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MORBIDITY AND MORTALITY WEEKLY REPORT

Epidemiologic Notes and Reports

Positive HTLV-III/LAV Antibody Results for Sexually Active Female Members of Social/Sexual Clubs — Minnesota

In June 1986, two sexually active women in Minnesota were found to have antibody to human T-lymphotropic virus type III/lymphadenopathy-associated virus (HTLV-III/LAV).* Both belonged to social/sexual clubs whose stated purpose was to provide their members (primarily couples) with opportunities for social and sexual contacts.† Each of the two seropositive women reported having sexual contact with a number of other persons from these clubs, including two men who were bisexual.

Infection was detected in these two women during a serologic screening program conducted by the St. Paul Division of Public Health, in consultation with the Minnesota Department of Health. This screening was undertaken because members of these clubs were known to have been involved in outbreaks of other sexually transmitted diseases (including syphilis and gonorrhea). From a total of 285 members (143 women and 142 men) of two of these social/sexual clubs in the Minneapolis-St. Paul area, 134 volunteers were tested with an enzyme-linked immunosorbent assay (ELISA) for antibody to HTLV-III/LAV in June and July 1986. Any ELISA-positive specimens were also tested with the Western blot assay. All 75 men tested had negative ELISA results for antibody to HTLV-III/LAV. Two of 59 women tested had positive antibody test results for HTLV-III/LAV with both ELISA and Western blot. Antibody results for these women were again positive with ELISA and Western blot when repeated 6 weeks later. The seroprevalence rate of 3% among female club members tested is significantly higher than the seroprevalence rate of zero (none of 56,000) among female blood donors in Minnesota.

*The AIDS virus has been variously termed human T-lymphotropic virus type III (HTLV-III/LAV), lymphadenopathy-associated virus (LAV), AIDS-associated retrovirus (ARV), or human immunodeficiency virus (HIV). The designation "human immunodeficiency virus" (HIV) has been accepted by a subcommittee of the International Committee for the Taxonomy of Viruses as the appropriate name for the retrovirus that has been implicated as the causative agent of AIDS (Science 1986;232:697).

†These clubs are popularly known as "swing clubs". A national organization lists more than 100 such clubs (*1*).

HTLV-III/LAV — Continued

The two seropositive women had belonged to two different social/sexual clubs for approximately 2 years. Both denied intravenous drug use, a history of blood transfusions, or receipt of clotting factor concentrates. One woman was 31 years old, married, and had sexual relations only with other club members; her husband (also a member) had negative test results for HTLV-III/LAV antibody. The other woman was 25 years old, unmarried, and occasionally had sexual relations with men outside the club.

Each of these two women reported having had sexual contact with more than 25 other club members, including five men with whom they had both had sexual intercourse. Two of these five men could be located for testing and had negative results for HTLV-III/LAV antibody. Two of the other three men whose serologic status could not be determined were reported to be bisexual men with whom both women had had repeated vaginal and anal intercourse.

An additional bisexual man who was a former member of one of these clubs is known to have developed acquired immunodeficiency syndrome (AIDS). He had no history of sexual contact with either of the seropositive women or with either of the two bisexual men who had sexual contact with these women.

To date, 55 of the 134 club members tested for antibody to HTLV-III/LAV (including the two seropositive women) have participated in follow-up interviews and have received counselling about their sexual practices and attitudes. Four (15%) of 27 men reported homosexual contact with other club members as well as with men who were not members of either of the two clubs. When asked whether they perceived themselves as being at increased risk of having AIDS, 40 members (73%) replied that they did not. One man reported that he "usually" used condoms while having sexual intercourse. When asked whether they would continue to participate in the activities promoted by social/sexual clubs if they knew such activities were associated with a high risk of having AIDS, 54/55 (98%) answered that they would not.

When it was known that one member of each of the two clubs was positive for HTLV-III/LAV antibody, both clubs disbanded. In an effort to minimize the transmission of HTLV-III/LAV, educational programs for sexually active adults (including former club members) are currently being implemented in the Minneapolis-St. Paul area. Follow-up studies of former club members are planned to assess whether other changes in sexual behavior are occurring.

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Editorial Note: The risk of having HTLV-III/LAV infection and other sexually transmitted diseases is increased for persons who have multiple sexual partners as well as for persons who have sexual encounters with high-risk individuals (*2-5*). However, most members of two social/sexual clubs in Minnesota who were interviewed did not consider themselves at increased risk of having AIDS and did not take precautions to protect themselves against AIDS or other sexually transmitted diseases.

Both seropositive women discussed above had a history of multiple sexual encounters—including vaginal and anal intercourse—with high-risk individuals. Although receptive anal intercourse is associated with increased risk of HTLV-III/LAV infection for homosexual men, most women infected with HTLV-III/LAV through sexual contact have denied having had anal intercourse (*6-11*).

To reduce the risk of HTLV-III/LAV infection, the Public Health Service recommends avoiding sexual contact with multiple partners or with persons who have been sexually active with multiple partners (*2,4,5*). Persons who do not follow this recommendation and who a) initiate a sexual relationship with another person who is at increased risk of having HTLV-III/LAV in-

HTLV-III/LAV – Continued

fection or b) maintain multiple sexual partnerships should at least avoid sexual practices that permit the exchange of blood, semen, urine, feces, saliva, or vaginal/cervical secretions. Consistent use of condoms may reduce transmission of HTLV-III/LAV (*12*). Other efforts to reduce HTLV-III/LAV transmission include making available voluntary serologic testing and health education and counselling for all persons believed to be at increased risk of having HTLV-III/LAV infection (*4*).

References

1. North American Swing Club Association. International directory swing clubs and publications. Buena Park, California: NASCA, 1986.
2. CDC. 1985 STD Treatment Guidelines. MMWR 1985;34:75S-109S.
3. CDC. Heterosexual transmission of human T-lymphotropic virus type III/lymphadenopathy-associated virus. MMWR 1985;34:561-3.
4. CDC. Additional recommendations to reduce sexual and drug abuse-related transmission of human T-lymphotropic virus type III/lymphadenopathy-associated virus. MMWR 1986;35:152-5.
5. Office of the Assistant Secretary for Health. Surgeon General's report on acquired immune deficiency syndrome. Washington, DC: Public Health Service, 1986:15-6.
6. Goedert JJ, Sarngadharan MG, Biggar RJ, et al. Determinants of retrovirus (HTLV-III) antibody and immunodeficiency conditions in homosexual men. Lancet 1984;2:711-6.
7. Groopman JE, Mayer KH, Sarngadharan MG, et al. Seroepidemiology of human T-lymphotropic virus type III among homosexual men with the acquired immunodeficiency syndrome or generalized lymphadenopathy and among asymptomatic controls in Boston. Ann Intern Med 1985;102:334-7.
8. Nicholson JK, McDougal JS, Jaffe HW, et al. Exposure to human T-lymphotropic virus type III/lymphadenopathy-associated virus and immunologic abnormalities in asymptomatic homosexual men. Ann Intern Med 1985;103:37-42.
9. Kreiss JK, Kitchen LW, Prince HE, Kasper CK, Essex M. Antibody to human T-lymphotropic virus type III in wives of hemophiliacs. Evidence for heterosexual transmission. Ann Intern Med 1985;102:623-6.
10. Peterman TA, Stoneburner RL, Allen JR. Risk of HTLV-III/LAV transmission to household contacts of persons with transfusion-associated HTLV-III/LAV infection. Presented at the International Conference on the Acquired Immunodeficiency Syndrome (AIDS), Paris, France, June 1986.
11. Saltzman BR, Harris CA, Klein RS, et al. HTLV-III/LAV infection and immunodeficiency in heterosexual partners (HP) of AIDS patients. Presented at the International Conference on the Acquired Immunodeficiency Syndrome (AIDS), Paris, France, June 1986.
12. Mann JM, Quinn T, Francis H, et al. Sexual practices associated with LAV/HTLV-III seropositivity among female prostitutes in Kinshasa, Zaire. Presented at the International Conference on the Acquired Immunodeficiency Syndrome, Paris, France, June 1986.

Current Trends

Tuberculosis — United States, 1985

In 1985, 22,201 cases of tuberculosis were reported to CDC (a rate of 9.3/100,000 population). The number of cases reported in 1985 was 54 less than the 22,255 reported in 1984—a marked change from the average annual decrease of 1,706 cases observed from 1981 to 1984. Compared with 1984, this is a 0.2% decrease in the number of reported cases and a decline of 1.1% in the case rate.

Tuberculosis — Continued

Table 1 shows the observed cases for 1984 and 1985 by state and the expected cases for 1985, based upon the average annual decline of 6.7% observed for the entire nation from 1981 to 1984. Overall, there were 1,437 more cases than expected (excess) in 1985. The five states with the greatest number of excess cases were: California (+407 cases), New York (+385), Texas (+247), Florida (+179), and Massachusetts (+106). The five large cities (≥ 250,000 population) with the greatest number of excess cases were: New York City (+322), Los Angeles (+108), Miami (+97), Dallas (+79), and San Francisco (+54).

Table 2 shows observed cases for 1984 and 1985 by age, sex, race, and ethnicity. There were 1,261 reported cases in children under 15 years of age, including 789 in children under 5. Compared with 1984, reported cases increased in two age groups in 1985—children under 5 years of age (+4.0%) and adults from 25 to 44 years of age (+5.5%). Reported cases increased 0.4% among males and declined 1.4% among females. Reported cases among whites decreased 1.6% while increases occurred in blacks (+0.7%), Asians/Pacific Islanders (+2.4%), and American Indians/Alaskan Natives (+5.9%). Reported tuberculosis cases among Hispanics increased 14.0%, but among non-Hispanics they decreased 2.2%.

Table 2 also shows the expected number of cases for 1985, based upon the average age-, sex-, race-, and ethnicity-specific declines observed from 1981 to 1984. Comparing observed with expected cases for 1985, the age groups with the greatest number of excess cases in 1985 were: 25-44 years (+663), 65+ years (+244), 45-64 years (+211), and 15-24 years (+146). There were 1,011 excess cases among males and 419 excess cases among females. Excess cases by race were: white (+747), black (+294), Asian/Pacific Islander (+294), and American Indian/Alaskan Native (+58). There were 640 excess cases among Hispanics and 791 excess cases among non-Hispanics.

Final morbidity data reported to CDC for 1985 indicate that 1,276 (5.7%) of the total 22,201 reported cases were found at time of death. In addition, program evaluation data reported to CDC from 95 reporting areas indicate that 9.3% of patients who began chemotherapy in 1984 died of various causes (including tuberculosis) within 1 year. Final tuberculosis mortality data from the National Centers for Health Statistics indicate that there were 1,729 tuberculosis deaths in 1984—a decline of 2.8% from the 1,779 deaths reported in 1983.

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

Editorial Note: The observed decline of only 0.2% in 1985 is substantially smaller than the average annual decline of 6.7% observed from 1981 to 1984. As reported previously (*1-3*), available evidence from some areas suggests that human T-lymphotropic virus type III/lymphadenopathy-associated virus (HTLV-III/LAV) infection of persons infected with the tubercle bacillus may be responsible for increased tuberculosis morbidity, but the full impact of HTLV-III/LAV on national tuberculosis morbidity is unknown. Health departments are encouraged to undertake surveillance activities to determine the degree to which tuberculosis morbidity is associated with AIDS and HTLV-III/LAV infection (*1,4*).

Of the five states (New York, California, Florida, New Jersey, and Texas) with the largest number of AIDS cases reported through 1985, four (New York, California, Florida, and Texas) had the greatest number of excess tuberculosis cases in 1985 (Table 1). New Jersey began participating in the national tuberculosis individual case reporting system in 1985, and the decrease in its reported tuberculosis cases (Table 1) may reflect a reporting artifact sometimes encountered during the first year that a state reports to this system.

Of the five metropolitan areas (New York City, San Francisco, Miami, Newark, and Los Angeles) with the largest number of reported AIDS cases through 1985, four (New York City, Los Angeles, Miami, and San Francisco) had the greatest number of excess tuberculosis cases

Tuberculosis – Continued

TABLE 1. Comparison of observed (reported) and expected tuberculosis cases by state and District of Columbia, 1985 vs. 1984

State	Observed cases 1984	Observed cases 1985	Change in cases	Percent change	Expected cases 1985*	Observed minus expected
California	3,306	3,491	+185	+ 5.6	3,084	+407
New York	2,246	2,481	+235	+10.5	2,096	+385
Texas	1,762	1,891	+129	+ 7.3	1,644	+247
Florida	1,335	1,425	+ 90	+ 6.7	1,246	+179
Massachusetts	376	457	+ 81	+21.5	351	+106
Georgia	784	828	+ 44	+ 5.6	731	+ 97
Arkansas	315	362	+ 47	+14.9	294	+ 68
Illinois	1,207	1,193	− 14	− 1.2	1,126	+ 67
South Carolina	544	566	+ 22	+ 4.0	508	+ 58
Virginia	473	488	+ 15	+ 3.2	441	+ 47
Alaska	79	110	+ 31	+39.2	74	+ 36
Maryland	428	434	+ 6	+ 1.4	399	+ 35
Louisiana	377	384	+ 7	+ 1.9	352	+ 32
Washington	207	220	+ 13	+ 6.3	193	+ 27
Oklahoma	262	264	+ 2	+ 0.8	244	+ 20
Montana	33	50	+ 17	+51.5	31	+ 19
Alabama	565	544	− 21	− 3.7	527	+ 17
Arizona	273	271	− 2	− 0.7	255	+ 16
Colorado	96	106	+ 10	+10.4	90	+ 16
Maine	35	47	+ 12	+34.3	33	+ 14
Minnesota	138	142	+ 4	+ 2.9	129	+ 13
Kansas	77	82	+ 5	+ 6.5	72	+ 10
South Dakota	25	31	+ 6	+24.0	23	+ 8
Tennessee	601	569	− 32	− 5.3	561	+ 8
Wyoming	5	9	+ 4	+80.0	5	+ 4
Rhode Island	55	53	− 2	− 3.6	51	+ 2
Mississippi	380	356	− 24	− 6.3	355	+ 1
Vermont	8	8	0	0.0	7	+ 1
Connecticut	176	164	− 12	− 6.8	164	0
Delaware	57	53	− 4	− 7.0	53	0
Idaho	28	26	− 2	− 7.1	26	0
Nevada	42	39	− 3	− 7.1	39	0
North Dakota	14	13	− 1	− 7.1	13	0
New Hampshire	27	23	− 4	−14.8	25	− 2
Oregon	156	144	− 12	− 7.7	146	− 2
Iowa	68	60	− 8	−11.8	63	− 3
Wisconsin	155	141	− 14	− 9.0	145	− 4
Nebraska	30	23	− 7	−23.3	28	− 5
Utah	40	31	− 9	−22.5	37	− 6
District of Columbia	189	168	− 21	−11.1	176	− 8
New Mexico	112	94	− 18	−16.1	104	− 10
Kentucky	510	463	− 47	− 9.2	476	− 13
Hawaii	218	189	− 29	−13.3	203	− 14
West Virginia	133	108	− 25	−18.8	124	− 16
Indiana	383	340	− 43	−11.2	357	− 17
Missouri	354	311	− 43	−12.1	330	− 19
Ohio	528	459	− 69	−13.1	493	− 34
North Carolina	756	669	− 87	−11.5	705	− 36
Pennsylvania	836	736	−100	−12.0	780	− 44
Michigan	661	540	−121	−18.3	617	− 77
New Jersey	790	545	−245	−31.0	737	−192
Total	**22,255**	**22,201**	**− 54**	**− 0.2**	**20,764†**	**+1,437†**

*Assumes a minus 6.7% decline in cases for 1985 compared with 1984. Based upon the average annual decline for the nation as a whole from 1981 to 1984.

†Expected cases and observed minus expected cases for states may not add to totals because of rounding.

Tuberculosis — Continued

in 1985. As with the total number of cases reported for New Jersey, tuberculosis morbidity reported for Newark in 1985 may be artifactually low.

In addition to the probable impact of HTLV-III/LAV infection, there are undoubtedly other reasons for the excess tuberculosis morbidity in 1985. Excess morbidity occurred in all age groups, both sexes, and all four races (Table 2), whereas AIDS patients who have had tuberculosis (as reported from Florida, New York City, San Francisco, and Newark) are predominantly black or white males from 25 to 44 years of age (*1,2,5,6*). This suggests that there are other factors contributing to the excess morbidity that need to be examined.

The continued occurrence of tuberculosis in children is clear evidence of ongoing transmission of infection in the United States. Health departments are encouraged to analyze childhood tuberculosis cases as a "sentinel health event" (*7-9*) to determine how and why they occurred and what program changes are needed to prevent future cases.

Reported tuberculosis deaths have failed to show an appreciable decline in recent years. From 1980 to 1984, the average annual decline in mortality was only 2.9%. Five to ten percent of persons who develop tuberculosis die from this disease, yet tuberculosis is considered preventable and curable by the medical community. Health departments are encouraged to identify and correct breakdowns or gaps in surveillance and health care systems that contribute to tuberculosis mortality.

It should be possible to accelerate the decline of tuberculosis by: (1) fully implementing existing methods of prevention; (2) developing new treatment, diagnostic, and prevention technologies (*10*); and (3) rapidly implementing these new technologies in all areas of the country.

TABLE 2. Comparison of observed (reported) and expected tuberculosis cases by age group, sex, race, and ethnicity — United States, 1985 vs. 1984

	Observed cases 1984	Observed cases 1985	Change in cases	Percent change	Expected* percent decline	Expected cases 1985	Observed minus expected	Percent
Age								
<5	759	789	+ 30	+ 4.0	− 7.8	700	+ 89	+12.7
5-14	477	472	− 5	− 1.0	−12.6	417	+ 55	+13.2
15-24	1,682	1,672	− 10	− 0.6	− 9.3	1,526	+ 146	+ 9.6
25-44	6,409	6,764	+355	+ 5.5	− 4.8	6,101	+ 663	+10.9
45-64	6,427	6,143	−284	− 4.4	− 7.7	5,932	+ 211	+ 3.6
65+	6,501	6,361	−140	− 2.2	− 5.9	6,117	+ 244	+ 4.0
Sex								
Male	14,441	14,499	+ 58	+ 0.4	− 6.6	13,488	+1,011	+ 7.5
Female	7,814	7,702	−112	− 1.4	− 6.8	7,283	+ 419	+ 5.8
Race								
White	11,729	11,538	−191	− 1.6	− 8.0	10,791	+ 747	+ 6.9
Black	7,678	7,734	+ 56	+ 0.7	− 3.1	7,440	+ 294	+ 4.0
Asian/Pacific Islander	2,473	2,532	+ 59	+ 2.4	− 9.5	2,238	+ 294	+13.1
American Indian/ Alaskan Native	375	397	+ 22	+ 5.9	− 9.6	339	+ 58	+17.1
Ethnicity								
Hispanic	2,750	3,134	+384	+14.0	− 9.3	2,494	+ 640	+25.7
Non-Hispanic	19,505	19,067	−438	− 2.2	− 6.3	18,276	+ 791	+ 4.3

*Average annual decline by age group, sex, race, and ethnicity, based on final reporting for 1981 through 1984.

Tuberculosis — Continued

References

1. CDC. Tuberculosis and acquired immunodeficiency syndrome—Florida. MMWR 1986;35:587-90.
2. Stoneburner RL, Kristal A. Increasing tuberculosis incidence and its relationship to acquired immunodeficiency syndrome in New York City. Presented at the International Conference on the Acquired Immunodeficiency Syndrome (AIDS), Atlanta, Georgia, April 1985.
3. CDC. Tuberculosis—United States, 1985, and the possible impact of human T-lymphotropic virus type III/lymphadenopathy-associated virus infection. MMWR 1986;35:74-6.
4. CDC. Diagnosis and management of mycobacterial infection and disease in persons with human T-lymphotropic virus type III/lymphadenopathy-associated virus infection. MMWR 1986;35:448-52.
5. Chaisson RE, Theuer CP, Schecter GF, Rutherford GW, Echenberg DF, Hopewell PC. Clinical aspects of tuberculosis in AIDS patients: a population based study. Presented at the Second International Conference on the Acquired Immunodeficiency Syndrome (AIDS), Paris, France, June 1986.
6. Sunderam G, McDonald RJ, Maniatis T, Oleske J, Kapila R, Reichman LB. Tuberculosis as a manifestation of the acquired immunodeficiency syndrome (AIDS). JAMA 1986;256:362-6.
7. Rutstein DD, Berenberg W, Chalmers TC, Child CG, Fishman AP, Perrin EB. Measuring the quality of medical care. A clinical method. N Engl J Med 1976;294:582-8.
8. Rutstein DD, Mullan RJ, Frazier TM, Halperin WE, Melius JM, Sestito JP. Sentinel health events (occupational): a basis for physician recognition and public health surveillance. Am J Public Health 1983;73:1054-62.
9. Bloch AB, Snider DE. How much tuberculosis in children must we accept? Am J Public Health 1986;76:14-5.
10. American Thoracic Society, Centers for Disease Control, National Institutes of Health, Pittsfield Antituberculosis Association. Supplement on future research in tuberculosis. Am Rev Respir Dis 1986; 134:401-23.

Trends in Mortality from Cirrhosis and Alcoholism — United States, 1945-1983

Approximately 10.6 million adults in the United States can be classified as alcoholics, and an additional 7.3 million either are alcohol abusers or have experienced negative consequences of alcohol use such as arrest or involvement in an accident. In addition, an estimated 4.6 million young people aged 14 to 17 are problem drinkers. The public health consequences of problem drinking include injuries and deaths from fires, falls, drowning, homicide, suicide, family abuse and other violence as well as industrial and motor vehicle accidents. An estimated one-third to one-half of all unintentionally and intentionally injured adult Americans involved in accidents, crimes, and suicides had been drinking alcohol (*1,2*). Problem drinking also causes medical damage including pancreatitis, nutritional deficiencies, malignancies, fetal alcohol syndrome, and cirrhosis (the ninth leading cause of death among adults in the United States) (*3*). Recent trends in the occurrence of selected medical complications of alcohol use are outlined below.

Cirrhosis and Alcoholism — Continued

Since 1950, noticeable trends in selected mortality rates have been associated with alcoholism and alcohol abuse (Table 1) (*4-9*). The age-adjusted total cirrhosis death rate increased gradually from 1950 until 1973 and has since declined. Death rates due to alcoholism reached a peak in 1980 and have leveled off since then.

Per capita rates of alcohol consumption rose approximately 21% during the 1960s and 10.3% during the 1970s. Data from 1977 through 1984 (the latest year for which complete data are available) show that overall per capita consumption reached a plateau in 1980 and 1981 and then declined until 1984. The 1984 consumption rate, which approximated that of 1977, was estimated at 2.65 gallons of absolute ethanol per year for U.S. residents aged 14 or older.*

The trends in death rates from alcoholism and per capita alcohol consumption have been parallel. On the other hand, cirrhosis mortality rates have declined since 1973, while per capita consumption of alcohol continued to increase until 1982.

*Estimated per capita ethanol consumption rates are based on beverage sales or shipments, and data include nondrinkers. Gallons of absolute ethanol consumption were calculated by using the following percentages of total beverage sales during the period 1945-1984: 1) For beer, 4.5% was used for the entire period; 2) for wine, 18.0% was used through 1951, 17% was used for the period 1952-1968, 16.0% was used for the period 1969-1971, 14.5% was used for the period 1972-1976, and 12.9% was used for the period 1979-1984; and 3) for spirits, 45.0% was used through 1971, 43.0% was used for the period 1972-1976, and 41.1% was used for the period 1977-1984.

=628.1 cans of beer or (1.7 cans/day)
or 77.8 liters wine (26 3L jugs) or 24.4 L whiskey (2.26 oz/day

TABLE 1. Age-adjusted death rates for liver cirrhosis and alcoholism — United States, 1945-1983*

wine = 10.1 oz/day

Year	Liver Cirrhosis†	Alcoholism†
1945	8.6§	1.7**
1950	8.5§	1.5
1955	9.4	1.2
1960	10.5	1.2
1965	12.1	1.4
1970	14.6	2.1
1971	14.6	2.2
1972¶	14.9	2.2
1973	15.0	2.2
1974	14.7	2.3
1975	13.7	2.3
1976	13.5	2.2
1977	13.0	2.3
1978	12.4	2.4
1979	12.1	2.4
1980	12.2	2.6
1981	11.4	2.4
1982	10.6	2.2
1983	10.2	2.3

*Rates per 100,000 population; computed by the direct method using as the standard population the age distribution of the United States as enumerated in 1940.

†A Crosswalk was used for the years 1979-1983 to convert diagnostic codes from ICD-9 rubrics to ICDA-8 rubrics (*9*).

§Deaths based on a 50% sample.

¶Based on enumerated population adjusted for age bias in the population of races other than white.

**Not age adjusted.

Cirrhosis and Alcoholism — Continued

Reported by J Colliver, PhD, D Doernberg, MLS, B Grant, PhD, Alcohol Epidemiologic Data System, CSR, Inc, M Dufour, MD, MPH, D Bertolucci, MA, Div of Biometry and Epidemiology, National Institute on Alcohol Abuse and Alcoholism; Epidemiology Br, Div of Nutrition, Center for Health Promotion and Education, CDC.

Editorial Note: The reason for the decline in cirrhosis mortality since 1973 is not clear—especially since deaths from alcoholism and per capita consumption have not shown a similar decline. Possible reasons for this decrease include earlier diagnosis and improvement in medical management, which enable persons having the disease to live longer. In addition to improved medical care, other possible contributing factors include: changes in physicians' coding of death certificates, a decrease in causes of cirrhosis other than alcohol misuse, and a decrease in co-morbid conditions with a resultant increase in survival. If this is true, the decline in the cirrhosis mortality rates may not reflect changes in drinking habits of the general population, and per capita consumption may not directly reflect individual use patterns. Therefore, changes in the prevalence of chronic heavy alcohol use among certain segments of the population might not be seen.

Data from CDC's 1981-1983 behavioral risk factor surveys provided national estimates of the prevalence of three patterns of alcohol misuse: chronic heavy alcohol use—8.7%, binge drinking—22.7%, drinking and driving—6.1% (*10,11*). The behavioral risk factor surveillance system (*12*) will be used to follow secular trends in these patterns of alcohol misuse and may provide some insight into changes in alcohol-related mortality as reflected by death certificate data. Further research is needed to determine which factor(s) account for the decline in cirrhosis mortality.

References

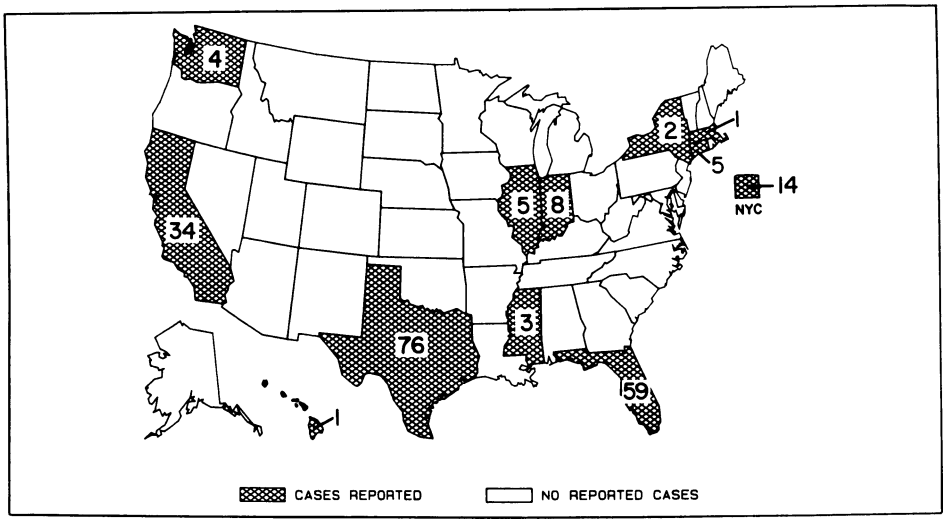
1. Office of the Secretary. Fifth special report to the US Congress on alcohol and health from the Secretary of Health and Human Services. Rockville, Maryland: Department of Health and Human Services, 1984. DHHS publication no (ADM) 84-1291.
2. Colliver J, Malin H. State and national trends in alcohol-related mortality. Alcohol Health and Research World 1986;3(10):60-4,75.
3. National Center for Health Statistics. Advance reporting of final mortality statistics, 1983. Hyattsville, Maryland: National Center for Health Statistics, 1985. (Monthly vital statistics report; vol 34; no 6; suppl 2).
4. National Center for Health Statistics. Vital statistics of the United States: volume II (data for years 1945-1980). Hyattsville, Maryland: National Center for Health Statistics, (Vol I and Vol II for each year, covering the years 1945-1980).
5. National Center for Health Statistics. Personal communication with Division of Vital Statistics, May 1986.
6. National Institute on Alcohol Abuse and Alcoholism. US alcohol epidemiologic data reference manual, Volume 2: liver cirrhosis mortality in the United States. Rockville, Maryland: National Institute on Alcohol Abuse and Alcoholism, 1985.
7. National Institute on Alcohol Abuse and Alcoholism. US alcohol epidemiologic data reference manual, Volume 3: county problem indicators. Rockville, Maryland: National Institute on Alcohol Abuse and Alcoholism, 1985.
8. Grant B, Zobeck T. Surveillance report #3: liver cirrhosis mortality in the United States, 1970-1983. Rockville, Maryland: National Institute on Alcohol Abuse and Alcoholism, 1986.
9. CDC. A system to convert ICD diagnostic codes for alcohol research. MMWR 1984;33:216, 221-3.
10. Marks JS, Hogelin GC, Gentry EM, et al. The behavioral risk factor surveys: I. state-specific prevalence estimates of behavioral risk factors. Am J Prev Med 1985;1(6):1-8.
11. Bradstock MK, Marks JS, Forman MR, Gentry EM, Hogelin GC, Trowbridge FL. The behavioral risk factor surveys: III. Chronic heavy alcohol use in the United States. Am J Prev Med 1985;1(6): 15-20.
12. CDC. Behavioral risk-factor surveillance in selected states—1985. MMWR 1986;35:441-4.

Notice to Readers

Delay in Publication of Tables I-IV

Because of the Veterans' Day holiday, Tables I-IV—specified notifiable diseases and deaths in 121 U.S. cities—for the week ending November 8 could not be prepared in time for this issue of the *MMWR*. Volume 35, Number 46, dated November 21, 1986, will contain a double set of Tables I-IV for the weeks ending November 8 and November 15.

FIGURE I. Reported measles cases — United States, weeks 41-44, 1986



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

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

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