

Rabies Control and Prevention (Thungsong Model)

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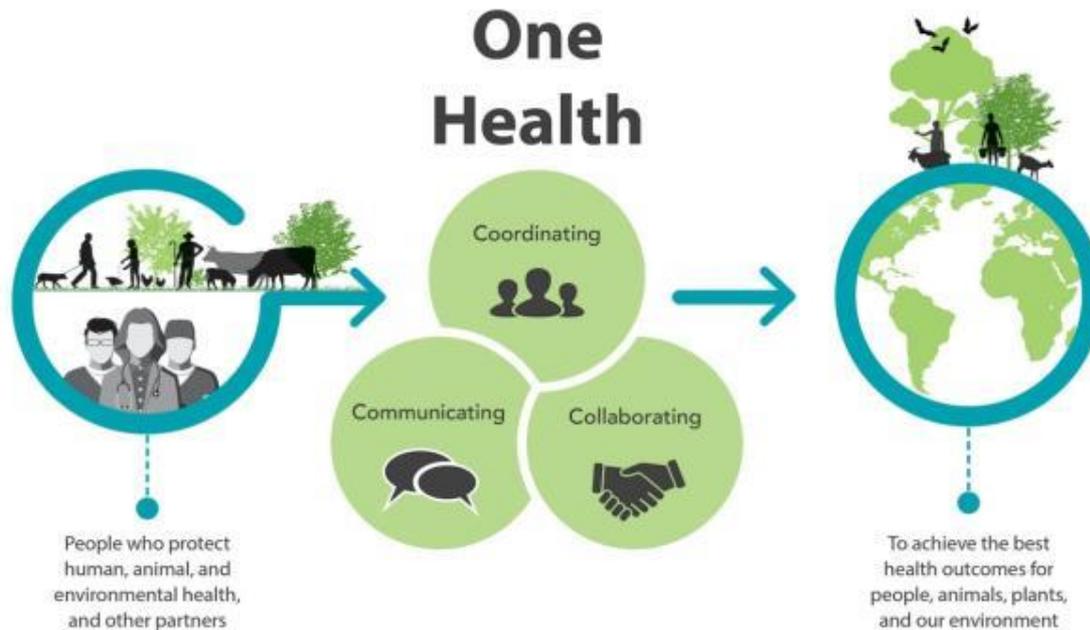
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Outline

- One Health basic: One Health approach commitment and its operationalize
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- Rabies situation in Thungsong District, Nakhon Si Thammarat Province, Thailand
- Thungsong Model activities
- Lesson learnt and recommendations
- Plan to continue on improved-activities

One Health basic:

One Health approach commitment and its operationalize



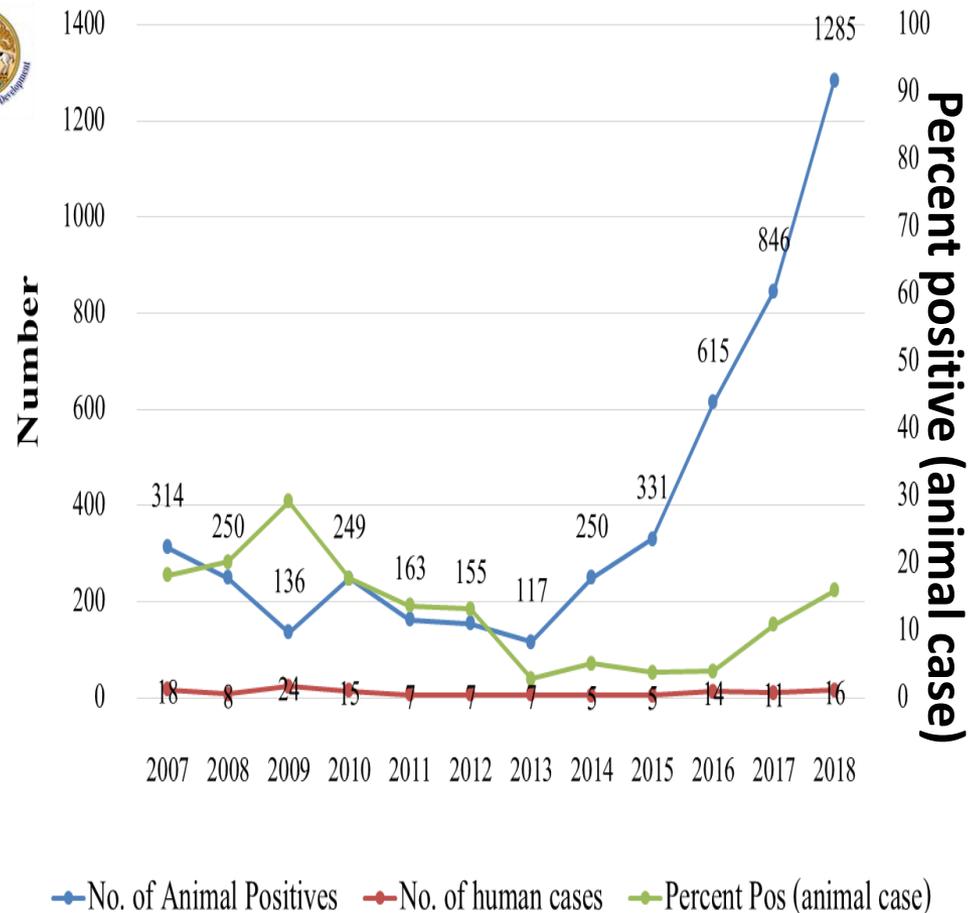
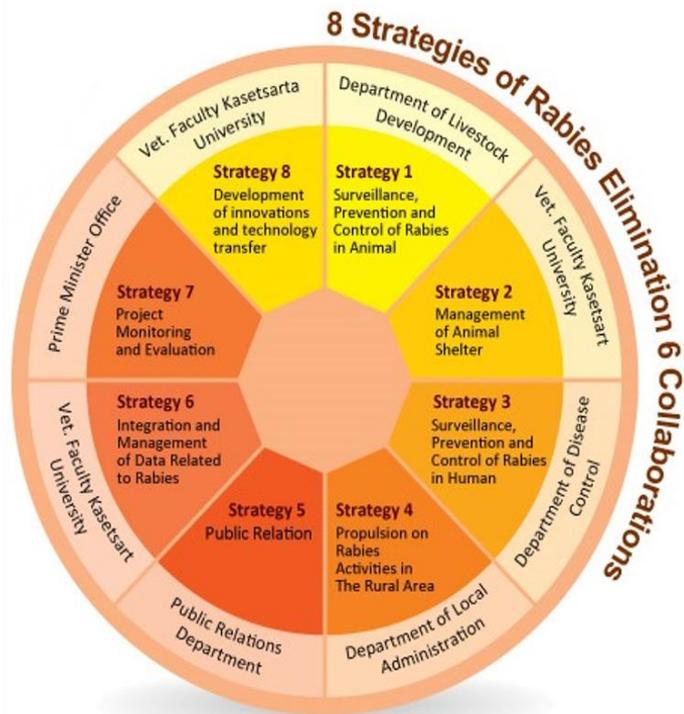
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One Health approach has been wide-ranging committed, its operationalization has so far proven challenging,

Establish /improve / strengthening the operationalization

One health approach of rabies elimination and rabies situation in Thailand, 2007-2018



Rabies situation in Thungsong District, Nakhon Si Thammarat Province, Thailand

- Rabies cases
 - Human (2002, 2005, 2012)
 - Animal (all except 2013)
- Located in the province classified as rabies high risk zone
- The municipality is well known in engaging community to manage local problems

Thungsong Model activities

Strengthening current measures in 5 components

1. Dog and cat population survey
2. Dog and cat population management
3. Rabies vaccination campaign improvement
4. Education and advocacy campaign improvement
5. Integrated bite case management implementation

(2) Dog and cat population management

Conduct dogs and cats neutering programme

- Once a month from Nov 2018 – Aug 2019 at Municipal Hall
- Neutering 15 male dogs; 64 female dogs; Total 79 dogs
- Neutering 54 male cats; 183 female cats; Total 237 cats
- Vaccinate 130 dogs and 303 cats

(3) Rabies vaccination campaign improvement

Monitor rabies antibody titer derived from vaccination campaign

- Collect blood from dogs \geq 3-month old, demography, vaccine history
- Examine rabies antibodies titers using ELISA assay (Platelia^R, BIORAD LABORATORIES, USA); protective titer >0.5
- 320 dogs from 142 households; 207 dogs (64.7%) have protective titers
- 71 vaccinated dogs (22.2%) do not have protective titer
- History of rabies vaccination can be confirmed in few households

(4) Education and advocacy campaign improvement

1. *Deliver information, education and communication (IEC) materials*
2. *Organize schools and community education campaign*
3. *Conduct Knowledge, Attitude and Practices (KAP) survey in schools and community*



(4) Education and advocacy campaign improvement: outputs/outcomes

(1)

1. *Deliver rabies information, education and communication (IEC):*

- Give brochures of rabies information to all household,
- Give education via radio and talk during community meetings

2. *Organize education campaign*

- 12 schools (missing 1) ; 4073 students
- 4 communities (all 4 temples); 205 adults most elderly

2. *Conduct Knowledge, Attitude and Practices (KAP) survey in schools and community:*

- school students (n=432),
- elderly attend temples (n=116),
- any persons attend health care centers of any causes (n=690)

(4) Education and advocacy campaign improvement: outputs/outcomes

(2)

Knowledge, attitude and practices that were not reach 80% satisfaction

Student: rabies occur only in summers and in stray animals, only furious form, will wait for vaccination services in dog from officers, 1 dose of vaccine can protect animals for several years, will not send suspect rabies for laboratory confirmation, not necessary to get full course of treatment

Elderly: same as students plus considered abandon dogs is a good deed and no need to seek post exposure treatment if bitten by family dogs

(4) Education and advocacy campaign improvement: outputs/outcomes

(3)

Knowledge, attitude and practices that were not reach 80% satisfaction

General : rabies is not a fatal disease, rabies does not occur in dog younger than 3 months old, it is not necessary to vaccinate their owned dogs, will not seek treatment if bitten by stray dogs, dogs do not need treatment if bitten by unknown dogs

(5) Integrated bite case management implementation

Facilitate integrated bite case management (IBCM)

- Thungsong Municipality organized a 2-day workshop on “application of Por Dee Dee” in Feb 2019, public health volunteers can report bite cases through the application.
- **No report of bite case through the “application of Por Dee Dee”**

Lesson learnt and recommendations (1)

- **Different results in dog and cat population from different methods as well as time-consume**
 - Improve the quality of method and personal skills and responsible
 - Apply digital technology to support data collection
- **Access of dog population management by neutering is convenience for cats more than dogs**
 - Conduct a service in each community
- **Free rabies vaccination campaign did not reached target level**
 - limit the time of campaign, deliver to households , increase the number of trained vaccinators, carry an two-round campaign each year

Lesson learnt and recommendations

(2)

- **Lack of knowledge, have negative attitudes and practices related with rabies prevention in particular issues**
 - Increase the coverage of rabies education
 - Increase knowledge particularly in those identified as lacking/negative
 - Increase frequency of education through the most familiar channels
i.e. TV and public health

Lesson learnt and recommendations

(3)

- **No report of bite case via application**
 - Activate and encourage public health volunteers to report by frequent evaluation
 - Announce to public where to report case of dog bite
 - Increase awareness of rabies among public

Plan to continue on improved-activities

1. Conduct rabies vaccination campaign and achieve it target in 2 weeks to 1 months
2. Use application and survey method support current dog population census
3. Meet the communities directly and listening to their voice to work together
4. Improve the stakeholders quality and frequency of meetings for quick information sharing and solving any difficulties together
5. Circulate dog bite cases to stakeholders monthly to possibly early detect rabies in animals

Acknowledgements

1. FAO: Financial and technical support

2. Working Teams from

- Thungsong Municipality
- Nakhon Si Thammarat Provincial Livestock Office
- Nakhon Si Thammarat Provincial Public Health Office
- Thungsong District Public Health Office
- Thungsong Hospital
- Thungsong District Livestock Office
- Veterinary Research and Development Centre (Upper southern Region)