Public Risk Perceptions & Policy Attitudes Toward Highly Pathogenic Avian Influenza (HPAI)

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Can he *really* do that?

Kennedy's Alarming Prescription for Bird Flu on Poultry Farms

The health secretary has suggested allowing the virus to spread, so as to identify birds that may be immune. Such an experiment would be disastrous, scientists say.

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Veterinarians with experience containing bird flu said letting the virus sweep through poultry flocks unchecked would be inhumane and dangerous, and have enormous economic consequences. Justin Sullivan/Getty Images

"Mr. Kennedy does not have jurisdiction over farms. But Brooke Rollins, the agriculture secretary, also has voiced support for the notion.

"There are some farmers that are out there that are willing to really try this on a pilot as we build the safe perimeter around them to see if there is a way forward with immunity," Ms. Rollins told Fox News last month."

Can he *really* do that?

Not really. But...

Health Laws & Policies Related to H5N1: A Review

Boston University School of Public Health

Culling Poultry on Commercial Farms

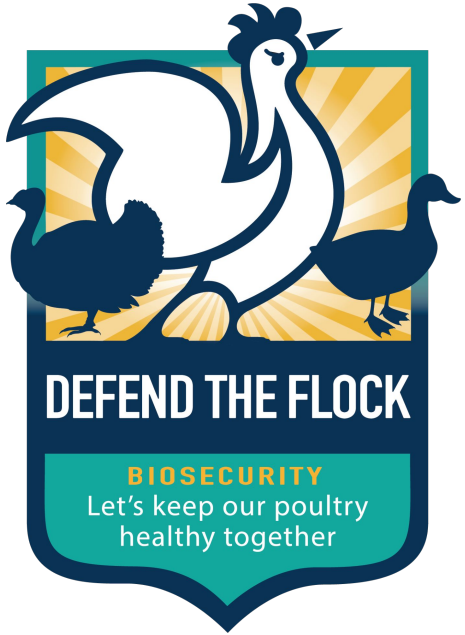
The Policy: Farmers are required to cull their flocks if H5N1 is discovered. They're paid for chickens culled that are *not infected with the virus.*

Responsible Agency: USDA, via the Animal and Plant Health Inspection Service (APHIS).

Authorization: Federal order, via Plant Protection Act of June 20, 2000, as amended, Section 412(a), 7 U.S.C. 7712(a).

Why This Works: It provides farmers with an incentive to test, and take aggressive action to stop the spread of bird flu.

What's at Risk: New presidential administration can propose a rule change to (say) only compensate for *infected* birds.



Testing Poultry on Commercial Farms

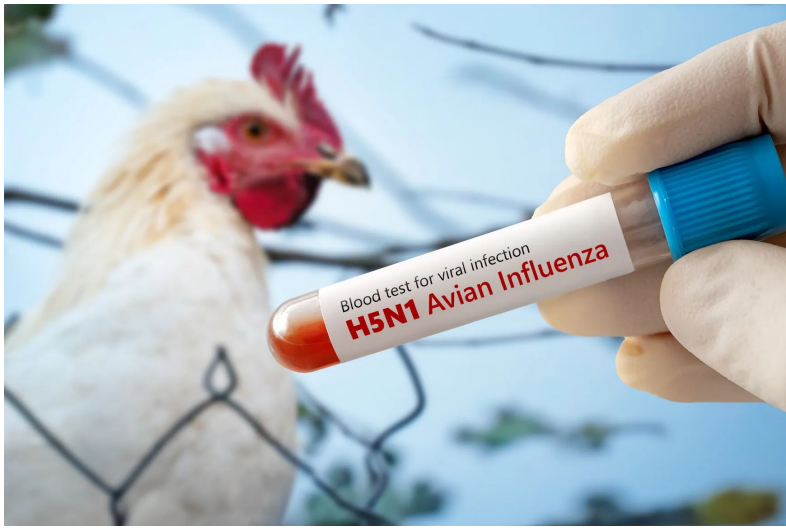
The Policy: Farmers are required to test all birds prior to distribution, and must allow local and federal officials to test flocks upon request in order to maintain a distribution license.

Responsible Agency: USDA, Animal and Plant Health Inspection Service (APHIS).

Authorization: Federal order

Why This Works: Helps limit asymptomatic spread; detect outbreaks early on.

What's at Risk: A new presidential administration can limit testing availability, or limit required testing standards.



Testing Dairy on Commercial Farms

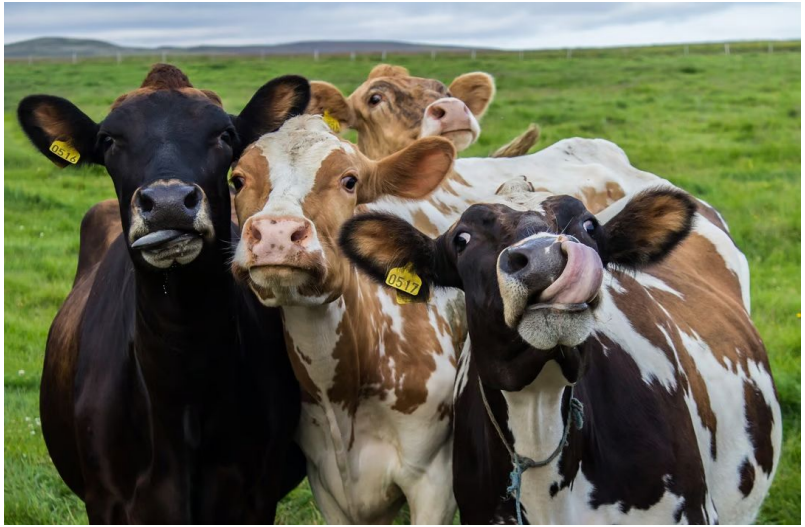
The Policy: Mandatory testing of lactating cows prior to interstate movement; mandatory testing and epidemiological reporting of unpasteurized milk products upon request from the USDA (in conjunction with state veterinarians).

Responsible Agency: USDA, Animal and Plant Health Inspection Service (APHIS).

Authorization: Federal order

Why This Works: Helps limit asymptomatic spread; detect outbreaks early on.

What's at Risk: Limits on testing availability, required testing standards.



Vaccinating Chickens

The Policy: In one of its final acts in the Biden Administration, the USDA eased restrictions on the importation of *vaccinated* poultry (many of our trading partners forbid vaccinated importation). [See “What’s at Risk” for the reason why this is the case].

Responsible Agency: USDA, Animal and Plant Health Inspection Service (APHIS).

Authorization: Federal order

Why This Works: Helps prevent chickens from being infected with H5N1.

What’s at Risk: Chicken vaccination is rare, because Vaccinating chicken, absent rigorous testing, could mask signs of H5N1 infection (asymptomatic spread).

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Key Takeaways

- In 2024, legislation (SB2543/HB2801) was introduced which would have limited the authority of the Tennessee State Veterinarian to mandate vaccinations in instances of disease outbreak. Due to concern from various agricultural commodity and industry groups, the legislation was sent to a summer study in the House and withdrawn in the Senate.
- Current state law provides the authority of supervision to the Commissioner of Agriculture and the State Veterinarian to all animals within or which may be in transit through the state.
- There are currently no limitations or requirements on routine vaccinations in any form of livestock in Tennessee. According to the State Veterinarian’s Office, the mandating of vaccinations is an authority which has not been exerted since the implementation of the law.
- There are efforts underway to educate Tennessee livestock producers, industry partners, and emergency management personnel on proper protocol on emergency disease response.

What We Wanted to Know

How does infectious disease concern (or lack thereof), misinformation acceptance, and political partisanship influence support for H5N1 policy response?

What We Did

What We Did

Approach: Survey public opinion about H5N1 health risks and support for mitigating policies.

Sample: Nationally representative survey of N = 831 US adults.

- Wave Two of a two-wave longitudinal survey
- Propensity score matching to ensure demographic representativeness
- Post-stratification weighting on the basis of gender and racial identity, age, income, geographic region, educational attainment, and more.

I'm happy to take technical questions about our methods in Q&A

Concept	Question Wording
Introductory Text (Shown to All)	As you may have heard, H5N1 influenza (the "bird flu" or "avian influenza") has been detected in poultry farms across the United States, and has begun to infect and spread among some mammals (like cows, sea lions, and other wild/domesticated animals). Some humans have been infected with H5N1 as a result of coming into contact with infected livestock, although human-to-human transmission is yet to be documented.
Concern: Spread to Humans	How likely, if at all, do you think it is that the H5N1 influenza ("bird flu") may one day spread between humans? **[ROTATE RESPONSE ORDER]** 1. Very likely (15%) 2. Somewhat likely (52%) 3. Not too likely (27%) 4. Not likely at all (6%) Coding: scored to range from 1 ("very likely") to 4 ("not likely at all")
Concern: Public Health Risks	How concerned would you be, if at all, about the public health risks posed by H5N1 influenza ("bird flu") if it were to spread among humans? **[ROTATE RESPONSE ORDER]** 1. Very concerned (27%) 2. Somewhat concerned (40%) 3. Not too concerned (25%) 4. Not concerned at all (8%) Coding: scored to range from 1 ("very concerned") to 4 ("not concerned at all ").

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Concept	Question Wording
Raw Milk Safety	Just your best guess. Would you say that raw (unpasteurized) milk is generally safe to drink, generally not safe to drink, or are you not sure? **[ROTATE RESPONSE ORDER 1-2]** 1. Generally safe to drink (26%) 2. Generally not safe to drink (43%) 3. I'm not sure (30%) Coding: scored to take on a value of 1 if respondents indicate that raw milk is "Generally not safe to drink," 0 otherwise.
Raw Milk Regulatory Policy Support	Would you support or oppose the passage of a federal (national) law that bans all fifty US states from permitting the sale of raw (unpasteurized) milk and milk products? **[ROTATE RESPONSE ORDER]** 1. Strongly oppose (16%) 2. Somewhat oppose (11%) 3. Neither oppose nor support (42%) 4. Somewhat support (18%) 5. Strongly support (14%) Coding: scored to range from 1 ("Strongly Oppose") to 6 ("Strongly Support")

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Concept	Question Wording
H5N1 Policy Support	Which of the following actions would you support taking, if any, in order to combat the spread of H5N1 influenza ("bird flu")? Please select all that apply. **[MULTIPLE ANSWER; ROTATE LIST ORDER]** 1. Vaccinating farm-raised chickens to prevent them from getting sick with H5N1 (59%) 2. Compensating farmers for killing chickens that have been exposed to H5N1 (60%) 3. Compensating farmers for killing non-poultry livestock (like cows or pigs) that have been exposed to H5N1 (62%) 4. Incentivizing farmers to report early cases of H5N1 by NOT compensating them for killing poultry or non-poultry livestock that have already gotten sick with H5N1 (73%) 5. Increasing government oversight of farms that raise poultry to test for H5N1 infection. (54%) 6. Increasing government oversight of farms that raise non-poultry livestock (e.g., cows, pigs) to test for H5N1 infection. (58%) Coding: outcome variables take on a value of 1 if respondents selected each of the options listed above; 0 otherwise.

What We Found

1. Public Concern About H5N1 Health Risks is Low

(Especially among those who express right-leaning political identities and/or hold negative attitudes toward scientific experts).

	Lower Bound Pr.	Upper Bound Pr.	Δ (pp)

Selected Predicted Values: H5N1 Risks

Pr(Not Concerned At All: Health Risks): Strong Rep.	18% (Str. Dem)	11% (Str. Rep)	-7pp
Pr(Very Unlikely: Spread to Humans): Anti-Intel	37% (Str. Dem)	17% (Str. Rep)	-20pp
Pr(Raw Milk Safe or Unsure): Anti-Intel.	45% (Low AI)	70% (High AI)	+35pp

Concern: Spread to Humans	How likely, if at all, do you think it is that the H5N1 influenza ("bird flu") may one day spread between humans? **[ROTATE RESPONSE ORDER]** Very likely (15%); Somewhat likely (52%); **Not too likely (27%); Not likely at all (6%)**
Concern: Public Health Risks	How concerned would you be, if at all, about the public health risks posed by H5N1 influenza ("bird flu") if it were to spread among humans? **[ROTATE RESPONSE ORDER]** Very concerned (27%); Somewhat concerned (40%); **Not too concerned (25%); Not concerned at all (8%)**
Raw Milk Safety	Just your best guess. Would you say that raw (unpasteurized) milk is generally safe to drink, generally not safe to drink, or are you not sure? **[ROTATE RESPONSE ORDER 1-2]** **Generally safe to drink (26%);** Generally not safe to drink (43%); **I'm not sure (30%)**

2. Public Concern About H5N1 Motivates Policy Support

(While right-leaning political identity and negative attitudes toward scientific experts motivate policy opposition).

Selected Predicted Values: H5N1 Policy Attitudes

	Lower Bound Pr.	Upper Bound Pr.	Δ (pp)
Pr(Support Vax. Chickens): PH Risks	60% (High Concern)	15% (Low Concern)	-45pp
Pr(Support Vax. Chickens): Strong Rep	51% (Str. Dem)	35% (Str. Rep)	-16pp
Pr(Support Cull Poultry): PH Risks	52% (High Concern)	22% (Low Concern)	-30pp
Pr(Support Cull Non-Poultry): PH Risks	48% (High Concern)	27% (Low Concern)	-19pp
Pr(Support Oversight Poultry): PH Risks	66% (High Concern)	17% (Low Concern)	-49pp
Pr(Support Oversight Poultry): Raw Milk	51% (Unsafe)	42% (Safe/Not Sure)	-9pp
Pr(Support Oversight Poultry): Anti-Intel	53% (Low AI)	38% (High AI)	-15pp
Pr(Support Oversight Poultry): Strong Rep	54% (Str. Dem)	39% (Str. Rep)	-15pp
Pr(Support Oversight Poultry): PH Risks	66% (High Concern)	17% (Low Concern)	-49pp

Selected Predicted Values: H5N1 Policy Attitudes

	Lower Bound Pr.	Upper Bound Pr.	Δ (pp)
Pr(Support Oversight Non-Poultry): Raw Milk	51% (Unsafe)	36% (Safe/Not Sure)	-15pp
Pr(Support Oversight Non-Poultry): Anti-Intel	54% (High AI)	30% (Low AI)	-24pp
Pr(Support Oversight Non-Poultry): PH Risks	61% (High Concern)	16% (Low Concern)	-45pp
Pr(Strongly Support Raw Milk Ban): PH Risks	20% (High Concern)	7% (Low Concern)	-13pp
Pr(Strongly Support Raw Milk Ban): Raw Milk	21% (Unsafe)	8% (Safe/Note Sure)	-13pp
Pr(Strongly Support Raw Milk Ban): Anti-Intel.	18% (Low AI)	11% (High AI)	-6pp
Pr(Support Raw Milk Ban): Strong Rep.	21% (Str. Dem)	11% (Str. Rep)	-10pp

Discussion