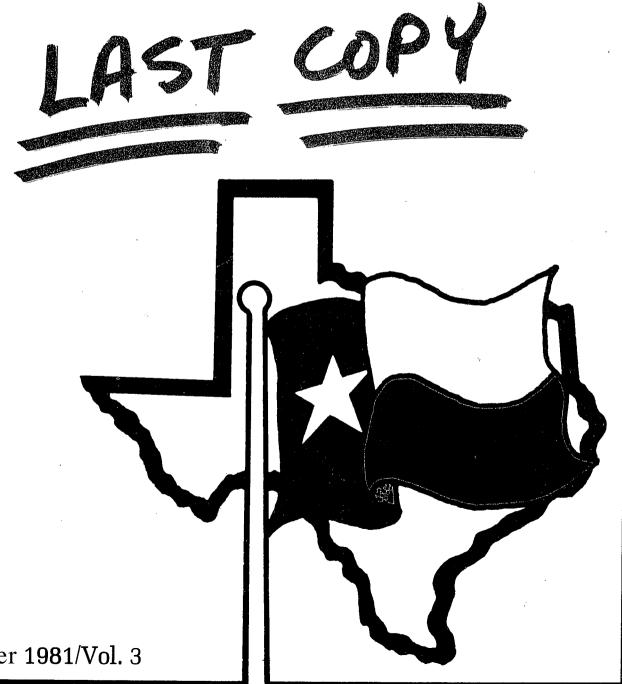
REPORTED MORBIDITY AND MORTALITY IN TEXAS

1980 ANNUAL SUMMARY

TEXAS DEPARTMENT OF HEALTH



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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 healthdepartments, 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 underreporting is thought to remain consistent over time allowing data comparison over the years.

Selected Disease Summaries

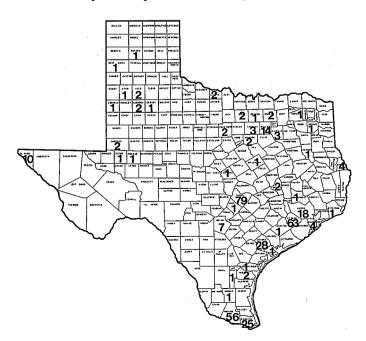
Amebiasis

Amebiasis is an infection with the protozoan parasite, Entamoeba histolytica. Usually restricted to the gastrointestinal tract, many infections are asymptomatic, and infections may vary from mild abdominal discomfort to acute fulminating dysentary. Severe extra-intestinal infections (i.e. hepatic or brain abcess) 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 AsianlPacific Islander, and 49 cases for whom racelethnicity 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 coxackievirus) tend to cause predominantly benign disease (viral meningitis), whereas other viruses, such as herpes simplex and arboviruses, cause more severe and sometimes fatal disease (viralencephalitis).

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.

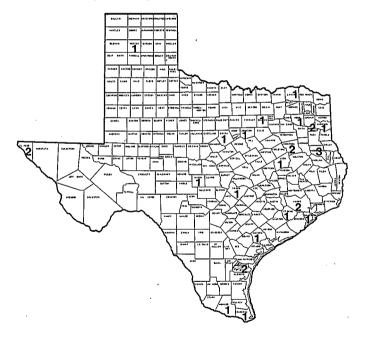
Brucellosis is predominantly an occupational disease of those working with infected animals, usually cattle, swine, and goats. The work activities reported by 17 of the 24 men were indicative of occupational exposure and included eight farmers and/or ranchers, five employed in the meat processing industry,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

inspector. While the exact sources of exposures for the remaining seven men were not determined, four men reported the consumption of unpasteurized dairy products from Mexico, and one reported exposure to an abattoir near his residence; two were never determined. Of the four women, one reported consumption of unpasteurized dairy products purchased in Mexico, and the sources of exposure were not determined for the other three women.

Brucella abortus was reported to be the species involved in ten cases, B. melitensis in three cases, and B. suis in two cases; the exact species was not indicated in 13 cases. All 28 cases reported in Texas in 1980 were confirmed serologically, and isolation of the organism was also reported in four cases.

The ages of the 28 cases ranged from 17 to 75 years; median age was 29.5 years. The racial and/or ethnic distribution of cases included 11 cases classified as white, 13 Hispanic, and four as black.

FIGURE 2
Reported Cases of Brucellosis in Texas
By County of Residence, 1980



Dengue

Dengue is an acute febrile illness resulting from infection with one of four closely related arboviruses: dengue serotypes 1, 2, 3, and 4. In the Western Hemisphere, dengue has been responsible for many epidemics between 1827 and 1956. During the last major outbreak of dengue in the continental United States in 1922-23, over 41,000 cases were reported in Texas. Dengue activity declined in subsequent years, and the last outbreak in the U.S. occurred in Louisiana in 1945.

Dengue 1 had not been isolated in the Western Hemisphere prior to an outbreak on the island of Jamaica in 1977. The importation of the virus — presumably from Africa — resulted in an explosive epidemic which spread to other islands in the Carribean. The virus was introduced to Central America from the Carribean in 1978, and three cases were imported to Texas that year. Although the mosquito vector, Aedes aegypti, is present in much of Texas, secondary transmission was not recorded. (There were no reports of cases imported to Texas in 1979.)

The disease spread rapidly northward from Central America through Guatamala into Mexico between 1978-1980. The national Centers for Disease Control and the Texas Department of Health anticipated the impact of the newly introduced dengue virus into an area with abundant vector populations and a susceptible human population. Adengue fever surveillance system to detect "dengue-like" illness in the urban communities of South, Central, and East Texas was established in March 1980.

On September 19, 1980, the Centers for Disease Control's San Juan Laboratory reported the isolation of dengue 1 virus from a five-year-old girl residing in Brownsville, Texas. This was the first confirmed case of dengue identified in the state of Texas in 1980. Since that report, an additional 60 cases of dengue were confirmed by the Centers for Disease Control and/or the Texas Department of Health laboratories. Thirty-five cases (57%) were discovered through the dengue fever surveillance system, 23 cases (38%) were diagnosed by physicians in practice throughout the state, and three cases (5%) were identified in serosurveys.

The majority (85%) of cases resided in South Texas: 19 in Brownsville, 11 in Laredo, six in Harlingen, seven in McAllen, five in Eagle Pass, and one each in Beeville, San Benito, Kingsville, and Raymondville. Other cases were reported in San Antonio, Bryan, Austin, and Houston. Figure 3 illustrates the geographic distribution of cases throughout Texas.

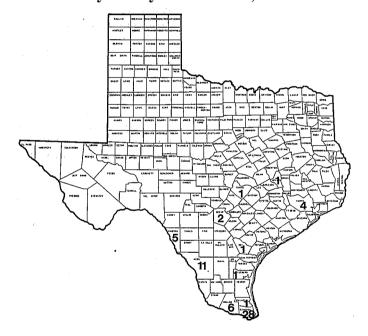
Seventy-four percent of the reported cases were females. This unequal sex distribution may have been the result of male-femaledifferences in the utilization of medical services in some of the surveillance areas. The patients ranged in age from two to 82 years with a median age of 34 years. The racial and/or ethnic distribution of cases included four cases (7%) classified as white, 54 cases (88%) as Hispanic, one case (2%) as black, and two cases (3%) were of Asian origin.

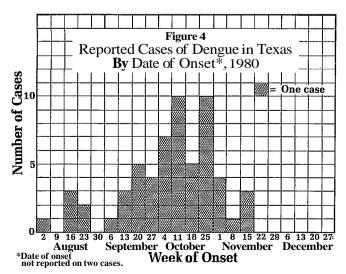
Dengue case investigation forms were completed for 49 cases. The most common symptoms reported were fever (92%), headache (88%), body pain (69%), eye pain (63%), and joint pain (61%). Fifty-five percent of these 49 individuals presented with a rash. Diarrhea, a symptom not commonly associated with dengue, was reported by 18% of the cases. Length of illness ranged from three days to 30 days; the median duration was seven to ten days.

Twenty-sevenindividuals (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 racelethnicity 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 accomodate 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.

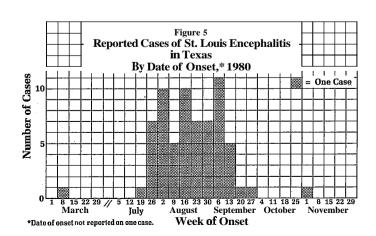
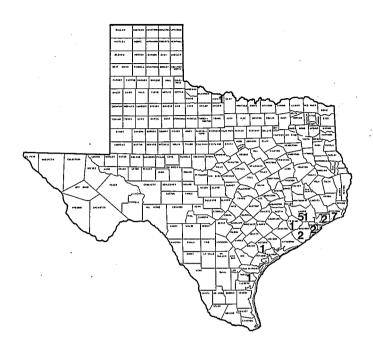


FIGURE 6 Reported Cases of St.Louis Encephalitis in Texas By County of Residence, 1980



Other Viral Encephalitides

Sixty-three cases of encephalitis (exclusive of those caused by arboviruses) were reported in Texas during 1980. Included in these reports were 14 cases of herpes encephalitis, one case of post-infectious encephalitis due to influenza, and one case each due to the following viruses: echovirus type 6, echovirus type 9, and coxsackievirus type B-3. The remaining 45 cases (71%) reported in 1980 were of unknown etiology.

Cases were reported in all age groups and ranged from eight months to 91 years. Males accounted for 37 cases (58.7%), and females accounted for 26 cases (41.3%).

There were 25 reported deaths due to viral encephalitis, resulting in a case-fatality ratio of 39.7%.

ENTERIC INFECTIONS

Salmonellosis, Excluding Typhoid Fever

Salmonellosis generally manifests in one of three clinical syndromes: 1) acute gastroenteritis, a self-limiting disease characterized by fever, abdominal pain, and diarrhea lasting from three to five days; 2) enteric fever syndrome with prolonged fever, malaise, frontal headache, nonproductive cough, and abdominal pain lasting from one to four weeks; or 3) localized infection or abcess formation involving almost any of the body's tissues producing clinical entities such as pneumonia, empyema, pericarditis, endocarditis, pyelonephritis, osteomyelitis, or septic arthritis. A very small percentage of persons with gastroenteritis will continue to excrete Salmonella organisms in the stool for prolonged periods. The "chronic asymptomatic 'Salmonella car-

rier" may have persistence of the same species of Salmonella in their feces for one year or more after the original episode of enterocolitis.

Man becomes infected with Salmonella generally by ingestion of contaminated food or drink. A food handler who has active clinical disease or one who is an asymptomatic carrier may, through inadequate hand washing techniques, contaminate the food or drink they prepare or serve. However, the largest reservoir for Salmonella in the United States is in the non-human animal population including farm mammals, poultry, household pets, and reptiles (lizards, snakes, and turtles.) Meat and poultry often become contaminated during slaughter, and anywhere from one to 50 percent of raw meat distributed retail will contain Salmonella organisms. If cooking is inadequate, or if the cooked meat is exposed to the same knives, chopping blocks, or tables used to process the raw product, high levels of contamination with Salmonella can result. Soft-cooked eggs, dried egg whites, dried milk, and a number of pharmaceutical products of animal origin have been identified as sources of Salmonella infections in man.

TABLE 1

REPORTED CASES AND INCIDENCE RATES OF SALMONELLOSIS AND SHIGELLOSIS FOR SELECTED COUNTIES IN TEXAS, 1980

		Salmon	ellosis	Shigellosis		
County	Population	#Cases	Rate ¹	# Cases	Rate ¹	
Bexar	982,589	270	2.74	220	2.24	
Cameron	208,125	44	2.11	70	3.36	
Dallas	1,551,032	210	1.35	15 <i>7</i>	1.01	
El Paso	478,834	95	1.98	136	2.84	
Harris	2,471,429	499	2.02	544	2.20	
Hidalgo	279,187	70	2.51	81	2.90	
Jefferson	248,156	38	1.53	8	0.32	
Lubbock	211,846	44	2.08	62	2.93	
Nueces	266,692	69	2.59	117	4.39	
Tarrant	856,499	117	1.37	76	0.89	
Travis	416,315	174	4.18	172	4.13	
All Others	6,257,679	826	1.32	519	0.83	
TEXAS	14,228,383	2,456	1.73	2,162	1.52	

¹ per 10,000 population

In 1980, there were 2,456 cases of non-typoidal salmonellosis reported in Texas. Appproximately 78% of these cases were reported from the 24 most populous counties which comprise 69% of the state's population. The reported incidence in these counties varied greatly from 0.09 per 10,000 population in Ector County (population 115,204) to 5.54 cases per 10,000 in Webb County (population99,027). The numbers of cases and incidence of salmonellosis in the eleven counties with populations over 200,000 are shown in Table 1. Since the morbidity information on salmonellosis in Texas includes not only reports received from reporting agents throughout the state, but also laboratory reports provided by the Texas

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

A	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. <i>7</i>
	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
	TOTAL	1,249	1.184	23	2.456	99.9%

Because Salmonella gastroenteritis is generally a selflimiting 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 (shownin 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 <u>Isolates</u>	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
TOTAL	1,968	100.2%	_

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	<u>Female</u>	Sex Not Reported	<u>Total</u>	/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
TOTAL	1 077	1 080	5	2,162	99.8%

Children under ten years of age accounted for 61.1% (1,321cases] 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
S. sonnei (GroupD)	791	61.8%
S. flexneri (GroupB)	425	33.2
S. boydii (GroupC)	43	3.4
S. dysenteriae (GroupA)	20	1.6
TOTAL	1,279	100.0%

Hansen's Disease

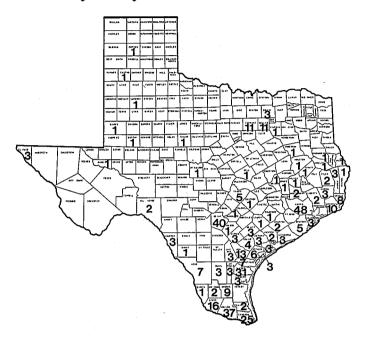
During 1980, 32 cases of Hansen's disease (leprosy) were reported to the Texas Department of Health. This is the largest number of cases reported during one year since 1972 when 34 cases were reported. Figure 7 indicates the county of residence for the 385 active Hansen's disease patients (patients currently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

	Indig	enous	Imp	Total	
Years	#Cases	Percent	#Cases	Percent	# 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	<u>17</u>	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-likeillness through the routine reporting system than through the special surveillance program, the more complete

data, which was published in "Texas Morbidity This Week" during 1980, are discussed.

Cases of influenza and influenza-like illness were reported to the Texas Department of Health weekly by numeric totals only. In 1980, there was a total of 99,292 cases reported; this represented a 14.5% increase over the 86,689 cases reported in 1979. Thenumber of deaths in Texas during 1980 due to influenza (70) more than doubled the 30 deaths reported in 1979.

Of the 254 counties in Texas, 133 (or 52%), reported influenza activity during 1980. The number of reported cases peaked in December with lowest activity reported during the summer months.

Laboratory confirmation of diagnosis was obtained for only a small percentage of the cases in 1980. Influenza B/Singapore/79 was prevalent in early 1980, and influenza A/Bangkok/79 and A/Brazil/78 were prevalent in the fall of 1980.

Leptospirosis

Three cases of leptospirosis, a disease in humans which results from contact with fomites or water contaminated by urine from animals infected with leptospira, were reported in Texas during 1980. Reservoir hosts of the leptospira, of which 18 serogroups and more than 170 serotypes are recognized, include both domestic and wild mammals, reptiles, and amphibians. Persons at greatest risk of infection are those occupationally in contact with infected animals, or who have contact with tanks and ponds contaminated by infected urine or sewage. Person-to-person transmission of the disease is unusual.

The Texas cases occurring in 1980 included the following: a 30-year-old, American Indian female [resident of Dallas County), whose probable exposure — water and/or domestic animals — occurred in Oklahoma; a 51-year-old, white male (resident of Brazoria County), who was occupationally exposed while working barefoot in the rice fields in Brazoria County; and a 23-year-old, white female (resident of Tarrant County), whose non-occupational exposure included cattle and domestic animals in both Tarrant and Cass Counties. The Dallas County case reported onset in January, and the other two cases occurred in July 1980.

Malaria

A total of 115 cases of malaria was reported in Texas during 1980. All cases were determined to be imported; that is, the infections were acquired in foreign countries where malaria is endemic.

Malaria is transmitted to man through the bite of an infective anopheline mosquito. Distribution records of the Texas Department of Health indicate that populations of various species of Anopheles have been identified in many areas of Texas, including those areas of the state where the majority of the cases lived — East Texas (Har-

ris and Jefferson Counties) and North Texas (Dallas and Tarrant Counties). (See Figure 8 for the geographic distribution of cases in Texas in 1980.) While the potential for introduced malaria (malaria acquired by mosquito transmission from an imported case in an area where malaria is not a regular occurrence) does exist in Texas, none has been reported in the state since 1970.

FIGURE 8
Reported Cases of Malaria in Texas — 1980
By County of Residence



Cases ranged in age from one to 70 years, and the largest number of cases (43)was reported in the 20-29 year age group. A distribution of cases by age group may be found in Table VI, Appendix. Males accounted for 76 cases (66%), and females for 37 cases (32%), the sex of the two remaining cases was not indicated.

The 115 cases of malaria reported in Texas in 1980 represented a 156% increase over the 45 cases reported in 1979, and included 73 cases (63%) reported to be Southeast Asian refugees from the following countries: Vietnam (44 cases), Laos (nine cases), and Democratic Kampuchea (two cases). Only ten cases (22%) of the 1979 cases in Texas occurred in the refugee population.

The counties reporting the highest numbers of cases in the Southeast Asian refugee population included: Harris County (19 cases), Dallas County (15 cases), Jefferson County (14 cases), and Tarrant County (five cases). All cases which were reported from Caldwell, Lampasas, Montgomery, Potter, and Wichita Counties occurred in Southeast Asian refugees.

Surveillance information revealed that 50 of the 115 cases (43%) reported a previous history of malaria; 37 of these 50 were Southeast Asian refugees. Only 24 of the

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
TOTAL	76	13	5	14	7	115

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, Neiserria 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 racelethnicity. 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.

REPORTED CASES OF MENINGOCOCCALINFECTIONS AND DEATHS IN TEXAS BY AGE GROUP, 1980

TABLE 8

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

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 dessicated 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,

and malaise. Seven of the cases had clinical evidence of pneumonitis. Diagnoses of psittacosis were based on the clinical presentation and serological testing in seven of the cases, and the clinical presentation and chlamydial isolation from a pet cockatiel in one case. All cases recovered with antibiotic therapy.

Two unrelated cases were reported in Harris County, and the following counties each reported one case: Ellis, Erath, Fayette, Frio, Lubbock, and Tarrant. Five of the cases had recently purchased psittacine birds (twoparrots, three cockatiels), four of which became ill. Chlamydia were isolated from two of the cockatiels and one parrot. Chronic exposure to psittacines and/or other birds was reported by the three remaining cases. The cases occurring in Ellis and Erath Counties were the only associated cases reported to the Texas Department of Health in 1980; each case had recently purchased a cockatiel from the same dealer. Only one of the birds became ill and died; the other bird remained healthy.

Rickettsia1 Diseases

Endemic Typhus

In 1980, Texas reported a total of 61 cases of endemic typhus fever (flea-bornetyphus fever). This represented only a 3% increase over the 59 cases reported in 1979, but was the highest number of cases reported in the state since 1954 when 64 cases were recorded.

Provisional data provided by the national Centers for Disease Control indicate that only 73 cases of the disease were reported nationwide in 1980, which means that 84% of the U.S. cases occurred in Texas. The cases reported in Texas during 1980 were again clustered in the southern counties of the state, as has been the trend for many years. In 1980, 49 (or 80%) of the state's 61 cases occurred within eight counties of Public Health Region 8, the 26 southernmost counties of Texas. (A geographic representation of Texas cases is provided in Figure 9.) From 1971 through 1980, Texas reported a total of 366 cases of endemic typhus, and 84% (or 309 cases) of these occurred within eleven counties of South Texas.

Endemic typhus occurs virtually year-round in Texas and is reported in all age groups. Figure 10 illustrates the Texas cases by month of onset of symptoms. The distribution of cases by age groups can be found in Table VI, Appendix. Of the 61 cases, 38 were female, and 23 were male; the racial and/or ethnic distribution included 35 cases reported as white, 23 cases reported as Hispanic, and three cases reported as black.

A review of case investigations revealed the following exposure histories: known flea bite (16 cases); no flea bite but exposure to rodents (eight cases), cats (six cases), dogs (five cases), opossums (one case), and outdoor exposure was indicated in four cases. Exposure history was not indicated for the remaining 21 cases.

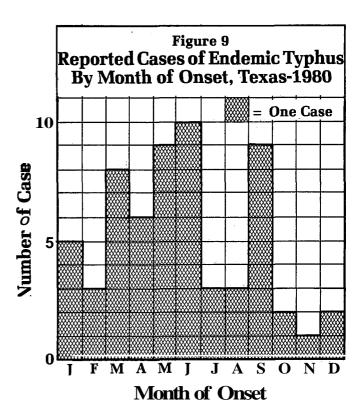


FIGURE 10
Reported Cases of Endemic Typhus in Texas
By County of Residence — 1980



O Fever

Q fever is a disease caused by the organism *Coxiella* burneti. Unlike other rickettsial diseases, it is not associated with an arthropod vector and is usually acquired through direct contact with infected animals (cattle, sheep, goats), inhalation of infected dust, or by drinking unpasteurized milk from infected, animals. Q

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 beween 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 illin 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 sheepherder 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.)

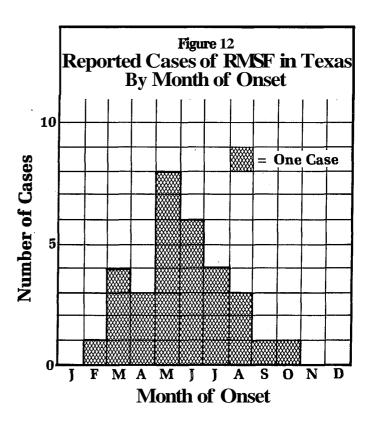
The 31 cases of RMSF reported in Texas during 1980 represented a 41% increase over the 22 cases reported in 1979 and included one death due to the disease, a four-year-old, white male, resident of Milam County, who died in May.

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.

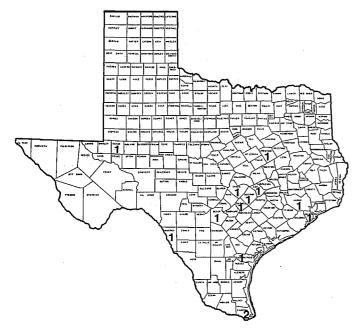
Clostridium tetani, a gram-positive, spore-forming rod, can be isolated from soil, many domestic environments, and human feces. The clostridial spores are extremely resistant to disinfection by physical and chemical agents. Since C. tetaniis present virtually everywhere, it can easily enter breaks in 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%) hadnot 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, therfore, 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

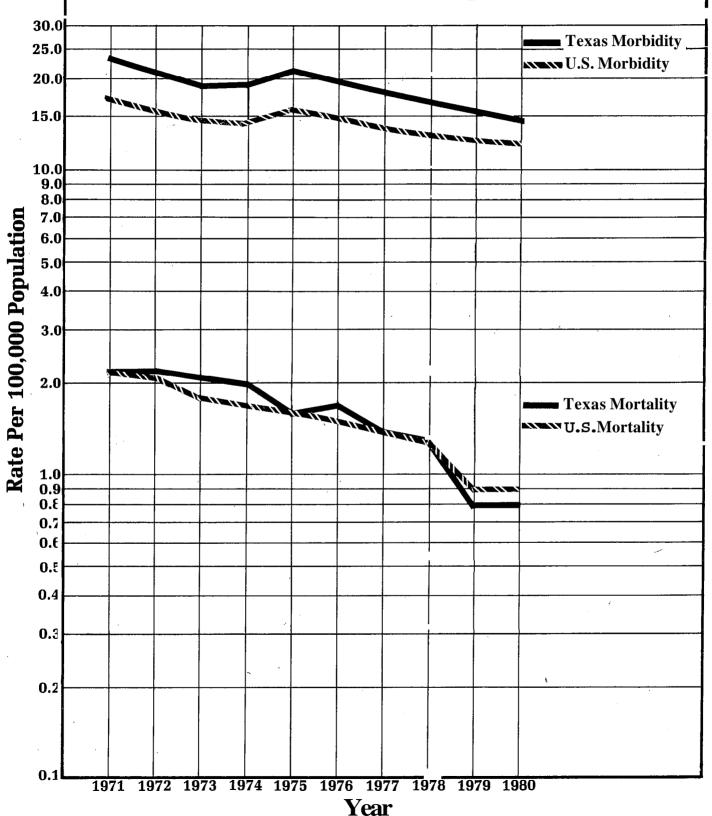


TABLE 9

REPORTED CASES OF TUBERCULOSIS BY RACE, SEX, AND HISPANIC ETHNICITY TEXAS, 1980

Age Group	Male	<u>Female</u>	White	Black	American Indian/ Alaskan Native	Asian/Pacific Islander	Hispanic Only
<4	37	46	67	11	1	4	56
5-14	23	20	26	10	0	7	24
15-24	116	109	154	43	2	26	126
25-34	201	130	210	82	3	36	133
35-44	211	92	188	84	1	30	88
45-54	223	87	234	55	3	18	103
55-64	243	86	262	56	4	7	121
65 +	315	_136_	364	77_	1	<u> </u>	143
TOTAL	1,369	706	1,505	418	15	137	794

abrupt drop in 1979 in the number of deaths due to tuberculosis reflects a change in coding procedures for cause of death classification.

Table 9 provides information regarding the distribution of cases reported in Texas in 1980 by age, sex, race, and ethnicity. There was an increase in new cases reported in younger persons; this indicated that transmission of infection from sputum-positive cases still occurs. Though not shown in Table 9, the unusually large number of cases in younger persons include many Hispanics, who may have had close contact with infectious persons in or from Mexico.

Tularemia

Tularemia is a **zoonosis** that primarily affects **lago**-morphs (hares and rabbits) and rodents (muskrats, beavers, and squirrels). The disease may be transmitted to man through direct contact with blood, tissues, or secretions of infected animals; through aerosolization of infected blood or secretions; or through bites of infected ticks or deer flies.

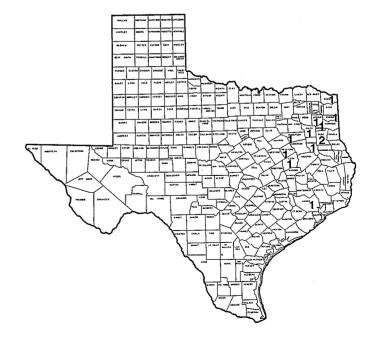
The most common clinical presentation is **ulcero**-glandular tularemia characterized by continuous or remitting fever with elevations to 104 - 106F (lasting as long as a month if untreated], skin ulcer or eschar at the site of innoculation, and tender enlargement of the regional lymph nodes which often spontaneously break down and ulcerate. Other forms less frequently experienced are pneumonic, oropharyngeal, **oculo**-glandular, and typhoidal tularemia.

Twelve cases of tularemia were reported to the Texas Department of Health in 1980, compared with 11 cases in 1979, and six cases in 1978. Perhaps, due to the association of tularemia with hunting and other outdoor activities, the disease is more common in males than in females; nine of the 12 cases occurred inmales. The ages of the tularemia cases reported in 1980 ranged from 13 to 72 years; median age was 60.5 years. All of the cases occurred in counties in the northeastern and eastern

areas of Texas (see Figure 15), but it is likely than there are undiagnosed cases occurring over a much broader area.

Seven of the cases reported a history of tick bite, two reported skinning rabbits or squirrels, and one had been clearing land around her home; epidemiologic data suggesting a source of infection were unavailable on two cases. The dates of onset of illness were fairly evenly distributed from April through September; ten cases (83%) occurred during this period, one case reported onset in October. and one in December.

FIGURE 15 Reported Cases of Tularemia in Texas By County of Residence, 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 racelethnicity 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-

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
50-5 9	3	4.5
60+	1	1.5
TOTAL	67	100 104

)

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-PREVENTABLEDISEASES

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. Encephalitisoccurs 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 esential that all infants be vaccinated. To ensure protection of infants vaccinated prior to the first birthday, they should be revaccinated 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-

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-agechildren 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

Adecrease 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). (Anadditional 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

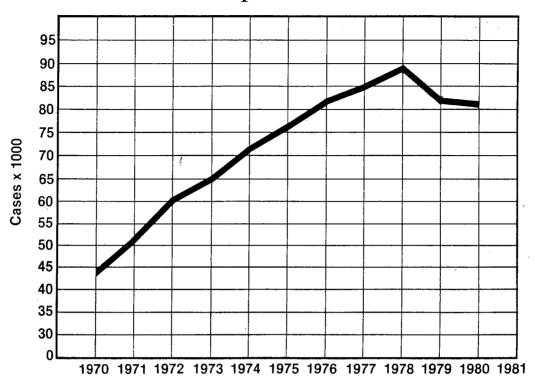
During 1980, there were 3,828 cases of primary and secondary syphilis (the infectious stages) reported to the Texas Department of Health. This figure is again representative of civilian cases only; an additional 69 cases of primary and secondary syphilis were reported inmilitary personnelin Texas. The 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 latelatent 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.

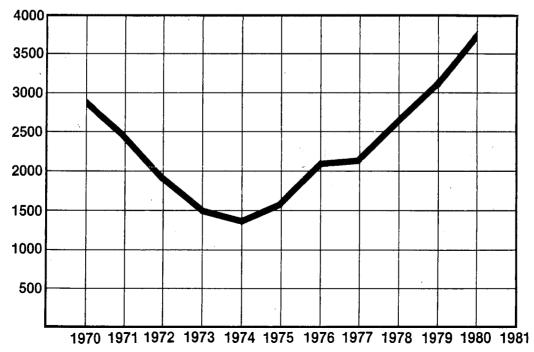
Other Venereal Diseases

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.

Texas
Gonorrhea-Reported Cases **1970-80**



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 occuring 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 racelethnicity 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 AsianlPacific Islander; and the racelethnicity 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 Acase reports was apparent in our data.

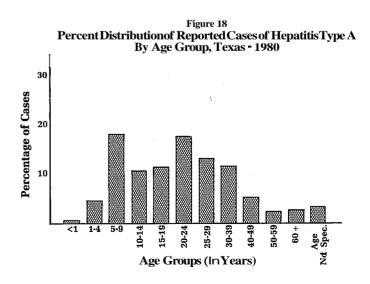
The number of cases of viral hepatitis type unspecified has increased steadily since 1974 (Figure 19), and in 1980, 2,194 cases were reported in Texas. The incidence rate also reflected this current trend as the rate for Texas in 1980 was 15.42 per 100,000 population compared to 13.75 in 1979. The epidemiology 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.

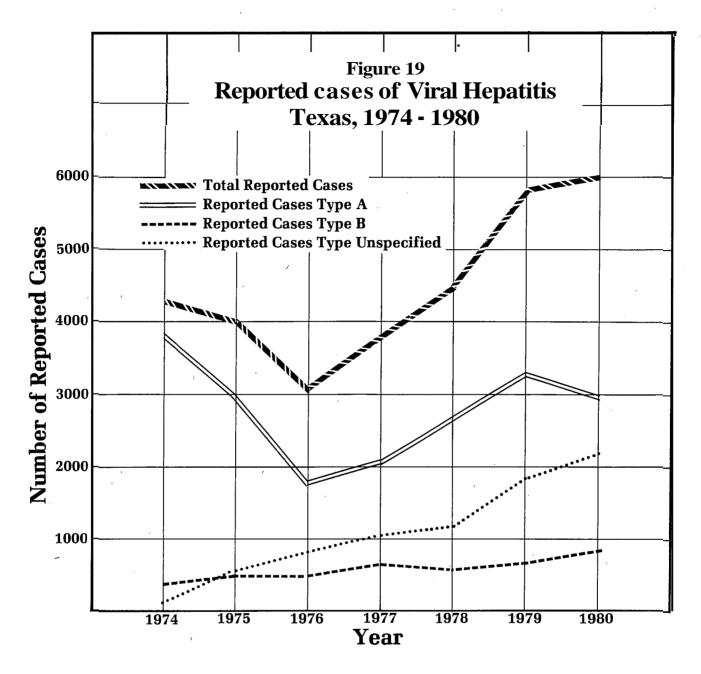
As with hepatitis type A, children and young adults are especially at risk, and 76% (1,673 cases) of the cases were reported in persons under 30 years of age. (See Figure 20.) Cases were evenly distributed among males (55%) and females (45%), and distribution of cases by racelethnicity was also similar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

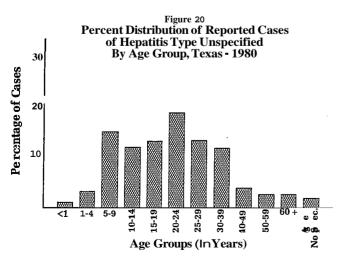
In 1980, there were 819 cases of hepatitis type B reported in Texas, a 19.6% increase over the 685 cases reported in 1979. The incidence rate in Texas was 5.76 cases per 100,000 population. The epidemiology of hepatitis type B is unique among the three types of viral hepatitis. Only 75 counties in Texas 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.

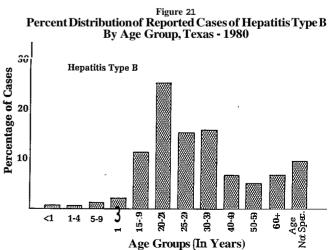
Hepatitis type B most commonly occurs in adults, with the majority of cases occurring in persons between the ages of 15 and 39 (Figure 21). It is this age group that is sexually active and is more likely to also have contact with drugs. Both activities have been associated with the spread of the disease.

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 racelethnicity 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 AsianlPacific Islander; .2% were American Indians; and the racelethnicity of 15.8% of the cases was not indicated.









APPENDIX

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

	ł .	h	ŧ	11	í	1	1	1	
DISEASE	1980	1979	1978	1977	1976	1975	1974	1973 _	1972
Texas Population	_	İ]						
(in thousands)	14,229*	13,385	13,050	12,860	12,599	12,318	12,017	11,830	11,619
					,	i			
	İ	ĺ	1	 	ľ	1	1	1	,
Amebiasis	355	301	210	216	146	129	186	195	180
Anthrax	-					i		-	-
Aseptic meningitis	432	753	405	315	312	362	228	180	272
Botulism	28	3 28	23	1	-		2		~_
Brucellosis	9,478	7,009	6,163	33	77	29	18	36	5
Chickenpox Cholera	9,470	7,009	0,103	8,222	8,280	9,213	7,505	11,034	1,778
Dengue	61	_	3		-	I -		1	_
Diphtheria Diphtheria]	4] _1	6	9	18	41
Encephalitis, infectious	631	59 ¹	471	551	351	821	30	43	43
Gonorrhea ²	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		50,010
Hepatitis, type B	819	685	586	650	497	490	357	$>$ 5,189 3	4,216 ³
Hepatitis, type unspecified	2,194	1,840	1,198	1,064	836	573	116/	1 -,	1,220
Influenza and flu-like illness	99,292	86,689	99,394		132,749			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 82	908	1,527	995	1,755	4,077	3,500	3,786	5,108
Pertussis	- 02	104	132	75	36	136	99	115	185
Plague Poliomyleitis, paralytic	_		_	3	-	2	_	-	
Psittacosis	8	5	5	6	2	6	- 58	5	4
0 fever		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	.,	_	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 2 Tetanus	3,828	3,154	2,637	2,123	2,041	1,579	1,405	1,521	1,800
Trichinosis	13 6	17	11 2	16 11	12	16	4 4	10 4	20
Tuberculosis	2,075	2,090	2,160	2,326	2,454	2 600	2,311	2,224	2,422
Tularemia	12	11	2,100	11	10	2,600 19	2,311	2,224	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
 Civilian cases only
 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						-		12.72	
(in thousands)	14,229*	13,385	13,050	12,860	12,599	12,318	12,017	11,830	11,619
š									
	!					l		ľ	
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	0.441	0.441	0.36 ¹	0.43 ¹	0.281	0.671	0.25	0.36	0.37
Gonorrhea ²	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 ³	36.29 ³
Hepatitis, type unspecified	15.42	13.75	9.18	8.27	6.64	4.65	0.97	l	
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 ²	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	-	-	-	-			-	_	-
	}				J	L			L <u>.</u>

* Provisional

** Not reportable

Exclusive of arboviral encephalitides
 Civilian cases only
 Includes all types of viral hepatitis

TABLE III DEATHS FROM SELECTED NOTIFIABLE DISEASES AND CONDITIONS OF INTEREST TO PUBLIC HEALTH 1 TEXAS, 1972-1980

CAUSE OF DEATH	IGD ²	1980	1979	1978	1977	1976	1975	1974	1973	1972
Amebiasis	006	6	5	2	4	5	3	5	5	6
Aseptic meningitis	047	2	2	_		5 5	-	1	5	6
Botulism	005.1		_	1	_)	2		, ,	D
Brucellosis	023		_	<u> </u>	_	1	_	2	_	1 1
Chickenpox	052	7	5	7	8	10	_ 5	7	19	3 9
Diphtheria	032	1	- -		0 1	10	<u> </u>	2		_
Encephalitis, infectious ³	049	16	9	12	16	12		15	15	1 15
Gonorrhea	098	10	1	2	10	12	15 2	2	1 1	3
Hepatitis, viral type A	070.0-070.1	8	8	33	34	42	41	52	52	53
	070.2-070.1	23	14	აა 11	6				11	
Hepatitis, viral type B	070.4-070.9	30		49		5	8	6		11
Hepatitis, viral type unspecified Influenza	487	70	19 30		63	63	31	43	57	38
	030	70		190	64	567	211	110	249	293
Leprosy (Hansen's disease)	100	_	_	2	1	1	-	1	1	1
Leptospirosis	084	-	3		1	2	-	1	_	1
Malaria	055	•	-	_	_	-		_] -	_
Measles	036	-	1	1	3	_	3	2	1	5
Meningococcal infections	036	24	27	37	25	20	28	22	39	25
Mumps Pertussis	072	-	-	1	-	2	_	-	-	1
Poliomyelitis, acute	033	_	_	-	1	_	1	1	1	1
Rheumatic fever, acute	390-391	2	40	_	-		_		1	2
Rocky Mountain spotted fever	082.0	_	10 1	5 -	11	4	8 3	12 2	9	13
Rubella	056	_		_	I -	1	1		1	-
Rubella congenital syndrome	771.0	_	_	_	2 1		4	- 5	3 2	-
St. Louis encephalitis	062.3	1	_	_	<u>'</u>	4	3			1 1
Salmonellosis	002.3	5	2	3	3	1 1	5 5	2	 5	5
Shigellosis	003	_	1	6	7	3	6	5	6	4
Strep 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	94	44	84	34	64	104
Tetanus, neonatal	771.3	_	l ĭ	*	×	*	*	*	*	*
Trichinosis	124	_	_	-	_	۰	_	_ :	_	_
Tuberculosis	010-018	111	112	163	176	211	200	237	247	256
Tularemia	021		1	_		1	_	1	3	1
Typhoid fever	002.0	1	l i	_	_		1) [2
Typhus fever, endemic	081.0			_	l <u> </u>	_		_		_
Child battering & other maltreatment	E967	15	13	26	41	28	**	**	**	**
Guillain-Barre syndrome	357.0	8	13	18	14	6	14	16	12	14
Mycobacteria infections	031	8	8	6	4	Ž	5	7	6	5
Reye's syndrome	331.8	17	19	**	**	**	**	**	**	**
Sudden infant death syndrome	798.0	323	340	298	293	217	203	175	**	**
		0_0							·	

^{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.} \star Includes deaths due to neonatal tetanus.

^{**} Prior to 1979, neonatal tetanus deaths were included in total tetanus deaths

Data not available

TABLE IV $\label{table in table in table in table in table in the content of th$

DISEASE	TOTAL	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	CCT	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	-	` -	-	-	- 1	_	_	_	_	14	20	27
Diphtheria	1	_	-	-	_	-	-	-	-	_	-	_	1
Encephalitis, infectious viral ¹	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	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	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.

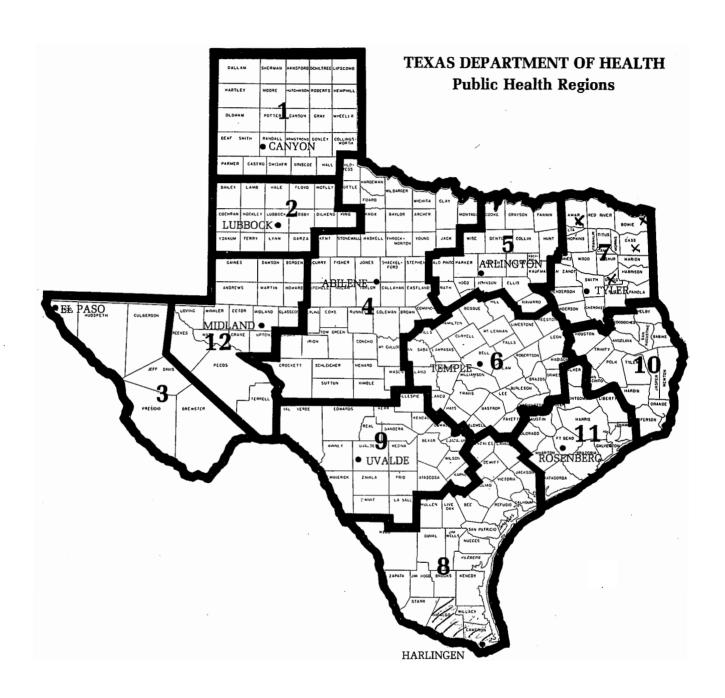
DISEASE	TOTAL	<1	1-4	5–9	10-14	15–19	20-24	25–29	30-39	40-49	50~59	60+	Age Not Specified
Amebiasis	355	13	26	25	48	38	35	30	32	23	24	20	41
Aseptic meningitis	432	174	37	33	25	30	33	36	36	14	4	2	'ŝ
Brucellosis	28	-		_	_	1	8	5	4	.3	2	5	
Chickenpox	9,478	206	2,244	3,399	506	228 ¹						_	2,895
Encephalitis, infectious viral ²	63	1	-,	3	5	7	5	3	10	3	5	10	3
Gonorrhea ³	80,297		38 ⁴	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	-	l	\ -	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	-	l -	-	
N 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	·	-	-	-	-	'-'	_	-	-] -	I
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 ³	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	٤1			1	5	<u> </u>	·	<u> </u>	7	7	6	12	

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

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

Encephalitis, infectious viral 2	DISEASE	8 9 10 11 12	Military ¹
Aseptic meningitis			
Brucellosis			1.
Chickenpox] 3
Encephalitis, infectious viral 2		- 1 1 - 1 - 1	1
Same			119
Hepatitis, viral type A 2,978 101 41 182 94 752 463 124 263 38 12 182 24 10 56 28 284 71 28 63 38 12 182 2 24 253 25 25 25 25 25 25 2		- 1 - 1 - 1 1	-
Hepatitis, viral type B 819 4 10 56 28 284 71 28 63 38 12 182 2			3,526
Hepatitis, viral type unspecified 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 2,2 12 12 1 2 11 2 11 2 11 2 11 2 11 2	1 , 1		28
Influenza & flu-like illness Leprosy (Hansen's disease) Leptospirosis Measles Meningococcal infections Mumps Pertussis Pertussis Pertussis Relapsing Fever Rheumatic fever, acute 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 2,954 2,954 2,954 2,26			
Leprosy (Hansen's disease) 32 - - - - - 4 2 - 12 1 2 11 - Leptospirosis 3 - -	Hepatitis, viral type unspecified		17
Leptospirosis 32		9,076 12,191 905 2,054 2,95	2,241
Measles 181 7 2 12 8 52 4 6 21 8 6 40 9 Meningococcal infections 145 6 2 3 4 42 19 2 10 12 8 35 1 Mumps 212 4 2 16 4 45 9 19 26 19 9 47 3 Pertussis 82 7 2 2 - 43 6 3 1 3 5 8 2 Psittacosis 8 - 1 - - 3 1 - - 1 - - - - - Relapsing Fever 1 -	Leprosy (Hansen's disease)	12 1 2 11	→
Meningococcal infections 145 6 2 3 4 42 19 2 10 12 8 35 1 Mumps 212 4 2 16 4 45 9 19 26 19 9 47 3 Pertussis 82 7 2 2 - 43 6 3 1 3 5 8 2 Psittacosis 8 - 1 - - 3 1 - - 1 -<	Leptospirosis	- - - 1	-
Mumps 212 4 2 16 4 45 9 19 26 19 9 47 3 Pertussis 82 7 2 2 - 43 6 3 1 3 5 8 2 Psittacosis 8 - 1 - - 3 1 - - 1 - 2 - Relapsing Fever 1 - - - 1 -	Measles	21 8 6 40	6
Pertussis 82 7 2 2 - 43 6 3 1 3 5 8 2 Psittacosis 8 - 1 - - 3 1 - - 1 - - 1 -	Meningococcal infections		1
Psittacosis 8 - 1 - - 3 1 - - 1 - <td< td=""><td>Mumps</td><td>26 19 9 47 </td><td>9</td></td<>	Mumps	26 19 9 47	9
Relapsing Fever	Pertussis	1 3 5 8	_
Rheumatic fever, acute 15 3 1 1 1 2 4 - 4 -	Psittacosis	- 1 1 - 2	
	Relapsing Fever		
	Rheumatic fever, acute	2 4 - 4	
Rocky Mountain spotted fever 31 1 1 12 5 4 1 3 2 3 -	Rocky Mountain spotted fever	1 3 2 3	_
Rubella 131 3 2 8 1 36 11 17 35 3 4 7 1	Rubella	35 3 4 7	3
Salmonellosis 2,456 63 66 96 75 437 296 95 321 295 72 590 10	Salmonellosis	321 295 72 590 1	40
Shigellosis 2,162 36 82 136 24 267 293 32 405 246 22 596 9	Shigellosis	405 246 22 596	14
			1,569
Syphilis, primary and secondary 3,901 19 64 96 25 1,234 254 136 154 197 105 1,516 28	Syphilis, primary and secondary		73
Tetanus 13 5 - 3 2 - 2 1		1	
Trichinosis 6 - - - 3 1 1 - - - -			1 1
Tuberculosis 2,075 14 30 102 52 365 106 106 266 195 84 720 35		266 195 84 720 3	
Tularemia 12 2 9 1 -		1 1	
Typhoid fever 67 - 1 5 2 23 5 1 11 3 1 14 1		11 3 1 1/4	_
Typhus fever, endemic 61 2 4 2 1 1 49 - 1 1 -			_
	Typhus Tover, endemie		_

Includes military installations and VA hospitals
 Exclusive of arboviral encephalitides



• Regional Headquarters

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 8061797-4331 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)
9151533-4972
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 9151673-5231 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) 817177843744 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 5121423-0130 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,

Yellow fever

Diphtheria

paralytic

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

Amebiasis

Leptospirosis

Anthrax

T)

Malaria

Rubella congenital syndrome

Aseptic meningitis

Measles

Salmonellosis

Botulism Brucellosis Cholera Diphtheria Meningococcal infections Mumps **Pertussis**

Shigellosis Smallpox **Tetanus Trichinosis**

Encephalitis (specify etiology)

Plague Poliomyelitis, paralytic Tularemia Typhoid fever

Hansen's disease (leprosy)

Psittacosis

Typhus fever,

Hepatitis, viral Type A

Q fever Rabies in man

endemic (murine)

Type B unspecified Relapsing fever

Rheumatic fever, acute

epidemic Yellow fever

Rocky Mountain' spotted fever

Diseases Reportable by Numerical Totals

Chickenpox

Streptococcal sore throat

Influenza and flu-like

(including scarlet fever)

illness

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.

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FIRSTCLASS PERMITNO.239 AUSTIN, TEXAS

POSTAGE WILL BE PAID BY ADDRESSEE

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



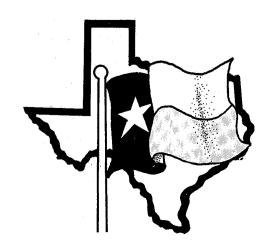
Leave This		NOTIFIABLE DISEASE REPORT FOR WEEK ENDING_					
Space Blank	Disease	Patient (Last, First, Middle Initial)	Age*	Sex	Racet		
	1	Name	1			*REPORT AGE AT LAST	
		Address	1			BIRTHDAY. IF LESS	
,		City	1			THAN 1 YR. REPORT	
		Name				BY MONTH.	
		Address	1			†ENTER CODE AS	
		City	1			APPROPRIATE	
		Name				1	
		Address]			WHITE 1	
		City	1			HISPANIC 2	
		Name				BLACK 3 AMERICAN INDIAN	
		Address	1	-		or ALASKAN NATIVE 4	
		City			ASIAN or PACIFIC		
		Name				ISLANDER :	
		Address	1			UNKNOWN 9	
		City_	1			CHECK FOR	
		Name				ADDITIONAL SUPPLIES J-27 (VD REPORTING	
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		Name					
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		City	1				

Texa D p rtniei | Health

5-9 10-14

15+

Unk.



REPORT BY NUMBER OF CASES PER AGE GROUP:

CHICKENPOX

052

<1 yr.

487—Influenza & flu-like illness________034—Strep. sore throat, incl. scarlet fever______

FORM **C-15** (REV. 6-79)