

Recommendations for Prevention and Control of Legionnaires' Disease in Texas

02-437
RECD AUG 01 2002

A task force was assembled in December 1999 to develop a Texas Legionnaires' disease control plan to help local health officials respond to reports of legionellosis in hospitals, long-term care facilities, and the community. The following is a summary of the Texas Legionnaires' Disease Task Force recommendations, which includes comparisons to existing control plans developed by the Centers for Disease Control and Prevention (CDC), the state of Maryland, and Allegheny County, PA.

Diagnostic Capacity

The Texas Legionnaires' Disease Task Force recommends that all acute care hospitals and all long-term care facilities either provide *Legionella* urine antigen testing in-house or contract with a laboratory that can report test results within 48 hours. These facilities should have a similar mechanism in place for *Legionella* culturing. Single serum antibody test results can not be used to confirm a diagnosis of Legionnaires' disease. The CDC, state of Maryland, and Allegheny County guidelines are very similar to these recommendations regarding diagnostic capacity.

Surveillance

According to the Texas Legionnaires' Disease Task Force, legionellosis surveillance should be conducted by all acute care and long-term care facilities, and should be followed by reporting of any cases as "definitely nosocomial," "possibly nosocomial," or "not nosocomial." Active surveillance, including urine antigen testing of other pneumonia patients and daily evaluation of all sputa and x-rays, should be implemented whenever an investigation of a suspected nosocomial case is initiated. Community-acquired cases must also be reported, but active surveillance and a thorough epidemiologic investigation are recommended only if two or more cases of legionellosis are confirmed in a small community within a 6-month period or if the rate in a large community seems to be above the state's 10-year average of 0.2 cases per 100,000 population. While 80% to 85% of Legionnaires' disease cases are estimated to be community-acquired, the Task Force recognizes the enormous difficulty of tracing possible exposures of a single case in a community. The Task Force addresses

surveillance in greater depth than the other Legionnaires' disease control guidelines do.

Environmental Testing

Routine culturing of acute care hospital water distribution systems (ie, environmental testing) for *Legionella* is not recommended by the Texas Legionnaires' Disease Task Force. On the other hand, environmental testing may be appropriate if it is determined that there is a significant risk of nosocomial Legionnaires' disease transmission. The Task Force provides guidelines for assessing this risk, which is known to be affected by the water treatment method in use, water temperature, a variety of water system engineering factors, the mix of patients, and history of nosocomial legionellosis cases. In long-term care facilities, the Task Force recommends environmental culturing only if there are one or more definite or two or more possible nosocomial cases. The Task Force also provides detailed guidelines for water distribution system testing when implemented. These recommendations are similar to CDC's but differ from those of the state of Maryland and Allegheny County, which both recommend routine environmental testing in acute care facilities but do not address testing in long-term care facilities. The Texas guidelines generally recommend environmental testing in a community setting only in the event of an outbreak and an epidemiologically implicated source.

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Also in this issue:

- Bimonthly Statistical Summary
- Vaccine Preventable Disease Update

disease prevention news

Bimonthly Statistical Summary of Selected Reportable Diseases: Provisional Cumulative Data

Jan-Feb 2002

Selected Diseases/Conditions	HHSC Region											Selected Texas Counties								Cumulative(1)	
	1	2	3	4	5	6	7	8	9	10	11	Bexar	Dallas	El Paso	Harris	Hidalgo	Nueces	Tarrant	Travis	2001	2002
Sexually Transmitted Diseases(2)																					
Syphilis, primary and secondary	11	0	31	3	0	11	14	6	0	5	3	6	22	5	9	0	1	9	3	74	84
Congenital Syphilis	0	0	3	0	0	1	1	0	0	0	2	0	2	0	1	2	0	0	1	8	7
Resistant Neisseria gonorrhoeae	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Enteric Diseases																					
Salmonellosis	*11	*0	*9	*0	*1	*3	*22	*20	*0	*0	*0	*16	*8	*0	*2	*0	*0	*0	*1	*109	*66
Shigellosis	*2	*0	*7	*0	*0	*3	*13	*13	*0	*0	*0	*12	*7	*0	*1	*0	*0	*0	*0	*77	*38
Hepatitis A	*10	*0	*10	*0	*1	*12	*20	*8	*2	*3	*0	*6	*9	*3	*4	*0	*0	*0	*2	*128	*66
Campylobacteriosis	*5	*0	*2	*0	*0	*0	*10	*7	*0	*0	*0	*5	*2	*0	*0	*0	*0	*0	*0	*29	*24
Bacterial Infections																					
H. influenzae type b, invasive	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
Meningococcal, invasive	*1	*0	*1	*0	*0	*5	*0	*1	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*47	*8
Lyme disease	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0
Vibrio species	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*1	*0
Other Conditions																					
AIDS(4)	7	1	130	0	12	111	44	40	1	16	35	32	91	16	105	11	4	27	23	311	414
Hepatitis B	0	1	12	4	1	7	18	5	0	1	4	2	5	1	5	0	2	3	13	588	53
Adult elevated blood lead levels	0	0	57	2	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	171	60
Animal rabies - total	3	7	65	12	12	13	37	3	5	0	1	0	3	0	1	0	0	9	0	160	158
Animal rabies - dogs and cats	0	0	2	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1	0	3	4
Tuberculosis Disease (2) (4)																					
Children (0-14 years)	0	1	1	1	0	0	2	2	0	0	1	1	0	0	0	1	0	1	0	3	8
Adults (>14 years)	0	2	43	3	3	60	12	9	2	2	12	7	28	2	55	7	0	11	8	87	149
Injuries(2)																					
Spinal Cord Injuries (5)	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0	*0

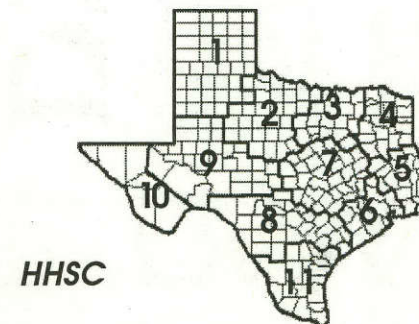
1. Cumulative to this month. 2. Data for the STD's, Tuberculosis, and spinal cord Injuries are provided by date of report, rather than date of onset. 3. Voluntary reporting. 4. AIDS + TB totals include reported cases from Texas Department of Corrections, which are not included in the regional and county totals. 5. 6 reports were missing PHR identification.
* Data Incomplete

Call 1-800-705-8868 to report

1999 POPULATION ESTIMATES

HHSC REGIONS			
1	770,440	4	971,877
2	533,633	5	690,501
3	5,366,008	6	4,557,450
7	1,989,767	10	784,287
8	2,076,931	11	1,687,473
9	567,058		
STATEWIDE TOTAL		19,995,428	

SELECTED COUNTIES	
Bexar	1,360,411
Dallas	2,172,486
El Paso	755,339
Harris	3,268,099
Hidalgo	528,300
Nueces	315,965
Tarrant	1,506,790
Travis	647,366



Vaccine-Preventable Disease Update
Reported Cases with Onset From January 1 thru February 28, 2002

Condition	County	Number of Cases	Date of Onset	Condition	County	Date of Cases	Date of Onset
Mumps	Bexar	1	1/26	Pertussis	Nueces	1	1/10
		1	2/26		Refugio	1	1/01
Pertussis	Harris	1	1/07	Rusk	1	1/07	
	Potter	1	2/08		1	1/11	
	Bexar	1	1/01	Tarrant	1	1/03	
		1	1/10		1	1/07	
		2	1/11		1	1/11	
		1	1/18		1	2/02	
		1	1/22	Travis	3	1/02	
		Collin	1	1/01		1	1/03
		Dallas	1	1/01		1	1/04
			1	1/05		1	1/06
			1	1/07		1	1/07
			1	1/08		1	1/09
			1	1/13		1	1/11
			1	1/15		1	1/12
			1	1/18		1	1/13
			1	1/28		2	1/14
			1	2/01		1	1/15
	El Paso	1	1/08		1	1/16	
	Harris	1	2/20		1	1/22	
	Hays	1	1/09		1	1/25	
	Hidalgo	1	1/28		1	2/01	
	Houston	1	1/19		1	2/04	
	Johnson	1	1/01		3	2/05	
		1	1/08		1	2/16	
	Limestone	1	2/11		1	2/18	
	Llano	1	1/07	Williamson	1	1/02	
Madison	1	1/18		1	1/12		
	1	1/19		1	1/16		
	1	1/23		1	1/17		
	1	1/29		1	1/19		
	1	1/30		1	1/20		
	1	2/01		1	1/21		
	1	2/02		1	1/23		
	1	2/16		1	1/31		
	Milam	1	1/01				

YTD	Measles	Mumps	Pertussis	Rubella	Tetanus
	0	4	75	0	0



Disease Prevention News (ISSN 1068-7920) is a biweekly newsletter published by the Texas Department of Health, Public Health Professional Education, at 1100 West 49th Street, Austin, TX 78756-3199, (512) 458-7677, FAX (512) 458-7340, email: dpn@tdh.state.tx.us. Periodicals Postage Paid at Austin, TX
POSTMASTER: Send address changes to *Disease Prevention News*, 1100 West 49th Street, Austin, TX 78756-3199.

The electronic version of *Disease Prevention News*, the subscription form, and a searchable index of issues from 1995 are available at the following website:
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Texas Department of Health
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Austin, TX 78756-3199

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Prevention

The Texas Legionnaires' Disease Task Force recommendations for legionellosis prevention include education of physicians and other hospital/facility personnel, equipment maintenance, and general facility control measures in acute care and long-term care facilities that do not have identified Legionnaires' disease cases. Facilities with cases or with a substantial number (>30%) of water distribution system sites that are culture-positive for *Legionella* upon background testing should further implement enhanced surveillance, immediate remediation, and protection of high risk patients. The CDC, Maryland, and Allegheny County guidelines for Legionnaires' disease control contain similar recommendations.

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For the complete Report of the Texas Legionnaires' Disease Task Force, go to [website].