

Swine influenza A virus (IAV-S) UK Update



Animal &
Plant Health
Agency

Helen Everett

Animal and Plant Health Agency (APHA)

OFFLU SWINE INFLUENZA EXPERTS TECHNICAL MEETING

28 – 29 April 2026

WOAH Headquarters, Paris



IAV-S subtypes detected in GB pig herds

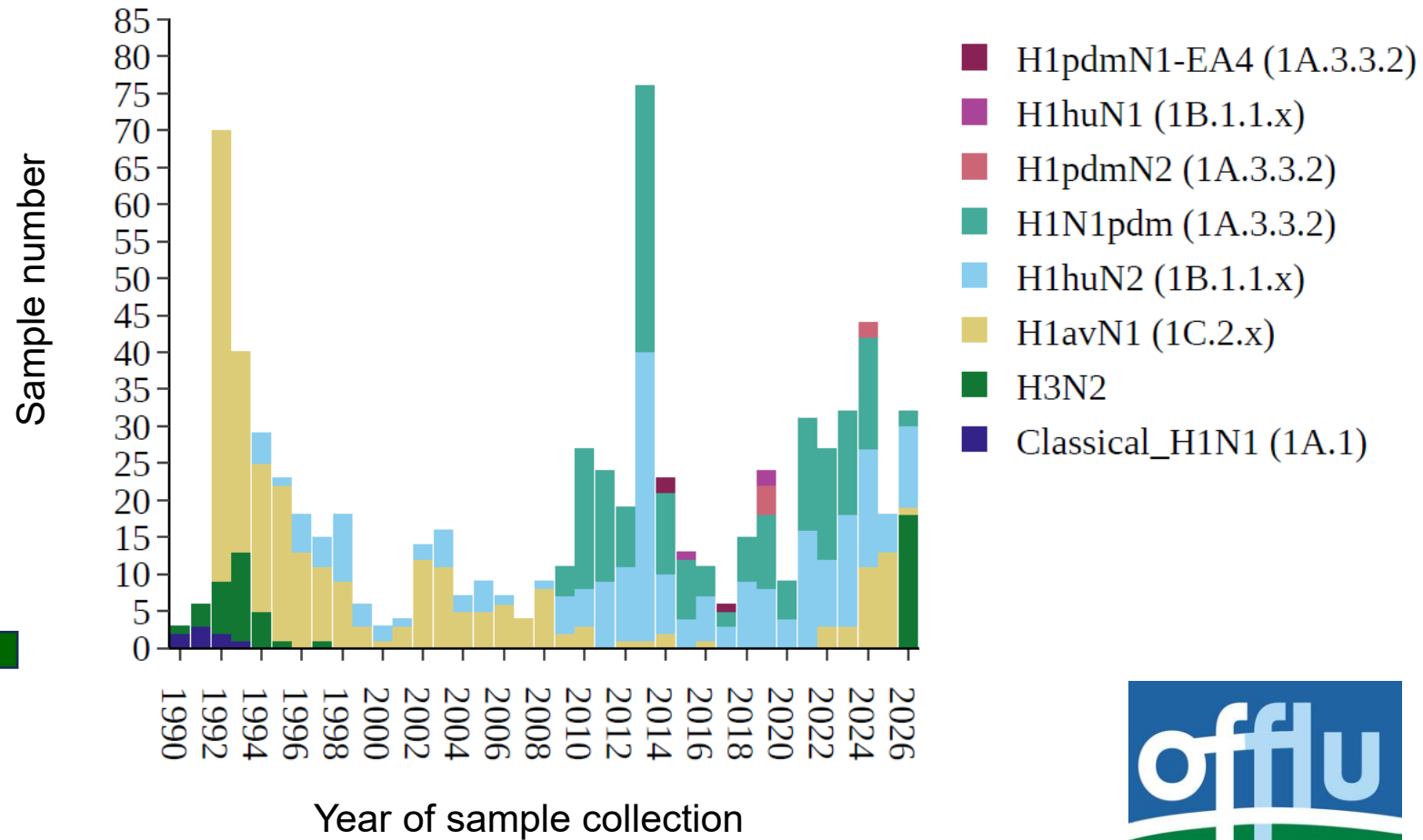
Predominant HA Clades

1A.3.3.2 (H1pdm09) 

1B.1.1.X (H1hu) 

1C.2.2 (H1av) 

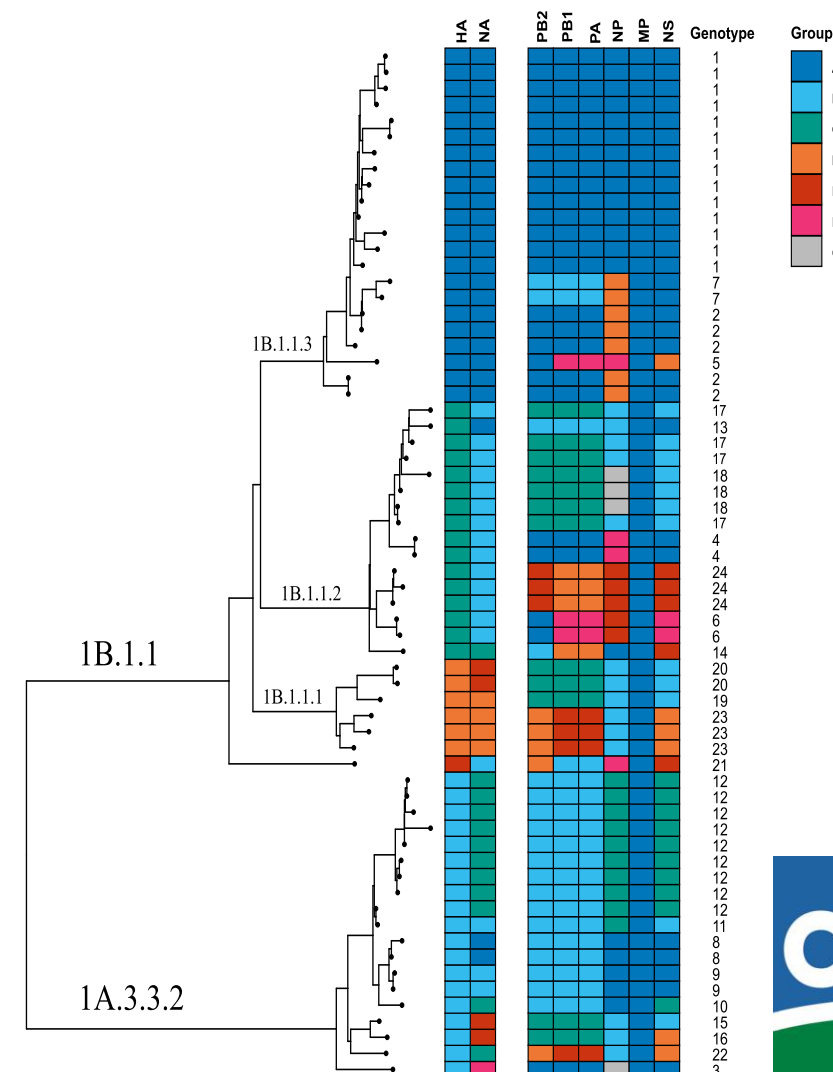
- 1C predominated pre-2009
- 1A.3.3.2 has persisted since 2009 and reassortants with pre-existing lineages are still detected
- 1B.1.1 viruses have increased in frequency since emergence in 1994
- No H3N2 strains were detected in GB for 30 years until Dec 2026 
- A single H3N2 detection was reported in N. Ireland (Feb 2024) clade J.2 (3C.2a1b.2a.2a.3a.1)



IAV-S genetic diversity in GB (2014-2022)

- H1B.1.1 and H1A.3.3.2 (pandemic 2009) lineages predominate
- NA reassortment continues to occur, although H1B+N2s and H1A+N1 viruses are most prevalent
- The H1B.1.1 lineage has uniquely been maintained in GB
- The 1A.3.3.2 lineage has donated the 'non-envelope' genes to GB viruses and this is the only genotype detected since 2012 - with genetic drift
- Phylogenetic analysis of the HA gene suggests multiple re-introductions of human-origin 1A.3.3.2 viruses into pigs

Subtype	HA	NA	PB2	PB1	PA	NP	MP	NS	#	%
H1N2	1B.1.1	N2s	pdm	pdm	pdm	pdm	pdm	pdm	42	65.6
H1N1	1B.1.1	pdm	pdm	pdm	pdm	pdm	pdm	pdm	03	4.7
H1N1	1A.3.3.2	pdm	pdm	pdm	pdm	pdm	pdm	pdm	13	20.3
H1N1	1A.3.3.2	EA-4	pdm	pdm	pdm	pdm	pdm	pdm	01	1.6
H1N2	1A.3.3.2	N2s	pdm	pdm	pdm	pdm	pdm	pdm	05	7.8



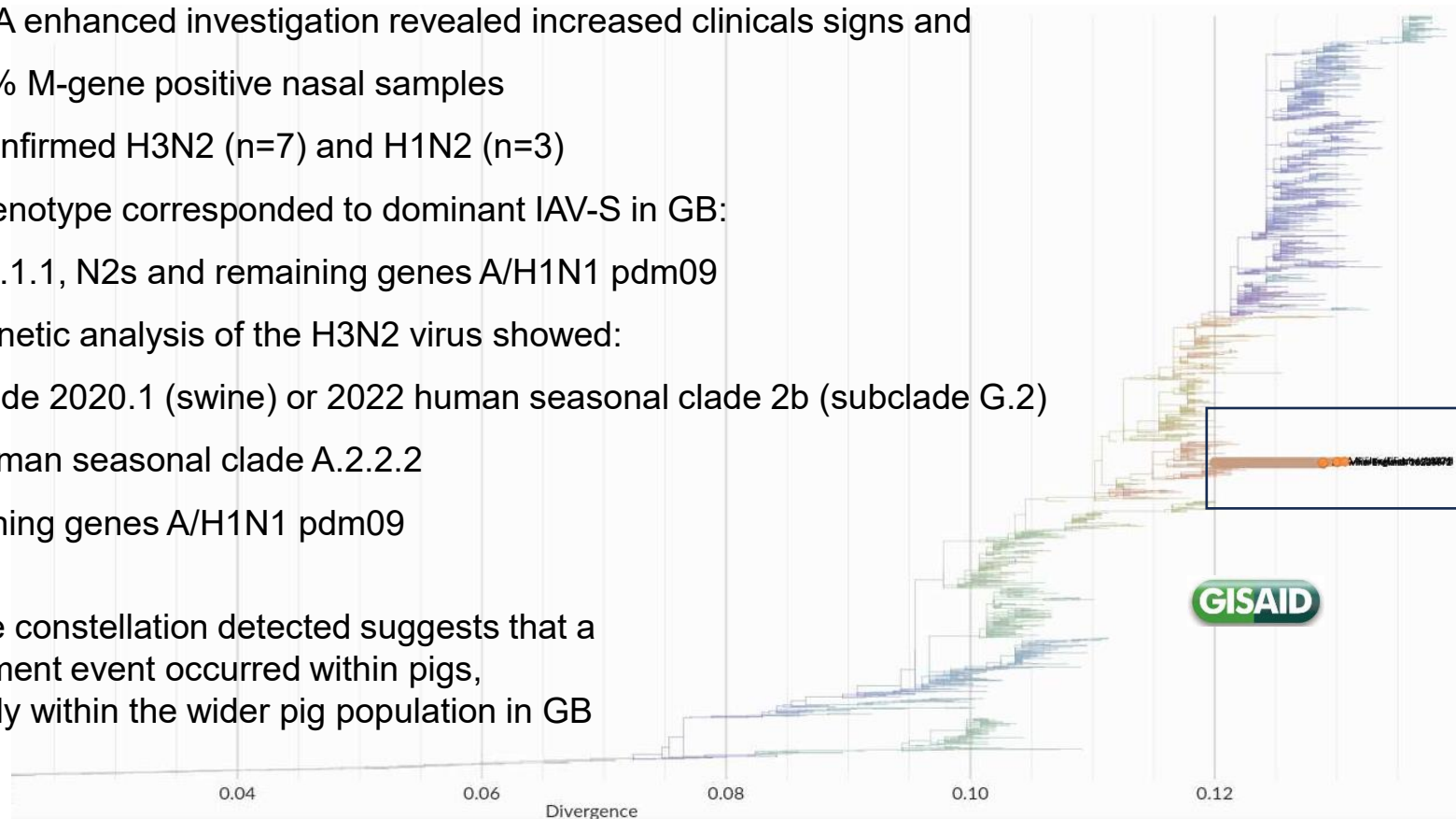
Mollett BC et al 2026

<https://doi.org/10.1099/mgen.0.001668>

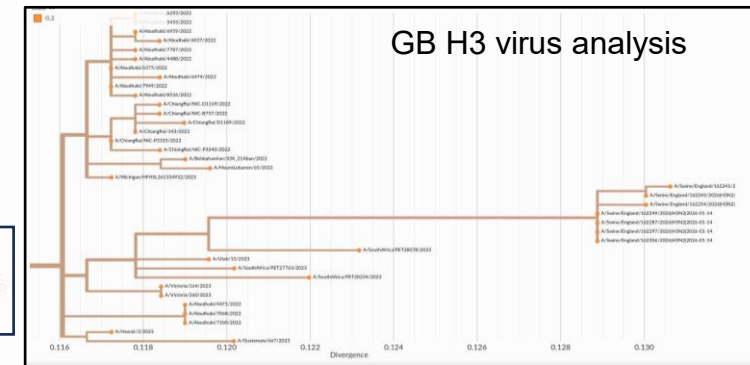
H3N2 subtype detection in Great Britain

- H3N2 subtype IAV-S was detected in England in Dec 2025
- Samples originated from a large breeding herd in Yorkshire
- Pigs of all ages had very mild respiratory signs and vaccination was planned
- An APHA enhanced investigation revealed increased clinical signs and over 50% M-gene positive nasal samples
- WGS confirmed H3N2 (n=7) and H1N2 (n=3)
- H1N2 genotype corresponded to dominant IAV-S in GB:
 - H1B.1.1.1, N2s and remaining genes A/H1N1 pdm09
- Phylogenetic analysis of the H3N2 virus showed:
 - H3 clade 2020.1 (swine) or 2022 human seasonal clade 2b (subclade G.2)
 - N2 human seasonal clade A.2.2.2
 - remaining genes A/H1N1 pdm09

The gene constellation detected suggests that a reassortment event occurred within pigs, most likely within the wider pig population in GB



Clade H3 phylogenetic analysis



GB pig
Quarterly
Report



Acknowledgements

APHA Bioinformatics Team

Holly Coombes

Ben Mollett

APHA Mammalian Influenza Team

Pauline van Diemen

Andrew Ramsay

APHA Pig Expert Group

Claire Scott

Chris Burns



Department
for Environment
Food & Rural Affairs



The Scottish
Government
Riaghaltas na h-Alba



Llywodraeth Cymru
Welsh Government

APHA Swine Influenza GB NRL

Tom Lewis

Andrea Moores

APHA Swine Influenza WOAHL IRL

Ash Banyard

Joe James

Josh Lynton-Jenkins

AFBINI

Ken Lemon

Paula Lagan



WIC (FCI)

Nicola Lewis

Alex Byrne

Abi Lofts



World Health
Organization

USDA

Amy Vincent-Baker

Tavis Anderson



ESFLU Continuation Funding

- Human and Animal Health funding agencies approached, but low response as swine influenza is not notifiable
- ESFLU is organising a Swine Influenza Symposium ****Save the Date****
- Invitations to attend the 'Stakeholder Panel' were sent to WOA, FAO, ECDC, WHO, EU Parliament (Croatian)
- Gregorio Torres (WOAH) already confirmed his participation in principle
- Other funding organizations are being approached
- Thank you in advance for pledging letters of support



ESFLU
European Swine
Influenza Network



<https://swineflu.eu/meetings/1st-swine-influenza-symposium/>

DAY 1: Wednesday, Sept 23	
ESFLU Final Meeting	
07:30-08:30	Registration
08:30-09:25	OPENING CEREMONY
09:30-10:30	SESSION 1: Diagnostics & Epidemiology <i>S. Fereidouni,, G. Richard, (...)</i>
10:30-11:00	Coffee Break
11:00-12:30	SESSION 2: Surveillance, Biosecurity & Economics <i>T. Tobias, M. Kjosevski, E. Velazquez</i>
12:30-13:30	Lunch
13:30-15:00	SESSION 3: Vaccines, Perception & Zoonotic Risk <i>C. Hautefeuille, L. Dieste, L. Larsen</i>
15:00-15:30	Coffee
15:30-16:30	SESSION 4: Stakeholders Roundtable <i>Policy makers dialogue</i>
16:30-17:00	Day Summary & Closure
19:00-22:00	GALA DINNER



Thank you

