HPAI for Backyard and Exhibition Poultry Producers Q&A Report

How much of this virus is being passed on by starlings and snow geese? What is the time frame of incubation of the virus in their feces?

This USDA website lists the positive detections of highly pathogenic avian influenza virus in wild birds: https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/avian-influenza/hpai-2022/2022-hpai-wild-birds

The virus has been primarily detected in wild waterfowl as they serve as a reservoir of the virus. Starlings can be infected and spread the virus but most of the detections have been in wild waterfowl.

Incubation period (time from infection to clinical illness) is typically a few days - around 2-6 days (but can be up to a couple of weeks ~14 days). The amount of time depends on the virus strain and the species of bird.

Infected birds can shed and transmit virus for 1-3 weeks, or longer (if they survive infection) - this also depends on virus stain and species of the bird.

How much mixing is there of migrating waterfowl from the front range to the western slope?

Migratory waterfowl typically migrate north to south and south to north, so they can commingle as they migrate Since viruses require a live host, how long can the avian influenza virus survive on a non-live host, such as tools, boots, etc.? And not under optimum lab conditions but under normal real-world conditions?

https://www.aphis.usda.gov/animal_health/downloads/animal_diseases/ai/hpai-reduction-of-infectious.pdf
This document summarizes a number of studies... depends on a lot of factors, but can be a few weeks but typically days.

I presume dogs, cattle and sheep could spread it too?

They could spread the infected feces by being a fomite or carrier.

Does it affect pigeon lofts?

It could. Pigeons are susceptible to avian influenza so they could be infected with the virus.

Can it be transmitted to other animals? For instance, I have a dog who likes to dig up dead animals and eat them. If he got ahold of an infected bird, could he get sick?

It would be very rare to be transmitted that way.

Is there a vacsine for HPAI?

Not available in the US.

Physiologically what causes the purple discoloration in heads and legs?

Decreased oxygen in the blood due to respiratory complications from the virus

Does the CDA have a list of active veterinarians that see poultry in the state?

We keep a list of veteriarians that see poultry at CSU (although there are not many of them). You can contact our Avian Health team at 970-297-4008.

As of now, can we still purchase young chickens from a source such as Murdoch's?

Yes, as long as the store is only receiving chicks from a single source (not commingling chicks from multiple sources)

Can eggs(fertile hatching ready) carry this too?

Yes

What is the CDC's recommendations for pasture poultry operations? These producers rely on there birds being in very "exposed" fields as per husbandry practices for their products.

Best option is to lock them up in a coop or house. Next best option is to keep them as far as possible from any open water like ditches, ponds, or lakes.

How risky is it to buy baby chicks at the local feed store or online? Should we avoid this for awhile?

If you already have birds, there is some risk to the new chicks as well as your existing flock. If you keep them completely separate or don't have an existing flock, then the risk decreases, but doesn't disappear completely.

Since the wild waterfowl are often asymptomatic or mildly symptomatic, detections will likely underestimate prevalence?

Correct

How long should we keep our birds locked up in their runs instead of free time in the backyard to prevent them from catching it? We live in Weld county

It will depend on how the outbreak progresses.

What do we do with the 10% that might live through an outbreak?

Unfortunately, this is a flock level disease and those birds would continue to present a risk for continued disease tranmission. All birds in a confirmed HPAI affected flock would be euthanized.

Why are we not keeping "Negative" testing birds that would have survived to help breed for resistance? Even the 10% that do not die?

There can be a carrier state where a bird won't show clinical signs but will shed virus intermittently, therefore we can't insure that a bird from an infected flock won't reinfect other birds. Plus we are always concerned that the virus could mutate enough in a recovering bird to start infecting humans.

How long do we anticipate this threat to last?

It is difficult to say; we have not seen this magnitude of an outbreak in the past, particularly the spread in wild birds. Our goal is that we limit continued spread and transmission by practicing really good biosecurity. The surviellance our wildlife partners are doing in wild birds will give us an idea of how much is continuing to circulate in the wild birds.

There have been rumors of airborne transmission? Should people worry about even keeping windows open in their coops?

During a wind storm like this, yes, however you have to balance disease risk with keeping good ventilation to decrease ammonia build-up.

So even if my birds are locked in a coop or completely covered area, and it's windy like today, whats to prevent the virus being introduced via feces/feathers in the air blowing in through vents??

Unfortunately, yes, this virus can be windblown in a situation like this. The good news is that it is somewhat susceptible to drying out so we're better off in CO than in more humid areas.

Is there such a thing as an asymptomatic carrier chicken?

There are chickens that can be infected with HPAI but do not show clinical signs (symptoms) but the vast majority (often close to 100%) of chickens will be sick and die. They could shed virus for weeks - so not a true "carrier" state but they could shed and transmit virus for a prolongued period of time.

Is there a way to disinfect a patch of ground or grass to allow for outdoor time for flocks that normally live inside?

No. Disinfectants are not effective on dirt and grass.

What is the testing turn around time?

Generally, we have a 1-2 day turnaround time from our CSU laboratory, but we have to wait another day or so for confirmatory results from the USDA laboratory.

Are suspect birds automatically culled either to obtain testing or prior to results being available?

No, the state/federal field veterinarian will collect swabs from live birds for testing and submit those to the lab. We wait for test results before any action is taken.

Are there any exceptions made for endangered or heritage breed poultry species?

Unfortunately, no. The risk of them becoming intermittent shedders is too high.

Should we be disinfecting the feet of pets that are indoor/outdoor that come into contact with the flock? What is safe to use?

It would be ideal to restrict pets from accessing the flock at this time. Because they can act as a vector for transmitting the disease.

Can squirrels carry the virus?

Not that we have seen so far.

How long will the birds have symptoms?

Some will die before showing any signs, the ones that do show signs will typically die within a day or two. We almost never see them recover and the few that do have significant long term problems with their lungs and digestive tract.

Is there a hotline or help available for people who are struggling with anxiety or depression pertaining to avian influenza?

Yes! We have mental health resources available through CDA. If you need help, call 1-844-494-TALK (8255) or text TALK to 38255.

How long does the influenza virus stay alive in infected feces out in the open?

This is entirely dependent on temperature, humidity, and UV light exposure so there is no one good answer. For outdoor infected flocks that can't be disinfected, we recommend a fallow period to allow the virus to die before restocking. That period is based on temperatures and time.

If a chicken has this virus now and survives, will they become immune the next time?

No, just like with human flu, the virus is mutating frequently so immunity is very short-term

Does the virus die with the chicken? Or are dead chickens spreading the virus too?

The virus can still be shed by dead chickens, it's on their feathers and can be found in their bodily fluids for a while after death. That can be dependent on humidity and temperature.

if a chicken test positive on a pcr test for having it in the past and happens to survive will they still need to be culled?

The nice thing about pcr testing is that it only tests for viral genetic material = no virus = negative PCR.

There is talk about a vaccine being produced to combat HPAI. Any whispering sun the wind about it and when it might be available?

Unfortunately, we do not have an approved vaccination for HPAI. There are challenges associated with vaccinating. I don't think there will be a vaccine available during this outbreak.

Is there any risk to indoor non-poultry birds, like pigeons or parrots? Should bird owners take extra care to disinfect floors/other surfaces after coming home?

Yes! if you have indoor birds you need to still have good biosecurity for them as well. taking off your "outdoor" shoes before entering the room with the birds, washing hands before working with them, and keeping windows closed in their rooms will all help.

How quickly are PCR test results coming back?

Typically within 2-3 business days.

What are the charges for swab tests or necropsy?

PCR testing for avian influenza virus is free (cost is covered by the USDA).

If the avian influenza test is negative and you want to determine cause of death, cost of necropsy is \$100 and there are costs for any additional tests needed.

How are infected chickens being disposed of?

That depends on the situation and where they are located. We try not to move them from the premises so that we don't risk spreading the virus.

Can the virus be transmitted human to human if the owner contracts it?

This virus has a very low risk of transmission from bird to person (this has only happened once in the United Kingdom and none in the US). There was no transmission from the UK person to any contacts.

How is it that, even though poultry sales have been suspended for 90 days, places like Tractor Supply and Murdoch's, etc are still able to sell chicks?

The Emergency Rule is specific for commingled poultry (birds from multiple premises). If the farm and ranch stores are sourcing their birds from a single source, it would not be in violation of the rule. I will talk about this at the very end of the webinar.

If we buy chicks from a NPIP nursery, is it safe to bring them into the flock? This is baby chick time.

Safer, but it is almost impossible to guarantee safety when bringing new birds in. They could be incubating the virus.

Really curious about what public health can/will do to respond to this.

Public Health is providing information to and monitoring the health of individuals with direct exposure to infected birds. If someone with contact develops Influenza Like Illness within 10 days of exposure we will help facilite getting that person tested for Avian Influenza.

What about water runoff? Can it transmit the virus? Our chicken run is downhill from the rest of the yard.

I wouldn't worry about that so much as long as you don't have wild waterfowl hanging out in your yard.

Will an entire flock be killed if one bird in it tests positive or can the remaining birds "test out"?

Unfortunately, this virus is so lethal and so contagious that in most cases most of the birds have been dying in a flock almost at the same time.

I know things can change before then but can you give some of us guidence on what to do with county fair poultry shows that will be in July and August please? Should we continue on planning on having them or should we cancel proactively?

We do not know if the virus will still be making an impact in our state in July and August. There is unfortunately no way to predict that.

Could baby animals get it to

We haven't seen any mammals so far in the USA. There are other strains that have not been found here yet that have infected mammals.

Is there disinfection guidance for fomites?

Here's a USDA reference on disinfectants.

https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/emergency-management/CT_disinfectants

For fomites such as flock equipment, we typically recommend cleaning off all environmental/organic material first (clean really well), then soaking the item in a disinfectant such as 10% bleach for 20 minutes.

And pre-disinfection practices, such as using soapy water to clean off fomite surfaces before disinfection. thinking like along the lines of norovirus cleaning/disinfection guidance?

Correct, soap and water are hugely important when dealing with this.

Do magpies carry HPAI?

Not that we've found so far. We tested some in 2015 and dint find any HPAI in them.

I still have my run sides wrapped in plastic from the winter should i still keep this up right now for extra security?

Yes, that will help with airborne transmission, especially in this wind.

Recipe for bleach solution? (Percentage or concentration?)

Add 1 quart bleach to 6 gallons water. (This is a 1:25 dilution, which equals 200 ppm sodium hypochlorite.)

Use as a general disinfectant and for foot bath. A 1:10 to 1:50 solution is adequate for hard surfaces and boot baths. Be sure to remove all organic material so the disinfectant can penetrate.

Can it affect other livestock like swine, goats, horses, etc.?

Not that we have seen so far in the US.

I'm in the NPIP and work with two local elementary schools to hatch chicks in their kindergarten classes. I lend them my equipment and give them fertile eggs from my flock and then take the chicks back to my flock once hatched. In past years the kids have handled the chicks extensively, and I have brought a full grown chicken to the classrooms for a Chickens 101 presentation. Would you advise against this activity this year? They are currently incubating eggs!

I would discourage that as it could present a risk for introduction of the virus to your flock (with sharing of equipment, movement of live birds, and flock exposure to additional people).

I understand that you have said that it is possible for starlings and finches to get it though not yet detected. Has there ever been a record of small song type birds getting it as that is pretty much the only wild birds visiting my property.

Yes, I have recently read primary literature articles regarding these small bird species. They are susceptible to HPAI and have been demonstrated to get the disease. Their exact role in disease transmission in this current outbreak is unknown, but they would pose a potential risk for introduction of disease.

What should we do with birds that die? How to properly dispose of the carcass?

This depends on your location. Most municipalities have regulations about carcass disposal so you need to follow those regulations first. If allowed, you may bury them deeply enough that scavengers can't reach them, you may burn them - though not during a Red Flag Warning!! You may also be able to double bag them in plastic bags, disinfecting the outside of each bag, and then sending them to a landfill, but that will depend on your local trash company and landfill.

Will you let flock owners know when it is safe to let their hens start roaming again?

Yes, we will continue to share information based on the current outbreak and what the surveillance is telling us about the virus circulating in the wild birds.

As to County Fair programs, at this time it seems that current infected cases are on the eastern plains... is this a state wide style quarantine or within a certain mileage of the cases?

For confirmed cases of HPAI, there is typically an "area quarantine" that is put in place around an infected premises (10 kilometer zone).

What makes poultry more susceptible to illness compared to wild birds? are there different receptors (like why do some of the wild birds have more GI signs and poultry more respiratory signs?)

Wild waterfowl and shorebirds (ducks, geese, plovers, etc.) are reservoirs of all influenza viruses. Reservoirs are animal populations that can get infected with a certain virus and they typically don't get sick and they replicate and shed a lot of virus. Wild waterfowl and shorebirds typically don't get sick from avian influenza infection (other influenza viruses that are lower pathogenic) but this high path avian influenza virus can cause disease and mortality in the reservoir species. Poultry are a spillover species and they do get sick and can die - with the currently circulating HPAI virus, they have very high mortality.

Just checking, it is still okay to sell eggs, as long as they have been properly clean

Yes!

Another screen early in the presentation said that "Properly prepared poultry eggs are safe to eat". Is that not true? Now it is being said that eggs must be destroyed.

Eggs from infected premises are destroyed and do not enter the food chain. Poultry and eggs from premises that are not affected with HPAI do not present a risk to the public.

Is the current recommendation to confine birds indoors or in covered pens statewide?

Yes, this is a statewide recommendation.

What happens if it gets into a breeding facility? Do all the breeding birds get culled? Some of them are very expensive or took a long time to build up those genetics.

Unfortunately, yes. But it is important to remember that mortality numbers will approach 90-100% in a very short period of time (days) and our goal is to help alleviate suffering and reduce spread of disease.

How does the emergency rule affect being able to ship hatching eggs?

As long as you are not in a control area and your chickens meet the destination requirements than you should still be able to ship.

For how long should we wait to add to flock or keep in an enclosed space?

Really until at least 14 days after the last infected flock/wild birds in the State. Which really doesn't help, I'm sorry!

If my neighbor gets the virus what happens? do you test birds nearby? with in a certain radius?

We will at best check with neighbors and give you information about the disease. We will also ask you to call us if you see any sick chickens!

Is this worse than the HPAI outbreak from 5 years ago? It looks like there are more states involved.

So far less birds, but more States with positive cases.

Has there been indications or communications from other countries where the migratory birds are leaving from regarding HPAI?

As of now most Northern Hemisphere countries are dealing with it. Europe has several strains they're fighting. We're all hoping we just have the one.

It is almost time to order broilers for the fair season. Should we not order meat birds this year?

If the only reason for ordering them is the fair, then maybe not. I'm sorry, I wish I could give you a better answer, but I've already admitted you losing the bet as to when it would be over!

I am looking for disinfecting foot bath for outdoor areas. Any help with knowing what is acceptable DIY with blean solution percentages?

Bleach is difficult it dissipates very rapidly from a foot bath. You may be better off to keep a pair of shoes that are coop or yard ONLY and change into them whenever you go into the coop or into the yard. A 1:10 - 1:25 bleach solution would be recommended. Change daily in a footbath

How long to repopulate if this kills my birds?

Depends on how aggressively you clean and disinfect, but the safe answer is 150 days. That gives summer a chance to do her work of heating everything up and drying it out.