EPIDEMIOLOGY SECTION

Connecticut Epidemiologist

STATE OF CONNECTICUT DEPARTMENT OF HEALTH SERVICES
Douglas S. Lloyd, M.D., M.P.H., Commissioner

May 1986
Vol. 5 No. 2

FDA ALERT: LISTERIOSIS AND CHEESE

The Food & Drug Administration (FDA) has detected Listeria monocytogenes in several soft cheeses, including Brie, Camembert, Liederkranz (no longer available), and Mexican-style soft white cheese. Persons in good health are generally not adversely affected by Listeria, but persons in certain groups may be a greater risk. The risk groups include pregnant women (the unborn child is at the greatest risk of infection), persons on cancer chemotherapy or with serious malignancy and persons on immunosuppressive therapy for various reasons (including individuals with organ transplants who are still under treatment). Other groups less strongly linked to increased risk of infection include hemodialysis patients, individuals with cirrhosis and hemachromatosis, or other conditions associated with a weakened immune system. The kind of disease caused by Listeria is variable and can range from fever of short duration to more serious conditions such as meningitis. It also can result in stillbirths. When promptly diagnosed by a physician, listeriosis can usually be successfully treated with antibiotics.

The FDA is actively sampling imported and domestic soft cheeses for Listeria monocytogenes, but the testing procedure for each food takes from one to two weeks. Many recalls are already underway. The number of Listeria organisms required to cause infections in debilitated persons is unknown, but is thought to be quite low from human epidemiology studies and from studies with immune-suppressed animals. Owing to the currently unknown scope of the problem, it may be prudent for persons within the groups at greater risk of infection to avoid consuming such cheeses until such time as the extent of the problem becomes clearer. FDA will provide updates as more is learned. There is no evidence that cheeses other than the types mentioned above contain Listeria. Listeria has not been detected in most types of cheese, such as aged cheeses, hard cheese, and processed cheese and cheese spreads.

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AIDS AND IV DRUG USERS: THE IMPORTANCE OF PREVENTION

Persons who have used intravenous (IV) drugs since 1977, their sexual partners, and their newborn children are at high risk for developing Acquired Immunodeficiency Syndrome (AIDS). In Connecticut, 31% of AIDS cases are in heterosexual IV drug users, a higher percentage than seen nationally (17%). Of eight cases acquired through heterosexual transmission, an infected IV drug user was the source in seven. All eight Connecticut cases of AIDS in children have been the offspring of IV drug users or their sexual partners. Thus, when AIDS cases in children and in heterosexual partners of IV drug users are added to the cases occurring in IV drug users, at least 38% of all Connecticut AIDS cases have been the direct or indirect result of IV drug use. Furthermore, 60% of the 55 cases reported in the first 4 months of 1986 are related to IV drug use.

Infection with human T-cell lymphotrophic virus type III/lymphadenopathy-associated virus (HTLV-III/LAV) is an important problem in IV drug users in the Northeast, particularly

in New York, New Jersey and Connecticut. Many Connecticut IV drug users are already infected with HTLV-III/LAV and are at risk for developing AIDS. In 1982-1983, at least 10% of clients tested in a New Haven methadone treatment program were HTLV-III/LAV antibody-positive.[1]

Preventing the spread of HTLV-III/LAV in the IV drug user population is a difficult problem, but one of crucial importance. Because there currently is no cure for HTLV-III/LAV infection, education and counseling are our most important tools for preventing its spread. In general, any IV drug user seeking medical treatment should also receive AIDS-related counseling and as appropriate, be referred to an alternative testing site for additional counseling and free, anonymous HTLV-III/LAV antibody testing.

Substance abuse treatment programs have an important role in AIDS prevention strategies since they are places where IV drug users interface with the health care community. The Connecticut Alcohol and Drug Abuse Commission (CADAC) and the State of Connecticut Department of Health Services are working with substance abuse treatment programs to develop and expand AIDS prevention and education services. These programs must be reliable sources of AIDS prevention information and education. Furthermore, entrance into a treatment program may disrupt HTLV-III/LAV transmission via IV drug use if the client is a carrier of the virus and may prevent infection in unexposed clients who might have been infected if they had continued street use of IV drugs.

References

1. D'Aquila R, Williams AB, Kleber HD, et al. Prevalence of HTLV-III infection among New Haven, Connecticut, parenteral drug abusers in 1982-1983. N Engl J Med 1986; 314:117.

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MEASLES IN CONNECTICUT - 1985

In 1985, seven confirmed cases of measles were reported in Connecticut, a 50% decrease from the 14 cases reported in 1984. Five cases were part of a college outbreak. The index case in the outbreak was a student exposed to measles in Great Britain. In the two remaining cases, no source of measles exposure was identified. In six cases, previous measles vaccination had been given. All cases were serologically confirmed and symptoms compatible with measles were noted.

Eliminating indigenous measles cases in Connecticut remains a priority of the Connecticut State Department of Health Services (DHS). Our committment to this objective employs a three-part strategy: (1) high immunization levels; (2) intensive surveillance for suspect measles cases; and (3) rapid, vigorous response to measles outbreaks. Immunization levels need to be high not only in the the pre-school and school populations, but in college-aged students as well.

A case of measles or rubella should be reported immediately by telephone to the Immunization Program (566-4141). A report of a suspect rash illness should include the following: patient's name, age, address, telephone number and date of rash onset.

Any suspect case that meets either of the following definitions should be reported immediately:

Measles (rubeola) case criteria:

1. generalized rash of 3 or more days duration; AND
2. temperature of 101°F or higher (taken by thermometer); AND
3. at least one of the following additionalsymptoms:
   a. cough
   b. coryza
   c. conjuctivitis
   d. photophobia

Rubella (German measles) case criteria:

1. generalized rash of 2-5 days duration, AND
2. low grade fever; AND
3. at least two of the following symptoms:
   a. posterior auricular or occipital adenopathy
   b. arthralgia
   c. coryza
   d. conjunctivitis

Please note that serologic confirmation (both acute AND convalescent titers) is essential

to the epidemiology and diagnosis of both measles and rubella.

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HEPATITIS B SCREENING OF HIGH RISK PREGNANT WOMAN AND SUBSEQUENT VACCINATION OF NEWBORNS

With the timely administration of hepatitis B vaccine, it should be possible to prevent many cases of pediatric hepatitis B virus (HBV) infection. Between July and December 1985, three HBV cases in children less than 5 years old were reported to the Connecticut State Department of Health Services. HBV infection might have been prevented in all three cases had the mothers, each of whom was in a high-risk group for HBV infection (see below), been prenatally screened. In Connecticut, an estimated 175 infants are born to HBsAg-positive mothers each year. Without preventive treatment, 35 will become chronic HBV carriers, 12 of whom may eventually die from liver disease.

HBV infection is a major cause of acute and chronic hepatitis, cirrhosis and primary hepatocellular carcinoma worldwide. In the United States, the estimated lifetime risk of HBV infection varies from almost 100% for the highest-risk groups to approximately 5% for the population as a whole. An estimated 300,000 persons, primarily young adults, are infected each year. One-quarter become ill with jaundice; more than 10,000 patients require hospitalization; and an average 250 die of fulminant disease each year.

Between 6% and 10% of young adults with HBV infection become carriers. In the United States, there are an estimated 500,000 - 1,000,000 HBV carriers. Chronic active hepatitis develops in over 25% of carriers and often progresses to cirrhosis. Furthermore, HBV carriers have a risk of developing primary liver cancer that is 12-300 times higher than that of other persons. Each year, an estimated 4,000 chronically infected persons die from hepatitis B-related liver cancer.

Maternal screening is recommended for women in groups at high risk for HBV infection. Questions regarding risk factors for HBV infection should be asked of all pregnant women. Because HBV can be transmitted sexually, information regarding these same risk factors should also be obtained from sexual partners of pregnant women whenever possible. The following questions should be part of the prenatal history:

1. Are you of Asian, Pacific Island or Alaskan Eskimo descent (both foreign-born and U.S.-born)?
2. Were you born in Haiti or Sub-Saharan Africa?
3. Have you ever:

   a. Had acute or chronic liver disease.
   b. Been jaundiced.
   c. Worked or received treatment in a hemodialysis unit.
   d. Worked or resided in an institution for the mentally retarded.
   e. Been rejected as a blood donor.
   f. Received blood transfusions on repeated occasions.
   g. Been exposed to blood in medical/dental settings.
   h. Had sexual contact with an HBV carrier or hemodialysis patient.
   i. Had multiple episodes of venereal disease.
   j. Used I.V. drugs.
   k. Had sexual contact with someone who uses I.V. drugs or has used them in the past.
   l. Had a child who developed hepatitis B or is a known carrier.

Management of HBsAg-Positive Mothers and Their Infants

Obstetric and pediatric staff should be notified of HBsAg-positive mothers, so the staff may take appropriate precautions to protect themselves and other patients from infectious material, blood and secretions, and so the neonate may receive therapy without delay after birth [MMWR 1985: 34(22):316-335]. HBIG should be administered after physiologic stabilization of the infant and preferable within 12 hours of birth. HBIG EFFICACY DECREASES MARKEDLY IF TREATMENT IS DELAYED BEYOND 48 HOURS AFTER BIRTH. HB vaccine should be administered in 3 doses. The first dose should be given within 7 days of birth and may be given concurrently with

HBIG but at a separate injection site. The second and third doses should be given 1 month and 6 months, respectively, after the first.

HBsAg testing at 6 months should be done for counseling purposes, since HBsAg-positivity at 6 months indicates a therapeutic failure, and the third vaccine dose need not be given if HBsAg is found. If a mother's HBsAg-positive status is not discovered until after delivery, prophylaxis should still be administered if a venous (not cord) blood sample from the infant is HBsAg-negative. Testing for HBsAg and anti-HBs is recommended at 12-15 months to monitor the final success or failure of therapy. If HBsAg is found, it is likely that the child is a chronic carrier. If HBsAg is not detected, and anti-HBs is present, the child should be considered immune. Since maternal antibody to the core antigen (anti-HBc) may persist for more than 1 year, testing for anti-HBc may be difficult to interpret during this period.

HB vaccine is an inactivated product, and it is presumed that it will not interfere with other simultaneously administered childhood vaccines. HBIG administered at birth should not interfere with oral polio and diphteria-tetanus-pertussis vaccines administered at about 2 months of age.

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COMMUNICABLE DISEASES REPORTED

CONNECTICUT

Weeks 1-20
(thru May 16, 1986)

Name	1986 To Date	1985 To Date	% Change From 1985
AIDS	71	34	+108.8
GONORRHEA	2478	3783	- 34.5
SYPHILIS P&S	62	89	- 30.3
MEASLES	0	2	-100.0
RUBELLA	1	0	-----
TUBERCULOSIS	73	48	+ 52.1
HEPATITIS A	44	21	+109.5
HEPATITIS B	122	106	+ 15.1
SALMONELLOSIS	179	216	- 17.1
SHIGELLOSIS	39	35	+ 11.4

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