

豬瘟拔針-哨兵豬中和抗體監測結果與分析

新興傳染病組

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摘要

豬瘟 (Classical Swine Fever, CSF) 為感染家豬與野豬的惡性病毒性傳染病。爆發豬瘟疫情的國家會造成嚴重的經濟損失，因此世界動物衛生組織 (World Organization for Animal Health, WOAH) 將其列為必須通報的疾病。我國實施全面性施打豬瘟疫苗後，有效控制疫情，自民國 95 年後再也沒有病例通報，更進一步於 110 年開始規劃豬瘟拔針與執行監測計畫。其中一項監測計畫為「哨兵豬監測計畫」，每年選擇 300 場豬場，每場執行 2 次哨兵豬採樣監測，第 1 次採樣豬隻年齡為 3-12 週齡，第 2 次採樣為 13-27 週齡。樣本檢測豬瘟病毒 RNA 及中和抗體力價。本篇報告分析哨兵豬中和抗體陽性率顯示：110 年及 111 年第 1 次採樣之中和抗體陽性率分別為 68% 及 70.8%；第 2 次採樣抗體陽性率下降，分別為 10.8% 及 9.5%。全國進入停止施打疫苗階段後，仍應持續監控抗體，並配合其餘檢測，確保環境中無豬瘟病毒。

**To end Classical Swine Fever (CSF) vaccination-
The surveillance and analysis of neutralizing antibodies
against CSF in sentinel pigs.**

Hui-Yu Chen

Abstract

Classical swine fever (CSF) is a highly contagious viral disease that affects domestic and wild pigs. Due to the significant global economic impact on countries experiencing outbreaks, the disease is notifiable to the World Organization for Animal Health (WOAH). Because of the comprehensive vaccination strategy, there have been no confirmed cases of CSF since 2006 in Taiwan. Council of Taiwan prepare to end vaccinations against CSF, and initiated a surveillance program since 2021. One of the national CSF surveillances of domestic pigs is the “sentinel pig program”. Each year, over 300 domestic pig farms were sampled from sentinel pigs that have not received CSF vaccination. These pigs were sampled twice, with the first inspection conducted when the pigs were 3-12 week-old and the second inspection at 13-27 week-old. The specimens were tested for CSFV RNA and anti-CSFV neutralizing antibody (NA). In this report, we presented that the seropositive rates for anti-CSFV NAs during the first inspection of sentinel pigs were 68% in 2021 and 70.8% in 2022. During the second inspection, the seropositive rates for anti-CSFV NAs significantly decreased to 10.8% in 2021 and 9.5% in 2022. To confirm whether CSFV exist in the environment, antibody levels and other surveillance measures should be continuously monitored even as all farms gradually stop CSFV vaccination.