## Animal Rabies: Is it possible to get rid?

#### Wirongrong Hoonsuwan, D.V.M.

Bureau of Disease Control and Veterinary services,

Department of Livestock Development,

Ministry of Agriculture and Cooperatives

## History and background on animal rabies

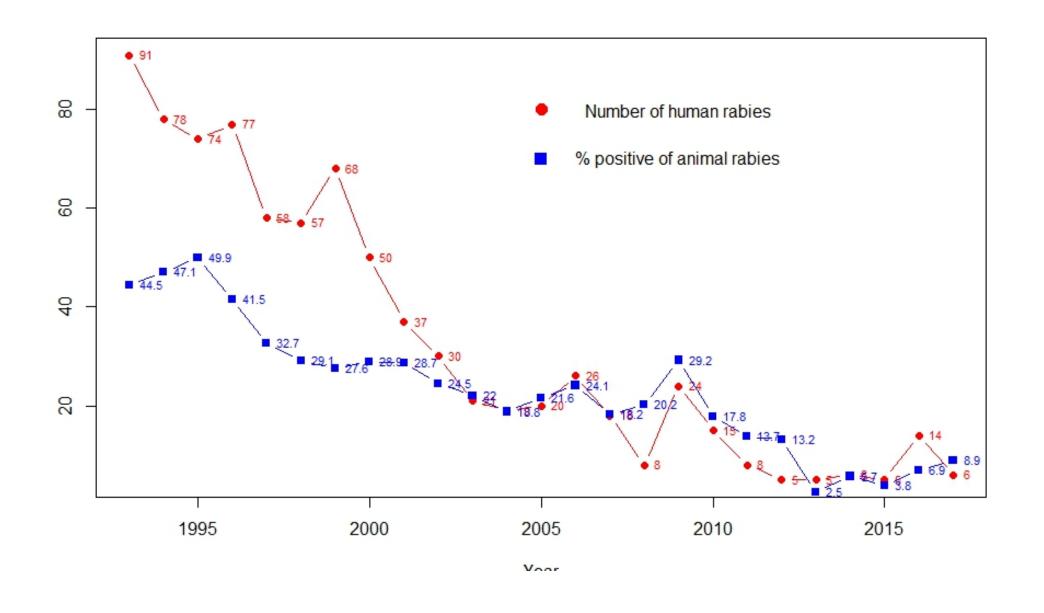
- Rabies is prioritized to be an important zoonotic disease that causes public health impact in Thailand
- Thailand spent more than 30 million\$ per year to control rabies in human and animal

Rabies is notifiable disease both in human and animal

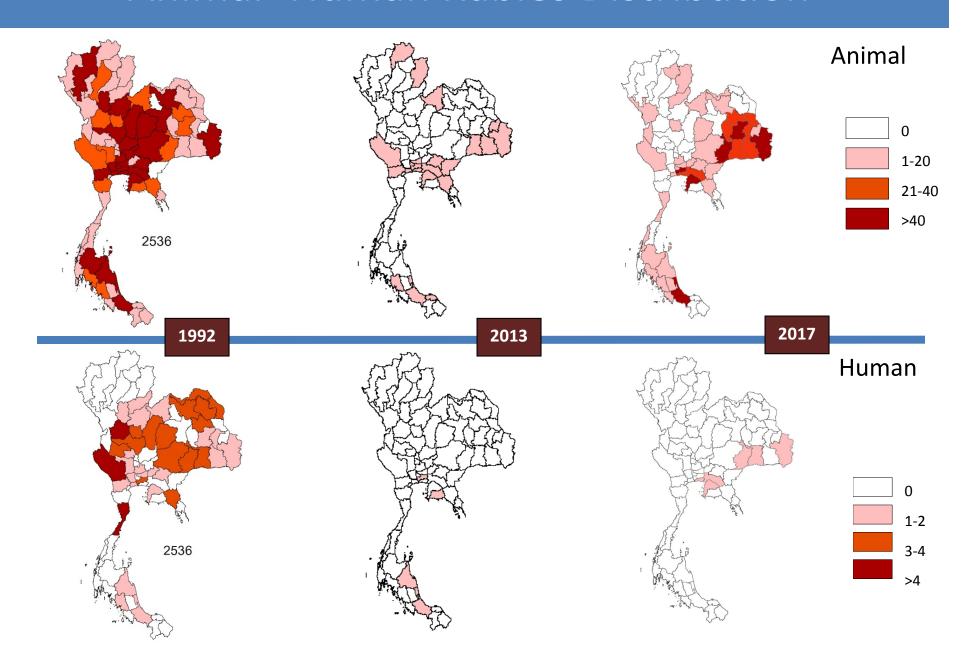
## History and background on animal rabies

- Strengthened partnership between Ministry of Agriculture and Cooperatives, Ministry of Public Health, local administrative organization, universities and other relevant organizations to tackle Rabies.
- Since 1992, Rabies situation has been decreasing and Thailand aims to eliminate Rabies from the country by the year 2020.

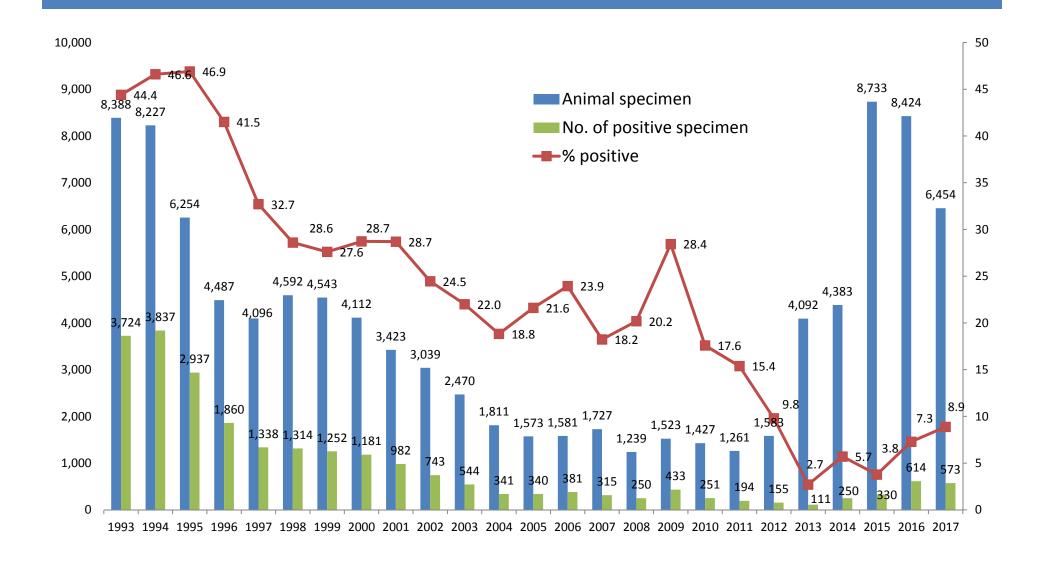
# RABIES SITUATION during 1993-2017



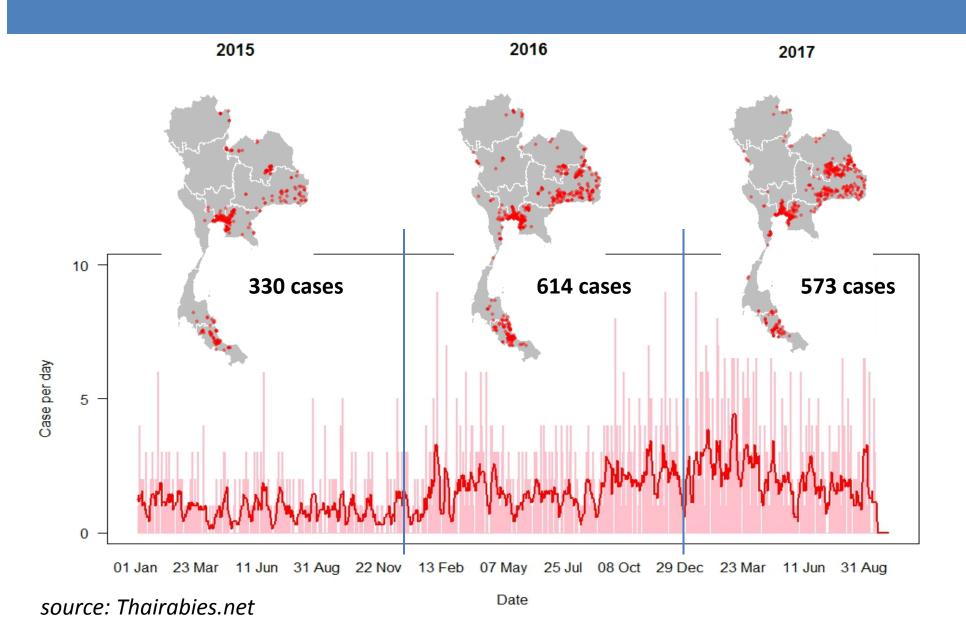
### Animal -Human Rabies Distribution



# Animal rabies situation during 1993-2017

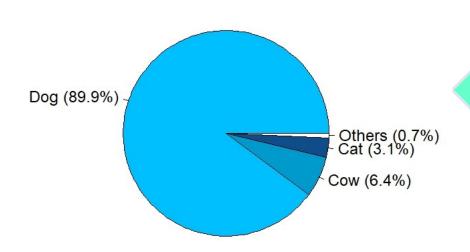


### Spatio -temporal distribution of 3-year animal rabies



# Animals rabies positive (2015-2017) by type and Status

Type of animal rabies

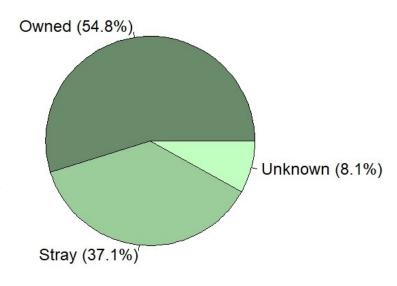


### **Status of animal rabies**

- Owned 54.8 %
- Stray 37.1 %
- •Unknown 8.1%

### Type of animal rabies

- Dog 89.9 %
- Cow 6.4 %
- Cat 3.1 %



source: Thairabies.net

### Animal rabies situation

- Dogs are still main reservoir
- Occurs through the year
- Occurs in animals of all age
- Most of them (even owned-dog) were not vaccinated.
- Furious type are still the main obvious symptoms.

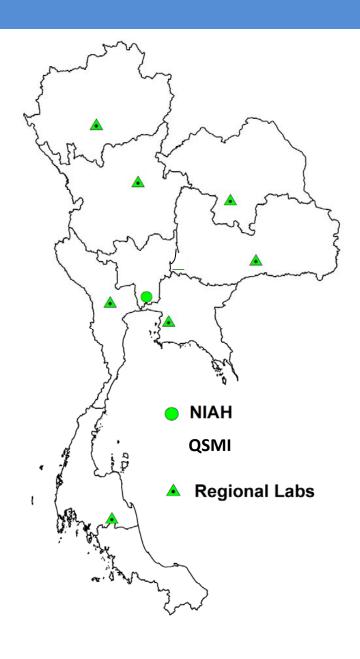
### Risk areas of animal rabies in Thailand in 2017



The high risk areas of animal rabies in Thailand in 2017

- were mostly distributed in the Central, Northeast, and South of Thailand
- Influenced by several factors such as dog population and vaccine coverage

# Animal rabies laboratory diagnosis



- Animal rabies laboratory diagnosis
  - 8 DLD animal rabies diagnostic laboratories
  - Queen Saowabha Memorial Institute (QSMI)
- submit all samples from suspected cases.

# Infrastructure of DLD for Animal Health Activities

**Provinces Planning unit** Bureau of Disease control for disease and Veterinary services prevention and control Regional Livestock Offices (9 RLOs) Districts **Implementing units** for disease **Provincial Livestock Offices** prevention and (76 PLOs) control District Livestock Offices (888 DLOs) 0 75 150

# Prevention and control policy on animal rabies

**Survey and registration of dogs**: To implement dog registration campaign by www.thairabies.net.

Vaccination: To ensure at least 80 percent of animal rabies vaccination coverage among animal populations, and 100 percent coverage in high-risk areas (rabies incidence reported).

: To secure enough animals rabies vaccines for prevention by local administrative organizations, private clinics and DLD supplies animals rabies vaccines for outbreak control.
Rabies vaccination campaign has been performed annually in March and April

### Animal rabies control activities

### Dog population control

- about 7 millions dog population and about 10% are stray dogs.
- Birth control by sterilization in both male and female dogs through livestock mobile services and sterilization campaign in provinces.



### Animal rabies control activities

#### Rabies surveillance

- -rabies surveillance system and network.
  - -conduct passive and active surveillance.
  - -online reporting system: Thai rabies net (<u>www.thairabies.net</u>)

### Rabies free zone

-establish Rabies free zone

Rapid outbreak response to animal rabies cases

# Outbreak management

# Disease investigation conducted by human health and animal health after disease notification



- Verification and investigation
- Quarantine and control movement
- Ring vaccination (3 km around index cases)
- Collaboration with other units such as Ministry of Public Health
- Announcement and publication about rabies information
- Control dog and cat population
- Surveillance (6 month)

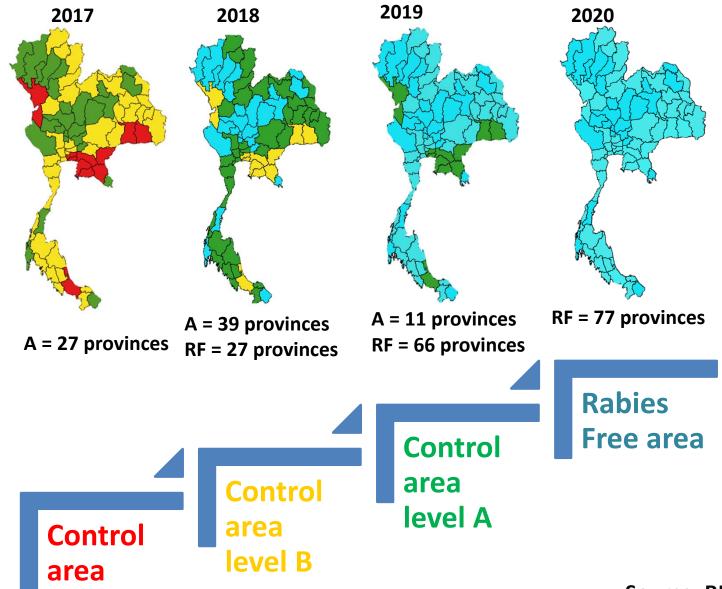
# Is it possible to get rid animal rabies?

# Problems and Challenge

- Dog vaccination coverage
- Dog population management (stray dog control)
- Dog population survey and registration
- -Responsible dog ownership
- —Public awareness (behavior change communication)



### Road Map: Rabies Free Zone 2017 - 2020



level C

Source: BDVS, DLD