMWR 1990;39(no. RR-13).
2. Sparling PF. Natural history of syphilis. In: Holmes KK, March PA, Sparline PF, Wiesner PJ, eds. Sexually transmitted diseases. New York: McGraw-Hill, 1990:214.
3. Brown WJ, Donohue JF, Axnick NW, Blount JH, Ewen NH, Jones OG. Syphilis and other venereal diseases. Cambridge, Massachusetts: Harvard University Press, 1970:41.
4. Hart G. Syphilis tests in diagnostic and therapeutic decision making. Ann Intern Med 1986;104:368–76.
5. CDC. Epidemic early syphilis—Montgomery County, Alabama, 1990–1991. MMWR 1992; 41:790–4.

Notice to Readers

Recommendations for HIV Testing Services for Inpatients and Outpatients in Acute-Care Hospital Settings

CDC has published revised recommendations for human immunodeficiency virus (HIV) counseling and testing of patients in acute-care hospital settings (*1*).* These recommendations update previous CDC guidelines published in 1987 (*2*) and strengthen the recommendation for hospitals to assess the rate of HIV infection among their patient populations and to develop HIV-testing programs that assist infected patients in obtaining HIV-related treatment and prevention services. The revision was prompted by information regarding both the rates of previously unrecognized HIV infection among persons admitted to some acute-care hospitals and the

*Single copies of the recommendations will be available from the CDC National AIDS Clearinghouse, P.O. Box 6003, Rockville, MD 20849-6003; telephone (800) 458-5231.

Notice to Readers — Continued

potential medical and public health benefits of recognizing HIV infection in persons who have not developed acquired immunodeficiency syndrome (AIDS).

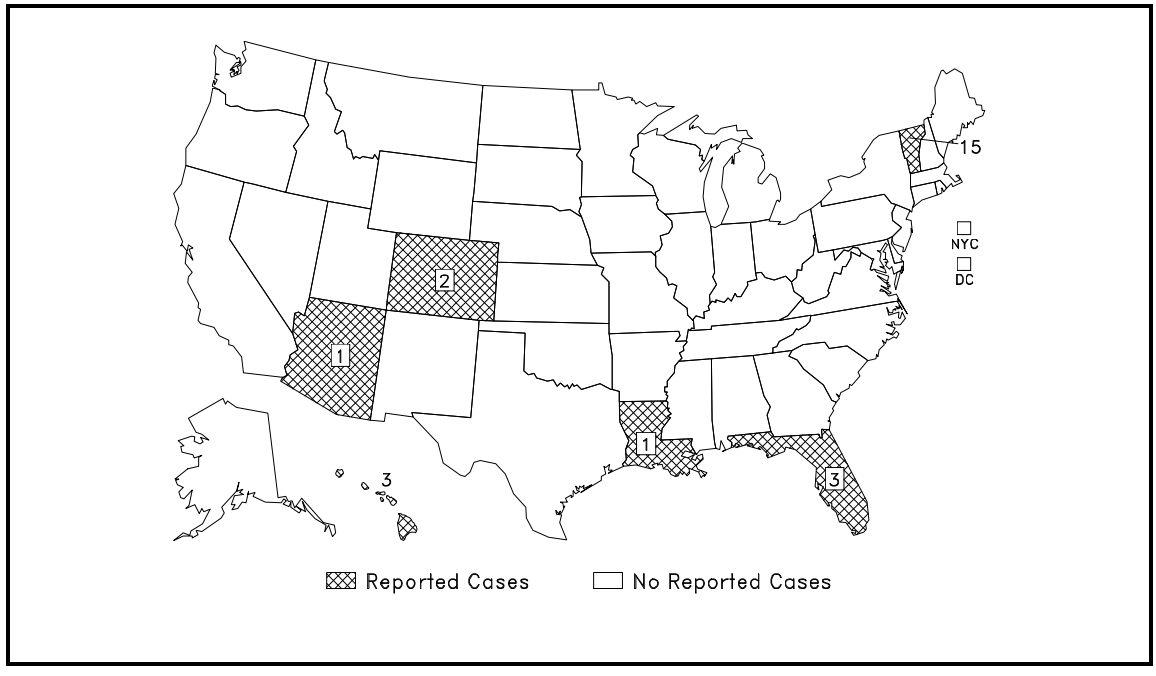
CDC recommends that hospitals and associated clinics encourage health-care providers to routinely ask patients in nonemergency settings about their risks for HIV infection. Patients at risk should be offered HIV counseling and testing services with informed consent obtained in accordance with local laws. In addition, hospitals with an HIV-seroprevalence rate of at least 1% or an AIDS diagnosis rate ≥1.0 per 1000 discharges (*3*) should strongly consider adopting a policy of offering such services routinely to patients aged 15–54 years. These services should be structured to facilitate confidential, voluntary patient participation and should include pretest information about the testing procedures, appropriate posttest counseling for infected patients and those at increased risk, and referral of HIV-infected persons for medical evaluation. Persons who decline HIV testing or who consent to testing and are found to be infected must not be denied needed health care or provided suboptimal care.

The recommendations emphasize that HIV counseling and testing programs should not be used as a substitute for universal precautions or other infection-control techniques and underscore the importance of effective and ongoing collaboration between acute-care providers and health departments to improve HIV-related prevention and treatment services.

References

1. CDC. Recommendations for HIV testing services for inpatients and outpatients in acute-care hospital settings and technical guidance on HIV counseling. In: Recommendations and reports (January 15). MMWR 1993;42(no. RR-2):1–6.
2. CDC. Public Health Service guidelines for counseling and antibody testing to prevent HIV infection and AIDS. MMWR 1987;36:509–15.
3. Janssen RS, St. Louis ME, Satten G, et al. HIV infection among patients in U.S. acute-care hospitals: strategies for the counseling and testing of hospital patients. N Engl J Med 1992;327:445–52.

Reported cases of measles, by state — United States, weeks 5–8, 1993



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