

A National Action Plan on TiLV in China

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Outline

1. Farmed and wild population of tilapia
2. Diagnostics
3. Surveillance: design and implementation
4. Emergency preparedness
5. TilV management and control

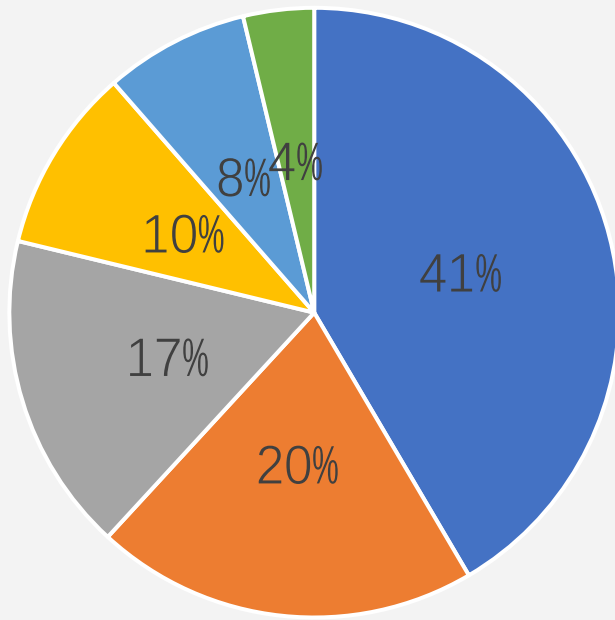


1. Farmed and wild population of tilapia

- ◆ Tilapia production : about 1.8 million tons in 2016. China has no catch wild tilapia records.
- ◆ Tilapia exports : about 520,000 tons in 2016
- ◆ Farm registry

1. Farmed and wild population of tilapia

◆ Main breeding areas :



- Guangdong
- Hainan
- Guangxi
- Yunnan
- Fujian
- other provinces



2. Diagnostics

- Diagnostic laboratories and competence
 - Molecular detection methods : RT-PCR , RT-qPCR
 - Electron microscopy
 - Cell culture
 - In situ hybridization
 - Histopathological observation
- Confirming of new emerging disease is based on Koch's Postulate
- Diagnostics tests



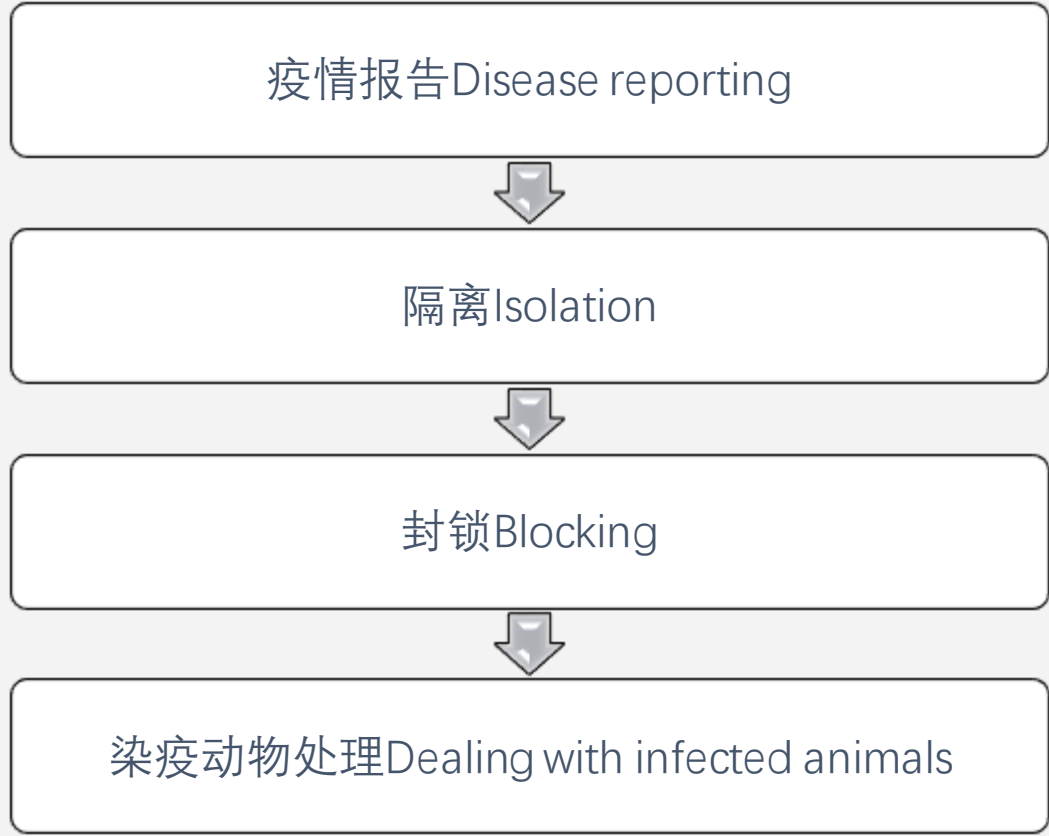
3 Surveillance

- ◆ Surveillance purpose : to confirm present status and to secure early detection of TiLV
- ◆ Populations : tilapia in farm (fingerlings and young adults)
- ◆ Clustering of diseases : every month for juvenile and young adults
- ◆ Case definition: clinical, laboratory and epidemiological

3 Surveillance

- ◆ Sampling : regular tilapia sampling at the monitoring sites during the whole year
- ◆ Disease detection : carrying out TiLV , *Streptococcus* detection of the collecting samples
- ◆ Data analysis : data analysis and risk assessment according to the test results of the detection

4 Emergency preparedness



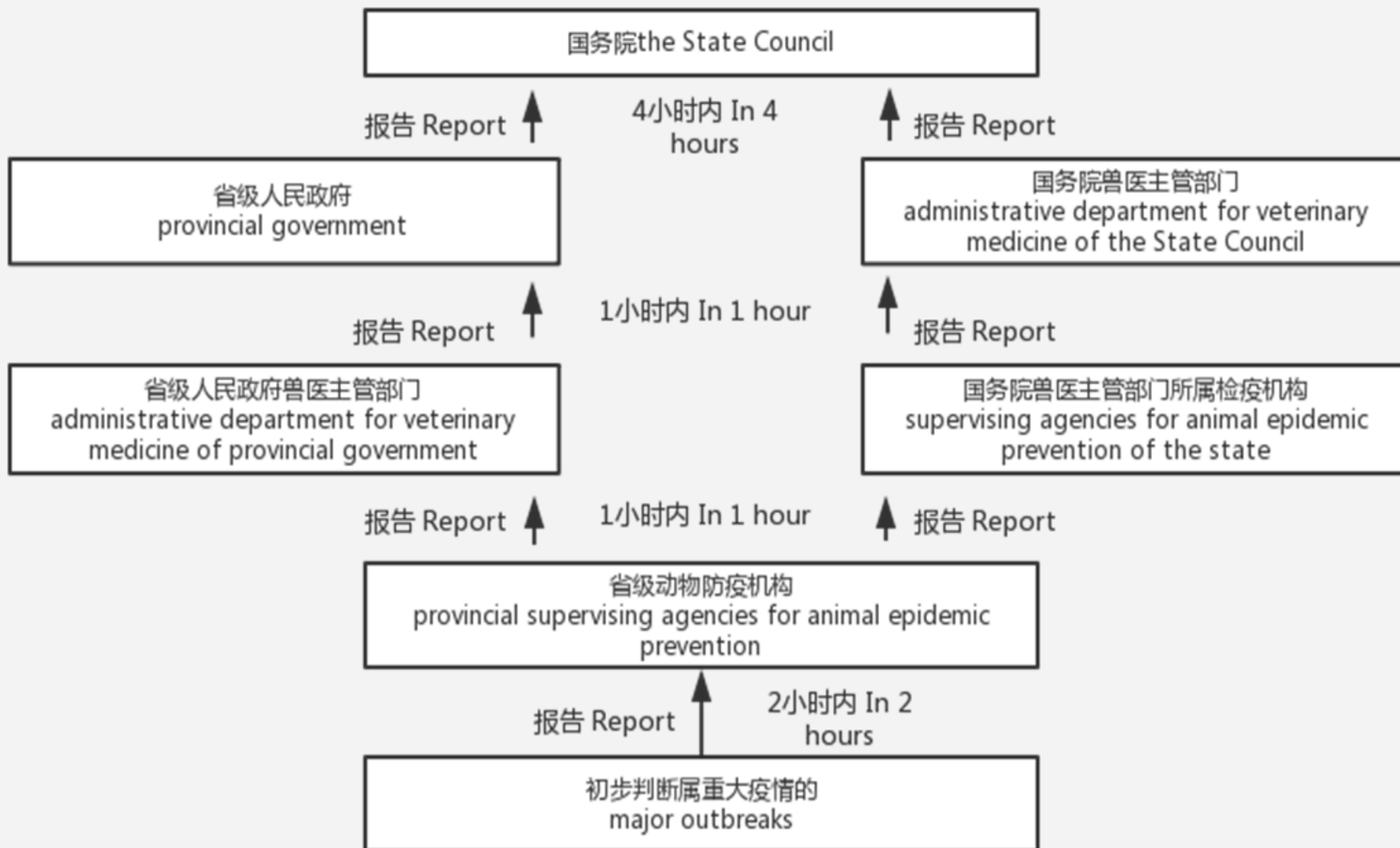
Report content

- Time and place;
- Kinds and quantity of infected animals, immunized situation, number of deaths, clinical symptoms, pathology and diagnosis
- Epidemiological situation;
- Control measures already put in place;
- Responsibility epidemic reporting unit and contact information 。



4 Emergency preparedness

Reporting procedures



4 Emergency preparedness

■ Isolation

- Separating infected farms or suspected infected farms from healthy farms, and taking necessary measures to cut off the transmission, to prevent the spread of the disease.

4 Emergency preparedness

■ Blocking

- To cut off the transmission after the outbreak of disease, ban people and animals from the epidemic area and its surrounding area

4 Emergency preparedness

■ Division of blocking areas

- Epidemic spot: Areas of infected animals
- Epidemic area: Areas with radius of 3 km centered on epidemic spot
- Risk area: Areas with radius of 3-5 km around epidemic area

4 Emergency preparedness

- Dealing with infected animals
 - Culling of infected animals
 - Treatment of infected carcasses
 - Burned
 - High temperature treatment
 - Buried deep
 - Fermentation
 - Disinfection by chemical treatment

5 TilV management and control

- Farm-level biosecurity
 - Ensure the fry/fingering quality
 - Reinforce the management , periodic sterilization of tools
 - Maintain a reasonable stocking density
 - Mixed culture and rotated culture with other species
 - Timely remove the sick and dead fish
 - harmless treatment of dead fish

5 TiLV management and control

■ Movement of live tilapia

- Make sure the transport equipment is clean and pollution-free
- Strengthen quarantine on imports and exports
- Other aspects: vaccine development

Thanks for your attention !

