Istituto Zooprofilattico Sperimentale delle Venezie

31st Annual Meeting

of the National Reference Laboratories for Avian Influenza and Newcastle Disease of European Union Member States

Istituto Zooprofilattico Sperimentale delle Venezie

Treviso
October 16-17, 2025

MEMBER STATES (& THIRD COUNTRIES) REPORTS FOR AVIAN INFLUENZA AND NEWCASTLE DISEASE 06/2024 – 06/2025 Based on the response to the questionnaires received

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EURL AI/ND

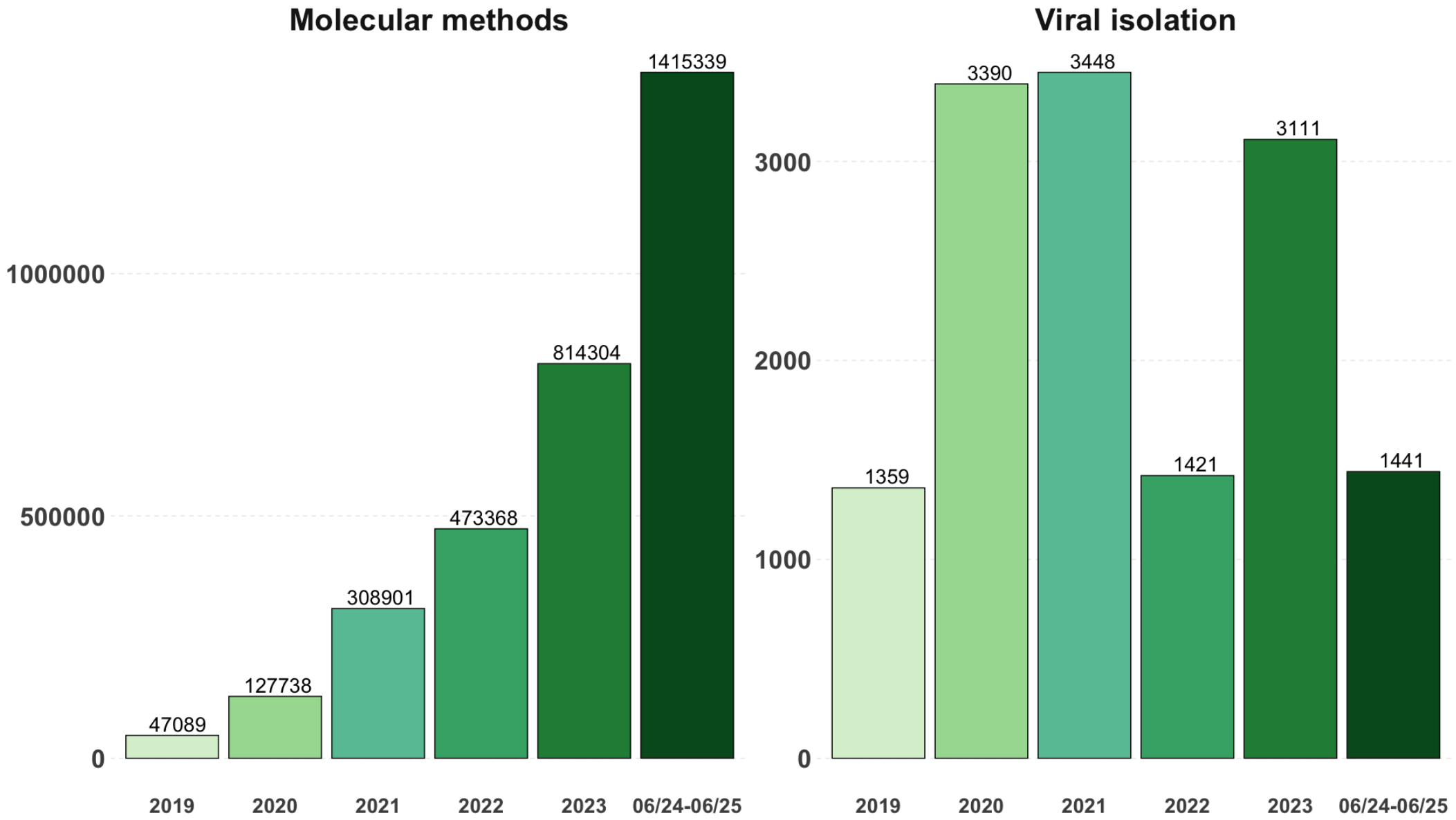
Istituto Zooprofilattico Sperimentale delle Venezie (IZSVe), Padua, Italy

Responding country

- Austria
- Belgium
- Bulgaria
- Croatia
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Kosovo
- Latvia
- Lithuania
- Luxembourg
- Macedonia
- Moldova
- Montenegro
- Norway
- Poland
- Portugal
- Republic of Ireland
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- Switzerland
- The Netherlands

1.1. How many samples were processed by molecular (RT-PCR or rRT-PCR) or virus isolation methods?

AI



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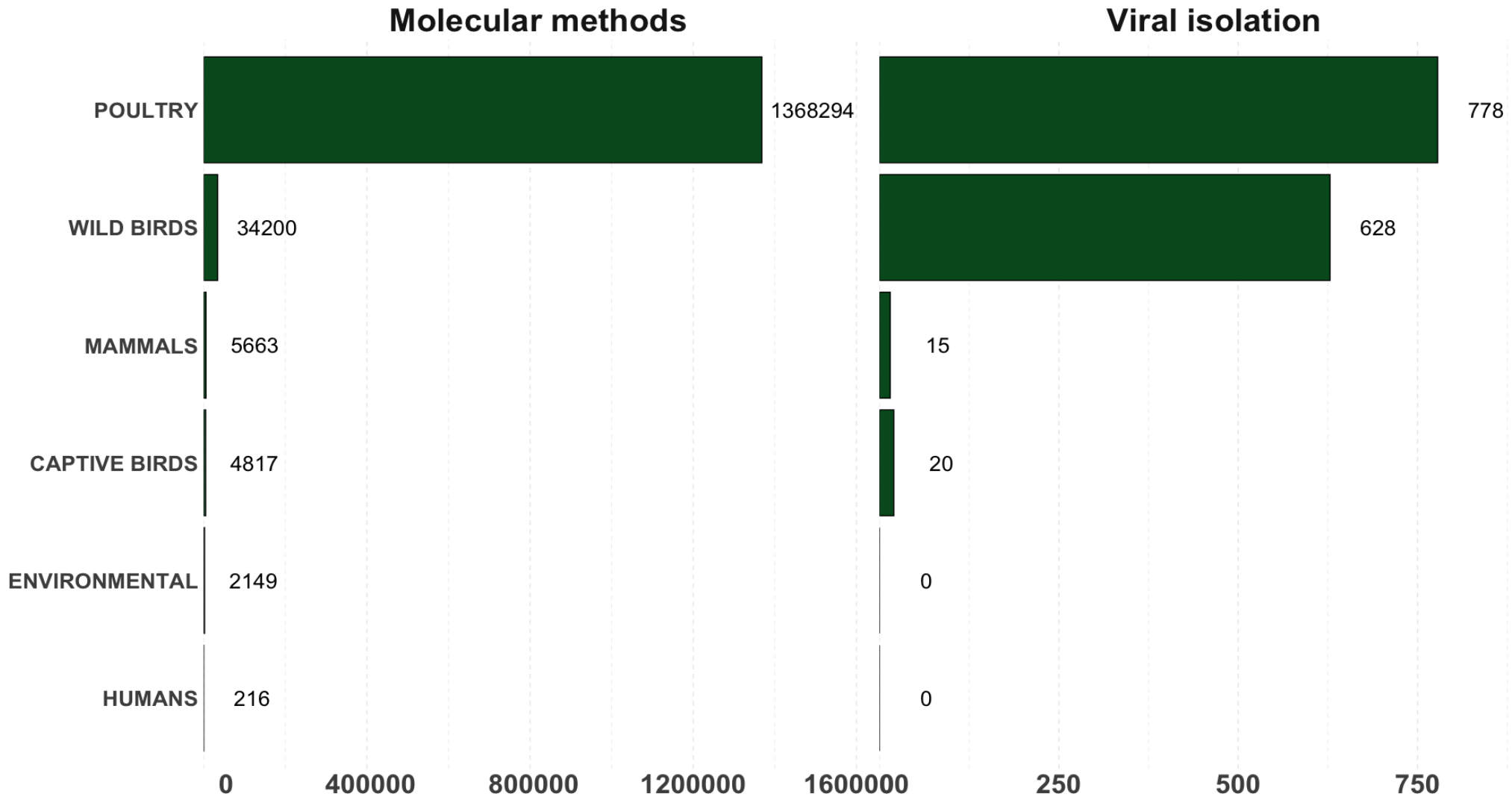

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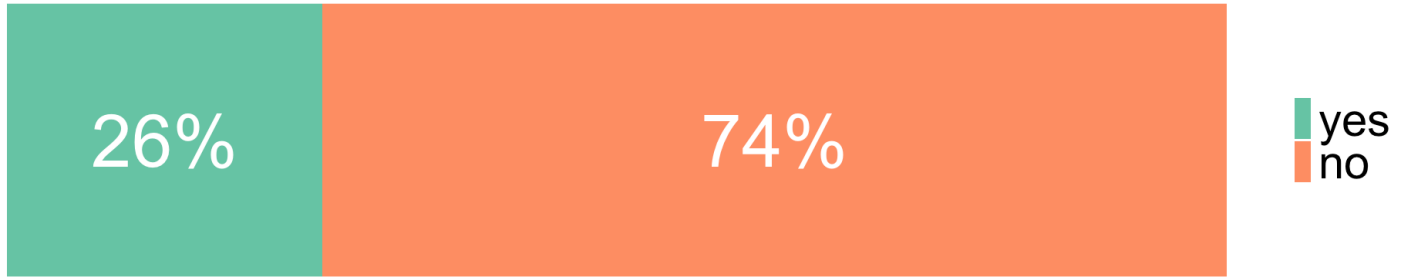
1.2 Do you or any regional laboratory use commercial PCR kits for diagnostics? If yes, please provide specification of the products and if performance verification has been carried out.



Few NRLs adopting commercial kits, verification of performances obtained by participation to national or EURL PT schemes

AI

1.4. Do you know if a rapid antigen test is used in your country (at field or laboratory level)? If known, please provide details.

Use by OVS paired with samples submission (1 MS), use at laboratory level (1 MS), used in the field (1 MS)

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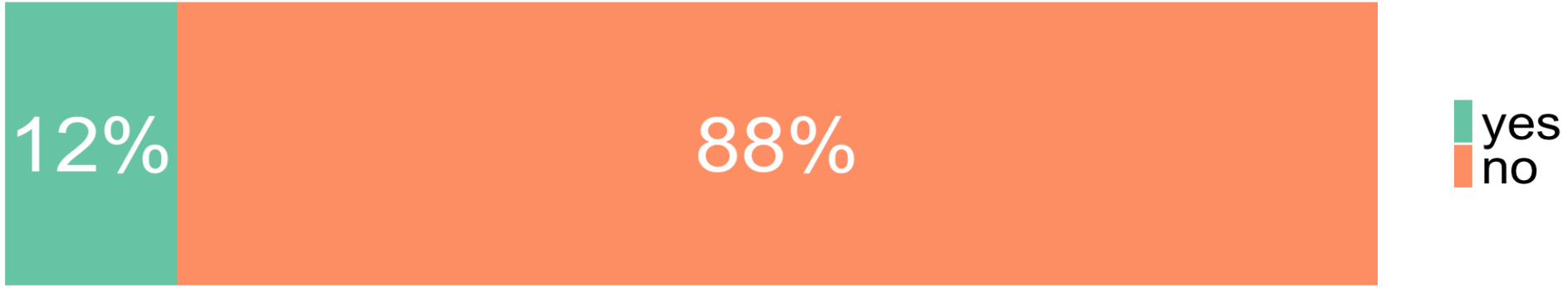
1.5. Do you perform rapid (real time RT-PCR-based) molecular pathotyping for H5 and/or H7 viruses? Please provide details.

All positive answers refers to H5 pathotyping by SOP VIR 1005, modified Naguib et al., 2017 or James et al., 2022

1.6. Have any changes occurred since last year in your access to Next Generation Sequencing (NGS) technology for influenza type A characterization (e.g. new instrument acquisition)? Yes/No. If your answer is yes, please provide details.

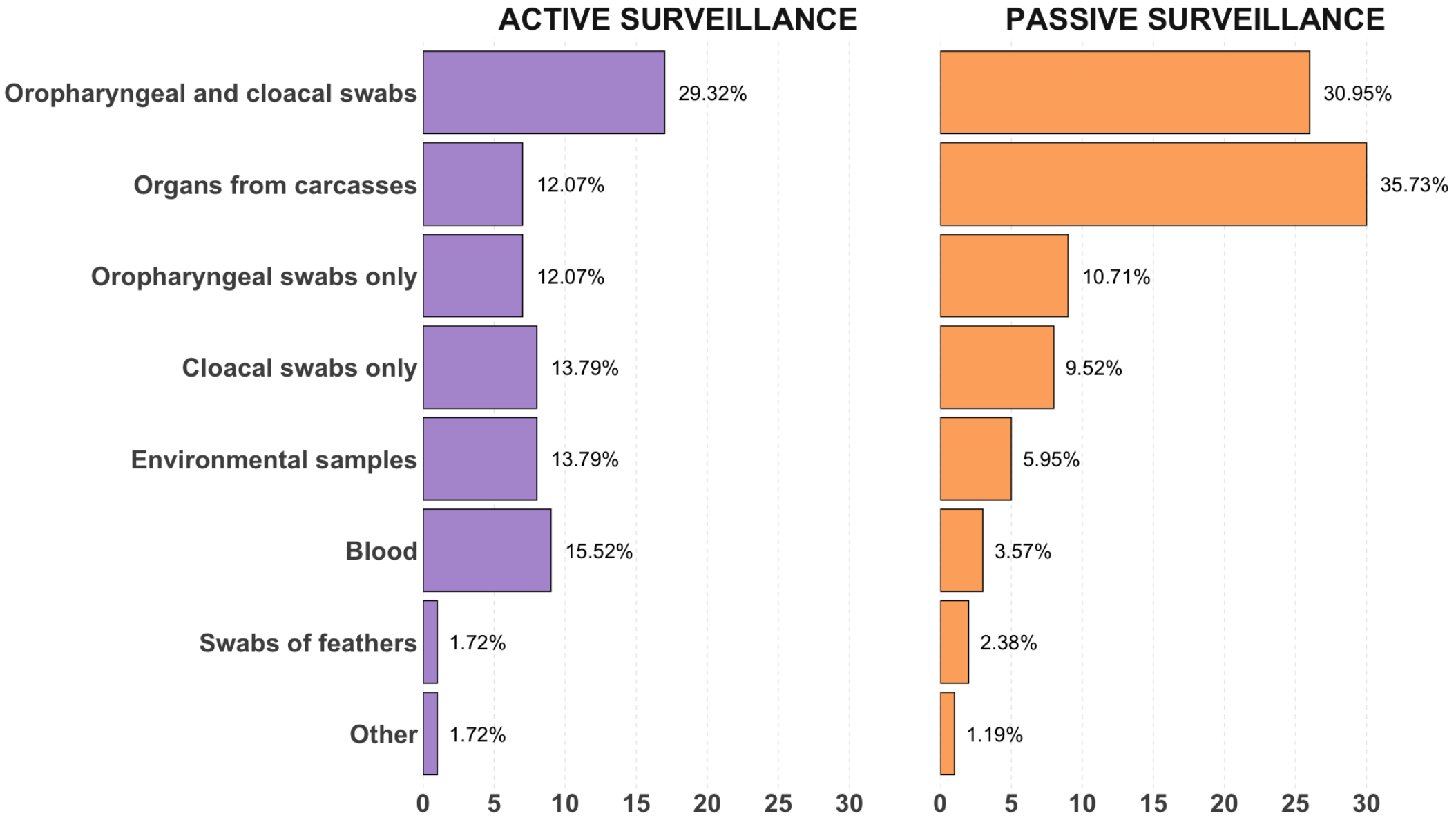


AI

- All positive answers refer to testing or implementing Oxford Nanopore Technologies plc. instruments
- Most labs already implemented NGS in previous years, with no major changes

1.7. Which type of samples from wild birds are submitted to the lab for testing from surveillance activities? Feel free to provide details on the tests performed on such samples in the "Comments" box.

AI



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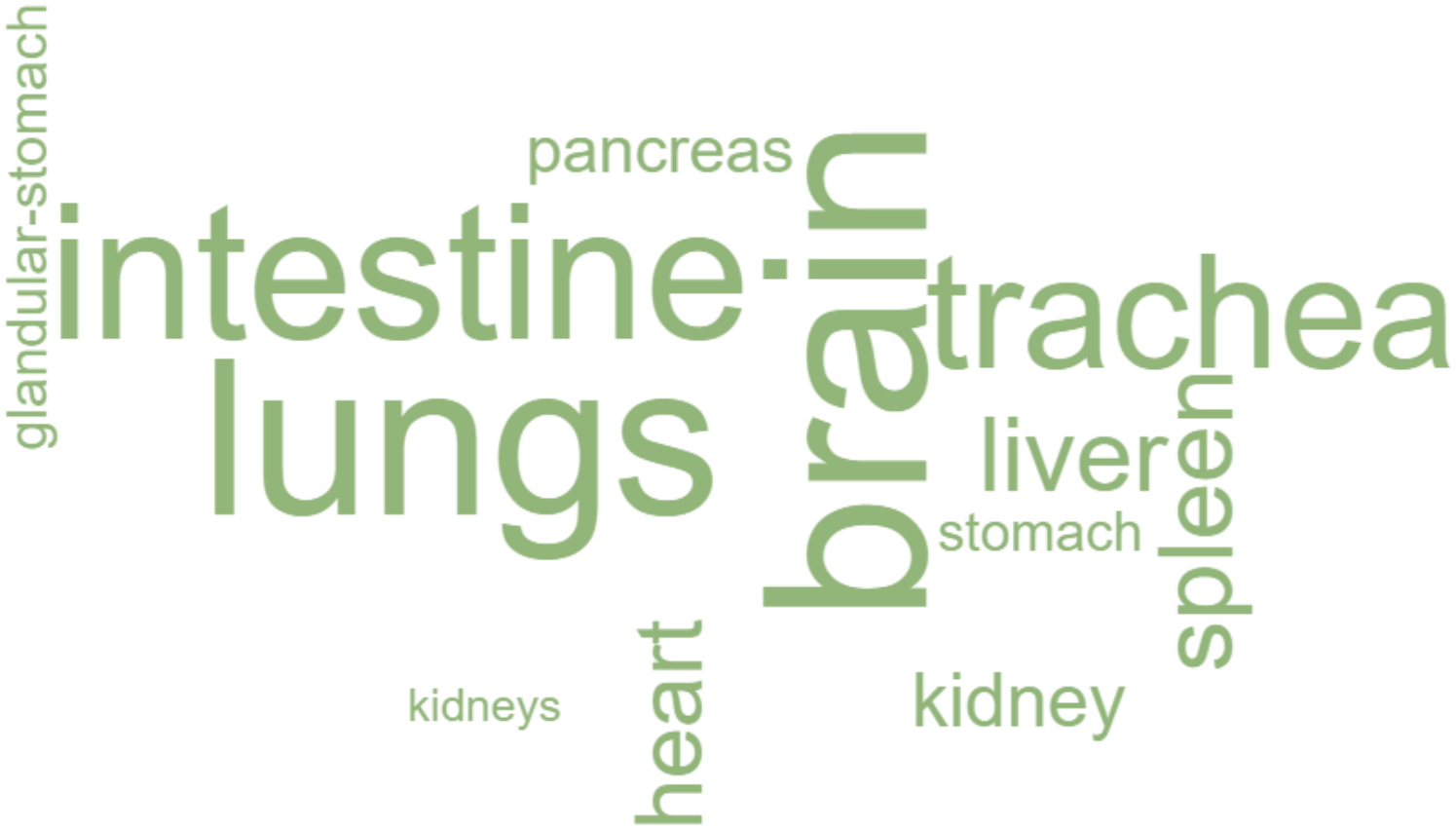
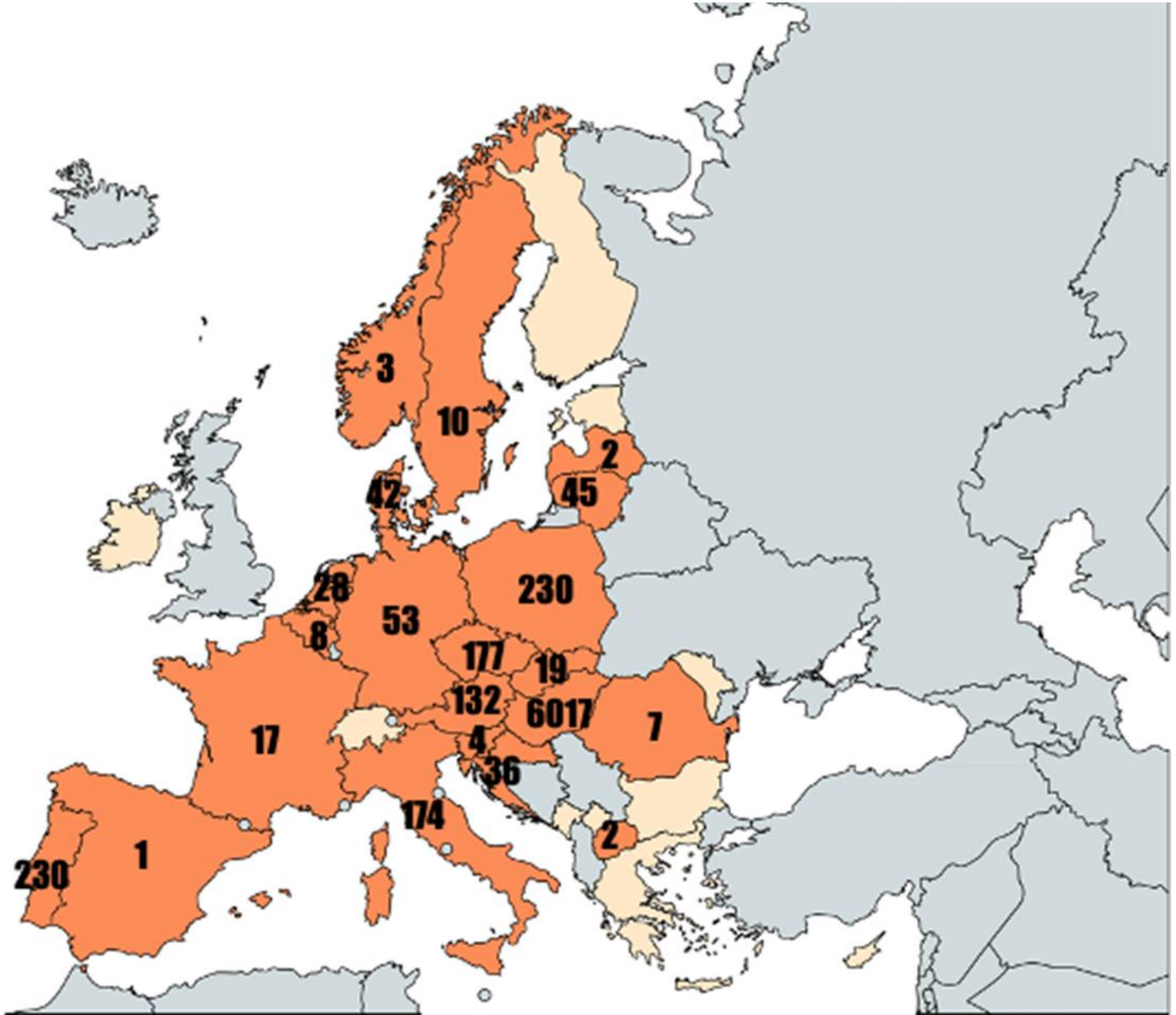
1.7. Which type of samples from wild birds are submitted to the lab for testing from surveillance activities? Feel free to provide details on the tests performed on such samples in the "Comments" box.



Avian influenza subtype detected in 2024/25 – H5 HPAI domestic

AI



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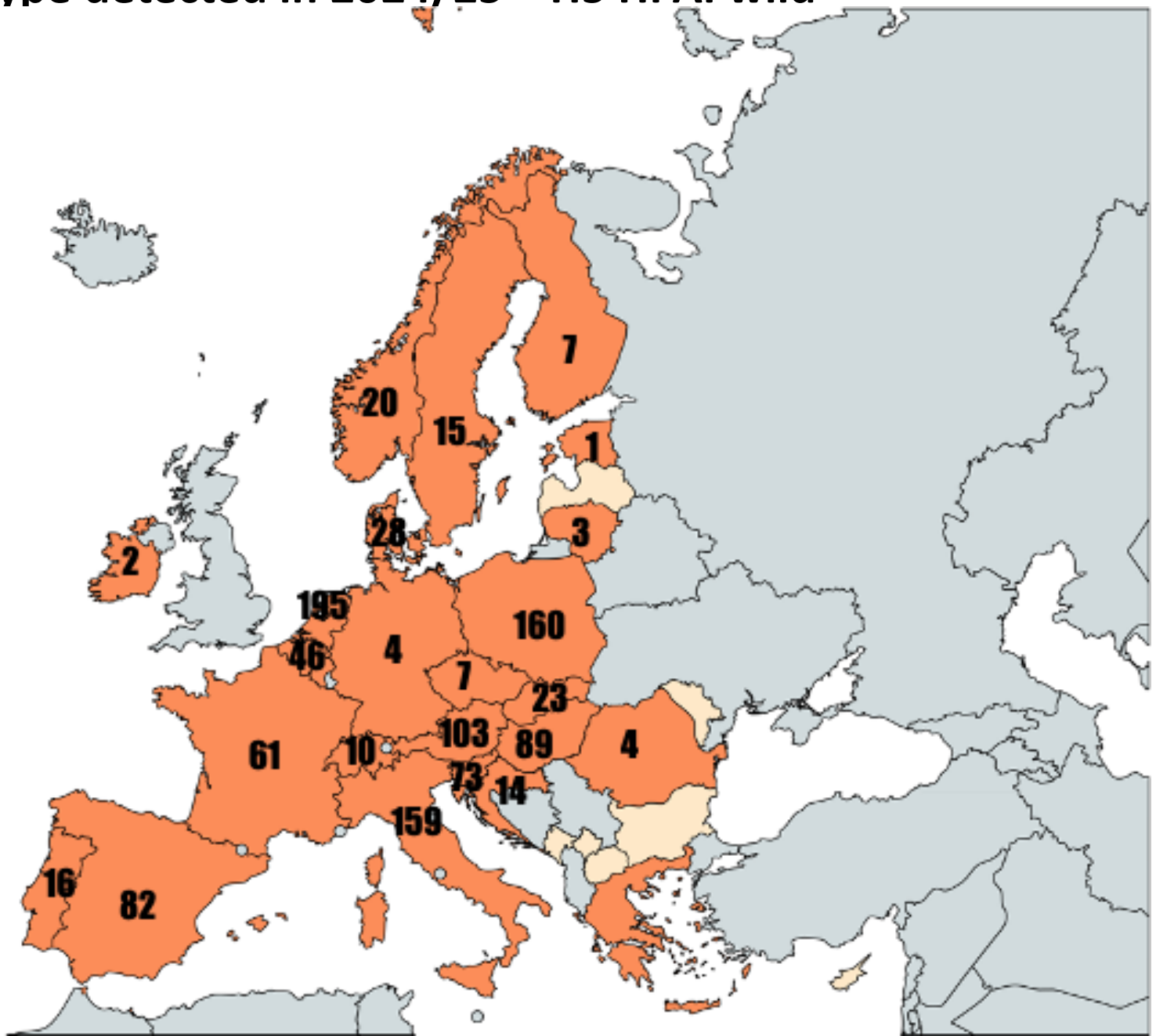
Created with mapchart.net

Avian influenza subtype detected in 2024/25 – H5 HPAI wild

AI

1125



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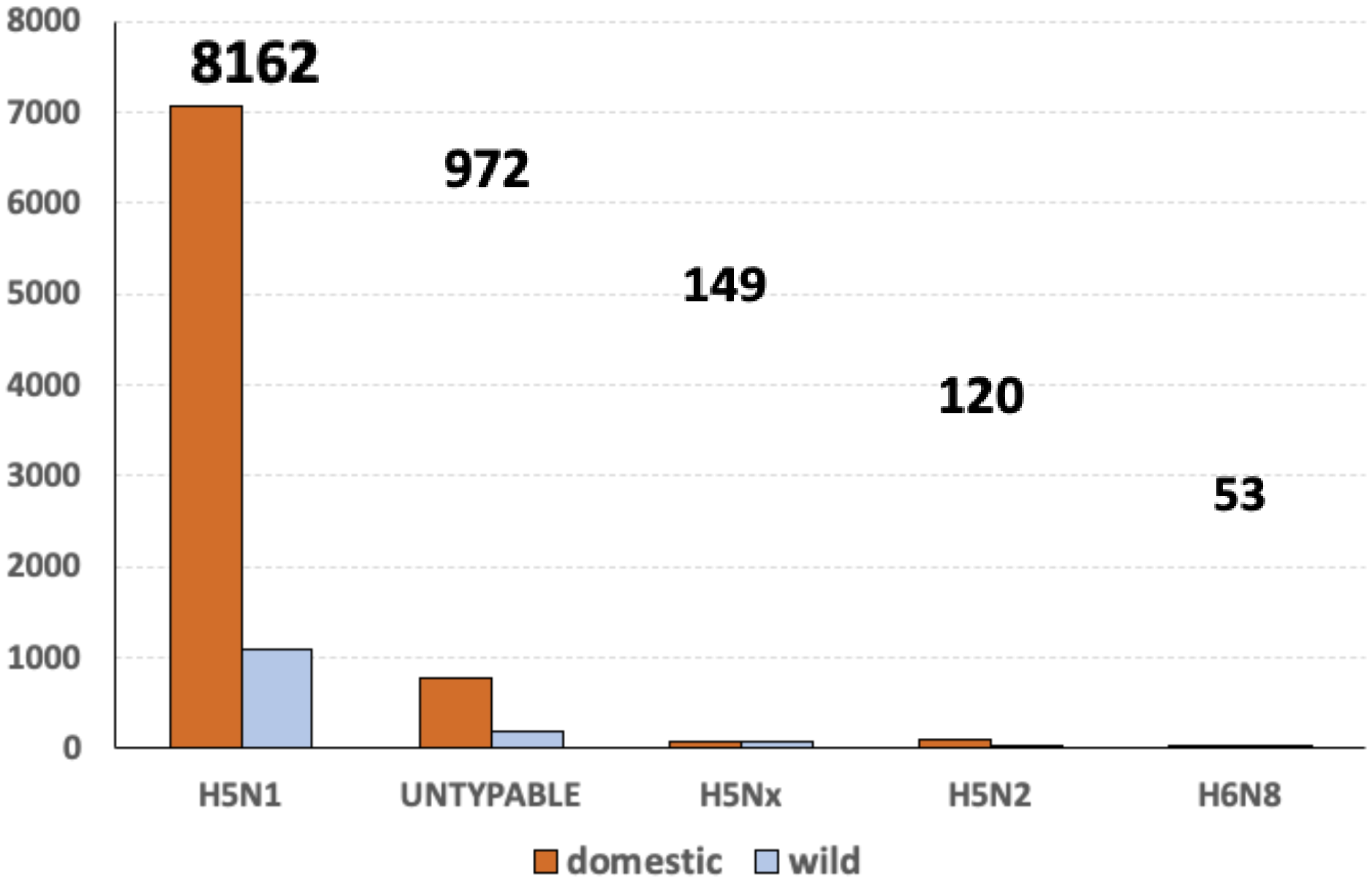
Created with mapchart.net

Avian influenza subtype detected in 2024/25 – TOP 5

AI



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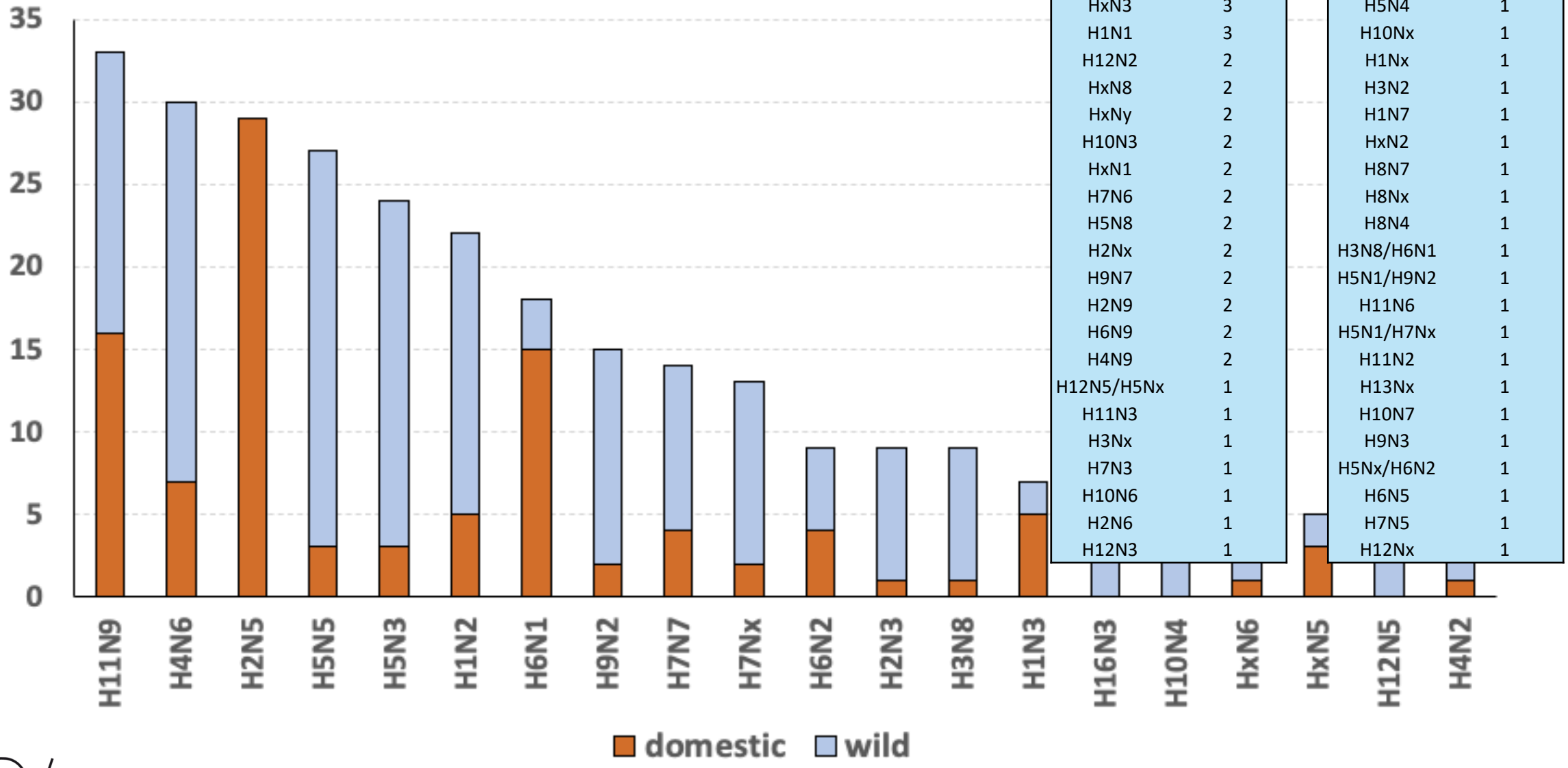
Avian influenza subtype detected in 2024/25

AI



H13N2	3
H6Nx	3
HxN3	3
H1N1	3
H12N2	2
HxN8	2
HxNy	2
H10N3	2
HxN1	2
H7N6	2
H5N8	2
H2Nx	2
H9N7	2
H2N9	2
H6N9	2
H4N9	2
H12N5/H5Nx	1
H11N3	1
H3Nx	1
H7N3	1
H10N6	1
H2N6	1
H12N3	1

H7N1	1
H11N7	1
H5N4	1
H10Nx	1
H1Nx	1
H3N2	1
H1N7	1
HxN2	1
H8N7	1
H8Nx	1
H8N4	1
H3N8/H6N1	1
H5N1/H9N2	1
H11N6	1
H5N1/H7Nx	1
H11N2	1
H13Nx	1
H10N7	1
H9N3	1
H5Nx/H6N2	1
H6N5	1
H7N5	1
H12Nx	1

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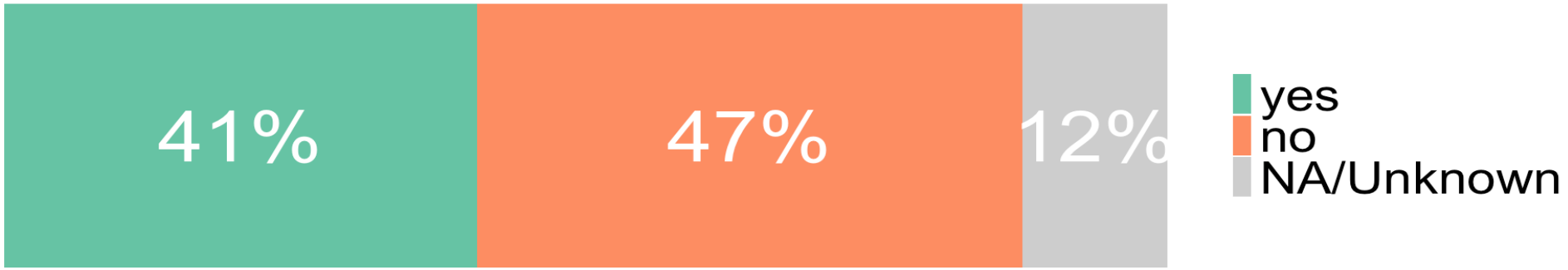
2.1. What type of surveillance is implemented in your country in wild birds (e.g. active, passive, none, both)?

AI

- Mainly passive surveillance (annual program, country-wide)
- Active surveillance only in high-risk areas, periods, or specific bird populations

2.2. Were investigations performed in humans with history of exposure to HPAI-positive poultry? Yes/No. If yes, please provide details



AI

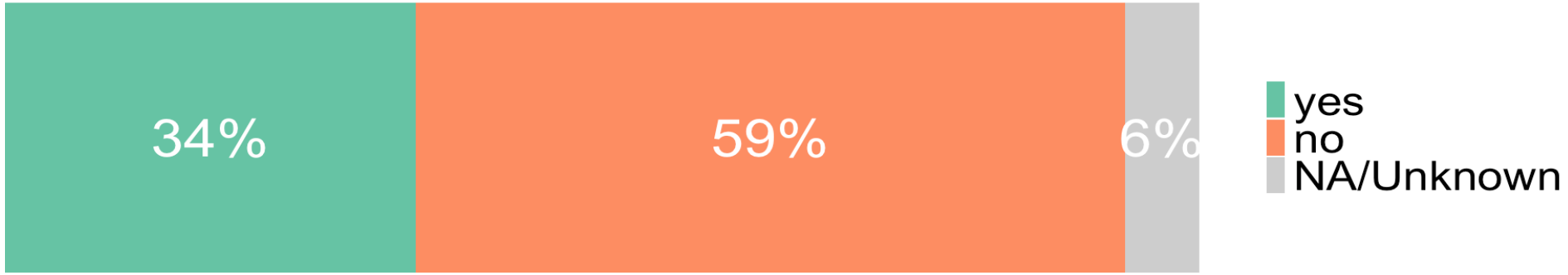
- Managed by public health authorities, mainly targeting exposed workers and close contacts
- No human cases detected in the reporting period

2.3. Were serological and/or virological investigations performed in domestic mammals with history of exposure to HPAI-positive birds in confirmed outbreaks? Yes/No. Please provide details

AI

Unknown

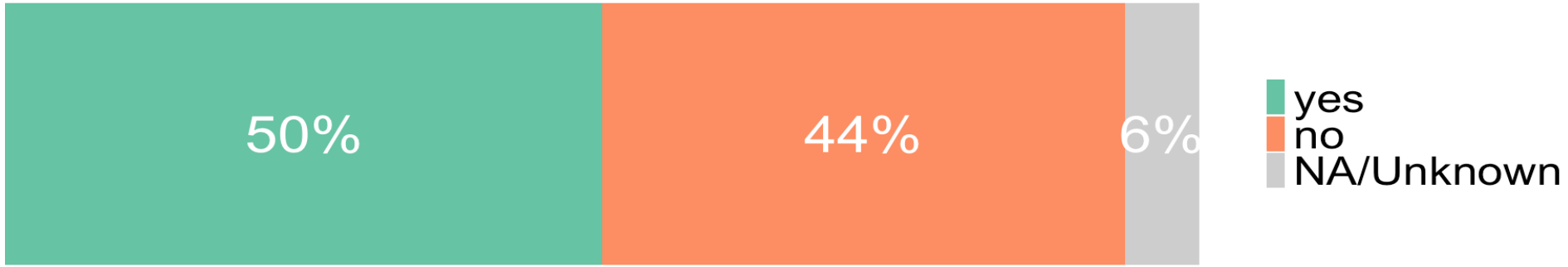
2.7. Did you perform or plan any surveillance (including retrospective) activities in dairy cattle and/or ruminants? Yes/No. If yes, please provide details



AI

- Most activities involved ELISA testing (on serum or bulk milk samples), sometimes complemented by RT-qPCR.
- A few countries are drafting or planning surveillance schemes for ruminants in contact with infected poultry holdings.
- No positive results have been reported so far.

2.4. Were domestic or wild mammals tested for HPAI in case of active circulation of HPAIVs? Yes/No. If yes, please provide details



AI

- Mainly wild mammals tested, via passive surveillance and the EU-funded One Health project; domestic mammals tested only in outbreaks


Adopted: 12 December 2024

DOI: 10.2903/j.efsa.2025.9191

SCIENTIFIC OPINION

Preparedness, prevention and control related to zoonotic avian influenza

EFSA Panel on Animal Health and Animal Welfare (AHAW)* | ECDC* | Julio Alvarez[1] |

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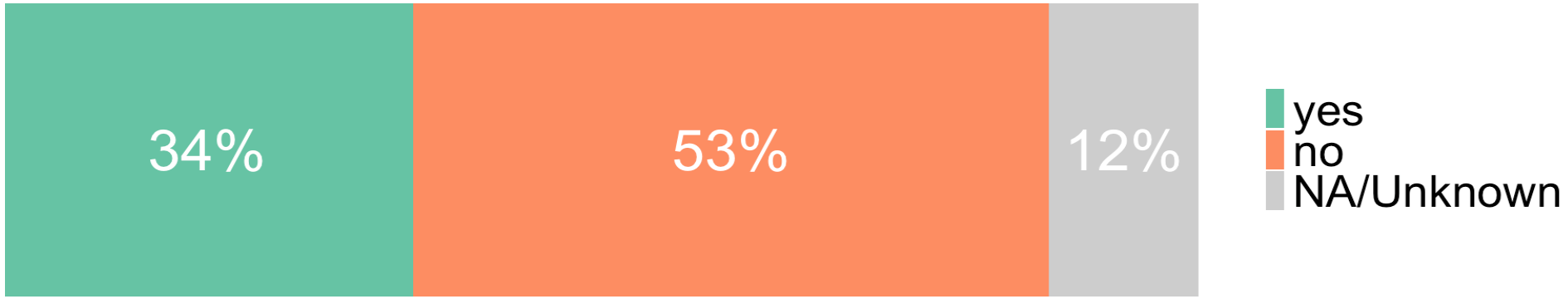
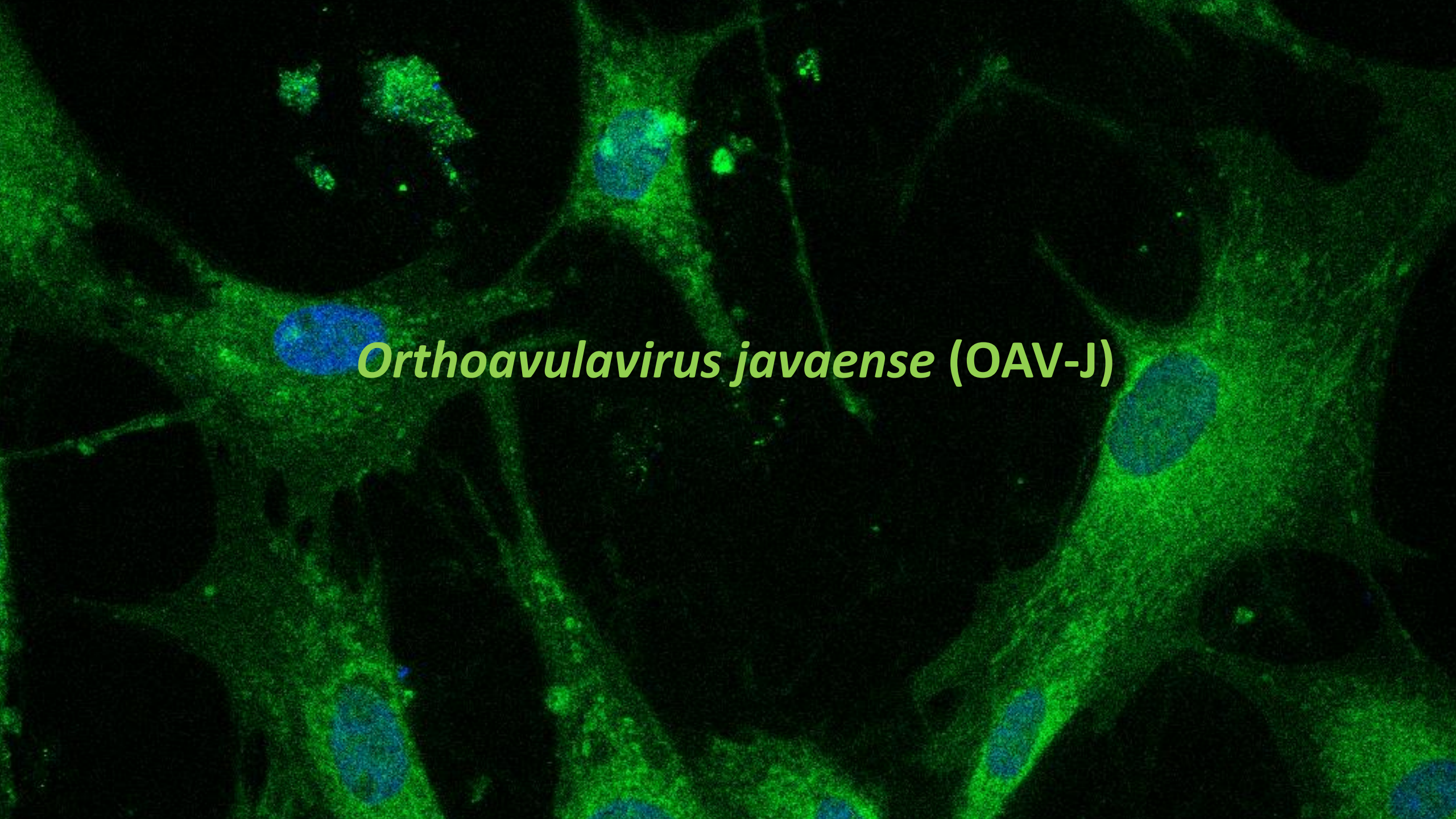
2.6. Did you perform active surveillance before the movement of poultry in case of active circulation of HPAIVs? If yes, please describe strategy of sampling applied



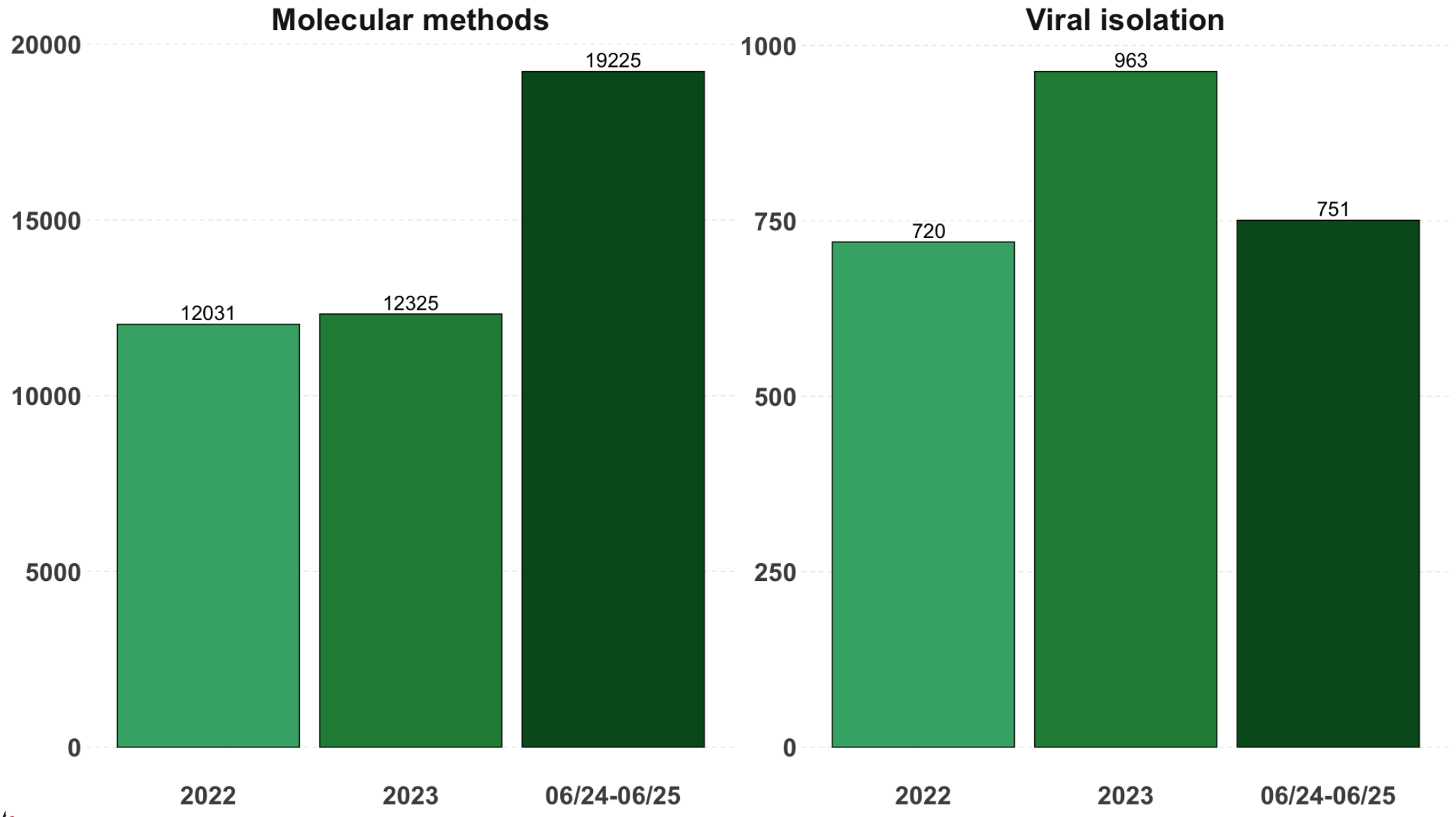
AI

- tracheal/cloacal swabs or serum samples may be collected before movement.


Orthoavulavirus javaense (OAV-J)

1.1 How many samples from poultry or wild birds were processed by molecular (RT-PCR or rRT-PCR) or virus isolation methods?

NDV



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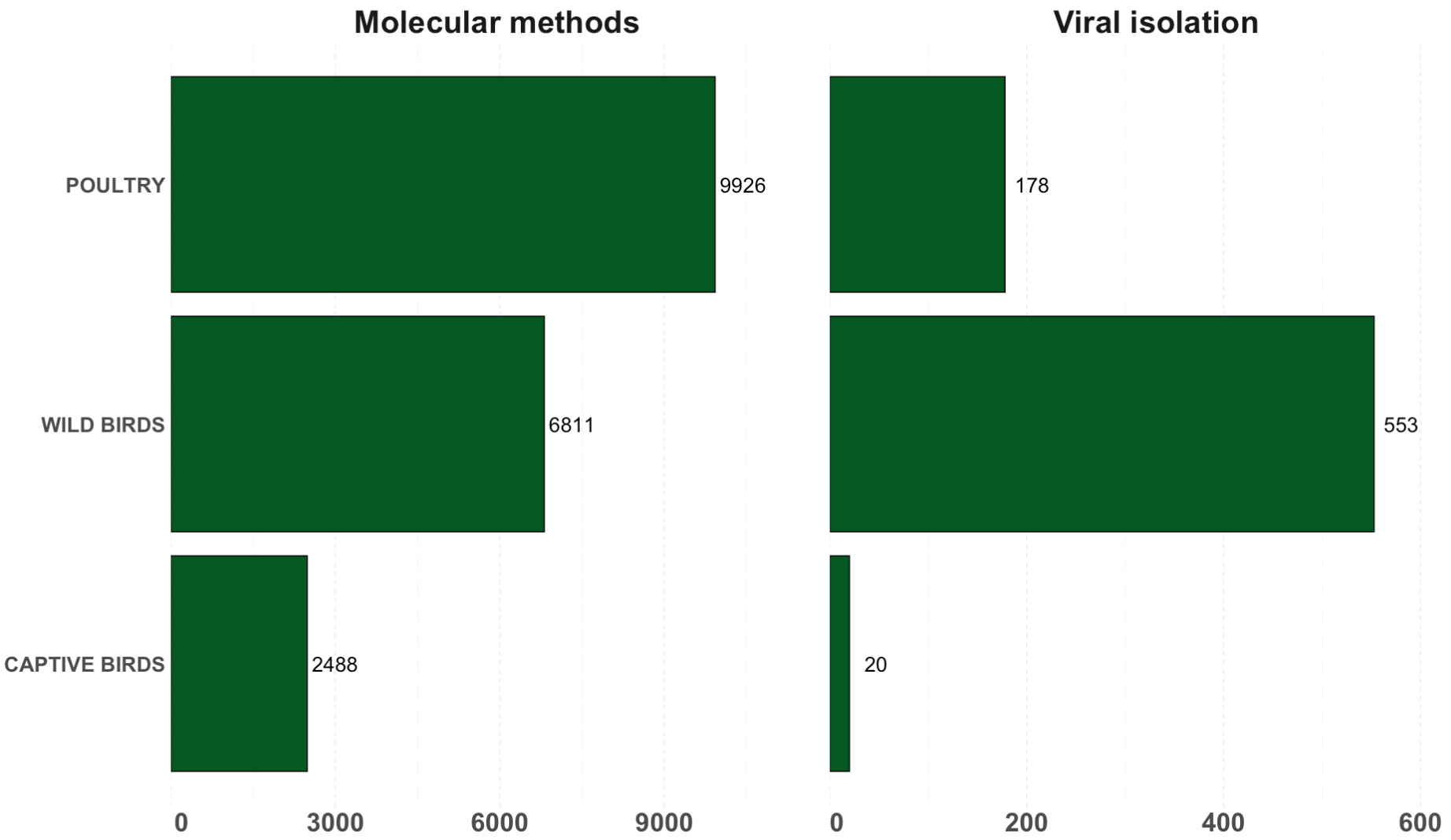

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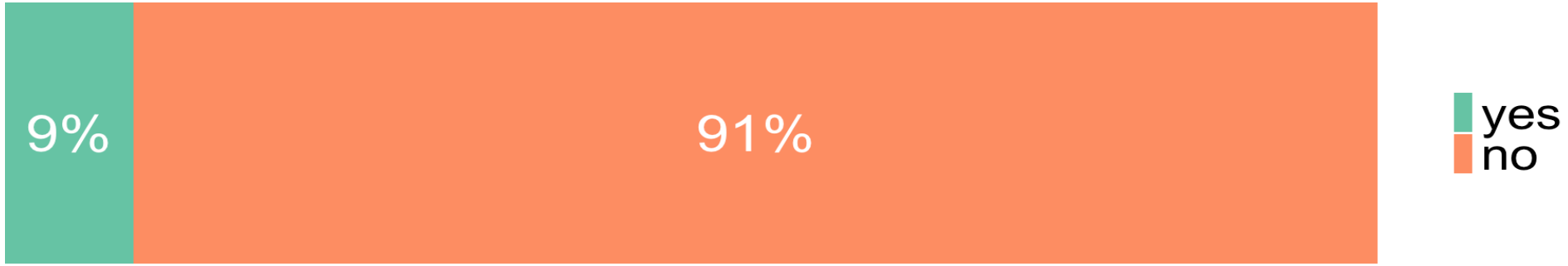


NDV

- Two NRLs reported internal or external use of commercial kits (e.g VetMAX™ NDV).

1.3 Do you perform serological testing for ND? If yes, please provide details on the methods and kits used.

NDV

- Mainly to check vaccination titres.
- Methods: HI test and ELISA

1.4 Do you perform rapid (real time RT-PCR-based) molecular pathotyping for APMV-1? Yes/No. If yes, please provide details

NDV

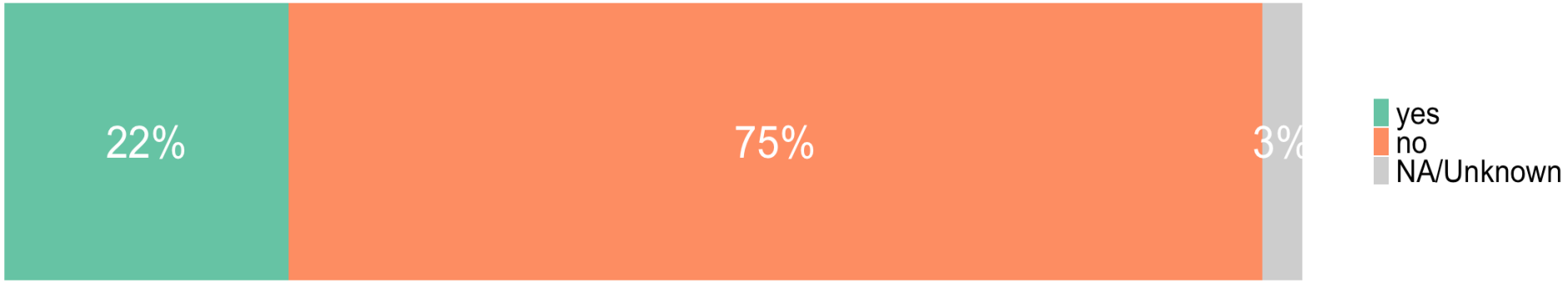
- Protocols: Fuller et. al. 2009; Sabre et al. 2017; SOP VIR 1006

1.5 If an APMV-1 was detected, was sequencing of the F gene performed? Yes/No. If yes, please specify whether a partial or complete sequence of the F gene was performed and deposited

NDV

- Most laboratories perform partial sequencing of the F gene, mainly targeting the cleavage site.
- Some laboratories also perform full F gene sequencing or whole genome sequencing (WGS).

1.6 Did you perform sequencing also of other genes (other than F gene)? Yes/No. If yes, please provide details

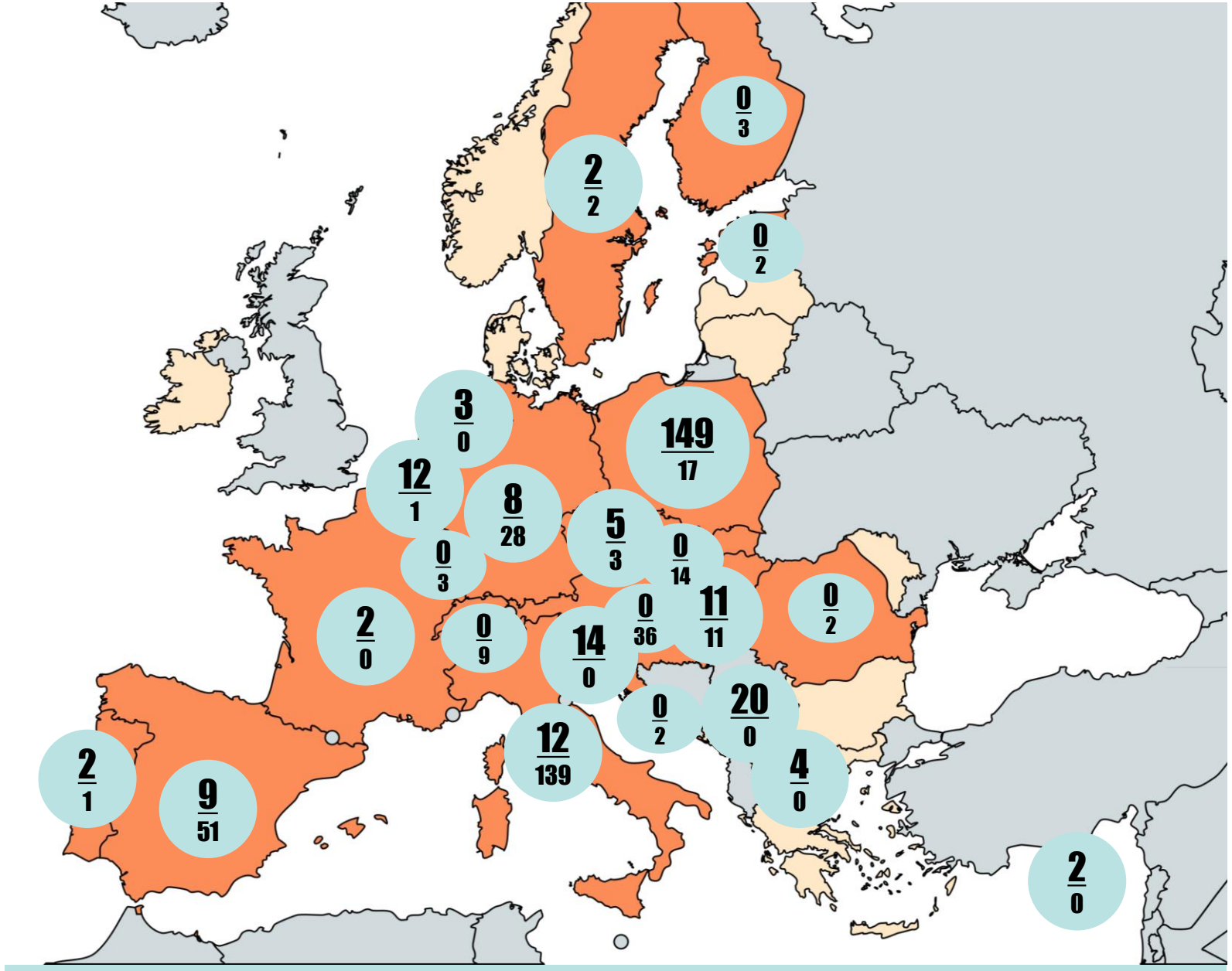


NDV

- Some laboratories perform whole genome sequencing (WGS) or sequencing of other genes, mostly for selected isolates or as part of epidemiological investigations.
- Systematic WGS is not routine, and sequencing of additional genes is done only when viral RNA concentration allows it.

1.7 Indicate the number of APMV-1 isolated/detected, their serotype/genotype and the type of bird from which they were identified

NDV



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OAV-J viruses detected in poultry (excluding pigeons) in 2024/25

NDV

Country	Species	ICPI	CS	Genotype	Patotype	Number of outbreaks
Belgium	chicken	nd	GRQGRL	n.a.	Avirulent	4
Czech Republic	chicken	nd	RRQKRF	VII.1.1	Virulent	5
Germany	poultry	nd	GRQGRL	2.II	Avirulent	2
Italy	chicken	nd	GRQGRL	I 1.1	Avirulent	2
Italy	chicken	nd	GRQGRL	I 1.2.2	Avirulent	3
Italy	chicken	nd	GRQGRL	I.2	Avirulent	1
Poland	chicken	na	RRQKRF	VII 1.1	Virulent	149
Republic Of North Macedonia	chicken	no	RQKRF	VII.2	Virulent	4
Slovenia	chicken	1,98	RRQKRF	VII.1.1	Virulent	2
Slovenia	chicken	nd	GKQGRL	I.1.1	Avirulent	1
Slovenia	chicken	nd	GRQGRL	II	Avirulent	5
Slovenia	turkey	nd	GRQGRL	II	Avirulent	1
Spain	mallard	no	GKQGRL	na	Avirulent	2
Spain	egyptian goose	no	GKQGRL	na	Avirulent	1
Sweden	chicken	no	RRQRRF	XIII.1.1	Virulent	1

OAV-J viruses detected in poultry (excluding pigeons) in 2024/25

NDV

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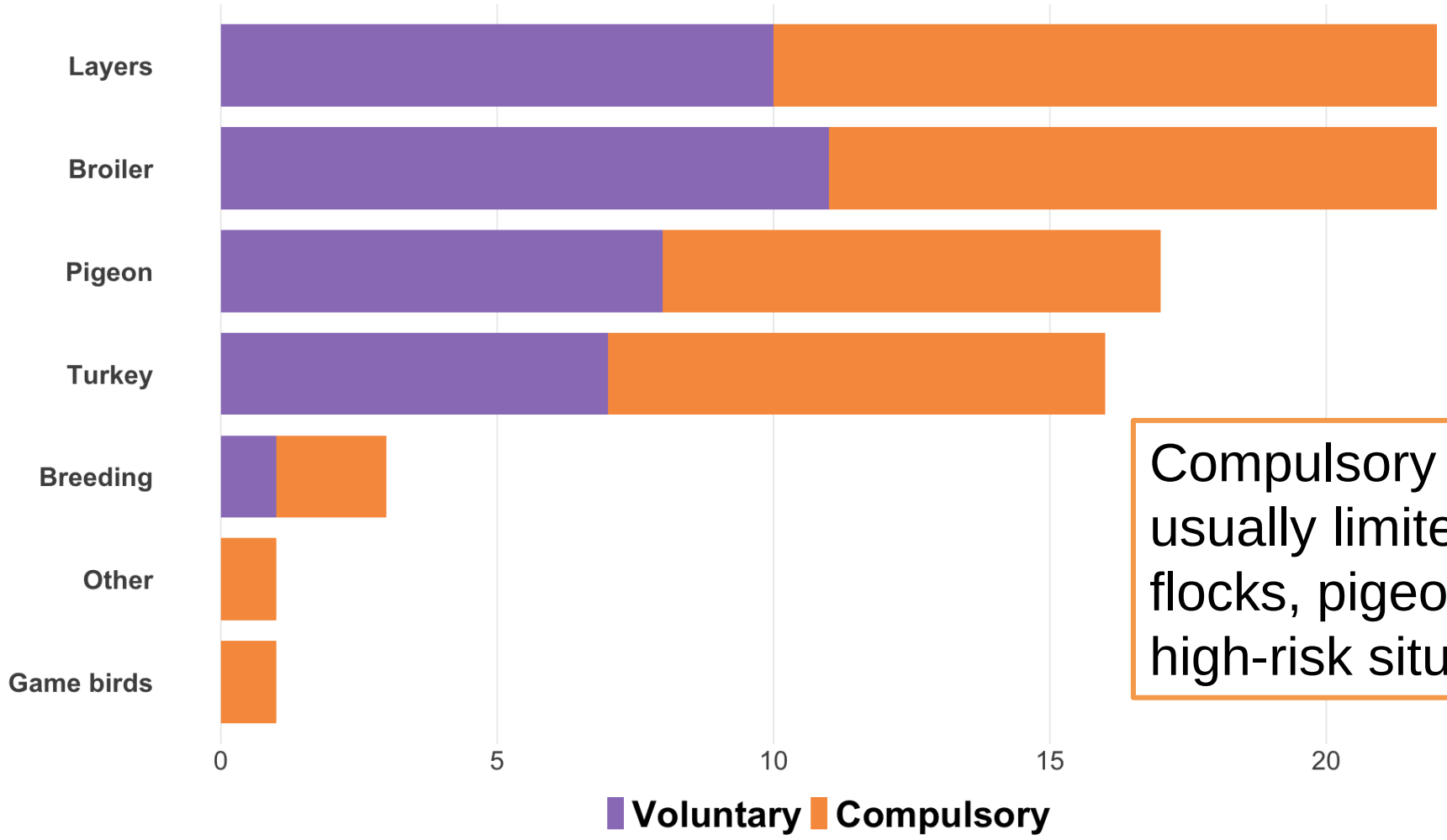
Belgium	chicken	nd	GRQGRL	n.a.	Avirulent	4
Czech Republic	chicken	nd	RRQKRF	VII.1.1	Virulent	5
Germany	poultry	nd	GRQGRL	2.II	Avirulent	2
Italy	chicken	nd	GRQGRL	I 1.1	Avirulent	2
Italy	chicken	nd	GRQGRL	I 1.2.2	Avirulent	3
Italy	chicken	nd	GRQGRL	I.2	Avirulent	1
Poland	chicken	na	RRQKRF	VII 1.1	Virulent	149
Republic Of North Macedonia	chicken	no	RQKRF	VII.2	Virulent	4
Slovenia	chicken	1,98	RRQKRF	VII.1.1	Virulent	2
Slovenia	chicken	nd	GKQGRL	I.1.1	Avirulent	1
Slovenia	chicken	nd	GRQGRL	II	Avirulent	5
Slovenia	turkey	nd	GRQGRL	II	Avirulent	1
Spain	mallard	no	GKQGRL	na	Avirulent	2
Spain	egyptian goose	no	GKQGRL	na	Avirulent	1
Sweden	chicken	no	RRQRRF	XIII.1.1	Virulent	1

NDV

country	specie	wild_dom	icpi	aa_F	genotype	patotype
austria	Columbiformes	wild	no	RRQKR/FIG	VI.1.1 (L4b**)	PPMV-1 virulent
austria	Columbiformes	wild	no	RRQKR/FIG	XXI.1.1 (L4d**)	PPMV-1 virulent
austria	Columbiformes	wild	no	KRRKR/FIG	XXI.1.1 (L4d**)	PPMV-1 virulent
belgium	Columbiformes	domestic	na	RRQKRF	PPMV-1	velogenic
germany	Columbiformes	wild	no	RRQKR*FIG	VI.2.1.1.2.2	PPMV-1
germany	Columbiformes	wild	no	KRQKR*FIG	VI.2.1.1.2.2	PPMV-1
belgium	Columbiformes	domestic	na	KRQKRF	Not yet sequenced	velogenic
germany	Columbiformes	wild	no	KRQKR*FIG	XXI.1.1	PPMV-1
germany	Columbiformes	wild	no	RRQKR*FIG	XXI.1.1	PPMV-1
luxembourg	Columbiformes	wild	no	RRQKRF	VI.2.1.1.2.2	PPMV-1 virulent
luxembourg	Columbiformes	wild	no	RRQKRF	VI.2.1.1.2.2	PPMV-1 virulent
romania	Columbiformes	wild	no	SGGRRRKR/FIG	VI.2.1.1.2.1	Mesogenic/Velogenic
estonia	Columbiformes	wild	no	GRRQKRFIG	na	na
estonia	Columbiformes	wild	no	GRRQKRFIG	na	na
portugal	Columbiformes	wild	no	RRQKRF	VI.2.1.1.2.1	Velogenic
belgium	Columbiformes	domestic	na	RRQKRF	PPMV-1	velogenic
sweden	Columbiformes	wild	no	GGRRQRRFIGA	XXI.1.1	Velogenic
belgium	Columbiformes	domestic	na	KRQKRF	PPMV-1	velogenic
spain	Columbiformes	wild	no	RRQKRF	XXI	Velogenic
belgium	Columbiformes	domestic	na			
spain	Columbiformes	wild	no	RRQKRF	VI	Velogenic
spain	Columbiformes	wild	no	RRQKRF	na	Velogenic
croatia	Columbiformes	wild	no	RRQKRF	VI 2.1.1.2.2	velogenic PPMV-1
croatia	Columbiformes	wild	no	RRQKRF	VI 2.1.1.2.2	velogenic PPMV-1
czech republic	Columbiformes	wild	no	RRQKRF	na	na
belgium	Columbiformes	domestic	na	RRQKRF	PPMV1	velogenic
finland	Columbiformes	wild	nd	KRQKRF	na	virulent
slovakia	Columbiformes	wild	nd	RERRQKR*FVG	na	na
slovakia	Columbiformes	wild	nd	RGRRQKR*FVG	na	na
hungary	Columbiformes	wild	na	na	pigeon paramyxovirus-1	na
belgium	Columbiformes	domestic	na			
poland	Columbiformes	wild	na	RRQKRF	VI.2.1.1.2.2	velogenic
poland	Columbiformes	wild	na	KRQKRF	XXI.1.1	velogenic
belgium	Columbiformes	domestic	na			
france	Columbiformes	domestic	na	SGGRRQKRFIG		Velogenic
france	Columbiformes	domestic	na	SGGRRQKRFIG		Velogenic
germany	Columbiformes	domestic	no	RRQKR*FIG	VI.2.1.1.2.2	PPMV-1
germany	Columbiformes	domestic	no	KRQKR*FIG	XXI.1.1	PPMV-1
hungary	Columbiformes	domestic	na	na	pigeon paramyxovirus-2	na
italy	Columbiformes	domestic			VI.2.1.1.2.2	Velogenic
portugal	Columbiformes	domestic	no	RRQKRF	VI.2.1.1.2.2	Velogenic
slovenia	Columbiformes	domestic	nd	RRQKRF	VI.2.1.1.2.2	velogenic
spain	Columbiformes	domestic	no	RRQKRF	VI	Velogenic
italy	Columbiformes	wild			VI.1.2.1.2	Velogenic
italy	Columbiformes	wild			VI.1.2.1.2	Velogenic
italy	Columbiformes	wild			VI.2.1.1.2.1	Velogenic
italy	Columbiformes	wild			VI.2.1.1.2.1	Velogenic
the netherlands	Columbiformes	domestic	no	GGRRQKRFIGA	VI.2.1.1.2.2	Velogenic
italy	Columbiformes	wild			VI.2.1.1.2.2	Velogenic
italy	Columbiformes	wild			VI.2.1.1.2.2	Velogenic
italy	Columbiformes	wild			VI.2.1.1.2.2/VI.2.1.1.2.1	Velogenic
italy	Columbiformes	wild			na	Velogenic

2.2 If vaccination is performed in your country, please provide releavant details

NDV



Compulsory vaccination is usually limited to commercial flocks, pigeons for exhibitions, or high-risk situations.

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Thank you for your contribution!

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Sperimentale delle Venezie