

Member's update on Avian Influenza (AI)

P. R. China

Jinming LI

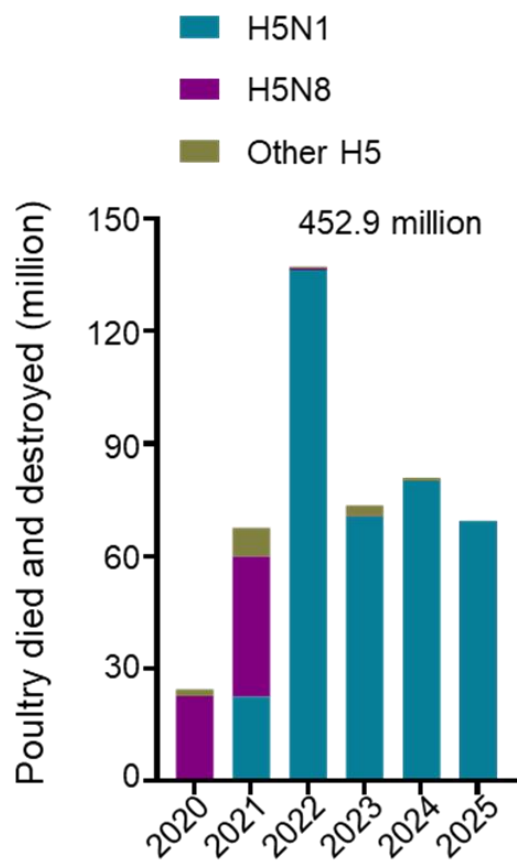
Research fellow, CAHEC

22 – 23 July 2025

Tokyo, Japan

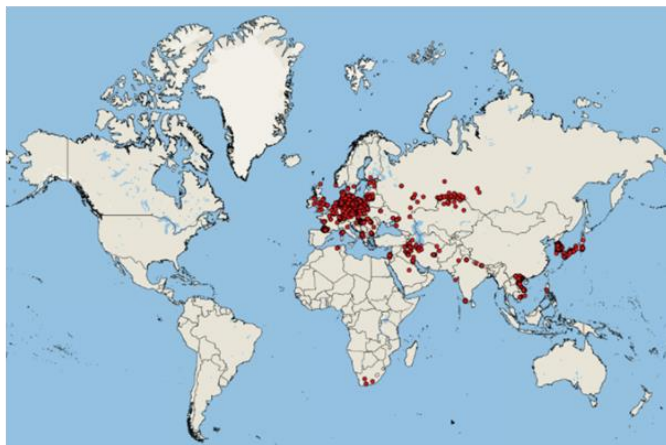
Disease situation - HPAI

H5 outbreaks in the world

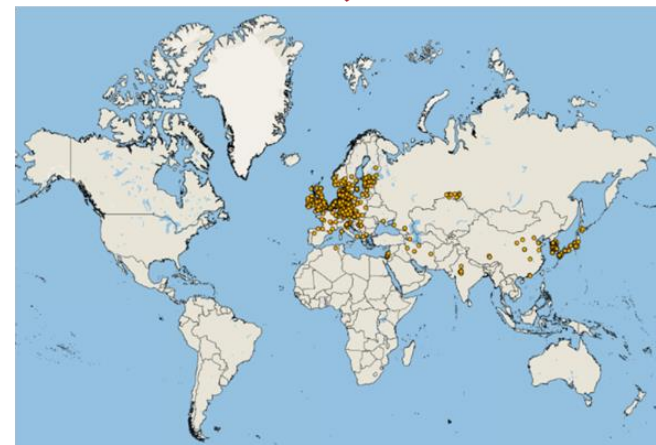


H5N8

Domestic, 1799

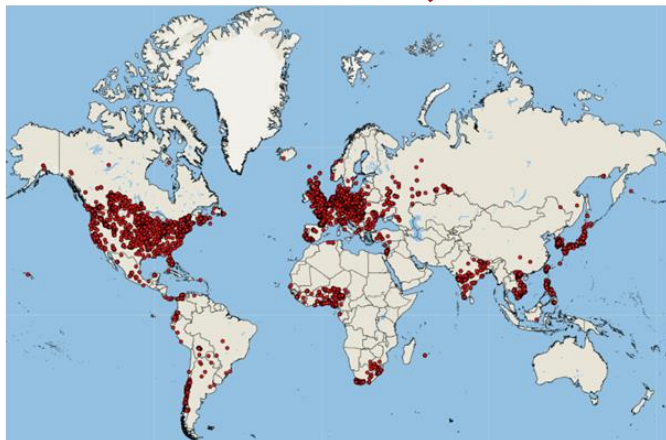


Wild, 1471

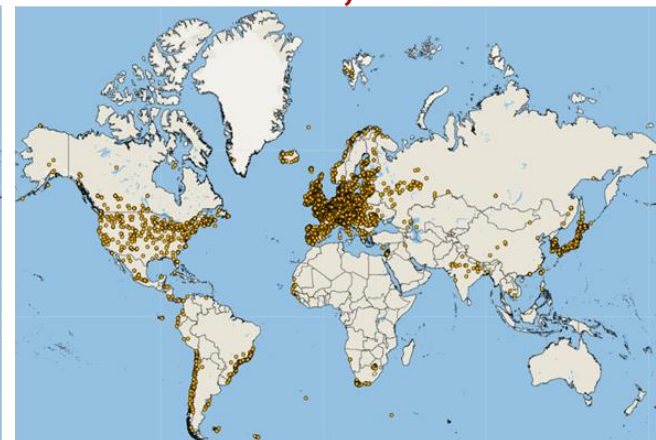


H5N1

Domestic, 8687



Wild, 9487



Since 2020, the H5 viruses have caused over **21,400** outbreaks in poultry and wild birds around the world

Disease situation - HPAI

Since 2020, the H5 viruses have caused only **22** outbreaks in wild birds and poultry in China

2 outbreaks in poultry

Time	Location	Deaths	Killed and disposed	Subtype	Clade
2020/2/1	Hunan	4500	17828	H5N1	2.3.2.1d
2020/2/9	Sichuan	1840	2261	H5N6	2.3.4.4h

20 outbreaks in wild birds

Time	Location	Deaths	Subtype	Clade
2020/1/8	Xinjiang	15	H5N6	2.3.4.4h
2020/1/16	Xinjiang	1	H5N6	2.3.4.4h
2020/1/20	Xinjiang	13	H5N6	2.3.4.4h
2020/1/21	Xinjiang	19	H5N6	2.3.4.4h
2020/11/26	Shanxi	2	H5N8	2.3.4.4b
2021/1/22	Shandong	35	H5N8	2.3.4.4b
2021/2/2	Beijing	3	H5N8	2.3.4.4b
2021/2/8	Jiangsu	17	H5N8	2.3.4.4b
2021/3/10	Guangdong	1	H5N8	2.3.4.4b
2021/4/10	Liaoning	11	H5N6	2.3.4.4h
2021/5/19	Tibet	268	H5N8	2.3.4.4b
2021/6/9	Shaanxi	4249	H5N8	2.3.4.4b
2021/6/15	Ningxia	38	H5N8	2.3.4.4b
2021/11/23	Hebei	134	H5N1	2.3.4.4b
2022/7/20	Qinghai	273	H5N1	2.3.4.4b
2023/8/3	Tibet	5182	H5N1	2.3.4.4b
2023/12/8	Fujian	7	H5N1	2.3.4.4b
2024/5/16	Qinghai	275	H5N1	2.3.4.4b
2024/5/31	Tibet	190	H5N1	2.3.4.4b
2024/6/15	Zhejiang	43	H5N6	2.3.4.4b

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There have been **no** H5 outbreaks in domestic poultry in China **since 2021.**

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Disease situation - HPAI

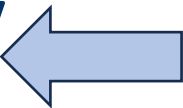
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No HPAI outbreaks occurred in poultry and wild birds in China in 2025

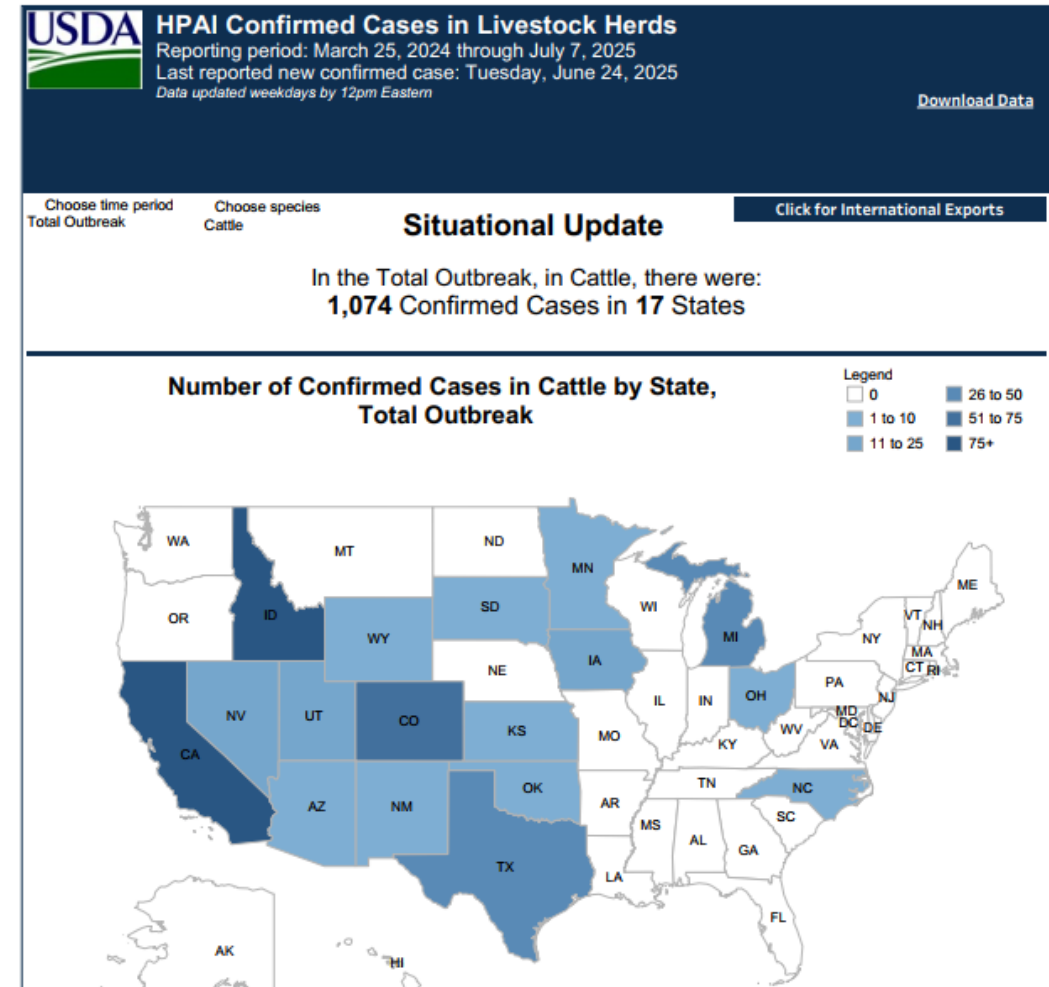


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Disease situation - HPAI

- As of July 7, 2025, cow infection was reported in 1,074 farms in 17 states in the US



Disease situation - HPAI

➤ Surveillance in diary cows

Since September 2024, total 1,918 nasal swabs and milk samples and 1,595 serum samples were collected from 54 cattle farms in 12 provinces.



Disease situation - HPAI

➤ Surveillance in diary cows

- We did not isolate any influenza virus from these samples.
- The serum samples were all negative for H5 virus by HI test.



Disease prevention and control

Countries in Europe
and North America

Biosecurity
+
Culling

Disease prevention and control

Countries in Europe
and North America

Biosecurity
+
Culling

China (since 2004)

Vaccination
+
culling

Disease prevention and control

- Vaccination campaign

- Vaccines

- *Recombinant Avian Influenza Virus (H5+H7)* **Trivalent Inactivated Vaccine**
 - *Recombinant Avian Influenza Virus (H5)* **Bivalent Inactivated Vaccine**
 - *Avian Influenza (H5+H7)* **Trivalent DNA Vaccine**

Disease prevention and control

- Vaccination campaign

- Recommended Vaccination Schedule

- For Commercial Farms

- Breeding/Egg-laying Chickens, Ducks, Geese

- Primary vaccination at 14–21 days of age,
 - second dose after 3–4 weeks,
 - third dose **before onset of lay**.
 - Booster vaccinations every **4–6 months** thereafter based on *serological monitoring results*.

- Commercial Broilers, Meat Ducks, Meat Geese

- Single dose at 7–10 days of age.
 - For flocks exceeding 70 days of age, administer a second dose 3–4 weeks post-initial vaccination.

- Quails & Other Domesticated Poultry

- Implement schedule according to production purpose, referencing the above protocols.

Disease prevention and control

- **Vaccination campaign**

- **Recommended Vaccination Schedule**

- **For Small-scale Poultry Keepers**

- Conduct biannual centralized vaccination during spring and autumn.
- Perform routine monthly supplementary vaccinations.
- Where feasible, adopt the commercial farm schedule.

Laboratory capacity

Diagnostic techniques for highly pathogenic Avian Infulenza (National Standards)

Purpose	Method	禽病系列检测产品		
		序号	产品名称	规格
Agent identification	RT- PCR	1	禽流感病毒实时荧光RT-PCR检测试剂盒	50T/盒
		2	禽流感病毒H5亚型实时荧光RT-PCR检测试剂盒	50T/盒
	Real-time RT-PCR	3	禽流感病毒H7亚型实时荧光RT-PCR检测试剂盒	50T/盒
		4	禽流感病毒HP-H7亚型荧光RT-PCR检测试剂盒	50T/盒
	Virus isolation (BSL-3)	5	禽流感病毒H9亚型荧光RT-PCR检测试剂盒	50T/盒
		6	禽流感病毒N9亚型实时荧光RT-PCR检测试剂盒	50T/盒
		7	禽流感病毒H7N9亚型实时荧光RT-PCR检测试剂盒	50T/盒
		8	高致病性禽流感病毒H7N9亚型荧光RT-PCR检测试剂盒	50T/盒
		9	禽流感病毒H5、H7亚型双重荧光RT-PCR检测试剂盒	50T/盒
		10	禽流感病毒H5、HP-H7亚型双重荧光RT-PCR检测试剂盒	50T/盒
Detection of immune response	HI	11	高致病性禽流感病毒H5、H7双重荧光RT-PCR检测试剂盒	50T/盒
		12	禽流感病毒H5亚型、通用双重荧光RT-PCR检测试剂盒	50T/盒
	ELISA	13	禽流感病毒H5、H7、H9亚型三重荧光RT-PCR检测试剂盒	50T/盒
		14	禽流感病毒RT-PCR检测试剂盒（通用型）（含提取）	20T/盒
		15	禽流感病毒RT-PCR检测试剂盒（通用型）	50T/盒
		16	禽流感病毒H5亚型RT-PCR检测试剂盒（含提取）	20T/盒
		17	禽流感病毒H5亚型RT-PCR检测试剂盒	50T/盒
		18	禽流感病毒H7亚型RT-PCR检测试剂盒（含提取）	20T/盒
		19	禽流感病毒H7亚型RT-PCR检测试剂盒	50T/盒
		20	禽流感病毒H9亚型RT-PCR检测试剂盒（含提取）	20T/盒
		21	禽流感病毒H9亚型RT-PCR检测试剂盒	50T/盒
		22	禽流感病毒N9亚型RT-PCR检测试剂盒（含提取）	20T/盒
		23	禽流感病毒N9亚型RT-PCR检测试剂盒	50T/盒
		24	禽流感病毒血凝抑制试验抗原H5亚型（Re-11-12株）、H7亚型（Re-2-3株）、H9亚型	2ml/瓶
		25	禽流感病毒血凝抑制试验阳性血清H5亚型（Re-11-12株）、H7亚型（Re-2-3株）、H9亚型	2ml/瓶
		26	禽流感病毒原学盲样、血清学盲样（2ml、1ml、500μl）	可定制
		27	禽流感H7亚型ELISA抗体检测试剂盒	96T/盒

ICS 11.220
B 41



中华人民共和国国家标准

GB/T 18936—2020
代替 GB/T 18936—2003

高致病性禽流感诊断技术

Diagnostic techniques for highly pathogenic avian influenza

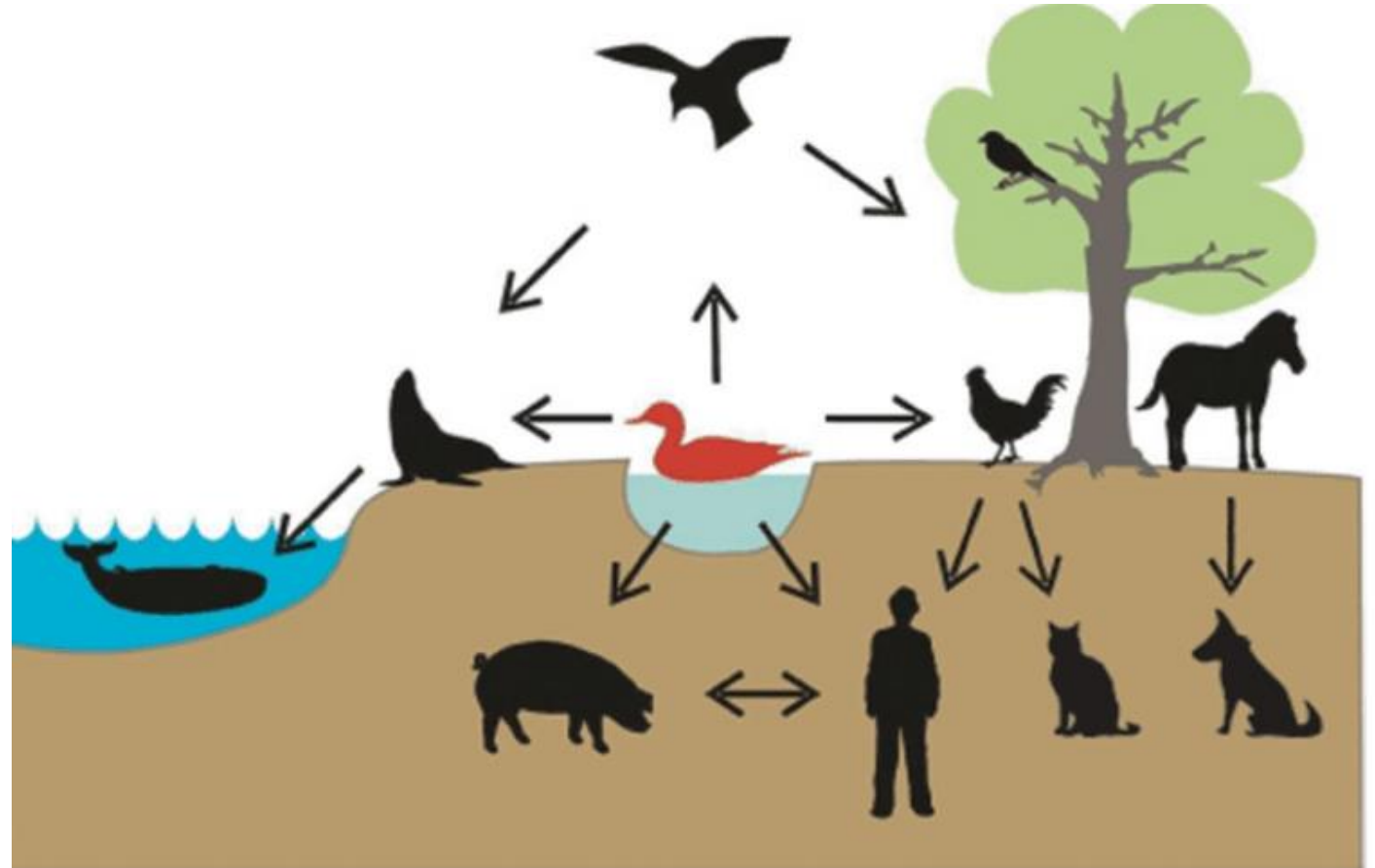
2020-12-14 发布

2020-12-14 实施

国家市场监督管理总局 发布
国家标准化管理委员会

Challenge and possible solutions

Unvaccinated ducks raised in open fields serve as “Trojan horses” for transferring AIVs from wild birds to domestic poultry



Challenge and possible solutions

Integrating vaccination with biosecurity measures, along with efficient surveillance, epidemiological investigations, and decisive emergency response.

Thank you

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