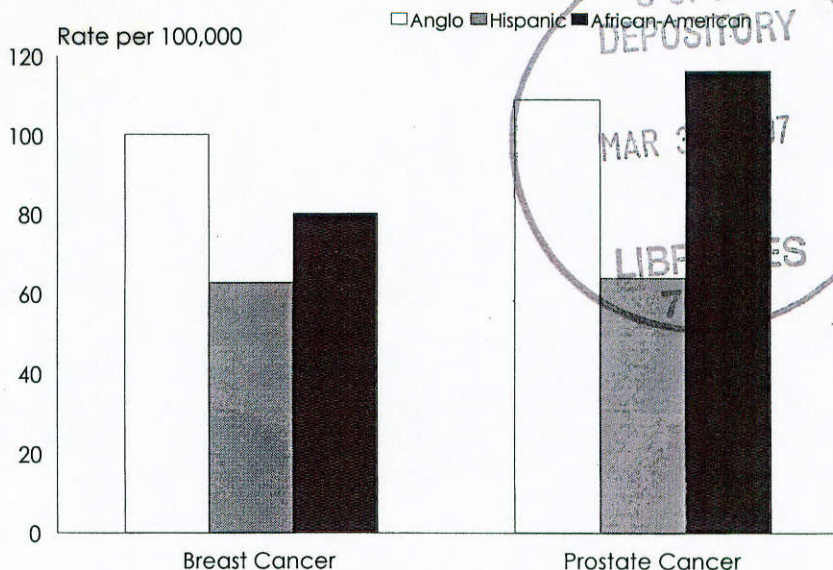


January 20, 1997

Breast and Prostate Cancers in Texas

Breast and prostate cancers are the most commonly occurring cancers: 29.8% of all cancer cases in females are breast cancer; 24.5% of all cancer cases in males are prostate cancer. They are also the second leading causes of cancer death (17.3% breast, 10.5% prostate) in Texas females and males, respectively, behind lung cancer. A comparison of Texas prostate cancer and breast cancer statistics indicates that in addition to being a major disease burden, these two cancers share similar risk factors and survivability. This report is an overview of the similarities, as well as the important differences.

Figure 1. Breast and Prostate Cancer Incidence Rates by Ethnicity in Texas, 1985-1991*



*Incidence rates in Texas for 1985-1991 are average annual rates age-adjusted to the 1970 US population, and are based on data from Public Health Regions 1, 5, 8, 10, & 11.

Incidence

An estimated 11,500 cases of breast cancer in females occurred in 1996.¹ During the period 1985 through 1991, the average annual age-adjusted incidence rate in Texas was 86.4 per 100,000 females.* Approximately 92% of all breast cancer cases occurred among women 40 years of age and older; the average age at diagnosis was 62 years. Breast cancer incidence was highest among Anglo women (100.3 per 100,000) and lowest among Hispanic women (62.8 per 100,000). The breast cancer incidence rate for African American women was 80.3 per 100,000 (Figure 1). Breast cancer incidence rates rose by 3.2% during this time period (Table 1), but this increase was not statistically significant.

Prostate cancer surpasses breast cancer in incidence, with an estimated 18,000 new cases diagnosed in Texas in 1996.¹ From 1985 through 1991, the average annual incidence rate for prostate cancer in Texas was 95.7 per 100,000. Approximately 90% of all cases occurred in men 60 years of age and older, with an average age at diagnosis of 72 years. Incidence of prostate cancer was highest

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Also in this issue:

- CDC 1995 Risk Factor Report Now Available
- Cancer Mortality Rates
- Helpline Provides HIV Information to Health Care Workers in Texas
- Protease Inhibitor Application Process Changed After Increase in Funding
- Bimonthly Statistical Summary
- Vaccine-Preventable Disease Update
- Subscription Renewal

* All incidence and mortality rates are age-adjusted to the 1970 US standard population, unless otherwise noted. Rates are given for Public Health Regions 1, 5, 8, 10 and 11, the only regions with complete reporting during the study period.

disease prevention newsletter

among African American men (116.2 per 100,000) and lowest among Hispanic men (64.1 per 100,000). Prostate cancer incidence among Anglo men (109.0 per 100,000) was similar to the rate among African American men (Figure 1). Overall, prostate cancer incidence increased significantly by 38.4% during the 1985-1991 time period (Table 1).

Mortality

It is estimated that 2,800 Texas women died from breast cancer in 1996.¹ For 1984 through 1993, the average annual breast cancer mortality rate was 23.5 per 100,000. African American women had the highest breast cancer mortality rates (30.2 per 100,000), while Hispanic women had the lowest (15.8 per 100,000). The rate for Anglo women was intermediate, with 24.1 cases per 100,000 (Figure 2). During 1984 through 1993, breast cancer mortality increased by 7.3% (Table 1).

An estimated 2,300 prostate cancer fatalities occurred among Texas men in 1996. The average annual prostate cancer mortality rate per 100,000 population was

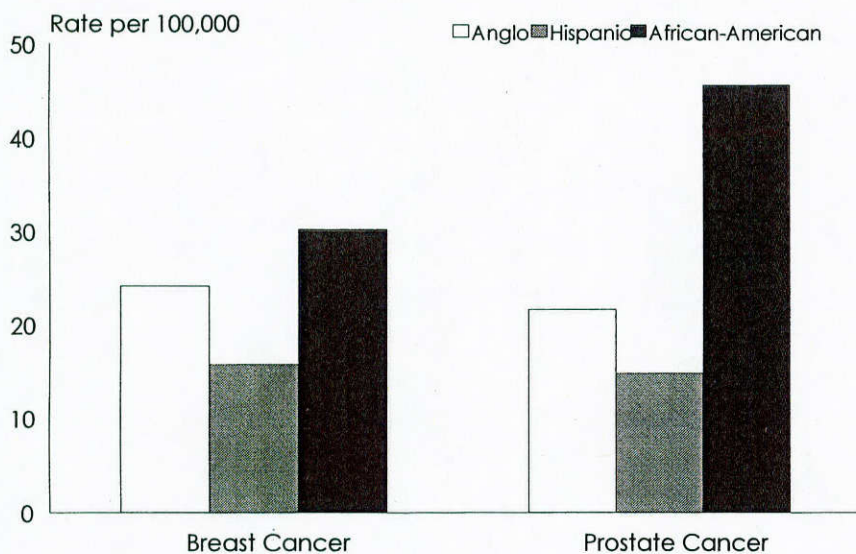
22.9 from 1984 through 1993, with African American men having the highest rate (45.6) and Hispanics the lowest (14.8). The mortality rate for Anglo men was intermediate (21.6 per 100,000, Figure 2). During 1984 through 1993, prostate cancer mortality increased by 34.2% (Table 1).

Risk Factors

Important biological and genetic risk factors for breast cancer are increased age, race, family history of breast cancer, early age at menarche, and late age of menopause. International correlations also suggest diet as a risk factor, especially high fat intake. While many of these risk factors are present to varying degrees in all women, the associated risks are usually at a relatively low level.^{2,3} Since there are presumably other unknown risk factors, the known risk factors alone may only partly explain the high and increasing incidence of breast cancer.

Prostate cancer risk factors also include increased age, family history, dietary fat, and race.^{4,5} International comparisons show the disease to be more common in northwestern Europe and North America, but rare in the Near East, Africa, Central America, and South America. Worldwide, African American men have the highest mortality rate.⁶ These differences suggest that both genetic factors and dietary components are important risk factors for prostate cancer. In addition, occupational exposures (cadmium, tire and rubber manufacturing, farming) have also been recognized as important in prostate cancer etiology. Genetic factors have been shown to be important in breast and prostate cancers, and the presence of both diseases in families may be further associated with an increased risk of breast cancer.⁷ However, as is true for breast cancer and most other cancers, the magnitude of the risks is largely unknown.

Figure 2. Breast and Prostate Cancer Mortality Rates by Ethnicity in Texas, 1984-1993



*Mortality rates in Texas for 1984-1993 are average annual rates age-adjusted to the 1970US population, and represent the entire state.

Table 1. Breast and Prostate Cancer in Texas

	Prostate Cancer	Breast Cancer (female only)
Incidence ¹	95.7/100,000	86.4/100,000
Mortality ²	22.9/100,000	23.5/100,000
Mortality/Incidence	23.9%	27.2%
Incidence increase (1985-1991)	38.4%*	3.2%
Mortality increase (1984-1993)	34.2%*	7.3%*
5-yr. survival ³	85%	83%
Shared risk factors	Age, dietary fat, fiber, vitamins, genetics	Age, dietary fat, fiber, vitamins, genetics
Different risk factors	occupation (cadmium exposure, tire and rubber mfg., farming, etc.)	age at menarche, parity, previous breast cancer, age at menopause

* Statistically significant for trend at $p < 0.05$.

¹ Average annual age-adjusted (1970 US Standard) incidence rates (1985-1991) for 5 Public Health Regions of Texas.

² Average annual age-adjusted (1970 US Standard) mortality rates (1984-1993) for Texas.

³ Survival rates (all stages) for US based on data compiled from Cancer Facts and Figures, 1996, American Cancer Society.

Discussion

Although incidence rates for breast and prostate cancers are rising, overall Texas incidence rates remain lower than those for the rest of the US. These lower rates may result from the much higher proportion of Hispanics in Texas. Hispanics typically have lower incidence rates for many cancers, including breast and prostate cancer (Figures 1 and 2). For both cancers, increases in incidence in recent years may have been at least partially related to improvements in diagnostic screening, leading to diagnosis at an earlier stage of disease. However, these improvements may not have the same impact on various race/ethnic populations. If these increases in incidence are related to diagnostic screening, incidence should eventually become stable and decrease, as prevalent cases are removed from the population.⁸ In addition, mortality rates should decrease because earlier diagnosis usually leads to improved survival for at-risk populations that also are able to receive treatment services.

Breast and prostate cancers both have relatively low mortality in comparison with their incidence rates (Figures 1 and 2). Since 55% of cases of breast can-

cer are diagnosed at a localized stage, in which the 5-year survival is almost 95%, the relationship of high incidence to low mortality is likely due to earlier diagnosis leading to improved survival. Similarly, since approximately 60% of prostate cancers are diagnosed at a localized stage in which the 5-year survival is 94%, early diagnosis is also a possible reason for the low prostate mortality rate compared with incidence rate. In addition, the slow-growing nature of prostate cancer may contribute to the low mortality relative to incidence.

Table 1 presents a summary of the similarities and differences between the epidemiology of breast and prostate cancer in Texas. Although these statistics describe the Texas population for all races combined, the same patterns of incidence and mortality were found when the data were examined by racial and ethnic group.

Breast and prostate cancers in Texas, as in the US,⁹ produce a similar burden of disease, and share other similarities, including many of the same major risk factors. Both cancers are also often

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diagnosed at an early stage of disease, resulting in a relatively high survival. Nevertheless, major race/ethnic differences remain in the relationship between incidence and mortality for these two major cancers. Screening and early detection continue to offer the highest potential for reducing mortality.

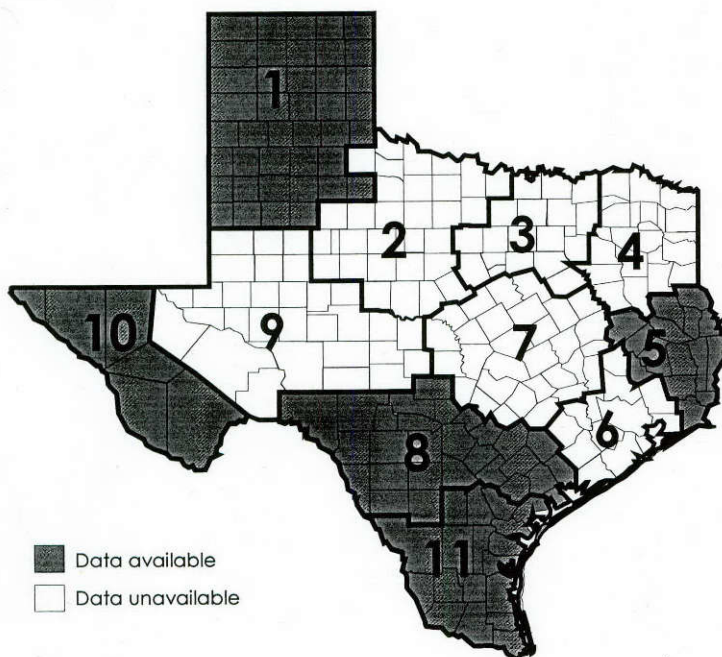


Prepared by David Risser, PhD, MPH, and Barry Wilson, Texas Cancer Registry.

Acknowledgements:

The authors of this report acknowledge the helpful advice on this manuscript from Nancy S. Weiss, Director, and Susan E.

Figure 3. Availability of Cancer Incidence Data by Public Health Region



Carozza, Senior Epidemiologist, Texas Cancer Registry. We also thank Enrique Nieves, Jr., and Fred Stahlings, MD, from the Centers for Disease Control and Prevention, for many helpful suggestions on the content of this report.

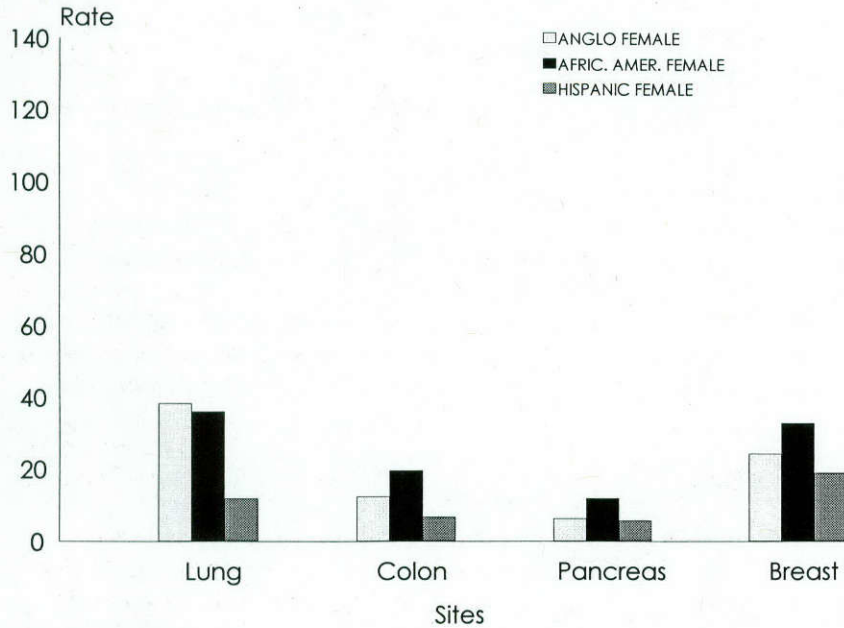
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CDC 1995 Risk Factor Report Now Available

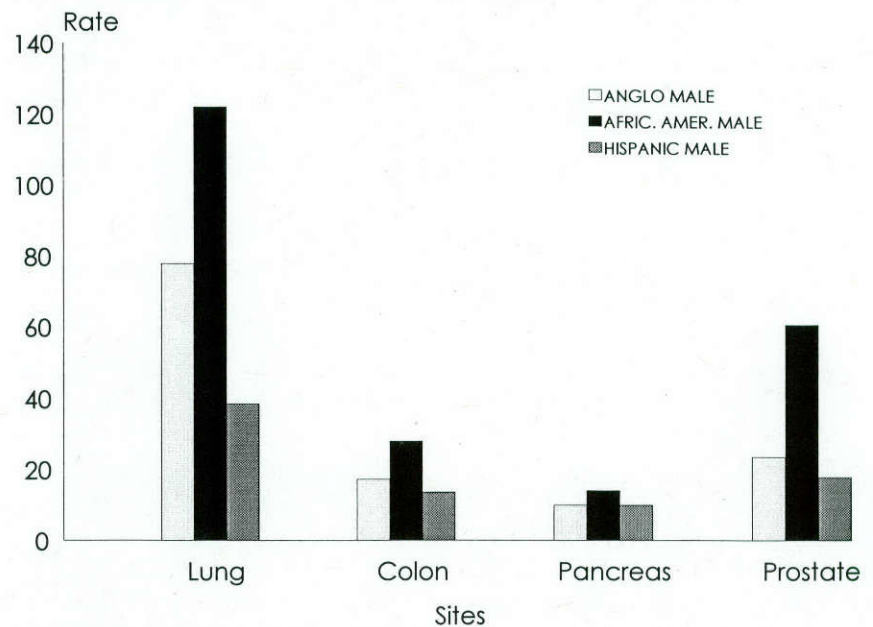
The Centers for Disease Control and Prevention has recently published its 1995 Summary Prevalence Report, which contains data from all 50 states on selected risk factors and health measures. Of particular interest in the area of cancer are data on smoking, colorectal screening, mammography, breast exam, and pap smear. For further information regarding this report, contact the Texas Department of Health Behavioral Risk Factor Surveillance System at (512) 458-7111 x2154.

Age-adjusted Mortality Rates* for Selected Cancer Sites by Sex (Female) and Race/Ethnicity; Texas, 1995



* Rates are per 100,000 and are adjusted to 1970 US standard million population

Age-adjusted Mortality Rates* for Selected Cancer Sites by Sex (Male) and Race/Ethnicity; Texas, 1995



* Rates are per 100,000 and are adjusted to 1970 US standard million population

Helpline Provides HIV Information to Health Care Workers in Texas

The AIDS Helpline for Health Professionals is a free AIDS information service for health care workers in Texas and Oklahoma.

Providers can dial (800) 548-4659 weekdays between 8 AM and 5 PM (CST) and get the latest information on all HIV-related topics including pathogenesis, epidemiology, prevention, education, clinical manifestations, diagnosis, treatment, and psychosocial issues.

Information is provided by performing customized computer searches of the medical literature and then mailing appropriate articles on the subject usually within two days. The Helpline has access to the wide array of books, journals, and newsletters of the University of Texas at Houston School of Public Health library.

Requests for clinical consultations (for health care providers only) are handled by the Helpline or referred to the HIV Telephone Consultation Service at (800) 933-3413.

The Helpline is operated by the AIDS Regional Education and Training Centers (ETC) and is funded by the Health Resources and Services Administration of the US Public Health Service.

The ETC also conducts clinical training programs for nurses, physicians, physician assistants, dentists, dental hygienists, and dental assistants. Providers can call the Helpline for more information on these programs.

Protease Inhibitor Application Process Changed After Increase in Funding

Federal funding will be increased to all Ryan White CARE Act-funded AIDS Drug Assistance Programs (ADAP) in April of 1997. Therefore, the Texas HIV/STD Medication Program has revised the application process for protease inhibitors. All protease inhibitor applications received after **October 1, 1996** are subject to the following conditions and terms:

- ◆ Applicant must be a non-Medicaid client currently active on the Program or whose application is accompanied by a complete HIV Medication Program application.
- ◆ A viral load of 10,000 copies/ml or above must be reported
- ◆ Approved Program clients who do not fill a prescription for protease inhibitors within 3 months of receiving approval will be dropped from protease inhibitor eligibility and their slots filled by the next qualified clients.
- ◆ Approved Program clients who begin receiving protease inhibitors and do not fill a protease inhibitor prescription for 3 consecutive months will be dropped from eligibility.
- ◆ Clients approved to receive protease inhibitors from the Program who subsequently become eligible for Medicaid prescription drug benefits will have their protease inhibitor eligibility discontinued. Protease inhibitors will then need to be obtained through Medicaid.

Protease inhibitors must be taken exactly as prescribed by the physician. Compliance with the protease inhibitor therapy regimen is essential for the medication to be most effective. Call the **Texas HIV Medication Hotline** at (800) 255-1090 for more information about the protease inhibitor application process.

Bimonthly Statistical Summary of Selected Reportable Diseases

Selected Diseases/Conditions	HHSC Region											Selected Texas Counties								This Period		Cumulative[1]	
	1	2	3	4	5	6	7	8	9	10	11	Bexar	Dallas	El Paso	Harris	Hidalgo	Nueces	Tarrant	Travis	1995	1996	1995	1996
Sexually Transmitted Diseases[2]																							
Syphilis, primary and secondary	0	0	74	0	5	43	15	13	1	5	6	6	65	4	24	0	0	6	2	257	141	1574	897
Congenital Syphilis	0	0	0	0	0	12	0	1	0	0	4	1	0	0	11	0	0	0	0	10	17	191	157
Resistant Neisseria gonorrhoeae	0	0	0	0	0	0	1	2	0	1	0	2	0	1	0	0	0	0	0	24	4	197	54
Enteric Diseases																							
Salmonellosis	24	1	15	4	3	9	35	13	4	1	13	6	5	1	2	2	5	5	16	336	122	2363	2248
Shigellosis	1	1	19	2	9	7	61	42	14	2	119	23	10	2	4	10	87	4	20	506	277	3017	2112
Hepatitis A	13	4	96	13	1	16	49	54	26	25	54	24	49	25	12	22	7	14	29	402	351	3001	3180
Campylobacteriosis	3	2	7	3	6	1	27	3	0	0	12	2	5	0	0	4	5	0	19	120	64	993	816
Bacterial Infections																							
H. influenzae, invasive	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	1	40	6
Meningococcal, invasive	0	0	7	3	1	0	2	4	0	0	1	1	2	0	0	0	1	4	0	43	18	253	207
Lyme disease	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	4	1	77	67
Vibrio species	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	24	16
Other Conditions																							
AIDS[4]	4	6	183	7	1	270	76	81	1	26	23	70	120	25	256	4	4	44	57	687	678	4600	4890
Hepatitis B	1	2	10	4	2	4	12	4	5	4	3	2	4	3	3	0	2	3	7	134	51	1211	1052
Adult elevated blood lead levels	2	0	42	0	0	3	0	28	0	0	0	25	28	0	3	0	0	0	0	55	75	483	411
Animal rabies - total	0	2	1	2	0	2	7	4	6	1	1	1	0	1	2	0	0	1	3	39	26	590	348
Animal rabies - dogs and cats	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	4	2	81	25
Tuberculosis Disease[2]																							
Children (0-14 years)	2	1	16	0	0	4	1	0	0	1	4	0	6	1	3	3	0	0	1	36	29	186	147
Adults (>14 years)	5	8	60	4	4	82	26	21	5	10	41	14	49	10	65	19	3	18	21	363	266	2053	1828
Injuries[2]																							
Spinal Cord Injuries	0	0	7	0	0	3	0	0	0	0	0	0	1	0	0	0	0	6	0	48	80	345	332

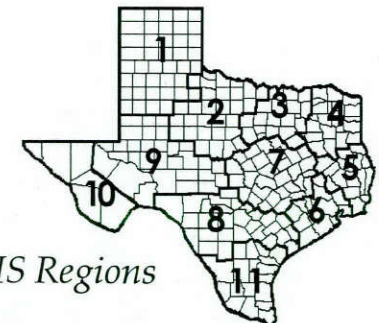
1. Cumulative to this month. 2. Data for the STD's, Tuberculosis, and spinal cord injuries are provided by date of report, rather than date of onset. 3. Voluntary reporting. 4. AIDS totals include reported cases from Texas Department of Corrections, which are not included in the regional and county totals.

Call 1-800-705-8868 to report

1996 POPULATION ESTIMATES

HHSC REGIONS			
1	760,526	4	947,431
2	532,854	5	683,583
3	4,968,610	6	4,325,854
7	1,902,211	8	1,983,995
9	548,963	10	722,076
11	1,574,446	STATEWIDE TOTAL 18,950,549	

SELECTED TEXAS COUNTIES			
Bexar	1,308,092	Hidalgo	475,917
Dallas	2,053,859	Nueces	313,907
El Paso	694,878	Tarrant	1,390,298
Harris	3,099,066	Travis	620,718



DHHS Regions



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Vaccine-Preventable Disease Update Reported cases with onset from 11/1/96-12/31/96

Condition	County	Number of Cases	Date of Onset	Condition	County	Number of Cases	Date of Onset	
Mumps	Dallas	1	11/5	Mumps	Travis	1	11/27	
	Ector	1	12/8		Pertussis	Bexar	1	11/12
	Jim Wells	1	11/20	Hood		1	11/1	
	Lubbock	1	11/30					
	Polk	1	11/5					
	Travis	1	11/19		Tom Green	1	11/28	
YTD	Measles	49	Mumps	39	Pertussis	131	Rubella	7