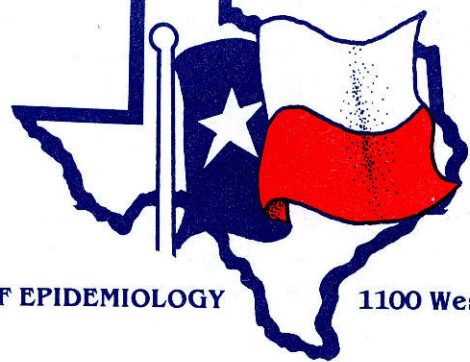


Texas Preventable Disease



NEWS

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BUREAU OF EPIDEMIOLOGY

1100 West 49th Street, Austin, Texas 78756 (512-458-7207)

INFLUENZA VIRUS ACTIVITY IN TEXAS DURING THE 1984-1985 INFLUENZA SEASON

Influenza viruses consistently cause widespread respiratory illnesses during the winter months. Intensive surveillance allows the early detection of virus activity, identification of groups of persons at risk, and identification of possible new strains. The following describes the surveillance methods used during the 1984-1985 influenza season.

METHODOLOGY

Cases of influenza and influenza-like illnesses were reported weekly by numeric totals to the TDH Bureau of Epidemiology through the routine morbidity reporting system. This system encompasses over 500 reporting sources, including physicians, city and county health departments, and hospitals.

Influenza isolates were reported to the Bureau of Epidemiology through a virus surveillance system involving eighteen participating laboratories located in Austin (1), Dallas (4), Galveston (2), Houston (5), Lubbock (1), San Antonio (4), and Temple (1).

A telephone surveillance system was utilized to ascertain absentee levels in public schools throughout the state. Public school districts were randomly chosen from an alphabetic listing and telephoned to ascertain total number of students absent at each school for a given day. One district was telephoned each working day, Monday through Friday, from January through March 1985. If schools were closed in a district (eg, for inclement weather), another district was chosen. Influenza virus activity was defined as an absentee level >10% for any school on any given day.

The number of deaths and the number of deaths attributed to pneumonia and influenza (P & I) for all age groups during October through May in the cities of Austin, Corpus Christi, Dallas, El Paso, Fort Worth, Houston, and San Antonio were obtained from the Morbidity and Mortality Weekly Report. A pneumonia mortality rate of five percent or less per month occurs year round. A rate greater than five percent is considered to be caused by influenza virus.

RESULTS AND DISCUSSION

The 1984-85 influenza season was similar to the 1982-83 season in number of reported cases. The 1982-83 epidemic was caused by influenza A/Bangkok, an H3N2 virus. Influenza A (H1N1) and B viruses were responsible for the 1983-84 epidemic. In the 1984-85 influenza season, 628 influenza A (H3N2), 5 influenza B, and 4 influenza A (H1N1) viruses were reported. The first influenza A (H3N2) virus was cultured from a throat swab specimen collected on December 10, 1984, in Houston, and the last was collected on March 11, 1985, also in Houston. Two influenza B viruses were identified in specimens collected in April.

AUG 15 1985

The temporal distribution of school absentee levels and the percentage of absenteeism from 903 schools in 1984 and 282 schools in 1985 are presented in Figure 1. During week 5 (January 29 - February 4) in 1984, 70% of the schools surveyed had absentee levels above 10%. Only 18% of the schools surveyed during the peak week in 1985 (week 4, January 20-26) had absentee levels above 10%. Apparently, the influenza A (H1N1) and B viruses circulating in 1983-84 caused greater morbidity among school-aged children in 1984 than did the A (H3N2) viruses circulating in 1984-85.

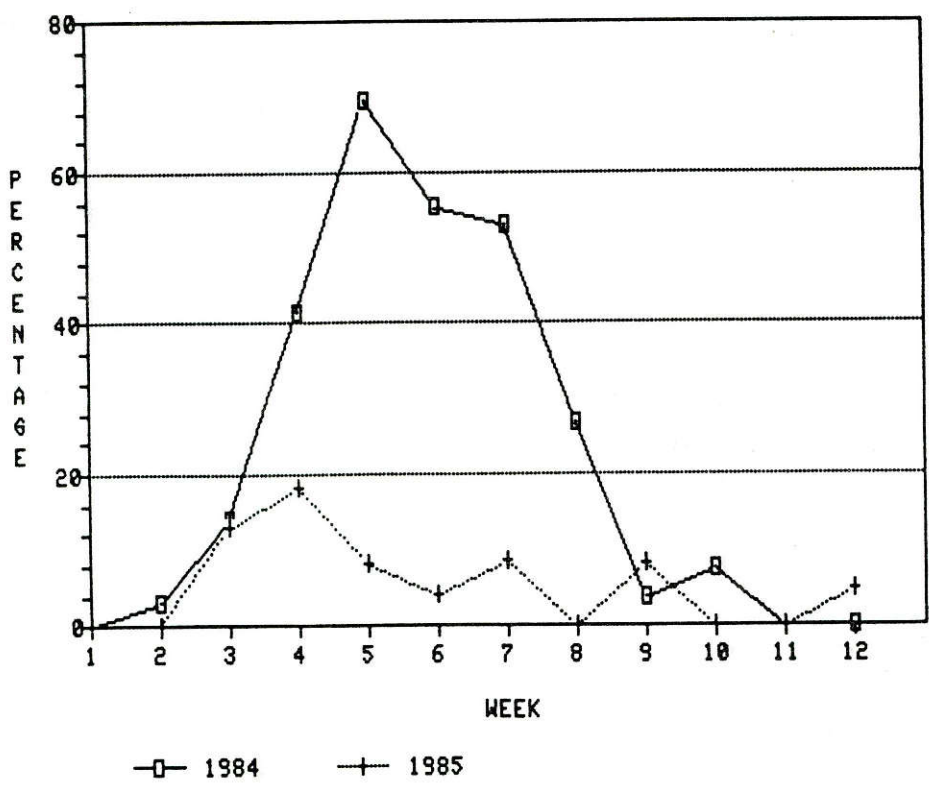
In 1984, the percentage of pneumonia deaths peaked at 6.4% during the period February 24 through March 9. The percentage of deaths due to P & I peaked at 7.7% during the two week period ending week 6 (January 27 - February 9) in 1985. The percentage remained above 7% for two more weeks, February 10 through February 23, 1985.

SUMMARY

Analysis of reported cases of influenza, school absentee levels, and influenza virus isolates in 1984-85 indicate that the peak of influenza virus activity in Texas occurred from late January through early March. The influenza epidemic was less severe, when compared by number of reported cases and school absentee levels, than the epidemic in 1983-84. Mortality data suggest that the A (H3N2) strain caused more deaths during the 1984-85 season than the strains circulating during the 1983-84 season.

This report was prepared by Jeffery P. Taylor, MPH, Staff Epidemiologist, Bureau of Epidemiology, Texas Department of Health.

Figure 1. Percentage of schools with absentee levels above 10%, Texas, 1984-1985.



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TUBERCULOSIS CONTROL DIVISION NOTES

Indochinese Refugees:

Some Indochinese refugees resettling in Texas from the Philippines will have been tuberculin skin tested overseas as part of a special Centers for Disease Control study designed to evaluate the high prevalence of significant skin tests observed in the US refugee population (30% to 50%). Results of these tuberculin tests and documentation of any therapy administered will be attached to form OF-157 (Medical Examination of Visa Applicants) accompanying each newly arriving refugee. Those who present documentation of such testing do not need to be routinely retested as part of the refugee health assessment in Texas. It is recommended that refugees who have a tuberculin skin test recorded as ≥ 10 mm receive isoniazid preventive therapy for a total of 12 months according to Centers for Disease Control/American Thoracic Society recommendations.

Streptomycin:

The Division is still unable to purchase streptomycin in solution form. We will continue to provide streptomycin in powder form for the next several months.

Annual Report:

The Tuberculosis in Texas Annual Report - 1984 will be available from the TDH Print Shop this month. Individual copies can be obtained by contacting the Tuberculosis Control Division.

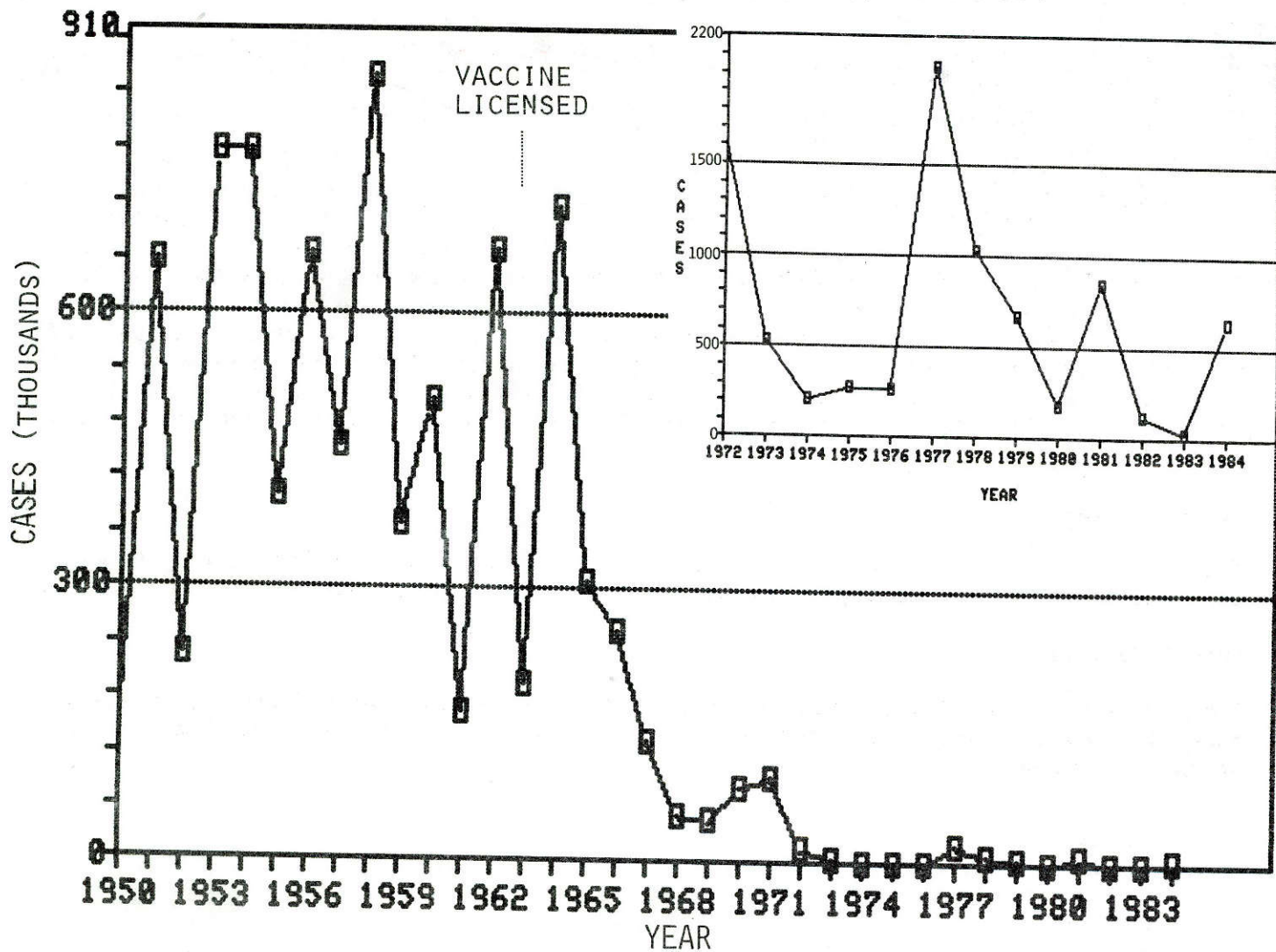
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NITROCELLULOSE PAPER USED IN WESTERN BLOT TEST --
FIRE AND POTENTIAL EXPLOSION HAZARD

Nitrocellulose paper is used in a variety of laboratory electrophoresis and gel-diffusion procedures, including the Western blot test. Nitrocellulose paper poses a well-recognized fire hazard and can be ignited at most ambient temperatures likely to be encountered in operating laboratories.

Additionally, nitrocellulose paper may be highly reactive and can detonate or explode when heated under the confinement conditions present in the closed chamber of a steam autoclave. Therefore, potentially infectious gels deposited on nitrocellulose paper should not be decontaminated by autoclaving. Instead, such materials should be decontaminated by immersing in a 10% aqueous solution of household laundry bleach for 30 minutes. Following removal from the bleach solution, nitrocellulose paper can be disposed of by incineration or burial in a sanitary landfill.

REPORTED MEASLES CASES -- TEXAS, 1950-1984



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