

# onnection

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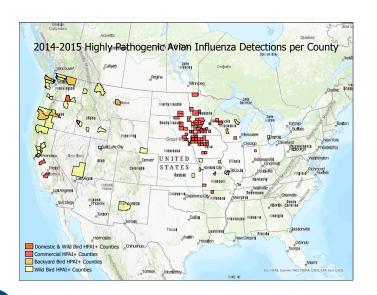
For questions or comments, please contact Maurice Pitesky at 530-752-3215 or mepitesky@ucdavis.edu

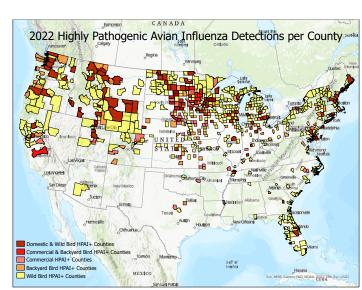
## **Keeping Track of HPAI**

Mr. Brock Riggs, Lab Manager, UC Davis School of Veterinary Medicine Cooperative Extension Poultry Lab

Highly Pathogenic Avian Influenza (HPAI) has yet again become an epidemic in the United States. The geographic area of impact, when compared to the most recent 2014-2015 outbreak is astounding. Since HPAI was first observed in a wild bird in South Carolina this past January, the disease has spread like a wildfire. In 2014-15, 113 counties in various states had a detection of HPAI, compared to the current 705 counties in 2022. Over 46 million commercial and backyard birds have been reported as infected to the United States Department of Agriculture (USDA APHIS), with thousands of wild bird detections (and countless numbers of wild birds going undetected). In California alone, there have been detections in 18 counties, as HPAI has crept into resident waterfowl populations. It has spread to several backyard flocks and commercial facilities within the state since the beginning of August, causing the euthanization of over half a million turkeys and chickens.

As bird migrations heighten with the coming fall and winter, the risk of exposure to poultry flocks grow. Not only has the virus been carried by waterfowl as it has in years past, but also by raptors, scavengers, and songbirds this year. As birds move south for the winter, they will travel near and often through properties where poultry are housed, carrying the virus with them and depositing it as they go along. The best way to avoid an outbreak in a facility is heightened biosecurity, and keeping your birds indoors. Wearing a dedicated set of clothes and shoes, along with disposable coveralls and plastic covers is the best way to keep HPAI away from poultry. This most recent epidemic has been much worse than in years past, and will likely continue into the winter. By enforcing the best biosecurity you can, your birds can stay healthy as the virus runs its course.





State of California—Health and Human Services Agency

# California Department of Public Health Influenza Vaccination for Poultry Workers



TOMÁS J. ARAGÓN, M.D., Dr.P.H Director and State Public Health Officer



GAVIN NEWSOM

Governor

August 30, 2022

Dear Poultry Operation Owner/Manager:

Influenza vaccination can protect your workers from missing work and from inadvertently spreading influenza viruses. Please consider offering on-site flu vaccine clinics for all of your employees and contractors, especially those who handle poultry.

Seasonal influenza vaccination benefits your workers: Each year, on average, 5 to 20 percent of the U.S. population gets the flu, resulting in tens of thousands of hospitalizations, thousands of deaths, annual medical costs of \$10.4 billion, and additional annual lost earnings and costs of \$16.3 billion. Vaccination can result in 18%–45% fewer lost workdays and 18%–28% fewer days working with reduced effectiveness. By preventing flu, employers can help protect employees health and reduce losses in productivity and revenue.

Reduce the risk of dual infection with seasonal influenza and avian influenza: In 2022, avian influenza (HPAI) H5N1 has been found in wild birds and backyard and commercial flocks across the United States, including in California. Two human cases of this strain of avian influenza A (H5N1) have been identified. Consistent with longstanding best practices, poultry workers are highly encouraged to receive the seasonal influenza vaccine each fall to reduce the possibility of dual infection with seasonal influenza and avian influenza at the same time<sup>3,4</sup>. Dual infection could result in the formation and spread of hazardous new influenza viruses. Seasonal influenza vaccine does not directly protect against infection with avian influenza viruses but can prevent dual infection.

<u>Consider offering worksite influenza clinics</u>: <u>Hosting a flu shot clinic</u> can help your company to:

- Reduce employee absenteeism
- Reduce time away from the job to go to another location for the shot
- Enhance your relationship with your employees

#### State of California—Health and Human Services Agency

# California Department of Public Health Influenza Vaccination for Poultry Workers

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Other options to prevent influenza include:

- Partnering with your health department, provider, or pharmacy to host community flu clinics
- Providing vouchers for staff to get vaccinated at a retail pharmacy or local clinic for free
- Supporting paid time off work for employees to receive flu vaccine
- Reminding workers of everyday preventive actions to stop the spread of germs:

Wash hands often with soap and water

Avoid contact with sick people

Stay home and away from others when they're sick

For more information about worksite influenza clinics or how to prevent influenza, please contact your <u>local health department</u>. Thank you for protecting your business and staff from influenza this season.

Barbara Materna

Barbara Materna, Ph.D., CIH, Chief Occupational Health Branch California Department of Public Health

#### **ADDITIONAL RESOURCES**

#### Resources for planning a worksite flu clinic:

- CDC "Make it your business to fight the flu" Toolkit
- CDC Promoting Vaccination in the Workplace

#### State of California—Health and Human Services Agency

# California Department of Public Health Influenza Vaccination for Poultry Workers

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#### Information on protecting poultry workers during an outbreak of avian influenza:

- CDC, National Institute for Occupational Safety and Health (NIOSH), Alert:
   Protecting Poultry Workers from Avian Influenza (Bird Flu), May 2008
- <u>Cal/OSHA Regulation, "Aerosol Transmissible Diseases Zoonotic" 8CCR</u>

  §5199.1
- CDC, Recommendations for Worker Protection and Use of Personal Protective Equipment (PPE) to Reduce Exposure to Novel Influenza A Viruses Associated with Severe Disease in Humans
- Centers for Disease Control and Prevention (CDC), Prevention and Antiviral
   Treatment of Bird Flu Viruses in People
- United States Food and Drug Administration (USDA), Avian Influenza

#### References:

- National Business Group on Health. Hospitals should require flu vaccination for all personnel to protect patients' health and their own health. National Business Group on Health's Position Statement on Influenza Vaccination of Hospital Personnel. October 18, 2011. <u>Position Statement on Influenza Vaccination (kff.org)</u>
- 2. Molinari NA, Ortega-Sanchez IR, Messonnier ML, Thompson WW, Wortley PM, Weintraub E, Bridges CB. The annual impact of seasonal influenza in the US: measuring disease burden and costs. Vaccine 2007; 25(27):5086–5096. <a href="https://www.ncbi.nlm.nih.gov/pubmed/17544181">www.ncbi.nlm.nih.gov/pubmed/17544181</a>
- 3. Centers for Disease Control and Prevention (CDC), Bird Flu Virus Infections in Humans: http://www.cdc.gov/flu/avianflu/avian-in-humans.htm
- 4. Centers for Disease Control and Prevention (CDC), Transmission of Avian Influenza A Viruses Between Animals and People: http://www.cdc.gov/flu/avianflu/virus-transmission.htm

### **Crops Taking Turns**

### **Organic Agriculture Research and Extension**

Ms Faye Duan, Graduate Student at UC Davis School of Veterinary Medicine, Cooperative Extension Poultry Lab

This autumn, the OREI one acre experimental trial on integrated cropping and poultry production produced an abundant crop of organic butternut squash. Researchers and farmworkers harvested the squash by hand, then graded the fruits from each of our experimental plots individually before weighing them. Marketables fruits were separated into grade 1, grade 2 and unmarketable grades were further divided into groups of immatures fruits, cracks or deformities, animal damage, insect damage, and rot. In all 12 of our plots, Grade 1 fruits far outnumbered the other categories—indicating the excellent quality of our crop.

Final numbers have yet to be compiled, but we know that each of our 30x40 feet plots were able to produce at least a few hundred pounds of fruit. Although researchers were glad to see a successful yield from the trial, hand harvesting so many hefty butternut squashes was a very laborious task! We gained a first hand appreciation for the hard work and difficult labor endured by farm workers, without whom vegetable production in California and the United States would not be able to succeed.

Following the completion of harvest, we will collect soil samples for analysis, prior to moving to the next stage of our rotational cropping system. While normally, this would entail grazing another flock of broiler chickens on the crop residue, we were unable to execute this step of our rotation due to the cases of highly pathogenic avian influenza. The current outbreak has already resulted in the loss of 40 million heads of commercial poultry in the United States this year, and an estimated 480 thousand commercial and backyard poultry lost in California alone. Therefore, although it was not the original design of our experiment, we will skip to planting our winter cover crop, with the hope to integrate chickens again in the spring of 2023.



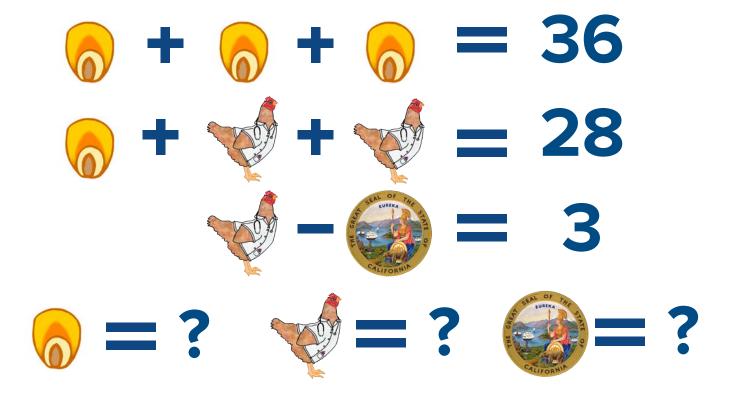
Ms. Duan harvesting butternut squash at Russell Sustainable Agriculture Research Ranch at UC Davis, CA.



A day's harvest of butternut squash at Russel Sustainable Agriculture Research Ranch at UC Davis, CA.

## **A Puzzling Situation**

Can you find the value of each symbol?





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Maurice Pitesky, editor in chief

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