

HPAI Outbreak and Response – Board Briefing

May 14, 2024

FDA Speakers: Jim Jones, Don Prater, Tristian Colonius

CDC Speakers: Demetre Daskalakis, Director of the National Center for Immunization and Respiratory Diseases; Nirav D. Shah, CDC's Principal Deputy Director

[FMI Backgrounder](#) – post the link to these notes with the backgrounder

Jim Jones:

We view you all as an important stakeholder in this issue. The totality of evidence on effectiveness of pasteurization continues to indicate that the commercial milk supply is safe. To further validate pasteurization against this virus, we are sharing recent efforts, specifically a study on pasteurization. We are validating criteria for pasteurization related to this virus and are using equipment typically used by producers in order to assess effectiveness under real world conditions. We will make these results available in the near future.

We advise against selling and consuming raw milk due to increased risk of foodborne illness with numerous pathogens in raw milk. This poses a risk to humans and animals who consume raw milk.

Demetre Daskalakis:

The milk supply is currently safe, but there is still risk for human/public health. There has been one human case and diagnosis in cows. We have conducted sequencing of the virus from the one human who has it and the changes match the pattern of vaccines we do have, and it is susceptible to drugs we use to treat the flu. Given the ongoing transmission in cattle, we know that this virus likes to make mistakes and these mistakes can lead to mutations and end up transmitting more efficiently between different mammals, including humans. Given that this virus is able to mutate, it is important to make sure we are controlling this infection in animals so we can work to end the transmission that could potentially lead to a variant of this virus that is more able to transmit to humans.

We don't see other human infections at the moment. We are working closely with the department of public health to monitor those with exposure and test if they have symptoms. There are 260 people being monitored, and all tests have been negative except for the one human who is positive. We want to emphasize that this virus could potentially create risk for humans. We are not seeing it to date, but the work to address this on the farm is critical to make sure we don't give this virus the opportunity to replicate and transmit in a more efficient manner. A lot of this is theoretical, but we have been watching this virus for 20 years and we know it can change, so it is important to emphasize a response.

Q&A

Leslie Sarasin: When you see symptoms, what are those symptoms?

Demetre Daskalakis: We are casting a wide net in terms of how we define symptoms. We have only had 2 cases of Avian Influenza in the US ever – one in 2022 and one now in 2024. Individuals who were exposed through raw milk should pursue public health. In the one case we have, he had conjunctivitis (pink eye) so if you had relevant exposure you should go to your local public health center and get tested.

Member: Is testing for this readily available in the medical community? What type of tests are available?

Demetre Daskalakis: Influenza tests we have in labs will detect this flu. It won't tell us what kind of Influenza A it is, but a standard flu test would pick this up. We are working closely with healthcare providers, especially those serving rural and migrant communities. The best strategy is to call your local public health department because H5 testing isn't available everywhere – it's in labs so if someone has an appropriate exposure and has symptoms, your local health department can take it from there in terms of testing.

Leslie Sarasin: Unless you're working on a farm or drinking raw milk, if you get flu symptoms you shouldn't be concerned at all about having this, correct?

Demetre Daskalakis: We haven't seen human-to-human transmission, so we are looking closely at what is happening in rural/migrant communities. We are monitoring ERs for people with flu-like symptoms. Across the US, we are seeing no concerning symptoms for human disease. The risk for the general population is low; there are some individuals who could be at a higher risk especially if they are exposed to cows or raw milk. We are monitoring what happens with influenza in the US to detect any concerning things. We are also monitoring waste water management for influenza A – 3 communities have found higher levels of that but based on monitoring ERs in those areas as well we are not seeing that as a concern.

Nirav Shah: The risk to humans right now thankfully is low. We want to keep it that way. The longer this virus sits out there in cows and does what viruses do which is change/mutate, the bigger risk it is that the risk to humans changes from low to medium to higher, and this is for humans alone, not even mentioning cows or poultry. You may ask what the fuss is for one person with pink eye, but we've seen this movie before and are concerned it's not bottled up the way we want it to be. We want to work with you on how you can help keep it bottled up.

Leslie Sarasin: What can and should we do to help keep it bottled up?

Nirav Shah: Ask tough questions. This is a virus that we are seeing with dairy cattle. There are practices that can keep it bottled up at farm level. You all asking tough questions around "Are workers truly being kept safe?", "Are conditions on the farm really safe?" and "Is the risk for cow-to-cow transmission really as low as possible?" will send a clear message on public health.

Demetre Daskalakis: Asking tough questions is great, and also your support that this is a human and veterinary thing to solve/attention on both is helpful. We shouldn't lose sight of the goal which is to end this. Where you have reach/influence, encourage folks in the more upstream part of this, tell people to focus on the human health and safety part of this.

Jennifer Hatcher: With regard to animals testing positive, will they be permanently removed from the food supply or only until they no longer test positive?

Nirav Shah: With respect to impact of the virus on dairy cattle, right now a cow that is showing symptoms or tests positive is taken out of production. Right now that time out is roughly 30 days. In some instances they may test again but we are not sure it's happening. They are put into a sick barn until the cow is recovered. When the cow is healthy again, they are put back into production, but in some cases their milk production is decreased for some time.

Member: To what degree are we seeing spreading of the virus in cattle beyond the US? Is there a concern that the virus could expand faster if it moves outside the US.

Nirav Shah: So far we only know of it in the US. Biosafety concerns are not as stringent in some other parts of the world so we may see more transmission and therefore more chances for mutation in other places.

Don Prater: It's hard to tell symptomatic from asymptomatic cows. The goal is for only healthy cow milk to make it into production. Studies show that pasteurization makes the virus non transmissible in milk. The goal is also to eliminate the virus from the herd. We encourage farmers to test these animals and figure out which herds are infected, but it will be challenging. Incentives USDA is putting in place will help – there wasn't a lot of incentive before that. It is going to be challenging and there needs to be testing, but incentives USDA is putting in place will help. You all can help by encouraging that to happen. That will help ensure safety of milk supply and to get the virus out of the system to protect everyone.

Leslie Sarasin: What we're understanding is that dairy farmers don't want to test. We're so glad to hear about incentives. How soon do we know if we've had a desired impact?

Don Prater: They will start participating in these programs (incentives for PPE or milk sampling equipment, etc.). One of the things poultry has had for years is indemnification. Poultry will go and depopulate the entire farm with indemnification. This will help some farmers be willing to test because they know they will be backed up by USDA. These guys are worried about their milk supply and selling it.

Jim Jones: Tests will be helpful to see where we're at.

Leslie Sarasin: How concerned are you for potential for increase and availability depending on how much removal you have to do?

Jim Jones: No supply impacts so far, it will be a function of how quickly the virus spreads in dairy to see impacts of supply.

Leslie Sarasin: You have indicated it will be helpful for us to ask questions of our suppliers to understand farms. It would be helpful for us for you to be forthcoming about what you see. We request that you continue to keep us apprised if you see any changes, we would love to be the first to know so we can be aware for our stores.

Member: That would be great if we could have access to that data. If there's new info we could share, don't know how difficult that would be and if there's any risk associated with that.

Jim Jones: Leslie and I talk regularly and as we get data updates we are happy to share it with this group.

Member: Is the CDC status online the most up to date info to point us to or is there a better space for us to look for daily info?

Demetre Daskalakis: There are a couple of sites – USDA HPAI site that updates daily on herds identified, our HPAI website with human level surveillance, weekly spotlight with roundup of what happens over the week. We will work with Jim to make sure you have links to this.

Member: The speed in which milk and dairy products get moved across network and consumed is light speed, so by the time we do tests and holds and things of that nature, or if there is an animal that's sick/symptomatic, it might already be out there. The more we can communicate the better.

Tristan Colonius: There are benefits to driving this virus down for all. We have been successful in sharing consumer confidence in milk supply. We know many other groups will be out there testing; there is a benefit in driving down those results. We are making sure our processors/pasteurization systems are on point so there are no failures.

References and Links

CDC <https://www.cdc.gov/flu/avianflu/avian-flu-summary.htm>

FDA <https://www.fda.gov/food/alerts-advisories-safety-information/updates-highly-pathogenic-avian-influenza-hpai>

USDA <https://www.aphis.usda.gov/livestock-poultry-disease/avian/avian-influenza/hpai-detections>