

# New Mexico: State Report

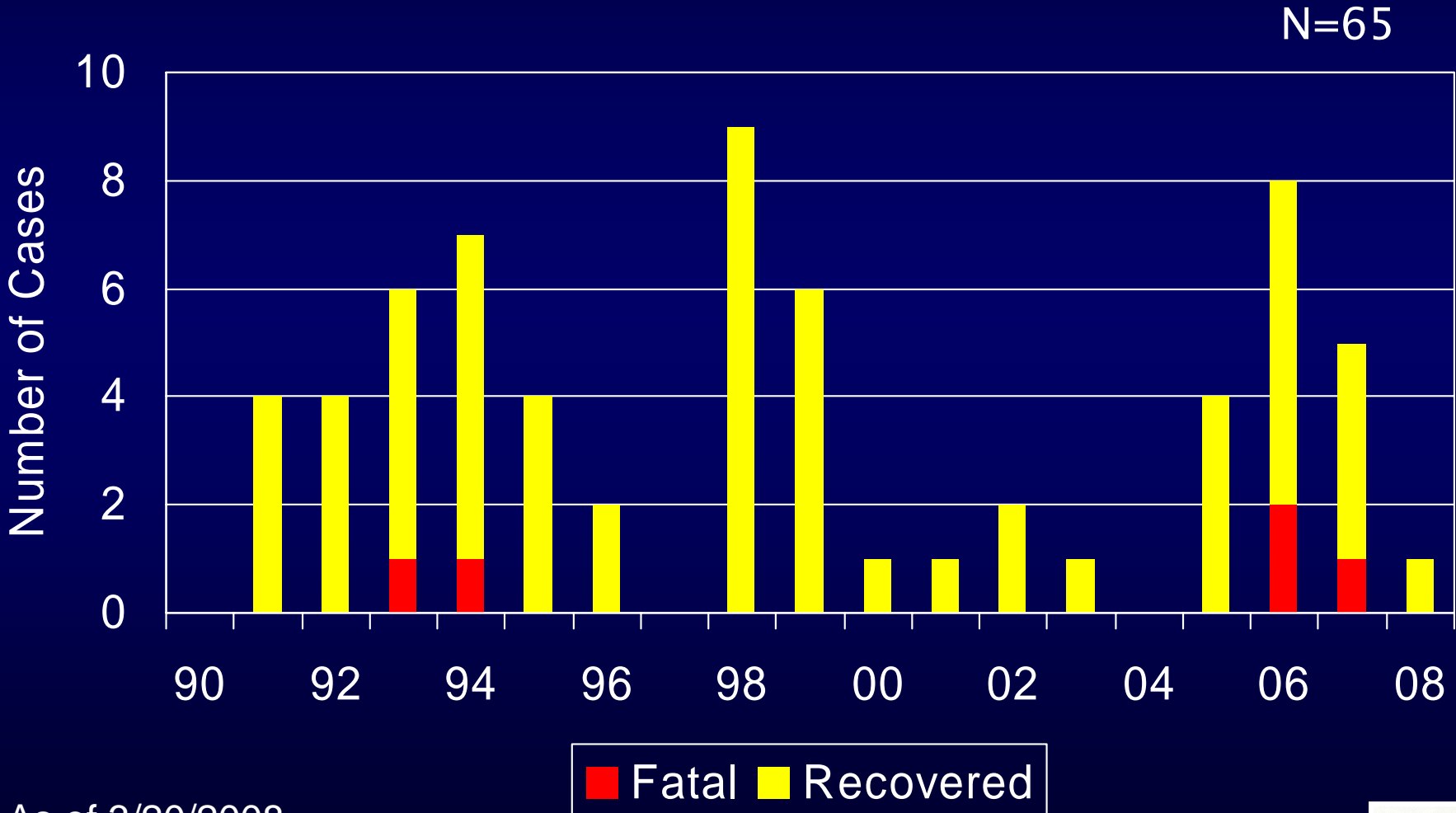
State Public Health Vector Control Conference  
March, 2008

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New Mexico Department of Health  
Santa Fe, NM

# Human Plague and Tularemia

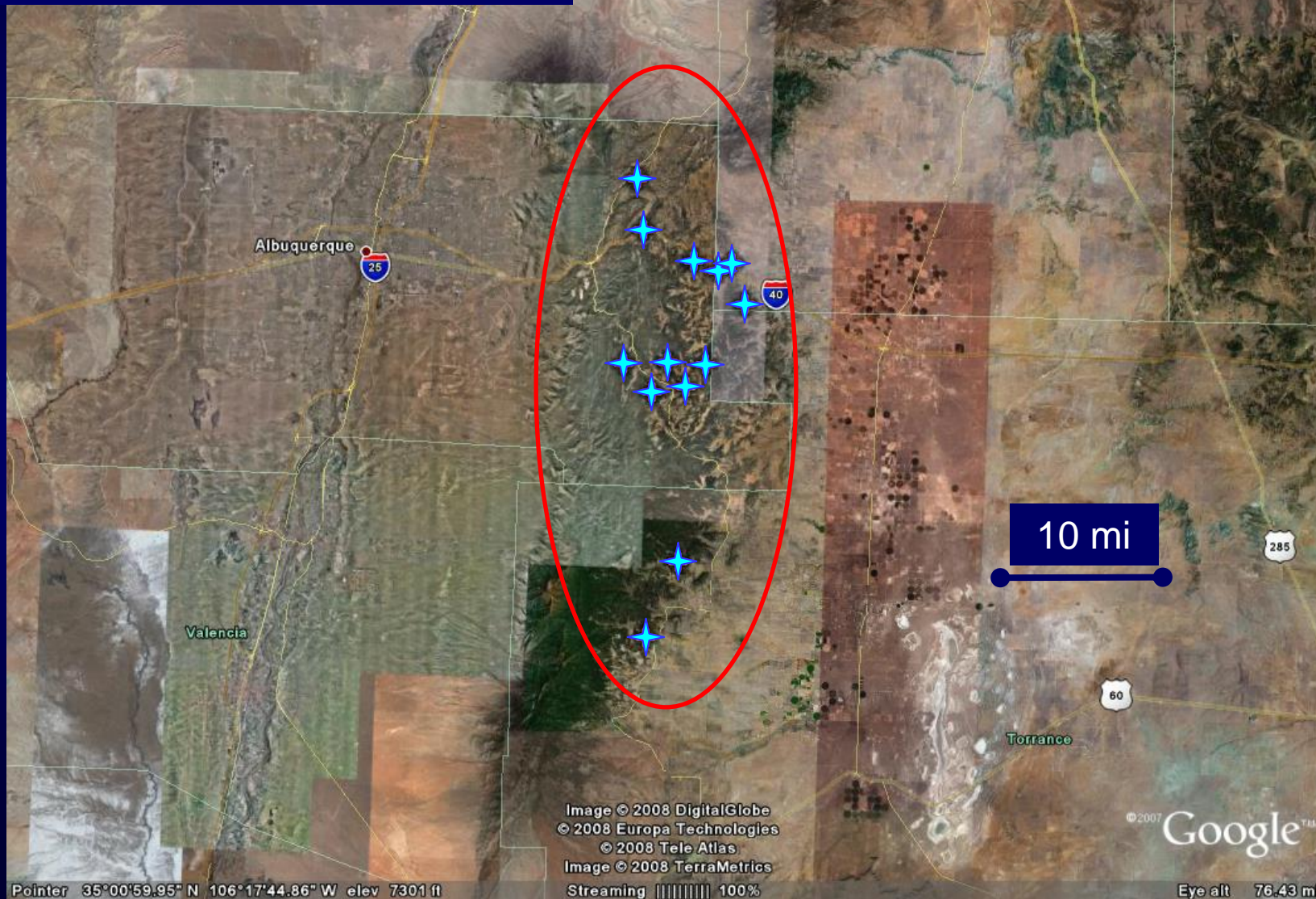


# Human Plague by Year New Mexico, 1990-2008

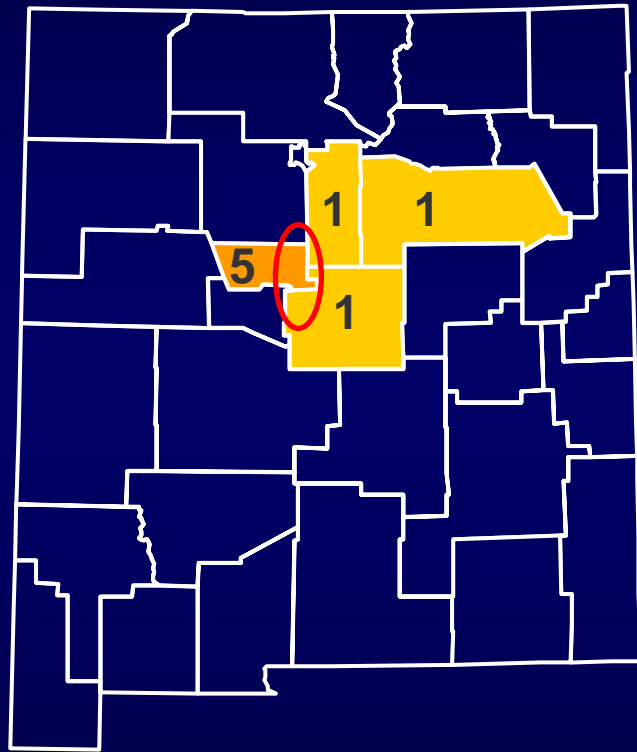


As of 3/20/2008

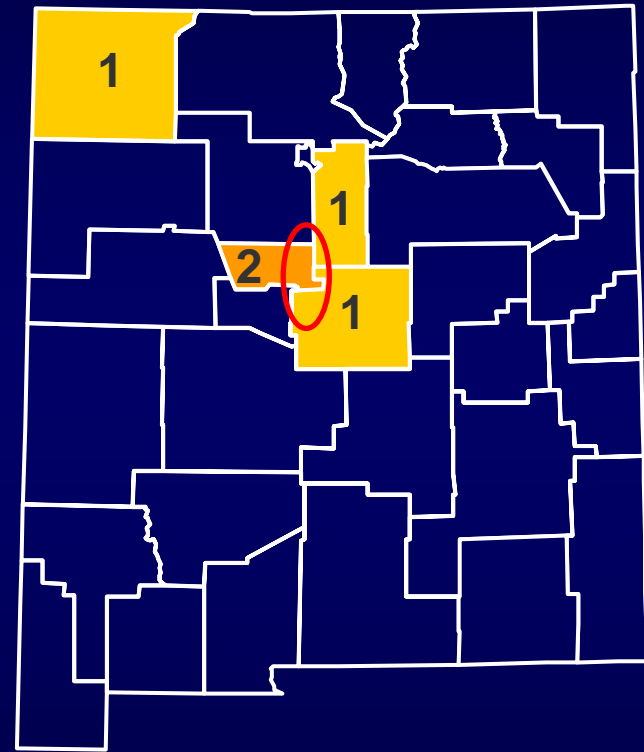
13 human plague cases in  
"East Mountain area" since  
July 2005



# Human Plague in New Mexico



2006, N=8



2007, N=5

# Human Plague Case Demographics

## 2006:

- 8 cases, 2 fatal
- 5 female, 3 male
- 2 children, 6 adults
- 4 cases primary bubonic, 4 primary septicemic
- Onset May through Aug

## 2007:

- 5 cases, 1 fatal
- 3 female, 2 male
- 1 child (fatal); 4 adults
- 3 cases primary bubonic, 2 primary septicemic
- Onset April through Sept

# 2006 Human Plague Case Sources

- 4 cases acquired by flea bite, 4 unknown
- 2 patients' dogs were seropositive
- 5 cases traced to rock squirrel epizootic, 1 to woodrat



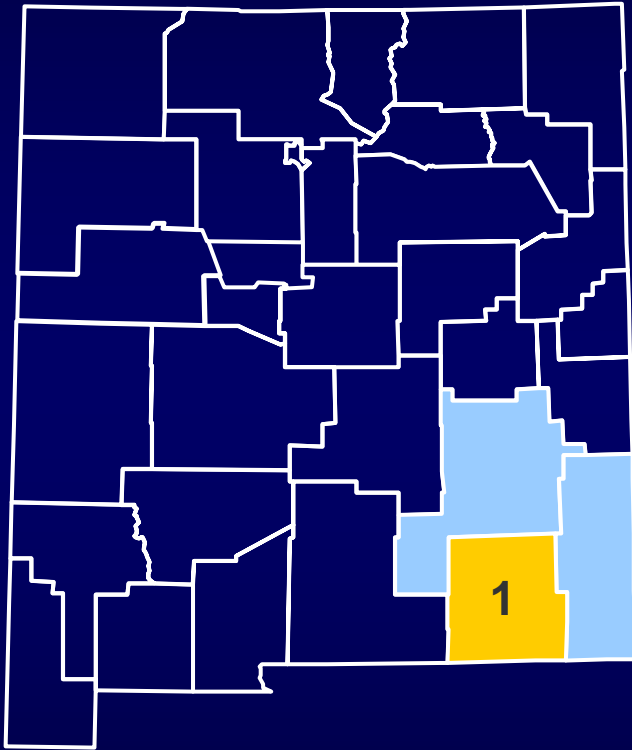
# 2007 Human Plague Case Sources

- 4 cases acquired by flea bite, 1 unknown
- 1 patient's dogs were seropositive
- 2 cases traced to rock squirrel epizootic, 1 to woodrat





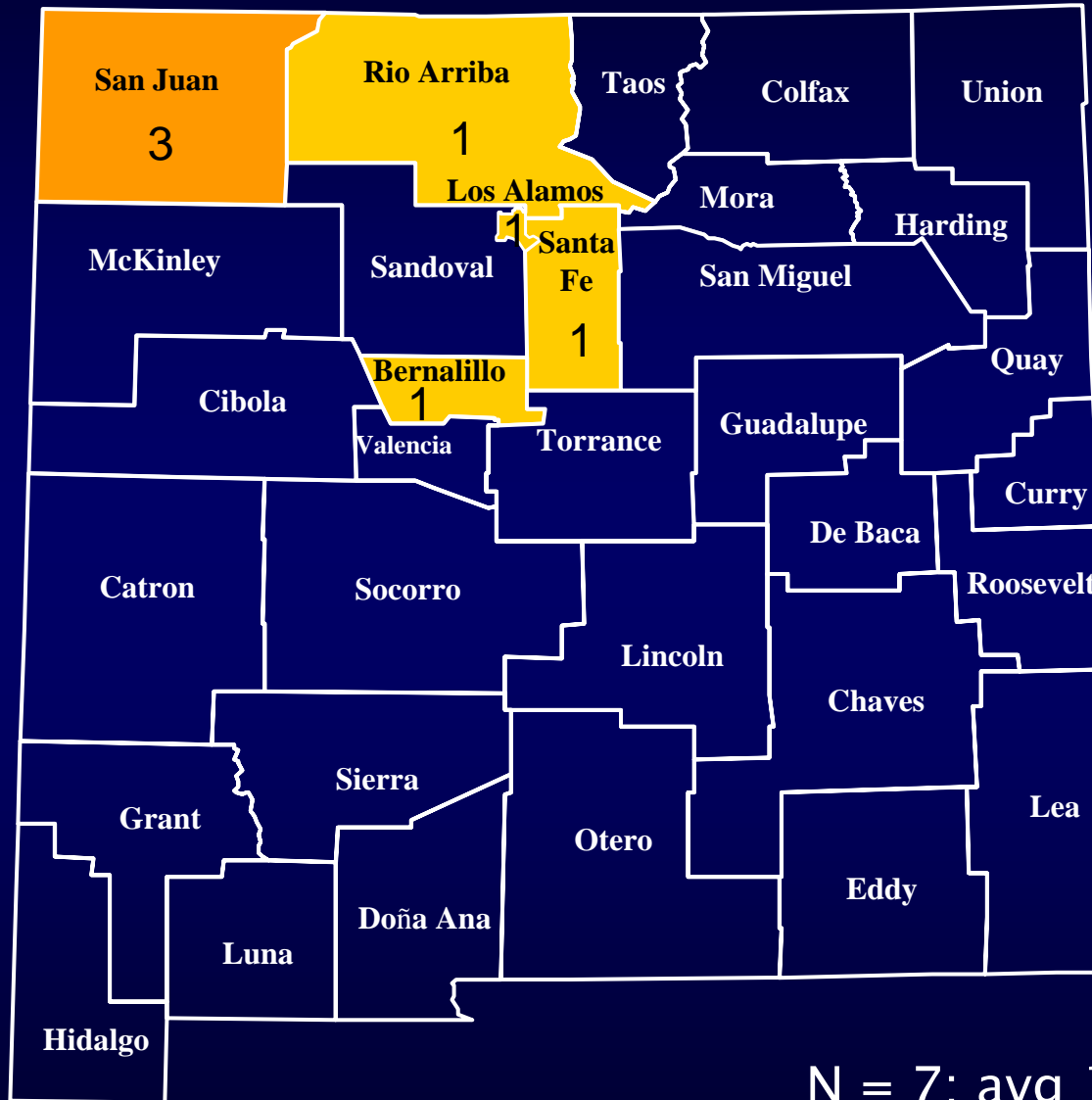
# Human Plague in New Mexico, 2008



- Eddy County rabbit hunter, onset in Jan
- First case ever in Eddy County
- Previous SE NM cases also rabbit hunters (Chaves and Lea counties)



# Human Tularemia in New Mexico, 2006

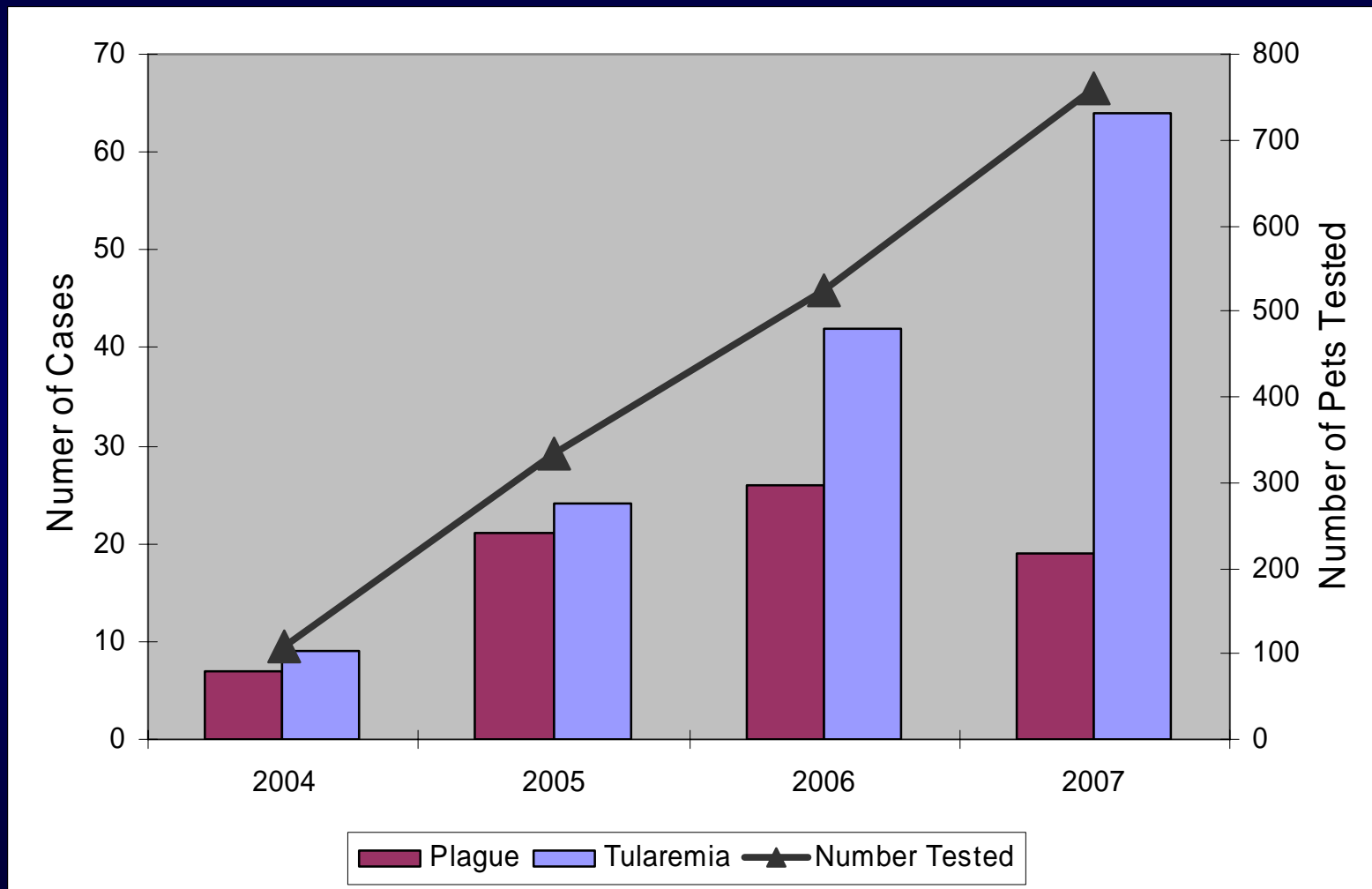


N = 7; avg 1.5 cases/yr  
No cases in 2007

# Pet Plague and Tularemia



# Confirmed Plague and Tularemia Cases in Cats and Dogs, New Mexico, 2004-2007

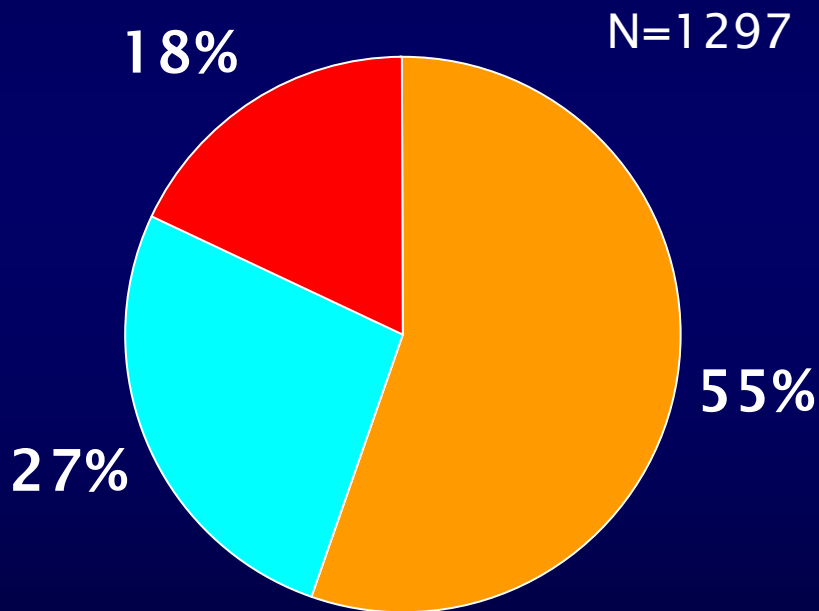


## Summary of Pet Cases, 2006-2007

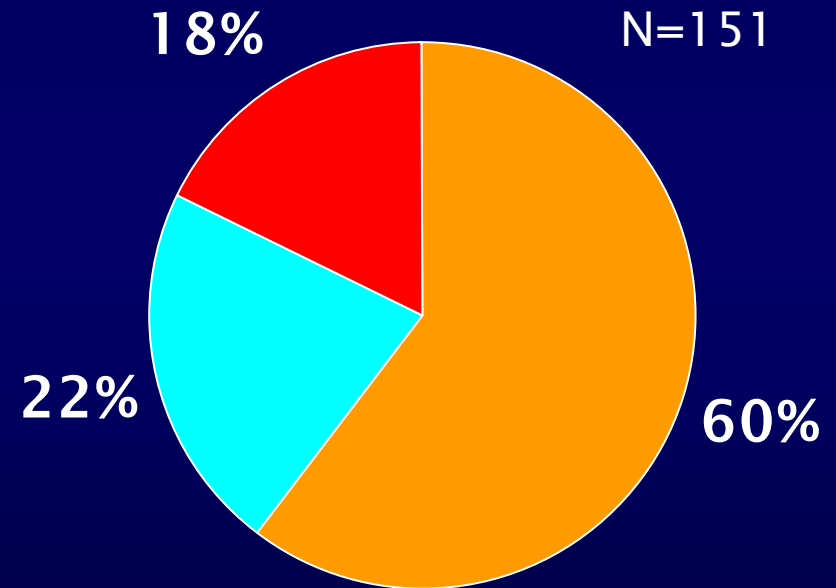
	# Tested	# confirmed w/plague (%)	# confirmed w/tularemia (%)
Dogs	789	25 (3.2%)	77 (9.8%)
Cats	508	20 (3.9%)	29 (5.7%)

# Pet Plague/Tularemia Testing and Cases by County, New Mexico, 2006-2007

## Testing by County



## Cases by County



■ Santa Fe    ■ Bernalillo  
■ All Others

■ Santa Fe    ■ Bernalillo  
■ All Others

# Risk Factors for Plague and Tularemia in Pets, 2006-2007

- History of rodent/rabbit contact or hunting behavior reported for 64% of cases
  - 29 of 45 plague cases
  - 68 of 106 tularemia cases
- Fleas noted on only 6 pet patients

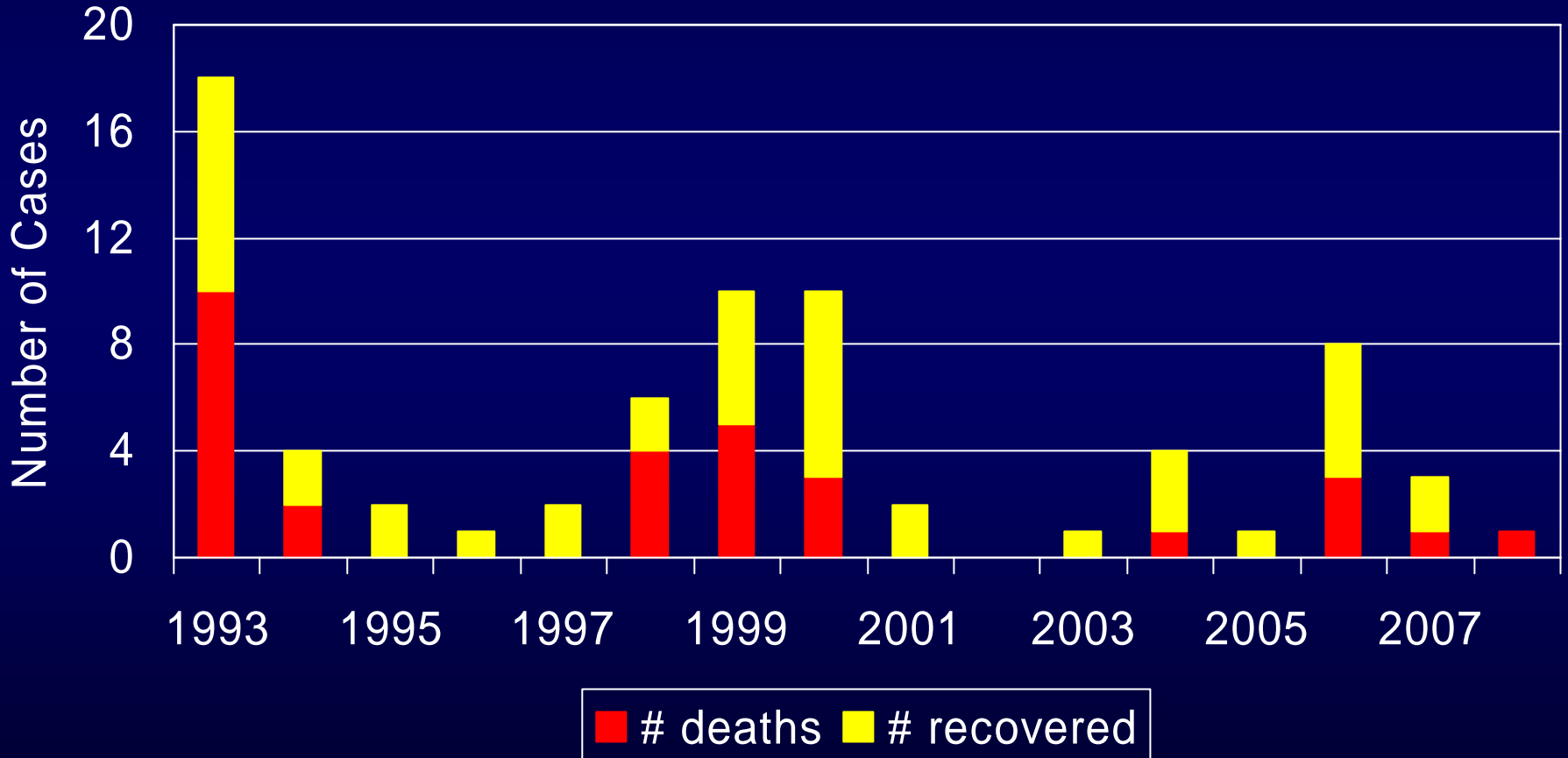


# Hantavirus Pulmonary Syndrome





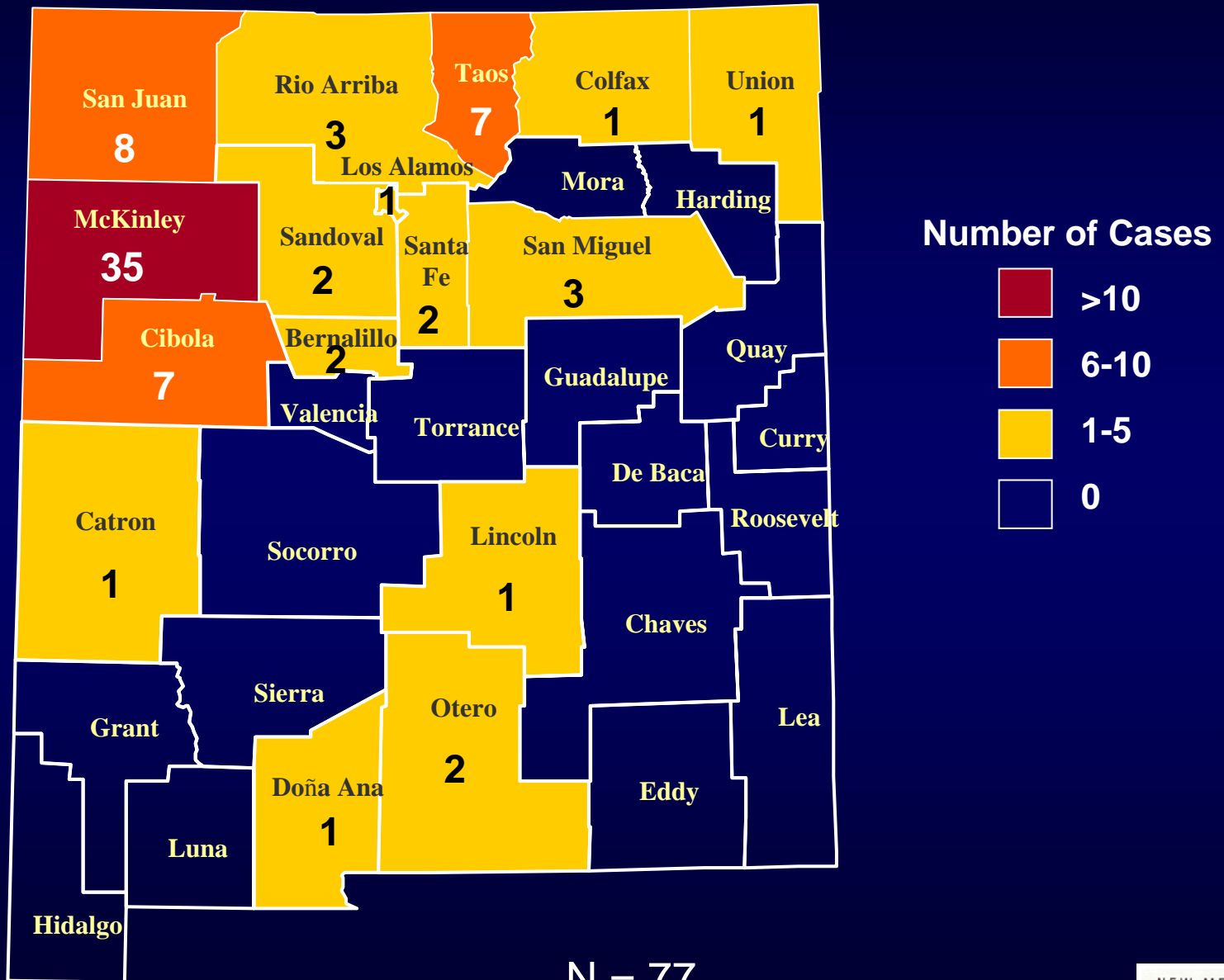
# Hantavirus Pulmonary Syndrome, New Mexico Cases by Year, 1993 - 2008



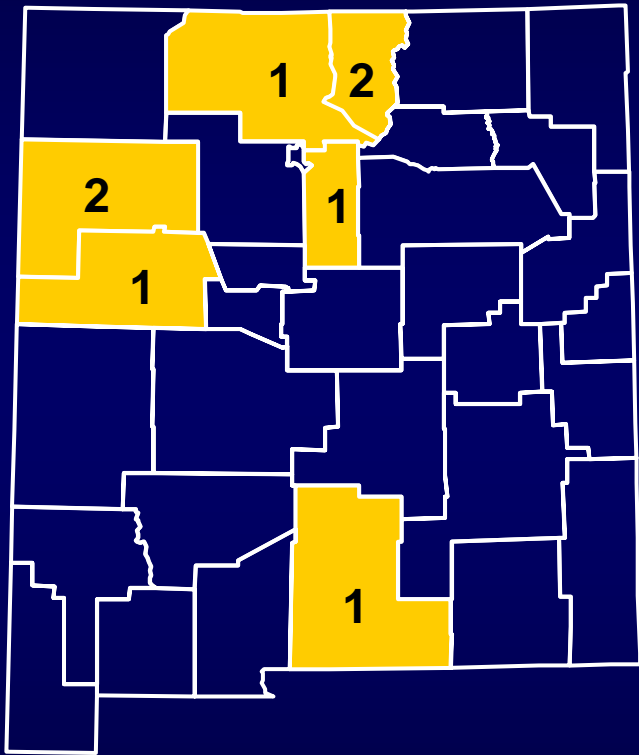
N = 73; 4 cases prior to 1993 not shown

As of 3/20/08

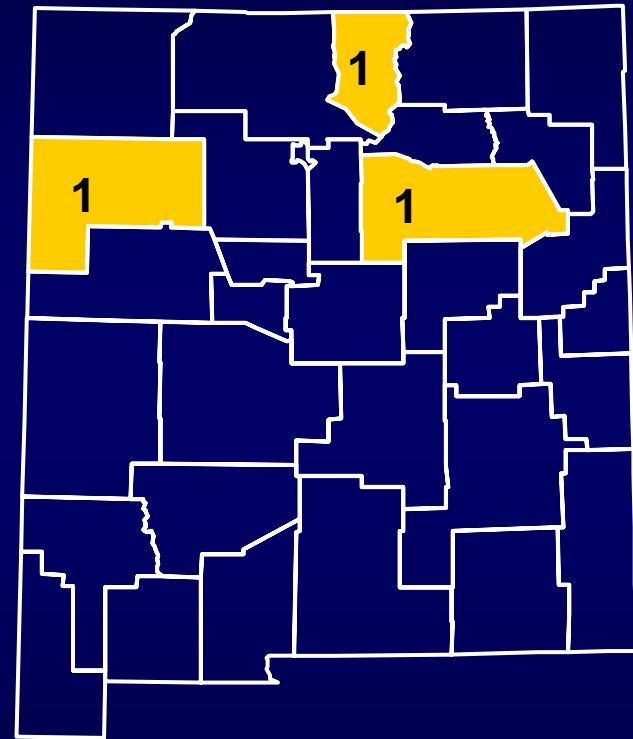
# HPS Cases in New Mexico by County, 1975 – 2008



# HPS Cases in New Mexico

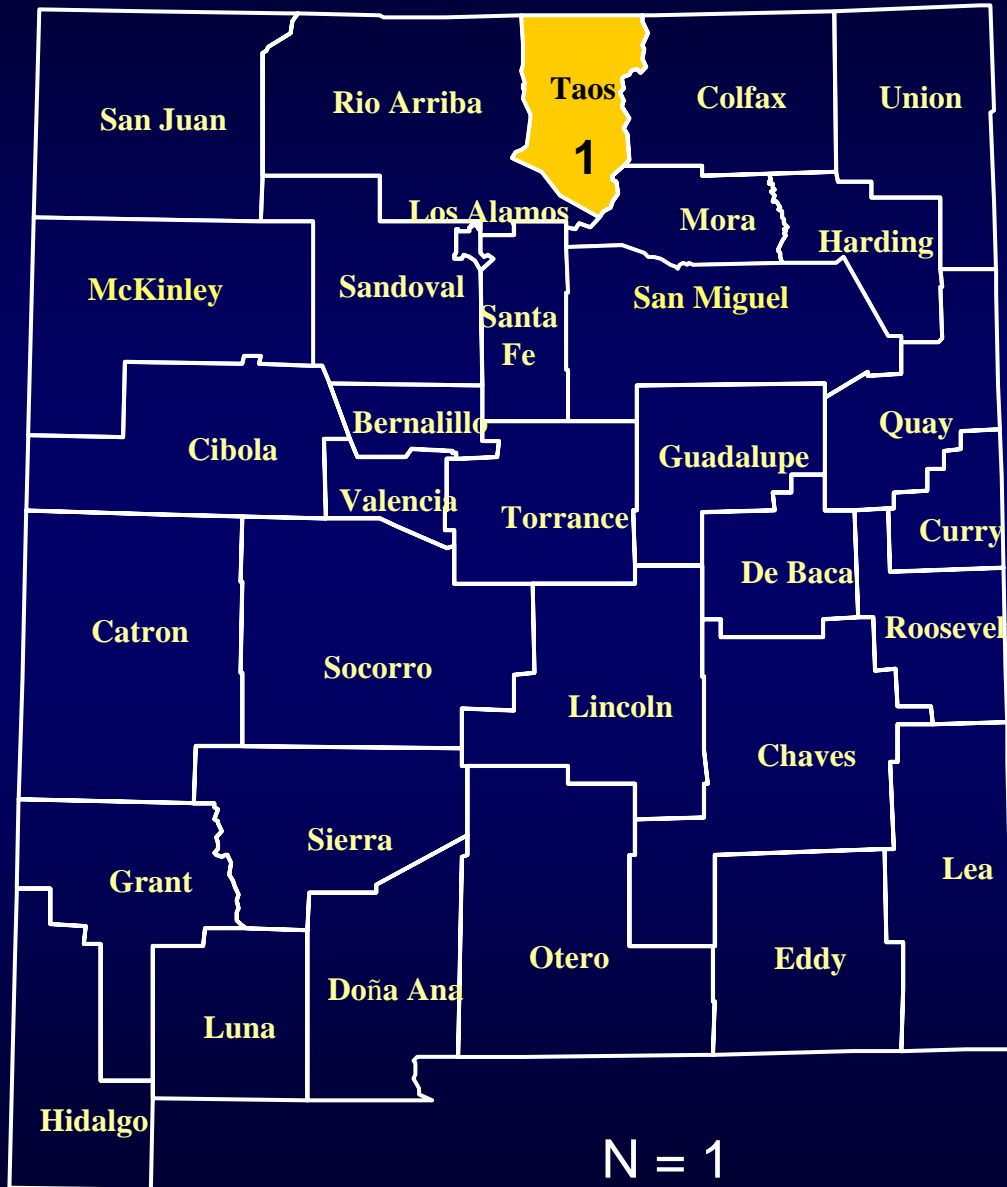


2006, N = 8



2007, N = 3

# HPS Cases in New Mexico by County, 2008



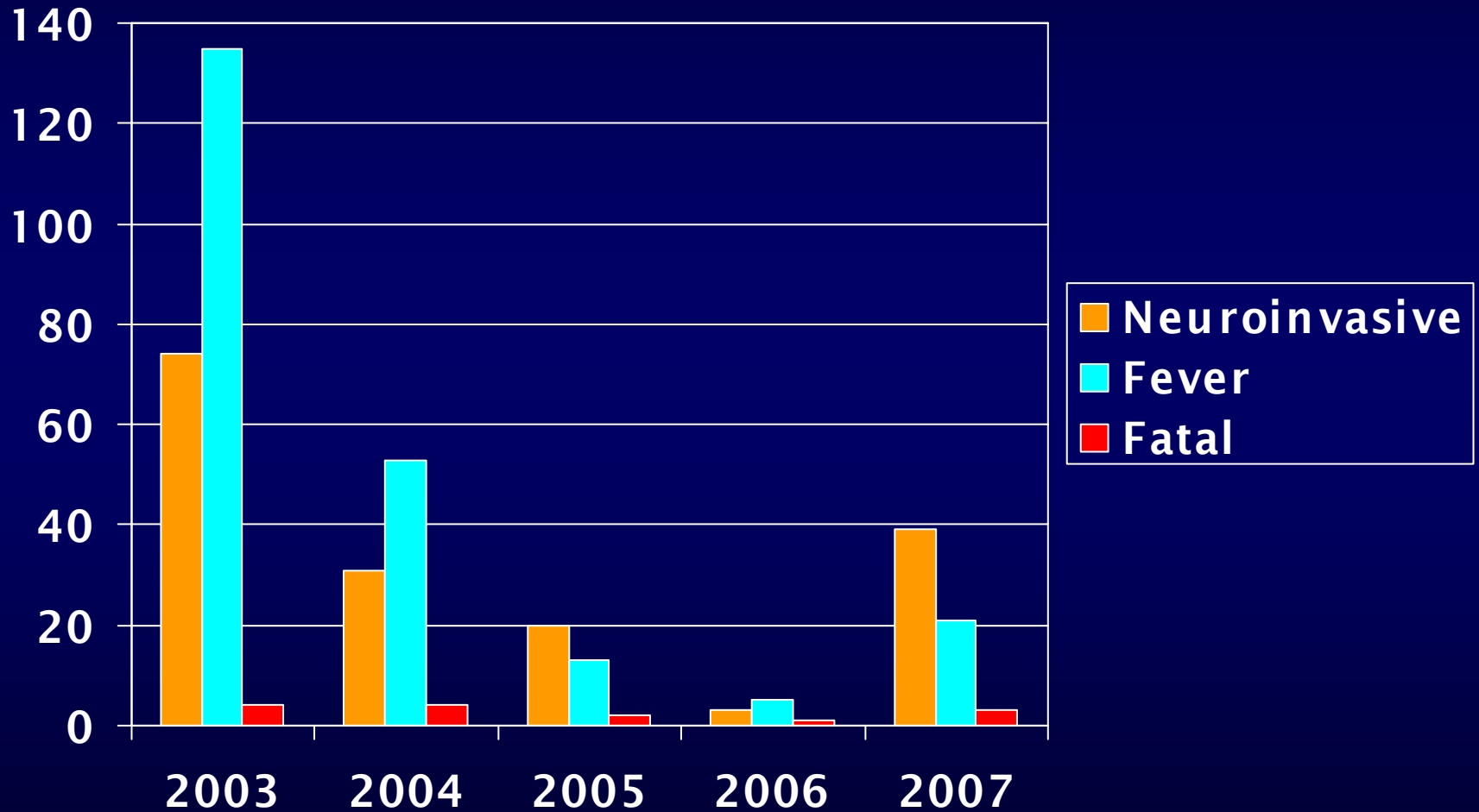
N = 1

As of  
3/20/08

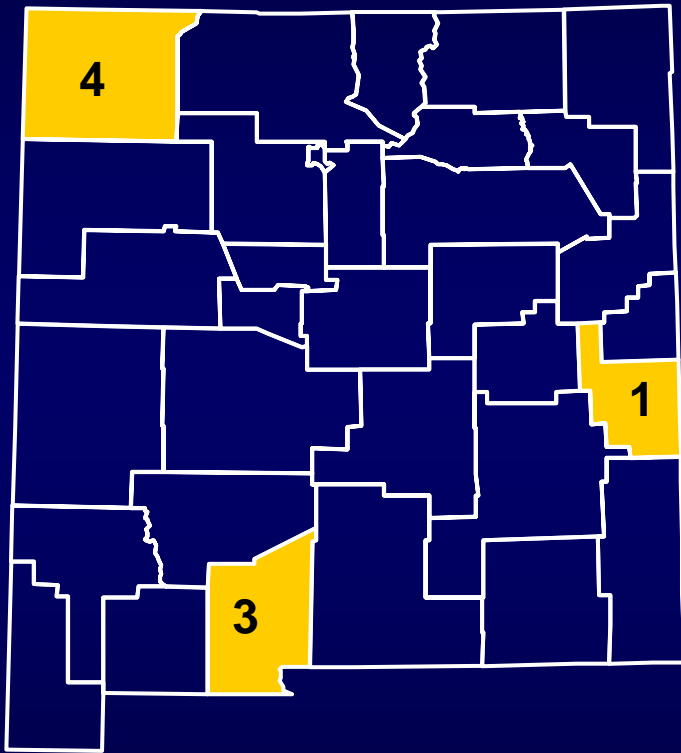
# West Nile Virus



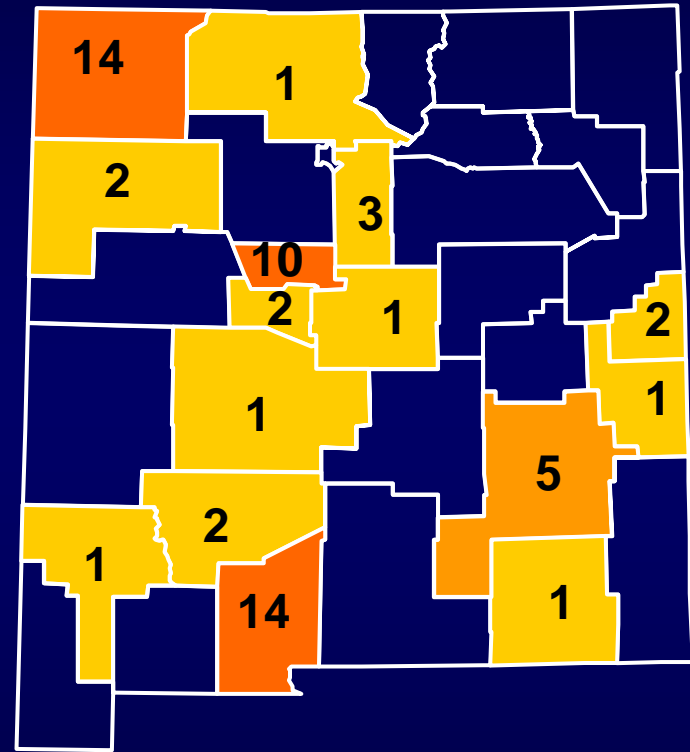
# WNV Cases in NM by Year



# Human WNV by County, NM

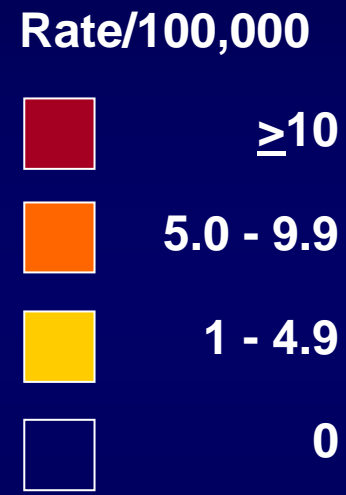
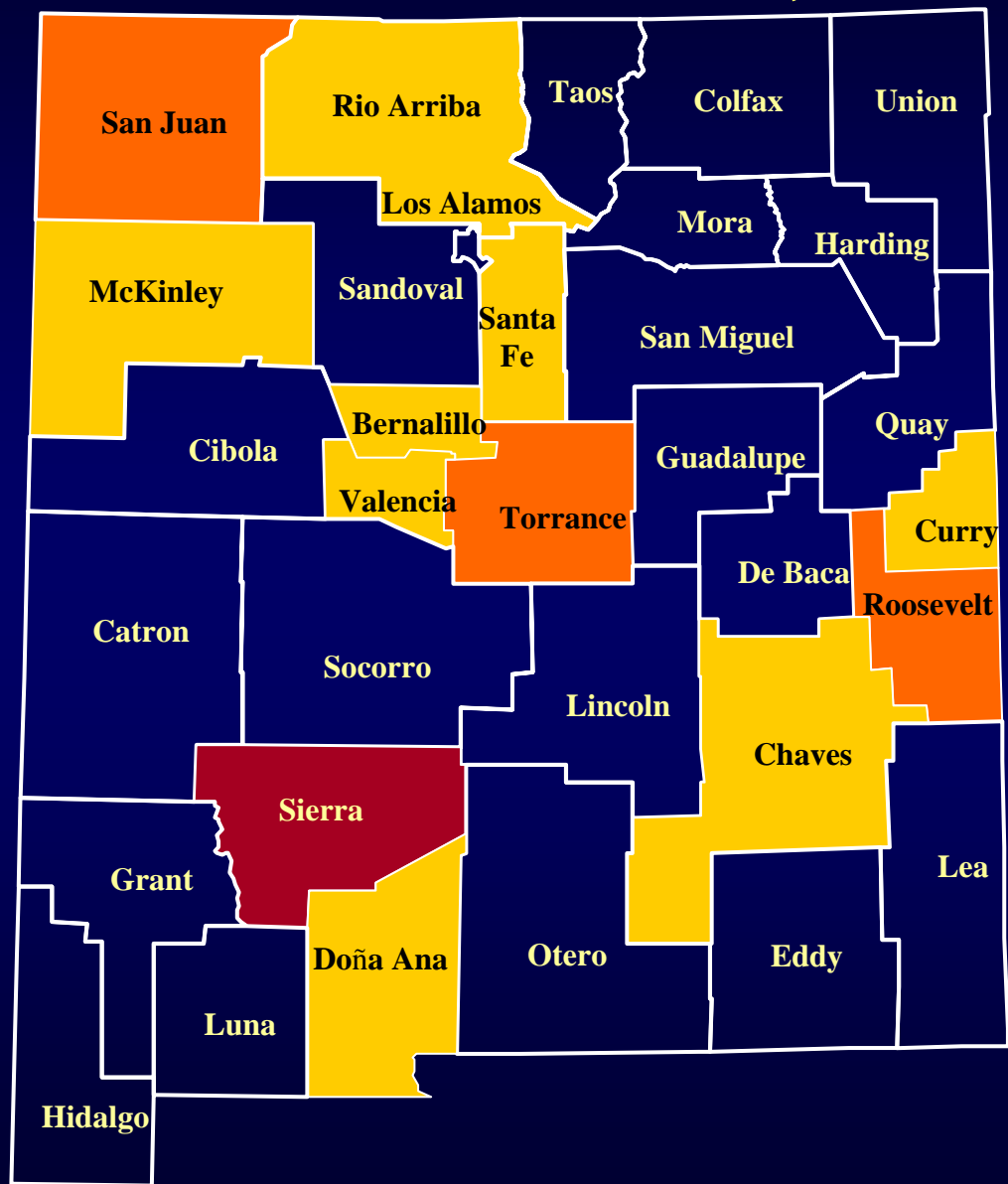


2006, N = 8



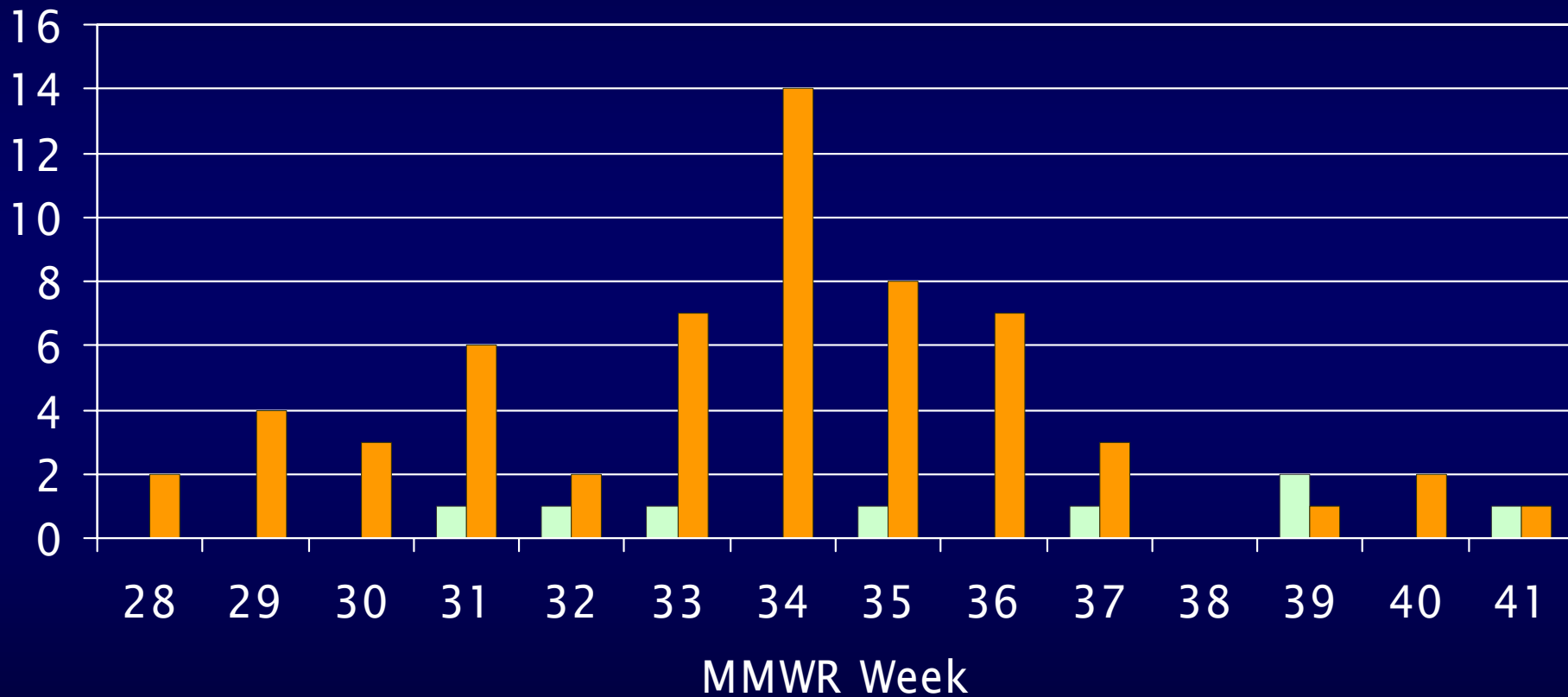
2007, N = 60

# Human case rates\*, WNV Neuroinvasive Disease, 2007





# Human WNV Cases by Onset Week New Mexico, 2006 — 2007

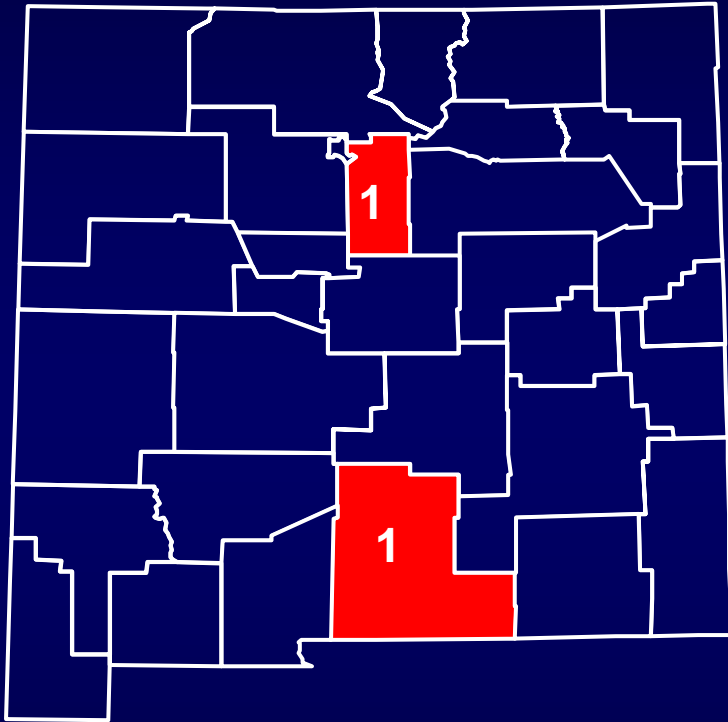


2006, N = 8

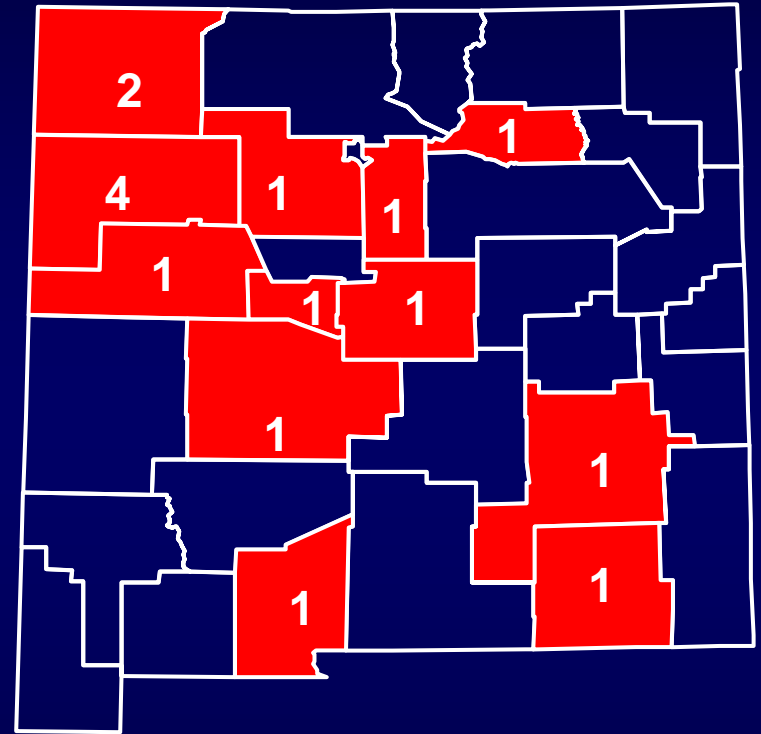
2007, N = 60



# Equine WNV Cases by County

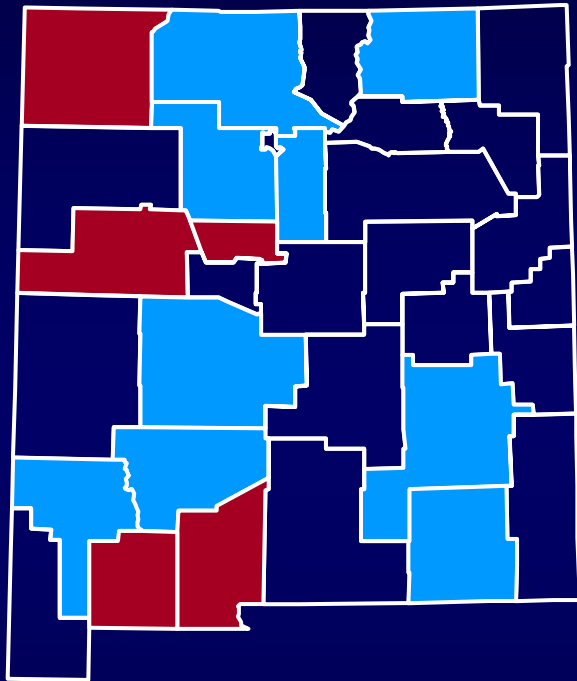




2006, N=2

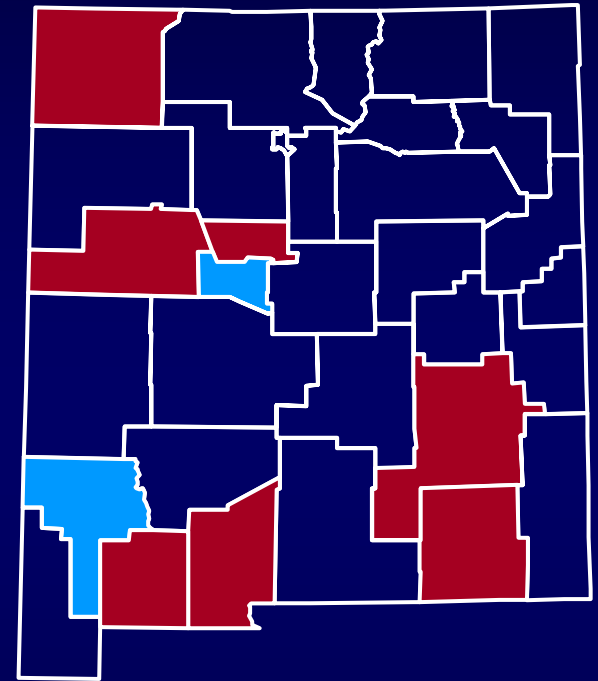


2007, N=16

# WNV Mosquito Surveillance by County



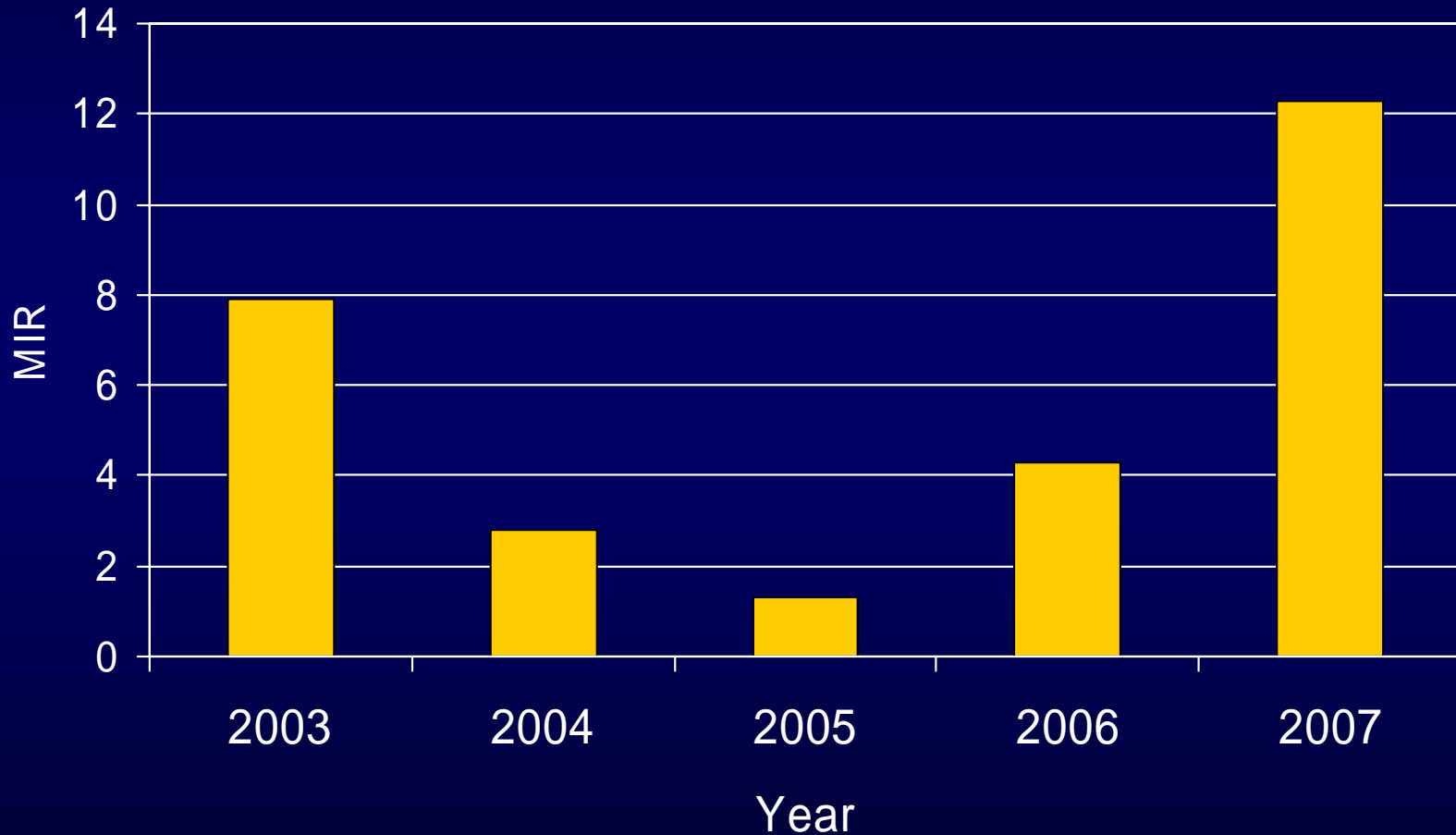
 Mosquitoes tested  
 Mosquitoes positive



2006: 18 positive pools out of 25,367 mosquitoes tested

2007: 76 positive pools out of 13,933 mosquitoes tested

# Overall MIR\* *Culex* Species New Mexico, 2003 – 2007



\* Minimum infection rate = minimum number of infected mosquitoes per 1,000 tested; assumes one positive mosquito per pool

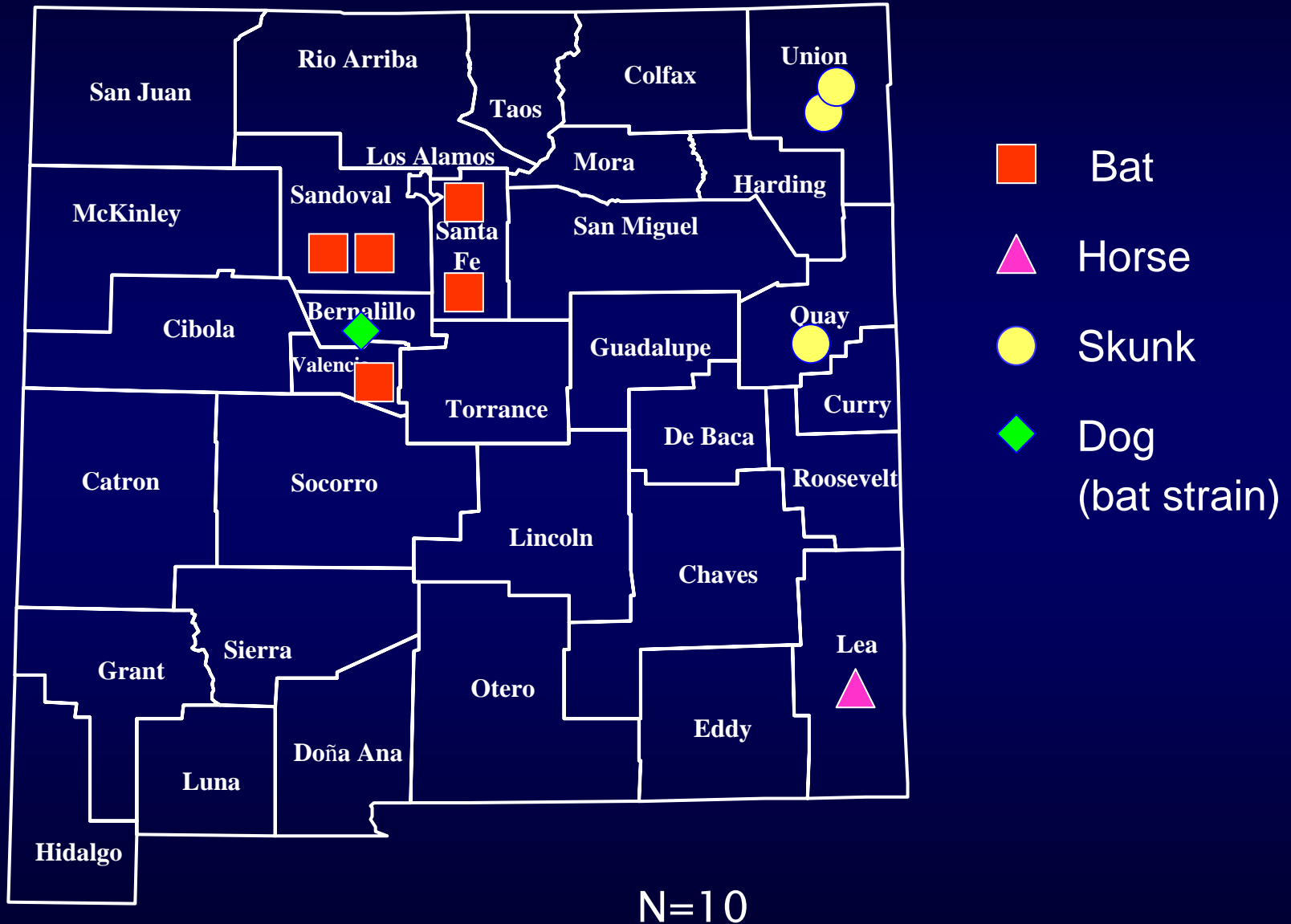
# Rabies



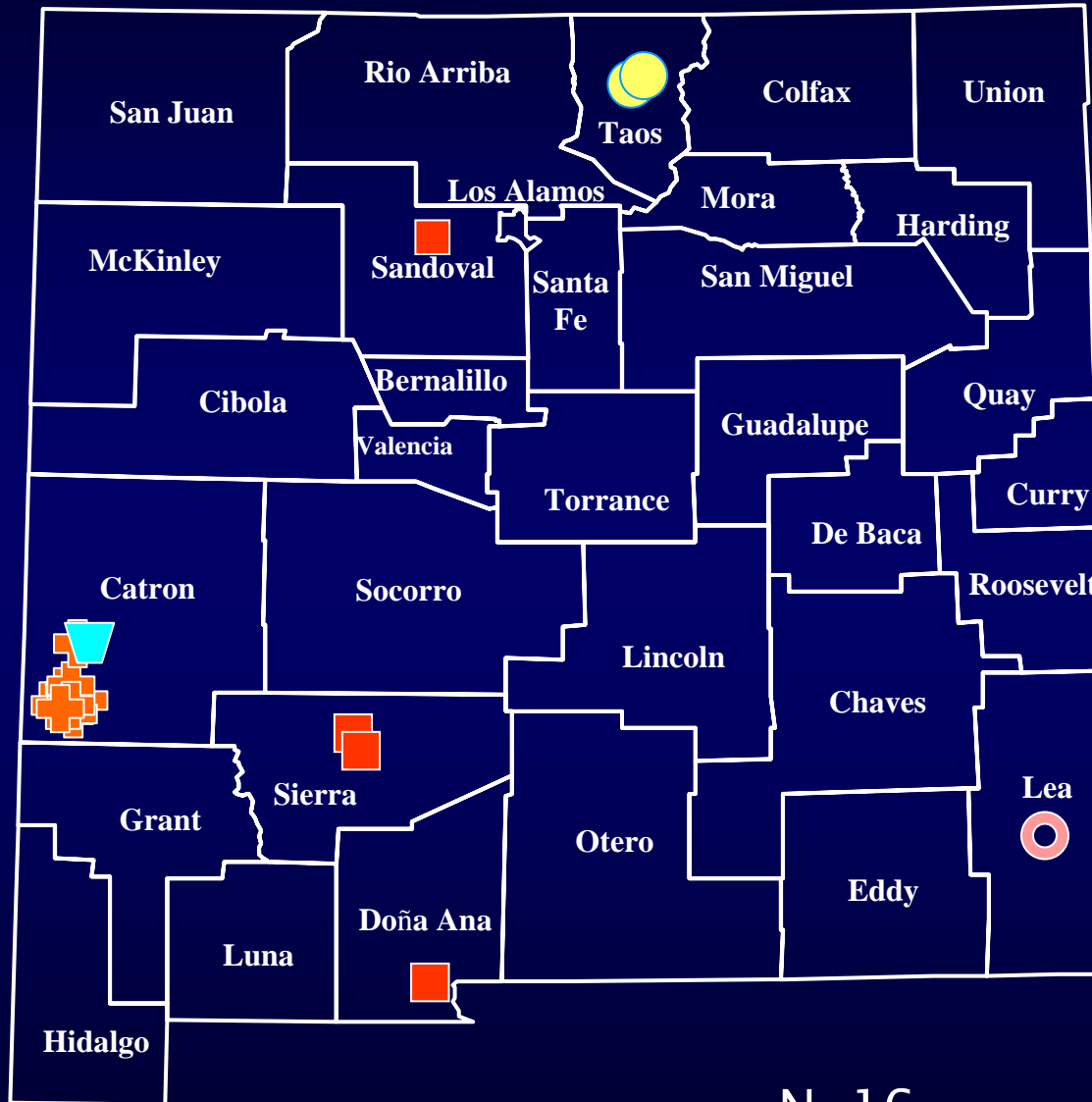
# Significant Rabies Activity

- Expansion of South Central skunk strain into north-central NM
  - Previously found in eastern border counties
- Expansion of Arizona gray fox strain into southwest NM
  - Several people and pet interactions with foxes, requiring rabies PEP for humans, quarantine or euthanasia for pets

# Animal Rabies by County, New Mexico, 2006



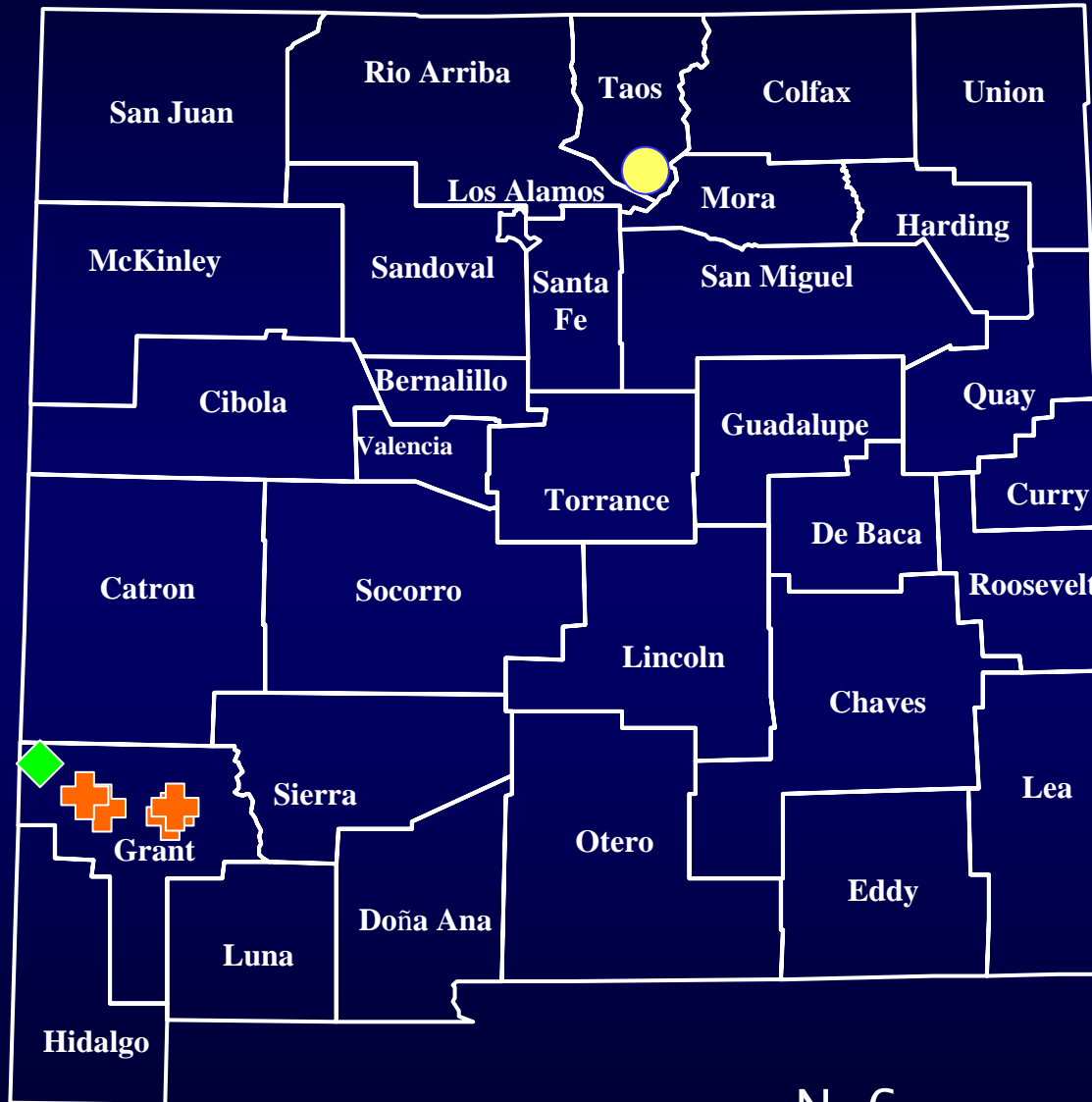
# Animal Rabies by County, New Mexico, 2007



N=16



# Animal Rabies by County, New Mexico, 2008



- ◆ Dog (fox strain)
- ✚ Fox
- Skunk

N=6

As of 3/20/08

