

2000 PLAGUE SURVEILLANCE REPORT (REVISED 10-10-14)

Each year Texas Department of Health (TDH) Zoonosis Control personnel, in cooperation with Texas Wildlife Damage Management Service, Texas Parks and Wildlife Department, and other agencies, collect serum samples from Texas wildlife. Samples are collected primarily from carnivores using Nobuto blood filter strips. Although most carnivores are resistant to plague, they develop antibodies when exposed to the plague organism (*Yersinia pestis*), thereby making them good indicators of local plague activity.

During calendar year 2000, the Texas Department of Health Bureau of Laboratories, Microbiology Services Division, Serology Branch tested 3,060 blood samples collected in 106 counties. Plague antibodies were found in 12 (0.39%) samples at a titer of 1:32 or greater (Table 1).

Country	Titer	Sp	ecies	Total				
County	Titer	Coyote	Raccoon	Animals				
Dallam	1:64	1		1				
Dallam	1:128	1		1				
Gray	1:64	1		1				
Gray	1:128	2		2				
Potter	1:32	2		2				
Potter	1:128	2		2				
Potter	1:256	2		2				
San Saba	1:128		1	1				
	Total	11	1	12				

Table 1. Samples with a Plague Titer of 1:32 or Greater, 2000

The geographic distribution of positive samples and samples collected is illustrated in Figure 1.

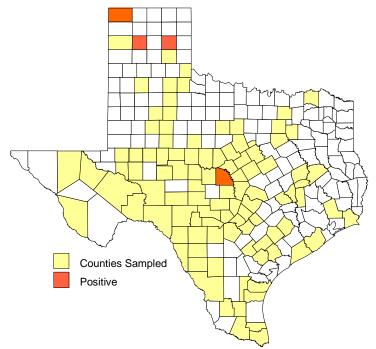


Figure 1. Texas Counties Sampled for Plague, 2000

Figure 2 compares the percent positive results from 2000 to those from previous years. The 2000 results continue to indicate a period of low plague activity in Texas.

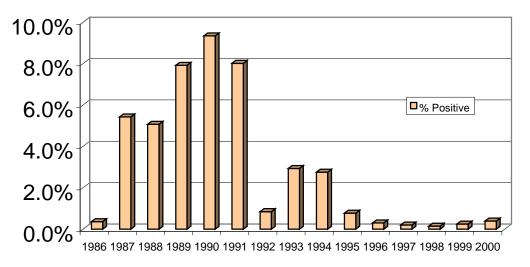


Figure 2. Percent of Surveillance Samples Positive for Plague, 1986-2000

The historic distribution of plague surveillance in Texas is shown in Figure 3. While plague is considered endemic in far west Texas, the surveillance results show that there may be naturally occurring risk in all but the extreme eastern part of the state.

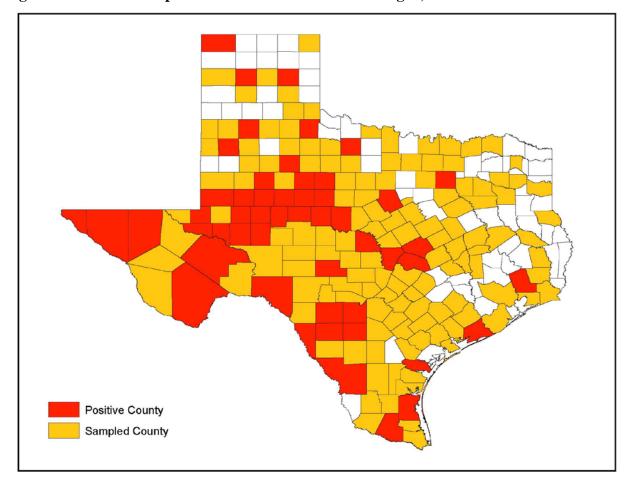


Figure 3. Counties Sampled and Counties Positive for Plague, 1976-2000

By using educational materials, news releases, a public access website, and conference presentations, TDH personnel keep veterinarians, physicians, and the general public aware of the plague risk in Texas. Even areas with historically low plague activity may have infections in hunters or campers who visit plague areas or in pets and wildlife transported from those areas. There is also a risk that new infestations may be established by moving animals across the state.

On the following pages, Table 2 shows the complete county listing, by species, of samples that tested negative at a titer of less than 1:32.

						Та	ble 2.	Negative	e Plagu	ıe Sam	oles by	y Coun	ty and Sp	ecies,	2000						
County	Aoudad	Armadillo	Axis Deer	Badger	Black Rat	Bobcat	Cat	Coyote	Dog	Fox, Gray	Fox, Red	Hog, Feral	Javelina	Mt Lion	Opossum	Porcupine	Prairie Dog	Raccoon	Ringtail	Skunk	Unknown
Bandera	0	0	0	0	0	0	0	1	0	6	1	0	0	0	0	0	0	2	0	0	0
Bexar	0	0	0	0	0	0	0	3	0	1	0	3	0	0	57	0	0	35	0	97	0
Blanco	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	1	0	0	0
Borden	0	0	0	0	1	16	0	71	0	0	0	14	1	0	0	1	0	5	0	1	0
Bosque	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0
Brazoria	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0
Brazos	0	0	0	0	0	0	0	3	0	2	0	0	0	0	0	0	0	12	0	4	0
Brooks	0	0	0	2	0	0	0	32	0	0	0	3	0	0	4	0	0	15	0	2	0
Brown	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0
Burleson	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
Burnet	0	0	0	0	0	0	0	2	0	6	0	0	0	0	0	0	0	8	0	0	0
Cameron	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0
Chambers	0	0	0	0	0	1	0	23	0	0	0	9	0	0	0	0	0	1	0	0	0
Childress	0	0	0	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0
Coke	0	0	0	0	0	3	0	5	0	1	3	0	0	0	0	0	0	0	0	0	0
Coleman	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Collin	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Colorado	0	0	0	0	0	6	0	23	0	0	0	0	0	0	7	0	0	34	0	11	0
Comal	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0
Comanche	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0
Concho	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0
Coryell	0	0	0	0	0	1	0		0	3	1	12	0	0	1	0	0	3	0	0	0
Cottle	1	0	0	0	0	0	0	12	0	0	0	14	0	0	0	0	0	3	0	0	0
Crane	0	0	0	0	0	0	0	52	0	0	0	0	0	0	0	0	0	0	0	0	0
Crockett	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
Culberson	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0

Plague Surveillance in Texas, 2000

						Та	ble 2.	Negative	e Plagu	ıe Sam _l	oles b	/ Cour	ity and Sp	ecies,	2000						
County	Aoudad	Armadillo	Axis	Badger	Black	Bobcat	Cat	Coyote	Dog	Fox,	Fox,	Hog,	Javelina	Mt	Opossum	Porcupine	Prairie	Raccoon	Ringtail	Skunk	Unknown
			Deer		Rat					Gray	Red	Feral		Lion			Dog				
Dallam	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	2	0	0	0
Dallas	0	0	0	0	0	0	0	6	0	3	0	0	0	0	0	0	0	26	0	0	0
De Witt	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0
Dickens	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0
Dimmit	1	0	0	1	0	1	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0
Donley	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Ector	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Edwards	1	0	0	0	0	15	0	2	0	12	0	86	0	0	0	0	0	53	0	2	0
Ellis	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0
Erath	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Garza	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Gillespie	0	0	0	0	0	0	0	8	0	2	0	0	0	0	0	0	0	3	1	0	0
Glasscock	1	0	0	1	0	13	0	30	0	15	11	0	0	0	0	0	0	6	0	1	0
Goliad	0	0	0	0	0	1	0	10	0	0	0	0	0	0	0	0	0	1	0	0	0
Gray	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0
Guadalupe	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0
Hale	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hamilton	0	0	0	0	0	1	0	17	0	0	0	17	0	0	0	0	0	0	0	0	0
Hays	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0
Hidalgo	1	0	0	1	0	3	0	56	2	0	0	5	0	0	5	0	0	0	0	1	0
Houston	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0
Irion	0	0	0	0	0	2	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
Jefferson	0	0	0	0	0	2	0	138	0	1	0	0	0	0	0	0	0	0	0	0	0
Jim Hogg	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0
Jim Wells	0	0	0	0	0	2	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0
Karnes	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Kaufman	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Kendall	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0

Plague Surveillance in Texas, 2000

						Та	ble 2.	Negative	e Plagi	ue Sam _l	oles b	y Cour	ty and Sp	ecies,	2000						
County	Aoudad	Armadillo	Axis Deer	Badger	Black Rat	Bobcat	Cat	Coyote	Dog	Fox, Gray	Fox, Red	Hog, Feral	Javelina	Mt Lion	Opossum	Porcupine	Prairie Dog	Raccoon	Ringtail	Skunk	Unknown
Kenedy	0	0	0	0	0	0	0	64	0	0	0	0	0	0	0	0	0	0	0	0	0
Kent	0	0	0	0	0	1	0	11	0	0	0	0	0	0	0	0	0	1	0	0	0
Kerr	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
Kimble	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Kinney	0	0	0	0	0	9	0	15	0	2	0	16	0	0	0	0	0	12	0	1	0
Kleberg	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
La Salle	0	0	0	0	0	1	0	17	0	0	0	1	0	0	0	0	0	1	0	0	0
Lamar	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Lampasas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0
Lavaca	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Leon	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	1
Liberty	0	0	0	0	0	0	0	6	2	2	0	1	0	0	0	0	0	0	0	0	0
Llano	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
Madison	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	0
Matagorda	0	0	0	0	0	0	0	2	0	0	0	6	0	0	0	0	0	0	0	0	0
Maverick	0	0	0	0	0	3	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0
McCulloch	0	0	0	0	0	5	0	24	0	2	0	0	0	0	0	0	0	0	0	0	0
McLennan	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	17	0	0	0
Medina	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0
Menard	0	0	0	0	0	2	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0
Midland	0	0	0	0	0	2	0	18	0	3	0	0	0	0	0	0	0	0	0	0	1
Mills	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0
Mitchell	0	0	0	0	0	2	0	20	0	0	1	0	0	0	0	0	0	0	0	0	0
Motley	1	0	0	0	0	0	0	18	0	0	0	14	0	0	0	1	0	0	0	0	0
Nueces	0	0	0	0	0	0	0	0	0	0	0	0	1	0	13	0	0	4	0	2	0
Oldham	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0
Palo Pinto	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Pecos	1	0	0	3	0	36	0	53	0	7	0	5	0	2	0	2	0	10	0	23	0

Plague Surveillance in Texas, 2000

						Та	ble 2.	Negative	e Plagi	ıe Samı	oles by	/ Coun	ty and Sp	ecies, i	2000						
County	Aoudad	Armadillo	Axis Deer	Badger	Black Rat	Bobcat	Cat	Coyote	Dog	Fox, Gray	Fox, Red	Hog, Feral	Javelina	Mt Lion	Opossum	Porcupine	Prairie Dog	Raccoon	Ringtail	Skunk	Unknown
Potter	1	0	0	0	0	3	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0
Presidio	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Reagan	0	0	0	0	0	0	0	6	0	4	6	0	0	0	0	0	0	0	0	0	0
Real	0	0	0	0	0	6	0	1	0	1	0	23	0	0	0	0	0	1	0	0	0
Reeves	0	0	0	0	0	0	0	3	0	0	0	0	0	4	0	0	0	0	0	0	0
Runnels	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0
San Saba	0	0	0	2	0	3	1	12	0	21	0	11	0	0	0	0	0	39	1	0	1
Scurry	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0
Somervell	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
Stephens	0	0	0	0	0	0	0	87	0	0	0	0	0	0	0	0	0	0	0	0	0
Sterling	0	0	0	0	0	5	0	18	0	2	2	0	0	0	0	0	0	4	0	0	0
Sutton	0	0	0	0	0	1	0	3	0	4	1	0	0	0	0	0	0	4	0	0	0
Taylor	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Terrell	0	0	0	1	0	23	0	1	0	26	0	0	0	1	0	0	0	13	2	1	0
Tom Green	0	0	0	0	0	11	0	0	0	2	1	0	0	0	0	0	0	0	0	0	1
Travis	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	0	0	8	0	8	0
Upton	0	0	0	0	0	7	1	12	0	0	2	0	0	0	0	0	0	0	0	0	0
Uvalde	0	0	0	1	0	3	0	8	0	2	0	0	0	0	0	0	0	0	0	0	0
Val Verde	1	0	0	10	1	108	0	21	0	62	0	2	0	0	2	2	0	143	0	1	1
Victoria	0	0	0	0	0	0	0	5	2	0	0	0	0	0	0	0	0	1	0	0	0
Webb	0	0	0	1	0	1	0	94	0	0	0	1	0	0	0	0	0	2	0	0	0
Willacy	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Williamson	0	0	0	0	0	0	0	4	0	0	0	17	0	0	0	0	0	0	0	0	0
Zavala	0	0	0	0	0	2	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	3	0	8	0	1	0	1	0	0	0	0	0	17	0	0	0