

NEWS

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contents:

PDN Surveillance Summary for 1986

TEXAS STATE DOCUMENTS
COLLECTION

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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	PHR: 1	PHR: 2	PHR: 3/12	PHR: 4	PHR: 5	PHR: 6	PHR: 7/10	PHR: 8	PHR: 9	PHR: 11	TOTAL: 1986	TOTAL: 1985
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-NE	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	01	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	211	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

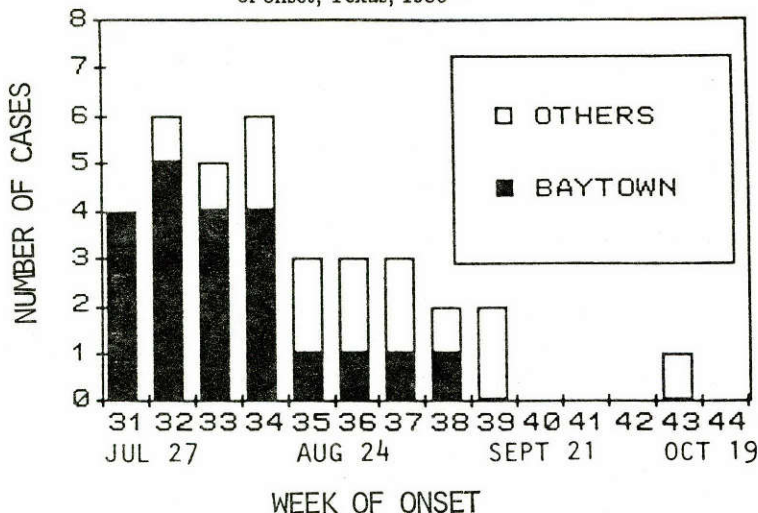


Figure 2.
Number of reported influenza cases
by week, Texas, 1986

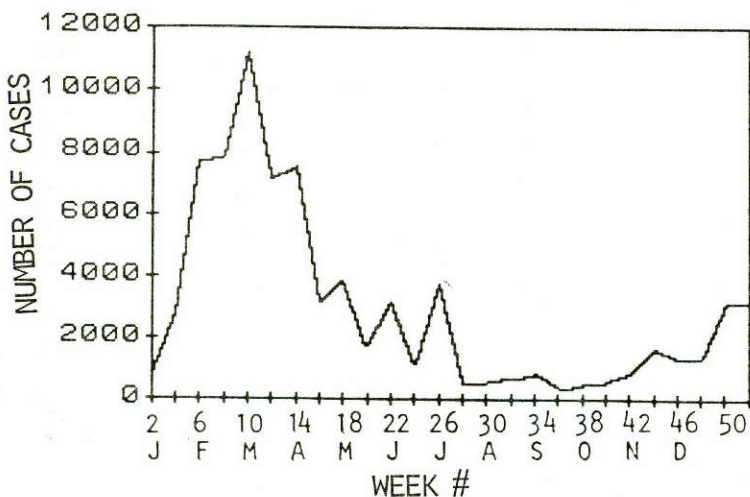
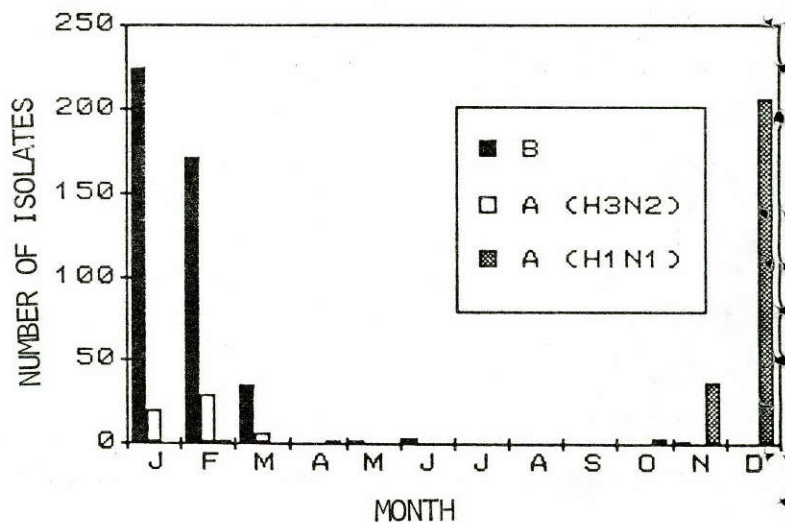


Figure 3.
Number of influenza virus isolates
by month, Texas, 1986



TEXAS PREVENTABLE DISEASE NEWS (ISSN 8750-9474) is a free, weekly publication of the Texas Department of Health, 1100 West 49th Street, Austin, TX 78756-3180. Second-class postage paid at Austin, TX. POSTMASTER: Send address changes to TEXAS PREVENTABLE DISEASE NEWS, 1100 West 49th Street, Austin, TX 78756-3180.

TEXAS PREVENTABLE DISEASE NEWS
Texas Department of Health
1100 West 49th Street
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