



# MAINTAIN FMD FREE STATUS OF CHINESE TAIPEI

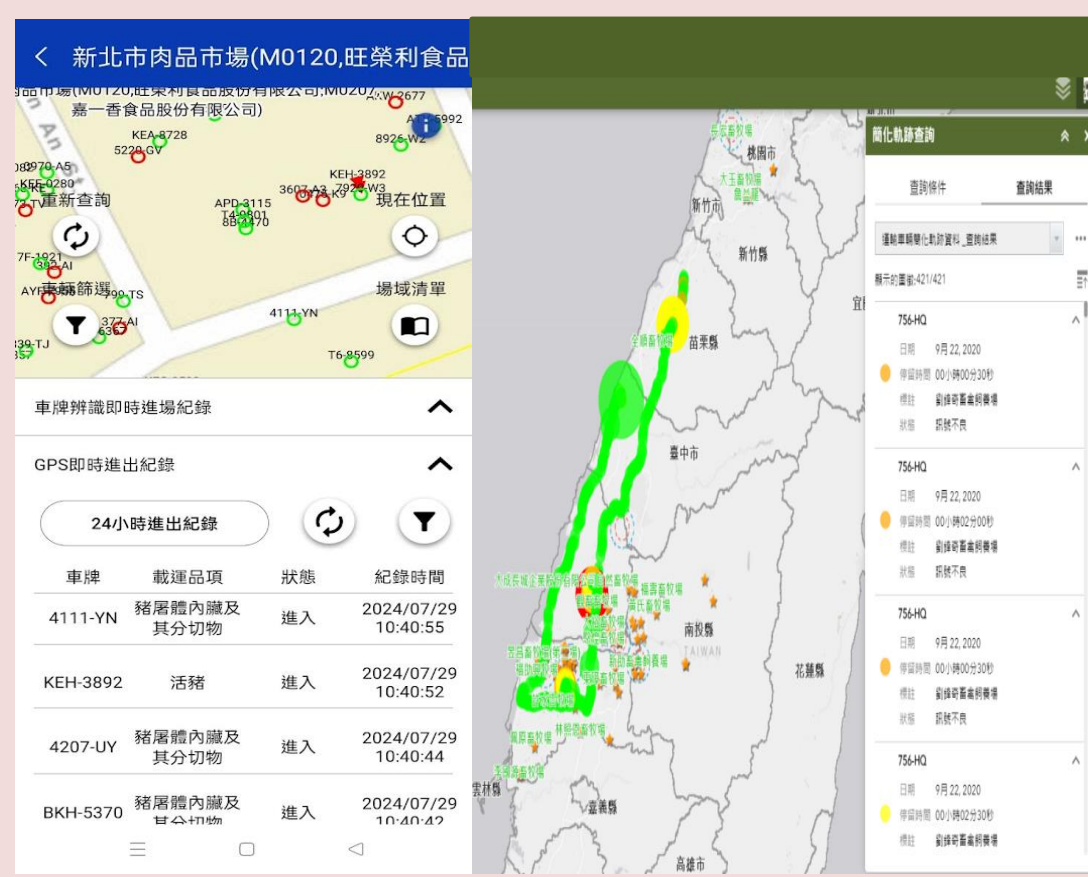


## Cheng-Ta Tsai, APHIA, Chinese Taipei

PREVENTION ACTIVITIES TO MAINTAIN FMD FREE STATUS

June 2020 FMD free area without vaccination for Taiwan, Penghu, Matsu

June 2018 FMD free area with vaccination for Kinmen



### - Entry risk assessment

- Chinese Taipei is composed of Taiwan, Penghu, Kinmen, and Matsu islands. Since it is not connected by land to neighboring countries, the risk of diseases entering mainly comes from maritime transport, air transport, and other non-normal channels (such as smuggling).

### - Surveillance

- Serological surveillance for
  - VNT
  - NSP reactors followed by clinical investigation and antigen detection
- Surveillance of wild cloven-hoofed animals

### - Quarantine and border control

- The Ministry of Agriculture (MOA) set up a Central Emergency Operation Center (CEOC) on Dec. 18, 2018 after ASF was introduced in China.
- Cross-agency coordination in implementing preventive measures, such as luggage inspections, control of food waste at international departure gates, public awareness and communication, enhanced enforcement of green line regulations, and penalties for non-compliant passengers, has been highly effective in preventing the invasion of FMD.

### - Movement control

- Statute for Prevention and Control of Infectious Animal Disease
  - Article 19 authorizes the prohibition of animal and related material movement in or out of the farm when there are risks of disease spreading.
  - Article 28 authorizes the transportation of livestock to auction markets or slaughterhouses only with the Livestock Health Statement presented by the owner or manager.
  - Article 43 authorizes fines ranging from TWD 50,000 to 1,000,000 for owners or managers who violate the above regulations.

### - Animal movement studies

- MOA amended the "Regulations for the Management of Animal Transportation" on 18 September 2020 and the "Regulations for Slaughter Operation" on 24 November 2020 to require vehicles transporting pigs and their carcasses/viscera and their parts to be equipped with a Global Positioning System (GPS).

### Active Surveillance

#### (On-farm)

- Clinical inspections
- Serological testing: 600 pig farms and 300 ruminant farms per year
- 15 serum samples per farm based on epidemiological principle

#### (Auction market)

- Clinical inspections
- Serological testing for NSP antibody on a daily basis
- 1-2 animals per original farm around 20 thousand samples/year

### Passive surveillance

Clinically suspected cases are traced back to the original farm to conduct:

- Movement restriction
- Follow-up serological and virological sampling and testing

Starting on May 20

The maximum fine for pork products mailed to Taiwan will increase to NT\$ 1 million

Recipients of intercepted international mail containing pork products sent from an area where there is an outbreak of African swine fever will be fined in accordance with the Statute for Prevention and Control of Infectious Animal Diseases

First offense NT\$200,000  
Second offense (or additional) NT\$1 million



### - Legislation

- FMD related control measures are implemented according to the "Statute for Prevention and Control of Infectious Animal Disease", its Enforcement Rules, "Vaccine Type Required and Management Measures for Eradication of Classical Swine Fever and FMD" and "Standard Operating Procedure for FMD Control"

### - Contingency Plan

- Since 2015, the major diseases of animals (FMD, ASF, HPAI, canine rabies, bovine spongiform encephalopathy and Nipah virus) were included into the "Disaster Prevention and Protection Act"

### - Laboratory diagnostic capacity

- The VRI is an ISO/IEC 17025:2017 accredited laboratory with a scope covering FMDV isolation, RT-PCR, ELISA, VNT of FMD (O type), and FMD NSP antibody test for cloven-hoofed animals. The ATRI is an accredited laboratory with FMD NSP antibody test. The accreditation is overseen by TAF.

- The testing method are WOH-recommended or internationally accepted methods. Established operating procedures meet common standards.



### - Testing of contingency plan

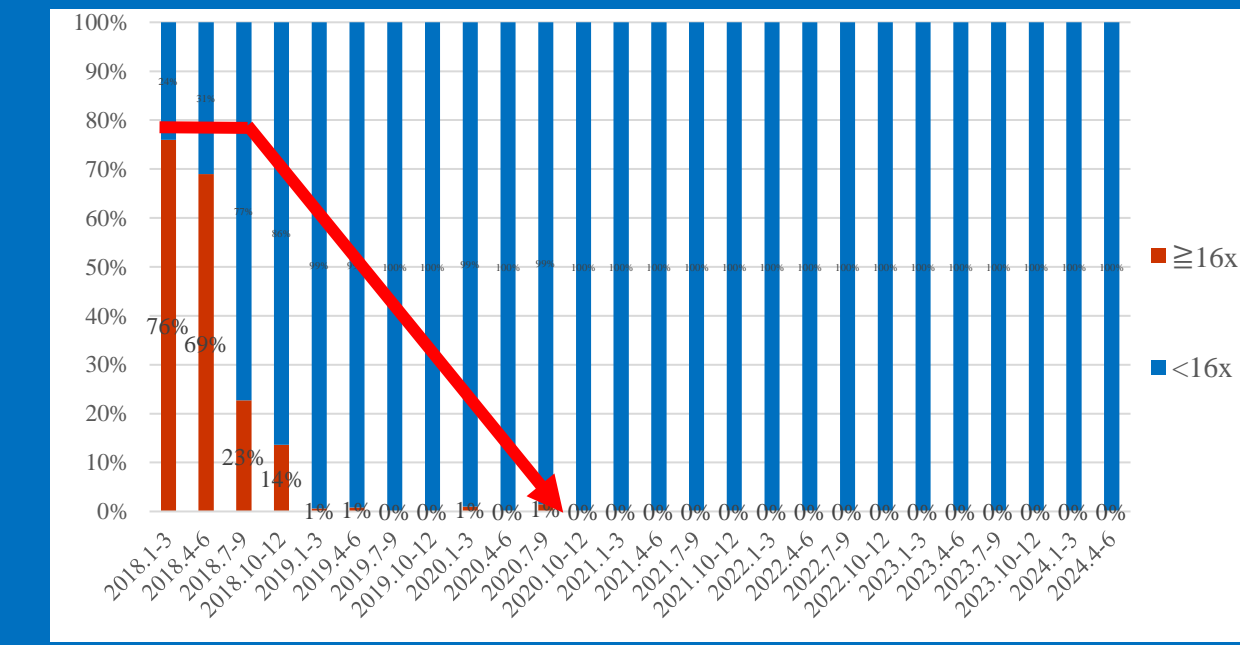
- For the preparation of the cessation of FMD vaccination, a simulation exercise on FMD was held in Tainan on 18 May 2018. Additionally, the ASF drills conducted in previous years can also help prevent the invasion of FMD and CSF.



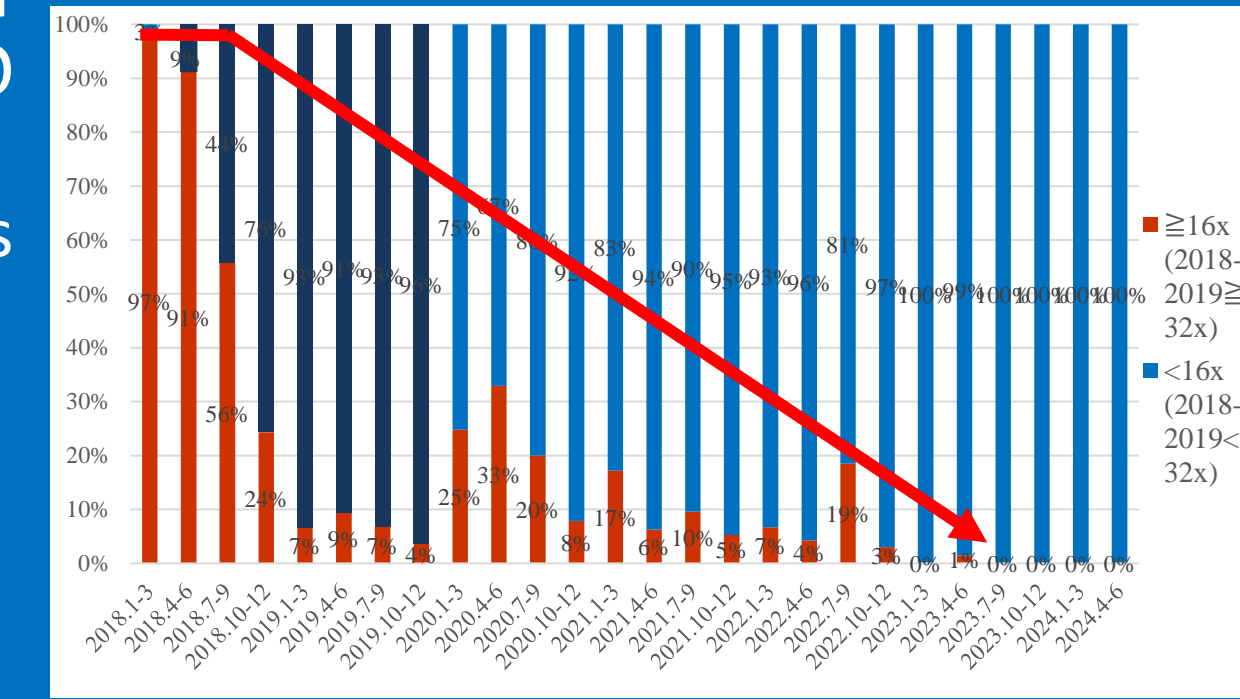
The simulation exercise on FMD was held in Tainan on 18 May 2018.

### - Emergency vaccine stock

- The VRI currently stockpiles type A (A22 Iraq strain, which are valid until 9 April 2025) 300,000 doses and type O (O1-Campos strain, which valid from 31 December 2024 through 30 April 2025) 931,980 doses of FMD vaccine for emergency use. Chinese Taipei also commissioned Merial UK to stock type O (O1 Manisa strain) and type A (A22 Iraq strain) of FMD antigens, 900,000 doses each, for emergency needs.



Percentage distribution of FMD serum neutralization antibody titers up to 16 folds in pig farm (sampling based on a 95% confidence interval and 1% prevalence)



Percentage distribution of FMD serum neutralization antibody titers up to 16 folds in cattle & goat farm (sampling based on a 95% confidence interval and 1% prevalence)



PREPAREDNESS & CONTINGENCY PLANNING

CONSTRAINTS & SOLUTIONS

### - CONSTRAINTS

- Most neighboring countries are epidemic areas, so preventing disease invasion is a difficult task.

### - SOLUTIONS

- Strengthen quarantine and border control measures and impose heavy penalties to deter the illegal introduction of disease infection sources.
- Continuous active and passive surveillance is necessary to maintain Taiwan's FMD-free status.
- We have further strengthened the surveillance of abnormal animal deaths and suspected lesions at rendering plants. Additionally, we strictly require that animal transport vehicles be thoroughly cleaned and disinfected before leaving auction markets and slaughterhouses.
- Public awareness and Public-Private Partnership

