



WEBINAR

## Avian influenza

- protecting wildlife in  
UNESCO World Heritage  
sites, Biosphere Reserves  
and Ramsar sites

[Register here](#)



Friday 19 April | 15:00 – 17:30 CET

09:00 – 11:30 GMT-5

# Avian Influenza: Why has it become a conservation issue?



Credit: M. Uhart

Dr. Marcela Uhart  
Karen C. Drayer Wildlife Health Center

# Avian Influenza

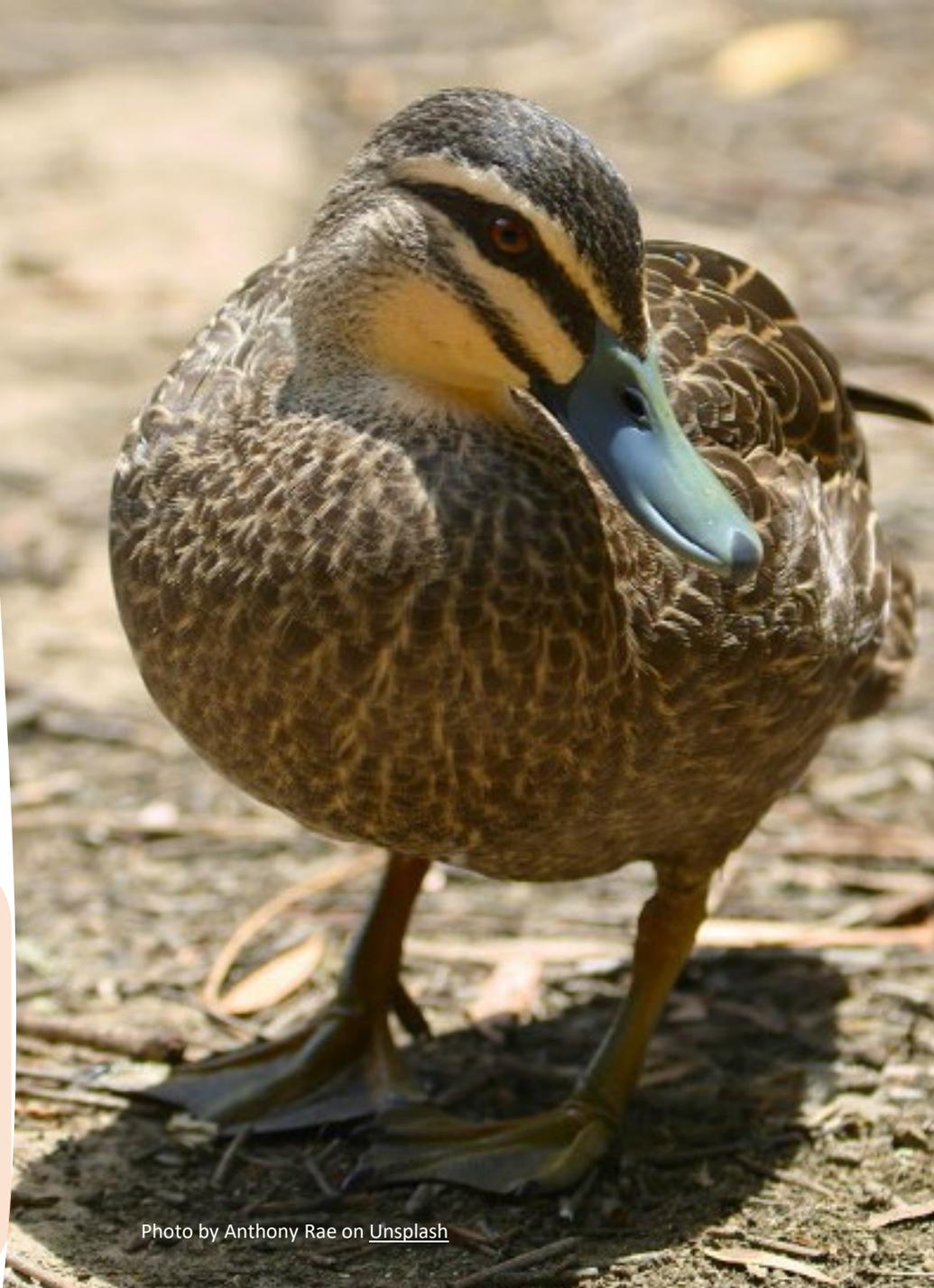
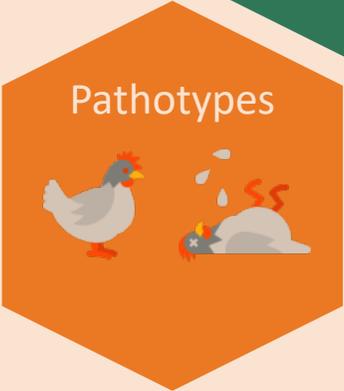
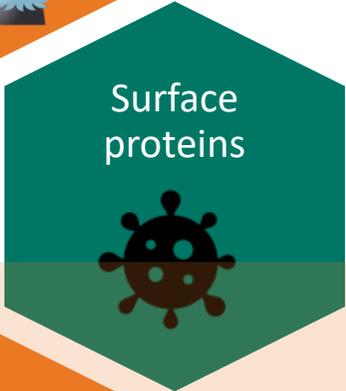
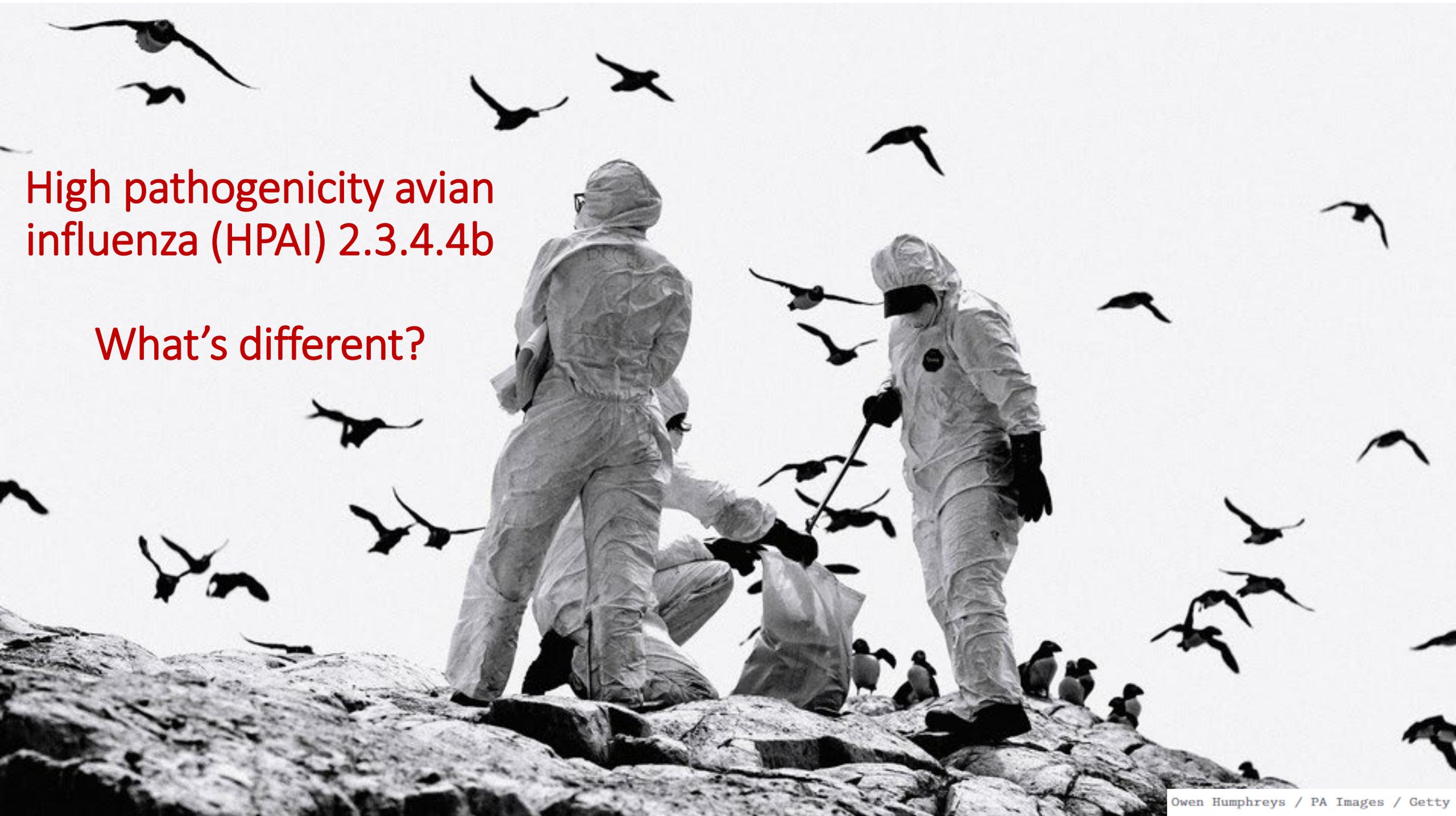


Photo by Anthony Rae on [Unsplash](https://unsplash.com/photos/AnthonyRae)

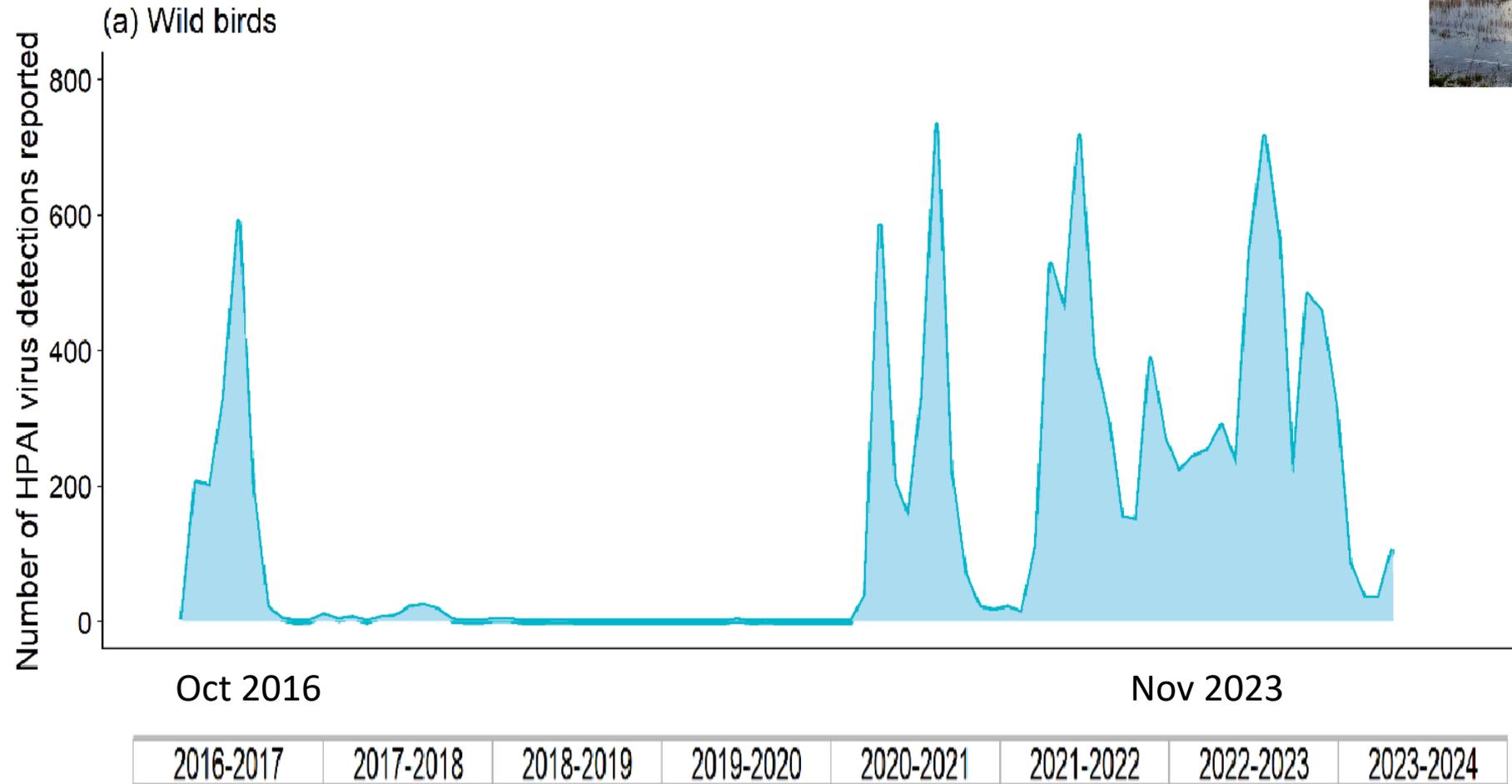


High pathogenicity avian  
influenza (HPAI) 2.3.4.4b

What's different?



# Loss of seasonality

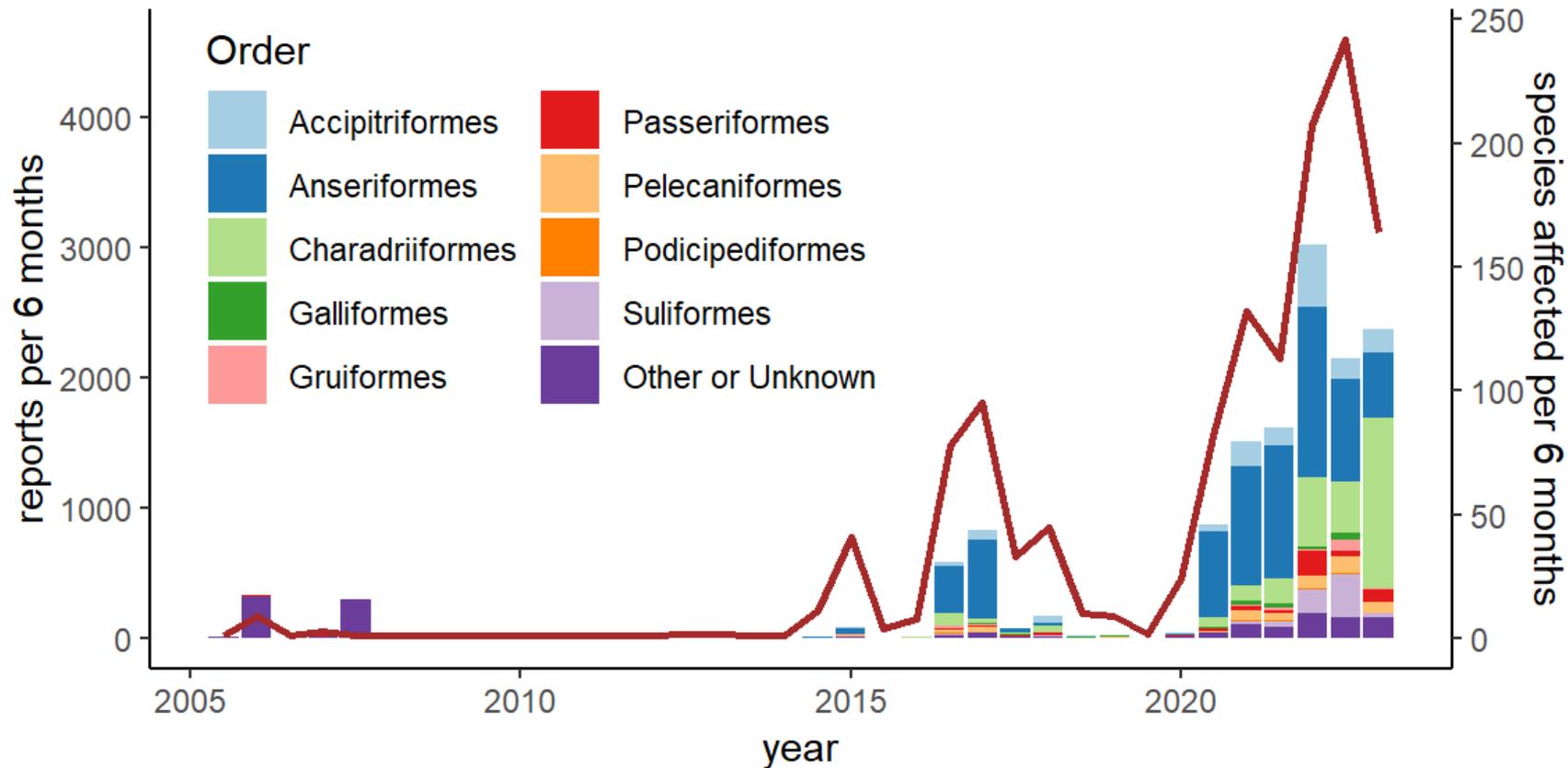


Densely aggregated species like seabirds



# Expanded type and number of species affected

>500 wild bird species from 25 orders

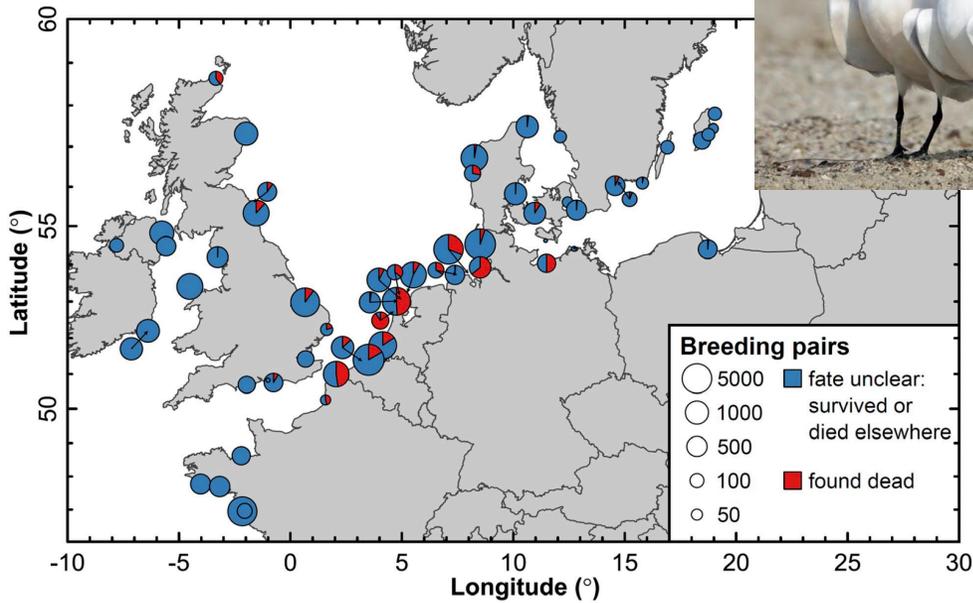


# Scale of the mortality

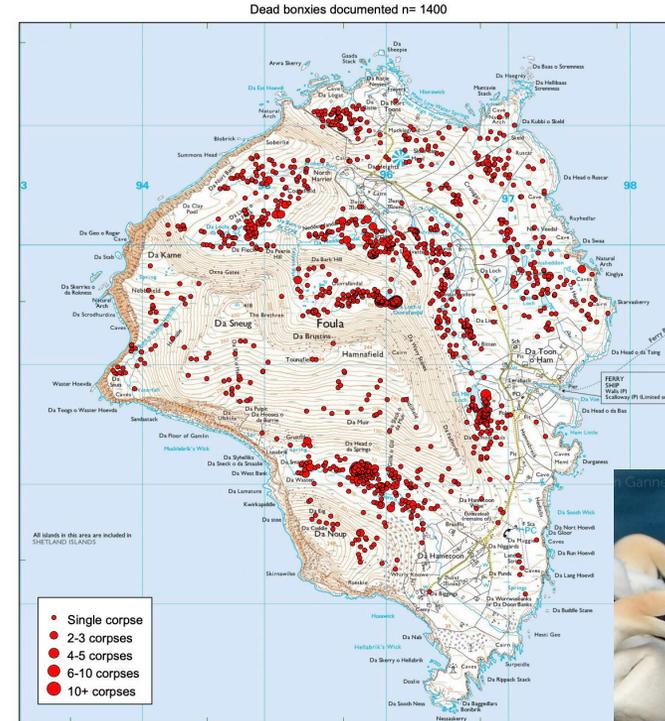
Sandwich Terns

>17% of European population (20,500 ind)

~ 100% mortality of chicks



Skuas 60-70% decrease



Scotland

Gannets 22% decrease



62,000 (36% ) Peruvian pelicans



# Bird flu kills 17,000 elephant seal pups in Argentina

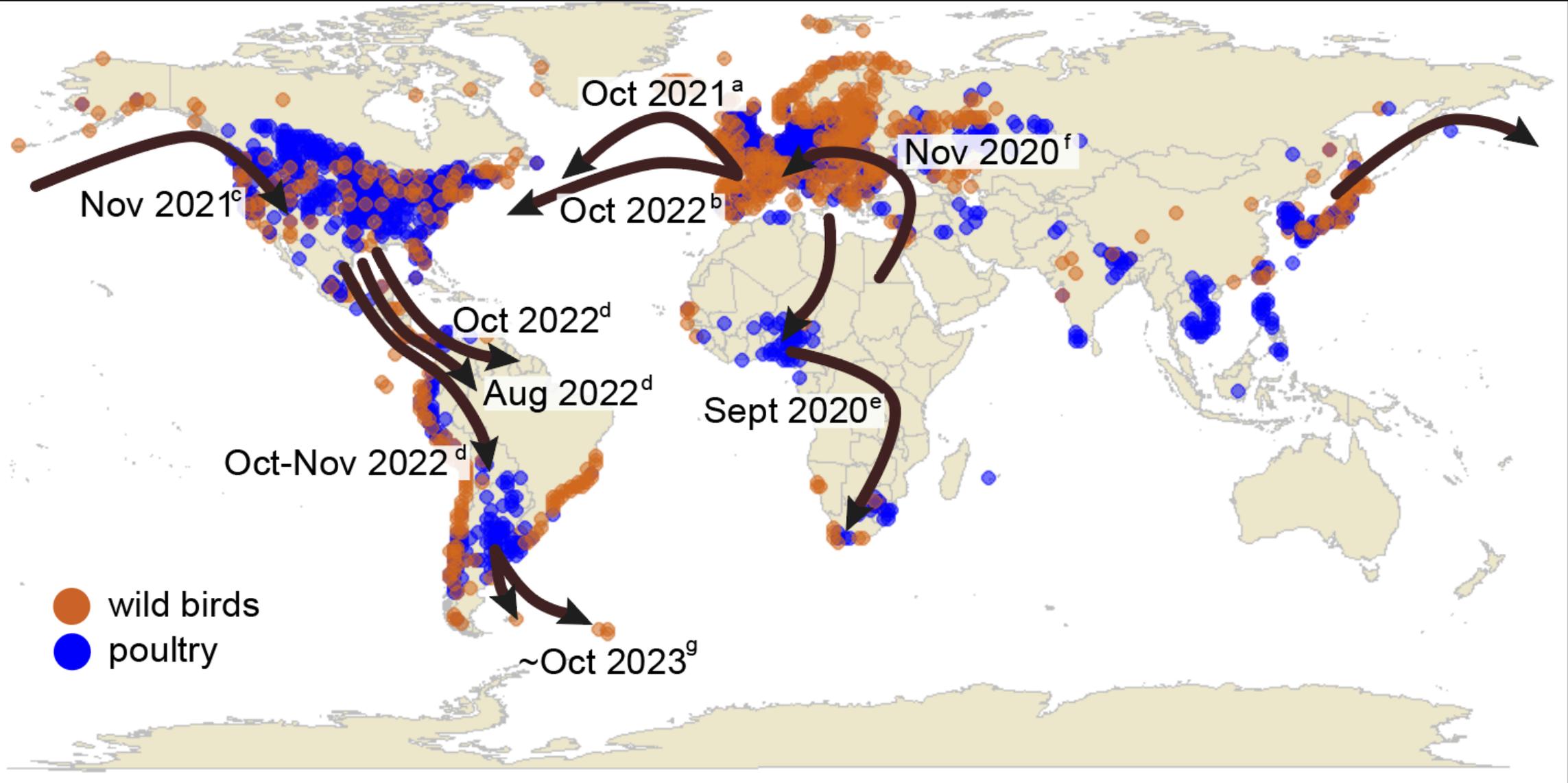
Conservationists say the 'catastrophic' mass seal deaths have never been seen before in Patagonia



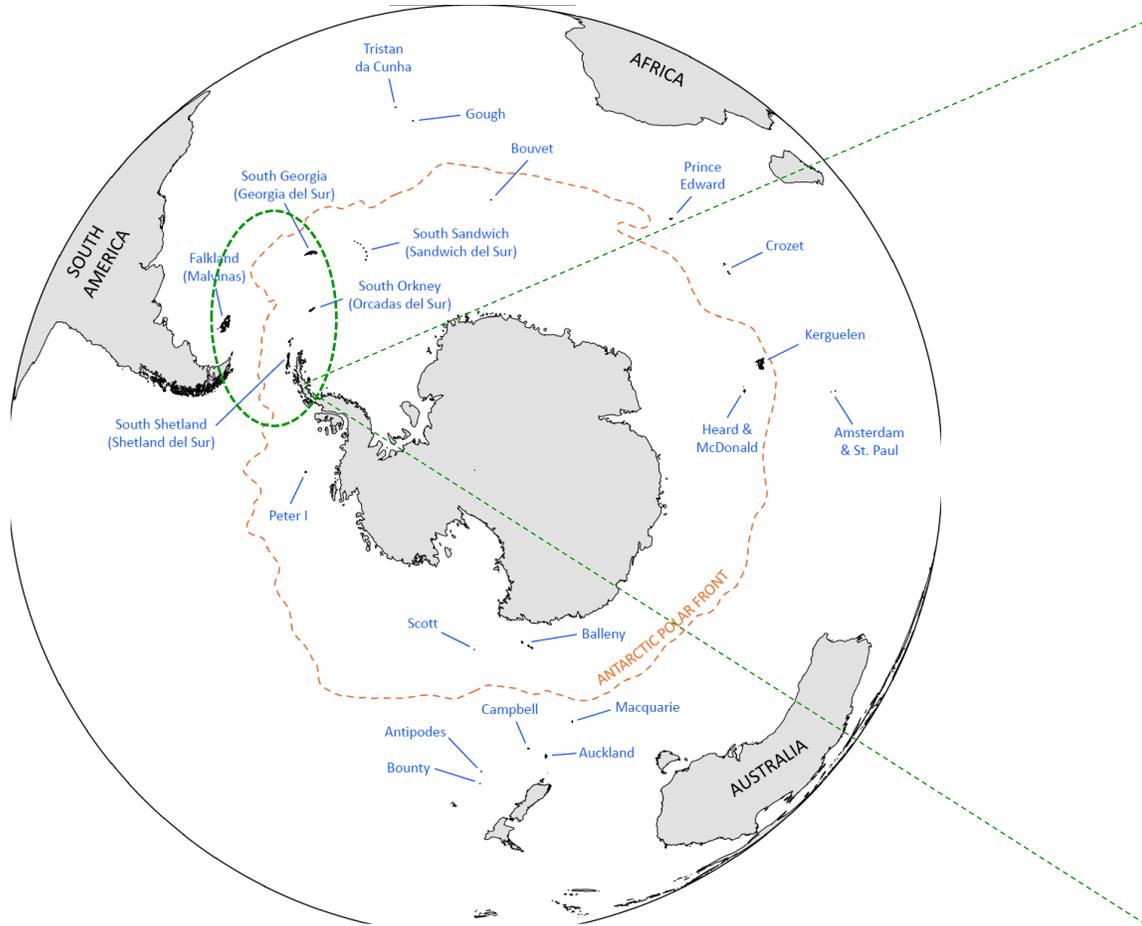
Credit: Ralph Vanstreels, UCD



# Global spread



# Recent spread to Antarctica



*Kuiken & Vanstreels et al. 2024*



Base Primavera, Argentina  
Cierva Cove

# High potential conservation impact

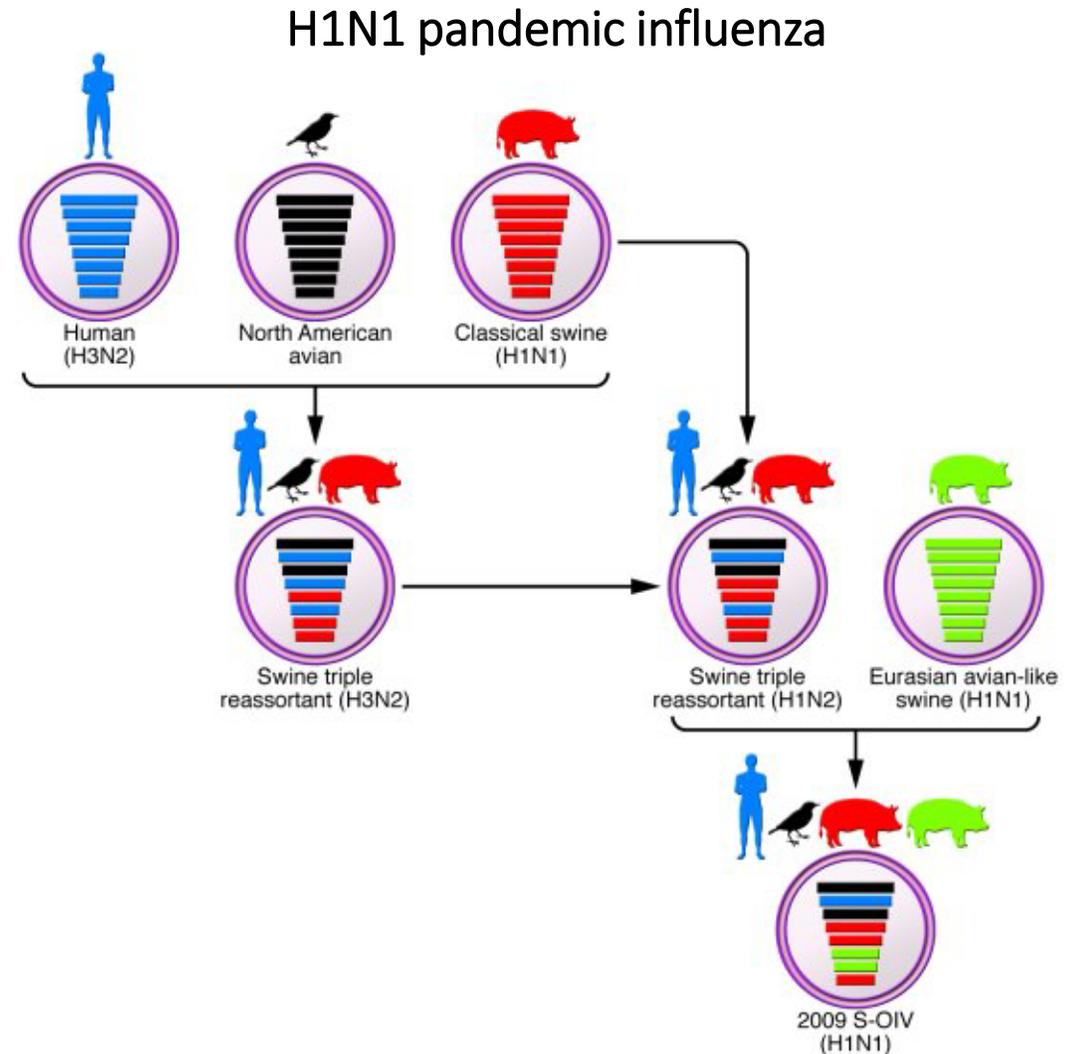
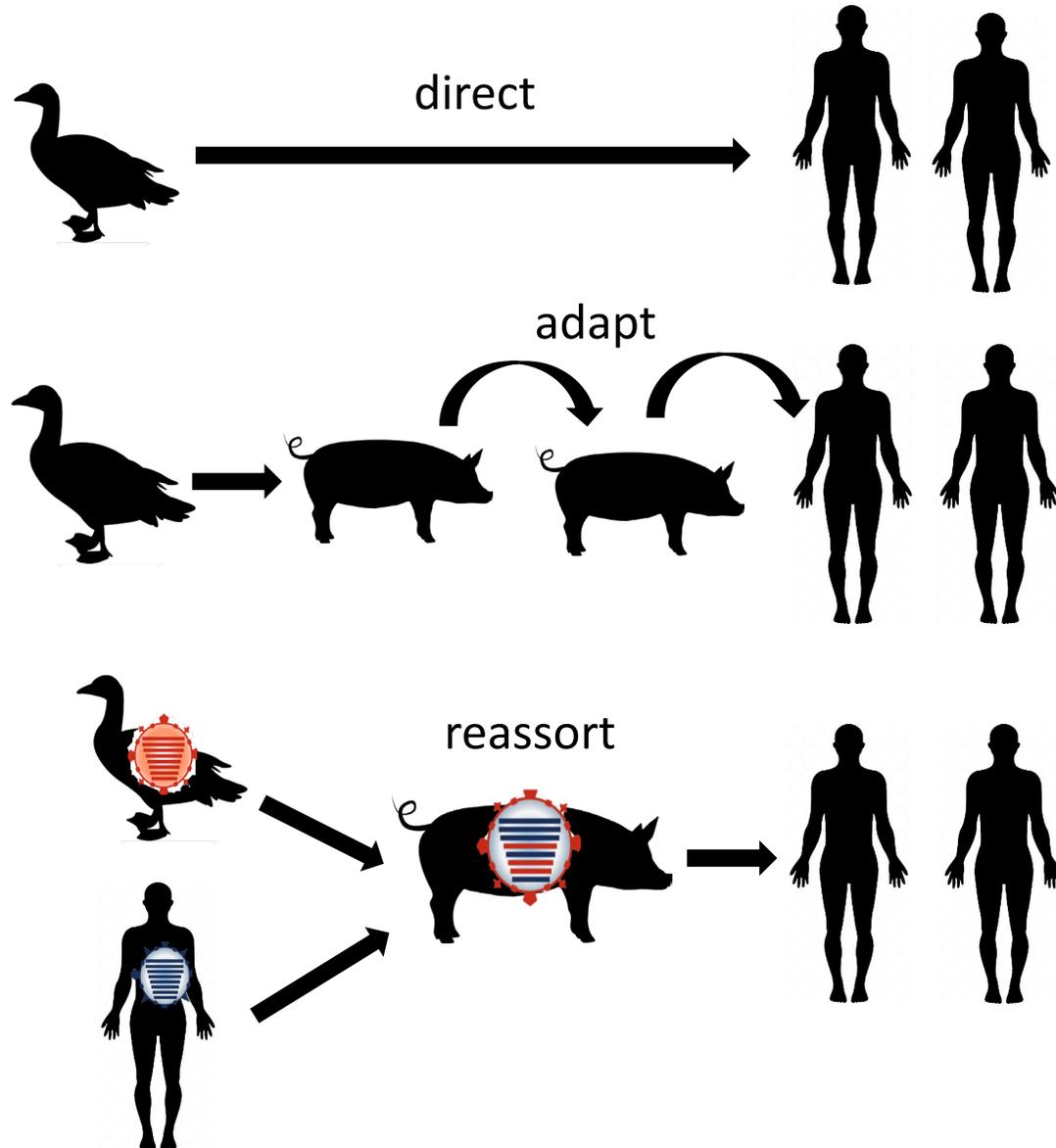
6 pinniped sp.



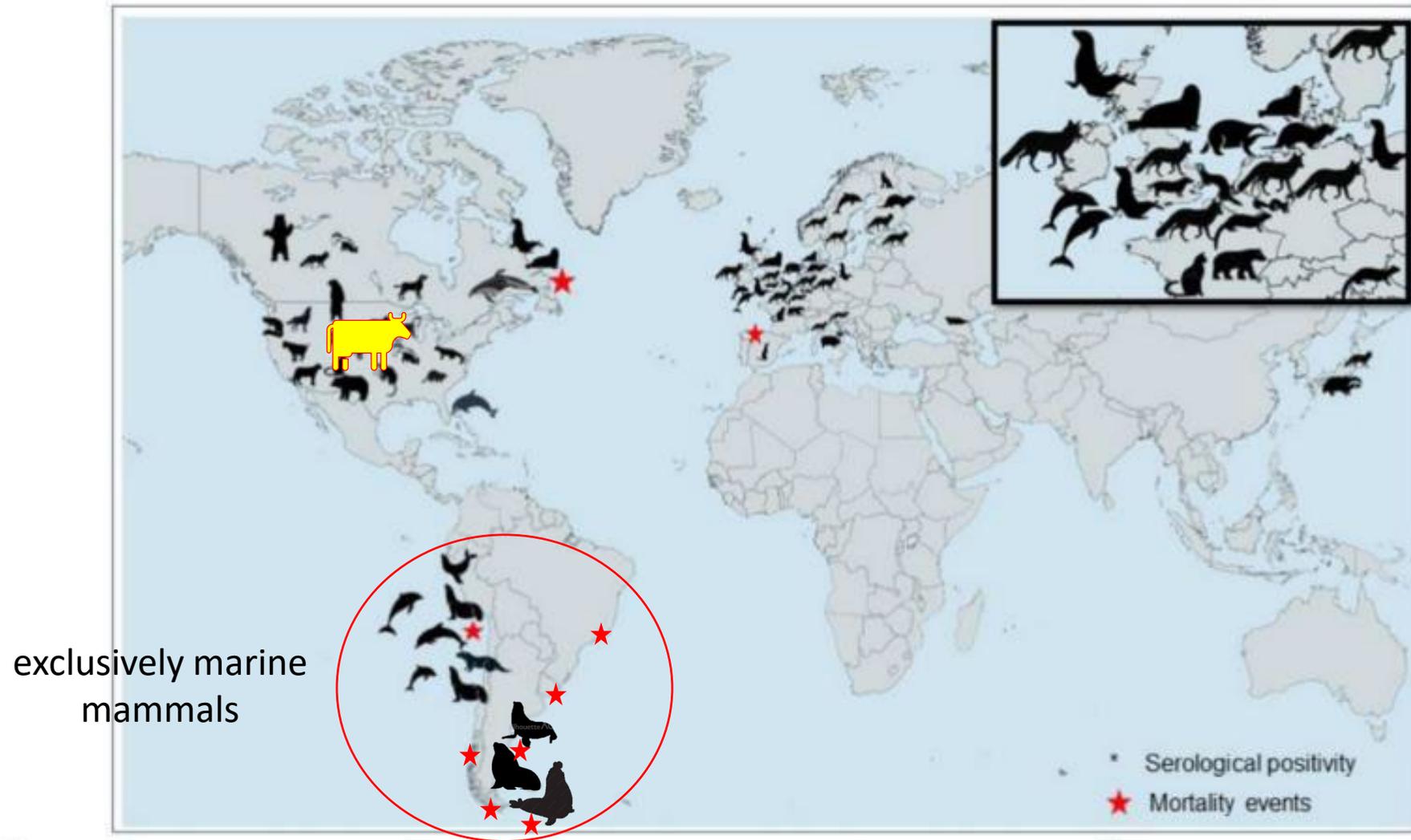
37 seabird sp.



# Influenza virus' superpower to transform



# Spillover to mammals



# Human case Chile – March 2023 attributed to environmental exposure



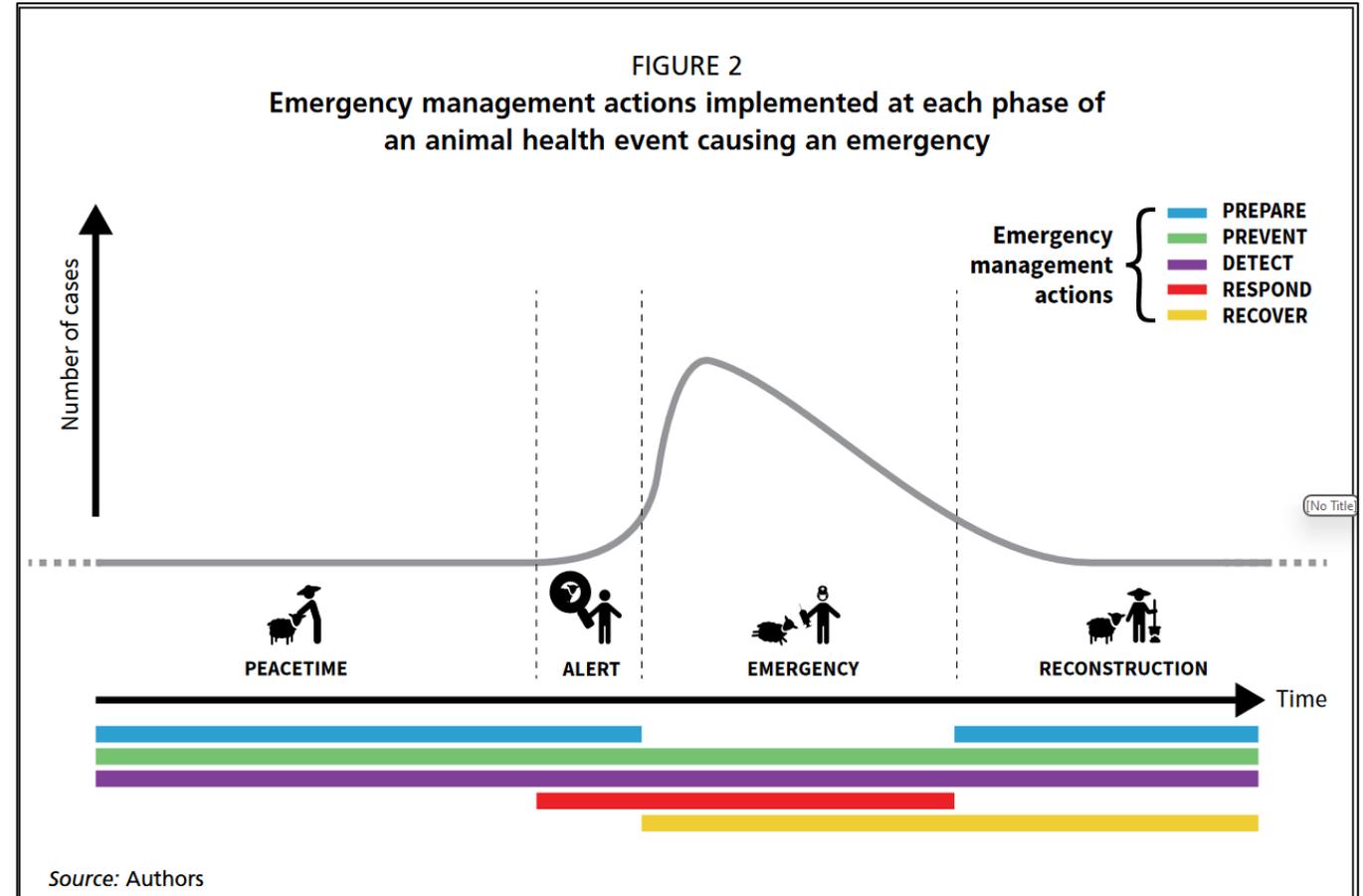
<https://www.nytimes.com/2023/04/14/science/bird-flu-humans.html>

# Avian Influenza: Guidance for site managers

Dr. Marcela Uhart  
Karen C. Drayer Wildlife Health Center

# 1. Contingency planning

- Develop and test during peacetime
- 2 types of plan
  - risk mitigation plan (proactive)
  - emergency response plan (reactive)



# 1. Contingency planning

**Proactive - risk mitigation plan**

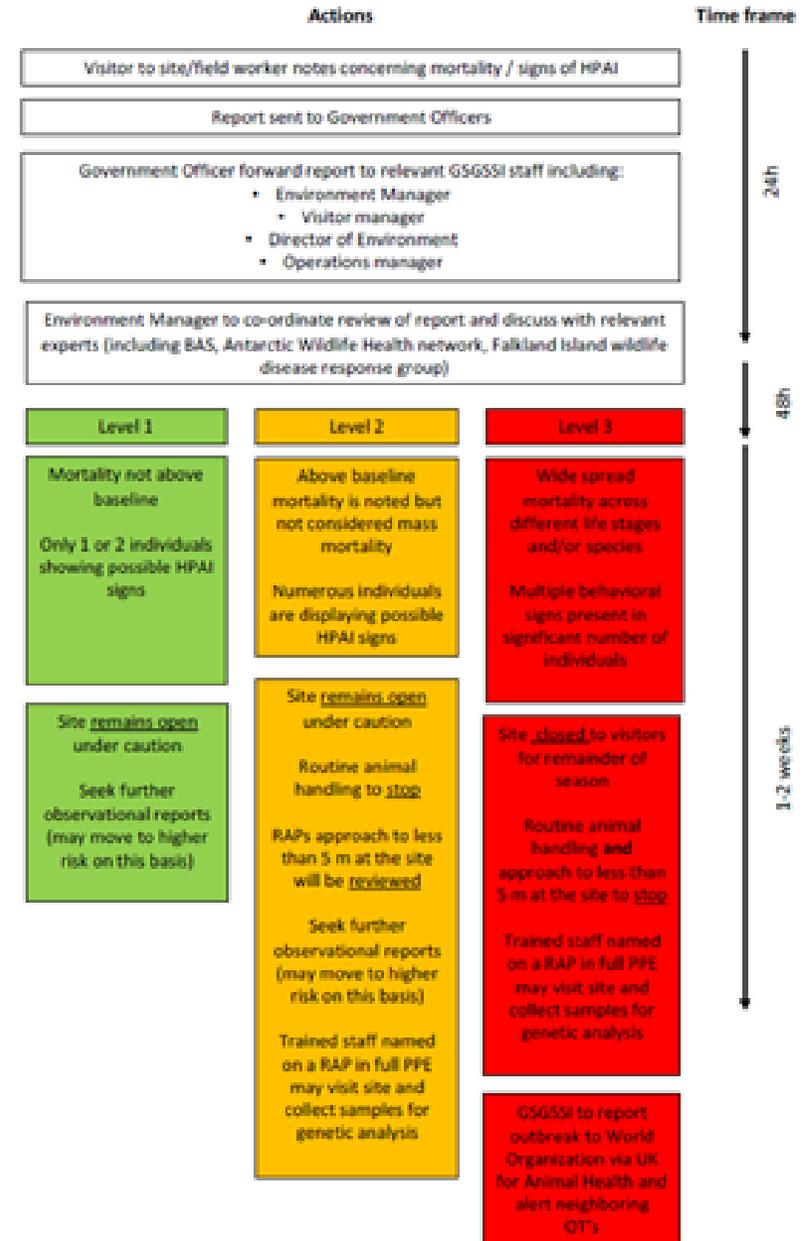
**Reactive - emergency response plan**

- Pre-determined processes and structures
- Cross-sectoral working and communication
- Clarify roles and responsibilities
- Prescriptive set of actions per stakeholder
- Practice in tabletop and/or simulation exercises.

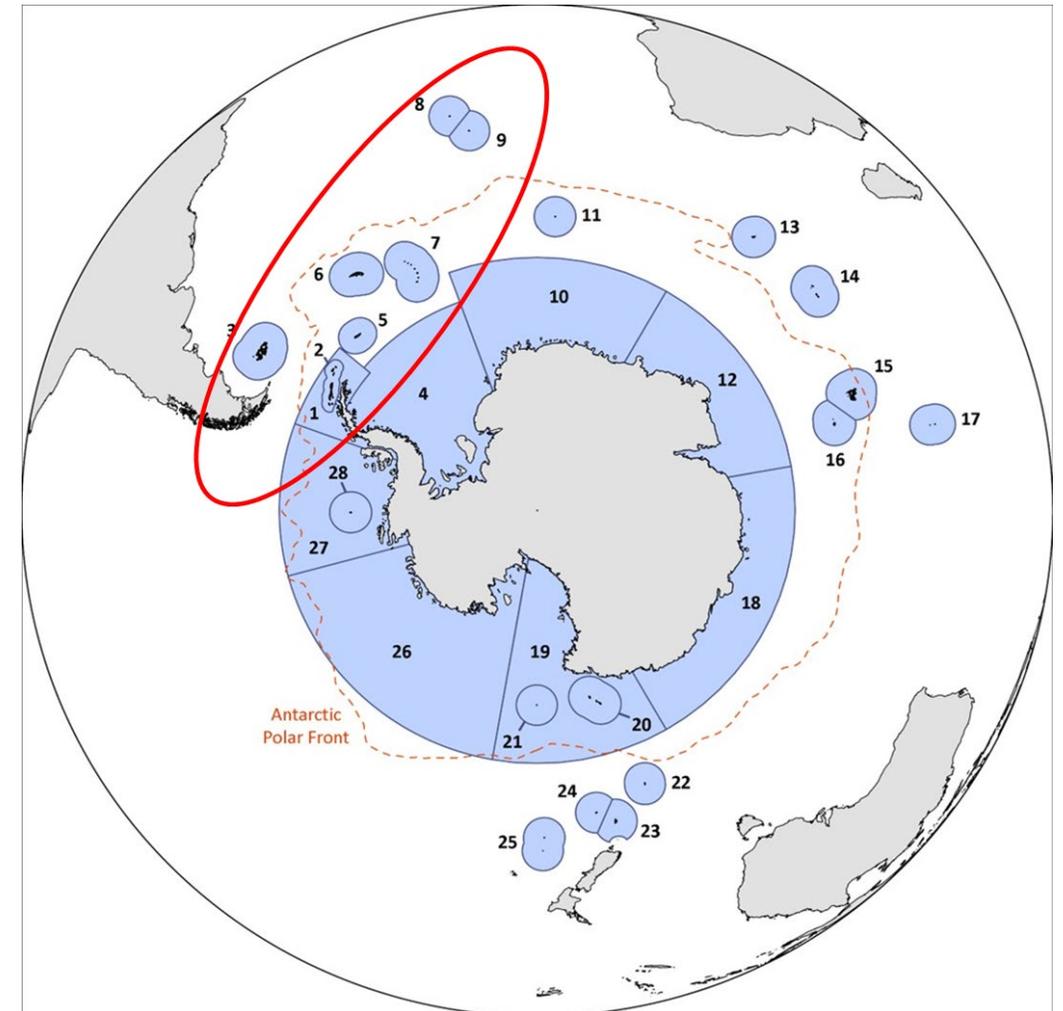


# 2. Integration of disease planning into site management plans

## 9.4. Action on suspected outbreak



# 3. Assessing risks of introduction of infection



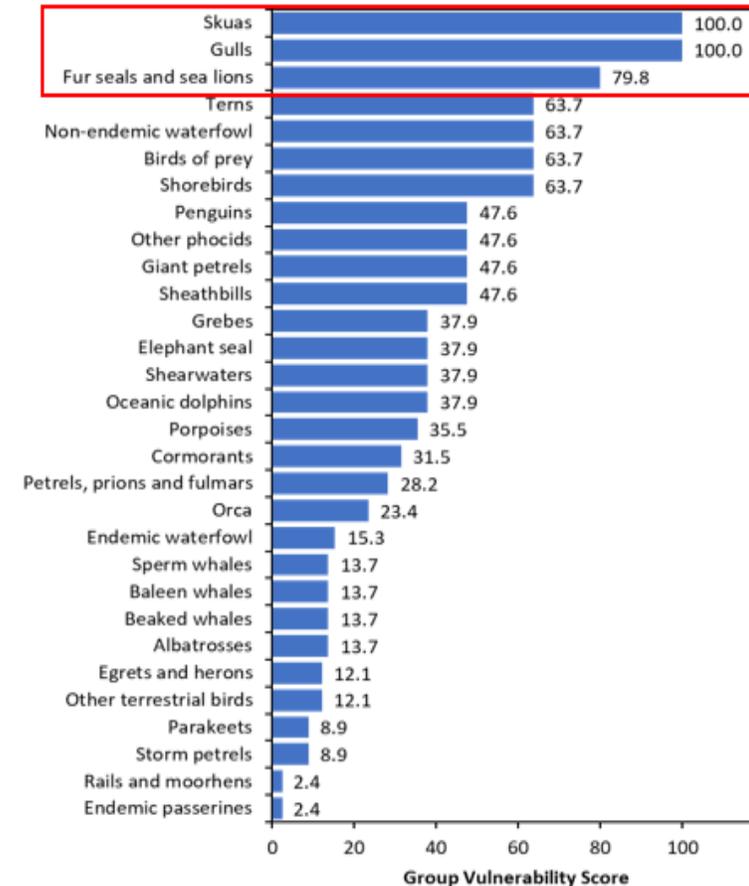
# 4. Assessing risks to populations and their vulnerability to negative impacts

Risk	Impact
Negligible	Impact so low so does not merit consideration
Very low	Impact very low but cannot be excluded
Low	Impact low but requires consideration
Medium	Impacts and requires consideration
High	Impacts and requires great consideration and mitigation
Very high	Impacts greatly and requires great consideration and mitigation

## Species group vulnerability score

### Vulnerability Score

- Proximity & wildlife Exchange
- Reservoir Hosts
- Human Presence



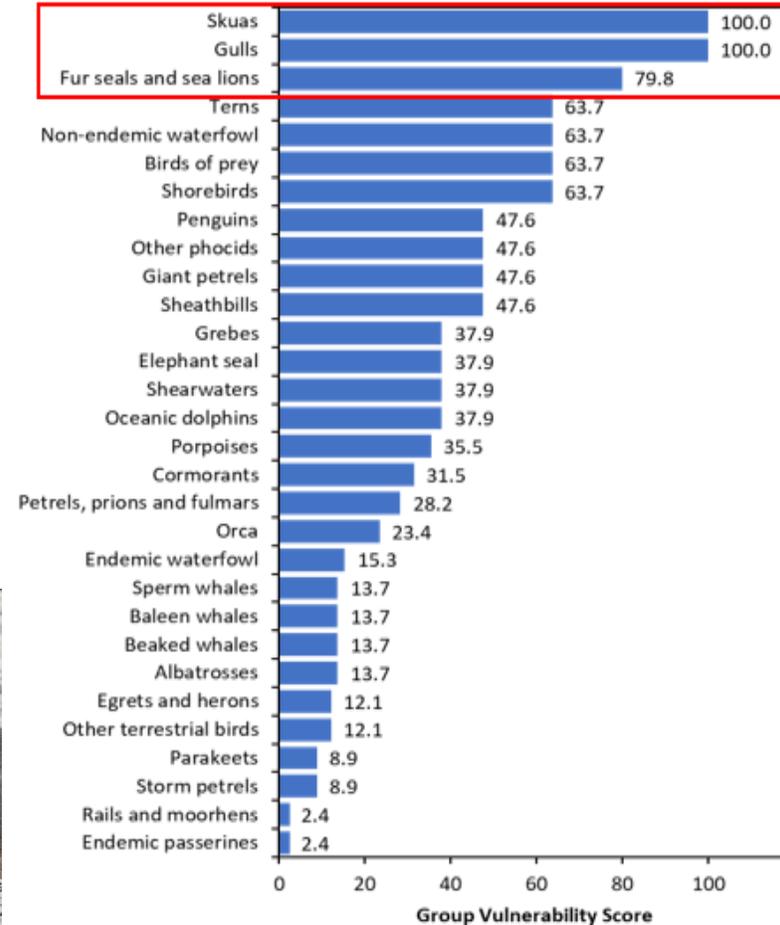
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## Species group vulnerability score

### Vulnerability Score

- Proximity & wildlife Exchange
- Reservoir Hosts
- Human Presence



# 5. Biosecurity in natural settings



## 6. Early detection of infection



# 7. Surveillance and data gathering in the face of an outbreak



# 8. Management of risk in wildlife

- Can't stop. Aim to reduce transmission
- Do not use disinfectants in environment



**Disinfection and sanitation**



**PPE donning and doffing**

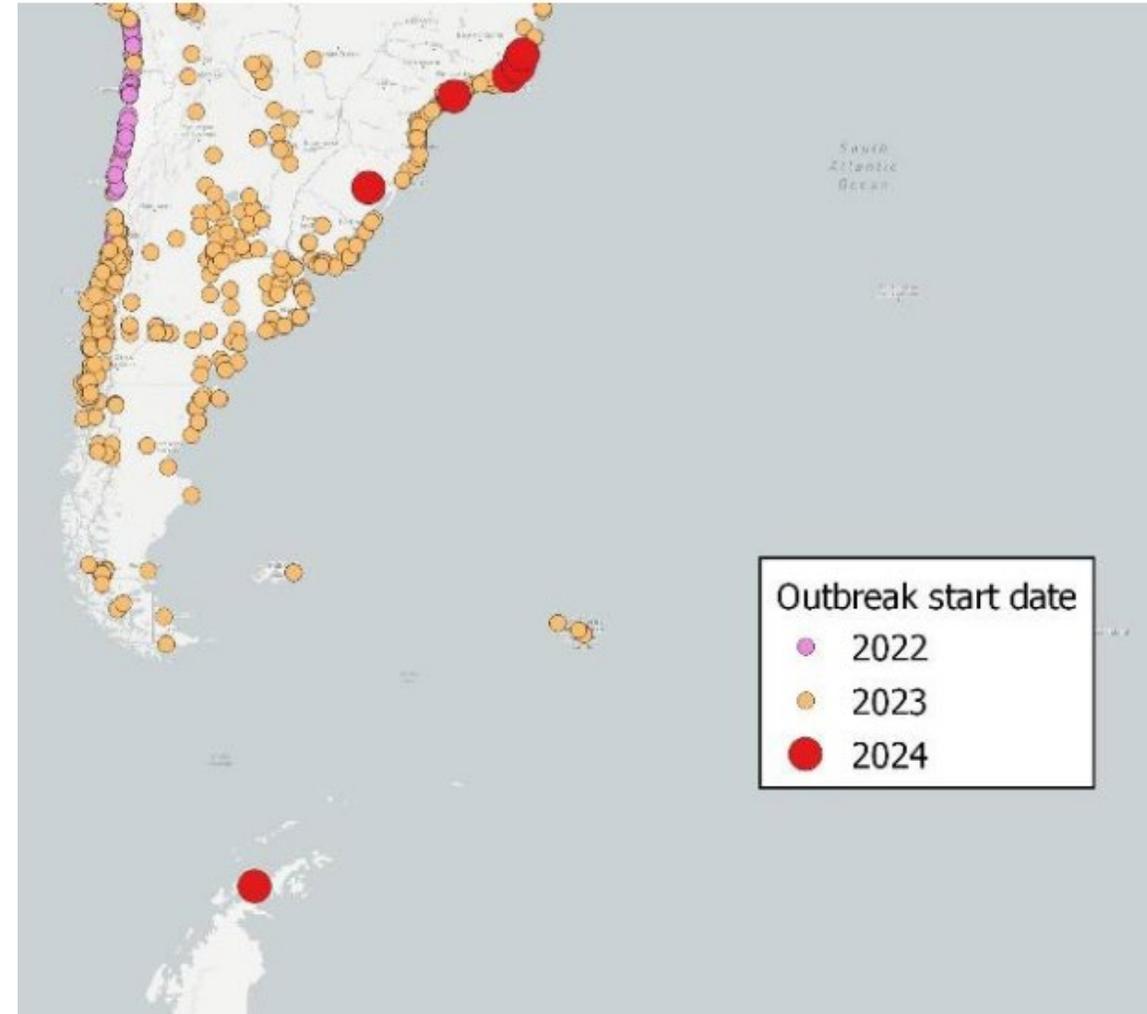
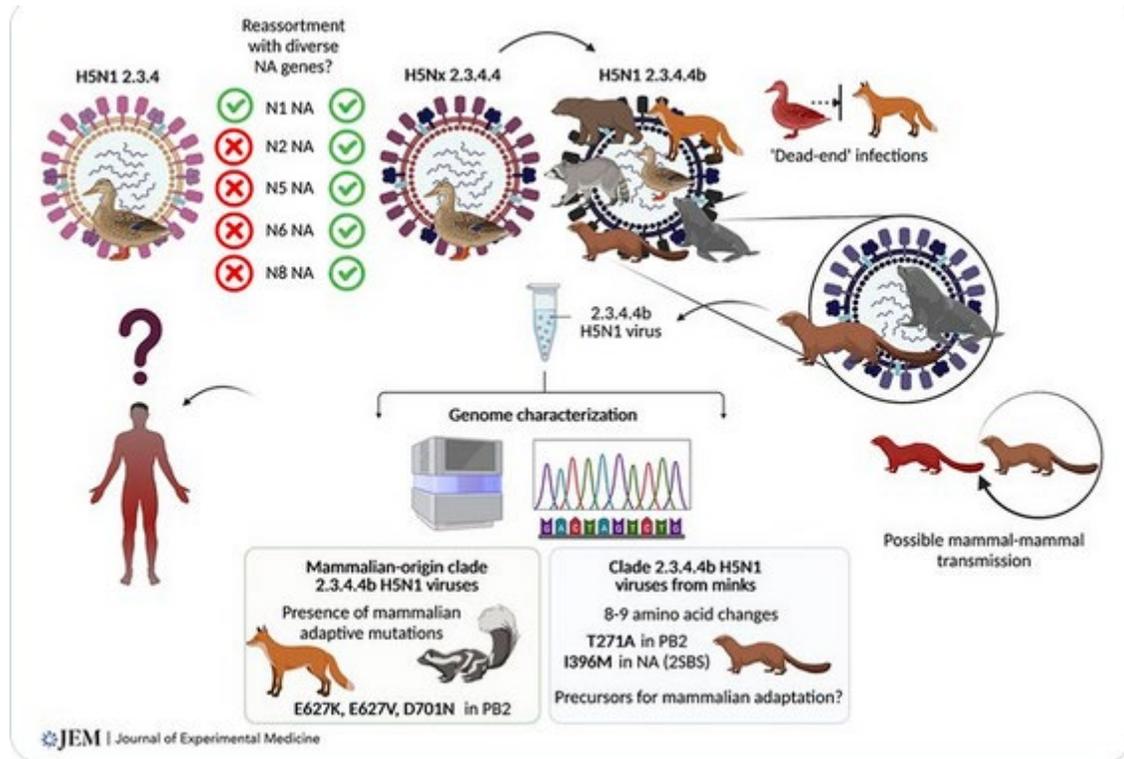
## 9. Carcass removal and disposal. Decisions on removal and practicalities



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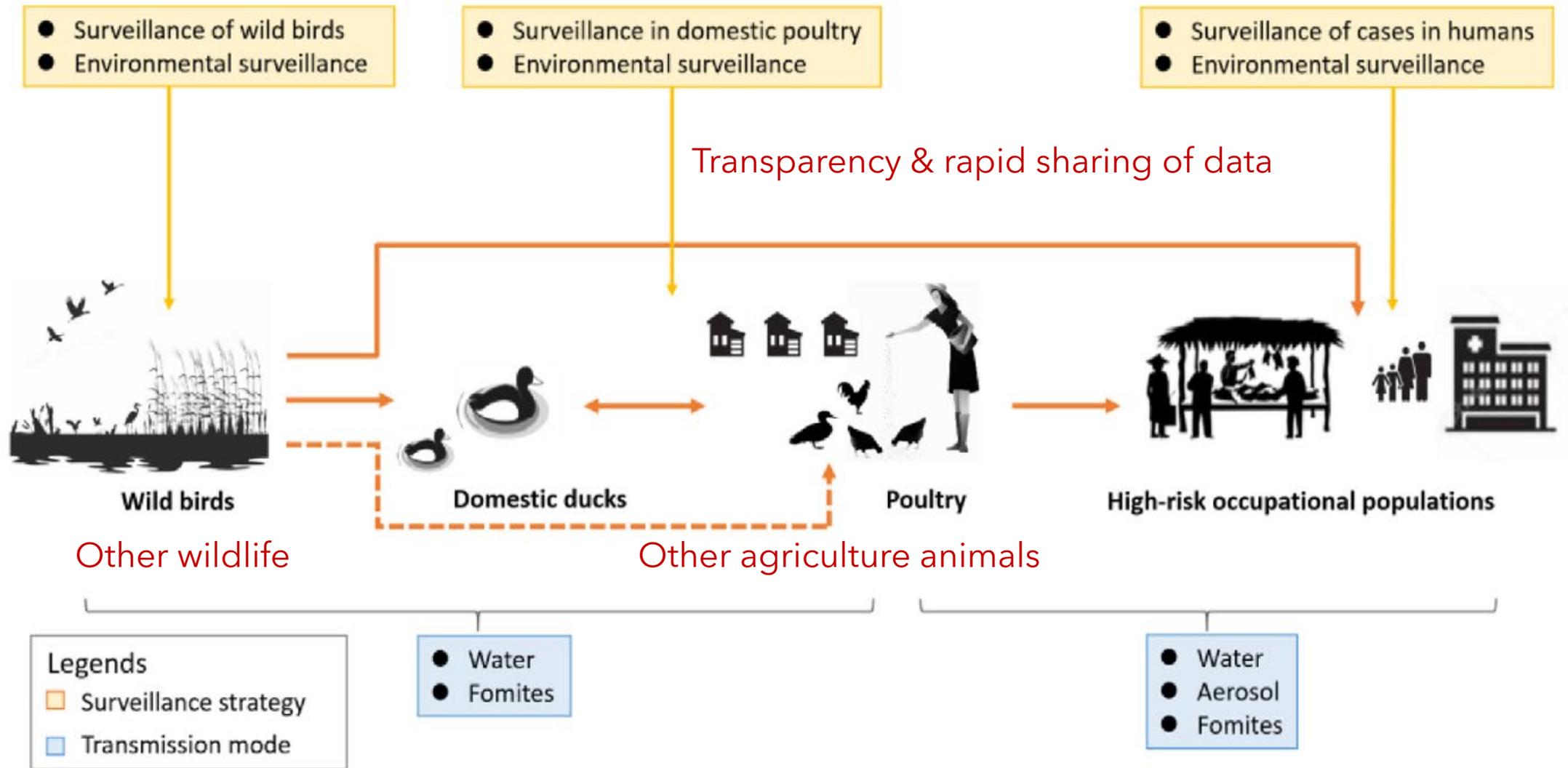
# 10. Monitoring and surveillance of wild birds and mammals



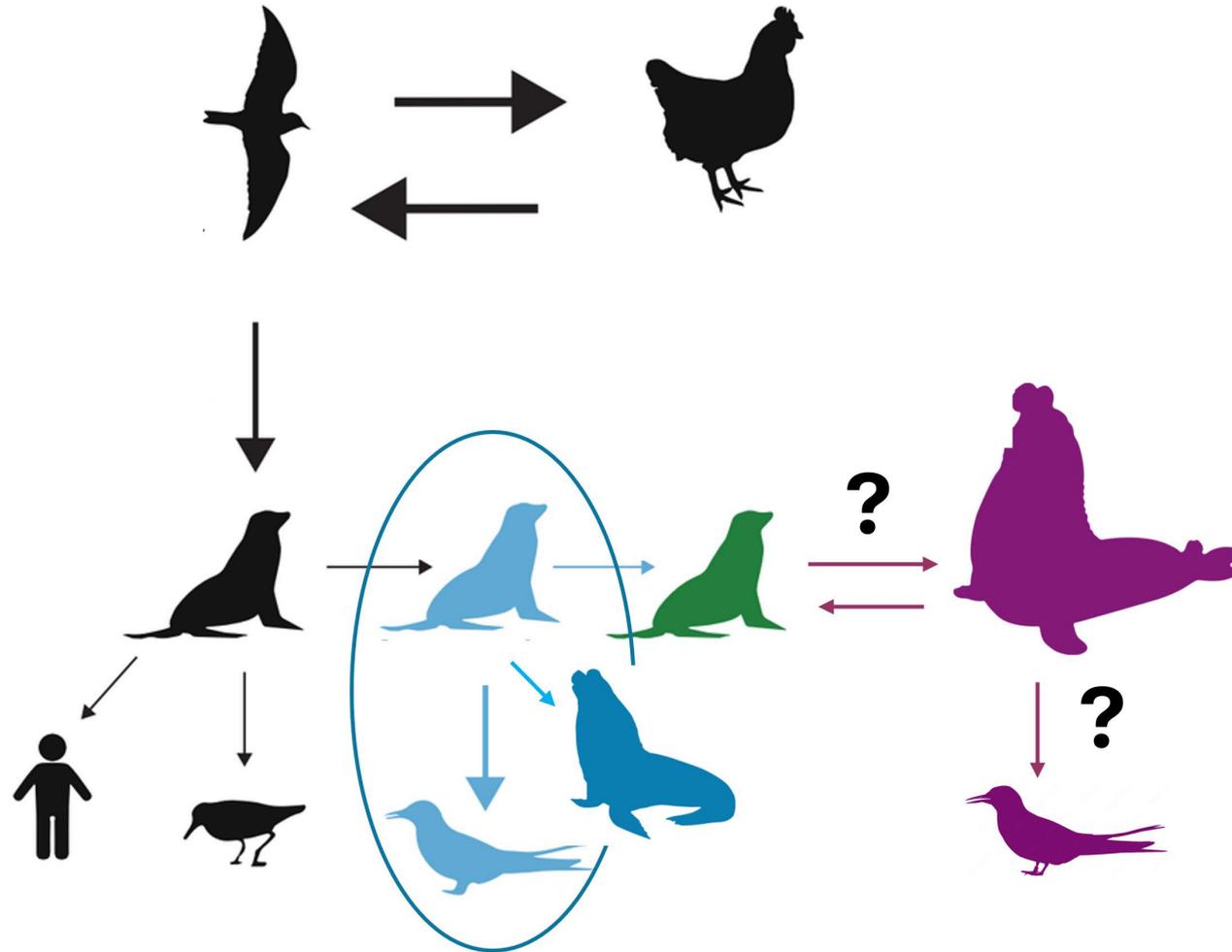
Gilbertson & Subbarao; 2023. <https://doi.org/10.1084/jem.20230447>

<https://www.woah.org/app/uploads/2024/03/hpai-situation-report-20240319.pdf>

# One Health influenza surveillance



# Research: e.g. understand transmission



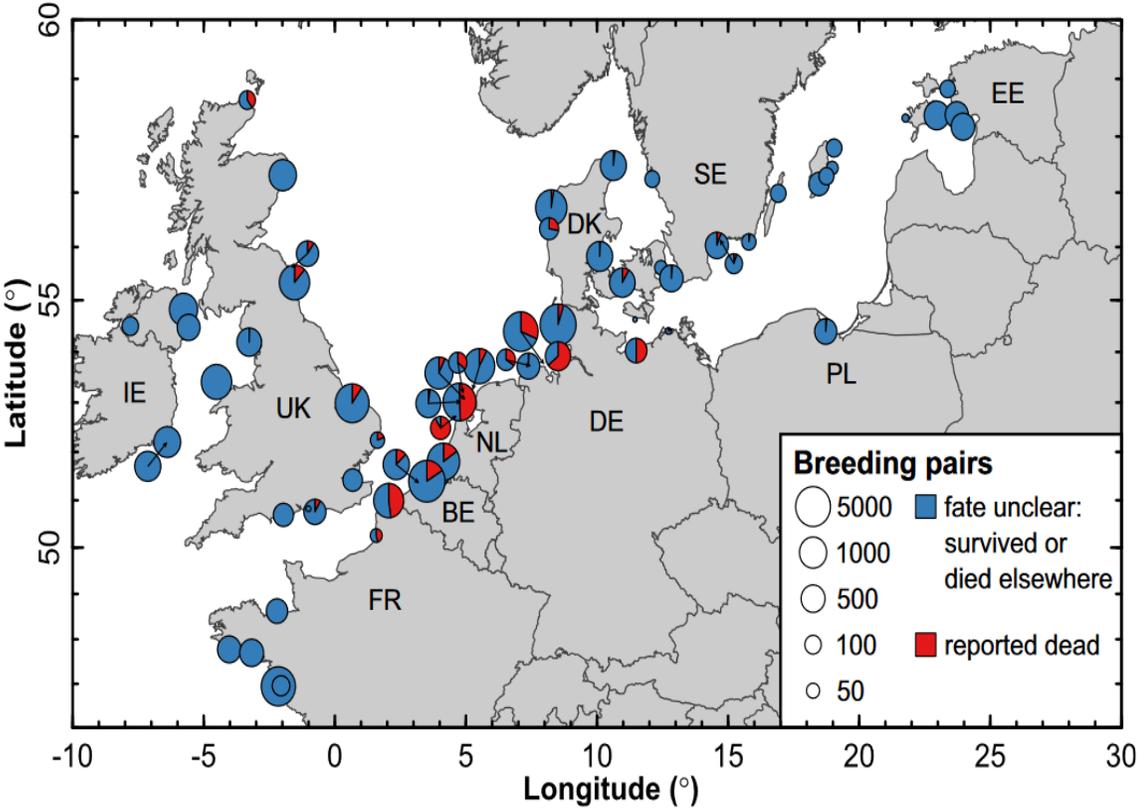
Sea lion, fur seal, tern

## Highly Pathogenic Avian Influenza A(H5N1) Viruses from Multispecies Outbreak, Argentina, August 2023

Agustina Rimondi, Ralph E.T. Vanstreels, Valeria Olivera, Agustina Donini, Martina Miqueo Lauriente, Marcela M. Uhart

Emerging Infectious Diseases • www.cdc.gov/eid • Vol. 30, No. 4, April 2024

# 11. Measuring impacts of HPAI in wildlife populations



Knief U, et al.. doi:10.1017/S0959270923000400

# 12. Human health considerations



## Avian influenza and Wildlife Risk management for people working with wild birds

### Purpose

The purpose of this article is to provide guidance to people who handle wild birds to reduce disease risks associated with avian influenza virus strains. The guidance Health approach by considering the health of wildlife, poultry and people.

### Impacts of the ongoing avian influenza outbreak wildlife

The recent outbreaks of avian influenza virus strains of the subtype H5N1 have rai for wildlife conservation due to their unusual impact on wild birds, including several species, and transmission to mammals. The most recent wave of infection spre October 2021, and to date thousands of outbreaks (including poultry and wildlife recorded worldwide. Events have been predominantly reported in North America Europe (34%). In addition to massive mortalities in seabirds, aquatic birds, and rapte reports of infections in wild mammals such as foxes, otters, and seals, which is relati for H5 strains. Although the current outbreaks have been linked to a low numb infections, involving mild symptoms, all H5N1 strains pose zoonotic risks.

**Help detect and put a stop to avian influenza**

**As a hunter, you have a vital role to play in preventing its spread and helping to detect it in wild birds.**

Avian influenza can easily spread through:

- Secretions and excretions from infected birds, especially faeces
- Contact with contaminated material, including vehicles
- International and illegal trade of birds

**Act as a sentinel!**

You can help detect avian influenza in wild animals by:

- Staying informed on the disease that might be present in waterfowl and other birds
- Monitoring the health of wild birds
- Reporting sick or dead animals to local Veterinary Authorities
- Being vigilant to the health of mammals, who can catch the disease too

**How can you help prevent avian influenza?**

Because avian influenza viruses are highly resistant in the environment, you can carry them on your boots, clothes and equipment, putting yourself and animals at risk.

**Adopt these good practices:**

- Never handle birds that appear sick or are found dead
- Do not visit poultry farms unless necessary
- Do not leave food for wild birds
- Clean and disinfect your equipment and hunting trophies
- Respect any ban on hunting and restriction on movement of auxiliary hunting birds (decoy birds, falcons...) imposed by authorities
- Ensure proper disposal of offal from hunted birds
- Always wash hands with soap and water immediately after handling animals, and when cooking or preparing animal products

Learn more with:

- Our [website](#) on avian influenza
- Our [disease reports](#) to follow the disease evolution
- Our [GISMS system](#) and its distribution to get informed on the areas affected

## Influenza (Flu)

Avian Flu

### Avian Flu

#### Current Situation

- Wild Birds +
- Poultry +
- Mammals
- Humans

#### Frequently Asked Questions about Avian Influenza

## H5N1 Bird Flu: Current Situation Summary

[Español](#) | [Other Languages](#) | [Print](#)

Updated April 10, 2024

### H5N1 Detections in USA

- Wild Birds: [Widespread](#)
- Poultry Flocks: [Sporadic outbreaks](#)
- Mammals: [Sporadic infections](#)
- People: [2 cases in U.S.](#)
- Person-to-person spread: None
- Current public health risk: Low



# 13. Public communications and awareness

**BIRD FLU HAS BEEN DETECTED IN THIS AREA. DON'T RISK SPREADING IT!**

Keep to the footpath, with dogs on leads

Do not feed wild waterfowl

Do not **pick up or touch** dead or sick wild birds

Do not touch wild bird feathers or surfaces contaminated with wild bird droppings

If you keep poultry or other birds, wash your hands, clean and disinfect your footwear before tending to your birds

**If you find any dead wild birds, please report online.**

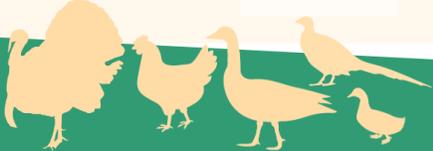


[www.gov.uk/guidance/report-dead-wild-birds](http://www.gov.uk/guidance/report-dead-wild-birds)

Or call the Defra helpline on 03459 33 55 77

APHA may collect some dead birds for surveillance testing. Otherwise, birds can be disposed of safely, if necessary, by the local authority on public land or by the landowner/manager.

[www.gov.uk/guidance/removing-and-disposing-of-dead-wild-birds](http://www.gov.uk/guidance/removing-and-disposing-of-dead-wild-birds)



Animal & Plant Health Agency

## Prevent the Spread of Avian Influenza in Wild Birds

Follow these tips to stop the spread



**SPOT AND REPORT** the signs of avian influenza

Report a sick or dead bird to your provincial Wildlife Emergency Hotline or the Canadian Wildlife Health Cooperative 1-800-567-2033.



**DO NOT TOUCH** or feed wild birds by hand

If you are a hunter or bird bander always follow safe handling practices.



**CLEAN** backyard bird feeders and baths regularly

Use a weak solution of domestic bleach (10% sodium hypochlorite), rinse well, and allow time to dry.



**SEPARATE** domestic and wild birds

Minimize contact between domestic and wild birds, especially if they have access to the outdoors or bodies of water used by wild birds.



**CONSERVE** migratory bird habitat

Birds that have access to high quality habitat and food are more resistant to disease.



SCAN TO LEARN MORE



For more information on preventing the spread of avian influenza in wild birds [Canada.ca/avian-flu](http://Canada.ca/avian-flu)

Canada

Evitemos la propagación del virus

## INFLUENZA AVIAR

No toques  Reporta

Si encuentras aves o animales marinos enfermos o muertos, llama inmediatamente:

 SERNAPESCA 800 320 032

 SAG 22345 1100



## PREVENCIÓN DE GRIPE AVIAR EN HUMANOS



Actualmente hay brotes de gripe aviar H5 en aves silvestres y de corral en varios países de las Américas.

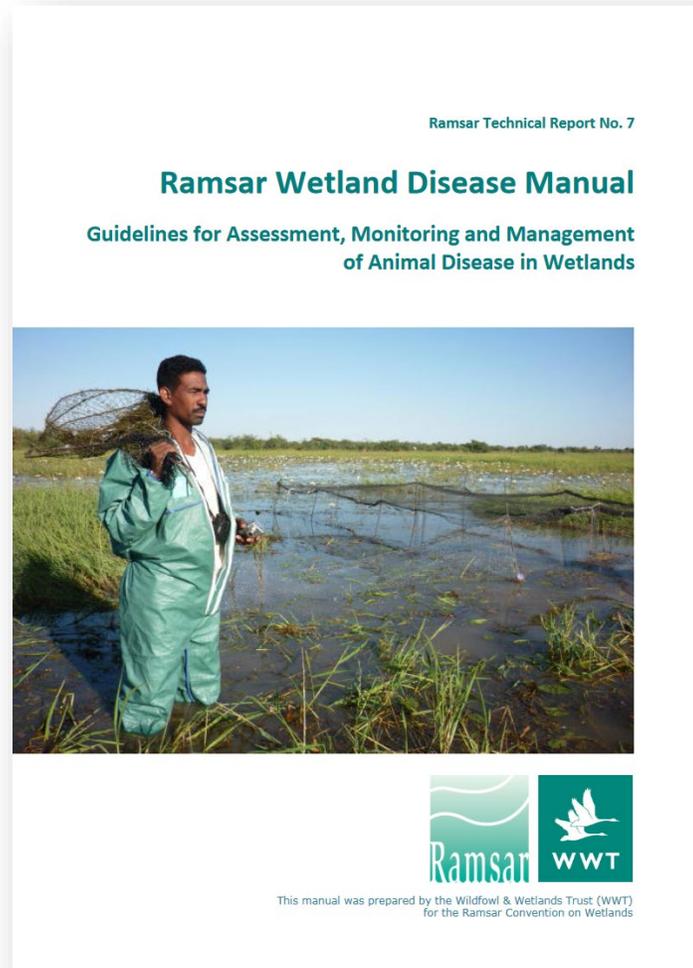


OPS  
Organización Panamericana de Salud

OPS  
Organización Mundial de la Salud



# Resources



[https://www.wwt.org.uk/uploads/documents/Ramsar\\_Wetland\\_Disease\\_Manual.pdf](https://www.wwt.org.uk/uploads/documents/Ramsar_Wetland_Disease_Manual.pdf)



<https://www.cms.int/en/publication/h5n1-high-pathogenicity-avian-influenza-wild-birds-unprecedented-conservation-impacts>