

Meeting Minutes: Quarterly Board Meeting

Date: 02/01/2022

Location: University Veterinary Diagnostic Laboratory (1333 Gortner Ave, St. Paul, Minnesota) and Teleconference via Microsoft Teams

Attendance

Board Members

- Dean Compart
- Erica Sawatzke
- Jim Vagts
- Peggy Anne Hawkins
- Jessica Koppien-Fox

Consultants to the Board

- Michelle Carstensen, Minnesota Department of Natural Resources
- Mary Donahue, USDA-APHIS, Veterinary Services
- Michelle Medina, Minnesota Department of Agriculture
- Laura Molgaard, University of Minnesota College of Veterinary Medicine
- Joni Scheftel, Minnesota Department of Health
- Jerry Torrison, University of Minnesota Veterinary Diagnostic Laboratory

Guests

- Karina Burger, USDA-APHIS, Veterinary Services
- Jim Byrne, Elk Producer
- Jenna Fier, USDA-APHIS, Veterinary Services
- Scott Fier, Cervid Producer
- Brad Finstad, Minnesota Turkey Growers Association
- Brenda Hartkopf, Elk Producer
- Kathy Jorgensen, Minnesota Veterinary Medical Reserve Corp
- Christina Krueser, USDA-APHIS, Veterinary Services
- Tony Kwilas, Lobbyist, Minnesota Elk Breeders Association/Minnesota Pork Producers Association
- Peter Larsen, Minnesota Center for Prion Research and Outreach
- Rich Meech, Cervid Producer
- Kelly Neisen, USDA-APHIS, Veterinary Services
- Tracy Nichols, USDA-APHIS
- Mark Nisley, Legislative Assistant
- Gary Olson, Deer Producer
- Laura Paynter, Legislative Analyst, Senate Agriculture and Rural Development Finance and Policy Committee
- Mackenzie Reberg, USDA-APHIS, Veterinary Services
- Marc Schwabenlander, Minnesota Center for Prion Research and Outreach
- Gary Wertish, Minnesota Farmers Union

Staff

- Beth Thompson
- Linda Glaser
- Dale Lauer
- Shauna Voss
- Courtney Wheeler
- Greg Suskovic
- Brian Hoefs
- Kara Schmidt
- Michael Crusan
- Erin Crider
- Annie Balghiti
- Tim Schulz
- Bliia Kha
- Angela Despiegelaere
- Kayla Pierson
- Tony LaBarre
- Sue Chapman
- Addie Evans Engelke
- Michael Herrmann
- Samantha Kappel
- Myrrh-Anna Kienitz
- Jason Cater
- Jen Hoven
- Heather Damico
- Carissa Allen
- Brad Peterson
- Lisa Ehlen
- Betsy Lempelius
- Chad Carlson
- Allison Pollock
- Laura TeBrake

Call to Order/Approve Minutes and February 1 Agenda

Dean Compart called the meeting to order. He stated several board members are participating remotely and can hear and participate in discussions. He noted the Board missed approving the September 15, 2021, minutes at the December meeting, so he asked for a motion to approve the September minutes. Dr. Peggy Anne Hawkins made the motion, and Erica Sawatzke seconded it. A vote was taken by roll call, with all voting aye to approve the minutes.

Mr. Compart then asked for a motion to approve the minutes from the December 8, 2021, meeting. Dr. Hawkins made the motion, and Jim Vagts seconded it. Mr. Compart took a vote by roll call, and all voted aye to approve the minutes.

Mr. Compart noted the agenda would not include a USDA Update, as Dr. Schaeffbauer is not able to attend the meeting. He asked for any other changes to the agenda. Hearing none, he asked for a motion to approve the agenda. Dr. Hawkins moved, and Ms. Sawatzke seconded. A vote was taken by roll call, and, with the exception of Mr. Vagts (audio issues), all voted aye to approve the agenda.

Legislative Update

Michelle Medina introduced herself as the new Director of Government Relations for the Minnesota Department of Agriculture (MDA) and the Board of Animal Health. She previously served as Director of Programming at the Minnesota Farmers Union (MFU) and attended Board meetings for MFU, so she is familiar with Board activities.

Ms. Medina said this session just began yesterday. It is supposed to be a shorter session, but the legislature will be dealing with the \$7.1 billion budget surplus, which will make things interesting. There will be a mix of virtual, hybrid, and in person meetings. The first hearing for the Board and MDA will be in the House Agriculture Committee tomorrow (February 2), which will be an interim update of both agencies. Dr. Thompson will testify.

College of Veterinary Medicine Update

Dr. Laura Molgaard said the University is continuing to navigate changes during the COVID-19 pandemic, noting the need for clear communication. All faculty, staff and students are required to be vaccinated. The University is examining the future of work. Some positions require in-person, on-campus activity, but some administrative staff are moving to hybrid or remote work, partially for employee retention and partially to free up office space. Dr. Molgaard noted staffing shortages continue to be an issue, leaving existing employees to pick up the extra work. Intensive recruiting efforts are ongoing.

Workforce needs extend into the veterinary field in the U.S. and in Minnesota. The newest study from the American Association of Veterinary Medical Colleges (AAVMC) shows an estimated veterinarian shortage of 13 percent. To close this gap, the College would need to graduate an additional 24 DVMs in each of the next five years. The CVM is addressing this through its VetFAST program, which focuses on bringing veterinarians into rural practice, and their partnership with South Dakota State University (Two-Plus-Two-Program), which increases enrollment by 20 students

per year. They continue to explore ways to meet the needs of the veterinary field and also meet accreditation requirements.

The University has proposed a 3.49 percent tuition increase. Dr. Molgaard stated the College has prioritized keeping their tuition increase below the University's proposed increase. However, inflation still exists, so an increase is required. The College is considering new tuition strategies to create greater predictability and flexibility for students.

Dr. Molgaard talked briefly about including proposals for equipment for the VDL, the Rural Agricultural Research Fund (RARF) research, and a CFANS proposal for matching funds to consolidate and modernize their animal agricultural research facilities. The College is examining the feasibility of HF2814 (CWD testing of live cervids). The Minnesota Center for Prion Research (MNPRO) is seeking \$4 million from the Legislative-Citizen Commission on Minnesota Resources (LCCMR). The College is standing with MVMA in opposing the Companion Animal Bill, and they are working with them on efforts to license Minnesota veterinary technicians.

Mr. Compart asked about the current shortage of veterinary technicians and the programs available. Dr. Molgaard said veterinary technician programs are two-year programs in Minnesota, but four-year programs are gaining traction in other areas of the country. The College is looking into the feasibility of adding this to their offerings. A four-year degree can make it easier for vet techs to advance in their careers, but it also increases student costs. Several veterinary technician programs in Minnesota have gone under in recent years, and the remaining ones are not enough to meet the demand. Those who start as veterinary technicians do not stay in the profession, so that is also a challenge. This impacts the College directly, as they employ many veterinary technicians.

Mr. Compart asked if the College needs to focus on accepting applicants from veterinary shortage areas to graduate more veterinarians who want to live in those areas. Dr. Molgaard replied that they take this into consideration but also aim to provide rural and large animal practice experiences while students are in school, so they get exposure to it. There may also need to be some changes to how rural practice is handled in certain areas to provide young veterinarians with the life-work balance they value. She acknowledged the challenge of making a rural practice economically feasible for new graduates with student debt through loan forgiveness programs.

CWD in the Wild Update

Dr. Michelle Carstensen said the Department of Natural Resources (DNR) has concluded its fall CWD surveillance work. She showed a map with their six CWD surveillance areas highlighted. The DNR collected nearly 15,000 CWD samples since July 1, 2021, and 31 new cases of CWD were detected.

Dr. Carstensen gave an overview of findings in each area:

- **Beltrami County Surveillance Zone:** The DNR sampled over 1,800 deer, with no CWD detected. There will be no additional work done in this zone this winter, and the zone will probably be downsized for next fall's work. They are also working with area tribal nations, who also collected samples. They have not detected any CWD.
- **East Central Surveillance Zone:** Sampled nearly 1,400 deer, with no CWD detected. The DNR has planned no additional winter work in this area.
- **West Central Surveillance Zone:** The DNR is using a risk-based model for testing in this area. They exceeded sampling goals in one of the deer permit areas (DPAs) and are close to the goal in the other, with no CWD detected.
- **North Central Management Zone (Crow Wing Co.):** The DNR found one CWD-positive deer, located about eight miles from the previous positive. They are issuing landowner shooting permits this winter. This was supposed to be the last year of surveillance in this area, but the DNR has now extended their surveillance efforts for another three years.
- **South Metro Management and Surveillance Zone:** The DNR collected 3,000 samples and found two new CWD positive cases: one near Chub Lake and another on the western edge of the management zone. Winter work in the area includes special hunts, landowner shooting permits, and USDA culling.

- **Southeast Management and Control Zone:** Sampled about 6,000 deer, with 27 new detections around the Winona County CWD-positive farm (found in 2017) and the Preston area. The DNR held winter hunts, issued landowner shooting permits and will focus on USDA culling efforts to remove more positive animals. Dr. Carstensen noted a continuing low disease prevalence in these areas (around one percent or lower), which has been consistent over the past five years.

The DNR continued their dumpster program with 32 sites for hunter-harvested deer carcasses. She noted of the 146 CWD positive animals found in Minnesota in the last few years, only six percent of these were left on the landscape. The dumpster program aids the DNR in reducing the transmission risk of CWD prions left in the environment.

The Minnesota and North Dakota DNR also performed sampling in Polk County, after a positive case was found along the North Dakota/Minnesota border. No new positives were detected, but they will continue to do CWD surveillance in the area this fall.

Landowner shooting permits for January 22-30, 2022, were sent by mail to those who are three miles from the positive case in the North Central Management Zone and two miles from the positives in the South Metro and Southeast Management Zones. These landowners also have an opportunity to open their land for USDA culling, which will begin in two weeks and run through the end of March.

Dr. Thompson asked if the DNR tracks privately submitted CWD samples, or if there is a way to encourage more hunters to do this. Dr. Carstensen said most people send samples to Colorado State University or the Wisconsin Veterinary Diagnostic Lab. The Wisconsin lab was sending the DNR reports on privately submitted samples, but Colorado State does not do that unless a sample is positive. This makes it difficult for the DNR to track private submissions. They are looking at ways to make the submission process easier for hunters, but there is a cost to it. They also want to make it easier for hunters to collect their own samples or have someone collect it for them at a DNR office.

Ms. Sawatzke asked if the DNR works with counterparts in Wisconsin and other states to share information on CWD. Dr. Carstensen said the DNR participates in several different forums with neighboring states, including the Midwest Association of Fish and Wildlife Agencies (MAFWA) Wildlife Disease and Health Committee. They meet annually but exchange information monthly. She and her staff also attend monthly CWD calls to share CWD surveillance results and other activities.

Mr. Compart asked if the DNR knows the percentage of harvested samples that are successfully tested. Dr. Carstensen replied that the laboratory notifies them if a sample cannot be tested. This accounts for less than one percent of submitted samples.

Genetics and Farmed CWD Resistance Work

Dr. Tracy Nichols, a staff scientist with the USDA's Cervid Health Program, shared information from her team's work in studying predictive genetics and CWD management in farmed white-tailed deer (WTD). Dr. Nichols first talked about the prion protein gene, which performs normal functions in the body, like cell signaling and neuroprotection. When the prion protein misfolds, it becomes pathogenic and infectious.

There are regions in the prion gene called codons. There are several codons known to have some influence on the CWD incubation period, including codon 96. Three different sequences of codon 96 occur in WTD. Dr. Nichols stated polymorphism, or changes, at codon 96 does not confer protection from CWD. The study has seen CWD-positive farmed deer with all three polymorphisms at codon 96; however, some deer still avoid getting CWD. In high prevalence herds, they have seen animals with the GG polymorphism (has the shortest CWD incubation period of the codon 96 polymorphisms) that did not have CWD. This shows there is something else happening to keep them from getting infected.

Dr. Nichols noted genetic work with scrapie, saying while scrapie is not entirely controlled by a single gene, or monogenic, it is monogenic enough that sheep can be bred to control scrapie. This is not the case with CWD. This led

to a whole genome study with geneticist Dr. Christopher Seabury (Texas A&M), to see if they could identify WTD that are highly susceptible to CWD.

Dr. Seabury had identified over 200,000 regions of interest in the farmed WTD genome that differ between animals. Dr. Nichols' team sent Dr. Seabury 807 characterized WTD samples from depopulated farms across the U.S., and he examined the positive and negative samples, comparing the data for genetic trends to train the computer to identify patterns. Dr. Seabury found more than 123,000 regions of interest related to CWD infection and used them to create a gene array. Then he ran the 807 WTD samples on the gene array and developed a breeding score called a "breeding value." What he found is that dozens of genes have a role in CWD susceptibility. While codon 96 had the greatest contribution, it has less than a five percent genetic contribution to the whole. Susceptibility is also easily passed from one generation to the next.

Next, they performed a blinded validation of their CWD genetic prediction. Dr. Seabury received 700 additional blind WTD samples to determine how well his breeding values could predict which animals had CWD. This was not an attempt at diagnostics; it was a tool to see if their research was on the right track. They found that his data could predict which deer had CWD with greater than 82 percent accuracy. She noted this percentage is likely higher because some deer with poor breeding values may not have had a chance to get CWD prior to depopulation.

Dr. Nichols showed a graph of the distribution of directly estimated breeding values, which showed a scale of genomically estimated breeding values (-0.45 to 7) and the number of WTD from the sample group found to be at each value. The graph also indicated a "cutoff value" (around -0.05), where animals with values to the right of the cutoff were more likely to have CWD, while animals with values to the left of it were less likely to have CWD. When applying this information to CWD prevention, animals with a higher breeding value should be removed from the herd, while animals with lower breeding values should be selectively bred. Dr. Nichols noted that animals with breeding values near the cutoff value should be avoided, as these animals would still have a CWD susceptibility risk.

Herds containing minimally susceptible deer may be able to survive a CWD introduction, though it's unclear if there is a CWD prevalence threshold in which even the genetically "better" deer cannot avoid infection. Study on this is underway.

Dr. Seabury worked with the North American Deer Registry to produce a commercially available array for predictive genetics on individual animals. The 50,000 gene array uses Allflex DNA ear punch samples. It costs \$75 per animal, and over 11,000 animals have had their predictive genetics done since the array became available in summer 2021.

Dr. Hawkins asked what characteristics (racks, resistance to other diseases) might be affected by breeding WTD that are genetically less likely to develop CWD. Dr. Nichols said they are still in the infancy of their research, but there do not seem to be any physical characteristics specific to these genetics, and whether these genetics affect a WTD's resistance to diseases is yet unknown.

Mrs. Brenda Hartkopf asked if similar research is being done with other species. Dr. Nichols said in 2021, they were able to establish funding for this same type of research in elk. Dr. Seabury is working on developing an array for elk, and then they will start running the predictions. Mrs. Hartkopf asked where they will get the samples for research. Dr. Nichols said they do not have many elk samples, but they have partnered with farms in Canada to provide characterized samples, as needed.

Dr. Thompson asked for an update on the validation of RT-QulC. Dr. Nichols stated the USDA started the validation process to develop a standardized protocol for RT-QulC, focusing on rectal biopsy samples first. They completed this work, and the Agricultural Research Service is writing the paper on rectal biopsy. Once it is submitted, USDA will share the protocol with five National Animal Health Laboratory Network (NAHLN) labs for a cross-lab study. They hope to be finished with validation of rectal biopsy within a year. Studies on medial retropharyngeal lymph nodes have begun but will take longer to complete.

Mr. Compart asked if other researchers have approaches to live animal testing that might work better than RT-QulC. Dr. Nichols said every lab is working on different angles in their research. However, when it comes to regulatory

diagnostics, every NAHLN lab must follow the same protocols for consistency. When developing diagnostics for new sample types like feces, many labs are researching this, but the key is who will get their test optimized to work best. Then, the USDA will have to go through the validation process and decide if it should be used as a testing protocol in NAHLN laboratories.

Mr. Compart asked if spontaneous spongiform encephalopathy occurs. Dr. Nichols stated this has been seen in humans and cattle, but it is uncertain if it happens in WTD. There have been instances of single animals in a closed herd testing CWD positive, but the USDA research program requires submission of fresh samples. When this has happened, the producers have not been in the USDA program, and the USDA has not been able to get fresh samples for research.

Mr. Compart asked if outside factors, such as being moved to a new farm, exposed to a new insect load, being vaccinated, etc., could cause a spontaneous infection. Dr. Nichols said it is possible outside factors could make an animal more susceptible, but susceptibility also could be in the animal's genetics. This needs more study.

Gary Olson asked about Dr. Nichols' findings in her research on CWD prion movement and grass feeding. She said she had thought disease would be taken up into the stem and leaves, but she found it did not. This may depend on the soil constituents, but there is more research to be done. She has passed her data on to Dr. Rodrigo Morales at the University of Texas to incorporate their findings into a paper.

Farmed Cervidae Update

Dr. Linda Glaser showed a map of the state's 233 registered cervid herds, of which 149 contain white-tailed deer (WTD). She then gave an update on the Beltrami County CWD-positive herd investigation. The Kanabec County herd that sold animals to the Beltrami County herd was recently depopulated. The Board worked with the USDA to provide indemnity funds for the herd, and it was put down in November. All the animals were sampled and tested, and results came back last week as CWD not detected. Three herds remain quarantined: one herd each in Hennepin (provided animals to the Beltrami Co. herd) and Dakota Counties (bought animals from the Hennepin Co. herd) were exposed to CWD. If CWD is not detected on either farm by October 2022, which will be five years since their last exposure, their quarantines will be released. The Winona County herd has been appraised and is requesting indemnity. The USDA is waiting for their budget to be finalized before deciding on herd indemnity funding.

The Mille Lacs County WTD herd owner who had his herd registration cancelled in 2021 was court ordered to depopulate his herd by April 1, 2022. Instead, he sold some of his animals to two farmed cervid herd owners. A hearing for contempt of court order was held on January 21, during which the court ordered him to put down his remaining four animals on February 4, 2022. Field staff will be accompanied by a DNR conservation officer and the local sheriff to collect CWD samples from these animals.

Dr. Glaser said the DNR and Board's shared farmed WTD database went live today, and the last of the farmed WTD data was transferred this morning. Both the DNR and the Board will be working in the system to keep records updated. The [legislative report on progress on the Board and DNR's concurrent authority over farmed WTD](#) was released this morning and is posted on the DNR's website. Both agencies continue to work on outlining program responsibilities (inspections, testing, etc.) and updating their Memorandum of Understanding (MOU).

There are two bills regarding farmed cervid legislation. HF 2814 includes testing the soil of CWD infected premises before any sale or transfer of the property. It also requires that the owner record any information on the CWD infected premises with the county recorder of titles. In addition, the bill requires all WTD herd owners to test each animal with RT-QuIC and report results to the Board by October 1, 2022. Positive results would require additional testing, including post-mortem testing. SF 2595 orders the Board to discontinue registration of new farmed WTD herds and not allow movement of farmed WTD unless it is to slaughter. Herd owners would not be allowed to import farmed WTD from other cervid herds. The bill also outlines a voluntary buyout of farmed WTD herds, though no funding amounts or sources have been determined for this.

Mr. Compart asked how many animals the Winona County herd owner has had CWD tested. Dr. Glaser said since the herd has been quarantined, the owner has tested 46 animals, with no CWD detected. There are 100 to 120 animals remaining in the herd.

Mr. Olson asked how many of the WTD in the 149 registered farmed WTD herds are in commercial herds. Dr. Glaser said the number of WTD herds includes any herd with WTD. About 20 of those are mixed species. Over half of the herds with only WTD have been labeled as hobbyist, meaning they cannot have animals for monetary gain and cannot have multiple species in the herd. Mr. Olson asked when the numbers were pulled, and Dr. Glaser replied they were pulled last week. Herd owners had until January 31 to report their fawn counts, so the numbers will fluctuate. She noted the Board is seeing a definite decline in the number of farmed cervids and the total number of herds.

Board of Animal Health Update

Dr. Beth Thompson stated she will be testifying at the House Agriculture, Finance and Policy Committee hearing tomorrow, giving an overview of Board activities and programs, including CWD and other diseases the Board dealt with in 2021 and is preparing for this year.

Dr. Dustin Oedekoven, South Dakota's state veterinarian, is taking a new position with the National Pork Board. This will leave Dr. Thompson as the senior state animal health official in the Midwest. The National Assembly of State Animal Health Officials (NASAHO) shows a 40 percent turnover in state animal health officials in the last two years. Dr. Thompson stated there is a lot of work ahead, and changes are affecting agriculture in the public and private sectors.

Dr. Thompson gave a brief overview of which agencies the Board partners with on various animal health issues, including zoonotic diseases (MDH), CWD (DNR), agricultural marketing (Department of Agriculture), wild waterfowl (DNR), and animal welfare. Animal welfare cases are handled by local law enforcement and the Minnesota Federated Humane Societies.

HPAI: Biosecurity from a Producer's Perspective

Ms. Erica Sawatzke introduced herself as a sixth-generation turkey, corn and soybean farmer. For many years, they were a breeder turkey farm that sold eggs to hatcheries. With changes to their family and the industry, they decided to switch to raising market turkeys. This allows them to have fewer employees and less traffic on the farm.

They begin each day wearing clean clothes and shoes that stay on the farm. Their employees park in a designated area and have shoes they leave at the farm to change into before starting work. Ms. Sawatzke shared a photo of their barn's Danish entry system. One enters on the dirty side, where they remove coats and outside shoes and use hand sanitizer. Then they put on barn boots and coveralls and enter the clean side of the barn. A two-by-four board on the floor marks the line of separation between the clean and dirty sides.

Ms. Sawatzke discussed additional biosecurity measures they have on their farm. They have a traffic log for all farm visitors, which involves verifying they have not been to other poultry or hog barns in the last 12 hours. They also place mouse bait stations every 30 feet in the barns, take down any bird nests, and use a specific skid loader and bucket to remove any daily mortalities, which are composted on site. The area around the barns is called the perimeter buffer area, which they keep clear of clutter and mow to prevent shelter for wild animals or rodents. They close any holes in the barn immediately and pick up any feed spills to avoid attracting wild birds. All barns have "No Entrance" signs.

Ms. Sawatzke described the routine farm traffic, including feed, bedding, poult, and supply deliveries. None of these delivery drivers have access to the barns. Poult delivery drivers wear clean coveralls and boots. Supplies are delivered to the end of the driveway. She noted feed and bedding trucks come with a full load and are not stopping at other farms before or after coming to their farm.

Spring is an important time to keep up biosecurity practices. It may be annoying to get into the barn and then realize you forgot a tool, but it's crucial to follow the Danish entry procedure to keep disease out. Make sure all employees

understand the farm's biosecurity plan. Ms. Sawatzke added she kept her employee informed on the H6N1 LPAI situation in 2021. She stressed having a good relationship with your veterinarian. When your flock seems "off," discuss it with your vet. In 2015, they also had testing swab kits on hand, so it may be convenient to have some of those on hand this spring.

Ms. Sawatzke stated the USDA is not doing wild bird surveillance for HPAI in the Midwest, but she hopes that will change. She thinks producers need to operate as if HPAI introduction is always a possibility. Producers should be aware of their landscape and potential risks for infection. She also recommended all producers update their contact information with the Minnesota Turkey Growers Association (MTGA), as they send out the Board's Disease Alerts to producers.

Mr. Compart asked where their supply deliveries are left. Ms. Sawatzke said they are delivered on a pallet, which they take off the truck with their skid loader.

Dr. Thompson thanked Ms. Sawatzke for her presentation and suggested other Board members discuss their operations at future board meetings. Mr. Compart agreed.

LPAI/HPAI Updates

Dr. Dale Lauer began with an update on the H5N3 LPAI outbreak, which was identified on two commercial turkey premises. Flocks on both premises have been depopulated, and all surveillance testing has come back negative. They have completed virus elimination activities, and environmental testing results are pending from the National Veterinary Services Laboratory (NVSL).

The Emergency Disease Management Committee (EDMC) met on January 28. The group received updates on H5N3 LPAI and progress in finalizing the Minnesota H5/H7 LPAI Response Plan. Some of the veterinarians on the EDMC are in the process of creating a controlled marketing plan for eggs and egg products. The EDMC also discussed the communications plan used during the recent LPAI outbreak, and it will be updated based on the feedback received. The USDA sent comments on their review of the Minnesota Plan, and the Board is incorporating these comments into the plan and will share the updates with the EDMC for their review.

Dr. Lauer then gave an update on the current H5 Highly Pathogenic Avian Influenza (HPAI) global outbreak. He showed a world map indicating HPAI cases as of Spring 2021. Numerous outbreaks occurred throughout Europe and Asia, and H5 was consistent. He then showed a map from Fall 2021, indicating more HPAI cases in the UK, Russia, South Korea, and Japan. Europe had outbreaks in both wild and domestic birds. Migratory patterns cross over the Atlantic and Pacific Oceans. In 2015, HPAI came to the U.S. over the Pacific by Alaska and British Columbia. This year, the virus appears to have come across the Atlantic Ocean into the North America Atlantic Flyway, with the first H5N1 detection in Newfoundland on December 20, 2021. Surveillance in the U.S. detected cases in hunter harvested wild birds in South and North Carolina and, last week, in Virginia.

Dr. Lauer showed a map of the U.S. migratory flyways. With H5N1 moving in wild birds and the spring migration beginning, USDA Wildlife Services will soon expand its HPAI surveillance into all U.S. flyways. The Board has an agreement with the industry for an early warning notification policy based on surveillance and research testing. Industry will report any mortality or drops in egg production to the Board. The EDMC members have spent much of their time on preparedness activities in the event HPAI is introduced to the state.

Dr. Lauer gave a summary of the highest risks for HPAI spread as identified in the USDA epidemiological report from the 2015 HPAI outbreak. These include workers or visitors who enter poultry buildings or who have contact with poultry, shared equipment and crews, entry of wild birds into barns, and procedures for disposal of dead birds. These should be the highest priority in each poultry site's biosecurity plan. The Board and University of Minnesota Extension are working on promoting this messaging to poultry producers.

Veterinary Diagnostic Laboratory Update

Dr. Jerry Torrison reviewed the Veterinary Diagnostic Laboratory's (VDL's) avian influenza preparedness activities. Samples can be tested in coordination with the Board at either the MPTL or the VDL, depending on the location of the premises. They expect plans to be subject to adjustments. The MPTL can run 600 tests per day, with suggested run times of 8:00 a.m. to noon. Weekend testing could be available during an active outbreak. Six technicians are certified to run the tests, and three National Guard personnel are also trained to step in as needed. The VDL can run 180 tests per day without disruption to other disease testing, and 5,000 tests with some disruption. Weekend testing is available, with 17 technicians certified to run tests. Dr. Torrison the MPTL and VDL are expected to meet the state's needs should an influenza outbreak occur.

Dr. Torrison gave an update on VDL COVID-19 operations. All VDL employees are considered essential workers, and the leadership surveyed staff on the changes implemented. A large majority (93.8 percent) feel safe with COVID precautions in place. Most staff found places to take breaks and were not overwhelmed because coworkers continued to work from home. The VDL has provided three different kinds of N95 masks, though they do not work for everyone. The VDL cannot require N95 masks. They also have offered to make home test kits available to employees.

The VDL recently received grant awards from the National Animal Health Laboratory Network (NAHLN) for upgrades to their online submission system, ASF sample submission training, and an ASF PCR negative cohort with Iowa State University and South Dakota State University. They also received NAHLN National Animal Disease Preparedness and Response (NADPRP) funding for a University of Minnesota/Ohio State University study in the Dominican Republic and a Southeast Asian country on how to incorporate more field-based testing into ASF surveillance, control and potentially virus elimination.

The VDL is requesting funding related to equipment, including for the back end of the PCR testing process, genomic sequencing, and RT-QuIC, in anticipation of USDA validation of the test.

Companion Animal Advisory Task Force Update

Dr. Courtney Wheeler stated the Board approved the formation of the task force at the December meeting. The task force will assemble a group of companion animal experts to identify concerns from Minnesota veterinarians, identify zoonotic and vector-borne diseases of the highest concern, and review import requirements for dogs and cats.

Dr. Wheeler showed a list of established task force members. There are still seven vacant positions. She has contacted individuals to fill these spots and hopes to have all members in place by the end of the week. The task force will meet quarterly and will begin by discussing interstate movement and importation of animals.

Minnesota Department of Health/COVID-19 Update

Dr. Joni Scheftel stated Minnesota no longer has the highest transmission rate among Midwestern states. The Omicron variant now accounts for over 99 percent of sequenced isolates. She noted case counts have been falling in the last few days. The numbers did not include at-home tests or those living with a COVID-positive person who did not get tested.

Dr. Scheftel displayed a chart of weekly COVID positivity rates through January 15, showing over one out of five people who were tested between January 1 and January 15 were positive. Young families and parents currently are experiencing the highest infection rates.

More than 64 percent of Minnesotans have completed their vaccination series, and Minnesota has one of the highest rates of booster vaccinations in the U.S. Over nine million boosters have been given in the state with no serious consequences.

Dr. Scheftel showed a list of animals that have tested positive for SARS-CoV-2, including a binturong, fishing cat, coatimundi, and a hippopotamus, and a list of animals experimentally infected with SARS-CoV-2 that can transmit the virus to their own species, including cats, ferrets, mink, deer mice, hamsters, and white-tailed deer.

She discussed the case of COVID-positive hamsters in Hong Kong, where a pet store worker tested positive. Half of the store's hamsters also tested positive, and all the hamsters and other pet store animals were killed, and the government requested people to relinquish their hamsters for euthanasia. Whole genome sequencing linked the virus strain in the store worker back to the store's hamsters, which were imported from Denmark. Two customers in the store also became infected with different variants from different hamsters at the store and passed the virus on to family members. This virus strain (Delta A.127) had not been circulating in Hong Kong prior to this exposure.

Dr. Hawkins commented she knows individuals who were looking forward to getting Omicron until they knew people who became very sick from it. She asked how to encourage people to get vaccinated as opposed to getting COVID. Dr. Scheftel said it is unknown how long immunity from getting COVID lasts. Studies have shown people who have had COVID and received vaccinations are less likely to get COVID again than those who only had COVID. Dr. Torrison added the vaccine is a standardized dosage designed to illicit a robust immune response in the body. A person who is infected by COVID naturally has no idea what amount of virus caused their infection. Therefore, naturally infected people could become sick from a small viral load and might incorrectly assume they're immunity is strong.

Next Meeting and Adjourn

The next quarterly meeting of the Minnesota Board of Animal Health will be held on Tuesday, April 12, 2022, starting at 9:30 a.m., location to be determined.

Mr. Compart asked for a motion to adjourn the meeting. Dr. Fox made a motion, and Mr. Vagts seconded it. Mr. Compart took a vote by roll call, with all voting aye to adjourn.

Respectfully Submitted,

Beth S. Thompson
Executive Director
State Veterinarian