Texas Preventable Disease
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TRAUMATIC SPINAL CORD INJURY SURVEILLANCE TEXAS, 1991

Current estimates indicate that over 200,000 US residents have spinal cord injuries (SCIs) and that 7,000 to 8,000 new SCIs occur in the US each year.[1,2] Estimated national incidence rates range from 28 to 50 injuries per million persons per year.[3] The direct medical costs to the federal government associated with these types of injuries have been estimated to exceed $4 billion per year.[4]

The public health impact of spinal cord injuries is underscored by: 1) the high cost of acute care (between $35-75,000 per injured person), 2) the age of the victims (over half of the injuries occur in the 15- to 24-year age group), 3) the preventable etiology of these injuries (46% vehicular, 13% gunshot, 13% sports/recreation related), and d) the permanence of disability (less than 7% of paraplegics and quadriplegics completely recover from their initial injury).[2] Individuals suffering with SCI experience reduced lifetime employment, decreased quality of life, and limited productivity; they may need special health services throughout life. Because of these reasons, in 1987, the Council of State and Territorial Epidemiologists (CSTE) recommended that SCI be designated as a condition reportable to state health agencies and to the Centers for Disease Control.

CDC is working with CSTE and state health departments in establishing nationwide SCI surveillance systems. The need exists to standardize case definitions, reporting sources, and the types of data collected. Epidemiologic studies of the new data can be used to define the impact of spinal cord injuries and provide direction for prevention activities.

In Texas, roughly 500-900 persons will incur traumatic spinal cord injuries during 1991. Although basic surveillance is the cornerstone of epidemiologic initiatives, Texas has, until now, lacked a statewide reporting system for SCIs. On January 1, 1991, the TDH Injury Control Program began collecting data to document the magnitude of traumatic spinal cord injuries in Texas. The Texas SCI surveillance system is voluntary and involves 13 key acute care hospitals and 22 inpatient rehabilitation facilities across the state. It is designed to document the series of events which lead to spinal cord injuries among Texans. The surveillance data will be used to: 1) define the extent of SCIs in the state, 2) describe etiologies so that prevention programs can be established, and 3) identify high-risk populations in order to target prevention initiatives.

Although participation in the TDH SCI Surveillance Program currently is voluntary, the Texas Board of Health recently approved legislation for consideration by the 72nd Legislature mandating the reporting of spinal cord injuries and near-drownings.

For more information about the Texas initiative, contact David Zane at (512) 458-7266.

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References:

1. DeVivo MJ, Fine PR, Maetz HM, Stover SL. Prevalence of spinal cord injury: a reestimation employing life table techniques. Arch Neurol 1980;37:707-8.

2. CSTE. CSTE injury surveillance resolution -- June, 1985.

3. Kraus JF. Epidemiological aspects of acute spinal cord injury: a review of incidence, prevalence, causes, and outcome. In: Becker DP, Povlishock JT, eds. Central nervous system trauma status report -- 1985. Bethesda, Maryland: National Institute of Neurological and Communicative Disorders and Stroke, National Institutes of Health, 1985:313-22.

4. Ergas Z. Spinal cord injury in the United States: a statistical update. Cent Nerv Syst Trauma 1985;2:31-2.

EPI NOTES

Mumps Outbreak in Floyd County: In October and November 1990, an outbreak of mumps occurred among a population of 319 high school students in which more than 98% of students had been immunized, according to school records. Sixty-two cases of mumps (seven serologically confirmed) were identified among students (attack rate=22%) between October 3 and November 23, 1990. There were five generations of transmission during the outbreak. Only two patients were immunized before onset of illness. These data suggest that sustained transmission of mumps can occur in a highly immunized population.

INFLUENZA - TEXAS, 1990-91 SEASON

Influenza virus activity has become more widespread in Texas as we approach mid-January. Currently, five cities have reported positive viral isolates. Influenza A and B isolates have been reported from Houston, San Antonio, and Austin. Temple has reported one influenza A isolate, and Waco, an influenza B isolate.

Influenza B (Yamagata) is the predominant virus in circulation, with influenza A virus appearing sporadically. One of the influenza A isolates (from Houston) has been subtyped as H1N1.

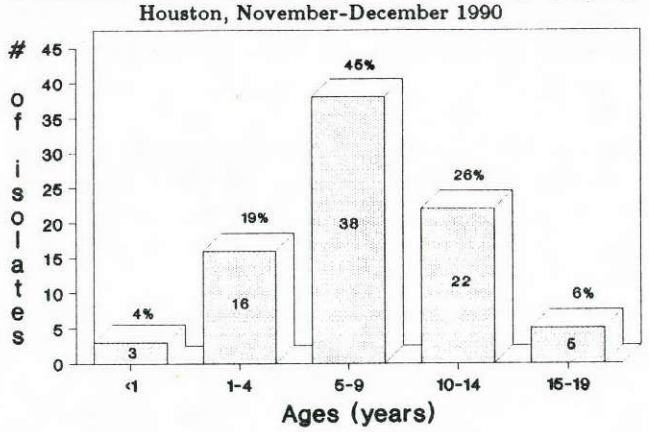
Houston experienced significant influenza B activity in November 1990, with reported cases of flu and flu-like illness exceeding 1,000 per week as early as Week 44 (Table 1). In contrast, the first week in which case totals exceeded 1,000 per week in Houston during the 1989-1990 flu season was Week 49 (mid-December); the predominant virus in circulation during this previous season was influenza A, which tends to show increased activity in Texas beginning in December.

Table 1.
Reported flu and flu-like illness, Texas
Oct.-Dec. 1989,1990

	October (weeks 40-43)	November (weeks 44-47)	December (weeks 48-52)	Total
1990	4,685	9,377	42,447	56,509
1989	4,128	5,676	47,766	57,570

To date, the Influenza Research Center at Baylor College of Medicine in Houston has reported 85 influenza B isolates. With the exception of one B virus isolated from a 40-year-old, all influenza B isolates have come from throat swabs collected from pediatric patients, predominantly elementary and middle-school children (Figure 1).

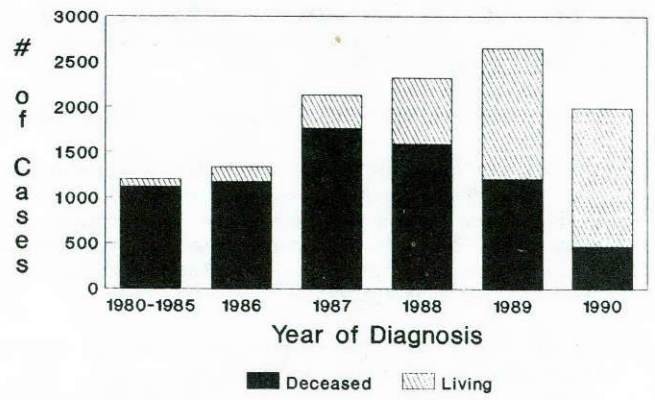
Figure 1.
Distribution of influenza B isolates from children by age group
Houston, November-December 1990



Influenza B virus morbidity generally affects children more than adults. Influenza B viruses change antigenically at a slower rate than influenza A viruses. Many adults have partial immunity because of prior exposure to influenza B viruses antigenically similar to current strains.

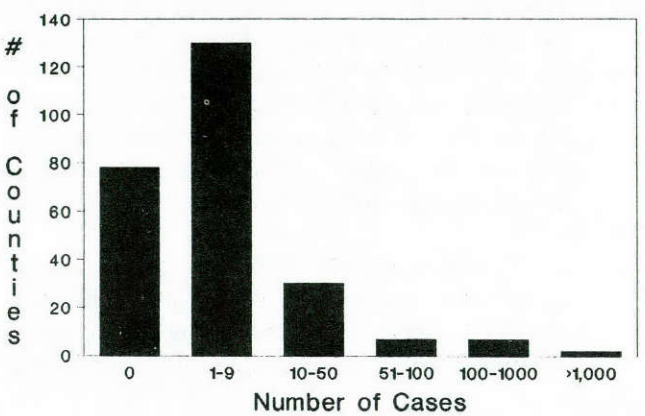
AIDS MONTHLY STATISTICAL SUMMARY

AIDS Cases and Deaths by Year of Diagnosis, Texas -- January 19, 1991



Cumulative: Cases 11,624 Deaths 7,302

Distribution of Counties by Number of Reported AIDS Cases, Texas -- January 19, 1991



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MONTHLY SUMMARY OF REPORTABLE DISEASES IN TEXAS

(Counties listed below reflect only those with populations of 190,000 or more, based on 1989 population estimates.)

Cumulative through: DECEMBER, 1990

County	Amebiasis	Campylobacteriosis	Chickenpox	Encephalitis	H. Influenzae Infections	Hepatitis A	Hepatitis B	Hepatitis NA-NB	Influenza	Measles	Meningococcal Infections	Aseptic Meningitis	Mumps	Pertussis	Rubella	Salmonella	Shigella
BEXAR	1	77	602	0	30	199	143	2	856	15	0	57	3	5	8	147	455
BRAZORIA	0	5	128	0	0	21	8	0	3704	0	2	1	2	2	0	11	22
CAMERON	28	4	446	0	17	83	6	0	1470	62	1	2	12	0	3	30	56
COLLIN	0	5	755	0	8	19	13	2	9211	59	2	11	6	1	2	15	2
DALLAS	21	120	484	8	76	379	281	4	1719	1763	15	211	33	13	8	222	175
DENTON	1	8	189	0	12	11	17	0	156	156	2	8	2	0	0	27	7
EL PASO	1	15	1562	0	9	296	109	1	59	299	0	8	29	0	3	82	6
FORT BEND	1	12	53	0	5	12	6	0	40	8	2	3	0	0	0	38	57
GALVESTON	1	10	494	0	15	52	43	1	302	2	3	9	5	1	0	22	26
HARRIS	10	88	7475	31	63	243	135	8	207540	111	14	153	62	3	3	267	422
HIDALGO	8	21	157	0	11	92	4	0	56	68	1	2	1	0	1	79	168
JEFFERSON	0	17	1207	5	16	8	39	1	4063	17	1	31	11	0	0	38	9
LUBBOCK	2	28	518	1	47	31	31	0	2212	5	4	15	9	1	6	54	319
MCLENNAN	0	2	301	0	3	25	7	3	5793	22	0	2	4	1	0	23	21
MONTGOMERY	0	1	5	1	4	13	7	2	2	1	1	0	4	1	0	16	12
NUECES	0	14	688	1	6	46	40	3	3963	6	2	3	3	0	2	52	95
TARRANT	2	43	2408	4	36	128	128	5	3396	261	9	34	36	4	9	100	165
TRAVIS	12	67	341	2	12	108	78	46	3378	331	9	24	9	5	0	88	106
All Other Counties	51	184	7205	16	249	678	552	29	49129	939	26	156	236	43	42	708	736
Cumulative TX 1990	139	721	25018	69	619	2444	1647	107	297049	4125	94	730	467	80	87	2019	2859
Cumulative TX 1989	159	625	23722	60	797	3211	1853	236	134604	3313	93	836	551	366	64	2277	1654

1990 CUMULATIVE TOTALS FOR OTHER REPORTABLE DISEASES:

Acute Occ. Pesticide Poisoning	60	Coccidioidomycosis	47	Histoplasmosis	82	Psittacosis	0
Anthrax	0	Dengue	0	Legionellosis	14	Q Fever	2
Asbestosis	110	Diphtheria	0	Leptospirosis	1	Rabies	1
Botulism	7	+ Elevated Blood Lead Levels	1034	Listeria Infections	29	Reye Syndrome	0
Brucellosis	12	Gonorrhea	43230	Lyme Disease	33	Rocky Mt Spotted Fever	6
Chlamydia trachomatis	20570	Hansen's Disease	37	Malaria	59	Silicosis	4
Cholera	0	Hepatitis D (Delta Agent)	0	Plague	0	Syphilis (P&S)	12484
		Hepatitis type unspecified	258	Poliomyelitis	2	Tetanus	7
						Toxic Shock Syndrom	3
						Trichinosis	0
						Tuberculosis	2242
						Tularemia	1
						Typhoid	28
						Typhus, Murine	32
						Vibrio Infections	20
						Yellow Fever	0

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

VACCINE-PREVENTABLE DISEASE UPDATE *

Provisional Data
Weeks 51-2
December16, 1990 - January 12, 1991

CONFIRMED AND SUSPECTED MEASLES

County	Latest Rash Onset	Cases This Period	Cases YTD	Affected Population
Bexar	01/03/91	2	2	PS
Cameron	01/10/91	2	2	PS
Denton	12/21/90	1	0	A
Ector †	01/03/91	1	1	PS
Ellis	12/22/90	1	0	SA
Hidalgo	01/10/91	2	2	PS, SA
Jefferson	12/27/90	1	0	PS
Kaufman	01/08/91	2	2	SA
Liberty	01/09/91	2	2	PS, SA
Lubbock †	01/01/91	2	2	A, PS
Tarrant †	01/09/91	1	1	PS
Webb	01/09/91	1	1	PS
Texas		18	15	

* Cumulative year-to-date data for counties with current outbreaks
† Serologically-confirmed cases

AAG = All age groups
PS = Pre-school
A = Adult
SA = School age

PERTUSSIS

County	Latest Onset	Cases This Period	Cases YTD	Affected Population
Bowie	01/12/91	1	1	not available
Dallam	01/02/91	1	1	PS
Ector	01/03/91	1	1	PS
Parker	12/26/90	2	0	PS
Tarrant	01/09/91	1	1	PS
Texas		6	4	

RUBELLA

County	Latest Rash Onset	Cases This Period	Cases YTD	Affected Population
El Paso	01/17/91	2	2	SA
Lee	01/05/91	1	1	SA
Texas		3	3	

MEASLES ALERT:
Three counties have at least one serologically-confirmed case. The cases from Lubbock and Tarrant Counties were imported from California and Mexico, respectively. Because the potential for spread throughout the state exists, public and private practitioners are encouraged to immediately report suspected cases to the local health authority or the TDH Immunization Division at 1-800-252-9152.

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