Swine Influenza Surveillance in Thailand

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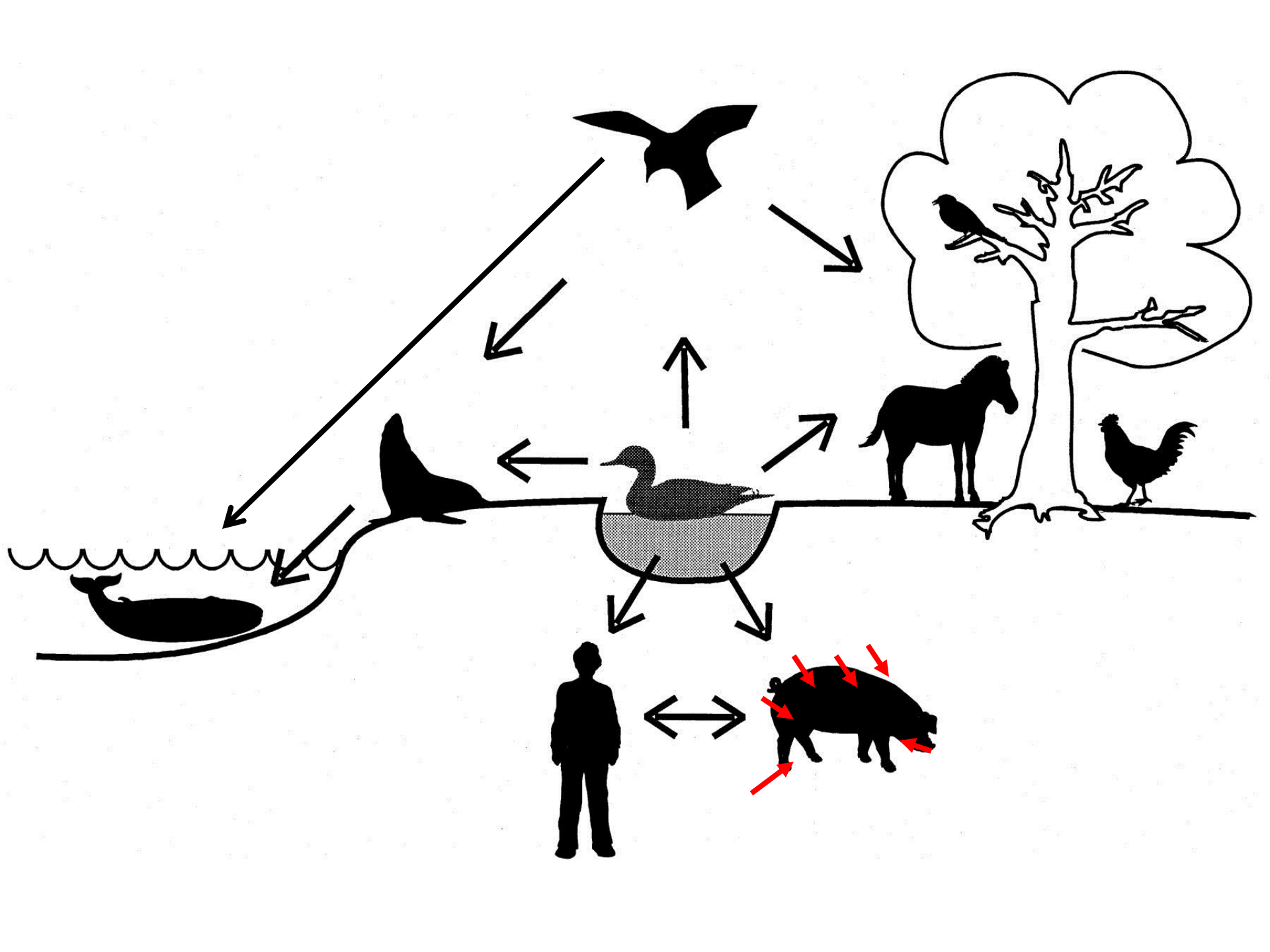


Current SIV surveillance activities in Thailand

- **National surveillance in Thailand**

  – To obtain informations on the prevalence of SIVs in Thailand using virological and serological analysis

  – 2010-2012

Collaboration study

National Institute of Animal Health, Japan

- To obtain informations on the prevalence of SIVs in Thailand and the circulation mechanism of SIV in pig farms using virological and serological analysis

- 2007-2015

AFRIMS

- Human – animal interface SIVs infection
- 2009-2013

Thai Ministry of Public Health (TMOPH)

- SIVs surveillence in Nan province
- 2010-2013

Samples collection in 2010

Map of Thailand

N = 1
NE = 3
E = 3
W = 2
S = 3
C = 3

15 provinces

24 farms

Number of test samples: 900

Sero-surveillance in Thailand

Haemagglutination Inhibition test (**HI test)**

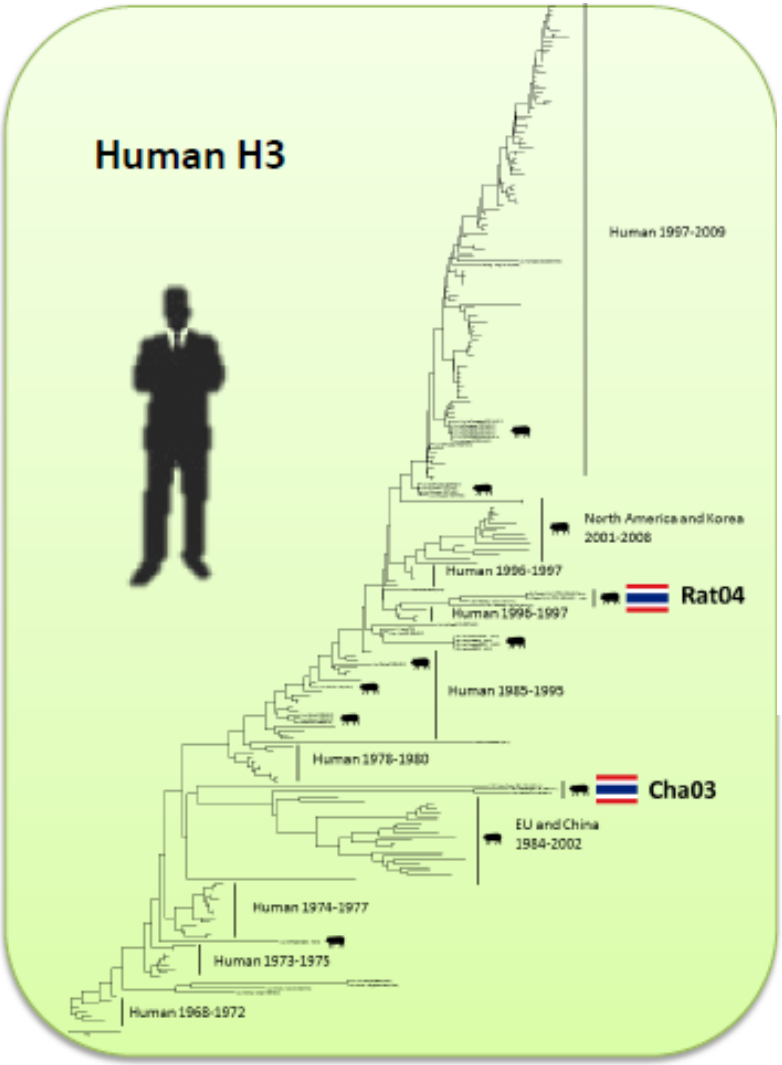
H1N1 Antigen

- A/swine/Ratchaburi/NIAH550/2003 (Rat03, Thai isolate)
- A/swine/Chonburi/NIAH110702-7/2008 (Cho08 , Thai isolate)
- A/swine/Saraburi/NIAH11720-26/2009 (Sar09 , Thai isolate) (H1N1)2009pmd

H3N2 Antigen

- A/swine/Chachoengsao/2003 (Cha03 , Thai isolate)
- A/swine/Ratchaburi/NIAH59/2004 (Rat04 , Thai isolate)

Comparison of sero-positive rate using two genetically different Thai H3 SIVs

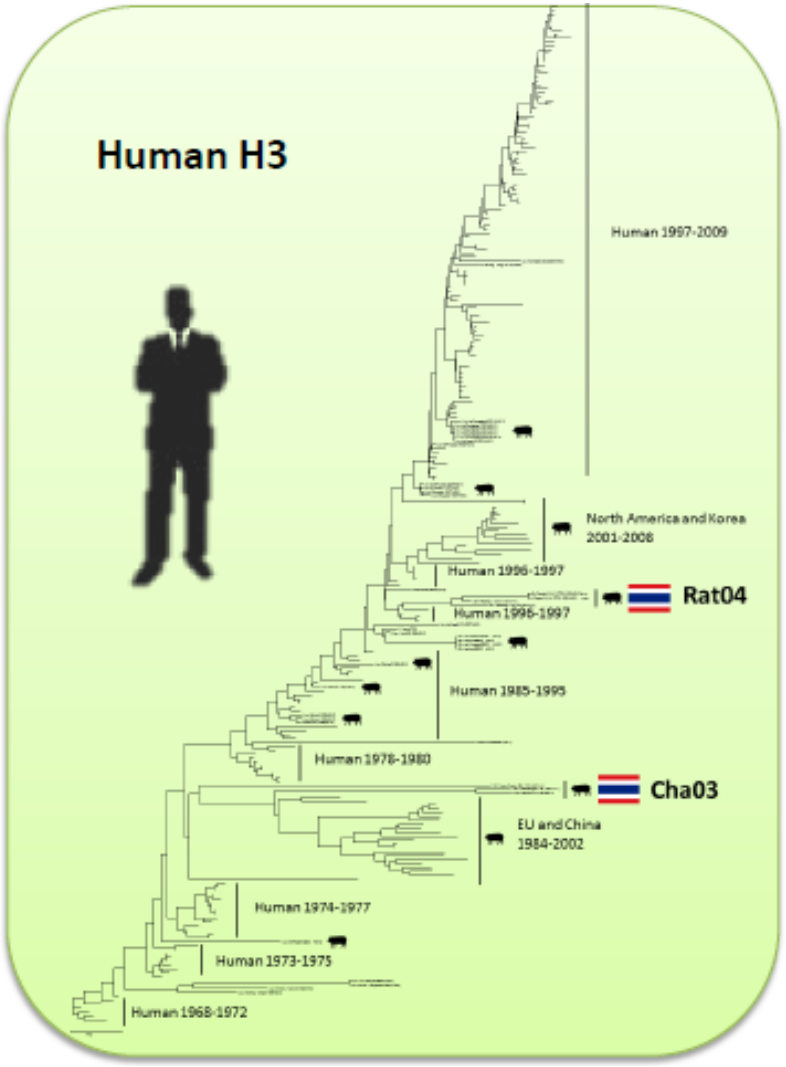


Serum			Number of positive (%)	
			H3N2	
Year	Samples	Provinces	Cha03 (Thai)	Rat04(59) (Thai)
2010	900	15	4 (0.44%)	5 (0.56%)

H3N2 Antigen

- A/swine/Chachoengsao/2003 (Cha03 , Thai isolate)
- A/swine/Ratchaburi/NIAH59/2004 (Rat04 , Thai isolate

Comparison of sero-positive rate using two genetically different Thai H3 SIVs

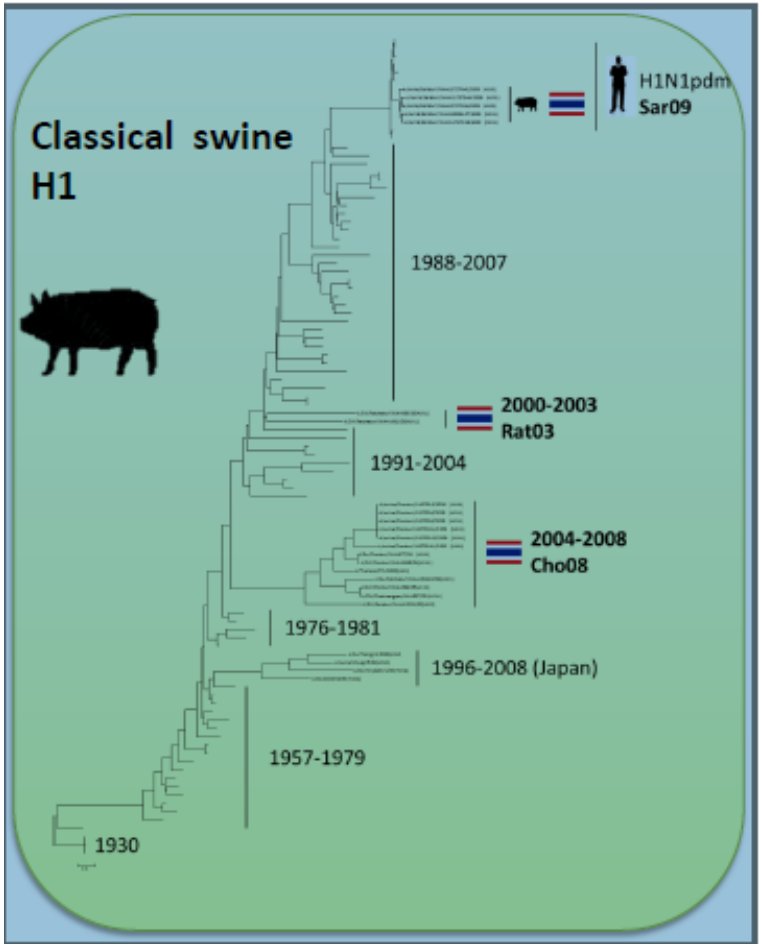


Serum			farm of positive (%)	
			H3N2	
Year	farms	Province	Cha03 (Thai)	Rat04(59) (Thai)
2010	24	15	3 (12.5%)	3 (12.5%)

H3N2 Antigen

- A/swine/Chachoengsao/2003 (Cha03 , Thai isolate)
- A/swine/Ratchaburi/NIAH59/2004 (Rat04 , Thai isolate

Reactivity of the sera collected in an infected Pandemic(H1N1)2009 pig farm among H1N1 SIVs

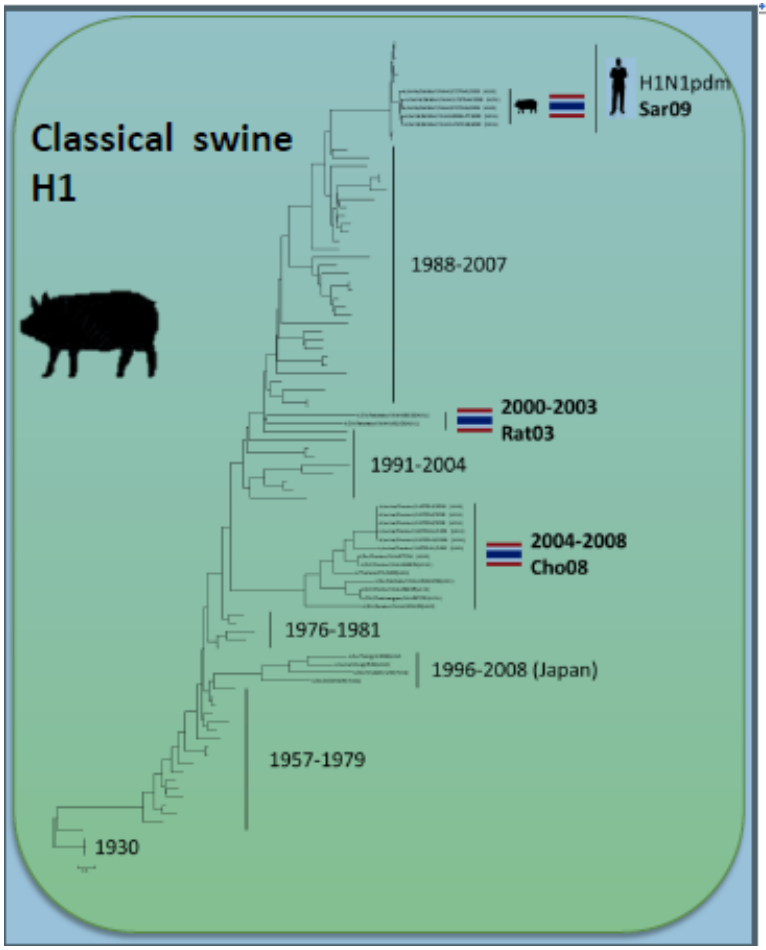


Serum			Number of positive (%)		
			H1N1		
Year	Samples	Provinces	Rat03 (Thai)	Cho08 (Thai)	Sar(Thai) H1N1pmd
2010	900	15	220 (24.44%)	128 (14.22%)	166 (18.44%)

H1N1 Antigen

- A/swine/Ratchaburi/NIAH550/2003 (Rat03, Thai isolate)
- A/swine/Chonburi/NIAH110702-7/2008 (Cho08 , Thai isolate)
- A/swine/Saraburi/NIAH11720-26/2009 (Sar09 , Thai isolate) (H1N1)2009pmd

Reactivity of the sera collected in an infected Pandemic(H1N1)2009 pig farm among H1N1 SIVs



Serum			farm of positive (%)		
			H1N1		
Year	farms	Provinces	Rat03 (Thai)	Cho08 (Thai)	Sar(Thai) H1N1pmd
2010	24	15	13 (54%)	10 (42%)	12 (50%)

H1N1 Antigen

- A/swine/Ratchaburi/NIAH550/2003 (Rat03, Thai isolate)
- A/swine/Chonburi/NIAH110702-7/2008 (Cho08 , Thai isolate)
- A/swine/Saraburi/NIAH11720-26/2009 (Sar09 , Thai isolate) (H1N1)2009pmd

4 viruses were isolated from routine diagnosis process at NIAH Thailand in 2010-2013

Clear nasal discharge

Contributions to OFFLU working group

- Sharing informations
- Technical expertise
- SIV Lab. Network
- Reagents supply

Thank you OFFLU team for