

# Rabies Surveillance Update

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# Discussion Topics

- Rabies Surveillance
- Oral Rabies Vaccination Program (ORVP)
- DSHS Exceptional Item



# Rabies Surveillance



# Rabies - Background

- Rabies is a viral disease that is deadly in people if medical care is not received before symptoms start.
- Rabies is spread to humans and pets primarily through bites from an infected animal.
- Rabies control measures in the United States have significantly reduced rabies as a public health threat.
- Each year 60,000 Americans receive preventive medical care following a potential rabies exposure.



Photo by Colleen Cook, ZCB staff

Available: <https://www.cdc.gov/rabies/about/index.html>, accessed 9/13/2024

# Rabies: Human Deaths Reported in Texas

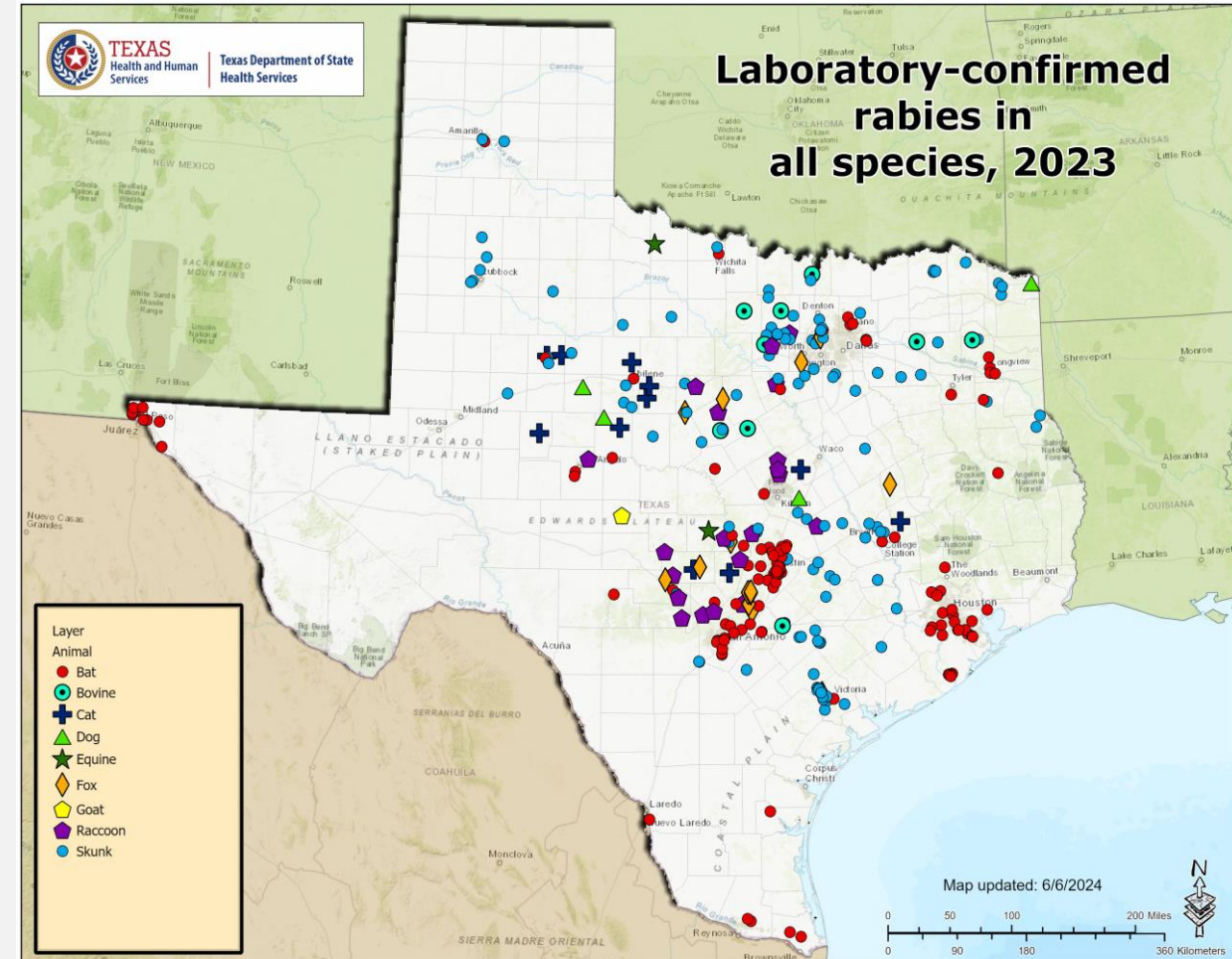
- Suspect cases of human rabies are immediately reportable
- DSHS Zoonosis Control Staff consult with CDC for human rabies testing

Year	County	Rabies Variant
1990	Hidalgo	Mexican free-tailed bat
1991	Starr	Domestic dog/coyote
1993	Bowie	Silver-haired bat
1994	Hidalgo	Domestic dog/coyote
1997	Harris	Silver-haired bat
2004	3 Cases in Northeast Texas	Mexican free-tailed bat (organ transplantation)
2006	Harris	Mexican free-tailed bat
2009	Bexar	Bat, unknown, (survived)
2013	Acquired outside of U.S.	Domestic dog/coyote
2021*	Medina	Mexican free-tailed bat

\*Source: <https://www.cdc.gov/mmwr/volumes/71/wr/mm7149a2.htm> ; accessed 9/17/2024

# Animal Rabies Cases Confirmed in Texas

- Most animal rabies cases involve skunks and a variety of bat species.
- Spillover of the south-central skunk (SCS) variant into other wildlife and domestic animal species occurs throughout the year.
- The SCS variant is currently the only terrestrial rabies variant in Texas.
- Maps are maintained throughout the year and updated as new cases occur on the DSHS website.



# DSHS Rabies Biologicals Program

- DSHS Public Health Region (PHR) staff conduct investigations of animal rabies cases and rabies exposure risk assessments.
- Persons exposed or likely exposed may obtain rabies post-exposure prophylaxis (PEP) from providers and emergency rooms, but access is not equal across the state.
- DSHS serves as a safety net for PEP for individuals who cannot obtain it otherwise.
- A full PEP series of biologicals include Human Rabies Immune Globulin plus 4-5 doses of vaccine.

# Oral Rabies Vaccination Program (ORVP)



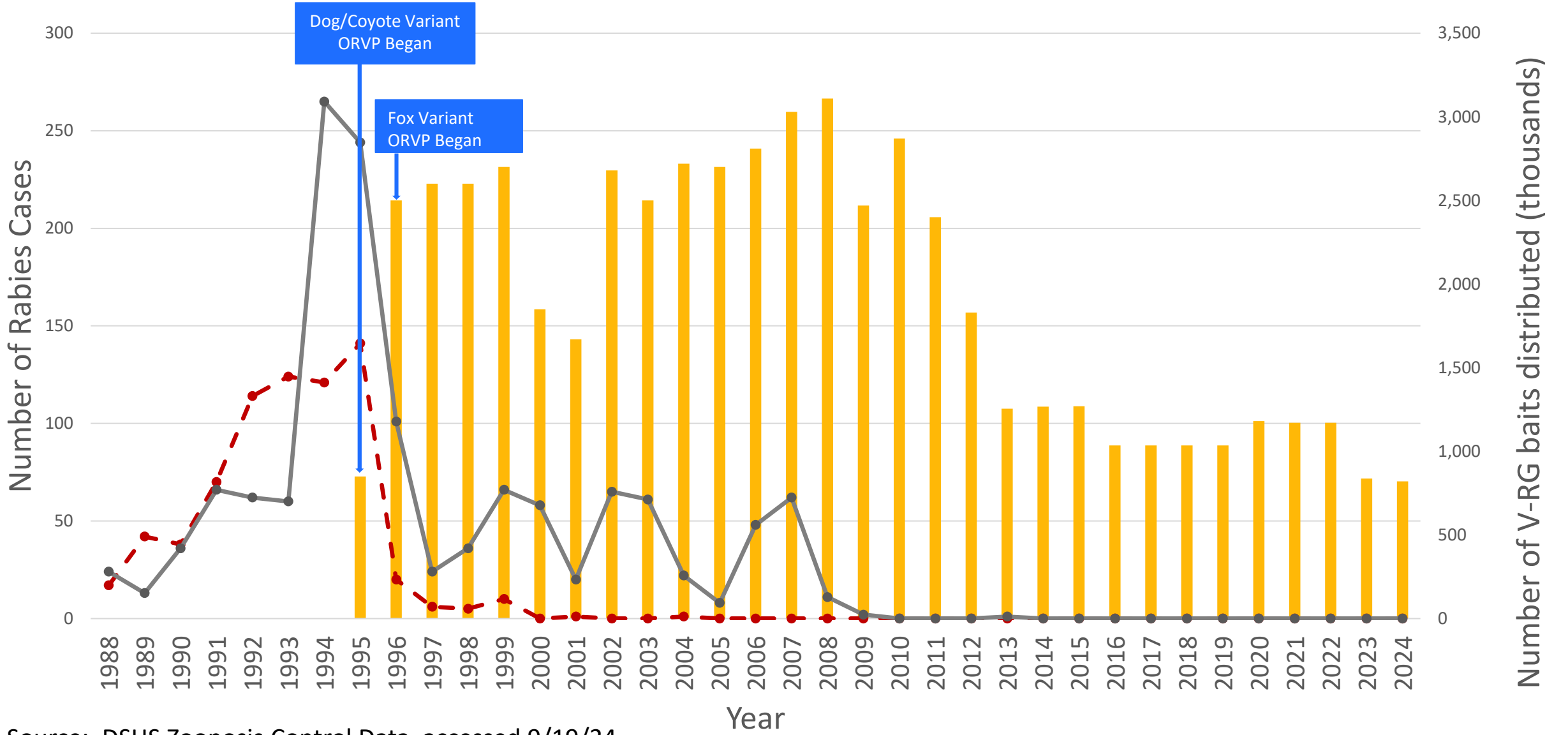


# Oral Rabies Vaccination Program (ORVP)

## Background

- In 1988, an outbreak of domestic dog-coyote variant rabies was identified in coyotes in South Texas and quickly spread to involve 21 counties.
- Between 1989 and 1994, an outbreak of gray fox variant rabies had erupted in West-Central Texas, spreading eastward to eventually involve 53 counties.
- Thus, in 1995, DSHS initiated, in collaboration with the USDA-Wildlife Services (WS) and the National Rabies Management Program (NRMP), the ORVP to immunize coyote and gray fox populations in at-risk corridors.
  - The ORVP utilized specialized oral rabies vaccine, contained inside edible baits, that were distributed by airplanes and helicopters into wildlife habitat.

# Texas Animal Rabies Cases and V-RG Bait Distribution, 1988-2024

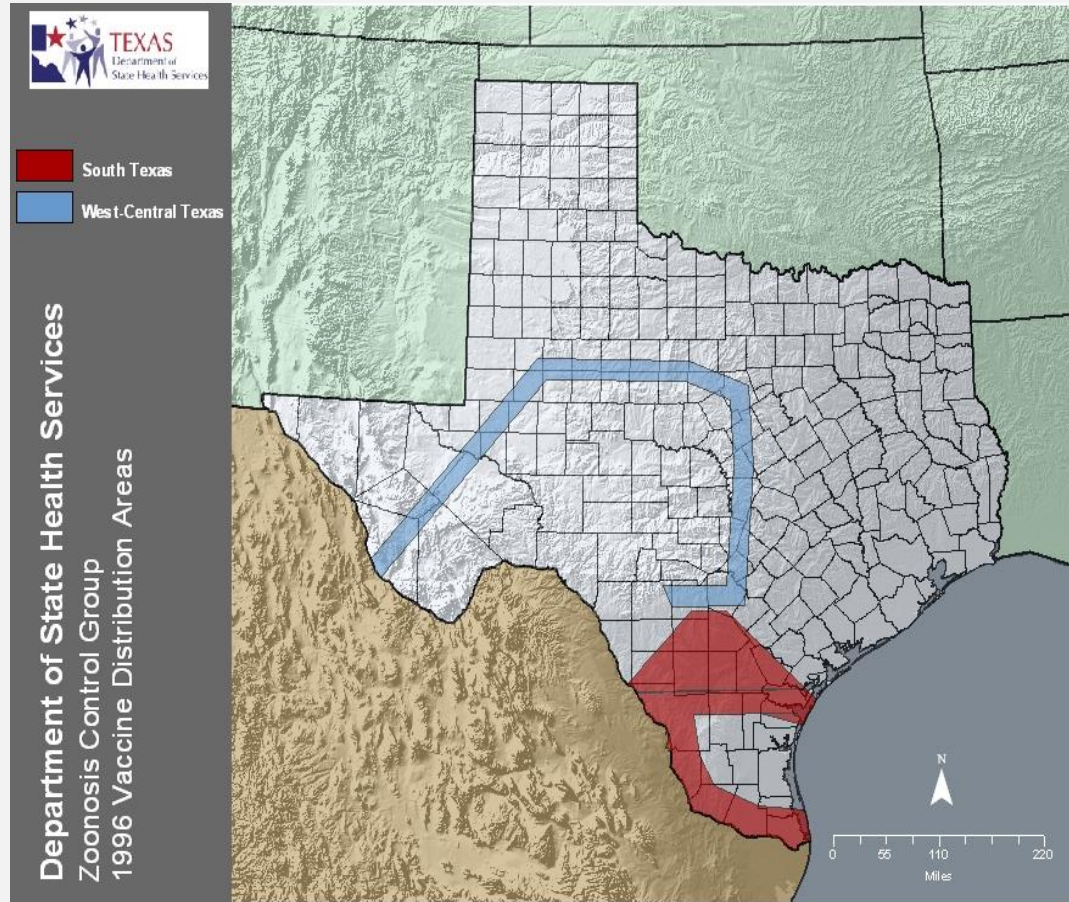


Source: DSHS Zoonosis Control Data, accessed 9/19/24

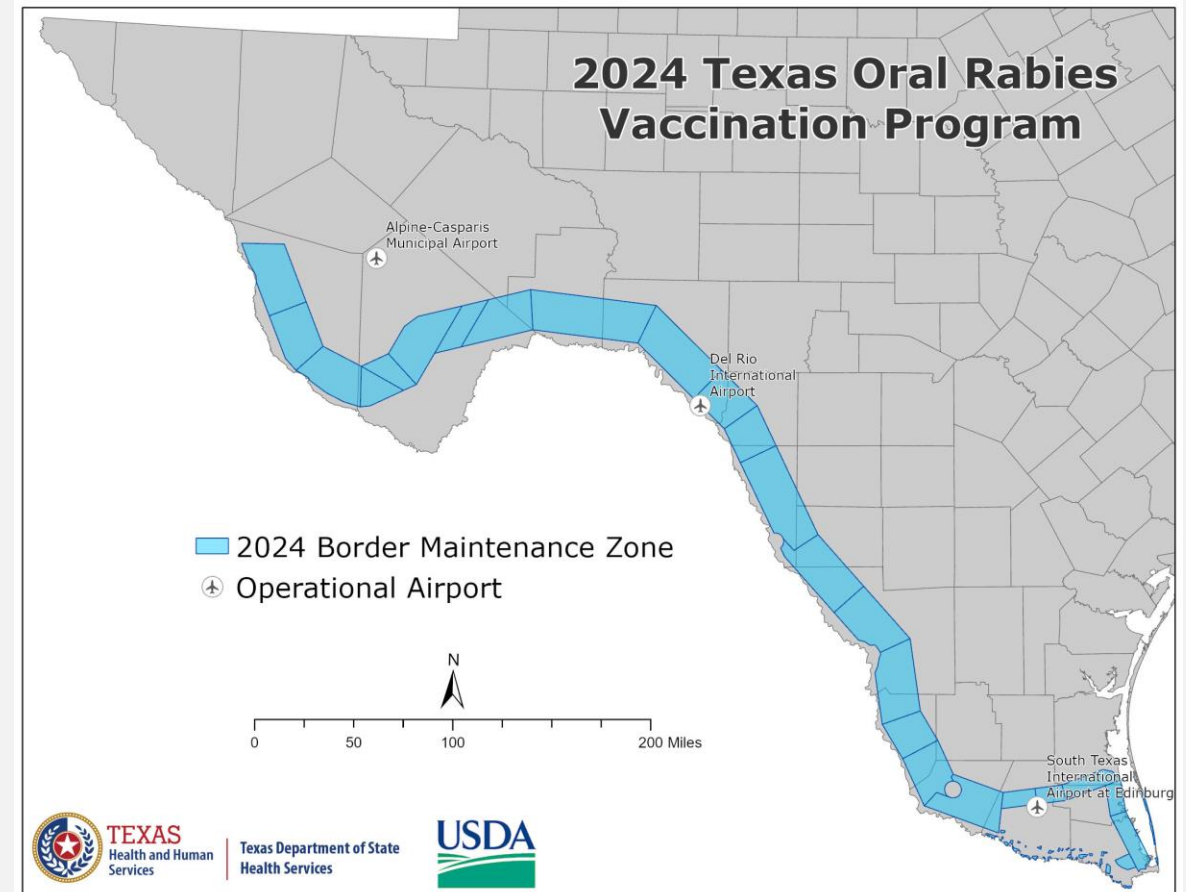
■ Total Baits (thousands)    
 -●- Domestic Dog/Coyote Variant    
 -●- Gray Fox Variant

# ORVP: Past and Present

## Bait Zones 1996 Texas Oral Rabies Vaccination Program

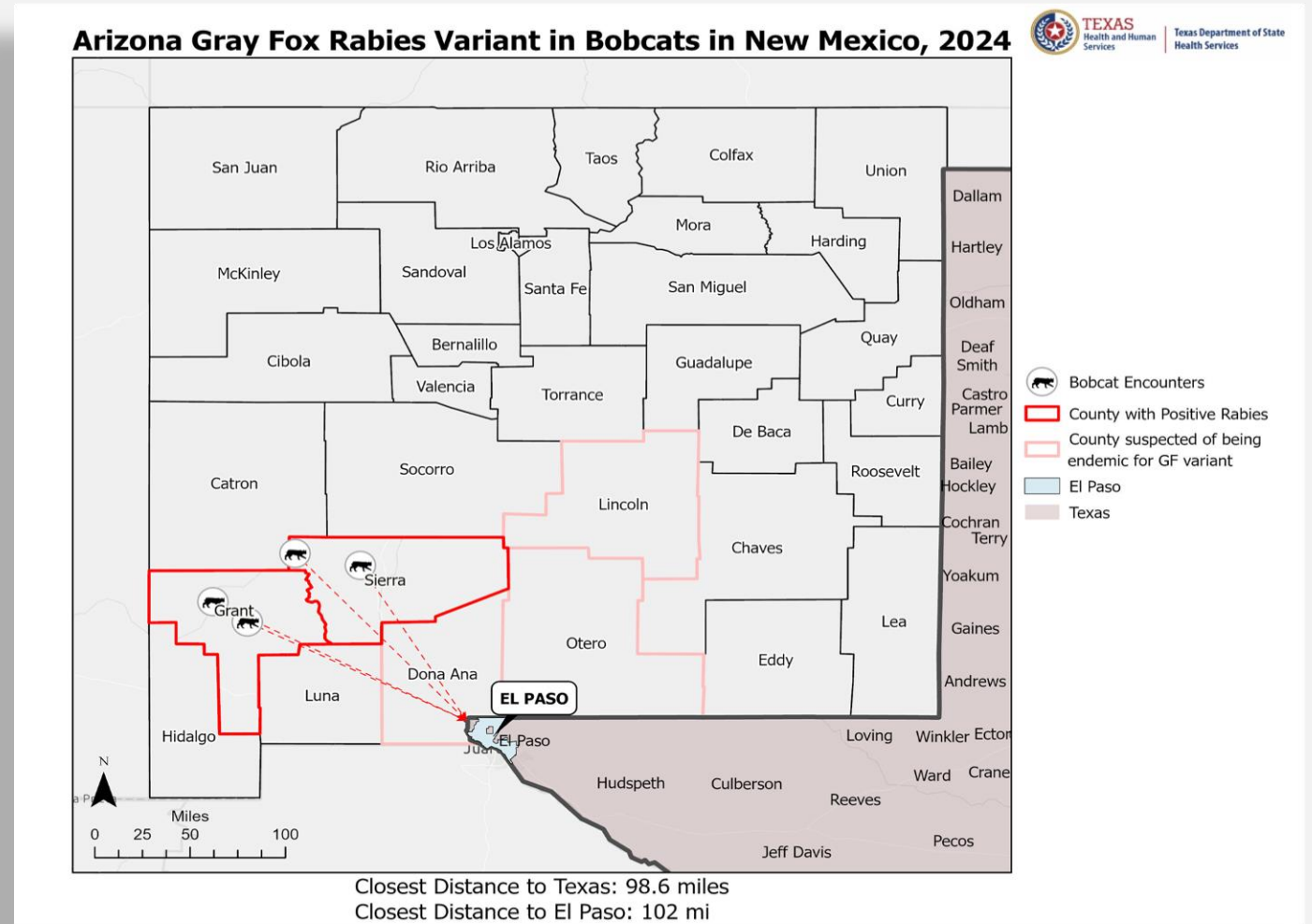


## Bait Zone 2024 Texas Oral Rabies Vaccination Program



# ORVP - Risk of Arizona Fox Variant

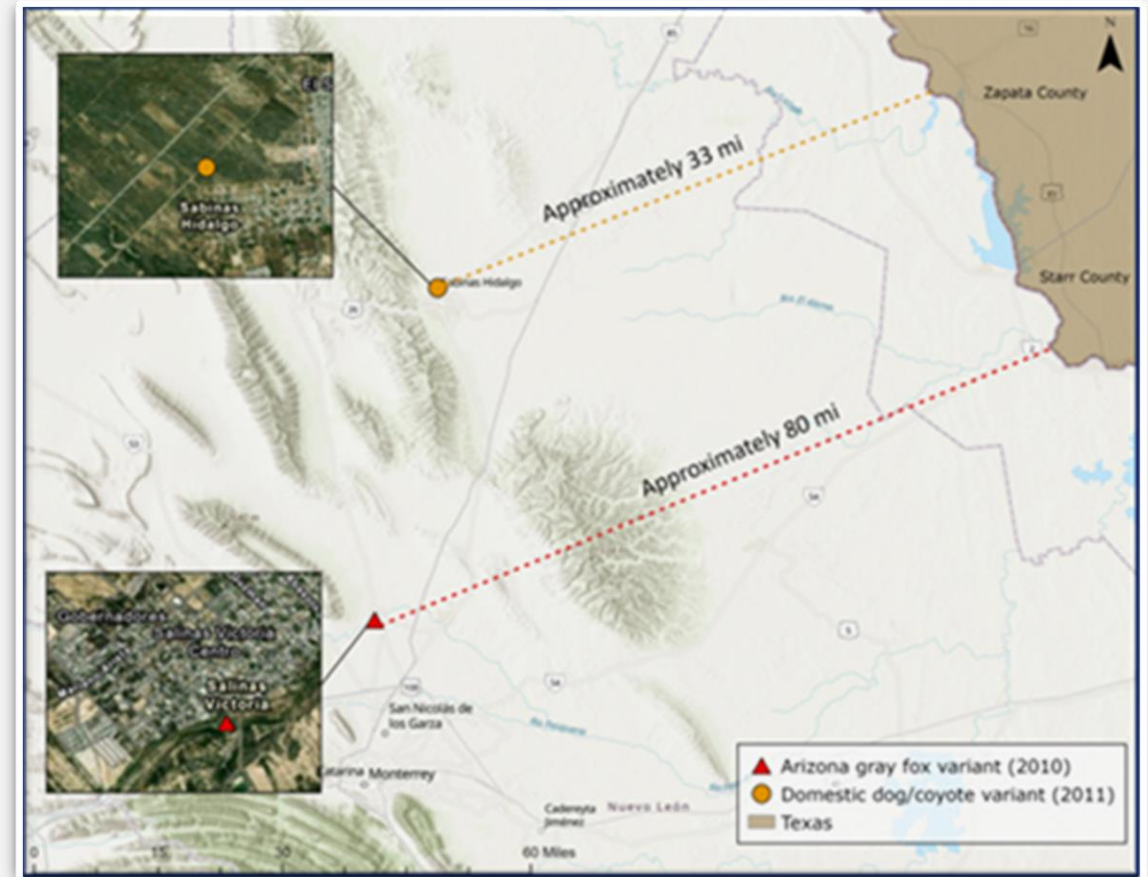
- In 2024, four bobcats infected with the Arizona fox rabies variant have been identified in New Mexico so far this year. The bobcats were identified within 100 miles of the Texas border.
- In consultation with the Centers for Disease Control (CDC), the Arizona fox strain is likely present in additional areas to the south and east of these cases, even closer to Texas.



Source: New Mexico Public Health/ DSHS Zoonosis map

# ORVP - Variants in Mexico: Texas Border

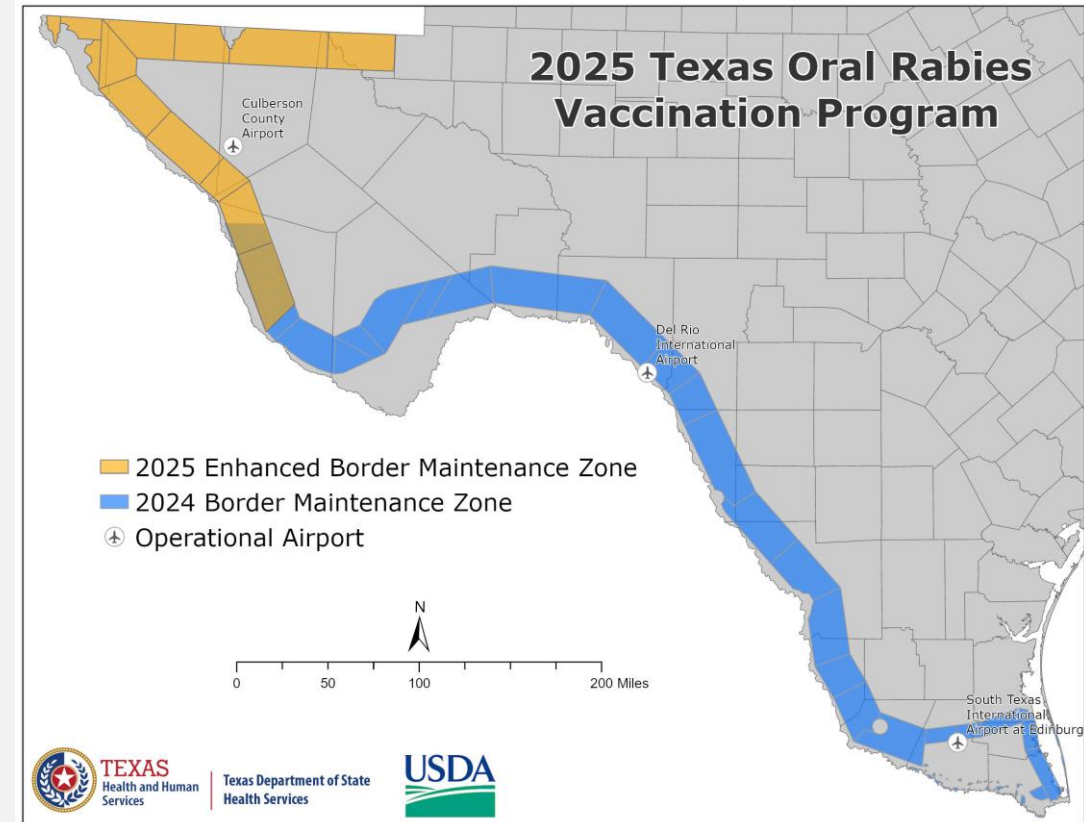
- Cases of the domestic dog/coyote and Arizona fox rabies variants have been detected in wildlife in Mexico less than 100 miles from the Texas border since 2010.
- Mexican public health authorities have communicated to USDA-Wildlife Services that the domestic dog/coyote variant is actively circulating in Mexico and definitive locations of canid rabies variants are unknown.



Source: US Department of Agriculture

# ORVP - Plan for 2025

- DSHS is expanding the bait zone to vulnerable areas.
  - Immunize susceptible wild animal populations prior to detection of new variants.
- In 2025, the annual rabies vaccine bait airdrop is planned from January 7 through 24.
  - This is the 31<sup>st</sup> of the program.
  - Target domestic dog/coyote, gray fox, and Arizona fox rabies variants from entering Texas from Mexico and New Mexico.
  - The baited zone will involve 21 counties.



# ORVP - Photo Gallery

Oral rabies vaccine is contained in edible baits and distributed by airplanes, helicopters, and by hand into wildlife habitat.



Source: Zoonosis Control Branch photos

# DSHS Exceptional Item





# DSHS Exceptional Item: Ensure Access to Regional and Local Public Health Services

- **Sexually Transmitted Disease, \$27.7 M (\$12.7 M Federal), 44 FTEs:** Maintain Disease Intervention Services staff primarily housed in local health departments and DSHS regional offices as federal funding ends.
- **Tuberculosis (TB), \$21.2 M, 16 FTEs:** Provide a 30% increase in LHD contracts for TB care services in the community, 16 DSHS staff for nurse consultation and direct care services, and funds to cover the increased cost of medications.
- **Rabies, \$7.1 M, 14 FTEs:** Support rabies surveillance and testing as well as the border Oral Rabies Vaccine Program's border maintenance zone. Address increased rabies vaccine, immunoglobulin, and lab costs.
- **Social Services, \$4.1 M:** Increase retention of social services staff who help connect vulnerable Texans with services.

Method of Finance	FY 2026	FY 2027	Biennium
GR	\$22.8 M	\$36.5 M	\$59.3 M
All Funds	\$35.5 M	\$36.5 M	\$72.0 M

FTEs	
FY 2026	82
FY 2027	82

Program Data	
Federally Funded STD Intervention Staff	44
State Population Increase Since 2000	40%

- **Immunizations, \$12.0 M, 8 FTEs:** Facilitate vaccine education and administration through a 30% increase in LHD contracts and one additional public health nurse in each public health region.

**Thank you**