Ron J. Anderson, M.D.

Texas Board of Health

Chairman

Vol. 46, No. 35 August 30, 1986

contents:

Virus Surveillance Cumulative Totals for Diseases Reported to the Bureau of Communicable Disease Services through

Bureau of Epidemiology, 1100 West 49th Street, Austin, Texas 78756-3180 (512-458-7207)

## VIRUS SURVEILLANCE

Robert Bernstein, M.D., F.A.C.P.

Commissioner

The Bureau of Epidemiology manages a virus surveillance system which incorporates viral isolate information from the 19 hospital, university, and military laboratories throughout the state which culture for viruses. The laboratories are located in Austin (1), Dallas (4), Galveston (2), Houston (6), Lubbock (1), San Antonio (4), and Temple (1). Each laboratory provides a line listing of virus isolations, with pertinent epidemiologic information, on a monthly basis. The following is a summary of the data reported in 1985.

The number of viruses by month of specimen collection is presented in Table 1. The temporal distribution of enteroviruses, influenza viruses, parainfluenza viruses, rotavirus, and respiratory syncytial virus (RSV) is graphically represented in Figures 1 through 8. The increased numbers of Chlamydia trachomatis (included in the system for convenience) reported in September through December reflect the addition of a new laboratory to the system.

Table 2 presents the number of viruses by age of the patient for those patients whose ages were known. Ninety-eight percent of C. trachomatis isolates were from patients 10 to 39 years of age. Eighty-eight percent of these patients are females. Sixty-nine percent of echoviruses were in children 4 years of age or less. A majority of parainfluenza type 3 viruses, rotaviruses, and RSV were in children less than one year of age. Eighteen percent of the cytomegalovirus (CMV) isolates were in children less than one year of age, reflecting possible congenital infections. Patients with acquired immunodeficiency syndrome (AIDS) represent the majority of CMV infections in the 20 to 39-year age group.

Laboratories included the patient's diagnosis and date of onset in their line listings. Enteroviruses were isolated from 184 of 185 (99.5%) patients identified as having viral meningitis. Seventy-five percent of the patients with meningitis caused by an enterovirus had onset of symptoms in May through August. Echovirus type 4 was the most commonly reported virus in patients with meningitis. Influenza A(H3N2) was responsible for a majority (90%) of respiratory tract infections reported in January through February. Thirty-seven percent of the patients with a respiratory tract infection reported in March through April had a parainfluenza type 3 virus infection. In November through December, 70% of patients with a respiratory tract infection had an RSV infection.

In 1985, 206 viral isolates were reported from 133 patients identified as having AIDS. Ninetyone percent of the isolates were CMV. The urine (52%) was the most frequent source of CMV, followed by bronchial lavage (21%), lung biopsy (13%), and blood (4%).

Several limitations in interpreting the viral isolate data must be noted. The research interests, hospital affiliation, and cell lines utilized in the laboratory determine the types and numbers of reported viruses. Geographic differences in viral activity are difficult to determine because of the lack of viral laboratories in some metropolitan areas of the state. No viral laboratories are located in Cameron, Hidalgo, Nucces (Corpus Christi), and Webb (Laredo) Counties in south Texas or El Paso, Ector (Odessa), Midland, Taylor (Abilene), and Tom Green (San Angelo) Counties in west Texas. In total, these counties represent about 23% of the state's population.

This report was prepared by Jeffery P. Taylor, MPH, Staff Epidemiologist, Bureau of Epidemiology, Texas Department of Health.

NON-CIRCULATING NTSU LIBRARY

Table 1.

Number of viral isolates by month of specimen collection,
January 1 through December 31, 1985, Texas

Virus	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
	====					====	====						
Adenovirus	12	5	21	24	15	15	11	15	8	12	17	11	166
Chlamydia trachomatis	22	24	23	30	13	24	13	22	81	90	92	59	493
Cytomegalovirus	36	35	43	50	52	25	37	43	50	58	53	43	525
*Coxsackievirus (Group A)	1	0	0	0	3	2	2	4	1	1	0	0	14
*Coxsackievirus (Group B)	0	0	0	6	4	- 5	9	8	4	3	0	1	40
*Echoviruses	6	4	5	21	45	56	58	30	30	14	14	11	294
Influenza A(H1N1)	0	1	3	0	0	0	0	0	0	0	0	0	4
Influenza A(H3N2)	246	349	22	0	1	0	0	0	0	1	0	3	622
Influenza B	1	0	2	2	0	0	0	0	0	0	2	8	15
Parainfluenza (1)	0	0	0	0	0	0	. 0	3	1	6	4	2	16
Parainfluenza (2)	0	0	0	0	0	0	0	1	2	1	5	1	10
Parainfluenza (3)	2	1	12	18	8	1	2	1	0	0	1	0	46
*Polioviruses	5	3	3	8	3	10	0	6	4	6	2	9	59
Rotaviruses	52	34	8	7	4	3	3	3	1	2	7	21	145
Respiratory Syncytial Virus	26	12	2	2	0	0	0	0	0	14	32	66	154
Varicella/Zoster	6	4	5	7	4	3	4	4	6	4	1	0	48

<sup>\*</sup>enterovirus

Figure 1.

Number of parainfluenza (3) viruses
by month of specimen
collection, Texas, 1985

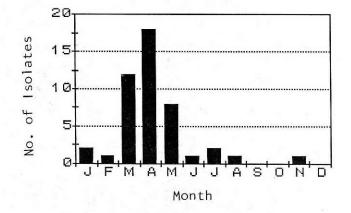


Figure 2.

Number of parainfluenza (1) and (2) viruses by month of specimen collection, Texas, 1985

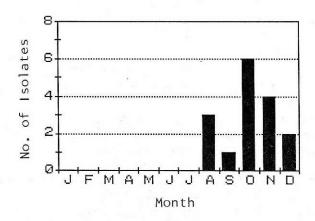
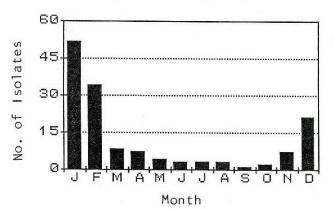


Figure 3.

Number of rotaviruses by month of specimen collection, Texas, 1985



Number of respiratory syncytial viruses by month of specimen collection, Texas, 1985

Figure 4.

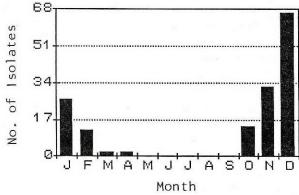


Figure 5.

Number of non-polio enteroviruses by month of specimen collection, Texas, 1985

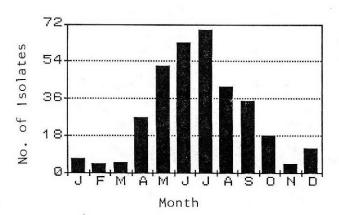


Figure 6.

Number of coxsackie viruses by month of specimen collection, Texas, 1985

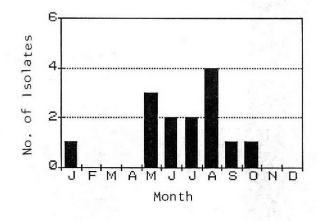


Figure 7.

Number of coxsackie B viruses by month of specimen collection, Texas, 1985

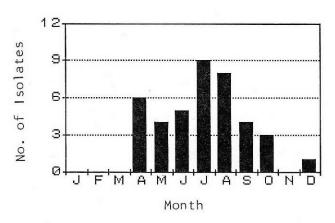
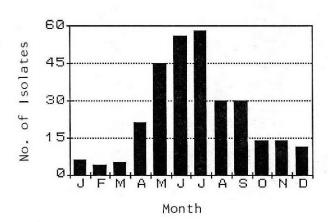


Figure 8.

Number of echoviruses by month of specimen collection, Texas, 1985



## NTSU LIBRARY

Table 2.

Number of viral isolates by age of patient,
January 1 through December 31, 1985, Texas

Virus	<1	1-4	5-9	10-19	<b>2</b> 0-39	40-59	60+	Unk	Total
A.J	20	45	10	9	20	3	1	46	166
Adenovirus	32	45	10	(F)	78.5	0	0	133	493
Chlamydia trachomatis	6	0	1	173	180	700	7	-300	
Cytomegalovirus	64	27	4	19	156	77	13	165	525
Coxsackievirus (Group A)	3	4	2	2	0	0	0	3	14
Coxsackievirus (Group B)	11	8	3	3	2	0	0	13	40
Echoviruses	96	52	20	14	30	1	0	81	294
Influenza A(H3N2)	41	122	161	93	120	65	16	4	622
Parainfluenza (1)	6	5	1	0	1	0	0	3	16
Parainfluenza (2)	2	5	2	0	0	0	1	0	10
Parainfluenza (3)	28	9	0	2	2	2	1	2	46
Polioviruses	31	10	1	0	0	0	1	16	59
Rotaviruses	71	27	0	2	0	0	0	45	145
Respiratory Syncytial Virus	60	18	1	2	0	0	0	73	154
Varicella/Zoster	0	1	1	. 2	15	8	7	14	48

\* \* \*

## CUMULATIVE TOTALS FOR DISEASES REPORTED TO THE BUREAU OF COMMUNICABLE DISEASE SERVICES THROUGH JULY 1986

REGION											STATEWIDE	
	1	2	3/12	4	5	6	<b>7</b> /10	8	9	11	1985	1986
TUBERCULOSIS	10	9	58	5	210	66	86	124	==== 80	===== 350	98 <b>2</b>	998
P&S SYPHILIS	27	74	105	23	890	176	173	64	176	622	2639	2330
GONORRHEA	699	781	1916	797	11791	3620	3150	995	2310	10551	37733	36610

TEXAS PREVENTABLE DISEASE NEWS (ISSN 8750-9474) is a free, weekly publication of the Texas Department of Health, 1100 West 49th Street, Austin, TX 78756-3180. Second-class postage paid at Austin, TX. POSTMASTER: Send address changes to TEXAS PREVENTABLE DISEASE NEWS, 1100 West 49th Street, Austin, TX 78756-3180.

TEXAS PREVENTABLE DISEASE NEWS Texas Department of Health 1100 West 49th Street Austin, TX 78756-3180 SECOND CLASS POSTAGE PAID AT AUSTIN, TX

RETURN POSTAGE GUARANTEED

