REPORTED MORBIDITY AND MORTALITY IN TEXAS

1979 ANNUAL SUMMARY

TEXAS DEPARTMENT OF HEALTH

October 1980/Vol. 2

EPIDEMIOLOGY DIVISION
BUREAU OF COMMUNICABLE DISEASE SERVICES
TEXAS DEPARTMENT OF HEALTH

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Historical Background

The Texas State Legislature passed laws in 1910 which required the reporting of certain communicable diseases. In 1920, the mechanisms for the reporting and management of morbidity became operative. Since that time, a surveillance system based on communicable disease reports submitted each week from designated agents across the state has served as the primary morbidity data collecting mechanism for the Texas Department of Health.

The Reporting System

There are approximately 500 designated reporting agents within the state of Texas, a number which varies slightly from year to year. Texas law requires that physicians report cases of communicable diseases to these designated reporting agents which include appointed city and county health officers, local city and county health departments, health districts, state schools, state hospitals, veterans' hospitals, andmilitary installations. Notifiable Case Report Cards, Form C-15 (Appendix),are mailed to reporting agents eachweek; the cards are then completed and returned to the Epidemiology Division, Texas Department of Health. Information regarding reportable diseases is also received by the Epidemiology Division via alternate routes such as telephone calls, letters, laboratory reports, surveillance forms, and death certificates.

Morbidity data are organized, recorded, and examined on a weekly basis for evidence suggestive of disease trends, including fluctuations in morbidity, seasonal variation, changes in disease distribution, and characteristics of the natural history of endemic, epidemic, or sporadic diseases. Each week morbidity data are published in "Texas Morbidity This Week," a report which is distributed to local health authorities, city and county health officers, and all other reporting agents and upon request to health care facilities, health professionals, and other interested parties. This publication also features informational material pertinent to communicable disease control activities on local, state, and national levels.

The communicable disease reporting system administered by the Epidemiology Division is essential to the successful prevention and control of certain communicable diseases which threaten the lives and well-being of the citizens of Texas. Early detection of unusual characteristics or patterns of reportable diseases often provides sufficient evidence warranting the initiation of specific preventive measures. In addition to statewide reporting, cooperative efforts in the area of communicable disease control are made with other state health departments and the Center for Disease Control, Atlanta, Georgia. These efforts contribute to an effective overall communicable disease prevention and control program for the nation.

Sources of Data

This report contains final figures on the reported incidence of the reportable diseases in Texas for 1979. Data are submitted to the Epidemiology Division through the statewide morbidity reporting system and are supplemented by other data collection procedures and surveillance activities within the division, the Bureau of Tuberculosis Services, the Infectious Disease Control Division, the Bureau of Veterinary Public Health, the Im-, munization Division, the Bureau of Vital Statistics, and the Bureau of Laboratories. The population figures from 1970-1979 used in computing rates are from the Current Population Report, Series P-25, published by the Federal Bureau of the Census. [Please note that the 1979 provisional Texas population figure (13,385,000)reflects a 2.6% increase over the 1978 state population (13,050,000).]

The morbidity data in this report represent cases reported to the Texas Department of Health through city and county health departments, local health officers, and other reporting agents. The degree of completeness is influenced by the interests and priorities of these various reporting sources for disease control and surveillance; however, the degree of underreporting is thought to remain consistent over time allowing data comparison over the years.

Selected Disease Summaries

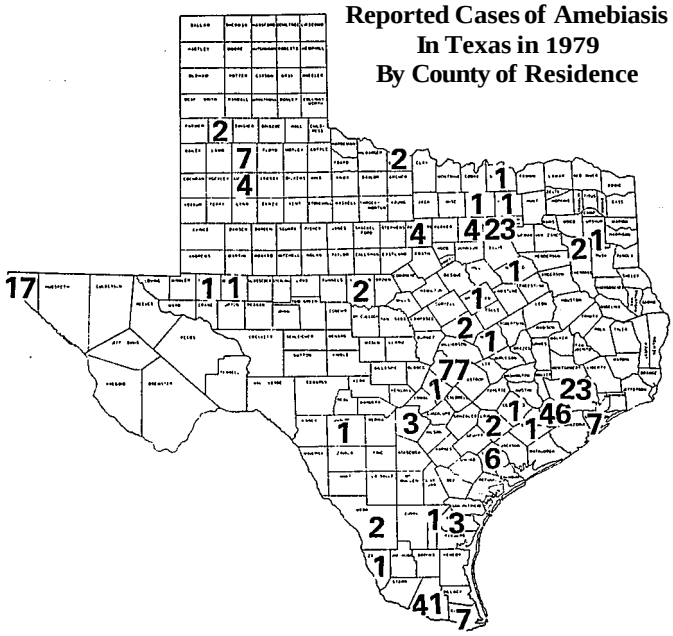
Amebiasis

Amebiasis is an infection with the protozoan parasite, Entamoeba histolytica, and frequently manifests with fever, chills, and diarrhea. The disease is spread primarily by hand-to-mouth transfer of feces, through water or contaminated raw vegetables. Reports of 301 cases of amebiasis were received by the Texas Department of Health during 1979. This figure represents a 43% increase over the 210 cases reported in 1978.

Of the 301 cases, 206 were males and 93 were females; the sex of the patient was not reported in two cases. The racial and/or ethnic distribution of cases was as follows: 90 cases were white, 120 were Hispanic, 23 were black, eight were Asian, and the race of the remaining 60 cases was not reported. Cases were reported in all age groups

FIGURE 1

Reported Cases of Amebiasis In Texas in 1979 By County of Residence



during 1979; the largest number of cases, 57, was found in the 20-29 year age group. However, the age of 47 cases was not reported.

The geographic distribution of amebiasis in Texas is shown in Figure 1. Cases were reported from all areas of the state with 70% coming from Travis, Fort Bend, Hidalgo, Harris, and Dallas Counties. An outbreak of amebiasis was reported in Travis County during 1979.

Aseptic Meningitis

The Texas Department of Health received 753 reports of aseptic meningitis in 1979, an 86% increase over the number of cases reported in 1978. The number of cases reported was evenly distributed between males and females, and the age distribution was heavily weighted toward children. Only 3.3% of all cases occurred in persons over the age of 40, yet children under nine years of age accounted for 63% of all cases, and 40% of the total cases occurred in children less than one year of age. The racial and/or ethnic distribution of 1979 cases in Texas included 368 cases classified as white, 138 as Hispanic, 212 as black, two Asians, and the racelethnicity of the remaining 33 individuals was not reported. There were only two fatal cases reported in Texas during 1979.

The term aseptic meningitis does not represent a distinct illness but rather a set of symptoms which cannot be attributed to the usual bacterial infection. In most cases, the underlying agent is thought to be a virus, but only 18.2% of cases nationally and 3.1% of cases in Texas can be attributed to a specific viral agent. In Texas, the viral isolations made between June and October were enteroviruses (ECHO 4, 6, 7, 11, 14, 8, 25, 32, one coxsackie, and nine unspecified picornaviruses). The greatest number of cases was reported between the months of May and October which corresponds with the peak incidence of enteroviral infections in the temperate climates of the southern United States. The majority of cases reported during this period was from the more densely populated Public Health Regions, particularly the large urban centers.

Botulism

Three cases of botulism were reported to the Texas Department of Health during 1979. One case each of food-borne botulism, infant botulism, and wound botulism were reported.

The reported episode of food-borne botulism involved a four-year-old, black female from whom botulism Type A toxin was isolated in both stool and serum specimens. The child died six days after becoming ill. No contaminated foods were documented, but the child was reported to habitually hide food inside her home for later consumption. The case was considered a "delayed report" as the actual onset of symptoms and death occurred in 1978.

Type B toxin was isolated from stool specimens of a six-month-old female in whom infant botulism was diagnosed. The infant was hospitalized with a two-week history of constipation, general weakness, and breathing difficulties and placed on complete ventilatory support. She progressively improved without further complications and was subsequently released from the hospital. Epidemiologic investigation of the case revealed that the child was primarily breast fed and had no identifiable risk factors occasionally associated with cases of infant botulism.

A 35-year-old, black male, employed at a bottling plant, was taken to the hospital for emergency surgery following a severe injury in which his left hand was crushed by a piece of machinery. He was released from the hospital immediately following the surgery. Two days after the initial injury, he was rehospitalized due to heavy bleeding at the wound site. Upon readmission, one finger was reported to be necrotic and nonviable. Sixteen days later the patient developed breathing and swallowing difficulties, ptosis of one eye, and poor balance and required emergency intubation. The hand was subsequently amputated, and the patient recovered after antitoxin and antibiotic therapy. The patient's serum was found to be positive for type A toxin.

Brucellosis

Brucellosis is an endemic disease in cattle, swine, and goats. In humans, it is primarily an occupational disease of veterinarians, farmers, ranchers, and meat-packing plant employees. The age and sex distribution of human cases in Texas is indicative of the role of occupational exposure and reflects the distribution of the disease in nature.

In 1979, 28 cases of brucellosis in humans were reported to the Texas Department of Health, resulting in a 21.7% increase over the 23 cases reported in 1978. Of the 28 cases, 24 occurred in males and four in females. Surveillance forms which were completed on all cases indicated that none of the four females diagnosed with brucellosis were employed outside the home, and the sources of their infections could not be determined. The occupations or work activities of the males included: seven farmers and/or ranchers, four veterinarians, six employed in the meat-processing industry, three indicating other occupations, and four were unemployed.

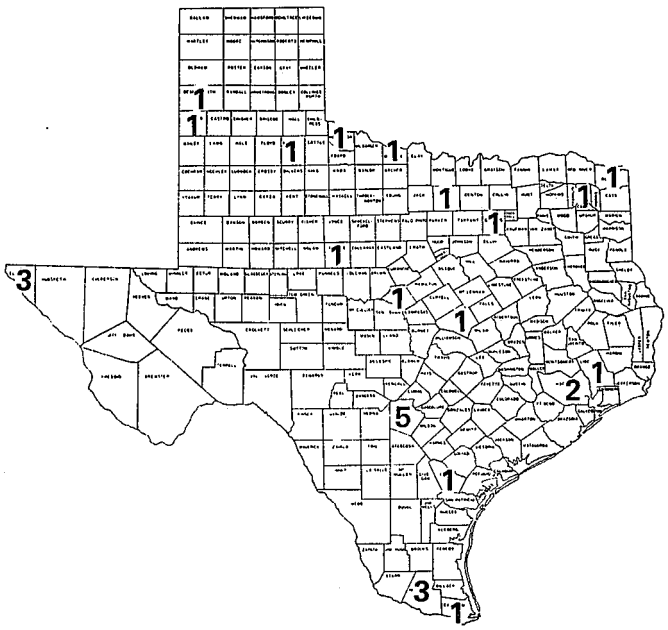
The most frequent source of human infection during 1979 in Texas was cattle with 13 (or 46%) cases; five cases reported ingestion of unpasteurized dairy products from Mexico, two cases reported possible source of infection as swine, and one case was classified as a laboratory-acquired infection. The sources of infection for the remaining seven cases were not specifically determined. Brucella abortus was reported to be the species involved in 16 cases, and B. melitensis was reported in eight cases; species was not indicated in four cases.

Human brucellosis occurred sporadically throughout the state in 1979 as illustrated in Figure 2. No outbreaks of the disease were reported; however, surveillance data indicate that two employees of the same meat-processing plant in Bexar County were diagnosed with brucellosis during 1979. Both individuals were employed in the sanitation department (cleaning tools and equipment) of the plant.

Cases in Texas during 1979 occurred in patients ranging in age from 16 years to 67 years. Among these, the largest number of cases, eight (or 28.6%), was found in the 30-39 year age group. The racial and/or ethnic distribution of cases included: 13 cases classified as white, 12 as Hispanic, and two as black; the race/ethnicity was not indicated on one case.

FIGURE 2

Reported Cases of Brucellosis in Texas — 1979
By County of Residence



Encephalitis

Arboviral Encephalitis

An arboviral encephalitis surveillance program, aimed at detecting virus activity in mosquitoes and birds (a possible reservior) before the viruses are spread to the human population, is carried out by the Texas Department of Health through the cooperative efforts of the Bureau of Veterinary Public Health, the Bureau of Laboratories, the Bureau of Environmental Health, and the Bureau of Communicable Disease Services. The program also provides the department with information concerning the mosquito vector, seasonal activity, and effectiveness of local mosquito control programs.

During 1979, there were 63,505 mosquito specimens submitted by mosquito control personnel, sanitarians, and zoonosis investigators for arboviral studies. Four viral isolates of western equine encephalitis (WEE) and a single isolate each of St. Louis encephalitis (SLE) and California encephalitis were detected from several mosquito species. Sampling of wild bird populations and sentinel chicken flocks is also a sensitive indicator of virus activity in a given geographic area. Two viral isolates of WEE were obtained from birds in west Texas. Antibodies to SLE, WEE, and Venezuelan equine encephalitis were found in sentinel flocks and wild birds from Lubbock, Dallas, Willacy, add Cameron Counties.

Although all of the viruses isolated can cause human disease, only cases of SLE were reported in Texas during 1979. Five confirmed cases were reported, three from the city of El Paso, one from Tornillo (El Paso County), and one from Bay City (Matagorda County). The 1979 total exceeded that for the previous year when no cases were reported.

Other Viral Encephalitides

Fifty-nine cases of viral encephalitis were reported to the Texas Department of Health during 1979. The majority of the cases was of unknown etiology. Those cases with known etiologies can be classified as post-infectious encephalitides; eight were associated with herpes infections (seven with H. simplex, three with H. *zoster*), two with mumps, and one with measles.

Although cases of unknown etiology occurred throughout the year, the incidence peaked in July and August. It is possible that some of the cases occurring throughout the summer and fall represent undiagnosed arboviral cases. Enterovirus activity is also high during the summer months, and the increase in reports may reflect this.

Fifty-nine percent of the cases with undetermined etiologies were less than fifteen years of age. Males and females accounted for equal numbers of cases.

Endemic Typhus

A total of 59 cases of endemic typhus, flea-borne typhus fever, was reported to the Texas Department of Health in 1979. This figure represents a 79% increase over the 33 cases reported in 1978, and is the largest number of cases reported in Texas since 1954 when 64 cases occurred.

FIGURE 3

Reported Cases of Endemic Typhus in Texas — 1979
By County of Residence

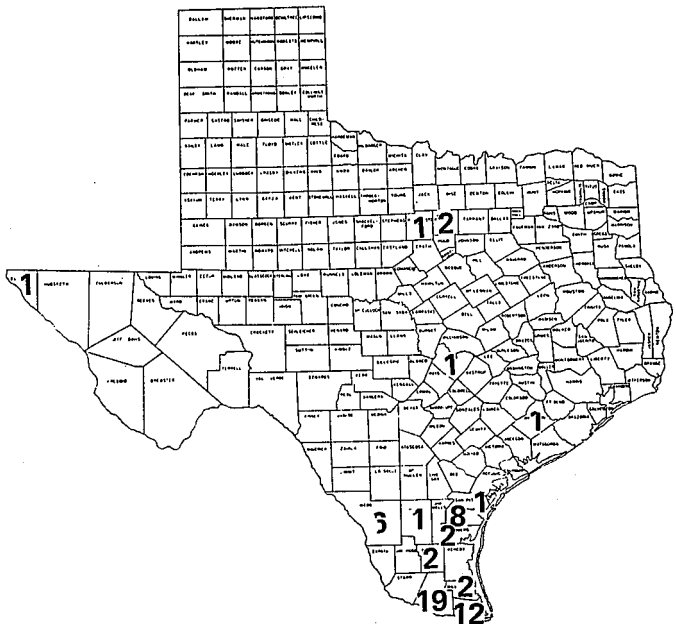


Figure 3 illustrates the geographic distribution of cases by county of residence throughout the state of Texas, and surveillance data indicated that 91.5%, or 54 cases, were exposed in one of ten counties within Public Health Region 8, the 26 southernmost counties of Texas.

Cases of endemic typhus are reported virtually year-round in Texas. In 1979, 57.6% (34 cases) reported onset of illness between the months of April and July.

Since 1963, with the exception of 1974, Texas has consistently reported greater than 50% of the cases of endemic typhus in the United States. Morbidity data provided by the Center for Disease Control indicate that in 1979 85.5% of the reported U.S. casas occurred in Texas (Table 1).

TABLE I
REPORTED CASES OF ENDEMIC TYPHUS IN TEXAS AND THE UNITED STATES, 1975-1979

YEAR	REPORTED CASES U.S.	TEXAS	TEXAS' % OF U.S. CASES
1975	44	30	68.2%
1976	69	58	84.1
1977	76	55	72.4
1978	46	33	71.7
1979	69	59	85.5
TOTAL	304	235	77.3%

The incidence rate of endemic typhus in Public Health Region 8 was 4.58 per 100,000 population in contrast to the statewide incidence rate of 0.44 per 100,000 population. Of the 59 cases reported in 1979, 32 occurred in males and 27 in females. The racial and/or ethnic distribution of these cases included 20 classified as white and 39 as Hispanic. The absence of reported cases in blacks may reflect the difficulty in detecting a rash on a person with dark skin. This theory may also be supported by the fact that of the 39 Hispanic cases 59% reported no history of a rash during illness.

Other Enteric Infections

Salmonellosis, excluding typhoid fever

The clinical manifestations of human salmonellosis can be divided into four syndromes: gastroenteritis, enteric fever (typhoid-like disease), extraintestinal focal infections, and the asymptomatic carrier state. In 1979, 2,198 cases of salmonellosis were reported to the Texas Department of Health.

Transmission of salrnonellosis occurs by the ingestion of contaminated poultry, eggs or egg products, dairy products, or meats or meat products; ingestion of food contaminated by an infected food handler who is excreting the organism and not practicing adequate hand washing techniques; or by contact with excreta of infected animals or humans.

Of the 112 counties in Texas from which cases of salmonellosis were reported in 1979, 67 reported from one to three cases, and the four counties containing the three largest metropolitan areas reported 1,026, or 47%, of all cases. Forty-six percent of the cases reported in Texas during 1979 occurred in children under five years of age (Table 2).

There were 114 species of Salmonella identified by the Texas Department of Health laboratories, but only ten of those accounted for 60% of the total cases. These were the same species that predominated in the United States as a whole in 1978. The most common species, S. typhimurium, was associated with 34.8% (in 1978) of all cases nationwide but only 17.6% of the cases in Texas during 1979. This is of particular interest because it is not only the most common species involved in gastroenteritis, but also a frequent cause of bacteremia and focal infections.

Shigellosis

In 1979, 2,299 cases of shigellosis were reported to the Texas Department of Health. Of these cases, 48% occurred in persons of Hispanic ethnicity, though Hispanics approximate 20% of the state's population. Children under five years of age accounted for 47% of the cases (Table 3). In Texas during 1979, the reported cases were greater in males up to age five, whereas, with increasing age, female cases predominated. Serotypes were available for 58% of the reported cases. Of these, 60% were Shigella sonnei, 36% were S. flexneri, 3% were S. boydii, and 2% were S. dysenteriae.

Several small outbreaks of shigellosis were reported to the Texas Department of Health in 1979. One involved the spread of the disease by an infected food handler in a day-care center; another occurred in the indigent Hispanic community of an urban area. Shigellosis is a problem in large cities as 81% of the reported cases in Texas during 1979 came from the seven counties with the largest urban centers.

TABLE 2

REPORTED CASES OF SALMONELLOSIS BY AGE TEXAS, 1979

AGE	# OF CASES	% OF CASES
<1	592	26.9%
1-4	420	19.1
5-9	109	5.0
10-19	108	4.9
20-29	151	6.9
30-39	103	4.7
40-49	57	2.6
50-59	69	3.1
60+	180	8.2
unk.	409	18.6
TOTAL	2,198	100.0%

TABLE 3

REPORTED CASES OF SHIGELLOSIS BY AGE AND SEX, TEXAS, 1979

Age	Sex of Patient: Male	Female	Not Stated	Total	% of Total
<1	94	76		170	7.4%
1-4	483	427	1	911	39.6
5-9	180	198		378	16.4
10-14	47	52		99	4.3
15-19	20	35		55	2.4
20-24	49	67		116	5.0
25-29	57	71		128	5.6
30-34	40	57		97	4.2
35-39	16	15		31	1.3
40+	51	96	2	149	6.5
Unk.	77	81	7	165	7.2
Total	1,114	1,175	10	2,299	99.9%

Hansen's Disease

Thirty-one (31) cases of Hansen's disease (HD) were reported to the Texas Department of Health during 1979. Whereas this was the largest number of cases to be reported in Texas since 1972, it was within the range of expected case reports during a one-year reporting period.

The raciallethnic distribution of cases in 1979 included 12 cases classified as white, 13 cases as Hispanic, one case as black, and five cases as Asian. The 20 cases indigenous to Texas accounted for 65% of the total number reported during 1979. It was also observed that among the 11 imported cases, six occurred in persons from Mexico and five in persons from Southeast Asia.

Cases of HD are generally divided into one of four types ranging from localized (tuberculoid)to systemic disease (lepromatous). Lepromatous and borderline types are considered to be contagious if not under appropriate therapy. The tuberculoid and indeterminate types are not thought to be of significance in the spread of HD. In 1979, the majority (74.2%) was classified as either lepromatous or borderline, and 17 of these cases (or 73.9%)were identified as indigenous to Texas (Table 4).

The epidemiology of HD in Texas appears to be changing with an overall downward trend in the percentage of indigenous cases reported and an upward trend in both the number and percent of cases being imported into Texas. A review of case reports over a twenty-year period, from 1960-1979, showed a continuing decrease in total cases reported during the last ten-year period (1970-1979).

TABLE 4

REPORTED CASES OF HANSEN'S DISEASE IN TEXAS, 1979, BY DISEASE TYPE AND ORIGIN OF INFECTION

DISEASE TYPE	INDIGENOUS TO TEXAS	IMPORTED INTO TEXAS	TOTAL #	TOTAL %
Lepromatous	10	5	15	48.4%
Borderline	7	1	8	25.8
Tuberculoid	2	5	7	22.6
Indeterminate	1		1	3.2
TOTAL	20	11	31	100.0%

Influenza and Influenza-Like Illness

During 1979, the Texas Department of Health obtained data on influenza and influenza-like illness through two programs: the routine morbidity reporting system and a special Influenza Surveillance Program coordinated by the Center for Disease Control. These programs, however, are not mutually exclusive. Since more counties report through the routine reporting system than through the special surveillance program, the more complete data, as published in "Texas Morbidity This Week," is discussed.

Influenza and influenza-like illness are reported by numeric totals only. The number of cases reported in Texas during 1979 was 86,689. This figure represents a 12% decrease from the 99,394 cases reported in 1978. Thirty deaths due to influenza were also recorded in Texas during 1979.

Laboratory confirmation of diagnosis was obtained for only a small percentage of cases. The Texas Department of Health's Bureau of Laboratories reported that influenza A (H_1N_1) resembling A/Brazil/78 was the most frequently isolated strain in 1979.

Of the 254 counties in Texas, 136, or 54%, reported influenza activity during 1979. The number of reported cases peaked in February, declined through the spring and summer months, and began increasing again in the fall.

Leptospirosis

Leptospirosis infections occur in humans after contact with urine-contaminated fomites or water containing leptospira from infected animals. Reservoir hosts of the leptospira include both domestic and wild mammals, reptiles, and amphibians. Persons at highest risk are those that occupationally come in contact with infected animals or those that have contact with tanks and ponds contaminated with infected urine or sewage. Person-to-person transmission is unusual.

Eight cases of leptospirosis were reported to the Texas Department of Health during 1979. Three cases were reported from Harris County, and the following counties reported one case each: Galveston, Hopkins, Hunt, Nacogdoches, and Randall. The Texas cases in 1979 included seven white males and one black female, and the cases ranged in age from 17 to 35 years. (The large number of males is thought to be related to exposure opportunity.) Table 5 contains additional information regarding the locations and types of exposure for individual cases.

TABLE 5

REPORTED CASES OF LEPTOSPIROSIS IN TEXAS BY COUNTY OF RESIDENCE AND LOCATION AND TYPE OF EXPOSURE—1979

County of Residence	Presumed County of Exposure	Type of Exposure
Harris	Harris	Vaccine
Harris	Harris	Dogs
Harris	Comal	Water
Galveston	Galveston	Water
Hunt	Hunt	Cattle
Hopkins	Hopkins	Cattle
Nacogdoches	Nacogdoches	Rats
Randall	Randall	Not Determined

Malaria

In endemic areas, the malaria parasites, Plasmodium falciparum, P. vivax, P. malariae, and P. ovale, are transmitted from man-to-man through the bite of an infected female anopheline mosquito. Although such naturally transmitted malaria rarely occurs in the United States, the disease is still present.

Practically all of the malaria seen in the United States at present is imported (acquired outside the United States). Malaria acquired within the United States is usually transmitted by injection or transfusion of blood from infected persons or through the use of contaminated syringes. Congenital transmission is also possible.

Forty-five cases of malaria were reported to the Texas Department of Health during 1979, 44 of which were imported. The remaining case was acquired in the United States presumably by congenital transmission. The newborn's parents were Kampuchean refugees who arrived in the United States two months prior to the child's birth.

Thirty-one cases were recent immigrants to the United States arriving from Asia (23 cases, nine of whom were Southeast Asian refugees), Africa (six cases), and Central or South America (two cases).

Of the 44 cases acquired outside the United States, 30 occurred in males and 14 in females. The racial and/or ethnic distribution of cases was as follows: 13 cases classified as white, three as Hispanic, five as black, 22 as Asian, and the racelethnicity of the remaining case was not reported.

The majority of the cases was infected with P. vivax. Plasmodium falciparum, P. malariae, and mixed infections were also reported. The distribution of malaria cases by the geographic origin of the parasite is shownin Table 6.

Meningococcal Infections

Meningococcal infections include meningitis, septicemia, arthritis, or other systemic disease caused by Neisseria meningitidis. Even with optimal therapy there is significant mortality. One-hundred and sixty-six (166) cases were reported to the Texas Department of Health in 1979. Twenty-five of these patients died resulting in a case fatality ratio of 15.1%.

The case distribution by age is found in Table 7. The striking features of these illnesses are the numbers of infections in children less than one year of age, the mortality in children under four years of age, and the high case fatality ratio for infections in persons over the age of 45. The distribution of cases within the state of Texas correlates with the population distribution.

Epidemics of meningococcal infections have occurred in otherwise healthy young adults under crowded conditions such as military recruitment centers. At such times, one serotype predominates. In Texas, as in other states, for the last 13 years the major serotype isolated in endemic situations was type B; although, in recent years, type W 135 has become common. Of the 38 cases typed by the Texas Department of Health and/or the Center for Disease Control, 30 were type B, five were type W135, two were type C, and one was type Y.

TABLE 6

DISTRIBUTION OF IMPORTED MALARIA CASES BY GEOGRAPHIC ORIGIN OF THE PARASITE TEXAS, 1979

GEOGRAPHIC ORIGIN	SPECIES OF MALARIA PARASITE					
	P. vivax	P.falciparum	P.malariae	Mixed Infection	Not Stated	TOTAL
Asia	18	4	2	2	1	27
Africa	2	2	0	2	2	8
Central America	3	1	0	0	2	6
South America	2	0	0	0	0	2
Not stated	0	0	0	0	1	1
TOTAL	25	7	2	4	6	44

TABLE 7

REPORTED CASES AND FATALITIES BY AGE GROUP MENINGOCOCCAL INFECTIONS IN TEXAS, 1979

Age Group	#Reported Cases	#Fatalities	Case Fatality Ratio
◄1	41	3	7.3%
1-4	56	12	21.4
5-14	19	2	10.5
15-44	34	2	5.9
45-64	11	4	36.4
65 +	4	2	50.0
Not stated	1		
TOTAL	166	25	15.1%

Poliomyelitis

Two cases of paralytic poliomyelitis were investigated by the Texas Department of Health during 1979. Neither case appears in the year's reported morbidity because the individuals were not residents of Texas.

The first case was a 16-month-old male who had been living in Mexico since birth. The child had been sick for two weeks before he was brought to Texas to see a physician; symptoms included weakness of the left leg, arm, and shoulder. The patient had no history of immunization. Poliovirus type 1 was isolated from the patient's stool.

The second case was a seven-month-old female resident of Mexico who had recently arrived in Texas with her family. The child had no history of polio immunization, and initial symptoms included fever and right-sided weakness. Poliovirus type 1 was isolated from the patient's stool, and a four-fold rise in antibody titer was also noted.

Paralytic poliomyelitis among Texas residents has not been reported since 1977.

Psittacosis

Psittacosis in humans is the result of exposure to nasal secretions, feathers, or feces of birds infected with Chlamydia psittasi. Persons at risk are those exposed to poultry, poultry processing plants, or pet birds.

The five cases of psittacosis reported to the Texas Department of Health in 1979 presented with vague flu-like symptoms: chills, fever, headache, myalgia, and anorexia, and pneumonia-like symptoms developed. Three of the cases had recently purchased psittacine birds (two cockatiels and one cockatoo) that were ill or subsequently became ill. The other two cases, husband and wife, were exposed to parakeets which the husband raised as a hobby.

Chlamydia-like organisms were isolated from one cockatiel'. The other cockatiel and the cockatoo had autopsy results consistent with a diagnosis of psittacosis. In all five cases, the patient's illnesses resolved with antibiotic treatment.

Q Fever

Two cases of Q fever were reported in Texas in 1979. The source of exposure for both cases was undetermined. The first case, a 70-year-old white male, presented in January 1979 with a fever of 102°, anorexia, headache, pneumonitis, and malaise. Two weeks prior, the patient had been on a hunting trip to Freer, Texas, where he reported stalking deer, walking in cattle pastures, and helping to kill and skin a javelina. There were also cattle within 11 miles of the patient's residence in Galveston County.

The second case, a 49-year-old white male experienced a sudden onset of fever of 104°, headache, anorexia, and myalgia in July 1979. The patient was exposed to ticks removed from his pet poodle, and mice were found in a small food market in Dallas County where the patient was employed as a butcher.

The organism responsible for Q fever, Coxiella burneti, is particularly resistent to destruction. Unlike other rickettsiae, it is not associated with an arthropod vector. Ticks have been demonstrated to carry the organism, but cases cannot usually be attributed to a specific tick bite. The organism replicates in the mammary and reproductive organs of sheep, goats, and cattle without producing overt signs of illness, but may be released at parturition, slaughter, or in the excreta.

Rabies In Man

One case of human rabies was reported to the Texas Department of Health in 1979. A seven-year-old female resident of Eagle Pass was bitten by a five-month-old dog with no history of rabies vaccination. The dog was proven rabid by the immunofluorescence test four days after the bite. The girl was treated with human rabies immune globulin (HRIG) and duck embryo vaccine (DEV) shortly afterwards.

Three weeks after the bite the girl complained of malaise, myalgia, and a low-grade fever; she was hospitalized and developed a severe encephalitis. Her condition worsened, and despite intensive medical care, she expired one month after being bitten.

Spinal fluid and serum specimens taken prior to her death were positive for rabies antibody by the rapid fluorescent focus inhibition technique. Post-mortem examination of brain tissue by the immunofluorescence test for rabies was also positive.

Another case of human rabies was diagnosed and treated in San Antonio, Texas; this case, however, was not included in Texas morbidity for 1979 because the individual was a resident of Piedras Negras, Mexico.

Relapsing Fever

In 1979, there were eight cases of relapsing fever reported to the Texas Department of Health. In the past 16 years, only two other cases were reported, both from Blanco County; one was reported in 1976 and the other in 1977.

All eight of the reported cases in 1979 originated in central Texas, three in Bell County, two in Blanco County, and one each in Bee, Bexar, and Coryell Counties. All cases occurred during the winter months of January, February, and December. The cases ranged in age from 10 to 66 years. Of the four cases for which there was exposure history, three were reported to have trapped small mammals. The fourth case was a real estate agent dealing with ranch property.

Endemic relapsing fever is a tick-borne spirochetal disease caused by several strains of *Borrelia* species in which periods of fever lasting two to nine days alternate with afebrile periods of two to four days; the number of relapses may vary from two to ten or more.

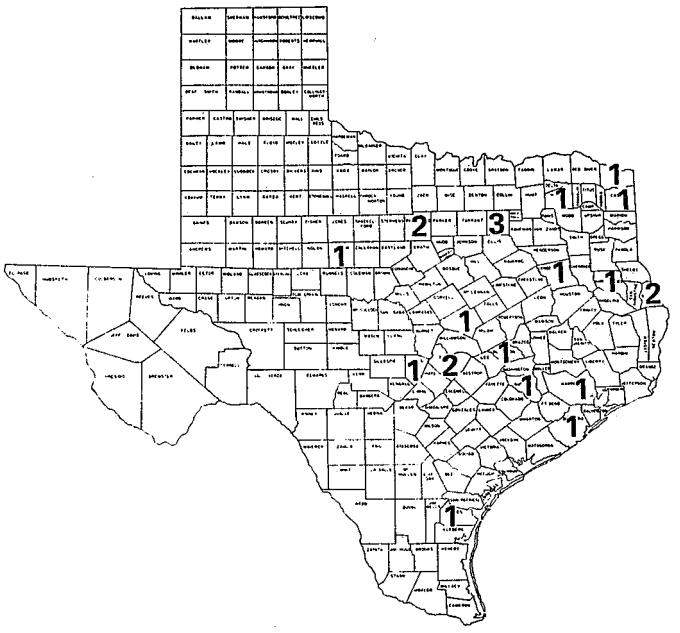
Rocky Mountain Spotted Fever

The number of reported cases of Rocky Mountain spotted fever (RMSF) in Texas during 1979 decreased 21%, from 28 cases reported in 1978 to 22 cases in 1979. Based on the figure of 1,067 cases of RMSF reported in the United States during 1979, Texas cases accounted for only 2.1% of the total.

In 1979, 90.9% of the reported cases of RMSF occurred in Public Health Regions 5, 6, 7, and 10, in eastern and pacts of central Texas, and is illustrated in Figure 4. Transmitted to man through the bite of an infected tick, the period of peak incidence of RMSF in Texas corresponds to the season of greatest tick activity, April through September.

FIGURE 4

Reported Cases of Rocky Mountain Spotted Fever By County of Residence, Texas — 1979



Of the 22 cases, 15 occurred in males and seven in females. Cases occurred in virtually all age groups with 54.5% of the cases between the ages of one and 17 years and 45.5% between the ages of 31 and 67 years. The racial and/or ethnic distribution included 19 cases classified as white, two as Hispanic, and one case as black.

One death due to RMSF occurred in Texas during 1979. The child, a 21-month-old, white male, died in April 1979, approximately eight days after becoming ill. Treatment with tetracycline was begun shortly before the child died. The death occurred in Palo Pinto County located in Public Health Region 5.

Of the 17 cases for whom specific treatment information was available, eight were treated with tetracycline, five with chloramphenicol, and four with both tetracycline and chloramphenicol. In untreated cases of RMSF, the case fatality ratio ranges from 10-40%; the case fatality ratio for Texas in 1979 for treated patients was less than 5%.

Tetanus

Seventeen cases of tetanus were reported to the Texas Department of Health during 1979. Of these, two were delayed reports from 1978.

Tetanus cases are predominately reported within two segments of the. Texas population: 1) individuals 45 years of age or older who were inadequately immunized (ten cases), and 2) neonates (infants less than 28 days of age), especially those delivered by inadequately trained personnel, or in contaminated environments (three cases). The remaining four cases occurred in the 30-44 year age group. The racial and/or ethnic distribution included six cases classified as white, six as Hispanic, and five as black.

Despite its status as an imrnunizable disease, tetanus remains dangerous in that a high case fatality ratio is not unusual. The case fatality ratio for the 1979 cases was 47%. Among the eight fatalities, four were over 70 years of age, the others were 64, 41, and 32 years of age, and one was a neonate. One midwife assisted with the deliveries of two of the three infants who subsequently developed neonatal tetanus.

Trichinosis

Trichinosis is a disease caused by the ingestion of raw or inadequately cooked meat — usually pork — infected with Trichinella *spiralis* larvae. During 1979, four cases of this disease were reported to the Texas Department of Health.

The source of exposure for a 25-year-old male from Smith County was determined to be the frequent consumption of uncooked bacon and pork sausage. Although these foods were commercially processed, they were not examined for Trichinella larvae. Additional cases reported during 1979 included two cases from Bexar County and one case from Harris County for which no futher epidemiologic data were available; each of these cases, however, was laboratory confirmed.

Tularemia

Tularemia is an infectious disease of rodents and rabbits that may be transmitted to man through direct contact with the infected tissues of such small mammals or through the bites of infected ticks and deer flies. Eleven cases of tularemia were reported to the Texas Depart-

ment of Health during 1979; this represents an 83% increase over the six cases reported in 1978. One death due to tularemia was also reported in 1979.

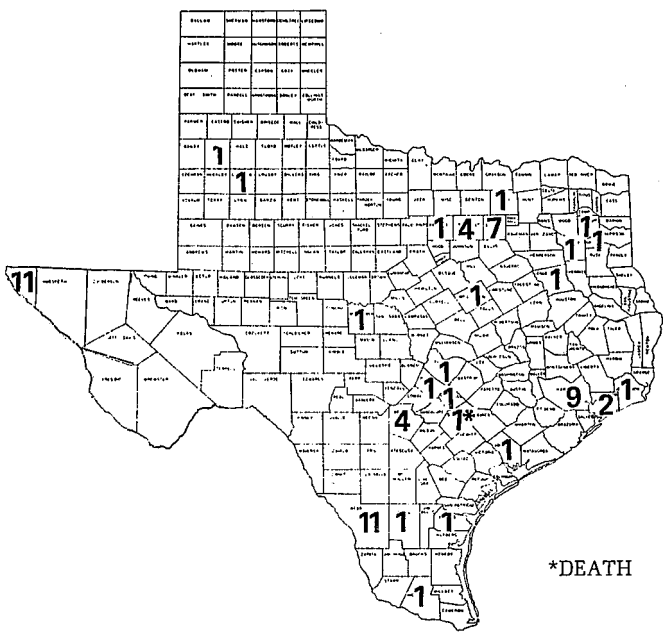
Due to the association of tularemia with hunting and other outdoor activities, the disease is more common among males than among females. Of the eleven cases, ten occurred in males and one case in a female. Although all age groups are equally susceptible to tularemia, all cases except one (a four-year-old male) were over 30 years of age. Fifty-five percent of the cases were reported from Upshur, Gregg, Panola, and Cherokee Counties in east Texas.

Surveillance forms were submitted to the Epidemiology Division for all eleven cases of tularemia. Six individuals reported the handling of or skinning of small mammals (rabbits and squirrels) prior to onset of illness, three reported tick bites, and one reported exposure to deer flies. The source of exposure for the remaining case was unknown.

Typhoid Fever

Typhoid fever usually results from the ingestion of drinking water contaminated by feces containing Salmonella typhi, or food prepared or handled by persons who are excreting the organism in their stool and do not wash their hands adequately. In developed countries, such as the United States, transmission is usually associated with asymptomatic carriers. In Texas, only seven of the 67 cases reported in 1979 were known to be contracted in this way. Thirty-nine cases (or 58%) were classified as imported cases, that is, the cases had been exposed outside the United States. One case was determined to be laboratory-acquired, whereas the sources of infections for the remaining 20 cases were not known. (See Figure 5 for the geographic distribution of cases throughout the state.)

FIGURE 5
Reported Cases of Typhoid Fever in Texas
By County of Residence — 1979



The age distribution differs from infections caused by Salmonella species other than S. typhi; typhoid fever is not a disease of young children but of older children, adolescents, and young adults (Table 8). There is also a difference in the incidence according to sex: 61% of the infected individuals were males and 39% were females. The distribution of cases by racelethnicity included 14 cases classified as white (20.9%), 42 as Hispanic (62.7%), four as black (6.0%), six as Asian (9.0%), and the racelethnicity of the remaining case was not reported.

Supportive care and adequate antibiotic use have been very effective in the treatment of typhoid fever and resultant complications; there was one death due to typhoid fever reported in Texas during 1979.

TABLE 8

REPORTED CASES OF TYPHOID FEVER BY AGE GROUP
TEXAS — 1979

AGE GROUP	# OF CASES	% OF CASES
<1	1	1.5%
1-4	6	9.0
5-9	15	22.4
10-19	15	22.4
20-29	16	23.9
30-39	6	9.0
40-49	1	1.5
50-59	1	1.5
60+	5	7.5
Not stated	1	1.5
TOTAL	67	100.2%

Other Vaccine-Preventable Diseases (See Table 9)

TABLE 9

SELECTED VACCINE-PREVENTABLE DISEASES
BY AGE GROUP
REPORTED IN TEXAS, 1979

Age Group	Measles	Mumps	Pertussis	Rubella
<1	39	5	63	46
1-4	78	70	30	43
5-9	122	322	3	21
10-14	146	152	3	9
15-19	98	61		17
20+	26	12	3	30
Not stated	161*	286	2	46
TOTAL	670	908	104	212

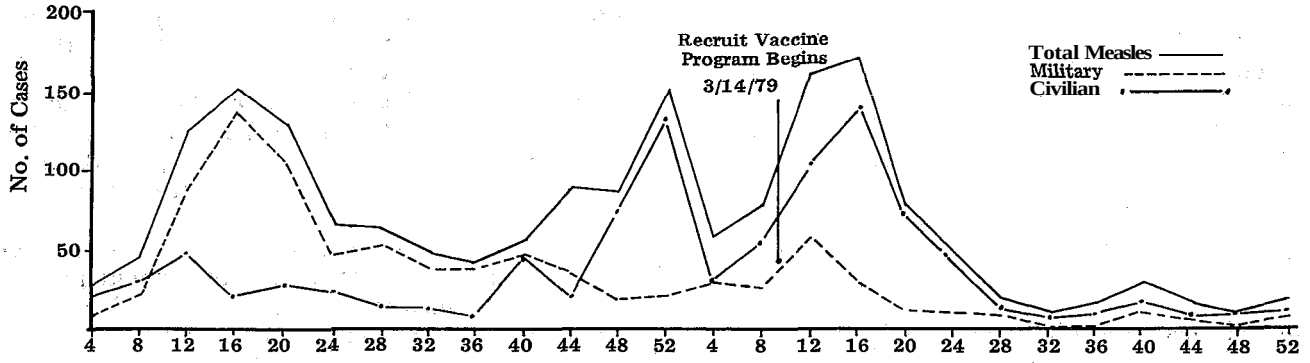
*148 of these cases were reported in military recruits

Measles

The number of measles cases reported in Texas in 1979 decreased by 363 (or 35%) when compared to 1978 (1,033 cases). This decline was attributed, in part, to a vigorously applied military recruit vaccination program initiated at a San Antonio Air Force base in March, 1979 (Figure 6). However, civilian measles cases increased by 8% when compared to 1978 morbidity. Despite the

Figure 6

Measles Cases in Texas by Four-Week Periods, Calendar Years 1978 & 1979



	1978 No. Cases	%		1979 No. Cases	a	% Change
Civilian	455	44	Civilian	492	73	+ 8
Military	578	56	Military	178	27	- 69
	1,033	100%		670	100%	- 35%

Texas civilian measles morbidity increased by 8% as compared to 1978; while a 69% decrease in military cases was reported for the same period. On March 14, 1979, a program to vaccinate susceptible recruits beginning training at Lackland AFB was initiated resulting in a marked decrease in military measles cases reported during 1979.

decline in total cases reported, the percentage of the national cases reported from Texas increased to 5% in 1979 from 3.8% in 1978. This was the highest level since 1972 when 5% of the reported cases came from Texas.

Mumps

During 1979, 908 cases of mumps were reported to the Texas Department of Health, a 41% decrease from the 1978 total of 1,527 cases. For nine out of the past ten years in Texas, mumps incidence has been highest in the five-throughnine-year age group. In 1979, 322 cases (or (35.5%) were reported in this age group.

Outbreaks of mumps occur periodically at intervals from two to three to seven years, but this pattern may change as mumps vaccine is placed in greater use throughout the nation.

Pertussis

A total of 104 pertussis cases was reported in Texas during 1979. This number is considerably lower than the ten-year average of 160 cases per year reported in the state during the period 1970 through 1979.

The severe complications from pertussis in infancy are the major reasons for immunization early in life. Pertussis is highly communicable, and attack rates of up to 90% are reported for unimmunized household contacts of cases. Cases and consequently deaths from pertussis have declined dramatically with the increasingly widespread use of standardized pertussis vaccines which began in the late 1940's. Since the incidence, severity, and fatality of pertussis decrease with age, routine pertussis vaccination is not generally recommended for persons seven years of age or older. In Texas, 91.3% of the reported pertussis cases in 1979 were under seven years of age, and no deaths due to pertussis were recorded.

When pertussis cases are identified in a community, it is important that unimmunized infants and preschool children be protected from exposure and that they complete their immunizations as quickly as possible.

Rubella

Only 212 cases of rubella were reported in Texas in 1979, a dramatic decline from the 8,409 cases reported at the start of the decade in 1970. The 1979 rubella morbidity was the lowest reported in Texas since 1965. Aggressive immunization activities for prepubertal children are felt to be largely responsible for this decline.

Four cases of congenital rubella syndrome were also reported in Texas during 1979, twice the number reported in 1978. Epidemiologic investigation of the cases revealed that three of the mothers had a history of a rubella-like illness during the first trimester of pregnancy. Of these three, only one reported a history of a rubella vaccination. Complete information regarding the mother of the fourth case was not available.

Venereal Diseases

In 1979, there were 88,249 cases of venereal diseases reported to the Infectious Disease Control Division (IDCD) of the Texas Department of Health. This represents a 7% decrease from the 1978 total of 94,769 cases. (See Figures 7 and 8.)

Gonorrhea

A decrease in the number of reported cases of gonorrhea was noted during 1979 and hopefully marks the reversal of the increasing trend in case reports noted for the past 20 years. There were 81,828 cases of gonorrhea reported in Texas giving the state the 12th highest case rate (617.8 per 100,000 population) in the United States. The decline in case reports may be related to the extensive case finding and treatment program for venereal diseases in Texas. Twenty percent of women in the child-bearing age group are screened for gonorrhea in Texas each year.

The IDCD has been collecting data on pelvic inflammatory disease (PID) since 1978, and in 1979, 1,416 cases were reported in Texas. Local PID programs are

Figure 7

Texas
Gonorrhea-Reported Cases 1970-79

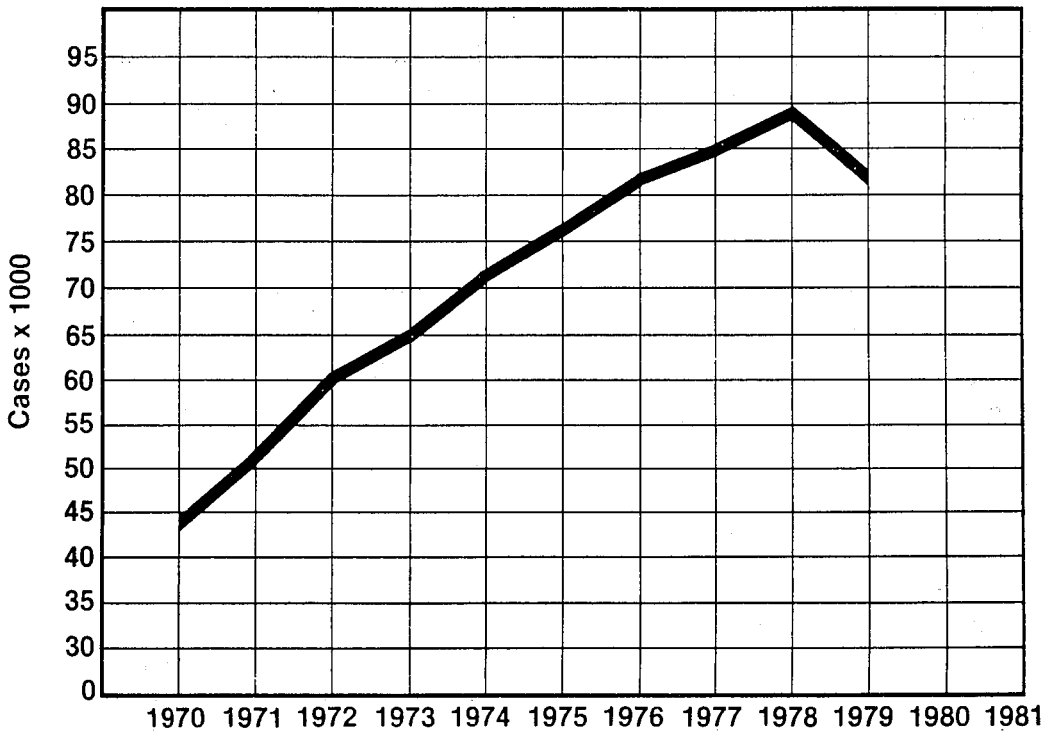
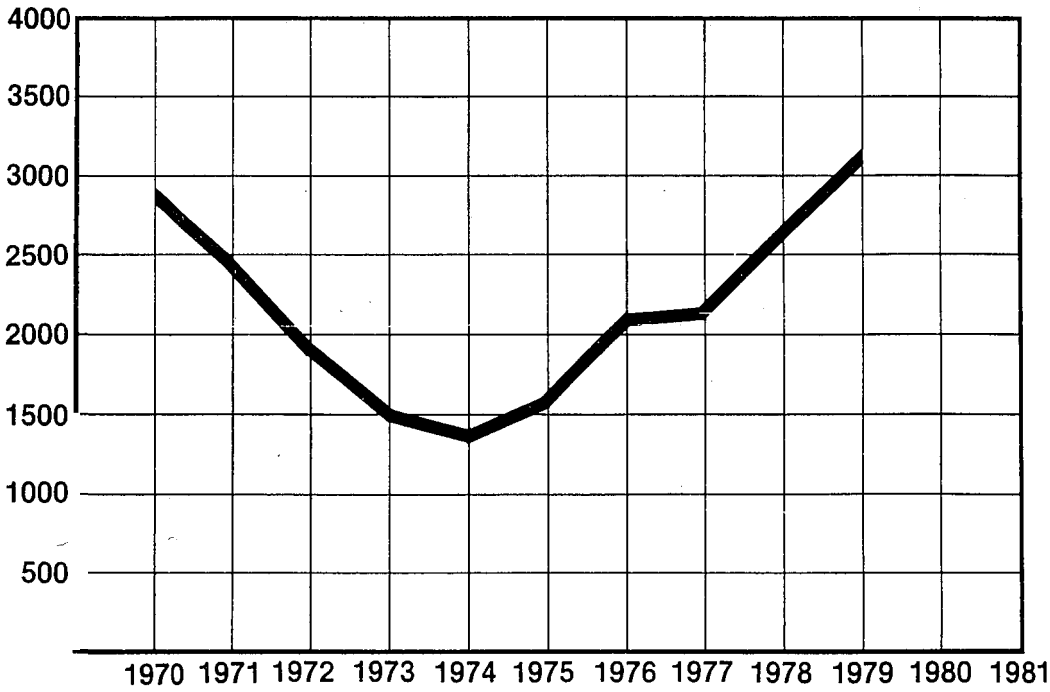


Figure 8

Texas
Primary & Secondary Syphilis
Reported Cases 1970-79



being initiated with the goal of reducing morbidity caused by PID in Texas.

Syphilis

During 1979, 3,154 cases of primary and secondary syphilis were reported to the IDCD. This figure represents a 20% increase over the number of cases reported in 1978 (2,637). The combined rate for primary and secondary syphilis in Texas, 23.8 cases per 100,000 population, is the fourth highest in the nation.

The number of cases of early latent syphilis reported to the IDCD increased 8.6%; 2,379 cases were reported 1979 compared to 2,191 in 1978. Case reports of late latent syphilis continued to decline; 746 cases were reported in Texas in 1979 compared to 913 cases in 1978. Twenty-one cases of congenital syphilis were reported during 1979, a decrease of 46% from the previous year's total.

Other Venereal Diseases

The IDCD received reports of 14 cases of lymphogranuloma venereum and seven cases of chancroid during 1979. The number of reports of these illnesses has been steadily declining since the mid-1970's.

Viral Hepatitis

The Texas Department of Health received reports of 5,814 cases of viral hepatitis during 1979. This figure represents the largest number of hepatitis cases ever reported in the state. Reports of hepatitis type A (3,289 cases), hepatitis type B (685 cases), and hepatitis type unspecified (1,840) all increased over the previous year's totals.

The rise in numbers of reported cases of hepatitis type A during 1979 continues the upward trend noted after 1976. The incidence of this disease in Texas is higher than in the United States as a whole; the 1979 Texas incidence rate based on Texas Department of Health population estimates is 24.6 per 100,000 population as compared to 13.8 per 100,000 population for the United States.

The age distribution of the hepatitis type A cases is shown in Table 11. Seventy-six percent of the cases occurred in individuals less than 30 years of age. The racial and/or ethnic distribution of cases was as follows: 2,037 classified as white, 898 as Hispanic, 173 as black, and seven as Asian; the racelethnicity of the remaining 174 cases was not reported. Approximately equal numbers of cases occurred in males and females.

Hepatitis type A cases were evenly distributed throughout the year and were reported from all areas of the state. The majority of cases was reported from counties with large metropolitan areas such as Harris, Dallas, Bexar, Travis, Nueces, and Potter-Randall Counties.

Hepatitis type B in Texas is less widely distributed than hepatitis type A, but, like hepatitis type A, it is centered in the urban areas of the state. Surveillance forms were submitted to the Texas Department of Health for 88 cases (13%) of hepatitis type B. Seven cases were stated to be drug-associated, four cases were transfusion-associated, and three cases followed plasmapheresis.

Sixty-one percent of the hepatitis type B cases reported in Texas during 1979 occurred in individuals between 15 and 29 years of age.

Hepatitis type unspecified was also reported from all areas of the state, but 55% of the cases were reported in Harris County and are believed to be largely hepatitis type A cases due to local reporting procedures. The age distribution of hepatitis type unspecified is nearly identical to that of hepatitis type A with the majority of cases less than 30 years of age (Table 10). The racial and/or ethnic distribution of cases was as follows: 1,257 were classified as white, 373 as Hispanic, 148 as black, and three as Asian; the racelethnicity of the remaining 59 cases was not reported.

Reports of hepatitis type unspecified (which include hepatitis type A, hepatitis type B, and non-A, non-B hepatitis) have continued to increase as they have every year since they were included in Texas morbidity in 1974. This increase is believed due to two factors: 1) the lack of consistency in reporting practices among reporting agents throughout the state, and 2) the relatively high cost of laboratory tests capable of distinguishing between hepatitis type A and hepatitis type B.

TABLE 10

REPORTED CASES OF HEPATITIS TYPE A AND HEPATITIS TYPE UNSPECIFIED BY AGE GROUP, TEXAS — 1979

AGE GROUP	HEPATITIS TYPE A # CASES	%	HEPATITIS TYPE UNSPECIFIED # CASES	%
◄9	687	21%	326	18%
10-19	757	23	438	24
20-29	1,064	32	652	35
30-39	356	11	193	10
40-49	154	5	84	5
50-59	92	3	46	3
60-69	43	1	35	2
70+	39	1	25	1
Not stated	97	3	41	2
TOTAL	3,289	100%	1,840	100%

APPENDIX

TABLE I

REPORTED CASES OF SPECIFIED NOTIFIABLE DISEASES, TEXAS, 1971–1979

DISEASE	1979	1978	1977	1976	1975	1974	1973	1972	1971
Texas Population (in thousands)	13,385*	13,050	12,860	12,599	12,318	12,017	11,830	11,619	11,422
Amebiasis	301	210	216	146	129	186	195	180	167
Anthrax	–	–	–	–	–	–	–	–	–
Aseptic meningitis	753	405	315	312	362	228	180	272	237
Botulism	3	4	1	–	–	2	–	–	–
Brucellosis	28	23	33	77	29	18	36	5	25
Chickenpox	7,009	6,163	8,222	8,280	9,213	7,505	11,034	1,778	**
Cholera	–	–	–	–	–	–	1	–	–
Dengue	–	3	–	–	–	–	–	–	–
Diphtheria	–	–	4	1	6	9	18	41	56
Encephalitis, infectious	59[1]	47[1]	55[1]	35[1]	82[1]	30	43	43	22
Gonorrhea[2]	81,828	88,943	84,789	82,304	76,486	75,086	66,900	58,818	55,043
Hepatitis, type A	3,289	2,696	2,086	1,762	2,955	3,818			
Hepatitis, type B	685	586	650	497	490	357	5,189[3]	4,216[3]	4,127[3]
Hepatitis, type unsp.	1,840	1,198	1,064	836	573	116			
Influenza and flu–like illness	86,689	99,394	67,094	132,749	92,585	118,847	109,669	170,127	59,868
Leprosy (Hansen's disease)	31	28	26	16	17	18	23	34	26
Leptospirosis	8	14	6	6	10	5	1	1	10
Malaria	1	1	–	–	–	–	–	2	3
Malaria acquired ex U.S.	44	32	27	16	19	9	10	67	437
Measles (rubeola)	670	1,033	2,032	265	275	212	532	1,617	9,585
Meningococcal infections	166	144	147	140	151	116	111	89	107
Mumps	908	1,527	995	1,755	4,077	3,500	3,786	5,108	9,231
Pertussis	104	132	75	36	136	99	115	185	282
Plague	–	–	–	–	–	–	–	–	–
Poliomyelitis, paralytic	–	–	3	–	2	–	–	4	4
Psittacosis	5	5	6	2	6	58	5	4	1
Q fever	2	–	1	2	2	–	1	4	–
Rabies in man	1	–	–	1	–	–	–	–	–
Rabies in animals	1,195	556	382	329	325	383	264	334	317
Relapsing fever	8	–	1	1	–	–	–	–	–
Rheumatic fever, acute	14	25	17	29	22	33	29	30	51
Rocky Mountain spotted fever	22	28	30	29	34	18	11	15	13
Rubella (German measles)	212	407	776	267	370	317	1,136	1,596	4,414
Rubella congenital syndrome	4	2	2	3	1	12	5	2	9
St. Louis encephalitis	5	–	9	77	37	**	**	**	**
Salmonellosis	2,198	1,199	1,045	917	1,110	994	1,211	979	1,037
Shigellosis	2,299	1,865	1,565	1,304	1,447	1,126	1,904	1,015	1,014
Smallpox	–	–	–	–	–	–	–	–	–
Strep throat, scarlet fever	37,526	29,433	31,595	36,385	35,861	43,817	44,613	50,274	43,598
Syphilis, Primary & secondary[2]	3,154	2,637	2,123	2,041	1,579	1,405	1,521	1,800	2,453
Tetanus	17	11	16	12	16	4	10	20	10
Trichinosis	4	2	11	2	4	4	4	–	1
Tuberculosis	2,090	2,160	2,326	2,454	2,600	2,311	2,224	2,422	2,730
Tularemia	11	6	11	10	19	8	8	11	12
Typhoid fever	67	40	28	18	19	13	14	20	24
Typhus fever, endemic	59	33	55	58	30	12	28	13	17
Typhus fever, epidemic	–	–	–	–	–	–	–	–	–
Venezuelan equine encephalitis	–	–	–	–	–	–	–	–	88
Western equine encephalitis	–	–	7	–	–	**	**	**	**
Yellow fever	–	–	–	–	–	–	–	–	–

1. Exclusive of arboviral encephalitides
2. Civilian cases only
3. Includes all types of viral hepatitis

* Provisional
** Not Reportable

TABLE II

REPORTED CASES OF SPECIFIED NOTIFIABLE DISEASES
PER 100,000 POPULATION, TEXAS, 1971–1979

DISEASE	1979	1978	1977	1976	1975	1974	1973	1972	1971
Texas Population (in thousands)	13,385*	13,050	12,860	12,599	12,318	12,017	11,830	11,619	11,422
Amebiasis	2.25	1.61	1.68	1.16	1.05	1.55	1.65	1.55	1.46
Anthrax	–	–	–	–	–	–	–	–	–
Aseptic meningitis	5.63	3.10	2.45	2.48	2.94	1.90	1.52	2.34	2.07
Botulism	0.02	0.03	0.01	–	–	0.02	–	–	–
Brucellosis	0.21	0.18	0.26	0.61	0.24	0.15	0.30	0.04	0.22
Chickenpox	52.36	47.23	63.93	65.72	74.79	62.45	93.27	15.30	**
Cholera	–	–	–	–	–	–	0.01	–	–
Dengue	–	0.02	–	–	–	–	–	–	–
Diphtheria	–	–	0.03	0.01	0.05	0.07	0.15	0.35	0.49
Encephalitis, infectious	0.44[1]	0.36[1]	0.43[1]	0.28[1]	0.67[1]	0.25	0.36	0.37	0.19
Gonorrhea[2]	647.90	681.56	659.32	653.26	620.93	624.83	565.51	506.22	481.90
Hepatitis, type A	24.57	20.66	16.22	13.99	23.99	31.77			
Hepatitis, type B	5.12	4.50	5.05	3.94	3.98	2.97	43.86[3]	36.29[3]	36.13[3]
Hepatitis, type unspecified	13.75	9.18	8.27	6.64	4.65	0.97			
Influenza & flu–like illness	647.66	761.64	521.73	1053.65	751.62	988.99	927.04	1464.21	524.15
Leprosy (Hansen's disease)	0.23	0.22	0.20	0.13	0.14	0.15	0.19	0.29	0.23
Leptospirosis	0.06	0.11	0.05	0.05	0.08	0.04	0.01	0.01	0.09
Malaria	0.01	0.01	–	–	–	–	–	0.02	0.03
Malaria, acquired ex U.S.	0.33	0.25	0.21	0.13	0.15	0.07	0.08	0.58	3.83
Measles (rubeola)	5.01	7.94	15.80	2.10	2.23	1.76	4.50	13.92	83.92
Meningococcal infections	1.24	1.11	1.14	1.11	1.23	0.97	0.94	0.77	0.94
Mumps	6.78	11.70	7.74	13.93	33.10	29.13	32.00	43.96	80.82
Pertussis	0.78	1.01	0.58	0.29	1.10	0.82	0.97	1.59	2.47
Plague	–	–	–	–	–	–	–	–	–
Poliomyelitis, paralytic	–	–	0.02	–	0.02	–	–	0.03	0.04
Psittacosis	0.04	0.04	0.05	0.02	0.05	0.48	0.04	0.03	0.01
Q fever	0.02	–	0.01	0.02	0.02	–	0.01	0.03	–
Rabies in man	0.01	–	–	0.01	–	–	–	–	–
Relapsing fever	0.06	–	0.01	0.01	–	–	–	–	–
Rheumatic fever, acute	0.10	0.19	0.13	0.23	0.18	0.27	0.25	0.26	0.45
Rocky Mountain spotted fever	0.16	0.22	0.23	0.23	0.28	0.15	0.09	0.13	0.11
Rubella (German measles)	1.58	3.13	6.03	2.12	3.00	2.64	9.60	13.74	38.64
Rubella congenital syndrome	0.03	0.02	0.02	0.02	0.01	0.10	0.04	0.02	0.08
St. Louis encephalitis	0.04	–	0.07	0.61	0.30	–	–	–	–
Salmonellosis	16.42	9.19	8.13	7.28	9.01	8.27	10.24	8.43	9.08
Shigellosis	17.18	14.29	12.17	10.35	11.75	9.37	16.09	8.74	8.88
Smallpox	–	–	–	–	–	–	–	–	–
Strep throat, scarlet fever	280.36	225.54	245.68	288.79	291.13	364.63	377.12	432.69	381.70
Syphilis, primary & secondary[2]	24.30	44.41	40.19	40.00	36.02	38.22	45.97	47.88	58.31
Tetanus	0.13	0.08	0.12	0.10	0.13	0.03	0.08	0.17	0.09
Trichinosis	0.03	0.02	0.09	0.02	0.03	0.03	0.03	–	0.01
Tuberculosis	15.61	16.55	18.08	19.48	21.11		18.80	20.85	23.90
Tularemia	0.08	0.05	0.09	0.08	0.15	0.07	0.07	0.09	0.11
Typhoid fever	0.50	0.31	0.22	0.14	0.15	0.11	0.12	0.17	0.21
Typhus fever, endemic	0.44	0.25	0.43	0.46	0.24	0.10	0.24	0.11	0.15
Typhus fever, epidemic	–	–	–	–	–	–	–	–	–
Venezuelan equine encephalitis	–	–	–	–	–	–	–	–	0.77
Western equine encephalitis	–	–	0.05	–	–	**	**	**	**
Yellow fever	–	–	–	–	–	–	–	–	

1. Exclusive of arboviral encephalitides
2. Civilian cases only
3. Includes all types of viral hepatitis

* Provisional
** Not reportable

TABLE III
DEATHS FROM SPECIFIED NOTIFIABLE DISEASES'
TEXAS, 1971-1979

CAUSE OF DEATH	ICD[2]	1979	1978	1977	1976	1975	1974	1973	1972	1971
Amebiasis	006	5	2	4	5	3	5	5	6	12
Aseptic meningitis	047	2	–	–	5	2	1	5	6	1
Botulism	005.1	–	1	–	–	–	–	–	1	–
Brucellosis	023	–	–	–	1	–	1	–	3	–
Chickenpox	052	5	7	8	10	5	7	19	9	10
Diphtheria	032	–	–	1	1	–	2	–	1	3
Encephalitis, viral	049	9[3]	12[3]	16[3]	12[3]	15[3]	15	15	15	19
Gonorrhea	098	1	2	1	–	2	2	1	3	–
Hepatitis, viral, type A	070.0–070.1	8	33	34	42	41	52	52	53	73
Hepatitis, viral, type B	070.2–070.3	14	11	6	5	8	6	11	11	16
Hepatitis, viral, type unspec.	070.4–070.9	19	49	63	63	31	43	57	38	55
Influenza	487	30	190	64	567	211	110	249	293	52
Leprosy (Hansen's disease)	030	–	2	1	1	–	1	1	1	1
Leptospirosis	100	3	–	1	2	–	1	–	1	–
Malaria[4]	084	–	–	–	–	–	–	–	–	–
Measles (rubeola)	055	1	1	3	–	3	2	1	5	9
Meningococcal infections	036	27	37	25	20	28	22	39	25	23
Mumps	072	–	1	–	2	–	–	–	1	1
Pertussis	033	–	–	1	–	1	1	1	1	2
Poliomyelitis, total, acute	045	–	–	–	–	–	–	1	2	1
Rheumatic fever, acute	390–391	10	5	11	4	8	12	9	13	8
Rocky Mountain spotted fever	082.0	1	–	1	–	3	2	1	–	–
Rubella (German measles)	056	–	–	2	1	1	–	3	–	2
Rubella congenital syndrome	771.0	–	–	1	–	4	5	2	1	1
St. Louis encephalitis	062.3	–	–	–	4	3	–	–	1	–
Salmonellosis	003	2	3	3	1	5	2	5	5	2
Shigellosis	004	1	6	7	3	6	5	6	4	4
Strep throat, scarlet fever	034	2	–	4	1	2	–	1	1	2
Syphilis, total	090–097	12	15	13	18	26	15	31	39	34
Tetanus, excluding neonatal	037	5	4[5]	9[5]	4[5]	8[5]	3[5]	6[5]	10[5]	10[5]
Tetanus, neonatal	771.3	1	*	*	*	*	*	*	*	*
Trichinosis	124	–	–	–	–	–	–	–	–	–
Tuberculosis	010–018	112	163	176	211	200	237	247	256	255
Tularemia	021	1	–	–	1	–	1	[illegible]	1	–
Typhoid fever	002.0	1	–	–	–	1	–		2	1
Typhus fever, endemic	081.0	–	–	–	–	–	–		–	

1. Source: Bureau of Vital Statistics, TDH, computer tabulations
2. Category numbers of the Ninth Revision of the International Classification of Diseases, adapted 1975
3. Exclusive of arboviral encephalitides
4. Includes malaria acquired within and outside the United States
5. Includes neonatal tetanus (until 1979); * prior to 1979 neonatal tetanus deaths were included in total tetanus deaths.

TABLE IV

DEATHS FROM SELECTED NON-NOTIFIABLE CONDITIONS OF INTEREST TO PUBLIC HEALTH, TEXAS 1971-1979[1]

CAUSE OF DEATH	ICDA[2]	1979	1978	1977	1976	1975	1974	1973	1972	1971
Texas Population (in thousands)		13,385*	13,050	12,860	12,599	12,318	12,017	11,830	11,619	11,422
Child battering & Other Maltreatment	E967	13	26[3]	41[3]	28[3]	**	**	**	**	**
Guillain-Barre Syndrome	357.0	13	18	14	6	14	16	12	14	10
Mycobacteria Infection	031	8	6	4	2	5	7	6	5	5
Reye's Syndrome	331.8	19	177	164	147	137	151	126	124	106
Sudden Infant Death Syndrome	798.0	340	298	293	217	203	175	**	**	**

[1]Source: computer tabulations, Bureau of Vital Statistics, TDH, with the exception of the child abuse category .

[2]Numbers after cause of death are category numbers of the Ninth Revision of the International Classification of Diseases, adapted 1975

[3]Child abuse, source: manual tabulation, Bureau of Vital Statistics

*provisional

**data not available

TABLE V REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY MONTH OF REPORT, TEXAS, 1979

	TOTAL	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT'.	OCT.	NOV.	DEC.
Amebiasis	301	3	30	26	13	15	44	25	31	30	18	29	37
Aseptic Meningitis	753	19	14	13	16	38	132	124	121	112	83	40	41
Botulism	3	-	-	-	-	-	2	-	1	-	-	-	-
Brucellosis	28	-	1	-	-	6	2	2	1	6	2	-	8
Chickenpox	7,009	419	633	1,475	1,201	930	1,104	143	87	97	157	235	528
Diphtheria	-	-	-	-	-	-	-	-	-	-	-	-	-
Encephalitis, Infectious Viral[1]	59	-	3	4	2	-	5	9	13	7	5	4	7
Hepatitis A	3,289	267	303	261	272	266	370	238	274	288	234	238	278
Hepatitis B	685	50	56	64	36	50	75	56	51	47	52	60	88
Hepatitis Unspecified	1,840	123	109	202	74	198	160	141	145	142	167	141	238
Influenza and Influenza-Like Illness	86,689	16,367	16,924	11,548	5,651	3,243	2,770	2,513	2,556	3,394	4,419	7,891	9,413
Leprosy (Hansen's Disease)	31	2	6	3	-	7	6	3	2	-	1	-	1
Leptospirosis	8	-	-	-	-	-	1	1	3	-	1	-	2
Malaria-Acquired Outside U.S.	44	1	3	3	2	-	5	3	3	3	6	6	9
Measles	670	57	80	188	147	79	42	7	9	18	11	9	23
Meningococcal Infections	166	14	13	28	23	16	18	12	11	5	7	6	13
Mumps	908	89	108	223	112	87	144	36	14	19	12	23	41
Pertussis	104	12	7	21	4	5	5	12	21	5	6	1	5
Poliomyelitis, Paralytic	-	-	-	-	-	-	-	-	-	-	-	-	-
Psittacosis	5	-	-	1	-	1	1	-	-	-	-	-	2
Q Fever	2	-	-	-	-	-	1	-	-	-	1	-	-
Relapsing Fever	8	2	1	-	-	-	-	-	-	-	-	-	5
Rheumatic Fever (Acute)	14	2	1	2	-	2	3	1	2	-	-	-	1
Rocky Mt. Spotted Fever	22	-	-	1	-	4	3	3	2	2	3	-	4
Rubella	212	11	14	48	27	13	32	8	17	12	12	11	7
Rubella Congenital Syndrome	4	-	-	2	-	2	-	-	-	-	-	-	-
St. Louis Encephalitis	5	-	-	-	-	-	-	-	1	-	4	-	-
Salmonellosis, Excluding Typhoid	2,198	79	38	53	200	105	115	123	109	296	169	577	334
Shigellosis	2,299	73	89	79	147	139	162	204	195	385	158	395	273
Strep Throat and Scarlet Fever	37,526	3,767	4,628	5,367	3,321	2,082	2,901	2,068	2,038	2,666	2,641	2,803	3,244
Tetanus	17	-	-	-	1	1	2	1	-	4	-	2	6
Trichinosis	4	-	-	-	-	-	-	-	-	-	2	-	2
Tuberculosis	2,090	195	173	183	182	214	140	169	194	157	195	150	138
Tularemia	11	-	1	-	-	2	-	1	-	1	1	1	4
Typhoid Fever	67	-	2	4	1	9	6	5	11	9	10	5	5
Typhus, Endemic	59	-	1	1	1	6	10	6	3	14	4	1	12

[1] exclusive of arboviral encephalitides

TABLE VI

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY AGE, TEXAS, 1979

DISEASE	TOTAL	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-39	40-49	50-59	60+	Age Not Specified
Amebiasis	301	6	20	8	25	12	30	27	48	25	24	19	57
Aseptic meningitis	753	298	106	84	57	43	51	38	43	11	9	7	6
Botulism	3	1	1	-	-	-	-	-	1	-	-	-	-
Brucellosis	28	-	-	-	-	1	2	4	8	2	7	4	-
Chickenpox	7,009	152	1,701	2,394	365	196	-	-	-	-	-	-	2,201
Encephalitfs, infectious[1]	59	5	7	10	10	3	6	4	3	3	5	3	-
Gonorrhea[2]	81,828	23	59	93	589	19,921	32,512	16,924	9,493	1,735	378	101	-
Hepatitis, type A	3,289	10	168	509	345	412	610	454	356	154	92	82	97
Hepatitis, type B	685	2	4	9	22	89	196	134	93	36	33	30	37
Hepatitis, type unspecified	1,840	6	70	250	166	272	354	298	193	84	46	60	41
Leprosy (Hansen's disease)	31	-	-	-	1	-	3	2	5	3	10	7	-
Leptospirosis	8	-	-	-	-	2	2	3	1	-	-	-	-
Malaria-acquired ex U.S.	44	-	1	3	5	2	9	6	7	7	3	1	-
Measles	670	39	78	122	146	98	17	3	4	1	1	-	161[3]
Meningococcal infections	166	41	56	14	5	16	7	3	8	3	5	7	1
Mumps	908	5	70	322	152	61	4	3	3	2	-	-	286
Pertussis	104	63	30	3	3	-	-	1	1	-	-	1	2
Psittacosis	5	-	-	-	-	-	-	-	2	1	2	-	-
Q fever	2	-	-	-	-	-	-	-	-	1	-	1	-
Rabies in man	1	-	-	1	-	-	-	-	-	-	-	-	-
Relapsing fever	8	-	-	-	1	-	-	2	2	2	-	1	-
Rheumatic fever (acute)	14	-	-	5	4	1	-	-	1	2	-	1	-
Rocky Mountain spotted fever	22	-	5	4	2	1	-	-	4	2	-	4	-
Rubella	212	46	43	21	9	17	16	7	6	-	-	1	46
Rubella congenital syndrome	4	2	2	-	-	-	-	-	-	-	-	-	-
Salmonellosis	2,198	592	420	109	55	53	78	73	103	57	69	180	409
Shigellosis	2,299	170	911	378	99	55	116	128	128	40	34	75	165
Syphilis, primary & secondary[2]	3,154	-	-	-	19	470	971	753	687	171	65	18	-
Tetanus	17	3	-	-	-	-	-	-	2	3	2	7	-
Trichinosis	4	-	-	-	-	-	-	1	2	-	-	1	-
Tuberculosis	2,090	23	77	30	18	69	154	170	280	295	357	617	-
Tularemia	11	-	1	-	-	-	-	-	5	1	-	4	-
Typhoid fever	67	1	6	15	9	6	10	6	6	1	1	5	1
Typhus fever, endemic	59	-	3	13	4	9	9	-	8	3	1	9	-

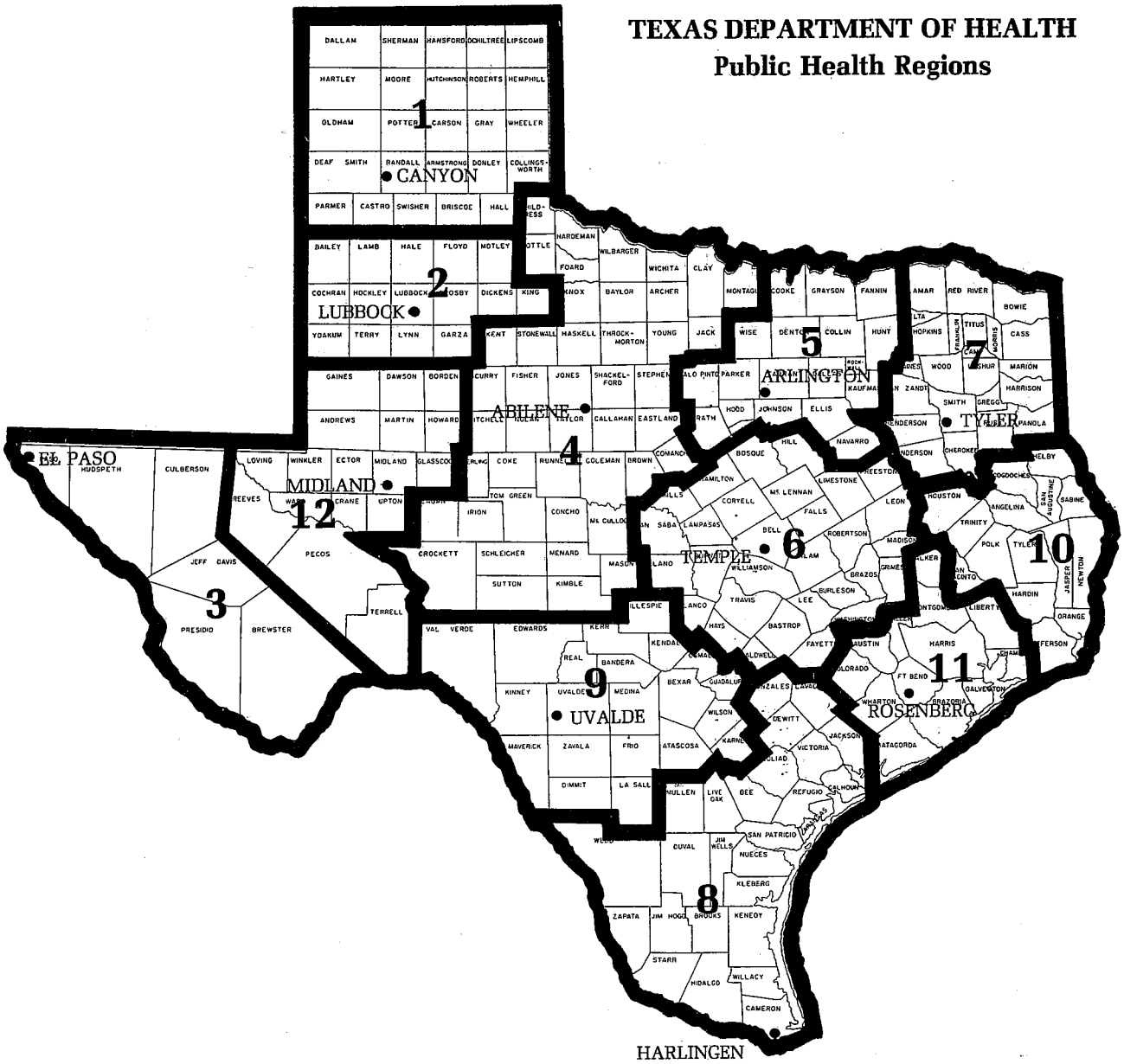
1. Exclusive of arboviral encephalitides
2. Civilian cases only
3. 148 cases are known to be in military recruits

TABLE VII

REPORTED CASES OF SPECIFIC NOTIFIABLE DISEASES BY PUBLIC HEALTH REGION, TEXAS, 1979

DISEASE	TOTAL	1	2	3	4	5	6	7	8	9	10	11	12	Military[1]
Amebiasis	301	2	11	17	4	35	82	3	63	4	-	78	2	-
Aseptic meningitis	753	24	2	8	9	311	42	16	58	89	2	177	-	15
Botulism	3	1	-	-	-	1	-	-	-	-	1	-	-	-
Brucellosis	28	2	1	3	2	2	2	2	4	5	-	3	-	2
Chickenpox	7,009	461	92	344	518	1,317	594	622	1,170	455	116	932	342	46
Encephalitis, infectious[2]	59	3	7	5	2	16	3	1	5	9	4	3	1	-
Gonorrhea	46,722	1,372	1,483	2,029	1,515	24,931	7,101	3,530	2,234	4,582	3,824	28,276	951	4,894
Hepatitis, type A	3,289	525	57	126	54	568	483	109	352	396	84	449	43	43
Hepatitis, type B	685	2	7	39	11	222	46	27	48	65	3	176	4	35
Hepatitis, type unspecified	1,840	43	46	43	27	127	217	42	95	42	35	1,072	32	19
Influenza & flu-like illness	16,689	2,535	2,068	33	9,778	5,173	27,203	5,777	17,061	5,584	873	4,763	1,488	4,353
Leprosy (Hansen's disease)	31	1	-	1	-	1	-	-	14	2	6	6	-	-
Leptospirosis	8	1	-	-	-	1	-	1	-	-	1	4	-	-
Measles	670	2	3	14	72	50	29	30	89	50	29	123	1	178
Meningococcal infections	166	2	1	3	2	47	19	4	10	9	13	51	3	2
Mumps	908	16	20	16	24	370	105	89	88	16	11	124	27	2
Pertussis	104	3	5	3	2	73	3	3	2	5	-	5	-	-
Psittacosis	5	-	-	-	-	1	2	-	-	-	-	2	-	-
Rheumatic fever, acute	14	1	1	2	-	1	-	-	1	4	-	4	-	-
Rocky Mountain spotted fever	22	-	-	-	1	5	5	4	1	-	3	3	-	-
Rubella	212	4	2	4	13	29	13	13	44	15	7	9	6	53
Salmonellosis	2,198	43	49	124	50	465	265	119	216	213	49	543	5	57
Shigellosis	2,299	17	100	186	6	263	247	49	475	210	42	690	1	13
Strep throat, scarlet fever	17,526	1,680	1,681	147	5,112	3,951	4,239	1,983	6,973	3,673	367	3,796	2,961	963
Syphilis, primary & secondary	3,252	15	52	106	23	872	217	50	118	155	77	1,466	3	98
Tetanus	17	-	-	-	3	2	3	-	4	2	-	3	-	-
Trichinosis	4	-	-	-	-	-	-	1	-	2	-	1	-	-
Tuberculosis	2,090	16	25	81	50	413	117	131	290	204	74	650	39	-
Tularemia	11	-	-	2	-	2	-	6	1	-	-	-	-	-
Typhoid fever	67	-	2	11	1	13	4	4	16	4	1	11	-	-
Typhus, endemic	59	-	-	1	-	3	1	-	53	-	-	1	-	

1. Includes military installations and VA hospitals
2. Exclusive of arboviral encephalitides



• Regional Headquarters

REPORTABLE DISEASES OF TEXAS

In Texas, specific rules and regulations for the control of communicable diseases have been approved by the State Board of Health under the legal authority vested in them by Articles 4418a, 4419, and 4477 of the Texas Revised Civil Statutes. These include the designation of certain diseases as "reportable" as well as the establishment of the mechanics for reporting communicable diseases, control measures, and the use of quarantine procedures. The following diseases are reportable in Texas:

Diseases to be Reported Immediately by Telephone to the Texas Department of Health

- Botulism
- Cholera
- Diphtheria
- Plague
- Poliomyelitis, paralytic
- Smallpox
- Yellow fever

Diseases Reportable by Name, Address, Age, Sex, and Race/Ethnicity

- Amebiasis
- Anthrax
- Aseptic meningitis
- Botulism
- Brucellosis
- Cholera
- Diphtheria
- Encephalitis (specify etiology)
- Hansen's disease (leprosy)
- Hepatitis, viral
  - Type A
  - Type B
  - unspecified
- Leptospirosis
- Malaria
- Measles
- Meningococcal infections
- Mumps
- Pertussis
- Plague
- Poliomyelitis, paralytic
- Psittacosis
- Q fever
- Rabies in man
- Relapsing fever
- Rheumatic fever, acute
- Rocky Mountain spotted fever
- Rubella
- Rubella congenital syndrome
- Salmonellosis
- Shigellosis
- Smallpox
- Tetanus
- Trichinosis
- Tularemia
- Typhoid fever
- Typhus fever;
  - endemic (murine)
  - epidemic
- Yellow fever

Diseases Reportable by Numerical Totals

- Chickenpox
- Influenza and flu-like illness
- Streptococcal sore throat (including scarlet fever)

In addition to the requirements of individual case reports, any unusual or group expression of illness which may be of public health concern should be reported to the local health authorities or the State Epidemiologist by the most expeditious means (AC 512-458-7207 or Tex-An 824-9207). Epidemiologic investigative consultation and assistance are available from the Texas Department of Health upon request.

If no cases occurred during the week, write "NONE" across the card. Upon completing your report, fold the top flap over the bottom flap and seal and return. Your cooperation in securing these reports promptly is greatly appreciated.

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

BUSINESS REPLY CARD
FIRST CLASS PERMIT NO. 239 AUSTIN, TEXAS
POSTAGE WILL BE PAID BY ADDRESSEE

TEXAS DEPARTMENT OF HEALTH
COMMUNICABLE DISEASE SERVICES
1100 WEST 49th STREET
AUSTIN, TEXAS 78756

NOTIFIABLE DISEASE REPORT FOR WEEK ENDING*_____

Leave This Space Blank	Disease	Patient (Last, First, Middle Initial)	Age*	Sex	Racet
		Name Address City			
		Name Address City			
		Name Address City			
		Name Address City			
		Name Address City			
		Name Address City			
		Name Address City			
		Name Address City			
		Name Address City			
		Name Address City			
		Name Address City			

*REPORT AGE AT LAST BIRTHDAY. IF LESS THAN 1 YR. REPORT BY MONTH.

†ENTER CODE AS APPROPRIATE

WHITE 1
HISPANIC
BLACK
AMERICAN INDIAN or ALASKAN NATIVE 4
ASIAN or PACIFIC ISLANDER
UNKNOWN

CHECK FOR ADDITIONAL SUPPLI!

☐ J-27 (VD REPORTING)
☐ TB-400 (REPORTING)

REPORT BY NUMBER OF CASES PER AGE GROUP:

052	CHICKENPOX	<1 yr.	1-4	5-9	10-14	15+	Unk.

REPORT BY NUMBER OF CASES:

487—Influenza & flu-like illness_____

034—Strep. sore throat, incl. scarlet fever_____

FORM C-15 (REV. 6-79)

P M S tment of H