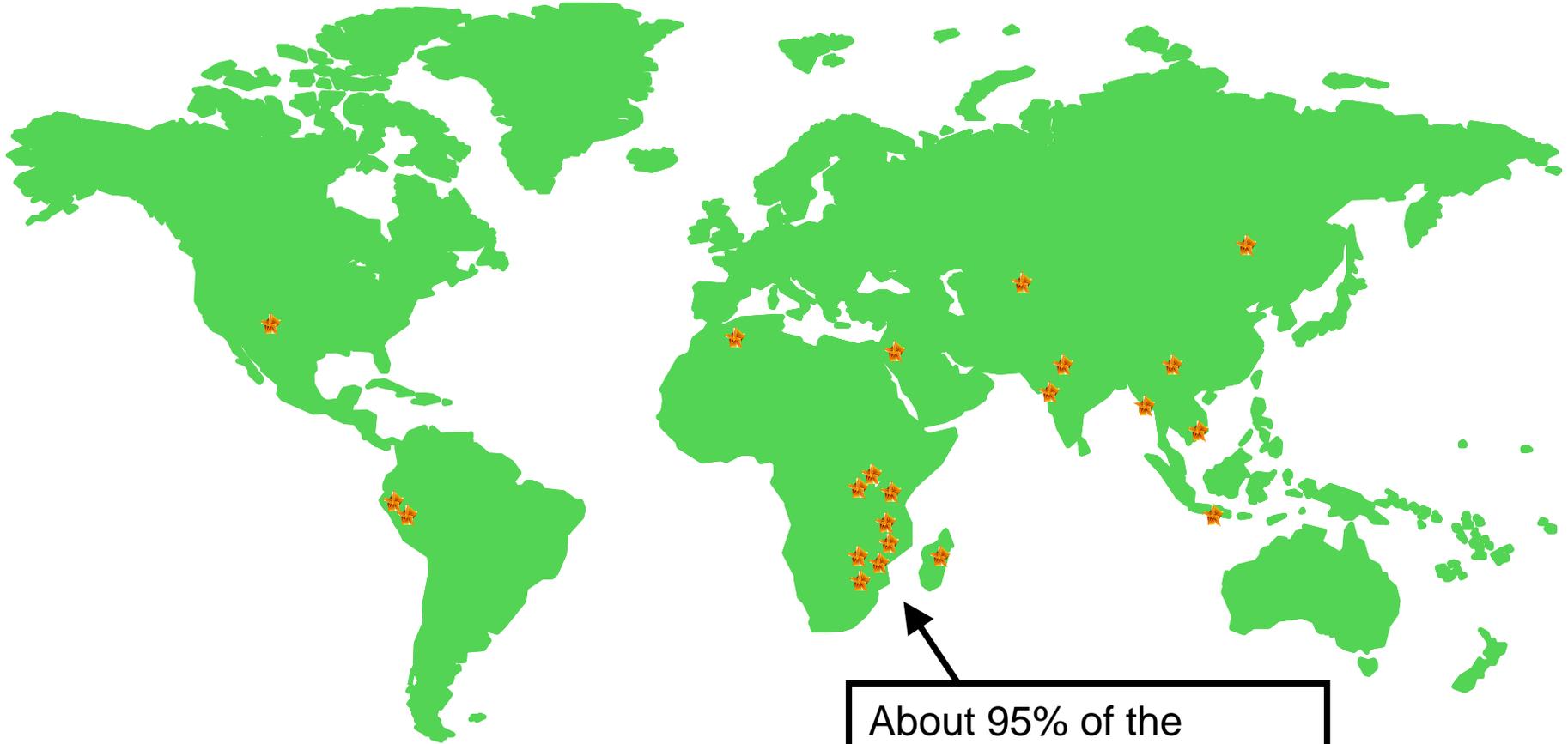


# Status of Plague in the U.S. and World (2006-2007)

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Division of Vector-Borne Infectious Diseases  
NCZVED/CCID/CDC

# Plague Outbreaks and Case Clusters (1991 – 2007)

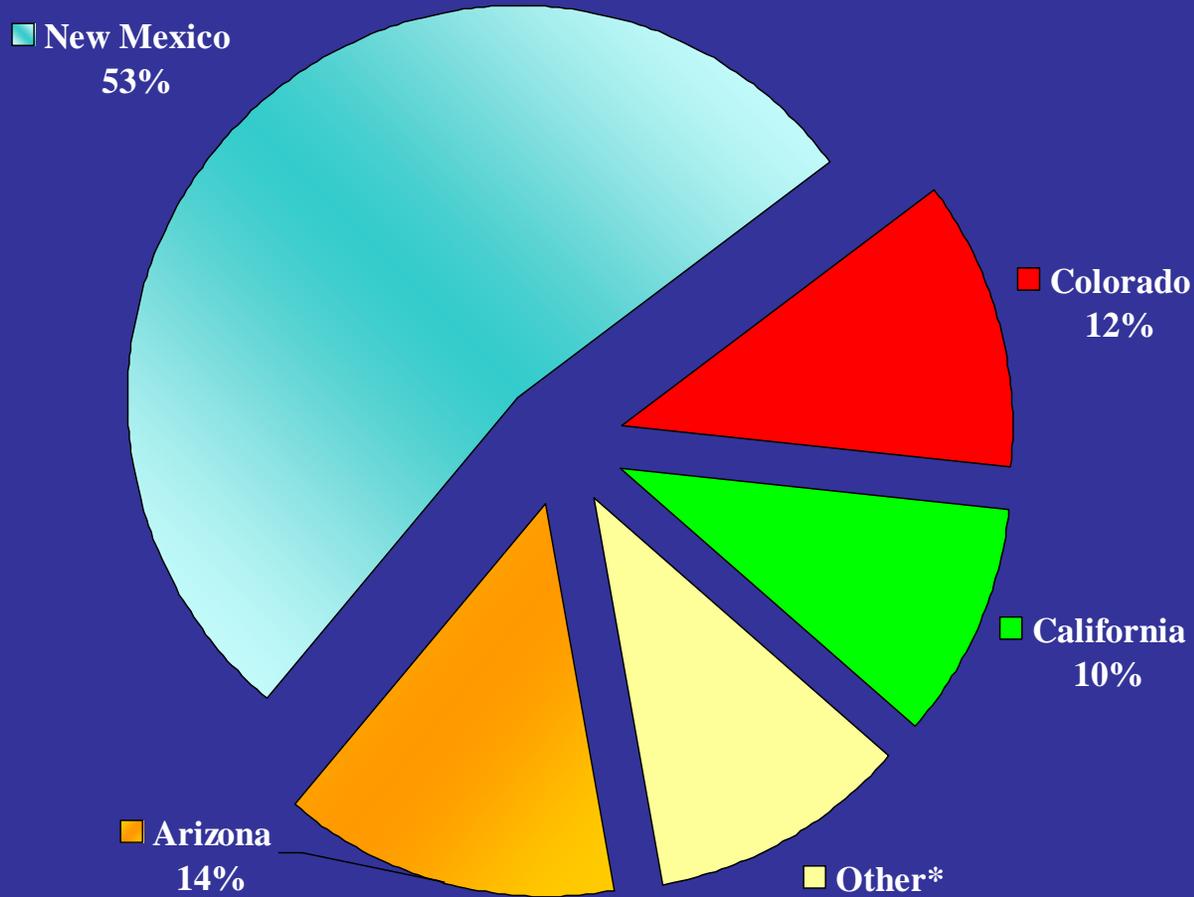


About 95% of the world's human plague cases now occur in the African region, including Madagascar

# Plague Cases by State

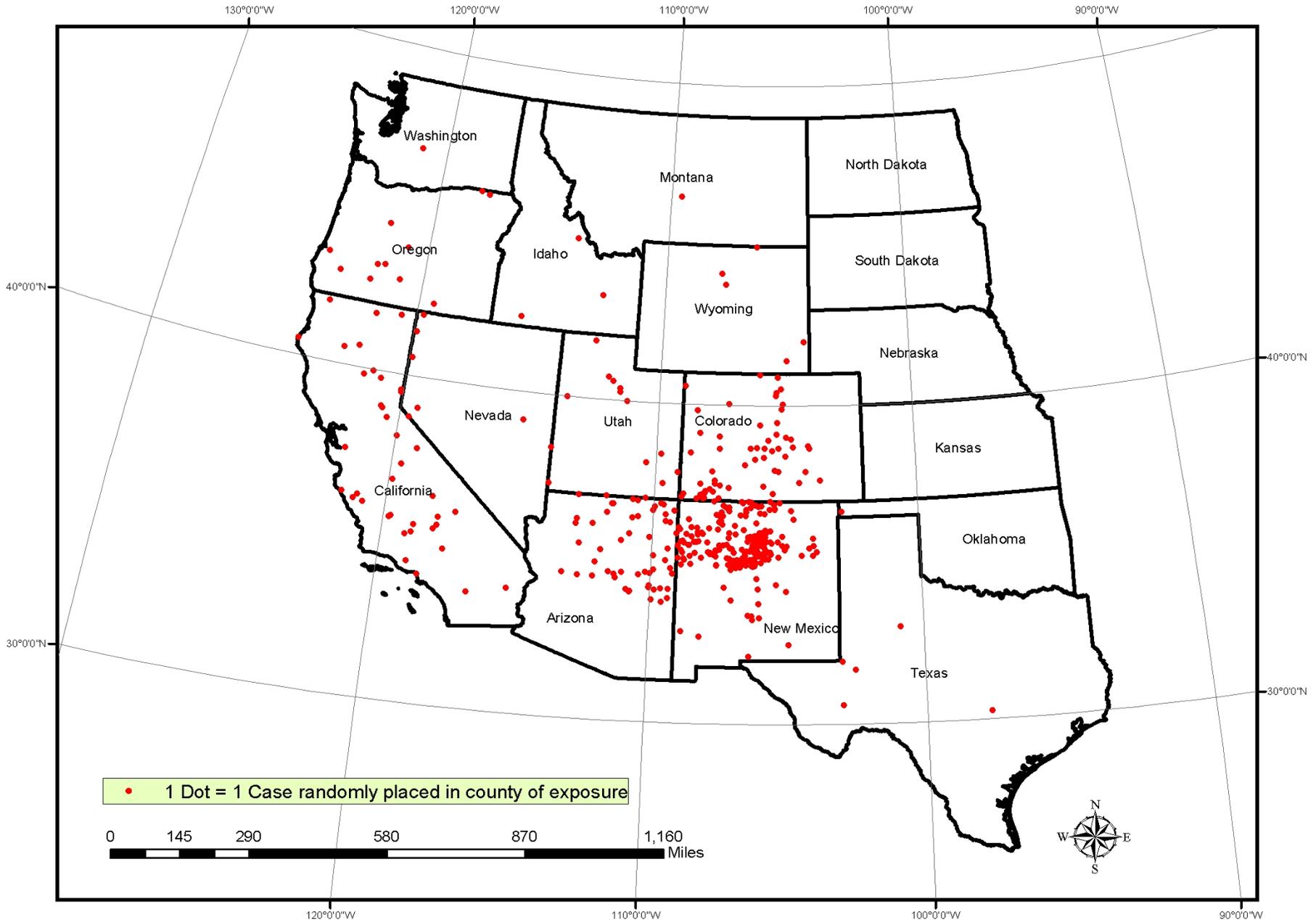
1970 - 2007

(n=414)

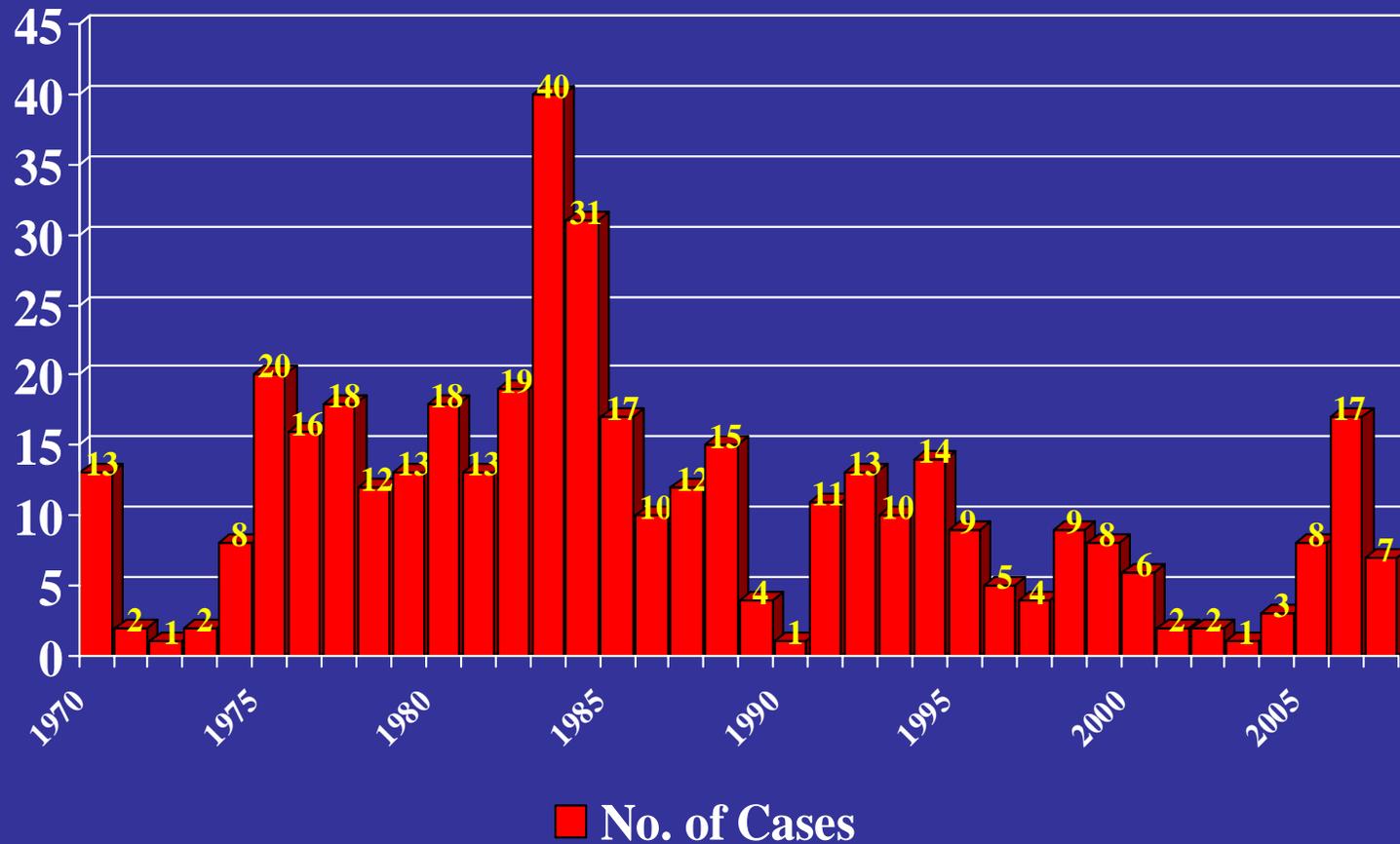


\* UT,OR,NV,TX,ID,WY,MT,OK,WA

# Plague Cases in the Western U.S., 1970-2007



# Reported Human Plague Cases By Year-U.S.A., 1970 - 2007



N = 390

# U.S. Plague Cases, 2006

- 17 Total (2 fatal)
- Highest number since 1985
- 2 clusters (likely peridomestic exposures)
  - Bernalillo, Tarrant and Santa Fe Counties, NM (7 cases)(2 fatal cases in this cluster)
  - La Plata County, CO (4 cases)
- Remaining cases in
  - New Mexico (1 case, Lea County – rabbit hunter),
  - California (2 cases, Los Angeles and Inyo Counties)
  - Utah (Uintah County)
  - Nevada (Lander county)

# U.S. Plague Cases, 2007

- 7 total cases (2 fatal)
  - New Mexico: 5 cases (1 fatal)
  - Arizona: 2 cases (1 fatal)
- The fatal Arizona case occurred in a wildlife biologist who handled a *Y. pestis*-infected mountain lion

# Recent Research (CDC collaborations)

- Role of blocked fleas in epizootic plague (Webb et al. 2006)
- Early Phase Transmission (Eisen et al. 2006 and other follow-up publications by Eisen et al. and Wilder et al.)
- Spatial models of human plague risk in the Southwest (Eisen et al.)
- Spatial model of shared human plague and hantavirus risk (Eisen et al. 2007)
- Impacts of climate on plague
  - Continues previous studies by Parmenter et al. (1999) and Ensore et al. (2002)
  - Ben Ari et al. - manuscript submitted (Effects of high temperatures and Pacific Decadal Oscillation on the occurrence of human plague in the western U.S.)
  - Nakazawa et al. 2007 (Potential effects of climate change on plague in U.S. – Projected slight northward shift in plague)

# Acknowledgements

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  - BDB Diagnostic and Reference Activity
  - BDB Epidemiology and Surveillance Activity
- USDA, NPS, IHS