

H 600.6 1928 87/6/3

NON-CIRCULATING

TEXAS STATE DOCUMENTS COLLECTION

Vol. 49, No. 22
June 3, 1989



Texas Preventable Disease

NEWS

contents:

PDN Annual Summary 1988

Frank Bryant, Jr. MD, FAAFP Chairman
Texas Board of Health

Robert Bernstein, MD, FACP
Commissioner

**Bureau of Disease Control and Epidemiology,
1100 West 49th Street, Austin, Texas 78756 (512-458-7455)**

PDN ANNUAL SUMMARY 1988

INFECTIOUS DISEASES

Anthrax: The first human cutaneous anthrax case in Texas since 1967 was reported in a Uvalde County resident. The patient, a 63-year-old Hispanic male, reported a history of dissecting sheep that had died suddenly. *Bacillus anthracis* was identified in tissue specimens from the dead sheep.

Botulism: A single, adult foodborne botulism case was reported in 1988. The patient was an 18-year-old male resident of Young County. Botulinum toxin, type A, was demonstrated in washings from aluminum foil used to wrap potatoes boiled in water and left out over night.

Influenza: A total of 109,871 cases of influenza was reported in 1988, representing a 71% increase in the number of cases compared with the total for 1987 (64,192). Several strains of influenza virus circulated during the year. During January - March 1988 (the 1987-88 influenza season), the major virus was influenza A(H3N2). At least two variants of this virus were isolated during this period -- Leningrad and Sichuan. As the season continued, a gradual decline was noted in reported isolates of influenza A with concomitant emergence of influenza B.

Influenza season 1988-89 got off to a very early start, with influenza B cases reported in October from the Influenza Research Center in Houston. Influenza B isolates appeared elsewhere in the state starting in November and continuing throughout December.

Lyme borreliosis: A total of 25 Lyme borreliosis cases was reported in 1988. The majority of cases resided in North-central Texas. Thirteen were female, and 22 were white. Lesions consistent with erythema migrans were reported for 14 patients.

Plague: The first human plague case in Texas since 1984 occurred in Pecos County in February 1988. Serologic tests to *Yersinia pestis* were positive. The patient resided in an area of 13 contiguous counties in West Texas experiencing an epizootic of plague.

Q fever: Four cases of Q fever were reported: two in Wheeler County, one in Bell County, and one in Uvalde County. All four patients recalled exposure to dusty environments where animals were held.

Shigellosis: In 1988, 2,826 cases of shigellosis were reported. This represents an increase of 739 (35%) cases over 1987. However, 727 of the cases reported during 1988 were the result of an outbreak associated with a restaurant in Travis County. The outbreak, caused by *Shigella sonnei*, occurred over a 24-day period. Infection was statistically associated with the consumption of water. The exact source of contaminated water was not determined. During the investigation, fecal coliforms were recovered from raw water samples taken from the well which served as the restaurant's water supply, and a problem with the chlorinator was documented during the outbreak. Also, the plumbing under the restaurant did not meet minimum plumbing codes. No other outbreaks were reported during 1988.

Tuberculosis: In 1988, 1,901 cases of tuberculosis (11.0/100,000 population) were reported. This represents an increase of 8.2% in the number of reported cases as compared with 1,757 cases reported in 1987 (10.3/100,000 population).

While 8.2% is a significant increase over 1987 morbidity, it is less significant when compared to the 1,890 and 1,891 cases reported in 1985 and 1986, respectively. The rate of increase compared to those years is approximately 0.5%. Regardless of the rate of increase, it is more important to determine why tuberculosis in Texas is not on the steady decline as it was in previous years. A careful analysis is being made to analyze the causes of this change in trend.

Vibrio Infections: A total of 28 culture-confirmed *Vibrio* infections were reported. Six species of *Vibrio* were identified: *V. cholerae* 01, *V. cholerae* non-01, *V. vulnificus*, *V. parahaemolyticus*, *V. alginolyticus*, and *V. mimicus*. Of the 28 patients reported to have *Vibrio* infections, nine died. All of the deaths were due to *V. vulnificus* infections. Eight of the nine deaths were associated with the consumption of raw oysters or other seafood.

The toxigenic *V. cholerae* 01 infection reported during 1988 was the first case of cholera reported in Texas since 1981. The patient, a 29-year-old pregnant female, developed watery diarrhea two days after eating 18 raw oysters purchased from a local grocery store. The oysters were harvested from a bay in Louisiana. The patient reported

having 48 bowel movements per day. Other symptoms included fever, chills, nausea, vomiting, headache, abdominal cramps, muscle pain, and diarrhea. She recovered from the infection without immediate adverse affect on the pregnancy, but the outcome of the pregnancy is unknown.

VACCINE-PREVENTABLE DISEASES

Measles: In 1988, 286 cases of measles were reported from 13 counties. The majority of the morbidity (92.3%) was reported from Harris County during November and December 1988. Heavy morbidity continued into 1989.

Mumps: Three hundred twenty-seven mumps cases were reported. Jefferson County reported 26% of the cases over a four-month period in an outbreak in school-aged individuals, most of whom had been immunized.

Pertussis: During 1988, 158 pertussis cases were reported from 43 counties. An early spring outbreak occurred in Bastrop County accounting for 17% of the morbidity. Of the 158 cases, 62% were reported in infants <1 year old.

Rubella: Thirty cases of rubella were reported from 15 counties. One third of the morbidity was reported from Lubbock County. Five cases were reported in persons over 20 years old.

Tetanus: Six cases of tetanus were reported. Four of the cases occurred in persons ≥ 50 years of age; two individuals died.

No cases of diphtheria or poliomyelitis were reported.

STD MORBIDITY TRENDS

Chlamydia: In September 1987, the Texas Board of Health promulgated rules requiring that physicians and laboratories report *Chlamydia trachomatis* infections. During the last four months of 1987, 4,082 chlamydia cases were reported to TDH; 13,572 cases were reported in calendar year 1988.

In August 1988, the TDH began a chlamydia screening project in 62 maternity clinics. That program was expanded to 300 maternity clinics in February 1989. Over 50,000 women seen in maternity clinics and another 20,000 women of childbearing age seen in family planning clinics will be tested for chlamydia by August 1989.

Women and children bear an inordinate share of the chlamydia burden. Women with chlamydia infections often require hospitalization for pelvic inflammatory disease, infertility, ectopic pregnancy, premature rupture of fetal membranes, and premature delivery. Infants of infected mothers are subject to eye infections and pneumonia. Each year, approximately 155,000 infants are born to mothers infected with chlamydia. By 1990, medical and other costs to Americans are projected to exceed \$2.18 billion. Nearly three fourths of the cost of chlamydia

infections could be prevented with an aggressive education, screening, treatment, and counseling program.

Gonorrhea: For the third consecutive year, gonorrhea morbidity declined in Texas. A total of 45,639 cases was reported in 1988, a decline of 12% from the 51,588 cases reported during 1987. The seven major metropolitan areas of Texas (Austin, Corpus Christi, Dallas, El Paso, Fort Worth, Houston, and San Antonio) reported three fourths of the gonorrhea morbidity.

The number of reported gonorrhea cases resistant to penicillin rose from 495 in 1987 to 593 in 1988, a 20% increase. The 593 resistant cases represent 1.3% of the 45,639 gonorrhea cases reported statewide. Areas of the state with >1% resistant gonorrhea (eg, Austin, Dallas, El Paso, and Houston) implemented special treatment protocols and control strategies to contain the spread.

Reported cases of pelvic inflammatory disease (PID) caused by gonorrhea declined 9%, from 1,962 cases in 1987 to 1,790 cases in 1988. Approximately 10% to 15% of women with gonorrhea develop PID along with the associated complications of pelvic abscess, ectopic pregnancy, sterility, and chronic menstrual abnormalities. Many of these complications require surgery.

Syphilis: After five years of steadily declining morbidity, there was a slight increase in early syphilis infections in 1988. The number of primary and secondary (P&S) syphilis cases increased 2% (3,071 to 3,124) over 1987, and early latent syphilis cases (under one year's duration) increased 9% (2,922 to 3,172) over 1987. As in previous years, the seven major metropolitan areas reported three fourths of the P&S syphilis and two thirds of the early latent syphilis.

In 1988, 72 cases of congenital syphilis in children <1 year of age were reported in Texas, a 60% increase over the 45 cases reported in 1987. More than 80% (59/72) of the cases were reported from the Dallas, Fort Worth, Houston, and San Antonio metropolitan areas.

ENVIRONMENTAL EPIDEMIOLOGY

In 1988, the Environmental Epidemiology Program staff implemented several new projects. A public health technician and industrial hygienist (assigned to the TDH Occupational Safety and Health Division) were added to the program to implement the National Institute for Occupational Safety and Health (NIOSH) funded cooperative agreement entitled the Texas Sentinel Event Notification System for Occupational Risk (TxSENSOR). This cooperative agreement enhances the surveillance and follow-up for the reportable occupational conditions in Texas. NIOSH also provided funds to design and implement a study to assess lead exposure problems in children of lead workers and women whose spouses are employed in lead industries. Recent studies have indicated that lead levels as low as 10-15 micrograms/deciliter of whole blood can

ANNUAL SUMMARY OF REPORTABLE DISEASES IN TEXAS, 1988

(Counties listed below reflect only those with populations of 100,000 or more, based on 1987 population estimates.)

County	Anebiasis	Campylo- bacteri- osis	Chickenpox	Encephal- litis	R. Influenzae Infections	Hepatitis A	Hepatitis B	Hepatitis NA-NB	Influenza	Measles	Meningo- coccal Infections	Aseptic Meningitis	Mumps	Pertussis	Rubella	Salmonella	Shigella
BEXAR	7	83	869	6	60	233	124	6	2797	1	7	60	4	10	0	140	251
BRAZORIA	1	2	11	0	5	11	0	0	14	1	1	2	4	1	0	13	8
CAMERON	104	6	421	0	14	66	13	1	3404	0	0	2	18	0	1	40	53
COLLIN	0	3	568	1	6	21	16	2	13893	0	0	4	2	2	0	12	11
DALLAS	24	84	2883	7	158	391	271	32	16576	2	16	113	27	19	4	320	252
DENVER	1	8	174	1	11	23	0	2	969	0	1	7	0	0	0	34	5
EL PASO	3	46	1110	0	23	275	95	8	139	0	2	2	7	1	0	97	175
PORT BEND	0	12	20	0	9	11	8	1	121	3	0	11	1	2	0	34	38
GALVESTON	1	21	173	0	6	19	40	0	1309	1	3	16	3	0	0	34	33
HARRIS	9	176	4317	10	125	286	126	32	18137	264	13	170	78	11	3	397	323
INDALGO	11	0	186	0	2	56	4	0	11	4	0	6	4	3	0	44	64
JEFFERSON	1	5	284	1	3	11	19	0	1227	0	0	4	84	1	0	31	13
LUBBOCK	4	12	169	4	11	32	19	2	2166	0	3	19	5	2	10	32	35
MCLENNAN	1	0	315	1	11	138	20	4	404	1	0	2	3	1	0	20	20
MONTGOMERY	2	5	241	1	33	34	23	5	393	1	0	5	1	3	0	27	8
WOCES	1	10	551	0	9	14	34	0	10876	0	2	5	0	0	0	90	33
PARRANT	1	62	1822	6	81	209	271	18	5154	1	10	71	20	23	1	91	79
TRAVIS	21	79	25	2	34	55	52	6	216	4	3	35	6	0	0	122	747
All Other Counties	60	123	5938	34	242	854	503	30	32865	3	37	141	60	71	11	1056	686
Cumulative TX 1988	252	745	20885	74	843	2739	1654	149	109871	286	90	675	327	158	30	2334	2826
Cumulative TX 1987	290	780	23228	118	747	1886	1487	161	62192	452	126	758	338	111	5	2803	2887

1988 CUMULATIVE TOTALS FOR OTHER REPORTABLE DISEASES:

Acute Occ. Pesticide Poisoning	24	Coccidioidomycosis	56	Histoplasmosis	133	Psittacosis	2	Toxic Shock Syndrom	29
Anthrax	1	Dengue	0	Legionellosis	20	Q Fever	4	Trichinosis	0
Asbestosis †	64	Diphtheria	0	Leptospirosis	0	Rabies	0	Tuberculosis	1901
Botulism	4	† Elevated Blood Lead Levels	1022	Listeria Infections	45	Reye Syndrome	8	Tularemia	3
Brucellosis	22	Gonorrhea	45639	Lyme Disease	25	Rocky Mt Spotted Fever	22	Typhoid	30
Chlamydia trachomatis	13572	Hansen's Disease	35	Malaria	73	Silicosis †	11	Typhus, Murine	30
Cholera	1	Hepatitis D (Delta Agent)	1	Plague	2	Syphilis (P&S)	3124	Widrio Infections	27
		Hepatitis type unspecified	576	Polioyelitis	0	Tetanus	6	Yellow Fever	0

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

cause neurobehavioral deficits in children and fetuses in utero.

Under the TxSENSOR grant, three brochures were developed and are available for distribution. *Reportable Occupational Diseases in Texas* provides information on occupational diseases, reporting requirements, steps for reporting, and resources. *Lead in Industry: A Guide for Employers* and *Working with Lead: A Guide for Employees* address health effects, the Occupational Safety and Health Administration's standard for lead, and protective practices. To obtain information or copies of these brochures, contact Janet L. Pichette at (512)458-7269 or Laurel Schulze at (512)458-7254.

The Program received funding from the Agency for Toxic Substances and Disease Registry (ATSDR) to build state capacity at the program level to conduct health assessments around toxic waste sites. Program staff also investigated reports of excess cancer and birth defects around the state, and completed investigations involving the health effects of occupational and environmental exposures.

INJURY CONTROL

All-Terrain Vehicles (ATVs): To understand the extent of the ATV injury problem in Texas, two epidemiologic investigations were undertaken. First, in collaboration with the Texas Safety

Association, program staff designed and implemented a surveillance system that collected ATV-related injury data from 40 selected facilities for a seven-month (February-August 1988) period. Seventy-three percent of the facilities reported a total of 104 individuals who were treated for non-fatal injuries during the study period. Three facilities in North and West Texas reported 40% of all the injury cases. Half of the injured were younger than 16 years of age.

The second investigation documented the number of persons killed while riding ATVs in Texas. With the assistance of the Bureau of Vital Statistics, the Consumer Project Safety Commission, Justices of the Peace, medical examiners, and police reports, program staff verified 42 deaths between 1982-1987. Fifty-two percent of the deaths were to persons 15 years or younger. The youngest fatality was four years old. Eighty-three percent of the fatalities sustained head/neck injuries.

Motorcycles: Program staff assisted the Texas Department of Public Safety with a study of 763 individuals treated in 17 hospitals across the state, for motorcycle-related injuries, between September 1, 1986, and December 31, 1987. Thirty-two of the 763 patients were fatalities; 17 were dead-on-arrival, and 15 died in hospitals. Twenty-four of the fatalities sustained head injuries; only six were helmeted. Results indicated that motorcycle helmets are effective in reducing the severity of head injuries.

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

TEXAS PREVENTABLE DISEASE NEWS
Texas Department of Health
1100 West 49th Street
Austin, TX 78756

**SECOND CLASS POSTAGE
PAID AT AUSTIN, TX**

RETURN POSTAGE GUARANTEED



Learn to Swim