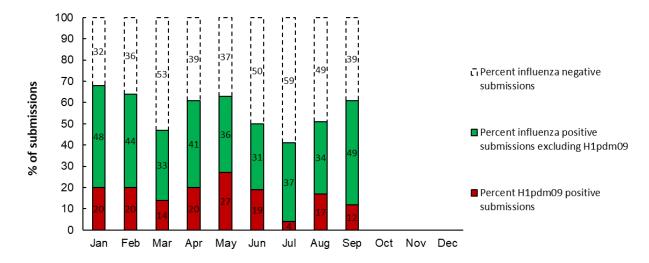
## Surveillance of Influenza A virus in Danish pigs

## Samples and results 2024

The table illustrate the number of samples, submissions and herds that contributed to the surveillance program each month and for the whole year. In addition, the results of the influenza A virus and H1pdm09 screening are shown.

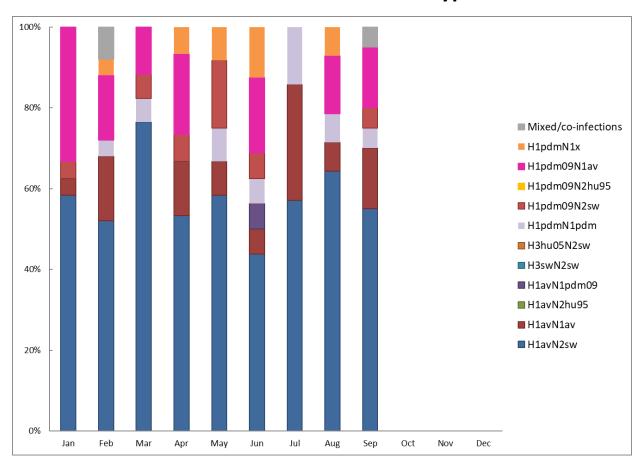
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Received									
Samples	156	140	121	141	107	84	68	115	141
Submissions	40	41	36	44	30	26	27	35	41
Herds	40	41	34	42	30	24	23	34	37
Influenza positive									
Samples	70	53	43	60	44	38	19	42	58
Submissions	27	25	17	27	19	13	11	18	25
Herds	27	25	17	27	19	13	10	18	23
H1pdm09 positive									
Samples	24	14	10	22	17	10	2	14	17
Submissions	8	8	5	9	8	5	1	6	5
Herds	8	8	5	9	8	5	1	6	5

In September, 41 submissions from 37 herds registered with different CHR numbers were received. On average, each submission consisted of 3.4 samples. The percentage of submissions positive increased this month to 61%, which is similar to the proportion registered April and May. All influenza A virus-positive samples were tested for the presence of H1pdm09. Overall, 20% of the submissions testing positive for the influenza A virus were positive for H1pdm09.



The figure illustrates the percentage of influenza A virus negative and positive submissions including the proportion of H1pdm09 positive submissions. The share of submissions with H1pdm was 20 %, which is one of the lowest proportions observed this year.

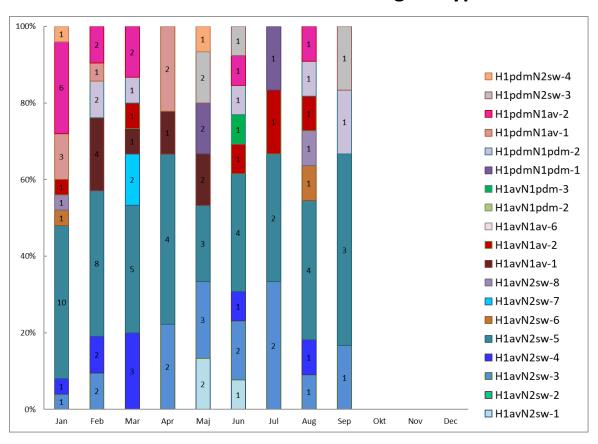
## Distribution of swine influenza A virus subtypes



Swine influenza A virus can be classified into subtypes and genotypes. The subtype describes the combination of HA and NA surface gene segments, and the genotype describes the combination of all eight genome segments based on their genetic origin. Information on the contemporary circulating swine influenza A virus subtypes is essential for the update of vaccination protocols, optimization of the diagnostic assays and for evaluation of the zoonotic risk.

In September, the full subtype (both HA and NA gene segments) was determined for twenty submissions. The far greatest majority of the submissions were of H1avN2sw origin (n=11) followed by H1pdm09N1av (n=3) and H1avN1av (n=3).

## Distribution of swine influenza A virus genotypes



For September, six submissions were genotyped. The H1avN2sw-5 viruses with a complete internal cassette were again the most abundant (n=3).

# Phylogenetic analysis

#### Fylogenetisk træ - Influenza A virus overvågning i Danske svin September 2024 FIND DIN PRØVE: Tryk "ctrl + f"

FIND DIN PRØVE: Tryk "ctrl + fog sog på dit sagsnummer: fx "24-03138-4" Vær opmærksom på at prover indsendt til SSI starter med "SI" og er navngivet med SSI's sagsnummer, mens prover indsendt til Veterinært laboratorium, Kjellerup starter med "LF" og er navngivet med Kjellerups sagsnummer.

