

NEWS

contents:

PDN Surveillance Summary for 1986

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PDN SURVEILLANCE SUMMARY FOR 1986

The following are summaries of selected surveillance activities conducted by the Bureau of Epidemiology during 1986. The complete report, "Reported Morbidity and Mortality in Texas - 1986 Annual Summary," will be available later this year.

I. INFECTIOUS DISEASE SURVEILLANCE

Arboviral Encephalitis: Three cases of western equine encephalitis (WEE) were reported within one week in rural residents of Deaf Smith County (Public Health Region 1) and Hale County (PHR 2). The two cases from Deaf Smith County occurred in infants less than 6 weeks of age who experienced onset of illness July 30 and August 1, respectively. The third case, a teenage girl in Hale County, had onset of illness August 3, 1986. All of the individuals recovered from the acute illness; however, longterm sequelae for the infants has yet to be determined.

Nationally, St. Louis encephalitis (SLE) virus activity centered along the Gulf Coast from New Orleans to Corpus Christi, with the majority of cases occurring among Texas residents (35/42). Of the 35 Texas cases, 21 were residents of Baytown in Harris County. The outbreak began in Baytown in late July and lasted there through September (Figure 1). Cases occurring in Matagorda and Nueces counties had onset in September and October. The age distribution of cases was typical of SLE infections: 2 cases, birth to 20 years; 12 cases, 21 to 40 years; 6 cases, 41 to 60 years; and 15 cases older than age 61. Seven of the individuals died; six of these were above the age of 61, for a case-fatality ratio in that age group of 40%.

Congenital Rubella Syndrome: Three cases of congenital rubella syndrome were reported in Texas in 1986. These were the first cases to have been documented in the state since 1981 when one case was reported. The immunization status of two of the mothers, ages 23 and 25 years, is unknown. Histories were difficult to obtain, as these women had recently immigrated to the United States (one from Honduras, the other from Pakistan) and neither spoke English. However, both of these mothers did recall a rubella-like illness early in pregnancy. One case was acquired in Pakistan; the other, after the woman arrived in Texas. The third mother, age 19, reported that she received a rubella immunization when she was six years old. This woman resided in a small community north of Waco. Upon investigation, it was determined that a small cluster of rubella cases had been reported in April 1986 from the same town. The mother most probably experienced an asymptomatic or mild case of rubella during her first trimester which resulted in infection in her unborn child. These three cases serve as a reminder that all women of child-bearing age who are susceptible to rubella should be vaccinated.

Dengue: Seventeen confirmed cases of dengue were reported in Texas residents during 1986. Seven cases were individuals who most likely acquired their infections while traveling in Mexico. Four reported recent travel to Monterrey; two, to Ciudad Victoria; and one, to Matamoros. Ten cases were classified as indigenous; these patients reported no travel outside Texas in the two weeks prior to onset of illness. These were the first cases of indigenous dengue reported in Texas since 1980. With the exception of one imported case in Bexar County, all cases occurred in South Texas (PHR 8). Dates of onset ranged from July 7 to November 16, with the majority of cases occurring in August and September. All of the cases were serologically confirmed, and two cases were also confirmed by isolation of the dengue type 1 virus by the TDH Bureau of Laboratories.

Influenza: A total of 78,073 cases of influenza and flu-like illness was reported to the Bureau of Epidemiology during 1986. The number of reported cases increased from week 1, peaking

during week 10 (Figure 2). The number of cases decreased to less than 800 cases per week during the summer months. The beginning of another peak is evident in week 42. Three influenza virus types were present in Texas during 1986. Influenza A (H3N2) and influenza B viruses circulated primarily in January and February (Figure 3). Influenza A (H1N1) viruses appeared in October 1986 and were responsible for influenza activity in November and December 1986.

Shigellosis Outbreak: From August 30 through October 7, 1986, 347 persons developed culture-confirmed *Shigella sonnei* gastroenteritis in Odessa and Midland (PHR 12). Illness was associated with eating at one of several fast-food restaurants in Midland or Odessa. A case-control study of persons who had eaten at one of the Odessa restaurants demonstrated an association between shigellosis and having eaten foods containing shredded lettuce (odds ratio = 58; 95% confidence limits = 7.6, 237). Surveillance in other West Texas towns identified two clusters of *Shigella sonnei* infections related to eating at the outlets of one fast-food restaurant in those towns. All the implicated restaurants received shredded lettuce that had been prepared by the same processing plant. This plant also distributes intact lettuce; restaurants that received only intact lettuce were not associated with the outbreak. Investigation of the processing plant did not identify the mode by which the lettuce was contaminated.

II. ENVIRONMENTAL DISEASE SURVEILLANCE

Neural Tube Defects: Neural tube defects are a group of congenital anomalies which are considered to have a possible environmental etiology. Birth, death, and fetal death records of Texas births for 1984 were surveyed for cases of anencephaly and spina bifida. One hundred twenty-two cases (4.1 cases per 10,000 total births) of anencephaly and 128 cases (4.3 per 10,000 total births) of spina bifida were found in this survey. The CDC Birth Defects Monitoring Program reported US 1984 rates of 2.6 per 10,000 total births for anencephaly and 4.9 per 10,000 total births for spina bifida. CDC rates are obtained from hospital discharge data on live and stillborn births (about 22 % of all US births). For anencephaly in Texas, females had higher rates than males, and Hispanic births (5.2 per 10,000 live births) had the highest rates of all ethnic groups. These trends were not noted with spina bifida in which case underascertainment is more likely. For month of birth, October-births had the highest incidence of both anencephaly and spina bifida.

Occupational Disease Reporting: In 1985, a law was passed in Texas requiring the reporting of certain occupational diseases to the Texas Department of Health. As of September 1, 1985, newly confirmed or suspected diagnoses of asbestosis, silicosis, acute occupational pesticide poisoning, and adult elevated blood lead (blood lead ≥ 40 $\mu\text{g}/\text{dl}$ blood in persons ≥ 15 years of age) are reportable. December 31, 1986 marked the end of the first complete year of occupational disease reporting. In all, 554 reports of elevated blood lead were received by TDH. Twelve of these reports were deemed serious enough to warrant investigations, which resulted in recommendations for reducing lead exposure in four worksites. (Data on the three other reportable occupational diseases are unavailable at this time.)

III. CANCER SURVEILLANCE

Cancer Incidence In PHR 3 and PHR 9: Cancer, in addition to the many infectious diseases, is a reportable disease in Texas. Although the goal of the Texas Cancer Registry is to collect and report cancer cases for the entire state population, lack of resources has forced the Registry to direct efforts toward obtaining complete coverage for specific public health regions. In 1986, the cancer incidence in PHR 3 and PHR 9 for the years 1976 through 1980 was determined. (Copies of these reports are available from the TDH Cancer Registry Division.)

The leading causes of cancer incidence for PHR 3 males and females were cancers of the prostate and breast, respectively. For PHR 9, cancer of the lung among males and cancer of the breast among females were the leading causes. Ethnic differences were observed in the incidence rate of cancer among residents in both regions. In general, total cancer incidence was lower among Hispanics as compared with Anglos, primarily due to the lower rates of respiratory cancer among Hispanics. For PHR 9 males, cancer incidence was highest among blacks. Slightly higher cancer incidence was seen among PHR 9 residents as compared with PHR 3 residents, largely due to higher rates of lung cancer among PHR 9 males and breast cancer among PHR 9 females.

1986 SUMMARY OF REPORTABLE DISEASES IN TEXAS

| DISEASE | PHR1 | PHR2 | PHR3/12 | PHR4 | PHR5 | PHR6 | PHR7/10 | PHR8 | PHR9 | PHR11 | TOTAL1986 | TOTAL1985 |
|-----------------------------|-------|-------|---------|-------|--------|-------|---------|--------|-------|--------|-----------|-----------|
| AMEBIASIS | 51 | 51 | 241 | 41 | 661 | 641 | 01 | 1181 | 301 | 781 | 3941 | 2791 |
| BOTULISM | 11 | 01 | 11 | 01 | 21 | 01 | 01 | 01 | 01 | 11 | 51 | 41 |
| BRUCELLOSIS | 01 | 01 | 01 | 01 | 21 | 01 | 51 | 81 | 11 | 21 | 181 | 471 |
| CAMPYLOBACTERIOSIS | 281 | 191 | 801 | 221 | 1091 | 1151 | 391 | 381 | 661 | 2871 | 8031 | 6661 |
| CHICKENPOX | 2381 | 1781 | 22851 | 6211 | 57621 | 15621 | 19641 | 28121 | 23581 | 54481 | 232281 | 207581 |
| COCCIDIOIDOMYCOSIS | 21 | 11 | 161 | 11 | 31 | 81 | 01 | 71 | 71 | 51 | 501 | 211 |
| DENGUE | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 161 | 11 | 01 | 171 | 11 |
| ENCEPHALITIS | 41 | 91 | 31 | 41 | 391 | 71 | 221 | 81 | 221 | 731 | 1911 | 1421 |
| HANSEN'S DISEASE | 31 | 01 | 01 | 01 | 51 | 21 | 21 | 91 | 41 | 41 | 291 | 281 |
| H. INFLUENZAE INFECTIONS | 131 | 181 | 231 | 251 | 1861 | 721 | 281 | 361 | 611 | 1461 | 6081 | 5541 |
| HEPATITIS A | 621 | 771 | 2921 | 1751 | 6791 | 1881 | 541 | 1691 | 2631 | 1781 | 21371 | 25651 |
| HEPATITIS B | 231 | 371 | 1531 | 591 | 4581 | 1041 | 771 | 1151 | 1571 | 3171 | 15001 | 15131 |
| HEPATITIS NA-NB | 81 | 31 | 131 | 81 | 591 | 171 | 101 | 111 | 191 | 571 | 2851 | 1781 |
| HEPATITIS UNSPECIFIED | 71 | 221 | 621 | 161 | 3351 | 361 | 401 | 1461 | 501 | 1401 | 8541 | 12901 |
| HISTOPLASMOSIS | 11 | 11 | 11 | 01 | 151 | 181 | 51 | 41 | 11 | 311 | 771 | 441 |
| INFLUENZA | 40981 | 28581 | 44721 | 63351 | 171981 | 39581 | 64651 | 155541 | 75351 | 150511 | 835241 | 961641 |
| LEGIONELLOSIS | 11 | 21 | 31 | 21 | 51 | 11 | 51 | 31 | 31 | 161 | 411 | 291 |
| LEPTOSPIROSIS | 01 | 01 | 01 | 11 | 31 | 11 | 11 | 01 | 01 | 01 | 61 | 61 |
| LISTERIOSIS | 11 | 11 | 11 | 11 | 71 | 31 | 11 | 11 | 41 | 81 | 281 | N/A1 |
| LYME DISEASE | 01 | 01 | 01 | 11 | 41 | 01 | 01 | 01 | 01 | 01 | 51 | N/A1 |
| MALARIA | 31 | 01 | 01 | 01 | 281 | 91 | 21 | 31 | 91 | 301 | 841 | 931 |
| MEASLES | 01 | 01 | 971 | 01 | 1391 | 41 | 1201 | 171 | 111 | 101 | 3981 | 4501 |
| MENINGITIS, ASEPTIC | 81 | 321 | 161 | 261 | 2731 | 1291 | 1191 | 21 | 1251 | 6341 | 13831 | 9891 |
| MENINGITIS, OTHER/BACTERIAL | 51 | 141 | 81 | 91 | 1801 | 421 | 241 | 211 | 271 | 2031 | 5331 | 4231 |
| MENINGOCOCCAL INFECTIONS | 11 | 51 | 21 | 71 | 491 | 151 | 181 | 111 | 101 | 201 | 1381 | 1321 |
| MUMPS | 71 | 91 | 271 | 11 | 611 | 141 | 101 | 331 | 191 | 581 | 2391 | 3211 |
| PERTUSSIS | 11 | 81 | 61 | 71 | 221 | 181 | 141 | 61 | 111 | 191 | 1121 | 3791 |
| PSITTACOSIS | 01 | 01 | 01 | 01 | 01 | 01 | 01 | 11 | 11 | 21 | 41 | 11 |
| RELAPSING FEVER | 01 | 01 | 01 | 01 | 01 | 11 | 01 | 01 | 01 | 01 | 11 | 01 |
| REYE SYNDROME | 21 | 11 | 11 | 01 | 01 | 11 | 11 | 21 | 01 | 01 | 81 | 131 |
| RMSF | 01 | 01 | 01 | 11 | 51 | 31 | 81 | 11 | 01 | 31 | 211 | 331 |
| RUBELLA | 21 | 151 | 71 | 11 | 181 | 191 | 61 | 31 | 11 | 61 | 781 | 521 |
| SALMONELLOSIS | 621 | 601 | 1731 | 851 | 5921 | 2451 | 2191 | 3051 | 1241 | 5801 | 24451 | 24421 |
| SHIGELLOSIS | 1311 | 351 | 5941 | 731 | 3531 | 1901 | 591 | 2071 | 2381 | 5741 | 24541 | 17181 |
| TETANUS | 01 | 11 | 21 | 01 | 21 | 21 | 11 | 21 | 21 | 01 | 121 | 91 |
| TOXIC SHOCK SYNDROME | 01 | 01 | 21 | 01 | 101 | 11 | 01 | 11 | 11 | 31 | 181 | 271 |
| TRICHINOSIS | 01 | 01 | 01 | 01 | 11 | 11 | 01 | 01 | 01 | 01 | 21 | 31 |
| TULAREMIA | 01 | 01 | 11 | 01 | 11 | 01 | 21 | 31 | 11 | 01 | 81 | 81 |
| TYPHOID FEVER | 01 | 11 | 21 | 01 | 81 | 11 | 01 | 61 | 21 | 81 | 281 | 321 |
| TYPHUS FEVER, ENDEMIC | 01 | 01 | 01 | 41 | 11 | 01 | 11 | 451 | 11 | 01 | 521 | 251 |

NOTE: No cases of anthrax, cholera, diphtheria, hepatitis D, plague, Q fever, rabies in man, or yellow fever were reported in Texas in 1986.

1986 SUMMARY OF REPORTABLE OCCUPATIONAL DISEASES IN TEXAS

| REGION | 1 | 2 | 3/12 | 4 | 5 | 6 | 7/10 | 8 | 9 | 11 | STATEWIDE 1986 |
|--|---|---|------|---|-----|---|------|---|---|----|----------------|
| ELEVATED BLOOD LEAD LEVELS † | 5 | 3 | 39 | 2 | 549 | | 10 | | 5 | 25 | 638 |
| ACUTE OCCUPATIONAL PESTICIDE POISONING § | | | | | | | | | | | |
| SILICOSIS § | | | | | | | | | | | |
| ASBESTOSIS § | | | | | | | | | | | |

† Blood lead level ≥40 ug/dl in persons 15 years of age or older; summarized by date of blood lead test.

§ Regular summaries of these reportable occupational diseases will be included as reporting procedures become better established.

1986 SUMMARY OF DISEASES REPORTED TO THE BUREAU OF COMMUNICABLE DISEASE SERVICES

| REGION | 1 | 2 | 3/12 | 4 | 5 | 6 | 7/10 | 8 | 9 | 11 | STATEWIDE 1986 | 1985 |
|--------------|------|------|------|------|-------|------|------|------|------|-------|----------------|-------|
| TUBERCULOSIS | 14 | 16 | 102 | 26 | 409 | 114 | 138 | 251 | 155 | 665 | 1890 | 1891 |
| P&S SYPHILIS | 43 | 104 | 170 | 41 | 1540 | 273 | 300 | 118 | 309 | 1069 | 3967 | 4610 |
| GONORRHEA | 1278 | 1268 | 3328 | 1623 | 10739 | 6098 | 5399 | 1729 | 4187 | 17727 | 63376 | 66728 |

Figure 1.
Number of reported SLE cases by week
of onset, Texas, 1986

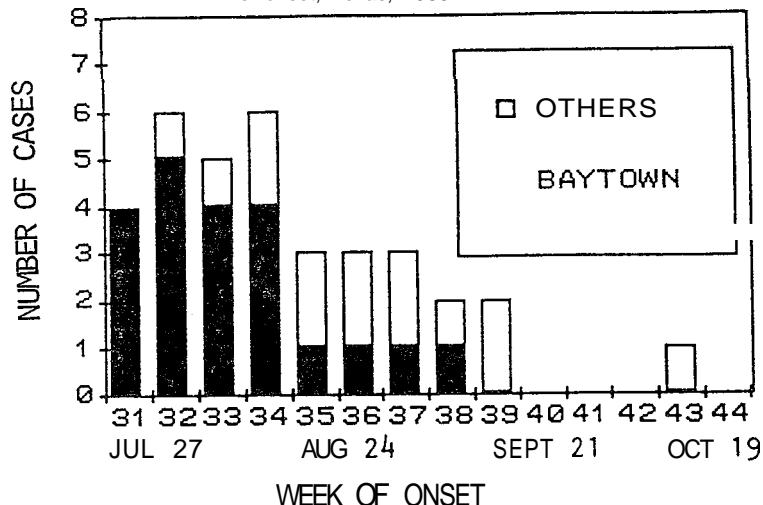


Figure 2.
Number of reported influenza cases
by week, Texas, 1986

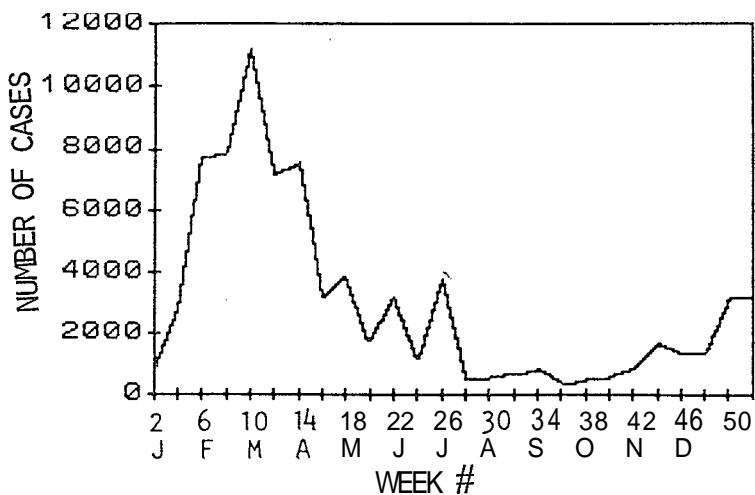
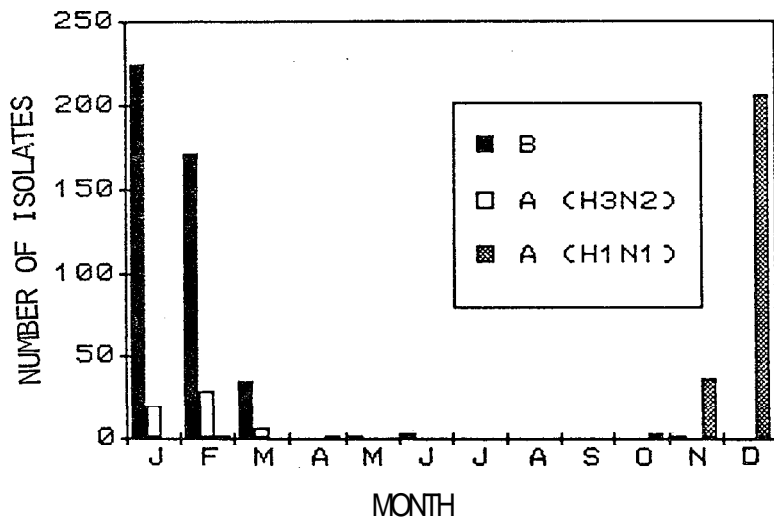


Figure 3.
Number of influenza virus isolates
by month, Texas, 1986



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