

Seroepidemiological study of influenza in poultry and pigs in northern Vietnam

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Pigs are thought to play a key role in inter-specific transmission of influenza since they are receptive to swine, avian and human influenza viruses. They have been considered as a potential intermediate host for the genesis of pandemic influenza viruses. Avian influenza viruses could spread both in swine and avian species especially under specific epidemiological conditions like the mix of species, poor level of biosecurity, and high levels of virus circulation. Vietnamese farming systems might be a potential candidate for the emergence of new swine influenza viruses from avian origin.

Our study focuses in one of the northern provinces of Vietnam. Traditional farming systems are characterized by small flocks of different species breed mainly for local consumption. Farmers are used to let the animals out for free grazing within the village. The preliminary results of a serological survey show a very high seroprevalence of influenza A infection within poultry. Among 353 serum samples tested with a commercial Elisa test, we found a seroprevalence rate of 27%.

The following investigations will concern swine species; we expect to measure the seroprevalence of swine influenza within the same area. The data collection of poultry and pigs will be combined by statistical analysis in order to evaluate their possible correlation.