



RÉPUBLIQUE TUNISIENNE  
MINISTÈRE DE LA SANTÉ



# North Africa Regional meeting on dog-mediated rabies elimination: towards effective regional and national elimination strategies

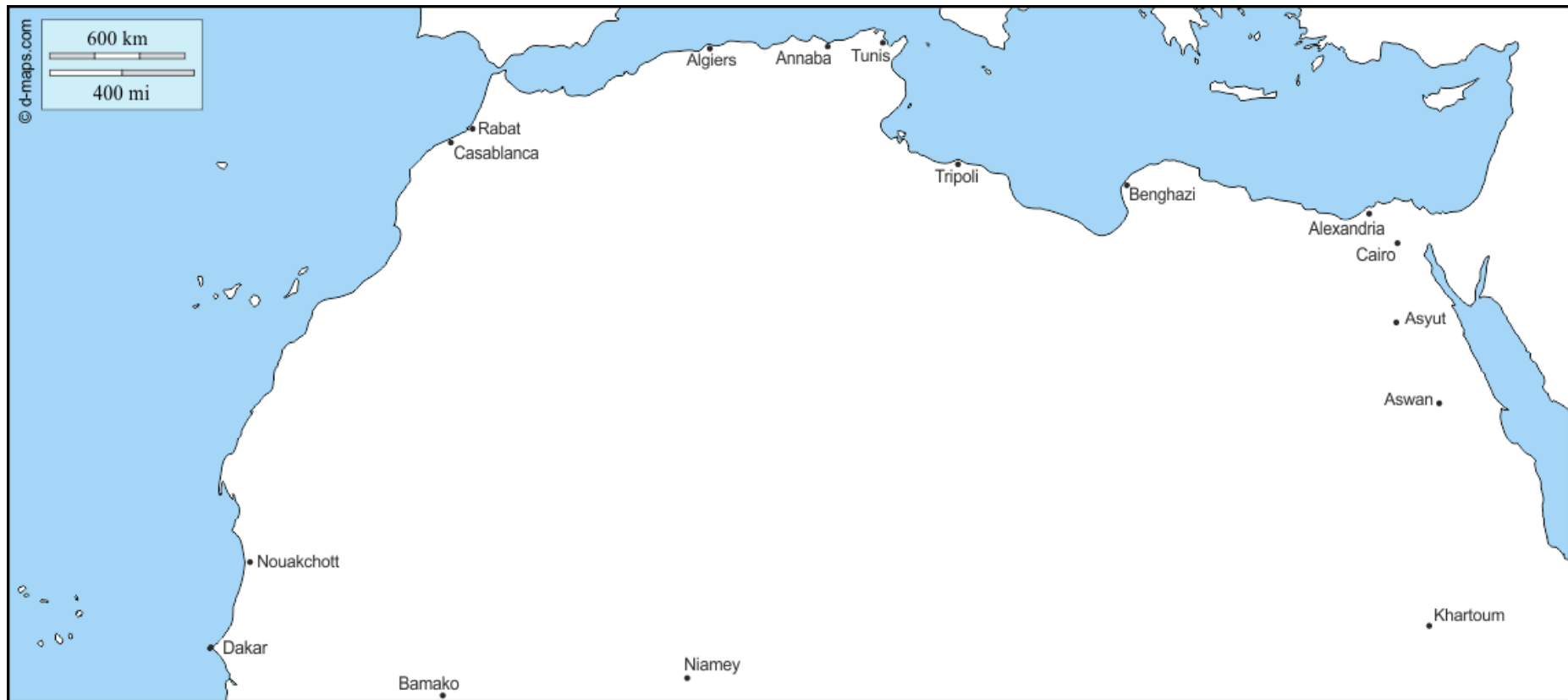
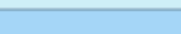
Presented by Dr Mariem Handous  
Rabies Laboratory – Pasteur Institute of Tunis, Tunisia

July 24-25, 2019

600 km



400 mi



Algiers

Annaba

Tunis

Rabat

Casablanca

Tripoli

Benghazi

Alexandria

Cairo

Asyut

Aswan

Khartoum

Niamey

Bamako

Nouakchott

Dakar

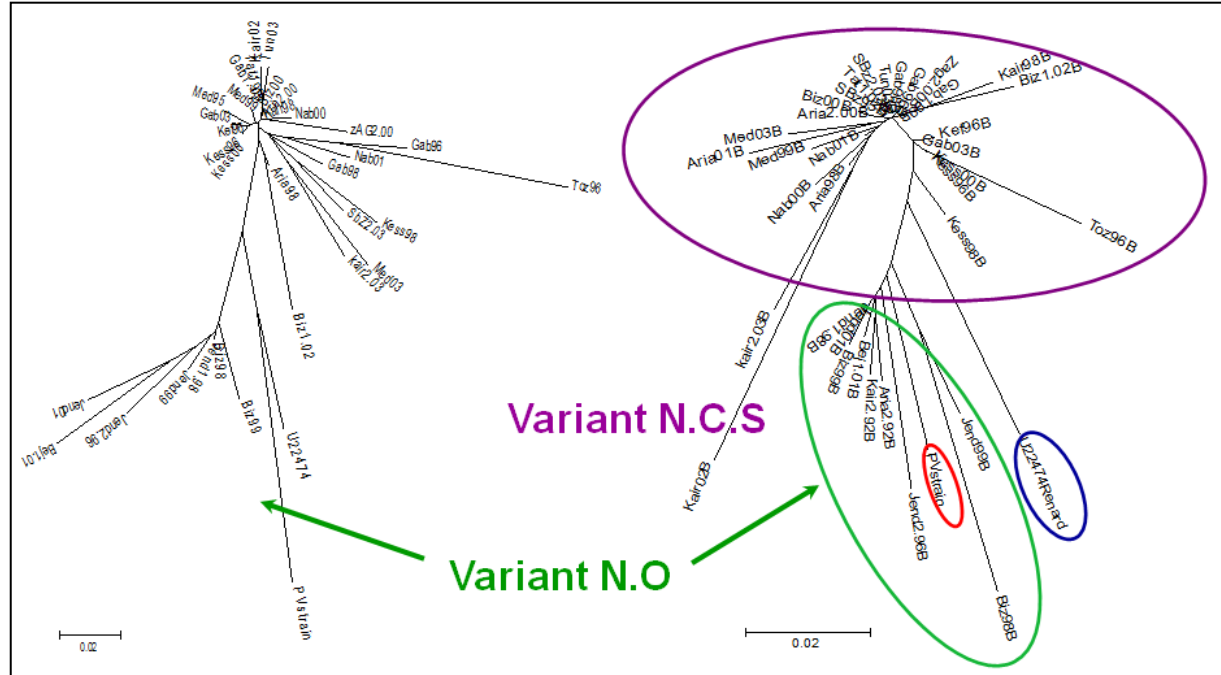
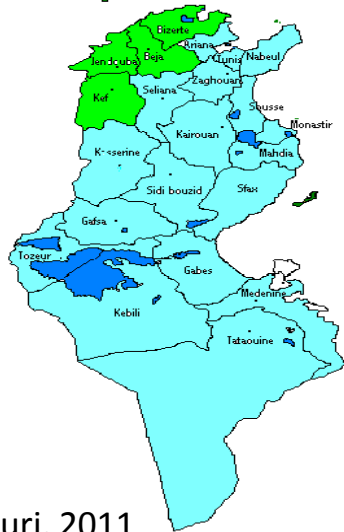
# Rabies in Tunisia

- Endemic and enzootic
- Legislative framework
  - 1966 (fight against rabies)
  - 1985 (specific health measures against rabies)
- National Program of Rabies Control (since 1982)



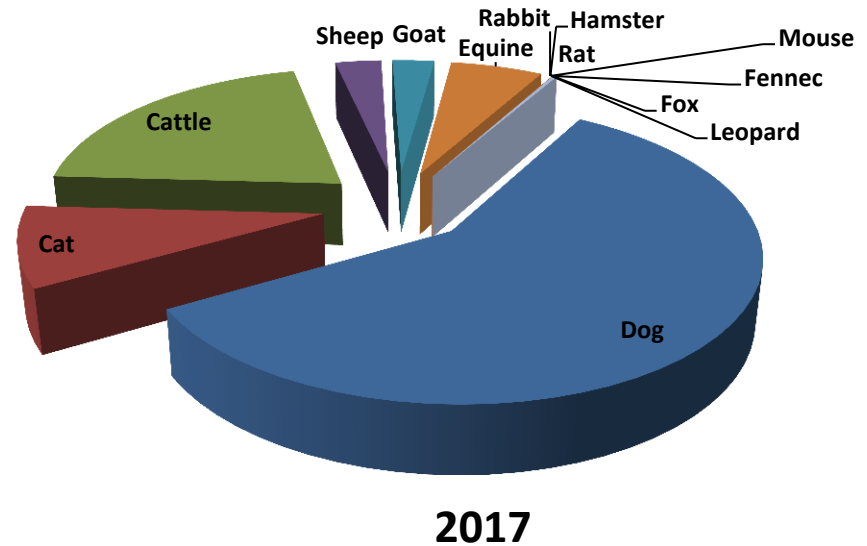
# Rabies in Tunisia

- RABV genotype
- 2 strains



# Rabies in Tunisia

- Dog : main reservoir and vector
- Most affected species



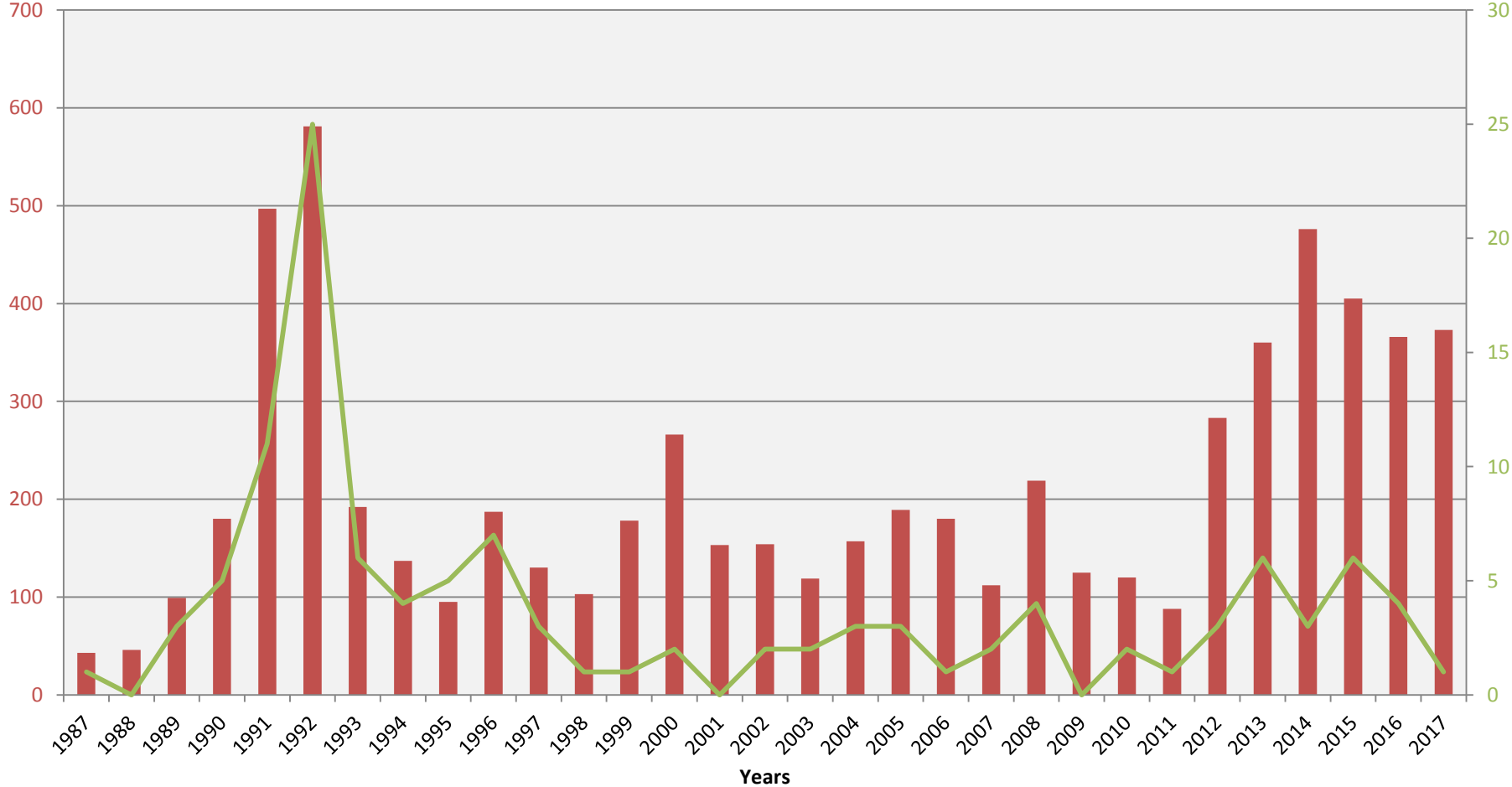
- National Program of Rabies Control: 1982
  - Mass dog vaccination
  - Dog population control
  - Medical care for contaminated persons

=> **Zero** human rabies in 1985 and 1988

# Evolution of animal and human rabies from 1987 to 2017 in Tunisia

Animal cases

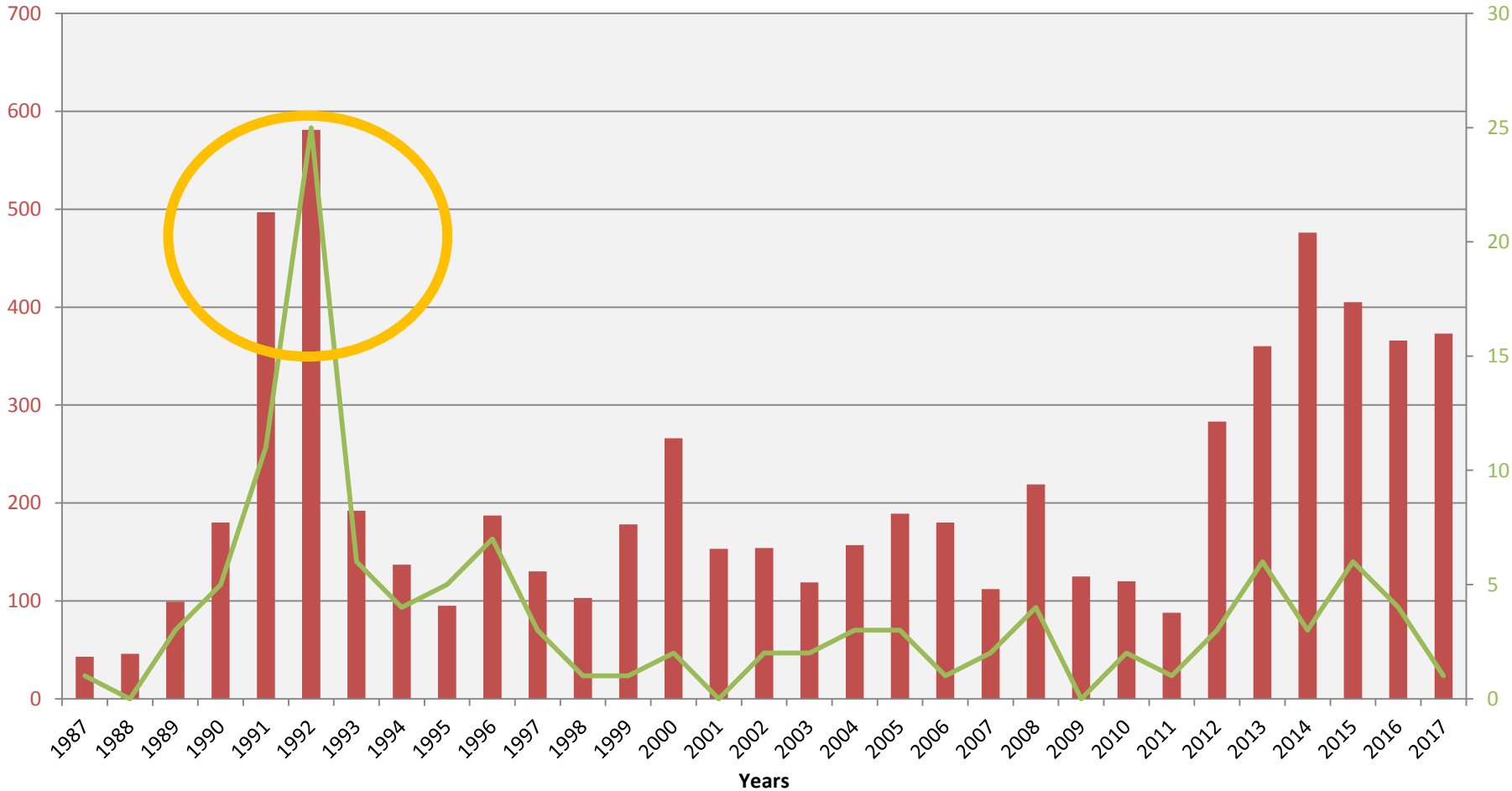
Human cases



# Evolution of animal and human rabies from 1987 to 2017 in Tunisia

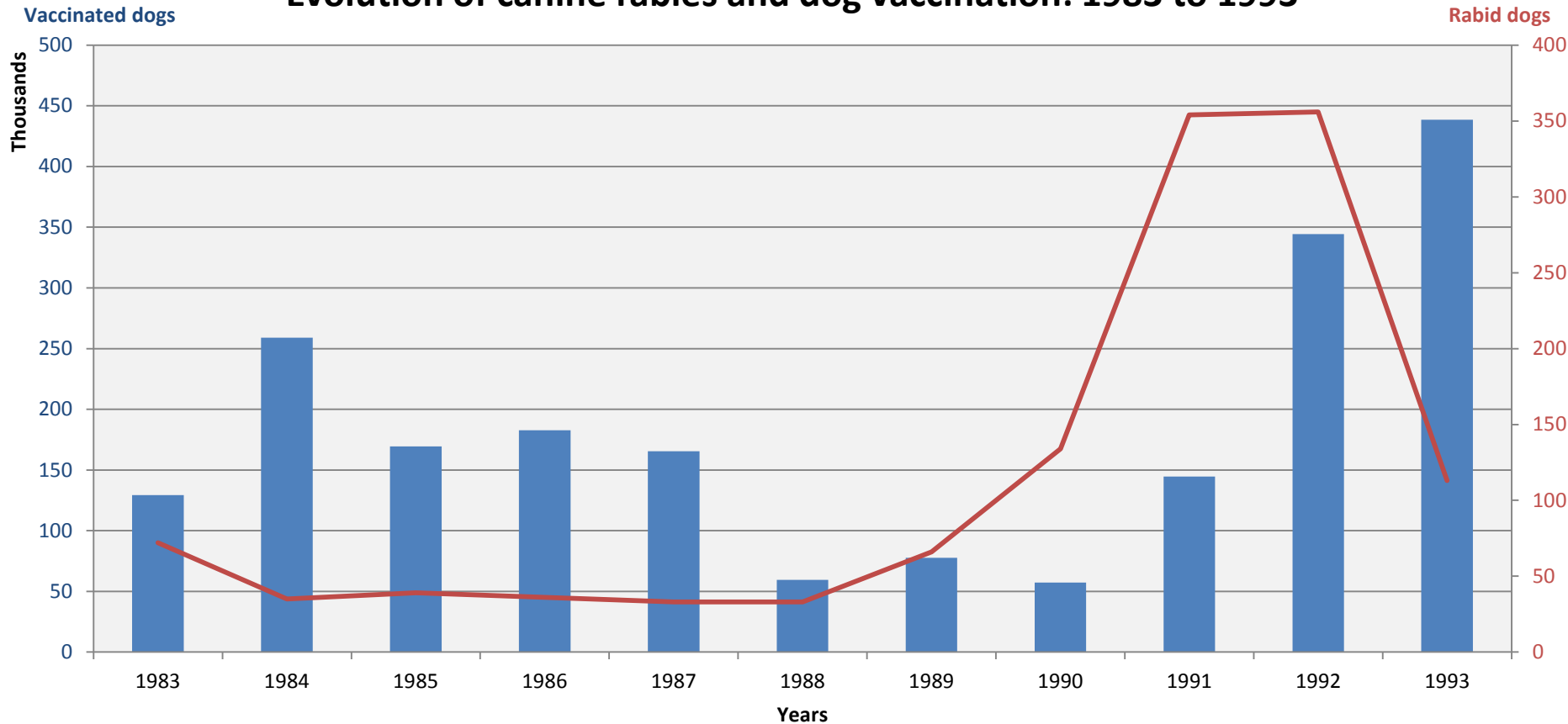
Animal cases

Human cases





# Evolution of canine rabies and dog vaccination: 1983 to 1993

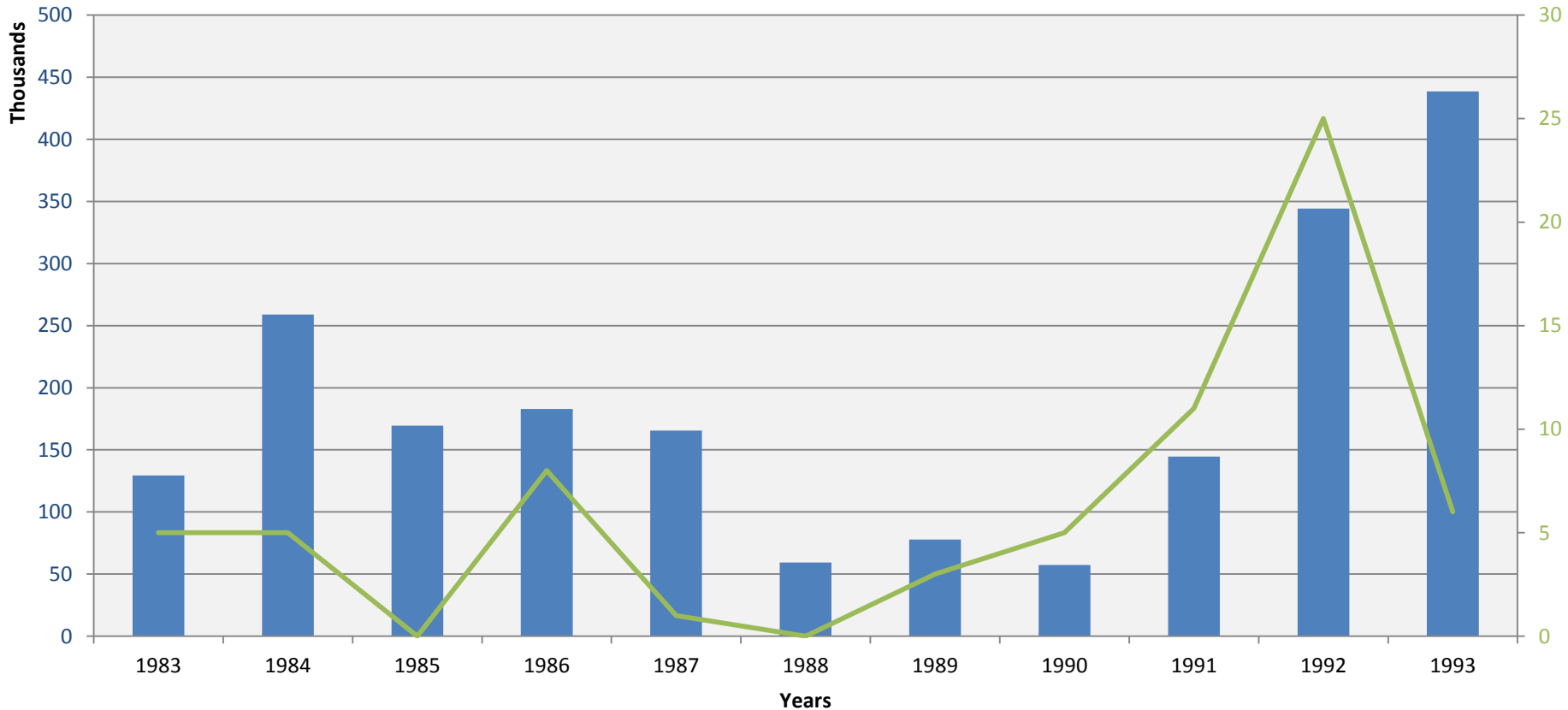


National Program of Rabies control, General Directorate of Veterinary Services (vaccinated dogs)

# Evolution of human rabies and dog vaccination: 1983 to 1993

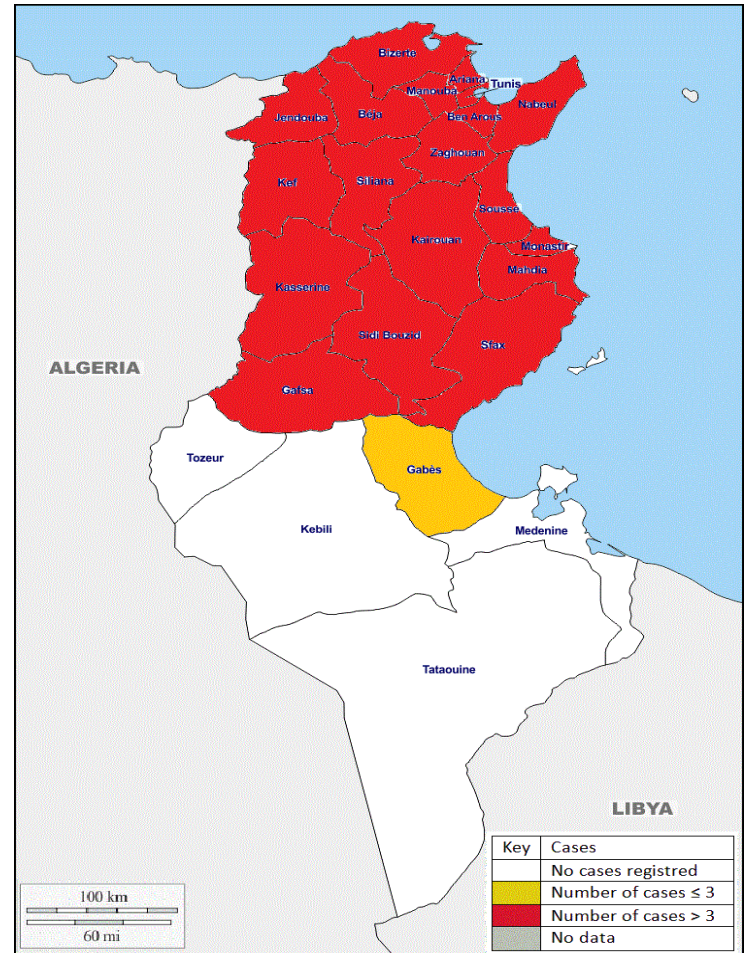
Vaccinated dogs

Human cases



## The situation in 1992:

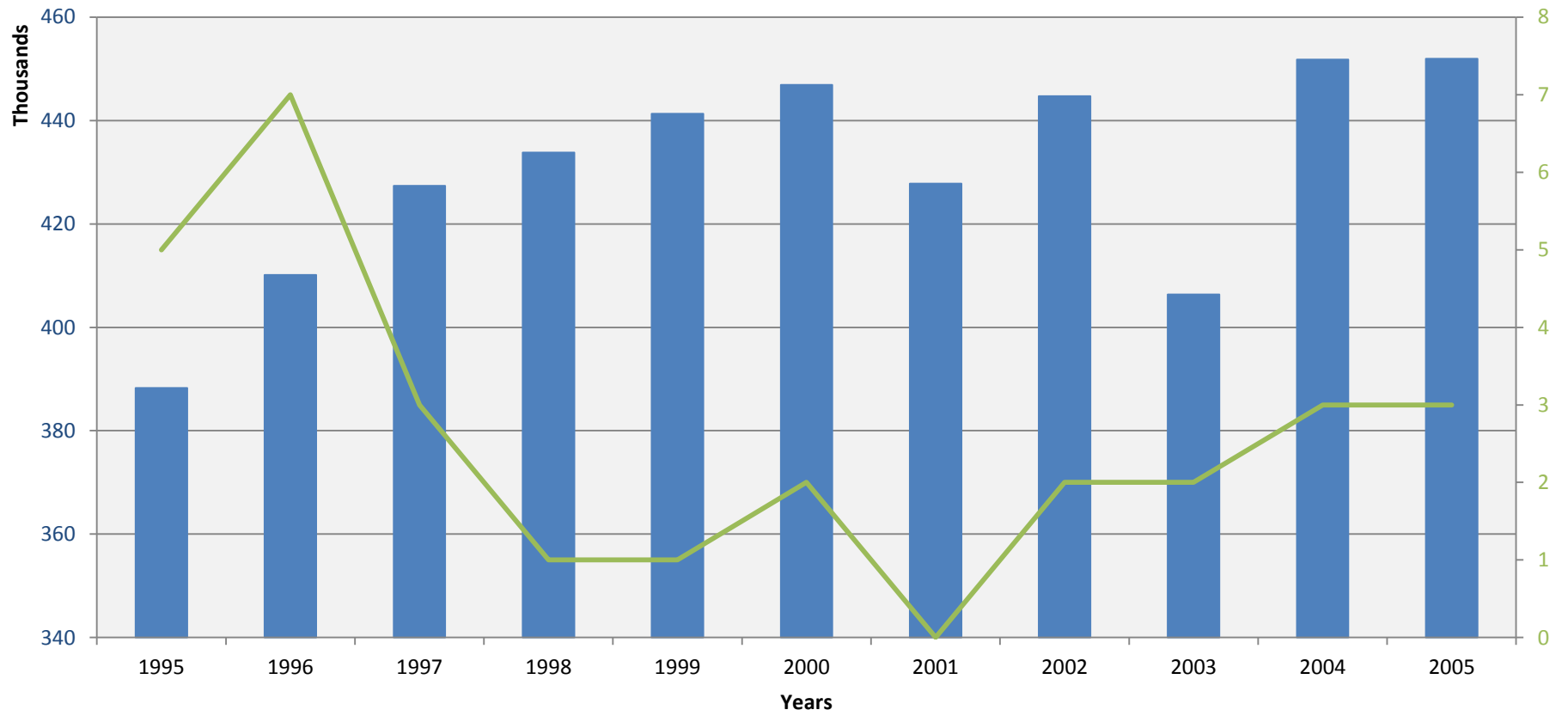
- 581 rabid animals
- 356 rabid dogs



# Evolution of human rabies and dog vaccination: 1995 to 2005

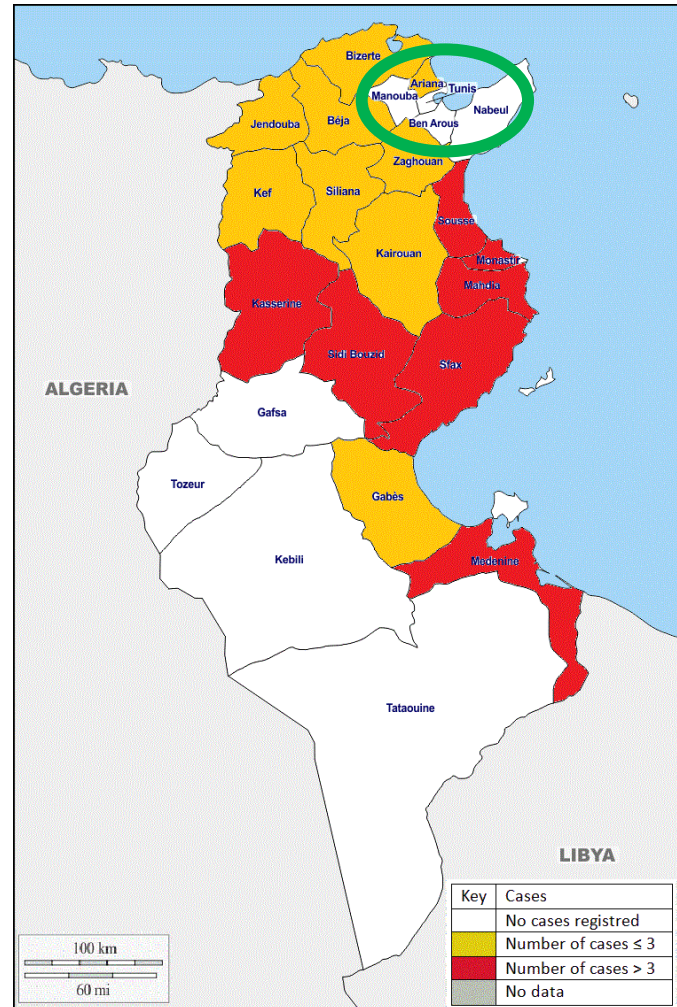
Vaccinated dogs

Human cases



- Maintenance of canine vaccination
- => **Zero** human rabies in 2001 and 2009

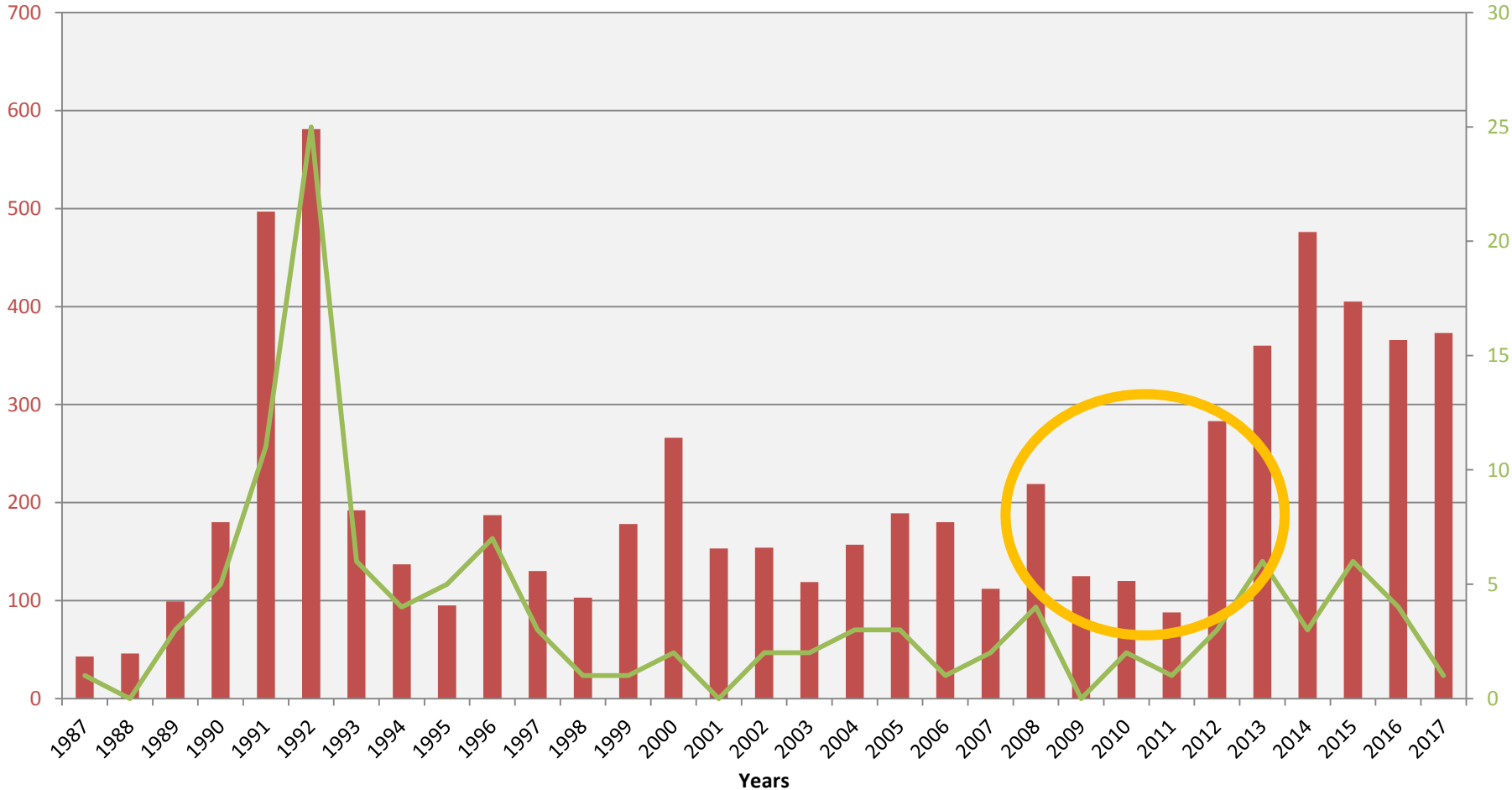
- 2004 to 2011:
- Above 3 animal cases per year
- 5 governorates

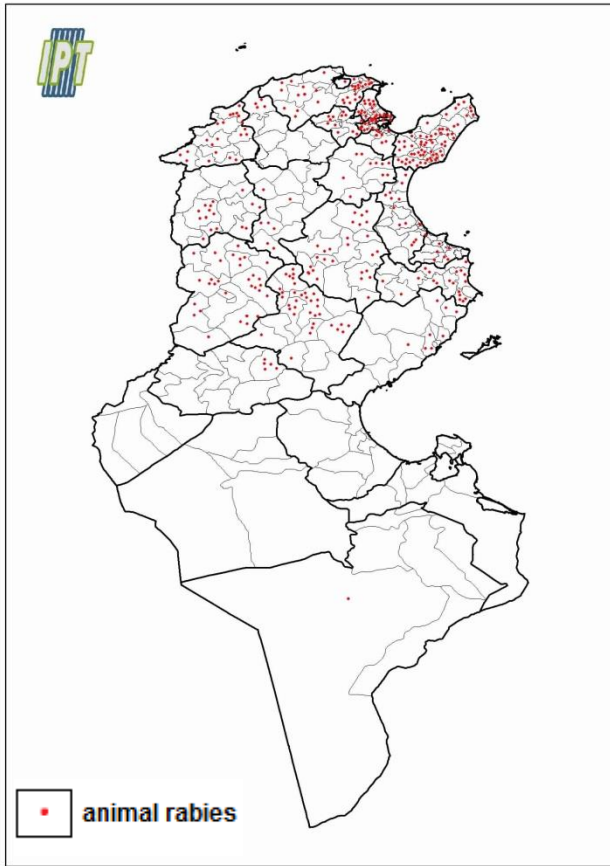


# Evolution of animal and human rabies from 1987 to 2017 in Tunisia

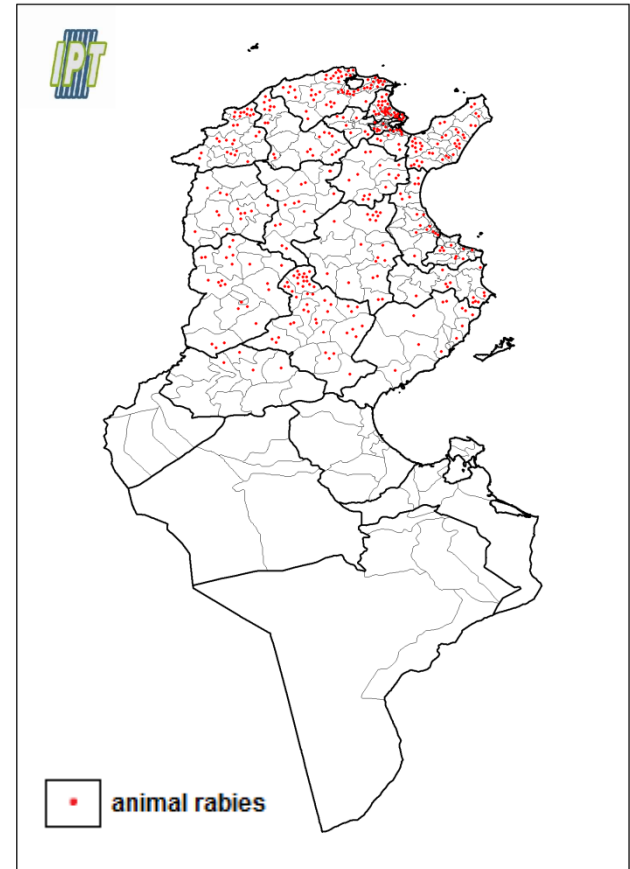
Animal cases

Human cases



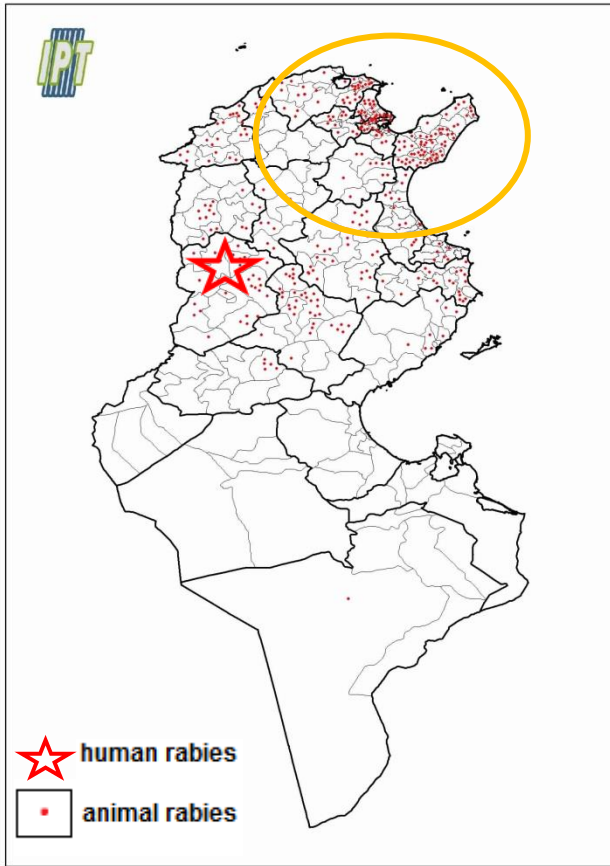


2017

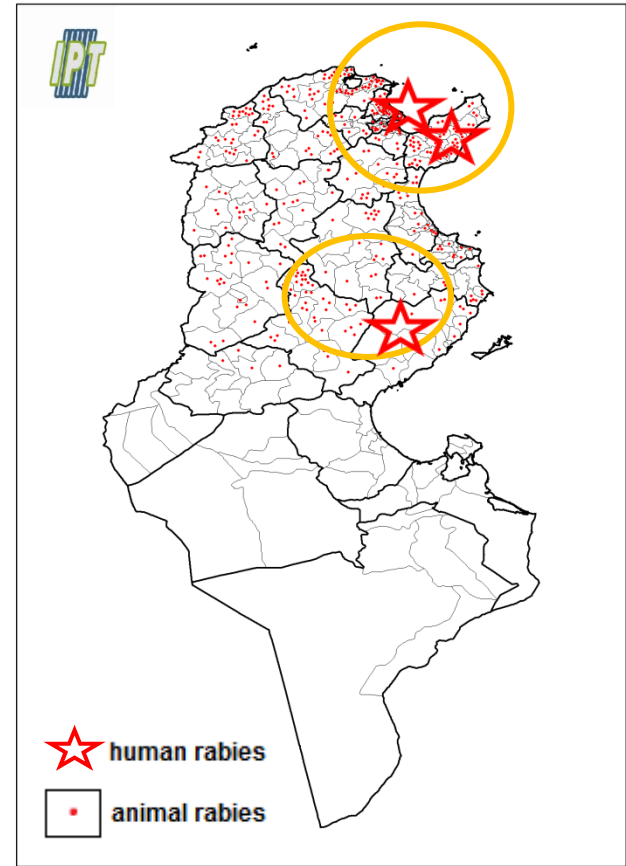


2018





2017



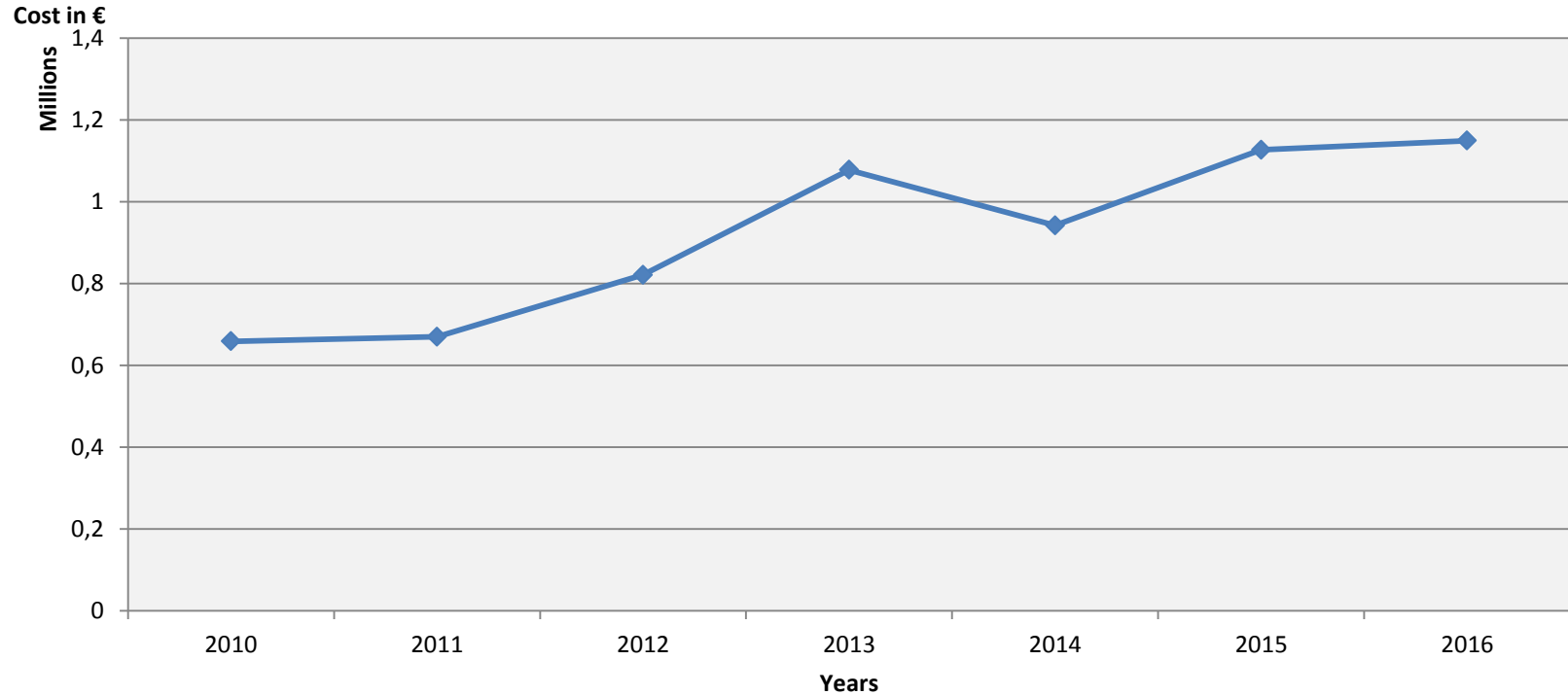
2018

# Economic impact

Year	Rabid cattle	Economic cost (€)
2010	13	21 450
2011	10	16 500
2012	51	84 150
2013	94	155 100
2014	88	145 200
2015	79	130 350
2016	76	125 400
2017	77	127 050
2018	73	120 450

# Economic impact

PEP cost in Tunisia: 2010 - 2016



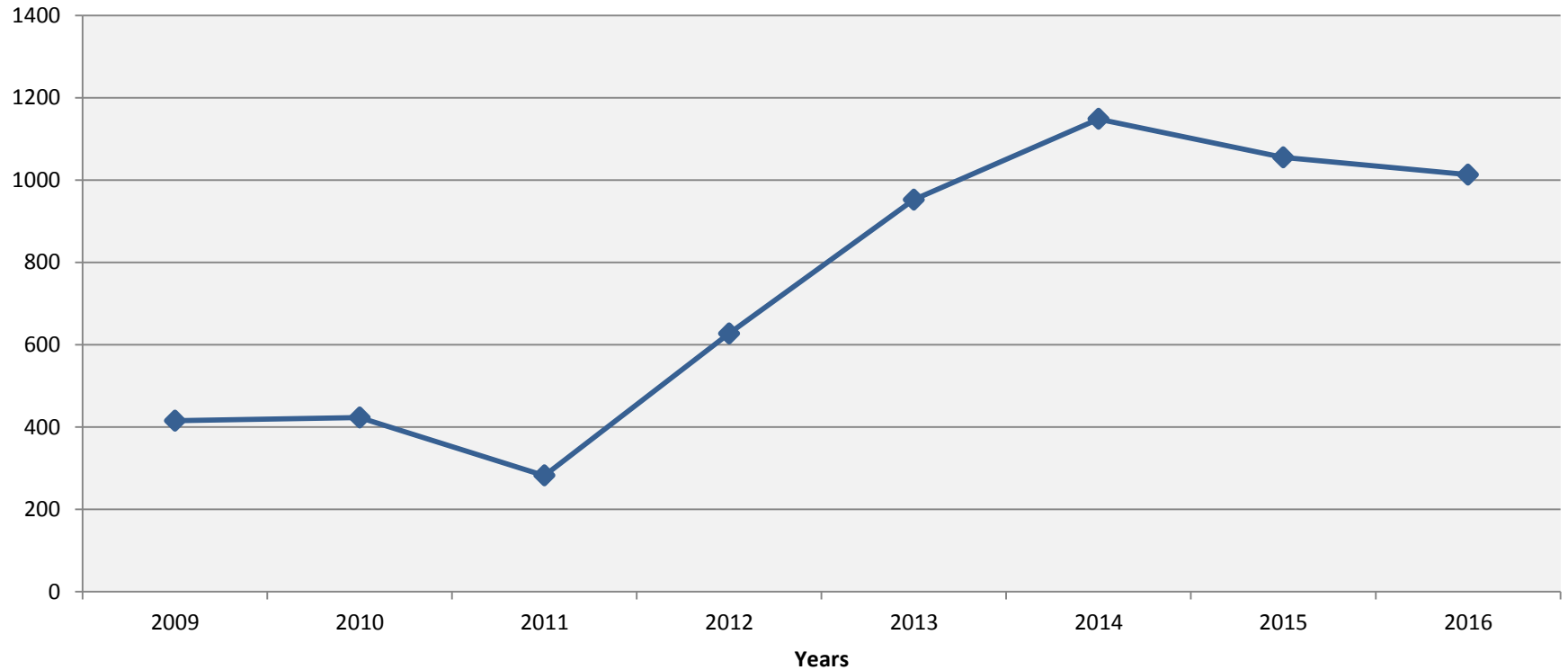
## Latest data

- First semester 2019 (551 samples) :
- **205** rabid animals
- **128** rabid dogs
- **2** human cases: **1** confirmed by laboratory

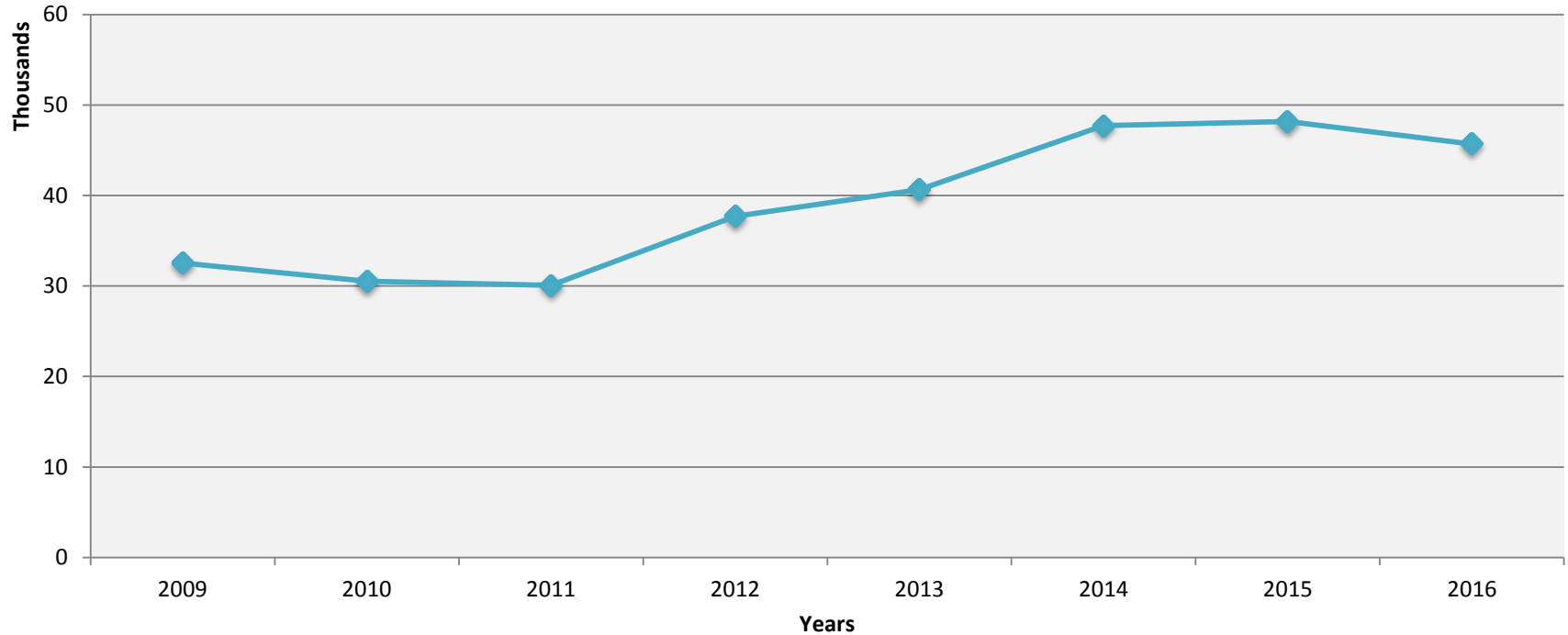
# Summary



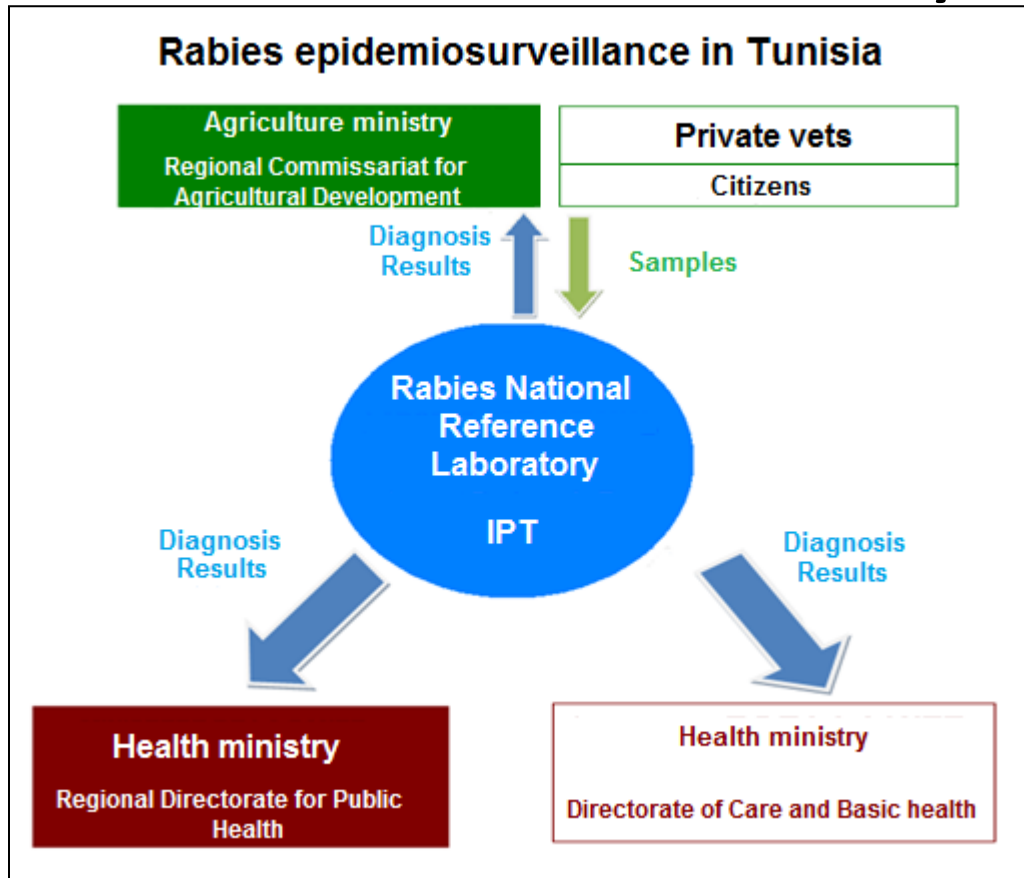
# Evolution of the number of samples



# Evolution of PEP for contaminated persons



# Role of Rabies Laboratory - IPT





Thank you for your attention

