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INFLUENZA TESTING

Isolation and identification of circulating influenza virus strains is an important part of Connecticut's influenza surveillance system. The Connecticut Department of Public Health encourages physicians to submit throat swabs for virus isolation to the Department's Virology Laboratory from patients with a typical influenza syndrome (abrupt onset of fever, myalgia, and cough). Specimens should be collected no later than 3 days after onset of symptoms and sent immediately to the Virology Laboratory on wet ice, if possible.

Throat swab kits (VRCs) may be obtained from the State laboratory (860-509-8501). Throat swabs submitted by a health care provider for influenza will be exempt from fees effective November 1, 1997 through February 30, 1998. To be eligible for the fee exemption, the health care provider must specify "FLU STUDY" in Section #1 of the Virology request form. All requested information on the form should be provided as well. For questions on specimen collection and submission, call the Virology Laboratory in Hartford at (860) 509-8553.

INFLUENZA SURVEILLANCE SENTINEL PHYSICIAN PILOT PROJECT

The Connecticut Department of Public Health (DPH) is participating in the Influenza Sentinel Physician Surveillance Pilot Project, a collaborative project involving state health departments and the Centers for Disease Control

and Prevention (CDC). The overall goals of this project are to:

- Optimize national capabilities for monitoring antigenic changes, morbidity, and mortality related to influenza.
- Develop a national influenza surveillance system that will provide early warning and adequate monitoring capabilities in the setting of the next pandemic.

The system will operate from October 1 to mid-May of each year. The main outcome of interest is the number of clinical cases consistent with influenza (i.e., influenza-like illness or ILI) occurring in the general population. The standard ILI case definition is: fever $\geq 100^{\circ}\text{F}$ and cough or sore throat in the absence of a known cause. Each physician will provide the following summary data each week: (1) the total number of patient visits; and (2) the number of patient visits for ILI by age groups [0-4 years (preschool), 5-24 years (school age through college), 25-64 years (adults), and ≥ 65 years (older adults)].

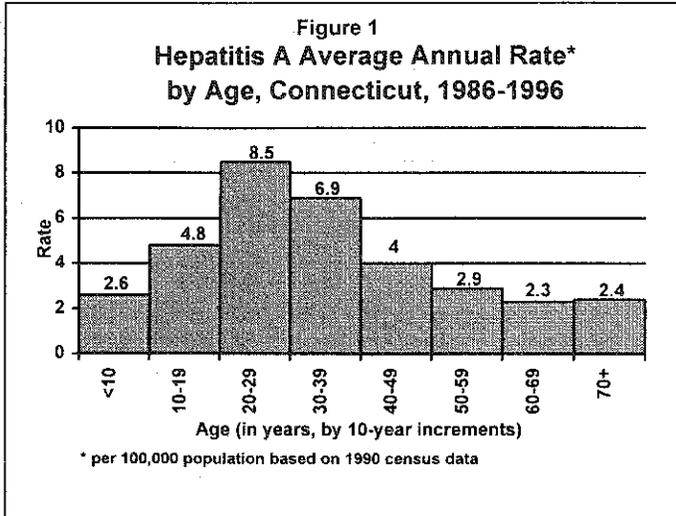
The ILI case data are sent by participating physicians to the CDC weekly via toll-free telephone numbers. Summary data will be included in weekly surveillance update reports from the CDC.

In Connecticut, the sentinel physician system will be an adjunct to our laboratory-based surveillance system for influenza. Connecticut-specific summary data will be available from DPH. Twelve physicians have agreed to participate in the project.

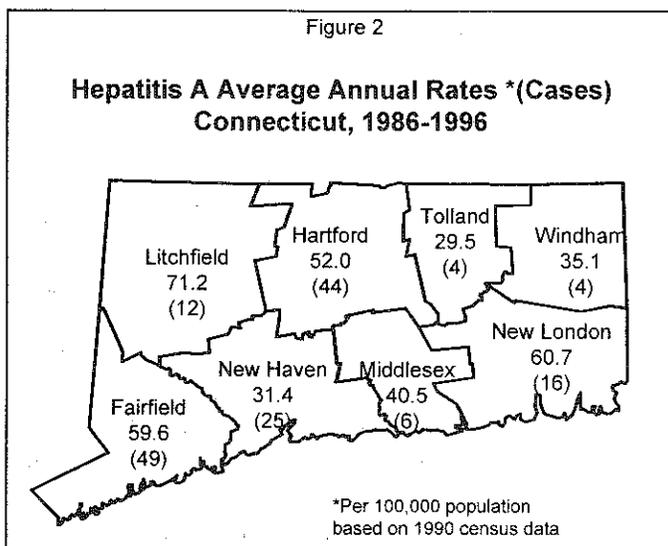
For additional information on the Influenza Sentinel Physician Surveillance Pilot Project, please contact Dr. Zygmunt Dembek in the Epidemiology Program, DPH at (860) 509-7994.

HEPATITIS A IN CONNECTICUT 1986-1996

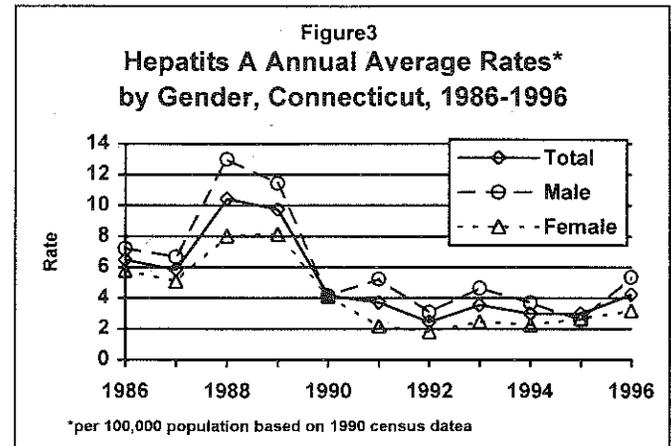
Hepatitis A is an enterically transmitted viral disease reportable by physicians and laboratories. From 1986 through 1996, a total of 1,860 cases of Hepatitis A were reported to the Connecticut Department of Public Health. Fifty-eight percent of the cases involved males. Persons aged 20-39 years accounted for 948 (51%) cases. The highest incidence occurred in the 20-29 year age group (average 8.5 cases per 100,000 population per year) (Figure 1).



Litchfield County reported the highest average annual rate of hepatitis A (71.2 cases per 100,000 population), while Tolland County reported the lowest (29.5 cases per 100,000 population). The highest average annual number of cases was reported in residents of Fairfield County and the lowest in residents of Windham County (49 and 4 respectively) (Figure 2).



In 1996, the rate of 4.2 cases per 100,000 population was the highest observed since 1989 (9.7 cases per 100,000 population) (Figure 3). This trend appears to be continuing with more cases of hepatitis A being reported in 1997 (106 cases as of September 30, 1997) than in the previous 7 years. The annual rate for males has exceeded that of females every year except for 1990 and 1995 when the rates were equal.



EDITORIAL NOTE: Hepatitis A is an acute inflammatory condition of the liver caused by the hepatitis A virus (HAV). In most cases, the disease is acquired by ingestion of the virus, which is then shed in the stool of infected individuals beginning 2 weeks before and 1 week after onset of symptoms (fecal-oral transmission). Very small numbers of HAV can produce infection, thus, the disease is highly infectious. Infection with HAV confers lifelong immunity. There is no chronic carrier state for hepatitis A, nor does it cause chronic liver disease. Many hepatitis A cases have minimal symptoms and go undiagnosed and therefore unreported (1).

Transmission of HAV is enhanced by poor personal hygiene and overcrowding. Common source outbreaks of hepatitis A have been strongly associated with contaminated food (2,3), or consumption of inadequately treated water (4). Other risk factors include having lived in the same household with a patient with hepatitis A (5), male homosexual activity (6,7), intravenous drug usage (8,9), and close contact with young diapered children attending day-care centers (10). Approximately 40% of patients with hepatitis A report no apparent risk factors (5).

For the past decade, the incidence of HAV in Connecticut, as determined by the passive reporting system, has dramatically decreased. A national peak in the hepatitis A case rate in 1989

was closely paralleled by a Connecticut peak in 1988 (11). Hepatitis A case rates in Connecticut were higher than national rates during 1986-89, and have been lower than national rates from 1990-1996 (11). Nationally, the incidence of hepatitis A has been higher than the Connecticut 11-year average for each of the past 4 years (hepatitis A was the fifth most frequently reported nationally notifiable infectious disease in 1995), with a peak in 1993 (11,12).

Hepatitis A occurs most frequently in the 5-30 year age group (13), and in a recent summary of national data for 1983-1993, the greatest number of hepatitis A cases were reported in the 15-24 year old age group (13). In Connecticut during 1986-1996, the 20-29 and 30-39 year age groups accounted for 51% of the total cases. There was a greater number of hepatitis A cases among males (58%) than females (42%). These results are consistent with the previously reported sex ratio among cases of 1.3-1.5:1 (male:female) in recent years (13). This ratio may be a result of risk behaviors that result in poor personal hygiene (illicit substance abuse) or fecal contact (male sex) (11,14).

Vaccine for hepatitis A immunization is now available and guidelines from the Advisory Committee on Immunization Practices for vaccine use have been published (15). Both vaccine and immune globulin are effective in the prevention of hepatitis A outbreaks (16,17). Hepatitis A vaccine is recommended for active immunization of all persons 2 years of age (15). While hepatitis A vaccine may have a role in post-exposure prophylaxis of hepatitis A, immune serum globulin remains the treatment of choice following acute exposures (15).

Persons who are at higher than average risk of hepatitis A and who are high priority candidates for vaccination against hepatitis A include: travelers to countries that have high or intermediate endemicity of infection; men who have sex with men; illegal (both injection and non-injection) drug users; persons who work with HAV-infected patients; and persons who have chronic liver disease or clotting-factor disorders.

During 1996, foodhandlers in five restaurants and one delicatessen located in four different communities in Connecticut were known to work during their initial prodromal infection period with hepatitis A. In all of these instances, infected foodhandlers were employed by more than one establishment, placing many patrons at risk for

hepatitis A. Recently, the Massachusetts Department of Public Health required inoculation against hepatitis A of all food handlers in Provincetown, where 10% of their 1996 statewide hepatitis A cases originated. Because foodhandlers with acute HAV infection can potentially expose large numbers of other persons, we encourage consideration of vaccination of foodhandlers at the time of their employment.

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10 Things to do to Prevent Infectious Diseases

- 1. Keep immunizations up to date.** ■ Follow recommended immunizations for children and adults
■ Don't forget your pets.
- 2. Wash your hands often, especially during cold and flu season. Be sure to wash your hands:**
■ After using the bathroom ■ Before preparing or eating food ■ After changing a diaper
■ After blowing your nose or sneezing or coughing ■ After caring for a sick person
■ After playing with a pet
- 3. Be aware of what you eat, and be careful how you prepare it.**
■ Keep hot foods hot and cold foods cold until eaten or cooked ■ Be sure temperature controls in refrigerators and freezers are working properly ■ Wash counters, cutting boards, and utensils frequently with soap and hot water, especially after preparing poultry or other meats ■ Wash fresh fruits and vegetables before eating ■ Cook ground beef until you can no longer see any pink
- 4. Use antibiotics exactly as prescribed.** ■ Take them for the full course prescribed by your doctor, but not for colds or other nonbacterial illnesses ■ Never self-medicate with antibiotics or share them with family or friends.
- 5. Report to your doctor any quickly worsening infection or any infection that does not get better after you take a prescribed antibiotic.**
- 6. Be cautious around all animals and domestic animals that are not familiar to you.** ■ After any animal bite, clean the skin with soap and water, and seek medical care immediately.
- 7. Avoid areas of insect infestation. Use insect repellents on skin and clothing when in areas where ticks or mosquitoes are common.** ■ If you have visited wooded or wilderness areas and are now sick, your doctor needs all the details to diagnose both rare and common illnesses quickly.
- 8. Avoid unsafe, unprotected sex and injecting drug use.**
- 9. Stay alert to disease threats when you travel or visit undeveloped areas.**
■ Get all recommended immunizations, and use protective medications for travel, especially to areas with malaria. ■ Don't drink untreated water while hiking or camping. ■ If you become ill when you return home, tell your doctor where you've been.
- 10. When sick, allow yourself time to heal and recover.** ■ Be courteous to others: wash your hands frequently, and cover your mouth when you sneeze or cough.

Source: American Association for World Health

Division of Infectious Diseases, James L. Hadler, MD, MPH, State Epidemiologist <i>AIDS Epidemiology</i> - Alicia Roach, PhD, Program Coordinator (860) 509-7900 <i>Epidemiology</i> - Matthew L. Carter, MD, MPH, Program Coordinator (860) 509-7994 <i>Immunizations</i> - Vincent Sacco, Acting Program Coordinator (860) 509-7929 <i>Pulmonary Diseases</i> - Joseph Marino, Program Coordinator (860) 509-7722 <i>Sexually Transmitted Diseases</i> - Ted Pestorius, Program Coordinator (860) 509-7920		Connecticut Epidemiologist Editor: Matthew L. Carter, MD, MPH Assistant Editor: Starr-Hope Ertel
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State of Connecticut
 Department of Public Health
 Division of Infectious Diseases
 410 Capitol Avenue, MS#11FDS
 P.O. Box 340308
 Hartford, CT 06134-0308

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