

APPROVAL OF FMD-FREE WITH VACCINATION STATUS

Statement by the Separate Customs Territory of
Taiwan, Penghu, Kinmen and Matsu at the meeting held on 24-25 June 2003

Background

1. Foot-and-mouth disease (FMD) is a highly contagious animal disease, which affects a wide variety of susceptible species and can be a significant factor in international trade. FMD is a 'List A' disease both for the Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu (TPKM) and the World Organisation for Animal Health (OIE).
2. The status of "FMD-free with vaccination" in TPKM was officially approved by the OIE on 22 May 2003. This paper describes the history of FMD in TPKM and the successful eradication programme devised and implemented over the past few years with the prime objective of regaining FMD-free status.
3. Two FMD epidemics occurred in TPKM in the early part of the last century, the first between 1913 and 1916 and the second between 1924 and 1929. Following its eradication in 1929, TPKM remained free from FMD for the next 68 years. New outbreaks occurred in pigs in March 1997, with the last case reported in February 2001, and then in ruminants in June 1999, with the last case reported in February 2000.
4. At the time of these last outbreaks, the disease spread across the island of Taiwan, resulting in economically serious losses in pig production and related industries. A policy of stamping out and blanket vaccination was immediately adopted, which succeeded in controlling the epidemic. At the same time, a comprehensive 3-stage eradication programme was launched in 1997 with the objective of bringing TPKM back to FMD-free status.

FMD Eradication Programme

5. Policies of stamping out, emergency vaccination and the application of bio-security measures were implemented during the 1997-2001 outbreaks. After gaining control of the epidemic, the government launched a comprehensive 3-stage (control, eradication and surveillance) programme designed to put TPKM back on the "FMD-free" list.
6. The measures described below have all been executed according to strict guidelines laid down in the eradication programme:

A. EDUCATION AND EXTENSION

7. Education has been aimed at informing the general public that the country is in the process of eradicating FMD. Further education courses are given annually to livestock producers, livestock traders, and the staff of government and private organizations, to raise their awareness of the nature of FMD and to draw their attention to the potential impact of the disease, on them and the industry.

B. COMPULSORY MASS VACCINATION

8. A mass FMD vaccination programme has been carried out since 1997. Based on the *Regulation of Kinds of Vaccines and their Management for Eradicating Classical Swine Fever and Foot and Mouth Disease*, promulgated in TPKM on 10 September 1997, it remains compulsory for all cloven-hoofed animals to be vaccinated with inactivated FMD vaccine.

9. Each cloven-hoofed animal farm has to have a vaccination record, which must be certified by veterinarians to confirm that the vaccination of animals has taken place and to check the rate of vaccination. On its transportation to the slaughterhouse, each cloven-hoofed animal is required to have a certificate authorized by a veterinarian, proving its vaccination status.

10. In order to help small producers with the vaccination of their animals, the government took action in June 2002 to purchase vaccine itself and arrange for veterinarians to conduct the vaccination on the basis of a standard charge to the producers.

C. EPIDEMIOLOGICAL REPORTING SYSTEM

11. Because FMD is a notifiable disease, in the event of an outbreak, veterinary practitioners or producers are obligated to report the disease to their prefecture or their city veterinary authority (Livestock Disease Control Centre, LDCC). Reports have to be sent to the Bureau of Animal and Plant Health Inspection and Quarantine (BAPHIQ). The sera and fluid of vesicles of suspected animals are collected for ELISA testing and virus isolation in order to detect whether there is FMD infection. An epidemiological investigation is conducted to identify the source of infection and the possible extent of the spread, so as to give a full picture of the status of the disease. After compiling all the reports, BAPHIQ will send a report to the OIE. The government also uses a system of rewards to encourage producers to report the occurrence of FMD, on their own farms, or the farms of others.

D. STRENGTHENING OF BIO-SECURITY AT THE FARM LEVEL

12. The disease can be transmitted from one farm to another through mechanical or biological means. In order to prevent the disease from spreading, any movement of man, animals, equipment and trucks is therefore controlled and disinfected by using appropriate disinfectants on both the infected and the disease-free farms. Routine cleaning and disinfecting of equipment and facilities on the farms is the basic health management responsibility of the producers. Selecting the appropriate disinfectant for the disease is also essential.

E. DISINFECTION IN THE MEAT MARKETS AND SLAUGHTERHOUSES

13. The cleaning and disinfecting of trucks whenever they enter or leave the meat markets or slaughterhouses is of paramount importance. Routine disinfection of facilities in the meat markets and slaughterhouses is also critical. The lairages are required to be disinfected at the end of each day's auction and slaughtering and the entire area of each meat market and slaughterhouse is disinfected on the four rest days of every month. LDCC staff that are working in the meat markets and slaughterhouses supervise the disinfection activities in these areas.

F. MONITORING AND SURVEILLANCE

14. In this programme, serum samples from cloven-hoofed animals are collected from meat markets and farms, and tested by serological testing techniques. The non-structural protein (NSP) antibody testing technique is used to verify the infection status. These serological tests provide an opportunity to trace the farms suspected of being infected, even though their animals are being vaccinated. Animals on these suspected farms are subjected to compulsory re-vaccination twice and are checked at six-monthly intervals until they become free of the FMD virus.

G. EMERGENCY PLAN FOR AN FMD OUTBREAK

15. Whenever an FMD outbreak is suspected, veterinarians from the LDCCs shall respond immediately with the following control measures:

- (a) Restrict the movement of animals from the infected farm. All of the sick, suspected and possibly-infected animals must be destroyed.
- (b) Disinfect the infected farm.
- (c) Animal movement shall be put on hold within the infected farm until no further cases have been found for a continuous period of two weeks.
- (d) Boosted vaccination may be required if deemed necessary.
- (e) Investigations shall be carried out on the infected and neighbouring farms to collect epidemiological information.

H. ANTIGEN AND VACCINE RESERVE

16. In case other types of FMD may invade TPKM as a result, for example, of increased international animal trade, or smuggling activities, antigen and vaccine reserves have been planned and put in place. The three FMD viral strains most commonly occurring in neighbouring countries and our trading partners - A22, Asia-1 and C1 - have been selected. Reserves consist of 100,000 doses of ready-to-use FMD vaccines of each selected strain (stock at National Institute for Animal Health) and 1.25 million doses of each of the three antigens mentioned above (stock at Bayer Company).

Achievements of the Eradication Programme

17. Since the last cases reported - in ruminants on 14 February 2000 and in pigs on 25 February 2001 - TPKM has had no further outbreaks of FMD. Based on the results of the active and extensive serological surveillance programme using non-structural protein (NSP) tests, and because of the regulatory measures put in place for controlling and preventing FMD, the absence of infection was reported with a high degree of confidence for a full 12-month period. This brought TPKM into compliance with the requirements of Article 2.1.1.3 of the International Animal Health Code (the Code), thus allowing the OIE to give its approval to a Member being granted FMD-free status with vaccination. According to the last paragraph of Article 2.1.1.7 of the Code, an amendment was adopted by the International Committee of the OIE stating that TPKM gains the status of "FMD-free with vaccination from 22 May, 2003".

Conclusion

18. Despite having gained FMD-free status with vaccination, TPKM recognizes that the achievement of long-term eradication will depend on further coordination and cooperation with Member countries in the region. TPKM will therefore continue with compulsory vaccination, bio-security and its active serological surveillance programme in order to minimize the risks of an FMD virus re-invasion.

19. Before the 1997 outbreak of FMD, TPKM was one of the world's largest pork exporters. Now it has the opportunity to re-introduce its "sweet-tasting" pork products to consumers in overseas markets. TPKM will be doing everything possible to maintain its FMD-free status in the future and is looking forward to becoming "FMD-free without vaccination" when the regional environment is more favourable.
