

# 家禽流行性感冒血清抗體檢測方法、監測系統及結果介紹

疫學研究組

陳麗璇助理研究員

## 摘要

血球凝集試驗普遍使用在具有血球凝集特性之病毒診斷，像是流行性感冒病毒。家禽流行性感冒（禽流感）也是流行性感冒的一部份，其病毒表面所攜帶的血球凝集素（hemagglutinin,HA），具備相同的功能。而血球凝集抑制試驗則可用來鑑定病毒亞型，或是檢測血清中是否帶有特定亞型抗體。然則目前禽類會感染的禽流感病毒，其 HA 已知至少具 16 種亞型。由於目前為止，高病原性禽流感只出現在 H5 及 H7 亞型病毒，因此血清抗體監測亦著重於該等亞型病毒。利用血球凝集抑制試驗，配合地方動物疾病防治機關例行性採檢血清，現今對各縣市及不同禽種檢測 H5、H6 及 H7 亞型抗體。本報告將介紹臺灣禽流感抗體監測系統、近年之抗體分布及分析結果。

# **Introduction of antibody detection method, surveillance system and result of avian influenza in Taiwan**

Li-Hsuan Chen

## **Abstract**

Today's talk will introduce Taiwan's avian influenza antibody surveillance system, antibody distribution and analysis results in recent years. Hemagglutination assay is commonly used in diagnosis of viruses with hemagglutination characteristic such as influenza viruses. Avian influenza virus is classified as influenza virus A and possessed hemagglutinin on the surface of virus particle. Hemagglutination inhibition test can be used for subtyping of unknown influenza viruses or detecting specific hemagglutinin subtype in serum. At least 16 subtypes of hemagglutinin have been identified in avian influenza viruses. Since highly pathogenic avian influenza has only occurred in the infection of H5 and H7 subtypes, serum antibody surveillance on poultry in Taiwan has therefore focused on these subtypes. Using the hemagglutination inhibition test, antibodies against H5, H6, and H7 subtypes have been detected in each county and city and different poultry species.