

RABIES IN TUNISIA:

Epidemiology and Control

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Geographical Location & demographics



- **Tunisia**

- 10982,754

Habitants (7/2014)

- 65,9 %

Urban zones

- 34,1 %

Rural zones



***NATIONAL PROGRAM OF
RABIES CONTROL
(NPRC)***

National Program of Rabies Control (NPRC, since 1982)

➤ **Strategy :**

- Mass vaccination of dogs : *Ministry of Agriculture*
- Prevention of Human Rabies : *Ministry of Health*
- Control of dog population : *Ministry of Interior*

National Program of Rabies Control (NPRC)

➤ **Management :**

- ❖ National Multidisciplinary Commission of Rabies Control (physician, veterinary, public collectivity ...)
- ❖ Regional and Local Committees in each departement (Epidemiological Bulletin/twice a year)

One Health concept

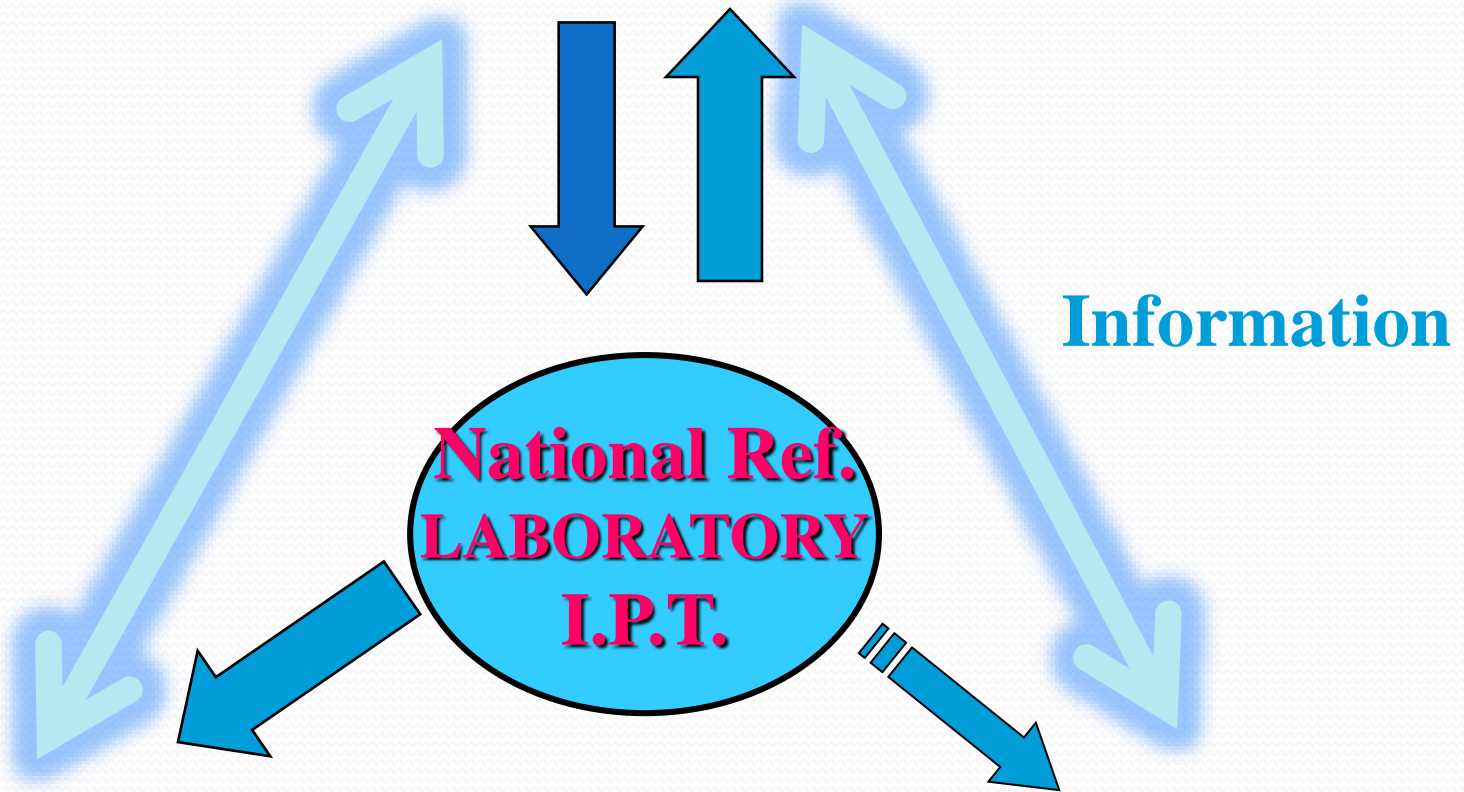
National Program of Rabies Control (NPRC)

➤ **Indicators :**

- ❖ Dog vaccination coverage (62.5 % in 2013) and dog population management
- ❖ Post-Exposure Prophylaxis rate (482/100.000 h)
- ❖ Incidence of Human and Animal Rabies

Epidemiological surveillance

VETERINARY
Specimen Collect



Medical Health
Primary Health Centers

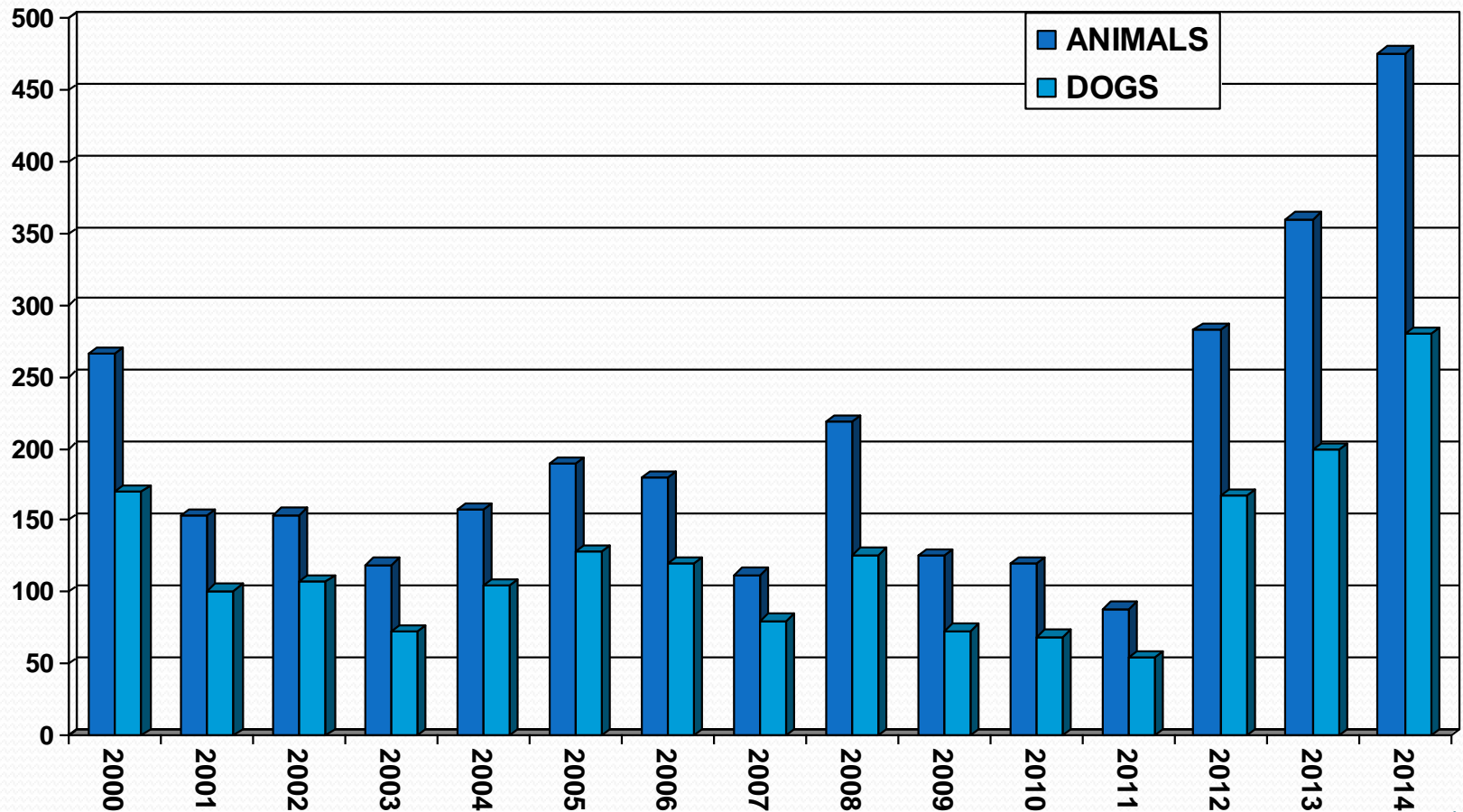
Public Collectivities
(Control of Dog Population) 8



ANIMAL RABIES

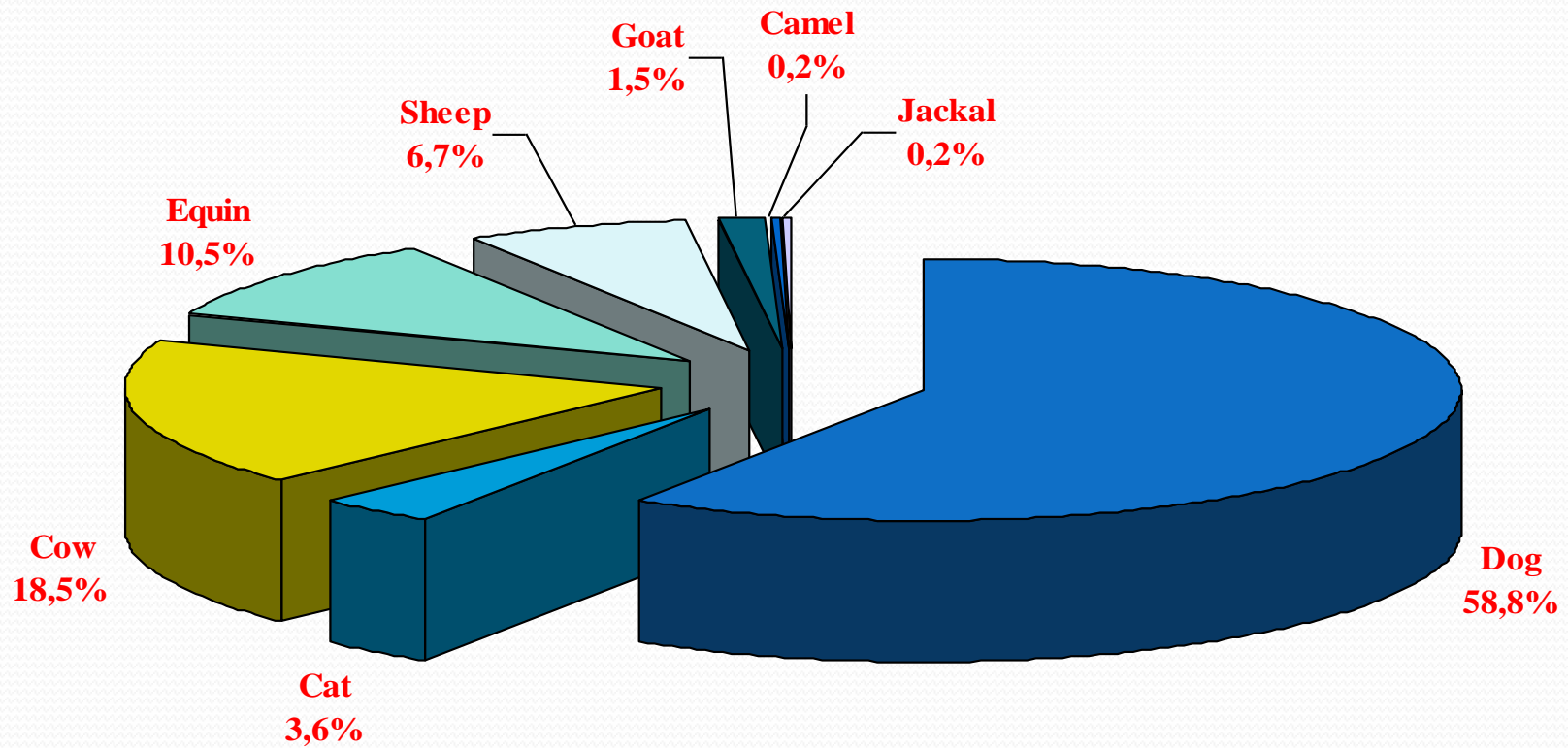
Animal Rabies :

Incidence of Animal Rabies (2000 - 2014)



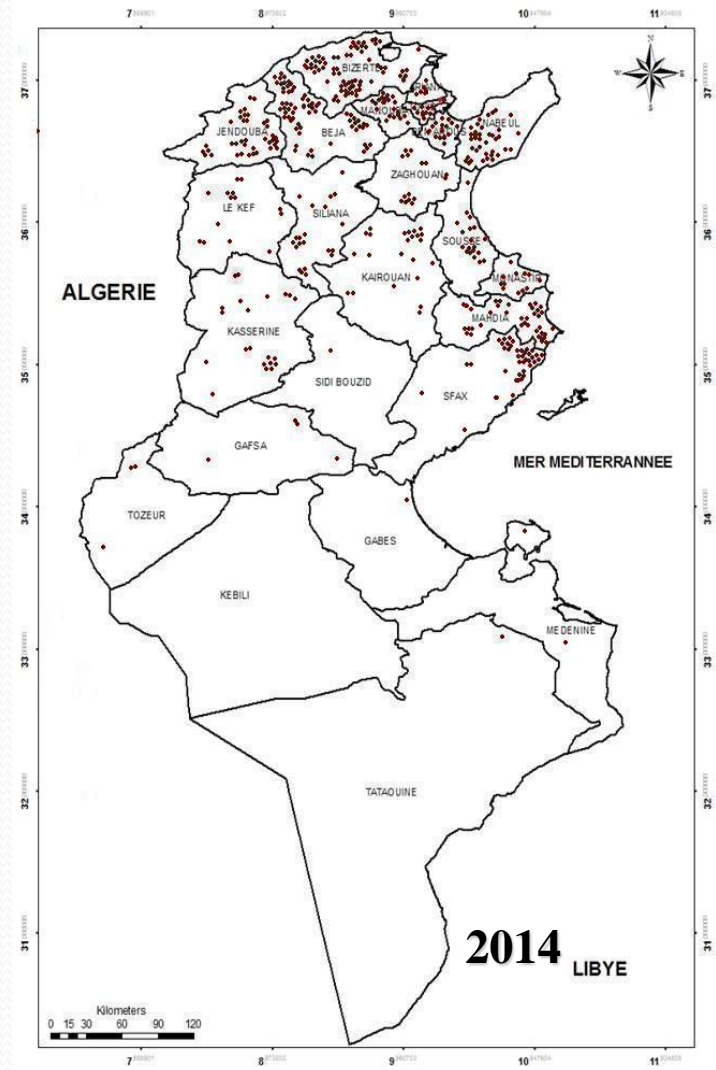
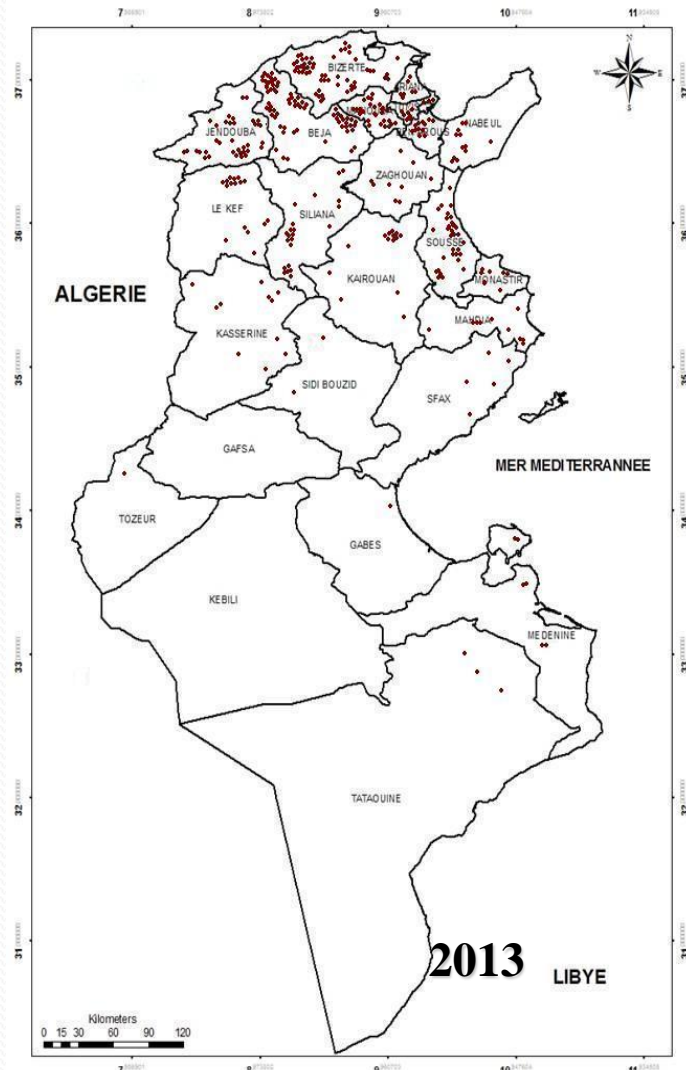
Animal Rabies :

Species affected (2014)



Animal Rabies :

Geographical Distribution : 2013 & 2014



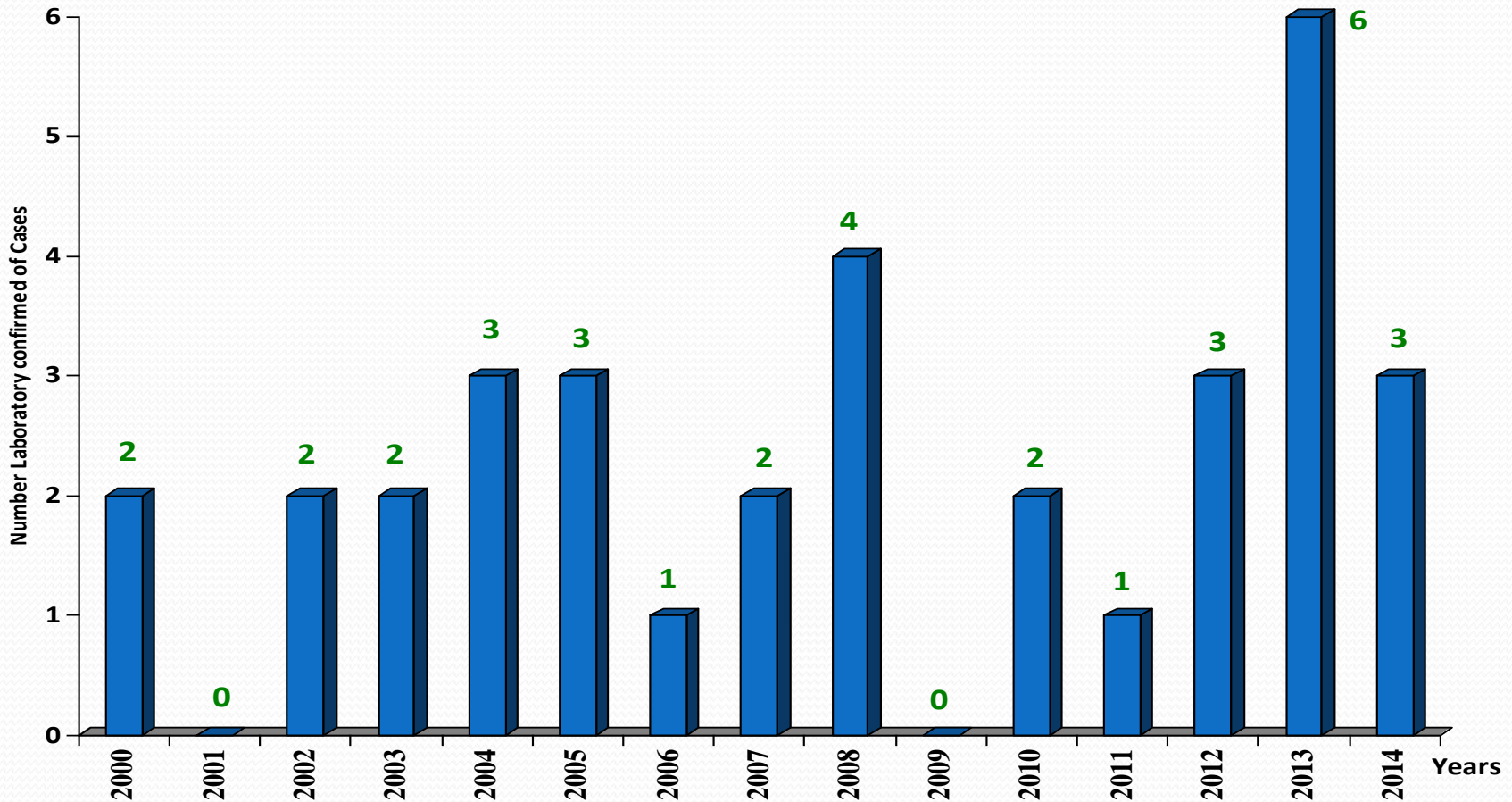


HUMAN RABIES

Epidemiology of Human Rabies

- **Rabies is Notifiable Disease :**
 - *Since 1969 (law 69/53 of 29/7/1969)*
Autopsy for each rabies suspected death
 - *Role of National Commission of control against rabies*
- **All cases are confirmed by Laboratory :**
 - *Rabies laboratory of IPT*
 - *Since 1961*
- **Only **One** laboratory for diagnostic in the country :**
Methods used : **FAT + RTCIT**

Incidence of Human Rabies : *2000 - 2014*



Prophylaxy : pre-exposure

- **Preventive vaccination:**
 - *Obligatory* :
 - staff of rabies Laboratoty
 - staff of mass vaccination campaing
 - *Vaccine* : supplied by the Ministry of Health

Prophylaxy : post-exposure

- **Rabies Immunoglobuline (RIG)**
 - Type : Equine (Fab'2)
 - Availability : always available
 - 20 000 vials / year
 - Free of charge

Prophylaxy : post-exposure

- **Rabies Vaccine :**

- Vaccine used: Cell Culture (PCEC, Vero Cells Vaccine)
- Origin: importation
- Availability: always available
- Protocol used: Essen / Zagheb
- Average : 2,4 doses / PEP ; 100 000 doses / year
- Free of charge

Prophylaxy : post-exposure

- **Structures :**
 - Number of centers : 206 specific centres
(+ hospital emergency services) = **360** (total PEP c.)
 - Localisation : *All regions of country*
 - Management : *Ministry of health*

Prophylaxy : post-exposure

- **Information of Public :**
 - Risk of Rabies
 - Location of PEP Centers
 - Tools :
 - Health services
 - Posters, leaflets
 - Media: prevention spots (Tv, Radio)

Conclusion

- **Critical points to improve :**
 - ✓ **Improvement of vaccination coverage of dogs (actually 50 % - 60 % ; Objective: to reach 70 % of canine population)**
 - ✓ **Better management of dog's population**
 - ✓ **Improvement of education and public awareness about rabies**
 - ✓ **Rigorous application for recommendations of PEP protocols**



***THANKS
FOR YOUR ATTENTION***