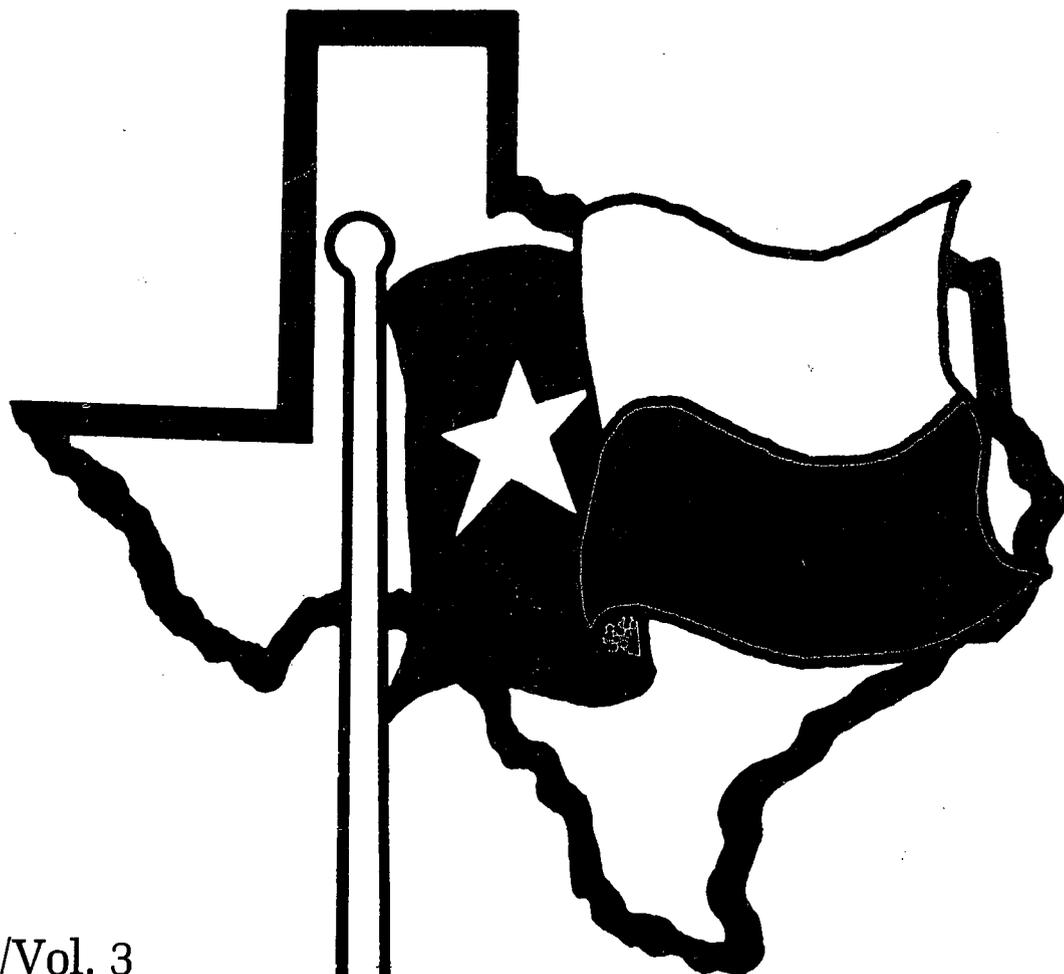


# REPORTED MORBIDITY AND MORTALITY IN TEXAS

## 1980 ANNUAL SUMMARY

TEXAS DEPARTMENT OF HEALTH

LAST COPY



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Epidemiology Division  
Bureau of Communicable Disease Services  
Texas Department of Health  
1100 West 49th Street  
Austin, Texas 78756  
(512)458-7328

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## Historical Background

Laws which required the reporting of certain communicable diseases were first passed by the Texas State Legislature in 1910. Later, in 1920, the procedures for the reporting and management of communicable diseases in Texas became operative. Since that time, a surveillance system based on communicable disease reports submitted each week from designated reporting agents across the state has served as the primary mechanism for the collection of morbidity data 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 disease 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, and military installations. Notifiable Case Report Cards, Form C-15 (Appendix), are mailed to reporting agents each week; 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 which have been filed with the Bureau of Vital Statistics, Texas Department of Health.

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 perti-

nent 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 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 national Centers 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 notifiable (reportable) diseases in Texas for 1980. 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 Immunization Division, the Bureau of Vital Statistics, and the Bureau of Laboratories.

The population figures for 1972-1980 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 1980 provisional Texas population figure (14,229,000) reflects a 6.3% increase over the 1979 state population (13,385,000).

The degree of completeness of the morbidity data published in this report is influenced by the interests and priorities of the various reporting agents for disease control and surveillance; however, the degree of under-reporting is thought to remain consistent over time allowing data comparison over the years.

# Selected Disease Summaries

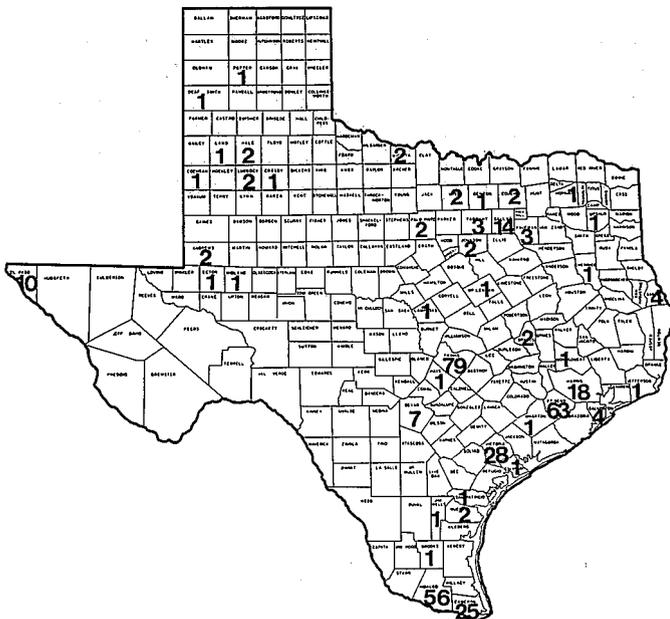
## Amebiasis

Amebiasis is an infection with the protozoan parasite, *Entamoeba histolytica*. Usually restricted to the gastrointestinal tract, many infections are asymptomatic, and infections may vary from mild abdominal discomfort to acute fulminating dysentery. Severe extra-intestinal infections (i.e. hepatic or brain abscess) occur infrequently. The disease is primarily spread through hand-to-mouth transfer of infective feces, through water or contaminated raw vegetables. The Texas Department of Health received reports of 355 cases of amebiasis during 1980. This represented an 18% increase in the number of cases reported in 1979 (301 cases).

Of the 355 cases, 203 were male, and 144 were female; sex of the patient was not indicated for eight cases. The racial and/or ethnic distribution of cases included 110 cases reported as white, 162 as Hispanic, 21 cases as black, 13 cases as Asian/Pacific Islander, and 49 cases for whom race/ethnicity was not specified. All age groups were represented among cases, with the largest number of cases (86) being reported in the 10-19 year age group. The ages were not provided for 41 cases.

Geographic distribution of cases within the state is shown in Figure 1. The large numbers of cases reported in Fort Bend and Travis Counties are associated with institutionalized populations where 120 cases occurred, 34% of the state's total. Twenty-one of the 28 cases reported from Victoria County represented an outbreak involving one extended family; one death resulted from this outbreak.

**FIGURE 1**  
**Reported Cases of Amebiasis in Texas**  
**By County of Residence, 1980**



## Aseptic Meningitis

Aseptic meningitis is not a distinct clinical entity, but rather a usually benign meningitis syndrome characterized by a negative cerebrospinal fluid gram stain and culture. The term aseptic meningitis may include rickettsial, bacterial (e.g. leptospira), autoimmune, and chemical agents.

Viral meningitis (a common syndrome often reported as aseptic meningitis) and viral encephalitis represent a clinical continuum, and have been attributed to a variety of viral agents. However, some viruses, such as mumps and enteroviruses (echovirus and coxsackievirus) tend to cause predominantly benign disease (viral meningitis), whereas other viruses, such as herpes simplex and arboviruses, cause more severe and sometimes fatal disease (viral encephalitis).

The Texas Department of Health received 432 reports of aseptic meningitis during 1980, a decrease of 43% from the 753 cases reported in 1979, and approximately equal to the 404 cases reported in 1978. Cases were equally distributed between males (228 cases) and females (204 cases). Two deaths were reported.

The majority (85%) of cases occurred in persons under 30 years of age, and the largest number of cases (174) was reported in infants less than one year of age. The race and/or ethnicity of the 432 cases included 240 (56%) classified as white, 93 (22%) as black, 78 (18%) as Hispanic, six (1%) as Asian/Pacific Islander, and 15 (3%) for whom no race was specified.

Most of the cases were reported from the larger metropolitan areas; Dallas County reported a total of 131 cases, and 143 cases were reported in Harris County. Three hundred and eight reports (71%) were received during the months of June through November. Viruses isolated from cases during this period included echovirus types 9, 14, and 16, and coxsackievirus B-2. Sero-conversion to herpes virus was documented in one case.

## Brucellosis

The Texas Department of Health recorded 28 cases of brucellosis during 1980, the same number of cases as was reported in 1979. Cases again were scattered throughout the state (as shown in Figure 2), and no outbreaks of the disease were reported. The distribution of cases by sex also remained the same as in 1979: 24 males and four females.

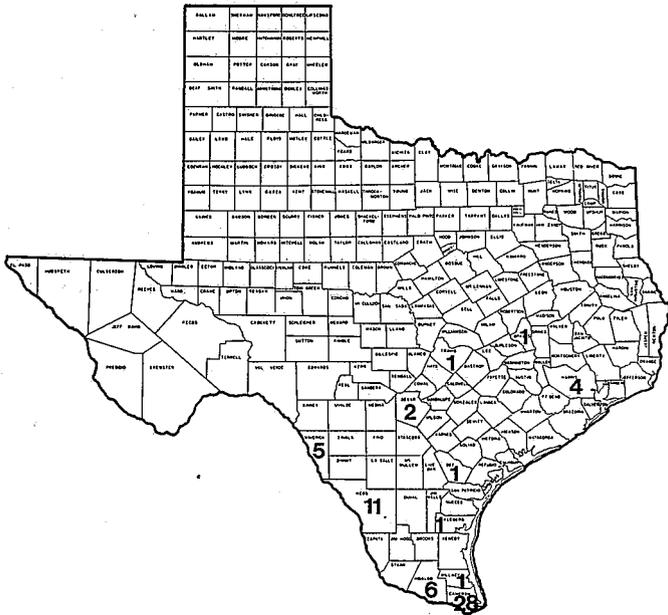
Brucellosis is predominantly an occupational disease of those working with infected animals, usually cattle, swine, and goats. The work activities reported by 17 of the 24 men were indicative of occupational exposure and included eight farmers and/or ranchers, five employed in the meat processing industry, three employed as or by veterinarians, and one animal health



Twenty-seven individuals (44%) reported no travel during the ten days prior to illness, and are, therefore, considered indigenous cases. Travel to Monterrey, Matamoros, or other cities in Mexico was reported by 19 individuals; these cases are considered to have been imported to Texas from Mexico. Travel history remains unknown for 15 cases. Indigenous cases were reported from Brownsville, Harlingen, McAllen, Austin, Raymondville, Laredo, San Benito, Eagle Pass, and Houston.

The earliest date of onset recorded was during the week ending August 2, 1980. (See Figure 4.) Peak activity occurred in October, with 32 cases reported. The number of cases declined to zero by mid-November as the cooler weather was presumed to have caused a decrease in vector populations and interrupted the cycle of transmission.

**FIGURE 3**  
**Reported Cases of Dengue in Texas**  
**By County of Residence, 1980**



## Encephalitis

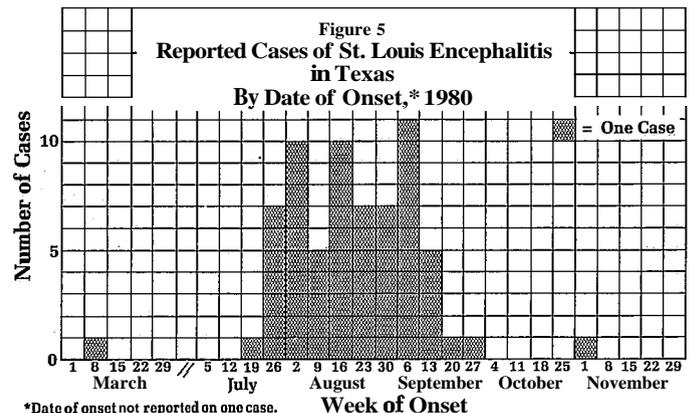
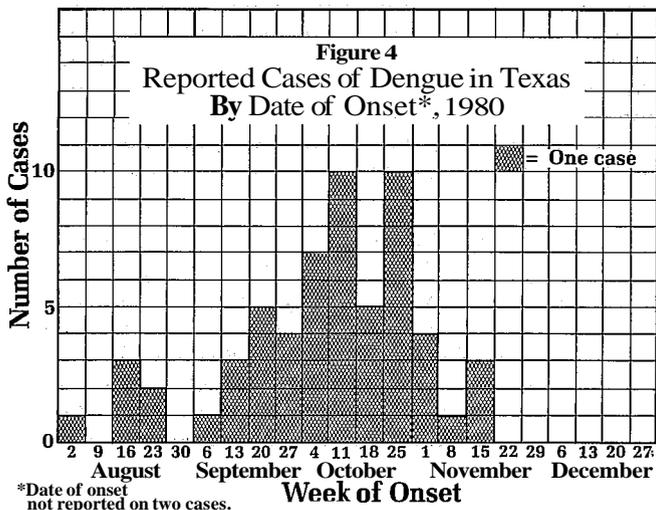
### St. Louis Encephalitis

The first and extraordinarily early case of St. Louis encephalitis (SLE) was reported to the Texas Department of Health from Houston in March 1980. After thorough investigation of the case, it was determined that exposure occurred at the patient's home, and no other cases were found. Other cases of SLE were recognized in the state in late July. Ninety percent (90%) of the cases reported onset during the eight-week period from July 20 through September 13, 1980. (See Figure 5.) All 68 cases reported in Texas were confirmed based on evidence of a four-fold rise in antibody titer to SLE in sera drawn at least two weeks apart.

Cases were clustered along the Gulf Coast region of the state as illustrated in Figure 6. Two urban centers of activity, Harris County and Jefferson County, accounted for 85% of the state's cases. The case reported from Wichita County had recently visited Harris County where he was probably exposed.

The cases ranged in age from three months to 88 years. Two deaths due to SLE were reported. Of the 68 cases, 39 (57.4%) were male, and 29 (42.6%) were female. The racial and/or ethnic distribution included 31 cases reported as white, 24 as Hispanic, 12 as black, and the race/ethnicity of one case was not reported.

The usual experience with SLE in Texas is a scattering of isolated cases where the mosquito vector, *Culex quinquefasciatus*, is present. The sewage systems in large cities along the Gulf Coast are designed to accommodate and be flushed by torrential rains. In the absence of these rains, the underground system of pipes can serve as breeding sites and protected resting places for inordinately large numbers of the vector mosquito. In such situations, mosquito control departments have found it necessary to direct a fog of insecticide into the sewers to reduce the vector populations. The drought and heat wave, which Texas experienced from mid-June to mid-August, were thought to be contributing factors to the increased number of cases which occurred in the state in 1980.





Department of Health's Bureau of Laboratories, much of the variation in the incidence of salmonellosis is undoubtedly caused by a difference in reporting procedures by the various reporting agents and does not accurately represent differences in the incidences of disease.

The highest incidence of salmonellosis in Texas in 1980 was reported in infants less than one year of age among whom there were 691 cases (28.1% of the total number reported). An additional 18% (441 cases) occurred in the one- to four-year-old age group. The ages of 358 cases (14.6%) were not indicated. Table 2 provides the numbers of reported cases in Texas by age and sex for 1980.

**TABLE 2**  
**REPORTED CASES OF SALMONELLOSIS IN TEXAS**  
**BY AGE AND SEX, 1980**

Age Group	Male	Female	Sex Not Reported	Total	% of Total Cases
<1	362	328	1	691	28.1%
1-4	224	214	3	441	18.0
5-9	80	59	1	140	5.7
10-19	96	51	1	148	6.0
20-29	86	110	1	197	8.0
30-39	62	76	—	138	5.6
40-49	37	50	—	87	3.5
50-59	32	47	—	79	3.2
60-69	31	36	—	67	2.7
70-79	38	34	—	72	2.9
80+	15	23	—	38	11.6
Unk	186	156	16	358	14.6
<b>TOTAL</b>	<b>1,249</b>	<b>1,184</b>	<b>23</b>	<b>2,456</b>	<b>99.9%</b>

Because Salmonella gastroenteritis is generally a self-limiting disease in all but the very young or aged, the lower reported incidence in the intermediate ages may be an artifact resulting from the physician's tendency not to obtain stool cultures unless the patient is having marked signs or symptoms.

The Texas Department of Health's Bacteriology Laboratory processed or received 1,968 non-typhoidal *Salmonella* isolates having 87 different serotypes during 1980. The ten most frequent serotypes (shown in Table 3) accounted for 73.5% of the total isolates reported. The most common serotype reported as *Salmonella typhimurium* which represented 24.8% of all isolations in Texas in 1980 compared with 17.6% of the total isolations in 1979. The latest information available for the United States indicates that in 1978, *S. typhimurium* was associated with 34.8% of the cases nationwide.

### Shigellosis

Shigellosis is typically an acute, self-limiting bacterial disease of the intestinal tract and is characterized by diarrhea, fever, abdominal cramps, and tenesmus. In severe infections, the stool may contain pus and blood,

**TABLE 3**

### REPORTED SALMONELLA SEROTYPES, TEXAS, 1980

Serotype (Species Enteritidis)	No. of Isolates	% of Isolates	Cumulative %
Typhimurium	488	24.8%	24.8%
Newport	320	16.3	41.1
Javiana	133	6.8	47.9
Heidelberg	112	5.7	53.6
Infantis	104	5.3	58.9
Agona	85	4.3	63.2
Montevideo	64	3.3	66.5
Oranienburg	61	3.1	69.6
Enteritidis	43	2.2	71.8
Muenchen	37	1.9	73.7
77 other serotypes	521	26.5	100.2
<b>TOTAL</b>	<b>1,968</b>	<b>100.2%</b>	<b>—</b>

and a profuse diarrhea may produce severe dehydration and electrolyte disturbances. In the United States, it is uncommon for species of *Shigella* to spread beyond the intestinal tract to produce disease in other organs.

There is no epidemiologically significant reservoir for *Shigella* other than man; consequently, the disease is transmitted almost exclusively by the fecal-oral route either through food or water contamination or via fomites. Even small lapses in personal hygiene can readily result in the spread of the disease.

**TABLE 4**

### REPORTED CASES OF SHIGELLOSIS IN TEXAS

#### BY AGE AND SEX, 1980

Age Group	Male	Female	Sex Not Reported	Total	% of Total Cases
<1	69	76	—	145	6.7%
1-4	451	385	—	836	38.7
5-9	180	160	—	340	15.7
10-19	80	81	1	162	7.5
20-29	97	152	—	249	11.5
30-39	48	59	—	107	4.9
40-49	19	24	—	43	2.0
50-59	12	21	—	33	1.5
60-69	11	18	—	29	1.3
70-79	13	11	—	24	1.1
80+	11	9	—	20	0.9
Unk	86	84	4	174	8.0
<b>TOTAL</b>	<b>1,077</b>	<b>1,080</b>	<b>5</b>	<b>2,162</b>	<b>99.8%</b>

Children under ten years of age accounted for 61.1% (1,321 cases) of the total cases, and the largest number of cases occurred in the one-to-four-year-old age group where 836 cases (38.7%) were reported. An additional 6.7% (145 cases) occurred in infants under one year of

age. The higher numbers of reported cases in pediatric age groups may be explained in part by the greater likelihood that cultures will be done in those patients who experience the most severe signs and symptoms, usually children. (Table 4 provides the numbers of reported cases of shigellosis in Texas by age and sex in 1980.)

A total of 1,279 *Shigella* isolates were reported by the Texas Department of Health's Bacteriology Laboratory in 1980. The most common *Shigella* serotype reported was *S. sonnei* (Group D) which comprised 61.8% of all the isolates. Table 5 shows the distribution of isolates for all of the four serogroups (A, B, C, and D) which the Bacteriology Laboratory reported last year.

TABLE 5

REPORTED SHIGELLA SEROTYPES, TEXAS, 1980

Serogroup		# Reported Isolates	% Of Isolates
<i>S. sonnei</i>	(Group D)	791	61.8%
<i>S. flexneri</i>	(Group B)	425	33.2
<i>S. boydii</i>	(Group C)	43	3.4
<i>S. dysenteriae</i>	(Group A)	20	1.6
TOTAL		1,279	100.0%

Hansen's Disease

During 1980, 32 cases of Hansen's disease (leprosy) were reported to the Texas Department of Health. This is the largest number of cases reported during one year since 1972 when 34 cases were reported. Figure 7 indicates the county of residence for the 385 active Hansen's disease patients (patients currently on chemotherapy) known to the Texas Department of Health.

The racial and/or ethnic distribution of 1980 cases included seven cases classified as white, 18 cases as Hispanic, one as black, and six cases as Asian/Pacific Islander. Seventeen of the 32 reported cases were imported to Texas and included eight cases from Mexico, five from Southeast Asia, and one case each from Cuba, Tahiti, the French West Indies, and Louisiana. Over time, both the number and the percentage of imported cases reported have been increasing. Table 6 shows the numbers and percentages of indigenous and imported cases for the period 1960-1980.

Hansen's disease cases are divided into one of four types ranging from localized (tuberculoid) to systemic (lepromatous), depending upon histopathologic and clinical criteria. Lepromatous and borderline (dimorphous) types are considered to be contagious if the patient is not under appropriate therapy. The tuberculoid and indeterminate types are not thought to be of significance in the spread of Hansen's disease.

As in 1979, the majority of 1980 cases (25 cases representing 78%) was classified as either lepromatous or borderline. However, only 40% of the potentially communicable cases were indigenous to Texas in 1980 compared with 74% in 1979.

FIGURE 7  
Hansen's Disease Cases in Active Register  
By County of Residence — Texas

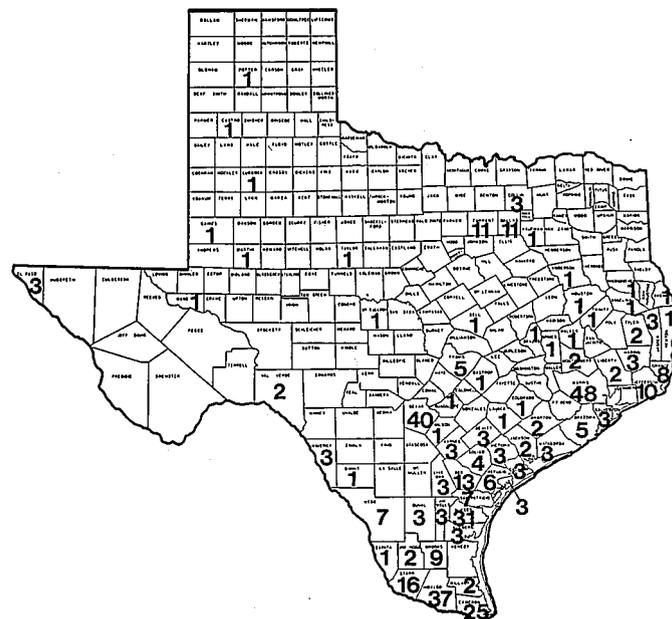


TABLE 6  
REPORTED CASES OF HANSEN'S DISEASE IN TEXAS  
BY ORIGIN OF INFECTION CLASSIFICATION,  
1960-1980

Years	Indigenous #Cases	Indigenous Percent	Imported #Cases	Imported Percent	Total #Cases
1960-64	113	82%	25	18%	138
1965-69	129	81	31	19	160
1970-74	101	75	34	25	135
1975-79	78	63	45	37	123
1980	15	47	17	53	32
1960-80	436	74%	152	26%	588

Influenza and Influenza-Like Illness

During 1980, the Texas Department of Health received data on influenza and influenza-like illness through two programs: the routine morbidity reporting system and a special Influenza Surveillance Program coordinated by the national Centers for Disease Control. These programs, however, were not mutually exclusive. Since more counties reported cases of influenza and flu-like illness through the routine reporting system than through the special surveillance program, the more complete



TABLE 7

**DISTRIBUTION OF IMPORTED MALARIA CASES BY  
GEOGRAPHIC ORIGIN OF THE PARASITE  
TEXAS, 1980**

Geographic Origin	P. vivax	P. falciparum	P. malariae	Mixed Infection	Not Stated	Total
Asia	58	8	4	9	6	85
Africa	6	2	1	2	1	12
Central America	6	1	—	3	—	10
South America	5	—	—	—	—	5
Multiple Exposures	—	1	—	—	—	1
Not Stated	1	1	—	—	—	2
<b>TOTAL</b>	<b>76</b>	<b>13</b>	<b>5</b>	<b>14</b>	<b>7</b>	<b>115</b>

115 cases (21%) reported taking some amount of malaria prophylaxis.

Three species of malaria parasites were reported in Texas last year. Seventy-six cases were infected with *Plasmodium vivax*, 13 were infected with *P. falciparum*, and five cases were infected with *P. malariae*. Fourteen persons were determined to have mixed infections, and the species was not determined (or not reported) in seven cases. The distribution of malaria cases by geographic origin of the parasite is shown in Table 7.

### Meningococcal Infections

The Texas Department of Health received 145 reports of meningococcal infections during 1980. Included in this disease category are: meningitis, septicemia, arthritis, or other systemic disease caused by the organism, *Neisseria meningitidis*. The 145 cases reported in Texas last year represented a 12.7% decrease from the 166 cases reported in 1979. However, the number of reported deaths due to meningococcal infections in Texas in 1980 remained the same as in 1979 (25 deaths each year), resulting in a higher overall case-fatality ratio. A significant increase was noted in the number of deaths occurring in infants under one year of age. The case-fatality ratio in this age group in 1980 was 23.3% compared to 7.3% in 1979. The distribution of cases and deaths is shown in Table 8. Mortality continues to be unacceptably high in those at the extremes of life, the very young and the very old.

The cases were evenly distributed in terms of sex and race/ethnicity. The geographic distribution of cases was representative of the population in Texas, with 85% of the cases reported from the eastern and central portions of the state.

The serotype of the organism was identified in 26 cases (17.9%). Of the organisms typed, 20 (77%) were type B, two (7.7%) were type C, two (7.7%) were type W135, one

(3.8%) was type Y, and one (3.8%) was type Z. This distribution did not change significantly from 1979.

TABLE 8

**REPORTED CASES OF MENINGOCOCCAL INFECTIONS  
AND DEATHS IN TEXAS  
BY AGE GROUP, 1980**

Age Group	# Cases	# Deaths	Case Fatality Ratio
<1	43	10	23.3%
1-4	38	7	18.4
5-14	8	0	—
15-44	35	4	11.4
45-64	8	1	12.5
65+	9	3	33.3
Not stated	4	0	—
<b>TOTAL</b>	<b>145</b>	<b>25</b>	<b>17.2%</b>

### Psittacosis

Psittacosis (ornithosis) in man is an acute infectious disease characterized by pneumonitis, fever, myalgia, and malaise. The disease is caused by *Chlamydia psittaci*, once thought to infect only psittacine birds (parrots, parakeets, cockatiels, etc.), but now known to be harbored, with or without disease, by a wide variety of birds. Man usually acquires the disease by inhalation of desiccated excretory products from sick birds, although person-to-person transmission can occur.

The eight cases of psittacosis reported to the Texas Department of Health in 1980 included two males and six females ranging in age from seven to 64 years; the race of all cases was reported to be white. All cases presented with flu-like symptoms: fever, chills, myalgia,



fever occurs only sporadically in Texas. No major outbreaks of the disease have been reported in Texas since 40 cases occurred in a military installation in South Texas between 1956-57, and only 14 cases have been reported within the state in the past ten years (1971-1980).

Two cases of Q fever were reported in Texas in 1980. No epidemiologic data were available on the first case, a 41-year-old, white male, living in Harris County, who became ill in January 1980. However, a complete case investigation on the second case indicated that the 40-year-old, white female suddenly became ill with headache, fever of 104°F, anorexia, and myalgia in May 1980. The patient reported multiple exposures; she was a shepherd and trapper in Hudspeth County, worked with the Federal Predator Control hunting coyotes in West Texas, and delivered and cared for kid goats and lambs.

### Rocky Mountain Spotted Fever

Cases of Rocky Mountain spotted fever (RMSF) reported in Texas during 1980 continued to occur primarily in Public Health Regions 5, 6, 7, 10, and 11; 26 (or 84%) of the 31 cases reported statewide in 1980 resided in these Regions which include the central, northeastern, and eastern counties of Texas. (See Figure 11 for the geographic distribution of cases in Texas.) Only the case reported in Uvalde County indicated exposure outside the state of Texas; that exposure occurred in Wyoming.

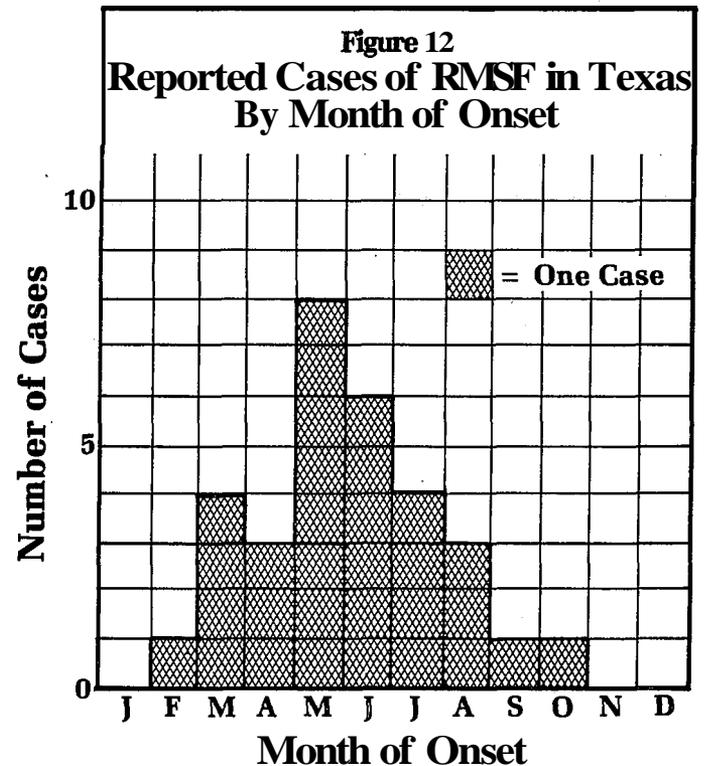
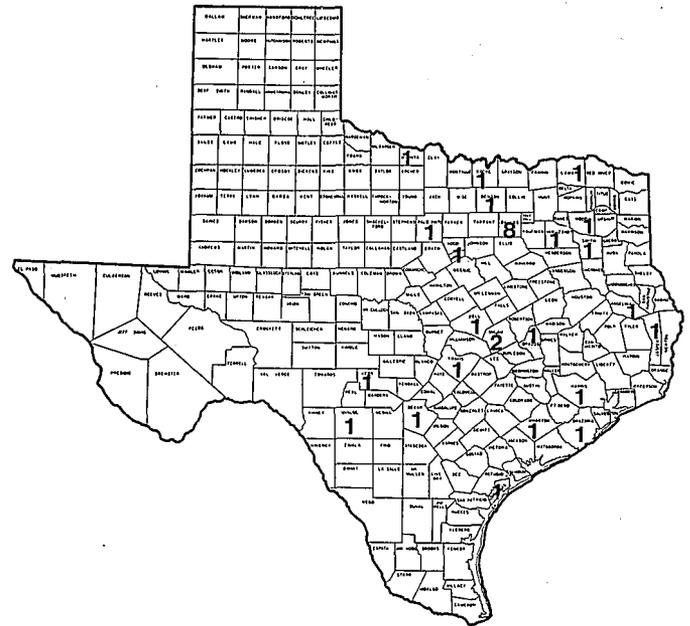
Because RMSF is transmitted to man by infected ticks, the disease is more prevalent during the spring and summer months, the season of greatest tick activity. Twenty-eight of the Texas cases last year reported onset of illness during the months of March through August; the greatest number of cases (eight) occurred in May 1980. (See Figure 12.)

The 31 cases of RMSF reported in Texas during 1980 represented a 41% increase over the 22 cases reported in 1979 and included one death due to the disease, a four-year-old, white male, resident of Milam County, who died in May.

Cases in 1980 ranged from one year to 79 years of age and were reported in all age groups, with the greatest number (six cases) reported in the 20-29 years age group. Males accounted for 22 of the 31 cases, whereas nine cases were reported in females. The racial and/or ethnic distribution of cases included 27 cases reported as white, three as Hispanic, and one as black.

Complete exposure histories were obtained on 29 of the 31 cases. Nineteen individuals reported a positive history of tick attachment, five reported removing ticks from pet dogs, three reported having tick-infested dogs within their households, and two reported outdoor exposure without known tick bites.

**FIGURE 11**  
**Reported Cases of Rocky Mountain Spotted Fever**  
**In Texas**  
**By County of Residence, 1980**



### Tetanus

In 1980, 13 cases of tetanus were reported to the Texas Department of Health, including only one case of neonatal tetanus reported from Cameron County. Cases

were clustered in Central Texas, with a few in counties along the Gulf Coast as illustrated in Figure 13. Six of the 13 cases died resulting in a case-fatality ratio of 46%; five of the six deaths were over 70 years of age, and three of these were reported to be diabetics.

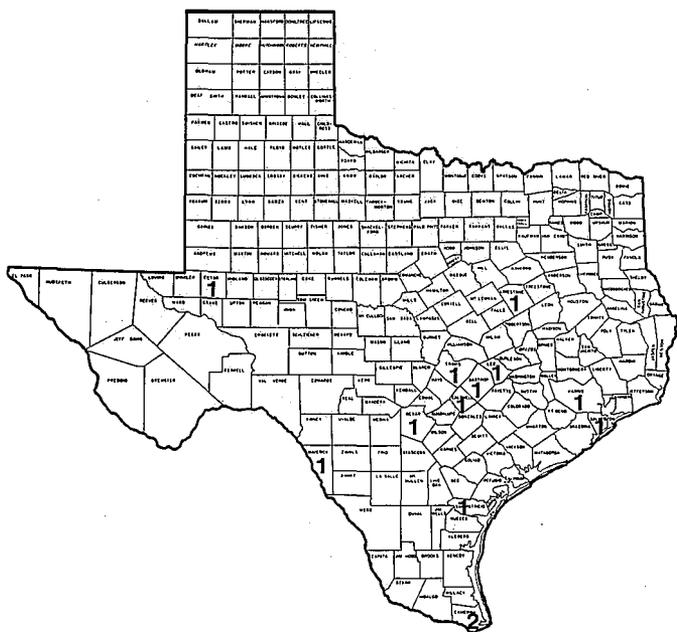
*Clostridium tetani*, a gram-positive, spore-forming rod, can be isolated from soil, many domestic environments, and human feces. The clostridial spores are extremely resistant to disinfection by physical and chemical agents. Since *C. tetani* is present virtually everywhere, it can easily enter breaks in the skin caused by puncture wounds, cuts, and burns, and persons who are not fully immunized against tetanus may develop the disease.

The immunization histories of nine cases (69%) were unknown, two cases (15%) had not been immunized, and two cases (15%) had been immunized to some degree; however, these two cases included a seven-year-old child with an immunological deficiency and a 64-year-old who had not been vaccinated against tetanus in 20 years.

Cases ranged in age from 12 days to 87 years; median age was 72 years. The racial and/or ethnic distribution of cases included seven cases (54%) reported as white, four cases (31%) reported as Hispanic, and two cases (15%) reported as black; cases were evenly distributed between males (six cases) and females (seven cases) during 1980.

A fourteenth case of tetanus was initially reported, but after further investigation, it was learned that although *C. tetani* had been isolated from a gangrenous extremity, the woman was fully immunized against tetanus, and, therefore, did not develop symptoms of the disease.

**FIGURE 13**  
**Reported Cases of Tetanus in Texas**  
**By County of Residence, 1980**



## Trichinosis

Six cases of trichinosis were diagnosed and reported to the Texas Department of Health in 1980. *Trichinella spiralis*, a nematode or round worm, infects the skeletal muscles of many carnivorous animals in most areas of the world. The disease is caused by the ingestion of inadequately cooked meat, usually pork, which contain *T. spiralis*. Cooking meat until it is no longer pink is the best method of preventing this disease. Also, storage of meat in a freezer (-15°C) for three weeks usually will sterilize the meat, thus killing most *T. spiralis* organisms which may be present.

Most cases of trichinosis are asymptomatic. When symptoms do occur, they are usually due to the ingestion of a large inoculum of larvae. The six cases of trichinosis in Texas last year were reported to have the following signs and symptoms and laboratory findings: Eosinophilia occurred in five cases (83%), myalgia in five cases (83%), fever in three cases (50%), and periorbital edema in two cases (33%). All six cases had bentonite flocculation antibody titers of 1:5 or more.

Exposure to the *T. spiralis* organism was attributed to improperly cooked pork in one case reported in Williamson County, one case in Van Zandt County, and one case from Tarrant County, (an American serviceman who had recently been stationed in Guam). Three cases were reported in Dallas County; these included a Laotian refugee for whom no epidemiologic data were available, and two additional cases with undetermined exposures. One case had experienced recurring symptoms since 1975, and the other ate very little meat.

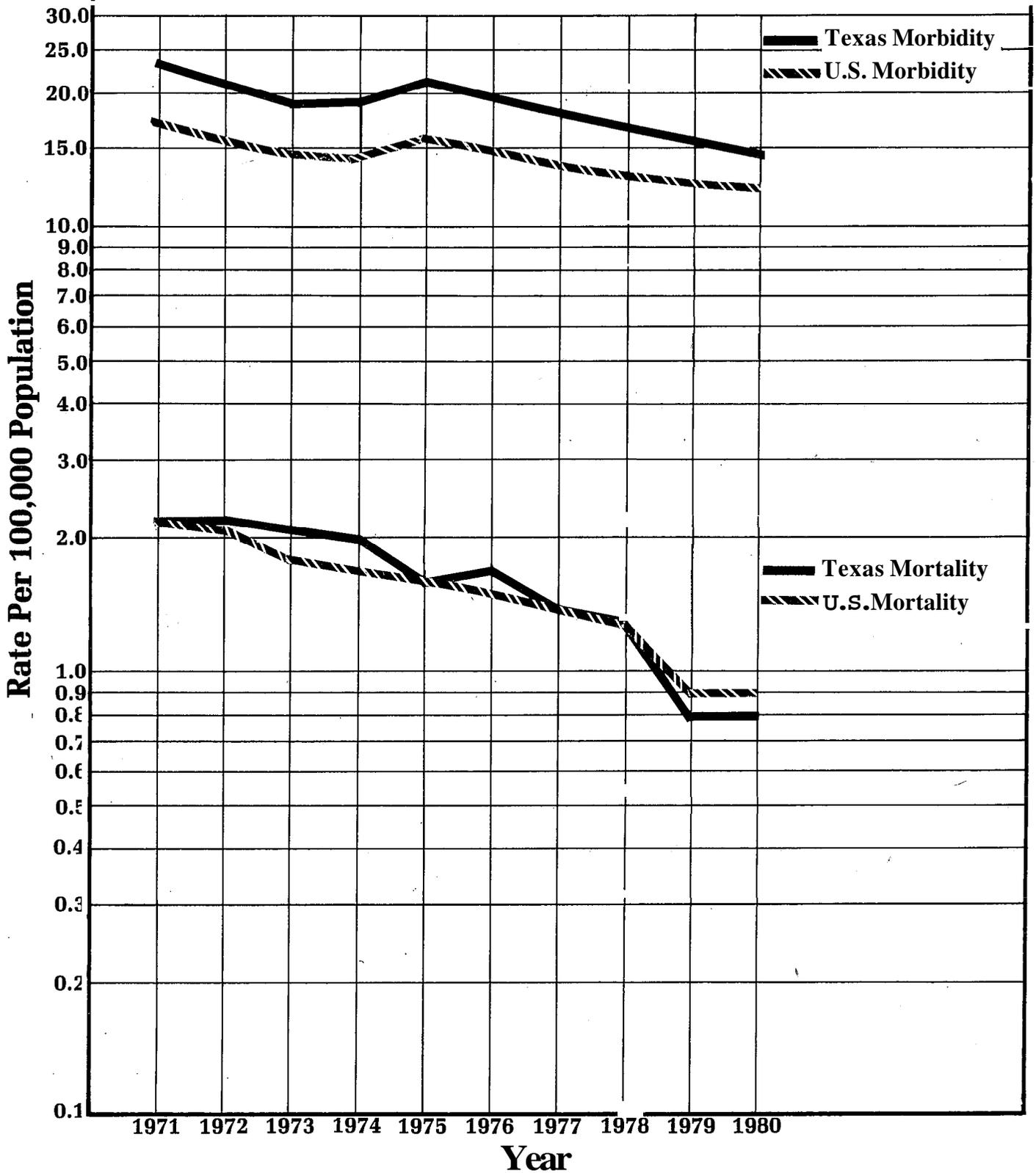
## Tuberculosis

During 1980, 2,075 cases of tuberculosis were reported in the state of Texas. The predominant site of infection was the lungs (88.1% of the total cases.) The most frequent sites of extrapulmonary disease were pleura, lymphatic system, and genitourinary system. There were 1,066 cases, representing 51.4% of the statewide total, reported from the six largest Texas cities — Austin, Dallas, El Paso, Fort Worth, Houston, and San Antonio; however, these cities comprised only 31.2% of the Texas population.

Texas has not yet experienced the increased tuberculosis morbidity which has been reported in nearly half of the other states including California and New York, two states which exceeded Texas in total number of cases reported in 1980. The reversal of the decline of cases has been attributed to natural population growth and to a high incidence of disease in recent foreign immigrants.

Figure 14 illustrates the morbidity and mortality rates of tuberculosis in Texas from 1971-1980 as compared with those reported in the United States as a whole during the same period. A change in diagnostic classification was made in 1975, and data prior to that year are not strictly comparable to those from later years. Likewise, an

**Figure 14**  
**Tuberculosis Morbidity and Mortality**  
**Per 100,000 Population**  
**Texas and the United States Compared, 1971-1980**





## Typhoid Fever

Typhoid fever usually results from the ingestion of either water contaminated by feces containing *Salmonella typhi* or food prepared or handled by persons who are excreting the *S. typhi* organism in their stools and do not wash their hands adequately. This is in contrast to other *Salmonella* infections which usually result from the ingestion of food products which may become contaminated at any step along the food production and processing chain.

Sixty-seven cases of typhoid fever were reported in Texas during 1980, the same number as reported in 1979. Thirty-three (or 49%) were classified as imported cases. That is, the cases had been exposed outside of the United States; 28 cases reported recent travel to Mexico, three cases to India, and two cases to Haiti. Of the 34 cases that acquired the disease in the United States, 15 were linked epidemiologically to exposure to contaminated tossed salad prepared by an infected cook at a summer camp. This outbreak occurred in August and mainly affected children in the Dallas area. Two additional outbreaks — each involving two cases — were reported where no source of infection was determined, as was the case of 14 other unrelated cases. One case reported in 1980 was determined to have been laboratory acquired.

The age distribution of typhoid fever differs from that of infectious 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. (See Table 10.) Forty-three cases (or 64.2%) occurred in males and 24 cases (35.8%) in females. The distribution of cases by race/ethnicity included 23 cases (34.3%) classified as white, 33 cases (49.2%) as Hispanic, seven cases (10.4%) as black, and four cases (6.0%) as Asian/Pacific Islander.

There was one death resulting from typhoid fever reported in Texas in 1980; this occurred in a 14-month-

old girl who had recently moved to Texas from Mexico where she had apparently acquired her infection. All other cases recovered with appropriate antibiotic therapy or were able to clear the organism from their intestinal tracts without therapy.

## VACCINE-PREVENTABLE DISEASES

### Measles

The 181 cases of measles cases reported in Texas in 1980 decreased 73% from the 670 cases reported in 1979. This decline, attributed partially to a military recruit vaccination program initiated at a San Antonio Air Force Base in March 1979, has continued throughout 1980. Civilian measles cases in 1980 decreased by 64% when compared with 1979 morbidity, and the percentage of national cases reported from Texas decreased to 1% in 1980 from 5% in 1979. No measles deaths were reported in Texas in 1980.

Measles is often a severe disease, frequently complicated by middle ear infection or pneumonia. Encephalitis occurs in approximately one of every 1,000 cases, and survivors often have permanent brain damage and mental retardation. Death, primarily from respiratory and neurologic causes, occurs in about one of every 1,000 reported measles cases. With safe and effective measles vaccines available, it is essential that all infants be vaccinated. To ensure protection of infants vaccinated prior to the first birthday, they should be re-vaccinated at 15 months of age.

### Rubella

Only 131 cases of rubella were reported in Texas in 1980, a 38% decrease from the 212 cases reported in 1979. The 1980 rubella morbidity was the lowest reported in Texas since the reporting of the disease began in 1965. Since 1970, when 8,409 cases of rubella were reported in Texas, aggressive immunization programs for prepubertal children have resulted in a 98% decrease in morbidity.

One case of congenital rubella syndrome was reported in Texas in 1980. Epidemiologic investigation of the case revealed that the unvaccinated mother had a history of rubella-like illness during the fourth month of pregnancy. Provisional data from the Centers of Disease Control indicate that 47 cases of congenital rubella syndrome were reported in 1980 in the United States.

Since vaccination programs for young children began, a greater proportion of rubella cases have affected adolescents and young adults. Because of this trend, and with the fact that 15% of all adults may still be susceptible, vaccination of post-pubertal females against rubella should be more strongly emphasized. Asking females if they are pregnant, excluding those who are, and explaining the theoretical risks to the others are reasonable precautions in a rubella vaccination pro-

TABLE 10

### REPORTED CASES OF TYPHOID FEVER IN TEXAS BY AGE GROUP, 1980

Age Group	# Of Cases	% Of Cases
<1	1	1.5%
1-4	4	6.0
5-9	4	6.0
10-19	33	49.3
20-29	12	17.9
30-39	7	10.4
40-49	2	3.0
50-59	3	4.5
60+	1	1.5
<b>TOTAL</b>	<b>67</b>	<b>100.0%</b>

gram. In Texas' public health clinics, rubella vaccine may be administered to females past the 12th birthday, after a physician has consulted with the patient and prescribed the vaccine.

### **Mumps**

In 1980, 212 cases of mumps were reported to the Texas Department of Health; a 77% reduction from the 1,527 cases reported in 1979. Cases reported from Texas accounted for 2% of the 8,531 cases reported nationwide in 1980.

Mumps vaccine was introduced in December 1967, and became available for public clinic use in the mid 1970's. Since licensure of the vaccine, a continuous decline in reported cases has occurred, and over 40 million doses of mumps vaccine have been distributed throughout the United States.

### **Diphtheria**

One diphtheria case, resulting in the death of a three-year-old girl from Southeast Asia, was reported in Texas in 1980. The child, who had not been immunized against diphtheria, had arrived in Dallas from Laos in July 1979. She was first seen by a physician and hospitalized with a diagnosis of diphtheria on December 7, 1980, and died two days later. Before this death, there had been no reported diphtheria cases in Texas since 1977 when four cases, resulting in one death, were reported.

Only five cases of diphtheria were reported nationwide in 1980, a 91% decrease from the 59 cases reported in 1979.

### **Pertussis**

Reported pertussis morbidity in Texas declined by 21% in 1980 when compared with 1979. The 82 cases reported in 1980 represented the lowest morbidity since 1977 when 75 cases were reported in the state.

Pertussis is widespread in the United States, but reported incidence varies considerably from state to state. Underreporting occurs because of difficulties encountered in clinical diagnoses for some age groups and in laboratory documentation of the disease.

The severe, and often fatal, complications from pertussis in infancy are the primary reasons for immunizations early in life. With attack rates of up to 90% for household contacts, it is important that infants and preschool-age children be vaccinated at the appropriate age and that they complete all immunizations as quickly as possible.

### **Venereal Diseases**

In 1980, there were 87,384 cases of venereal diseases reported to the Infectious Disease Control Division of the Texas Department of Health. This figure represents less than a one-percent decrease from the 1979 total of 88,149 cases.

### **Gonorrhea**

A decrease in the number of reported cases of gonorrhea was again noted during 1980, and marks a continuing reversal of the increasing trend in case reports noted for the past two decades. There were 80,297 cases of gonorrhea reported in the civilian population of Texas in 1980, representing a 2% decrease from the cases reported in 1979 (see Figure 16). (An additional 3,350 cases of gonorrhea were reported in military personnel in Texas in 1980.) The decrease in case reports may be related to the extensive case finding and treatment program for gonorrhea infections in Texas. Twenty-percent of women in the child-bearing age group are screened for gonorrhea in Texas each year.

A major complication of untreated gonorrhea in women is pelvic inflammatory disease (PID). The condition has been linked to increased risk of recurrent pelvic infection, ectopic pregnancy, and sterility. In 1978, the Infectious Disease Control Division began collecting data on gonococcal PID (GIPID) from regional and local venereal disease control programs in Texas. The purpose of the GIPID initiative was to identify women who were being diagnosed with GIPID and to assist with the medical management and follow-up of the patient and her sexual partners. In 1980, 2,003 cases of GIPID were reported in Texas. This represented a 42% increase over the 1,416 infections reported in 1979. It is expected that the number of GIPID cases will continue to increase as local and regional programs expand their surveillance network to health providers (i.e. hospital emergency rooms, out-patient clinics, private physicians' offices) within their communities.

### **Syphilis**

During 1980, there were 3,828 cases of primary and secondary syphilis (the infectious stages) reported to the Texas Department of Health. This figure is again representative of civilian cases only; an additional 69 cases of primary and secondary syphilis were reported in military personnel in Texas. The total of 3,828 cases of infectious syphilis represented a significant 21% increase over the number of cases reported in 1979 (3,154 cases), and is the largest number of cases ever reported in Texas in a one-year period. (See Figure 17.)

The number of cases of early latent syphilis reported in Texas increased 8% from 2,208 cases in 1979 to 2,392 cases in 1980 (civilian cases only). Case reports of late latent syphilis continued to decline; 829 cases were reported in Texas in 1980 compared to 917 cases in 1979. Twenty-one cases of congenital syphilis were also reported in Texas in 1980, the same number as in 1979.

### **Other Venereal Diseases**

The Texas Department of Health received reports of seven cases of lymphogranuloma venereum (LGV), nine cases of chancroid, and one case of granuloma inguinale during 1980. The number of reports of these illnesses has been steadily declining since the mid 1970's.

Figure 16  
Texas  
Gonorrhea-Reported Cases 1970-80

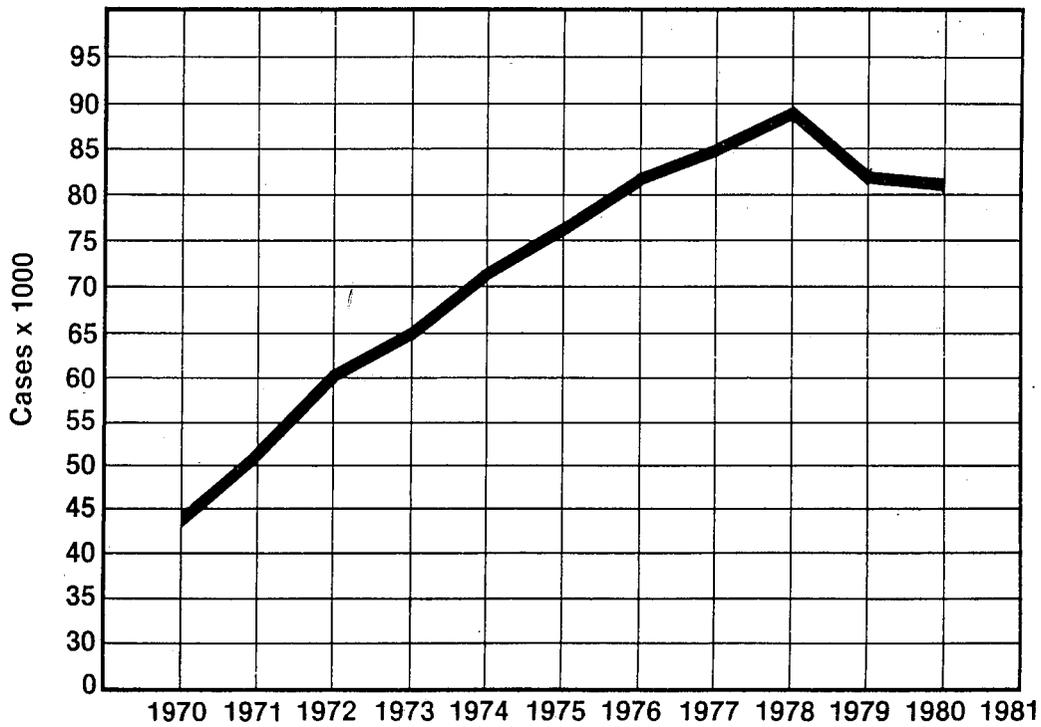
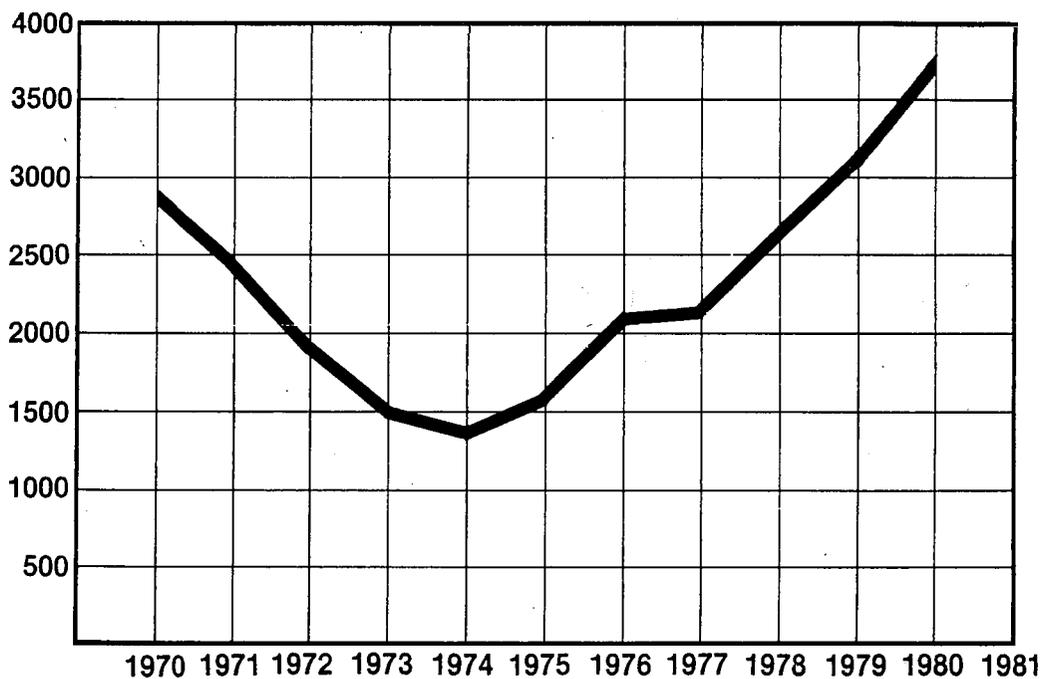


Figure 17  
Texas  
Primary & Secondary Syphilis  
Reported Cases 1970-80



## Viral Hepatitis

The term "viral hepatitis" is used to designate inflammatory conditions of the liver resulting from viral infections. There are currently two major types of viral hepatitis of which diagnoses can be confirmed by serologic methods: hepatitis type A (infectious hepatitis, epidemic jaundice, epidemic hepatitis) and hepatitis type B (serum hepatitis, homologous serum jaundice). An additional category, viral hepatitis type unspecified, was included in the Texas morbidity records beginning in 1974 for the purpose of reporting hepatitis cases where a specific viral diagnosis was unavailable, or where hepatitis types A and B had been excluded by serologic testing.

In 1980, the total number of cases of viral hepatitis reported to the Texas Department of Health was 5,991, the largest number of cases since the reporting of hepatitis in Texas began in 1952. However, this represented only a 3% increase over the 5,814 total cases reported in 1979 in the state.

There were 2,978 cases of viral hepatitis type A reported from 134 counties throughout Texas in 1980, with the greatest concentration of cases occurring in the major metropolitan areas. The incidence rate for Texas in 1980 was 20.93 cases per 100,000 population, down from the 1979 incidence rate of 24.57.

Hepatitis type A is primarily a disease of children and young adults. The distribution of hepatitis type A cases reported in Texas in 1980 among the various age groups is illustrated in Figure 18. In 1980, 75% of the cases were reported in persons under 30 years of age. Ten of the reported cases died as a result of their illnesses. These were primarily patients who ranged in age from 55 to 74 years. The distribution of hepatitis type A cases by race/ethnicity was as follows: 1,673 cases (56.2%) were classified as white; 920 cases (30.9%) as Hispanic; 207 cases (7%) as black; eight cases (.3%) as Asian/Pacific Islander; and the race/ethnicity of the remaining 170 cases (5.7%) was not reported. Cases were equally distributed between males and females, and no seasonal variation in the number of hepatitis type A case reports was apparent in our data.

The number of cases of viral hepatitis type unspecified has increased steadily since 1974 (Figure 19), and in 1980, 2,194 cases were reported in Texas. The incidence rate also reflected this current trend as the rate for Texas in 1980 was 15.42 per 100,000 population compared to 13.75 in 1979. The epidemiology of unspecified hepatitis approximates that for hepatitis type A. It is likely that many cases of hepatitis type A are reported as "type unspecified" primarily because of the limited availability of the diagnostic test for antibodies to hepatitis A virus. Cases were reported throughout Texas, but were concentrated again in the metropolitan areas. Harris County reported 45.7% of all type unspecified cases.

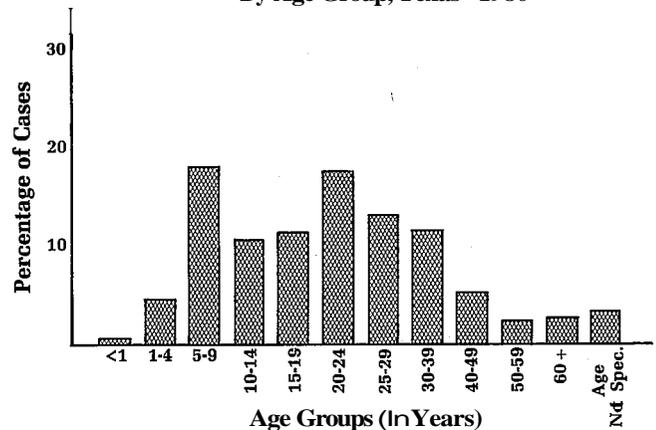
As with hepatitis type A, children and young adults are especially at risk, and 76% (1,673 cases) of the cases were reported in persons under 30 years of age. (See Figure 20.) Cases were evenly distributed among males (55%) and females (45%), and distribution of cases by race/ethnicity was also similar to that for hepatitis type A.

In 1980, there were 819 cases of hepatitis type B reported in Texas, a 19.6% increase over the 685 cases reported in 1979. The incidence rate in Texas was 5.76 cases per 100,000 population. The epidemiology of hepatitis type B is unique among the three types of viral hepatitis. Only 75 counties in Texas reported one case or more. Those counties reporting ten or more cases included: Bexar, Bowie, Brazoria, Caldwell, Dallas, El Paso, Harris, Lubbock, Nueces, Tarrant, Travis, and Wichita. Males accounted for 63.1% of the reported cases as opposed to only 35.9% reported in females; sex was not indicated for one-percent of the cases.

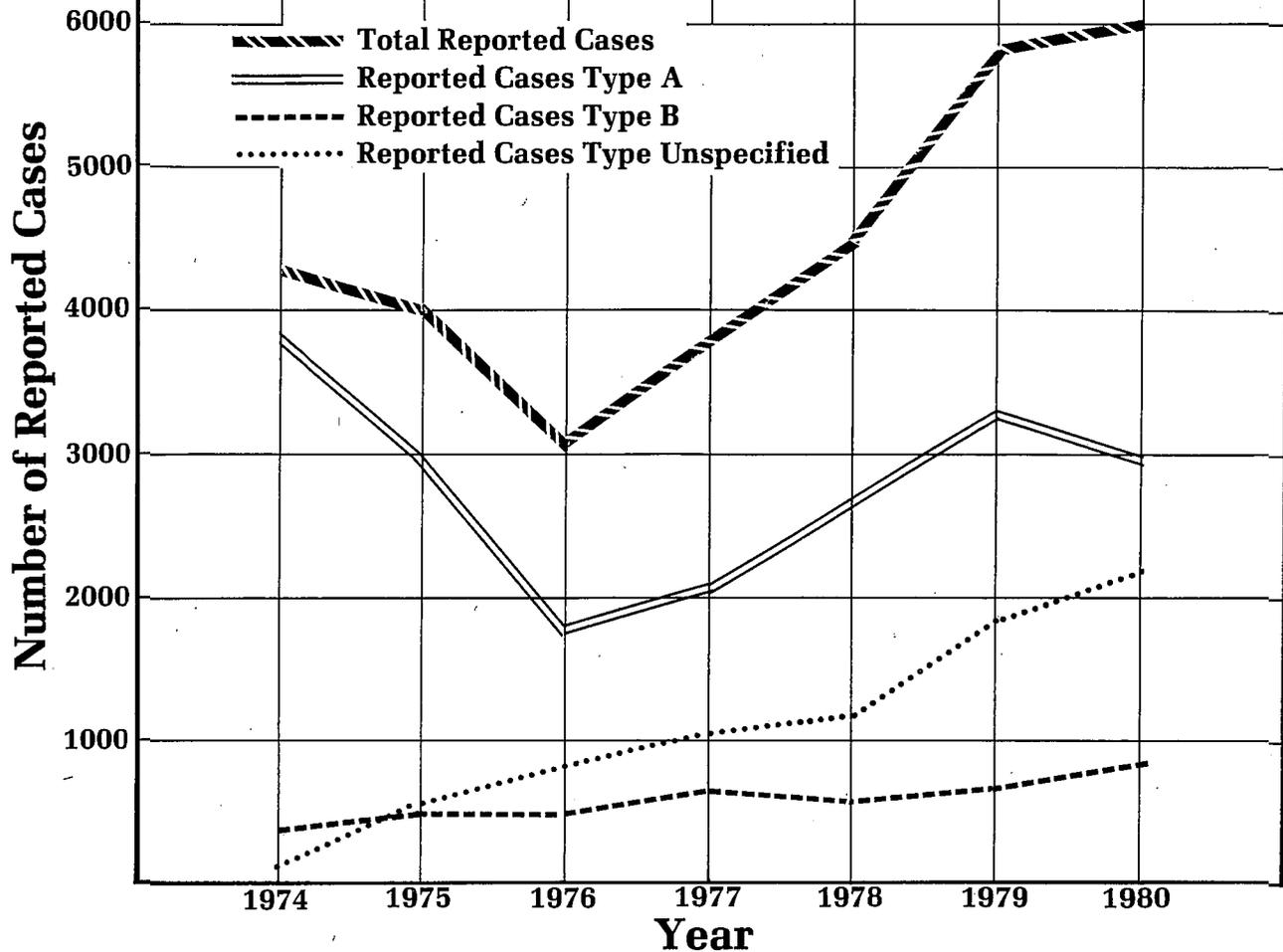
Hepatitis type B most commonly occurs in adults, with the majority of cases occurring in persons between the ages of 15 and 39 (Figure 21). It is this age group that is sexually active and is more likely to also have contact with drugs. Both activities have been associated with the spread of the disease.

The death rate is higher with hepatitis type B; in 1980, 1.8% of all type B cases resulted in death. Deaths were reported in adults 40 years or older. Distribution of cases by race/ethnicity was also distinct from those for types A and unspecified. Cases were reported such that 49.5% of the cases were reported to be white; 12.8% were Hispanic, 19.1% were black, 2.7% were Asian/Pacific Islander; .2% were American Indians; and the race/ethnicity of 15.8% of the cases was not indicated.

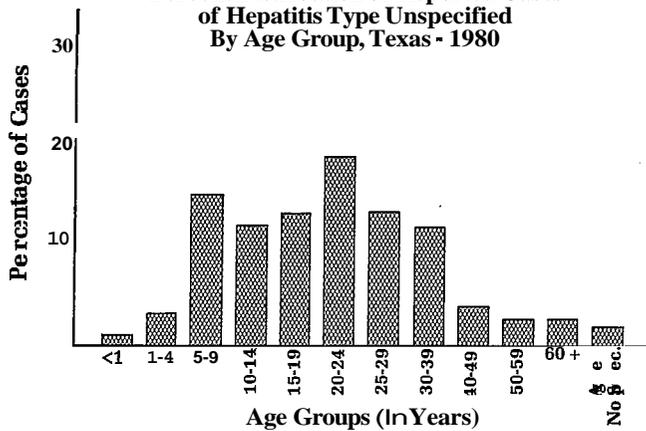
Figure 18  
Percent Distribution of Reported Cases of Hepatitis Type A  
By Age Group, Texas - 1980



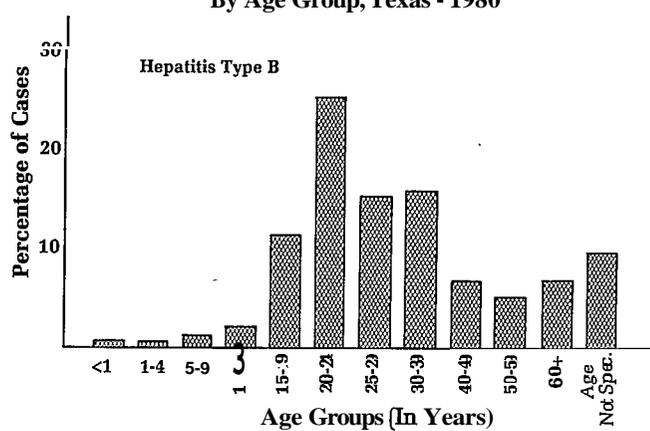
**Figure 19**  
**Reported cases of Viral Hepatitis**  
**Texas, 1974 - 1980**



**Figure 20**  
**Percent Distribution of Reported Cases**  
**of Hepatitis Type Unspecified**  
**By Age Group, Texas - 1980**



**Figure 21**  
**Percent Distribution of Reported Cases of Hepatitis Type B**  
**By Age Group, Texas - 1980**



# APPENDIX

TABLE I  
REPORTED CASES OF SPECIFIED NOTIFIABLE DISEASES, TEXAS 1972-1980

DISEASE	1980	1979	1978	1977	1976	1975	1974	1973	1972
Texas Population (in thousands)	14,229*	13,385	13,050	12,860	12,599	12,318	12,017	11,830	11,619
<b>Amebiasis</b>	355	301	210	216	146	129	186	195	180
Anthrax	-	-	-	-	-	-	-	-	-
Aseptic meningitis	432	753	405	315	312	362	228	180	272
Botulism	-	3	4	1	-	-	2	-	-
Brucellosis	28	28	23	33	77	29	18	36	5
Chickenpox	9,478	7,009	6,163	8,222	8,280	9,213	7,505	11,034	1,778
Cholera	-	-	-	-	-	-	-	1	-
Dengue	61	-	3	-	-	-	-	-	-
Diphtheria	1	-	-	4	1	6	9	18	41
Encephalitis, infectious	63 <sup>1</sup>	59 <sup>1</sup>	47 <sup>1</sup>	55 <sup>1</sup>	35 <sup>1</sup>	82 <sup>1</sup>	30	43	43
Gonorrhea <sup>2</sup>	80,297	81,828	88,943	84,789	82,304	76,486	75,086	66,900	58,818
Hepatitis, type A	2,978	3,289	2,696	2,086	1,762	2,955	3,818	5,189 <sup>3</sup>	4,216 <sup>3</sup>
Hepatitis, type B	819	685	586	650	497	490	357		
Hepatitis, type unspecified	2,194	1,840	1,198	1,064	836	573	116		
Influenza and flu-like illness	99,292	86,689	99,394	67,094	132,749	92,585	118,847	109,669	170,127
Leprosy (Hansen's disease)	32	31	28	26	16	17	18	23	34
Leptospirosis	3	8	14	6	6	10	5	1	1
Malaria	-	1	1	-	-	-	-	-	2
Malaria acquired ex U.S.	115	44	32	27	16	19	9	10	67
Measles (rubeola)	181	670	1,033	2,032	265	275	212	532	1,617
Meningococcal infections	145	166	144	147	140	151	116	111	89
Mumps	212	908	1,527	995	1,755	4,077	3,500	3,786	5,108
Pertussis	82	104	132	75	36	136	99	115	185
Plague	-	-	-	-	-	-	-	-	-
Poliomyelitis, paralytic	-	-	-	3	-	2	-	-	4
Psittacosis	8	5	5	6	2	6	58	5	4
Q fever	2	2	-	1	2	2	-	1	4
Rabies in man	-	1	-	-	1	-	-	-	-
Rabies in animals	945	1,195	556	382	329	325	383	264	334
Relapsing fever	1	8	-	1	1	-	-	-	-
Rheumatic fever, acute	15	14	25	17	29	22	33	29	30
Rocky Mountain spotted fever	31	22	28	30	29	34	18	11	15
Rubella (German measles)	131	212	407	776	267	370	317	1,136	1,596
Rubella congenital syndrome	1	4	2	2	3	1	12	5	2
St. Louis encephalitis	68	5	-	9	77	37	**	**	**
Salmonellosis	2,456	2,198	1,199	1,045	917	1,110	994	1,211	979
Shigellosis	2,162	2,299	1,865	1,565	1,304	1,447	1,126	1,904	1,015
Smallpox	-	-	-	-	-	-	-	-	-
Strep throat, scarlet fever	32,113	37,526	29,433	31,595	36,385	35,861	43,817	44,613	50,274
Syphilis, Primary & Secondary <sup>2</sup>	3,828	3,154	2,637	2,123	2,041	1,579	1,405	1,521	1,800
Tetanus	13	17	11	16	12	16	4	10	20
Trichinosis	6	4	2	11	2	4	4	4	-
Tuberculosis	2,075	2,090	2,160	2,326	2,454	2,600	2,311	2,224	2,422
Tularemia	12	11	6	11	10	19	8	8	11
Typhoid fever	67	67	40	28	18	19	13	14	20
Typhus fever, endemic	61	59	33	55	58	30	12	28	-
Typhus fever, epidemic	-	-	-	-	-	-	-	-	-
Venezuelan equine encephalitis	-	-	-	-	-	-	-	-	-
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, 1972-1980

DISEASE	1980	1979	1978	1977	1976	1975	1974	1973	1972
Texas Population (in thousands)	14,229*	13,385	13,050	12,860	12,599	12,318	12,017	11,830	11,619
Amebiasis	2.49	2.25	1.61	1.68	1.16	1.05	1.55	1.65	1.55
Anthrax	-	-	-	-	-	-	-	-	-
Aseptic meningitis	3.04	5.63	3.10	2.45	2.48	2.94	1.90	1.52	2.34
Botulism	-	0.02	0.03	0.01	-	-	0.02	-	-
Brucellosis	0.20	0.21	0.18	0.26	0.61	0.24	0.15	0.30	0.04
Chickenpox	66.61	52.36	47.23	63.93	65.72	74.79	62.45	93.27	15.30
Cholera	-	-	-	-	-	-	-	0.01	-
Dengue	0.43	-	0.02	-	-	-	-	-	-
Diphtheria	0.01	-	-	0.03	0.01	0.05	0.07	0.15	0.35
Encephalitis, infectious	0.44 <sup>1</sup>	0.44 <sup>1</sup>	0.36 <sup>1</sup>	0.43 <sup>1</sup>	0.28 <sup>1</sup>	0.67 <sup>1</sup>	0.25	0.36	0.37
Gonorrhea <sup>2</sup>	564.32	611.34	681.56	659.32	653.26	620.93	624.83	565.51	506.22
Hepatitis, type A	20.93	24.57	20.66	16.22	13.99	23.99	31.77	-	-
Hepatitis, type B	5.76	5.12	4.50	5.05	3.94	3.98	2.97	43.86 <sup>3</sup>	36.29 <sup>3</sup>
Hepatitis, type unspecified	15.42	13.75	9.18	8.27	6.64	4.65	0.97	-	-
Influenza and flu-like illness	697.81	647.66	761.64	521.73	1053.65	751.62	988.99	927.04	1464.21
Leprosy (Hansen's disease)	0.22	0.23	0.22	0.20	0.13	0.14	0.15	0.19	0.29
Leptospirosis	0.02	0.06	0.11	0.05	0.05	0.08	0.04	0.01	0.01
Malaria	-	0.01	0.01	-	-	-	-	-	0.02
Malaria, acquired ex U.S.	0.81	0.33	0.25	0.21	0.13	0.15	0.07	0.08	0.58
Measles (rubeola)	1.27	5.01	7.94	15.80	2.10	2.23	1.76	4.50	13.92
Meningococcal infections	1.02	1.24	1.11	1.14	1.11	1.23	0.97	0.94	0.77
Mumps	1.49	6.78	11.70	7.74	13.93	33.10	29.13	32.00	43.96
Pertussis	0.58	0.78	1.01	0.58	0.29	1.10	0.82	0.97	1.59
Plague	-	-	-	-	-	-	-	-	-
Poliomyelitis, paralytic	-	-	-	0.02	-	0.02	-	-	0.03
Psittacosis	0.06	0.04	0.04	0.05	0.02	0.05	0.48	0.04	0.03
Q fever	0.01	0.02	-	0.01	0.02	0.02	-	0.01	0.03
Rabies in man	-	0.01	-	-	0.01	-	-	-	-
Relapsing fever	0.01	0.06	-	0.01	0.01	-	-	-	-
Rheumatic fever, acute	0.11	0.10	0.19	0.13	0.23	0.18	0.27	0.25	0.26
Rocky Mountain spotted fever	0.22	0.16	0.22	0.23	0.23	0.28	0.15	0.09	0.13
Rubella (German measles)	0.92	1.58	3.13	6.03	2.12	3.00	2.64	9.60	13.74
Rubella congenital syndrome	0.01	0.03	0.02	0.02	0.02	0.01	0.10	0.04	0.02
St. Louis encephalitis	0.48	0.04	-	0.07	0.61	0.30	-	-	-
Salmonellosis	17.26	16.42	9.19	8.13	7.28	9.01	8.27	10.24	8.43
Shigellosis	15.19	17.18	14.29	12.17	10.35	11.75	9.37	16.09	8.74
Smallpox	-	-	-	-	-	-	-	-	-
Strep throat, scarlet fever	225.69	280.36	225.54	245.68	288.79	291.13	364.63	377.12	432.69
Syphilis, primary & secondary <sup>2</sup>	26.90	24.30	20.20	16.51	16.20	11.41	11.69	12.86	15.49
Tetanus	0.09	0.13	0.08	0.12	0.10	0.13	0.03	0.08	0.17
Trichinosis	0.04	0.03	0.02	0.09	0.02	0.03	0.03	0.03	-
Tuberculosis	14.58	15.61	16.55	18.08	19.48	21.11	19.23	18.80	20.85
Tularemia	0.08	0.08	0.05	0.09	0.08	0.15	0.07	0.07	0.09
Typhoid fever	0.47	0.50	0.31	0.22	0.14	0.15	0.11	0.12	0.17
Typhus fever, endemic	0.43	0.44	0.25	0.43	0.46	0.24	0.10	0.24	0.11
Typhus fever, epidemic	-	-	-	-	-	-	-	-	-
Venezuelan equine encephalitis	-	-	-	-	-	-	-	-	-
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 SELECTED NOTIFIABLE DISEASES AND CONDITIONS OF INTEREST TO PUBLIC HEALTH<sup>1</sup>

TEXAS, 1972-1980

CAUSE OF DEATH	ICD <sup>2</sup>	1980	1979	1978	1977	1976	1975	1974	1973	1972
<b>Amebiasis</b>	006	6	5	2	4	5	3	5	5	6
Aseptic meningitis	047	2	2	-	-	5	2	1	5	6
Botulism	005.1	-	-	1	-	-	-	-	-	1
Brucellosis	023	-	-	-	-	1	-	2	-	3
Chickenpox	052	7	5	7	8	10	5	7	19	9
Diphtheria	032	1	-	-	1	1	-	2	-	1
Encephalitis, infectious <sup>3</sup>	049	16	9	12	16	12	15	15	15	15
Gonorrhea	098	1	1	2	1	-	2	2	1	3
Hepatitis, viral type A	070.0-070.1	8	8	33	34	42	41	52	52	53
Hepatitis, viral type B	070.2-070.3	23	14	11	6	5	8	6	11	11
Hepatitis, viral type unspecified	070.4-070.9	30	19	49	63	63	31	43	57	38
<b>Influenza</b>	487	70	30	190	64	567	211	110	249	293
Leprosy ( <b>Hansen's disease</b> )	030	-	-	2	1	1	-	1	1	1
Leptospirosis	100	-	3	-	1	2	-	1	-	1
Malaria	084	-	-	-	-	-	-	-	-	-
Measles	055	-	1	1	3	-	3	2	1	5
Meningococcal infections	036	24	27	37	25	20	28	22	39	25
Mumps	072	-	-	1	-	2	-	-	-	1
Pertussis	033	-	-	-	1	-	1	1	1	1
Poliomyelitis, acute	045	-	-	-	-	-	-	-	1	2
Rheumatic fever, acute	390-391	2	10	5	11	4	8	12	9	13
Rocky Mountain spotted fever	082.0	-	1	-	1	-	3	2	1	-
Rubella	056	-	-	-	2	1	1	-	3	-
Rubella congenital syndrome	771.0	-	-	-	1	-	4	5	2	1
St. Louis encephalitis	062.3	1	-	-	-	4	3	-	-	1
Salmonellosis	003	5	2	3	3	1	5	2	5	5
Shigellosis	004	-	1	6	7	3	6	5	6	4
<b>Strep</b> throat, scarlet fever	034	1	2	-	4	1	2	-	1	1
Syphilis, total	090-097	12	12	15	13	18	26	15	31	39
Tetanus, excluding neonatal	037	5	5	4 <sup>4</sup>	9 <sup>4</sup>	4 <sup>4</sup>	8 <sup>4</sup>	3 <sup>4</sup>	6 <sup>4</sup>	10 <sup>4</sup>
Tetanus, neonatal	771.3	-	1	*	*	*	*	*	*	*
Trichinosis	124	-	-	-	-	-	-	-	-	-
Tuberculosis	010-018	111	112	163	176	211	200	237	247	256
Tularemia	021	-	1	-	-	1	-	1	3	1
Typhoid fever	002.0	1	1	-	-	-	1	-	-	2
Typhus fever, endemic	081.0	-	-	-	-	-	-	-	-	-
Child battering & other maltreatment	E967	15	13	26	41	28	**	**	**	**
<b>Guillain-Barre</b> syndrome	357.0	8	13	18	14	6	14	16	12	14
Mycobacteria <b>infections</b>	031	8	8	6	4	2	5	7	6	5
<b>Reye's</b> syndrome	331.8	17	19	**	**	**	**	**	**	**
Sudden infant death syndrome	798.0	323	340	298	293	217	203	175	**	**

1. Source: Computer tabulations, Bureau of Vital Statistics

2. Category numbers of the Ninth Revision of the International Classification of Diseases, adapted 1975

3. Exclusive of arboviral encephalitides

4. \* Includes deaths due to neonatal tetanus.

\*\* Prior to 1979, neonatal tetanus deaths were included in total tetanus deaths

\*\* Data not available

TABLE IV

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY MONTH OF REPORT, TEXAS, 1980

DISEASE	TOTAL	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Amebiasis	355	4	24	45	36	21	40	25	30	27	29	48	26
Aseptic meningitis	432	16	26	17	13	18	43	45	68	46	49	55	36
Brucellosis	28	-	1	3	5	3	-	1	2	3	1	3	6
Chickenpox	9,478	538	914	2,120	1,734	1,592	1,115	306	102	108	84	344	521
Dengue	61	-	-	-	-	-	-	-	-	-	14	20	27
Diphtheria	1	-	-	-	-	-	-	-	-	-	-	-	1
Encephalitis, infectious viral <sup>1</sup>	63	3	2	3	5	6	3	1	5	6	11	10	8
Hepatitis, viral type A	2,978	223	265	263	246	265	237	212	238	199	219	281	330
Hepatitis, viral type B	819	40	54	75	60	73	69	56	88	74	55	82	93
Hepatitis, viral type unspecified	2,194	109	212	232	204	229	163	124	209	128	197	216	171
Influenza & flu-like illness	99,292	10,077	13,014	19,103	8,736	5,037	2,775	2,355	3,133	2,703	3,952	6,880	21,527
Leprosy (Hansen's Disease)	32	3	1	1	1	6	1	1	7	4	1	3	3
Leptospirosis	3	-	-	1	-	-	-	-	-	2	-	-	-
Malaria	115	-	3	5	8	17	6	13	8	16	1	21	17
Measles	181	3	42	24	30	8	12	9	11	3	12	16	11
Meningococcal infections	145	14	15	21	14	13	6	6	5	10	14	12	15
Mumps	212	29	18	25	16	34	15	9	17	5	14	20	10
Pertussis	82	10	4	5	4	5	6	6	14	8	2	10	8
Psittacosis	8	-	-	-	-	1	-	1	-	3	-	1	2
Q fever	2	-	-	-	-	1	-	-	1	-	-	-	-
Relapsing fever	1	-	-	-	-	-	-	-	-	1	-	-	-
Rheumatic fever, acute	15	3	2	2	2	1	-	1	-	3	-	1	-
Rocky Mountain spotted fever	31	-	-	1	1	7	4	4	4	7	-	2	1
Rubella	131	3	16	12	20	23	8	7	7	4	12	11	8
Rubella congenital syndrome	1	-	-	-	1	-	-	-	-	-	-	-	-
St. Louis encephalitis	68	-	-	-	1	-	-	-	4	23	26	10	4
Salmonellosis, excluding typhoid	2,456	37	45	139	60	73	236	113	209	230	581	485	248
Shigellosis	2,162	43	63	180	67	87	186	152	184	139	487	320	254
Strep throat and scarlet fever	32,113	2,503	3,143	3,691	3,136	3,641	2,186	1,616	2,053	1,492	1,968	3,320	3,364
Tetanus	13	1	-	-	1	1	4	1	1	2	-	-	2
Trichinosis	6	-	-	1	-	2	-	-	1	-	-	-	2
Tuberculosis	2,075	172	147	177	183	172	173	207	160	181	208	128	167
Tularemia	12	-	-	-	-	1	1	2	1	1	2	3	1
Typhoid fever	67	-	-	2	-	13	5	6	4	16	6	7	8
Typhus fever, endemic	61	-	1	3	6	6	8	10	4	6	5	8	4

1. Exclusive of arboviral encephalitides.

TABLE V

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY AGE, TEXAS, 1980

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	355	13	26	25	48	38	35	30	32	23	24	20	41
Aseptic meningitis	432	174	37	33	25	30	33	36	36	14	4	2	8
Brucellosis	28	-	-	-	-	1	8	5	4	3	2	5	-
Chickenpox	9,478	206	2,244	3,399	506	228 <sup>1</sup>	→						2,895
Encephalitis, infectious viral <sup>2</sup>	63	1	8	3	5	7	5	3	10	3	5	10	3
Gonorrhea <sup>3</sup>	80,297	-	38 <sup>4</sup>	63	540	19,469	31,698	16,707	9,608	1,608	459	107	-
Hepatitis, viral type A	2,978	11	133	529	312	335	513	396	342	156	77	81	93
Hepatitis, viral type B	819	4	3	11	17	92	207	126	128	53	44	56	78
Hepatitis, viral type unspecified	2,194	14	81	328	237	286	427	300	249	101	64	63	44
Leprosy (Hansen's Disease)	32	-	-	-	3	2	2	4	6	3	3	9	-
Leptospirosis	3	-	-	-	-	-	1	-	1	-	1	-	-
Malaria	115	-	4	10	10	20	22	21	15	4	5	4	-
Measles	181	35	40	47	38	12	6	-	2	-	-	-	1
Meningococcal infections	145	43	38	5	3	15	7	7	6	2	4	11	4
Mumps	212	4	32	77	46	12	4	3	13	4	3	3	11
Pertussis	82	64	10	1	2	2	1	-	-	-	-	-	2
Psittacosis	8	-	-	1	-	-	-	-	2	2	2	1	-
Q fever	2	-	-	-	-	-	-	-	-	2	-	-	-
Relapsing fever	1	-	-	-	-	-	-	-	1	-	-	-	-
Rheumatic fever, acute	15	-	1	5	3	2	1	-	3	-	-	-	-
Rocky Mountain spotted fever	31	-	5	3	4	2	2	4	5	1	2	3	-
Rubella	131	41	28	24	7	9	11	4	1	1	1	-	4
Rubella congenital syndrome	1	1	-	-	-	-	-	-	-	-	-	-	-
Salmonellosis	2,456	691	441	140	85	63	110	87	138	87	79	177	358
Shigellosis	2,162	145	836	340	109	53	112	137	107	43	33	73	174
Syphilis, primary and secondary <sup>3</sup>	3,828	-	1*	4	36	546	1,196	981	739	233	77	15	-
Tetanus	13	1	-	1	-	-	-	-	-	-	2	9	-
Trichinosis	6	-	-	-	2	-	-	1	1	2	-	-	-
Tuberculosis	2,075	9	74	24	19	61	164	179	279	299	363	604	-
Tularemia	12	-	-	-	1	-	1	1	-	2	-	7	-
Typhoid fever	67	-	4	4	21	12	9	3	7	2	3	1	-
Typhus fever, endemic	61	-	-	1	5	-	-	-	7	7	6	12	-

1. Includes all cases 15 years of age and older.
2. Exclusive of arboviral encephalitides.
3. Civilian cases only.
4. Includes infants under one year of age.

TABLE VI

## REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY PUBLIC HEALTH REGION, TEXAS, 1980

DISEASE	TOTAL	1	2	3	4	5	6	7	8	9	10	11	12	Military <sup>1</sup>
Amebiasis	355	2	7	10	2	29	84	3	115	6	5	87	4	1
Aseptic meningitis	432	8	1	6	7	173	7	19	10	37	1	159	1	3
Brucellosis	28	1	-	1	1	3	2	7	5	-	3	4	-	1
Chickenpox	9,478	832	44	397	365	1,415	1,328	1,115	1,558	345	467	1,096	397	119
Encephalitis, infectious viral <sup>2</sup>	63	-	2	2	4	17	7	4	5	8	2	12	-	-
Gonorrhea	83,823	1,322	1,481	2,338	1,613	24,585	6,520	3,381	2,040	4,493	3,738	27,829	957	3,526
Hepatitis, viral type A	2,978	101	41	182	94	752	463	124	263	402	42	462	24	28
Hepatitis, viral type B	819	4	10	56	28	284	71	28	63	38	12	182	2	41
Hepatitis, viral type unspecified	2,194	27	50	43	51	249	325	50	168	57	37	1,110	10	17
Influenza & flu-like illness	99,292	1,763	2,194	13,511	7,022	3,485	27,750	4,146	19,076	12,191	905	2,054	2,954	2,241
Leprosy (Hansen's disease)	32	-	-	-	-	4	2	-	12	1	2	11	-	-
Leptospirosis	3	-	-	-	-	2	-	-	-	-	-	1	-	-
Measles	181	7	2	12	8	52	4	6	21	8	6	40	9	6
Meningococcal infections	145	6	2	3	4	42	19	2	10	12	8	35	1	1
Mumps	212	4	2	16	4	45	9	19	26	19	9	47	3	9
Pertussis	82	7	2	2	-	43	6	3	1	3	5	8	2	-
Psittacosis	8	-	1	-	-	3	1	-	-	1	-	2	-	-
Relapsing Fever	1	-	-	-	-	1	-	-	-	-	-	-	-	-
Rheumatic fever, acute	15	-	-	3	1	1	-	-	2	4	-	4	-	-
Rocky Mountain spotted fever	31	-	-	-	1	12	5	4	1	3	2	3	-	-
Rubella	131	3	2	8	1	36	11	17	35	3	4	7	1	3
Salmonellosis	2,456	63	66	96	75	437	296	95	321	295	72	590	10	40
Shigellosis	2,162	36	82	136	24	267	293	32	405	246	22	596	9	14
Strep throat and scarlet fever	32,113	926	1,591	224	2,616	4,292	3,564	1,674	8,428	4,091	251	1,140	1,747	1,569
Syphilis, primary and secondary	3,901	19	64	96	25	1,234	254	136	154	197	105	1,516	28	73
Tetanus	13	-	-	-	-	-	5	-	3	2	-	2	1	-
Trichinosis	6	-	-	-	-	3	1	1	-	-	-	-	-	1
Tuberculosis	2,075	14	30	102	52	365	106	106	266	195	84	720	35	-
Tularemia	12	-	-	-	-	-	2	9	-	-	-	1	-	-
Typhoid fever	67	-	1	5	2	23	5	1	11	3	1	14	1	-
Typhus fever, endemic	61	-	-	2	4	2	1	1	49	-	1	1	-	-

1. Includes military installations and VA hospitals

2. Exclusive of arboviral encephalitides



# Public Health Regions

## **Public Health Region 1**

Henry C. Moritz, M.D., M.P.H.  
Regional Director Public Health  
Texas Department of Health  
Public Health Region 1  
P.O. Box 968 WTSU Station  
Canyon, Texas 79016  
(Location: Old Health Cntr. Bldg. —  
300 Victory Dr.)  
806/655-7151  
TEX-AN 844-2801

## **Public Health Region 2**

C. R. Allen, Jr., M.D.  
Regional Director Public Health  
Texas Department of Health  
Public Health Region 2  
3411 Knoxville  
Lubbock, Texas 79414  
806/797-4331  
TEX-AN 862-9780

## **Public Health Region 3**

John L. Bradley, M.D.  
Regional Director Public Health  
Texas Department of Health  
Public Health Region 3  
P.O. Box 10736  
El Paso, Texas 79997  
(Location: 2300 East Yandell, 79903)  
915/533-4972  
TEX-AN 846-8127

## **Public Health Region 4**

Myron J. Woltjen, M.D., M.P.H.  
Regional Director Public Health  
Texas Department of Health  
Public Health Region 4  
301 Oak Street, 2nd Floor, Old Courthouse  
Abilene, Texas 79602  
915/673-5231  
TEX-AN 847-7011

## **Public Health Region 5**

Hal J. Dewlett, M.D., M.P.H.  
Regional Director Public Health  
Texas Department of Health  
Public Health Region 5  
P.O. Box 6229  
Arlington, Texas 76011  
(Location: 701 Directors Drive)  
817/460-3032  
TEX-AN 833-9011

## **Public Health Region 6**

Charles C. Eaves, M.D.  
Regional Director Public Health  
Texas Department of Health  
Public Health Region 6  
P.O. Box 190  
Temple, Texas 76501  
(Location: 2401 S. 31 St., Alexander  
Nursing Bldg., Scott & White Hospital)  
817/77843744  
TEX-AN 820-1431

## **Public Health Region 7**

Marietta Crowder, M.D.  
Regional Director Public Health  
Texas Department of Health  
Public Health Region 7  
P.O. Box 2501  
Tyler, Texas 75710  
(Location: 1517 West Front St.)  
214/595-3585  
TEX-AN 830-6011

## **Public Health Region 8**

Charles B. Marshall, Jr., M.D., M.P.H.  
Regional Director Public Health  
Texas Department of Health  
Public Health Region 8  
1401 S. Rangerville Road  
Harlingen, Texas 78550  
512/423-0130  
TEX-AN 820-4501

## **Public Health Region 9**

Rodger G. Smyth, M.D., M.P.H.  
Regional Director Public Health  
Texas Department of Health  
Public Health Region 9  
P.O. Drawer 630  
Uvalde, Texas 78801  
(Location: Old Memorial Hosp.,  
Garner Field Rd.)  
512/278-7173  
TEX-AN None

## **Public Health Region 10**

Marietta Crowder, M.D.  
Regional Director Public Health  
Texas Department of Health  
Public Health Region 10  
(Contact Regional Director.  
P.H.R. 7 address]

## **Public Health Region 11**

Nina M. Sisley, M.D., M.P.H.  
Regional Director Public Health  
Texas Department of Health  
Public Health Region 11  
1110 Avenue G  
Rosenberg, Texas 77471  
713/342-8685  
TEX-AN 851-3000

## **Public Health Region 12**

C. R. Allen, Jr., M.D.  
Regional Director Public Health  
Texas Department of Health  
Public Health Region 12  
Midland, Texas  
(Contact Regional Director.  
P.H.R. 2 address]

# 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	Plague	Smallpox
Cholera	Poliomyelitis, paralytic	Yellow fever
Diphtheria		

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

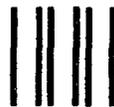
Amebiasis	Leptospirosis	Rubella
Anthrax	Malaria	Rubella congenital syndrome
Aseptic meningitis	Measles	Salmonellosis
Botulism	Meningococcal infections	Shigellosis
Brucellosis	Mumps	Smallpox
Cholera	Pertussis	Tetanus
Diphtheria	Plague	Trichinosis
Encephalitis (specify etiology)	Poliomyelitis, paralytic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

Diseases Reportable by Numerical Totals

Chickenpox	Streptococcal sore throat
Influenza and flu-like illness	(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**  
 FIRSTCLASS 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				*REPORT AGE AT LAST BIRTHDAY. IF LESS THAN 1 YR. REPORT BY MONTH.
		Address				
		City				
		Name				†ENTER CODE AS APPROPRIATE
		Address				
		City				
		Name				WHITE 1 HISPANIC 2 BLACK 3
		Address				
		City				
		Name				AMERICAN INDIAN or ALASKAN NATIVE 4 ASIAN or PACIFIC ISLANDER 5 UNKNOWN 9
		Address				
		City				
		Name				CHECK FOR ADDITIONAL SUPPLIES
		Address				
		City				
		Name				<input type="checkbox"/> J-27 (VD REPORTING) <input type="checkbox"/> TB-400 (REPORTING)
		Address				
		City				
		Name				
		Address				
		City				
		Name				
		Address				
		City				
		Name				
		Address				
		City				
		Name				
		Address				
		City				

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)

**Texas Department of Health**

