

Annual Report Fiscal Year 2023

Healthy Animals for Healthy People and Communities

BOARD MEMBERS

Erica Sawatzke – President of the Board and Poultry Producer, Kensington
Peggy Anne Hawkins – Vice President of the Board and Veterinarian, Northfield
Dean Compart – Swine Producer, Nicollet
Jim Vagts – Former Livestock Producer, Harmony
Jessica Koppien-Fox – Veterinarian, Marshall
Alex Stade – Cattle Producer and member of the Shakopee Mdewakanton Souix Community, Prior Lake

BOARD MEETINGS

September 21, 2022 December 6, 2022 February 8, 2023 April 12, 2023

The Annual Report of the Minnesota Board of Animal Health is published in accordance with the provisions of Minnesota Statutes.

The Board of Animal Health is an equal opportunity employer.

TABLE OF CONTENTS

Letter from the State Veterinarian	1
Cattle	2
Companion Animals	3
Farmed Cervidae	5
Horses	7
Poultry	9
Sheep and Goats	10

Swine	11
Animal Movements and Traceability	13
Rabies	14
Emergency Preparedness	15
Compliance	16
Budget	17
Veterinary Diagnostic Laboratory	19

LETTER FROM THE STATE VETERINARIAN



It's been a learning experience and a privilege to serve as the Interim Executive Director and State Veterinarian during the tail end of the fiscal year. Although this role is uniquely defined by each incumbent, there are numerous relationships with internal and

external partners to serve as mileposts guiding us along the way to achieving our mission. One of the first things I noticed when stepping into this role is the amount of support offered and required to serve. One person cannot singlehandedly fend off diseases like avian influenza or canine influenza. For this year's letter I'd like to highlight the teamwork aspect in all we accomplish.

Highly Pathogenic Avian Influenza, HPAI though the acronym seems ubiquitous at this point, carried over again into this fiscal year with our first ever incursion of the disease during the autumn migration. With federal responders being stretched thin and our staff fatigued from still cleaning up the spring wave, we had to find new recruits and new efficiencies. We would not be where we are today without the Minnesota Department of Agriculture's emergency response team. I was embedded in the HPAI response at that time and can say from firsthand experience it was a real team effort to get us across the finish line in the winter.

As the HPAI response wrapped up, and before it began again in the spring, the Minnesota Legislature convened, and our staff were busy educating new legislators on our work and our mission. Three key issues arose in the 2023 legislative session: a proposal to form a companion animal board, expanding membership and altering service requirements for our Board members, and reshaping farmed Cervidae oversight in Minnesota. In the end there was a lot of compromise from everyone, and we ended up with one additional Board member and the oversight of farmed white-tailed deer transferred to the Department of Natural Resources (DNR). You can read more about those changes in the Farmed Cervidae section of this report.

During the spring of this fiscal year, we were surprised by minimal avian influenza cases. However, another influenza filled the void and threatened our dog population, canine influenza. A sick dog was imported in April and the disease soon emerged in the community. Coupled with a shortage of canine influenza vaccines and an outbreak in an urban community where dog owners depend on shared spaces to exercise their animals, the cases climbed. We worked quickly with veterinarians, dog businesses and others to get the word out on the disease and ways to slow the spread. Unfortunately, the case counts still trickled in as of the writing of this report at the end of the fiscal year. We are continuing our vaccination outreach and will push for more positive outcomes in the new fiscal year.

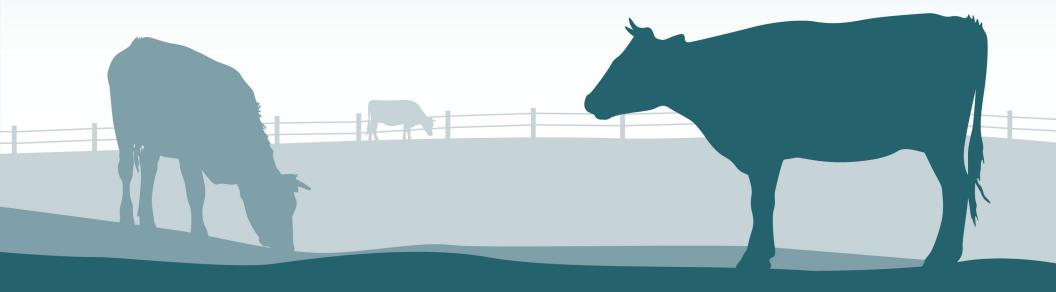
Last year's letter from the State Veterinarian talked about staffing shortages and filling shortand long-term vacancies. I'm pleased to report we've made great progress on that front and have bolstered our staff with internal growth and the addition of new positions to round out our expertise at all levels. There are still a few key positions remaining to fill, including the State Veterinarian, and we look forward to being back at full staff and increasing our service level to Minnesotans in the next fiscal year. I'm thankful for this opportunity to serve the Board in the interim role.

Brin J Maps, Dum

Brian L. Hoefs, DVM Interim State Veterinarian, Executive Director

CATTLE

The Board's Cattle Program staff partner with state and federal agencies, producers, and other stakeholders to rapidly detect, prevent the introduction, and mitigate spread of diseases that could severely impact our state's cattle and bison industry. Board staff continue to work with producers to comply with the state's official identification requirements, which facilitate rapid tracing of potentially diseased cattle and bison. Producers and veterinarians can order free, USDA provided, radio frequency identification (RFID) tags for replacement heifers on our website. Read more about official identification including RFID in the Traceability section of this report on page 13. Minnesota remains bovine tuberculosis (TB) and brucellosis (*Brucella abortus*) free, thanks to more than 500 accredited and certified veterinarians who conduct disease surveillance in cattle across the state. Minnesota veterinarians continue to screen cattle and bison for bovine tuberculosis using the caudal fold tuberculin (CFT) test. Any test-responders were confirmed negative with additional testing by regulatory veterinarians. We continue to monitor preventative measures for *B. abortus* like vaccinations and disease testing. The Board did not conduct any TB or brucellosis trace investigations this fiscal year.



Licensed Kennel & Commercial Dog and Cat Breeder (CDCB) Data: Fiscal Year 2023

> 93 Kennels licensed

13 New kennels licensed

> **107** CDCB licensed

8 New CDCB licensed

Breeders of Excellence (all badges earned)

COMPANION ANIMALS

The Board's companion animal programs work to ensure the health and welfare of the dogs and cats in Minnesota through the regulation of commercial breeders and kennels/animal shelters, animal importation, and disease surveillance and control.

Commercial Breeders

The Board licenses and inspects dog and cat breeders with 10 or more intact animals that produce six or more litters of puppies or kittens in a year. This year, five commercial breeders participated in the Breeder of Excellence program. This voluntary program recognizes commercial breeders exceeding state-required standards in the following areas of care: facilities management, behavior and socialization, continuing education, health screening, and canine brucellosis or feline leukemia/FIV screening. Three commercial breeders were awarded badges in all areas, earning the title of Breeder of Excellence. Several more commercial breeders have started the evaluation process for this program.

Companion Animal Imports

The state saw a dramatic increase in the number of dogs and cats coming into Minnesota this year. Over 42,000 dogs and cats entered as either owned pets or imports of animal welfare organizations for adoption in Minnesota. The Board continued to work with the Companion Animal Advisory Task Force, Minnesota Veterinary Medical Association, and the Minnesota Department of Health to identify disease risks these imports represent and areas of improvement for import regulations to continue to protect the health of Minnesota's resident dogs and cats.

Kennels

The Board licenses and inspects facilities that accept impounded, stray, abandoned, or owner-surrendered cats and dogs. This includes humane societies, rescue organizations and impound facilities. The Board does not currently license training and boarding facilities, animal day care facilities or groomers.

Canine Brucellosis

The Board continues to partner with the Minnesota Department of Health (MDH) to investigate all non-negative test results for canine brucellosis. Canine brucellosis is a zoonotic disease of concern because it can be spread from dogs to humans. Because of the contagious nature of this disease, infected dogs must be permanently isolated from other dogs or be euthanized. This year the Board had the highest number of canine brucellosis investigations in its history. The Board and MDH are committed to preventing the spread of this disease by educating the public, canine businesses and rescue organizations, and veterinarians about the importance of surveillance and reporting.



Canine Influenza

This year saw an outbreak of another disease not present in Minnesota for several years, canine influenza. Canine influenza is a similar virus to the flu in other species, including humans and birds, however it only infects dogs. Infection causes respiratory signs including coughing, fever, and severe lethargy. The virus spreads easily between dogs through dog-to-dog contact and on contaminated surfaces. Infection for most dogs is mild to moderate, although in the old, young, and immunocompromised, it can be serious, even fatal.

The FY23 canine influenza outbreak was first detected in a Twin Cities animal shelter with approximately 200 dogs across three shelter locations showing signs of the disease, four of which were confirmed positive by laboratory testing. The virus was detected in the community within the next couple weeks. By the end of the fiscal year there were over 100 dogs confirmed infected with the virus by laboratory testing and nine dogs died from complications of the disease. The Board partnered with veterinarians, local municipalities, dog businesses, and dog owners across the state to slow disease spread through quarantines of infected dogs, increased biosecurity, and vaccination.



106 Positive Cases

196+ Suspect Positives

10 Counties Affected

Canine Brucellosis:

50 Investigations

44 Total dogs tested

27 17 Positives Negatives

FARMED CERVIDAE

The number of registered farmed Cervidae herds in the state continues to decline. Most registered herds consist of white-tailed deer and elk managed by farmers who engage in interstate commerce and producing animals for breeding or hunting, or for the production and sale of animal products.

The most recent detection of Chronic Wasting Disease (CWD) in a farmed Cervidae herd was in Winona County in August 2022. The herd was previously quarantined as part of an investigation into another CWD detection. The remaining 120 animals in the herd were depopulated in October 2022 and no CWD was detected.

Since 2002, 13 herds have been identified as CWD positive and been depopulated. More than 1,500 animals in these herds were tested at the time of depopulation and CWD infection was confirmed in 54 animals.

The 2023 legislative session yielded multiple proposals to change laws regulating farmed Cervidae, and in the end lawmakers enacted several changes to statutes. Most notably, in FY24, responsibility for administering and enforcing the statutes and rules for farmed white-tailed deer are transferred from the Board to the Minnesota Department of Natural Resources (DNR). The Board retains responsibility for administering and enforcing the statutes and rules for all other farmed Cervidae.

Other statutory changes include a moratorium on registration of white-tailed deer herds, prohibition of importation of farmed Cervidae from a state where CWD has been detected in the farmed or wild cervid population in the last five years, additional testing requirements for all farmed Cervidae 6 months of age and older, and requirements for exclusionary fencing on all premises with farmed Cervidae.

The Board continues to partner with farmers, researchers, and state and federal partners to utilize cooperative agreement funding provided by the U.S. Department of Agriculture Veterinary Services to prevent and control CWD in Minnesota's farmed Cervidae population. In FY23, the Board worked on three projects utilizing these funds:

1. Dr. Scott Wells and his University of Minnesota team continue to promote their work on environmental risk factors associated with CWD-positive herds, which resulted in an on-farm risk assessment tool available to cervid farmers and veterinarians. This assessment allows farmers to evaluate current biosecurity measures and assess the impacts of management changes to determine if they decrease a farm's risk of CWD introduction.

This fiscal year, Dr. Wells and his team were awarded additional funding to work with cervid farmers to assess the ecology of wildlife near the perimeter of cervid farms. The intent of this study is to determine the level of risk wildlife pose as a potential pathway for CWD transmission.

- 2. The Board utilized FY23 federal cooperative agreement funding to pay the North American Deer Registry (NADR) to test farmed white-tailed deer and analyze their genetic code to determine a genomically-estimated breeding value (GEBV) for each animal sampled. The GEBV can be used by deer farmers to make breeding management decisions which may reduce a herd's susceptibility to CWD. In addition, NADR reports to the owner the genotype of five prion protein genes in white-tailed deer. Prion protein gene results can be used in tandem with GEBV results to minimize the risk of CWD.
- 3. Minnesota law requires registered farmed cervid owners to track the animals in their herd including when they are born, when they die, and any movements from one herd to another. The Board is utilizing cooperative agreement funding to create an online database farmed cervid owners can use to report movement and testing data to the Board in real time. This will result in more accurate and timely herd data, which is critical when tracing animals that may have been exposed to CWD.

In this next fiscal year, the Board will continue to build upon these projects and foster relationships with state and federal partners with expertise in animal health with the goal of stopping the spread of CWD and maintaining the health of herds in Minnesota.

Species Breakdown by Animal

Breed	Total Animals	Number of Herds
White-Tailed Deer	3,337	140
Elk	3,073	83
Red Deer	154	7
Reindeer	75	9
Fallow Deer	93	7
Sika Deer	27	4
Muntjac	23	5
Pere David's Deer	4	1
Moose	2	1
Caribou	2	2
White-Lipped Deer	1	1
TOTAL:	6,791	227

Herd Usage

Usage	TOTAL Herds
Breeding	57
Exhibition/Competition	17
Hobbyist	106
Hunting Preserve Site	12
Meat Production	45
Other Animal Products	8
Trophy/Hunting Animal Sales	71
Urine Production	4
Velvet Antler Production	16
Unknown	1
TOTAL:	227

Herd Totals by Fiscal Year, 2013 to 2022:

2013:	522	2018:	395
2014:	489	2019:	360
2015:	463	2020:	291
2016:	462	2021:	259
2017:	421	2022:	227

Herd Total, Fiscal Year 2023: 209

HORSES

Minnesota experienced a surge in West Nile virus (WNv) cases in horses during the year. The virus is spread by mosquito species that prefer feeding on birds. However, with migration of birds in the fall, these mosquitoes shift their diets to mammalian species including horses and humans. Horses develop a variety of signs relative to WNv infections with the mildest being fevers and slight inappetence, and the most severe affecting the central nervous system and causing incoordination, inability to stand, seizures, and death. Treatment for WNv infections in horses is limited to supportive care to allow the animals immune system to fight off the virus. WNv vaccines for horses are available and considered effective at preventing infections or, at least, minimizing severity of signs in horses affected. Unfortunately, 100-percent of WNv positive cases reported in Minnesota this fiscal year were in unvaccinated horses with mortalities in reported cases over 75-percent. Half of the horses that survived the infection were reported to continue exhibiting residual neurologic signs after recovery.

Eastern Equine Encephalomyelitis (EEE), a virus also spread by mosquitoes, presents with similar neurologic signs to WNv. Generally, horses are tested for both diseases when signs suggest neurologic disease is present. EEE also has effective vaccines available for preventing or minimizing severity of disease in horses. While no positive cases of EEE were reported this fiscal period, similar statistics have been reported in previous years relative to non-vaccinated or under vaccinated horses representing nearly 100-percent of cases. Both EEE and WNv are considered reportable diseases in Minnesota due to the human health risks. While not considered zoonotic diseases that can be directly spread from horse to human, the diagnosis of positive cases in horses identifies mosquitoes carrying these viruses are in the area and humans are at risk of exposure. Positive cases for EEE and WNv are dually reported to the Minnesota Department of Health to advise owners or care givers of the infected horse of the potential risk of exposure to humans in the area. Owners are given guidance on mosquito mitigation measures to diminish populations including changing water in watering containers frequently, eliminating tires and other debris that may collect water, and draining puddles that accumulate water for extended periods of time.

Equine Herpes Myeloencephalopathy (EHM) is a disease condition caused by Equine Herpes Virus 1 (EHV1). This virus historically manifested with upper respiratory signs and occasionally reproductive signs. However, in the past decade an outbreak of neurologic cases attributed to a large national horse show were revealed to be caused by EHV1 that had entered the central nervous system. While somewhat ubiquitous in domestic equids, EHV1 rarely develops into neurologic cases known as EHM. However, with the discovery of variants of the virus, horses that exhibit neurologic signs and test positive on a PCR-test for EHV1 are required to report the condition to the Minnesota Board of Animal Health. Facilities are immediately quarantined to halt all equine movement on or off the site where the affected horse resides or resided when exhibiting signs. Further, any horse or facility that the affected horse had contact with in the 72 hours preceding development of signs are also quarantined. Quarantines include twice daily temperature checks on all equids on site with readings logged for auditing by the Board. Temperatures above 102° Fahrenheit must be reported to the Board, which may order EHV1 testing of the affected horses. Quarantines remain in effect for 21 days after exposure to last reported clinical signs or temperature over 102 degrees Fahrenheit. Guidance regarding biosecurity, cleaning and disinfecting facilities and equipment is provided by the Board, including minimizing human traffic on and off quarantined sites. Minnesota also requires facilities under quarantine due to EHM case exposure be identified on the Board website for reference to the equine community to determine their risk of exposure.

There is not an approved EHM vaccine. However, veterinarians generally recommend vaccinations and boosters for EHV1 to reduce virus shedding in equine populations. EHM cases in Minnesota over the fiscal year consisted of two geriatric patients with underlying conditions that diminished a typical immune response to the virus. Both recovered with varying degrees of residual neurologic signs. A third case was not considered immune compromised despite developing neurologic signs. This horse recovered with no apparent residual effects. Historically, approximately half of EHM cases succumb to complications from the disease or are humanely euthanized due to poor prognosis for recovery.

With each new year new challenges arise, and old challenges resurface. Equine events and exhibitions are again in full swing

after transitioning back from pandemic era restrictions. While equine exhibition requirements have remained the same for over 30 years, adherence to those requirements have been proving more challenging each year. All equine moving about the state of Minnesota are required to have negative Equine Infectious Anemia (EIA) test, or Coggin's Test, results dated within the previous 12 months, except foals nursing on a dam with negative test results. Additionally, equine entering Minnesota are required to be accompanied by a Certificate of Veterinary Inspection (CVI) dated within the previous 30 days. Exceptions to the CVI requirement include horses entering the state to participate in trail rides or exhibitions as well as horses entering the state for veterinary medical care. Equine exhibitions planned to extend longer than 12 hours or include overnight camping are required to obtain a permit from the Minnesota Board of Animal Health. Obtaining a permit includes identifying an "Official Veterinarian" to perform a visual evaluation of all horses present at the exhibition each day of the exhibition for signs of communicable disease. Securing Official Veterinarians for equine exhibitions has become challenging to equine exhibition management and financially burdensome. Nationwide veterinary shortages are evident in Minnesota and are cited as one of the main reasons show management are challenged with being able to provide veterinary oversight at their events. An equine advisory group is being convened to consider alternatives or updates to the equine exhibition regulations.

POULTRY

Highly Pathogenic Avian Influenza (HPAI) continues to be a significant threat to poultry in Minnesota. During the 2022-2023 HPAI outbreak, Minnesota had 112 flocks confirmed H5N1 positive by the National Veterinary Services Laboratories. A total of 81 commercial flocks and 31 non-commercial (backyard) flocks in 39 counties were infected, resulting in the depopulation of 4.2 million birds. Sustaining a response of this magnitude over the course of more than a year could not have been possible without the collaborations of our partners, specifically the Minnesota Department of Agriculture, the U.S. Department of Agriculture, Minnesota IT Services, the Minnesota Department of Health, the University of Minnesota Veterinary Diagnostic Laboratory,

HPAI breakdown:

- 72 commercial turkey meat bird flocks
- 7 commercial turkey breeder flocks
- 1 commercial chicken table-egg layer flock
- 1 commercial broiler flock
- 31 backyard flocks

University of Minnesota-Extension, and local partners.

The national 2022-23 HPAI outbreak impacted 836 flocks in 47 states across the country, along with countless wild birds and mammal detections. With widespread disease prevalence, the impacts could have been significantly worse without the mitigation measures like biosecurity practices used by the industry to protect birds from avian influenza and other diseases. The Board continues to conduct audits of producer's biosecurity plans every two years as required by National Poultry

Improvement Plan (NPIP) Program Standards. These measures are not only the backbone for healthy birds, they are also critical to minimize economic consequences of infection.

The Board continues to serve as the Official State Agency for the NPIP program in Minnesota. The NPIP program provides established standards for the evaluation of poultry with respect to freedom from NPIP listed diseases. NPIP participants in Minnesota are required to file an application with the Board, have their flock tested for Plan diseases, allow for an inspection by an agent of the Board and retain records of testing, inspections, and movements of poultry or hatching eggs that enter or leave the facility.

NPIP program participants as of June 30, 2023:

- 68 Commercial Breeding Flock Facilities
- 28 Commercial Egg Layer Facilities
- 8 Commercial Hatcheries
- 6 Commercial Slaughter Plants
- 3 Live Bird Markets
- 214 Poultry Dealers
- 16 Subpart J Gamebirds
- 76 Waterfowl, Exhibition Poultry and Gamebirds (WEGBY)

NPIP participating flocks: Fiscal Year 2023

Poultry type	Number of flocks	Nunber of birds
Commercial Egg-Type Chicken Breeders	1	39,000
Commercial Meat-Type Chicken Breeders	37	568,200
Commercial Turkey Breeders	87	1,145,400
Commercial Egg-Type Chicken	142	16,126,131
Commercial Meat-Type Chicken	1,194	67,153,083
Commercial Meat-type Turkeys	1,418	37,122,808
WEGBY Facilities	76	12,320
Subpart J - Gamebirds	16	274,392

In accordance with Minnesota Board of Animal Health rules (1721.0330), all samples collected from hatcheries and poultry flocks in Minnesota to meet Board disease program requirements must be collected by an Authorized Poultry Testing Agent (APTA). APTAs collect samples for routine NPIP disease surveillance testing and are called upon to collect samples during disease outbreaks. As of June 30, 2023, the Board has 950 Authorized Poultry Testing Agents certified.

SHEEP AND GOATS

Scrapie hasn't been detected in Minnesota since 2011. However, Minnesota's sheep and goat producers still participate and add value to state and national Scrapie Eradication Programs. These collaborative efforts by regulatory agents, veterinarians, producers, slaughter establishments, livestock concentration points and industry partners help keep the disease at bay.

The National Scrapie Eradication Program has been extremely successful, and the Board of Animal Health continues to contribute to its success. Board staff enforce state scrapie rules requiring official identification of all sheep and goats moving off the farm where they were born, and all sheep and goats imported into the state. Staff also conduct scrapie surveillance by collecting and submitting samples from sheep and goats for testing. In FY23 we exceeded minimum requirements for scrapie surveillance in sheep and goats, which boosted shortfalls of other states in the national testing targets.

The Ovine Progressive Pneumonia (OPP) Concerned Sheep Breeders Society continue to be a valuable partner to the Board and other regulators in promoting a voluntary OPP and Caprine Arthritis Encephalitis (CAE) program. The goal of the program is to eradicate these diseases and promote herd health through routine testing, robust management practices and biosecurity.

SWINE

African Swine Fever

Minnesota's swine industry remains concerned about African Swine Fever (ASF). Cases worldwide continue to develop as close as the island of Hispaniola in Haiti and the Dominican Republic. Minnesota has partnered with other states to plan and prepare if the ASF virus arrives in North America, the United States, or Minnesota. U.S. Customs and Border Protection (CBP) deploys the "Beagle Brigade" at ports of entry to detect illegally imported meat products that could be tainted with the virus. According to CBP, in just nine months, from October 2022 to June 2023, 118,308 international passengers faced agricultural inspections triggered by its K9s. In total, 98,253 plants, 39,086 animal products and 9,166 miscellaneous products were seized. Additionally, Minnesota requires quarantines along with cleaning and disinfecting protocols for dogs and cats imported from ASF infected countries.

In addition to its role in national preparedness for ASF, the Board remains busy preparing for a local incursion. The Emergency Disease Management Committee for Swine subcommittees are undergoing consolidation and restructuring to align with national committees and working groups and continue to focus on communication plans, depopulation and carcass disposal research, biosecurity, cleaning and disinfecting protocols for facilities, equipment, and personnel, feral swine mitigation, permitted movement plans, and regionalization of a response to maintain continuity of business. The previously drafted Minnesota African Swine Fever Response Plan is currently being reviewed.

U.S. Swine Health Improvement Plan

The U.S. Swine Health Improvement Plan (US SHIP) is a program designed to further prepare the U.S. swine industry for responding to a foreign animal disease like ASF. Initially a pilot program developed

through National Animal Disease Preparedness and Response Program (NADPRP) funds, the program is slated to become USDA codified by 2025. US SHIP is intended to provide a universal format for disease surveillance and traceability, developing enhanced biosecurity, and establish boundaries necessary for inhibiting disease spread while maintaining continuity of business in verified, uninfected regions.

Minnesota maintains the second largest enrollments for US SHIP with the following breakdown reported at the end of FY23:

- 2 Boar Stud farms with a total of 400 animals.
- 89 Breeding farms with a total of 317,841 animals.
- 14 Farrow-Feeder-Finnish farms with a total of 32,720 animals.
- 990 Growing Pig farms with a total of 2,952,900 animals.
- 1 Non-commercial farm with a total of 20 animals.
- 1 Packing plant with a capacity for 7000 swine.
- 13 Small Holding farms (sites with between 100 – 1,000 animals) with a total of 7,927 animals.

The annual US SHIP House of delegates meeting will be held in Bloomington, MN, again this year with 10 delegates assigned to Minnesota. The meeting will focus on resolutions, policy changes, working group assignments, and General Conference Committee elections.

Swine Sample Collector Trainings

There are currently 33 Tier 2 Certified Swine Samplers in Minnesota with 19 individuals added in the last quarter of the fiscal period. More individuals have received partial training with field/hands-on training pending. Additional trainings are scheduled for fall 2024. Outreach efforts have been in coordination with the National Pork Board encouraging those certified swine veterinarians to actively train individuals to become Certified Swine Samplers. The University of Minnesota Swine Extension has also been involved in promoting training of Certified Swine Sample Collectors.

Traceability

Minnesota and South Dakota officials participated in an interstate traceability exercise this fiscal year to explore the value of US SHIP. Specifically, data provided by Pipestone Veterinary Clinic was used to evaluate AgView as a form of electronic records to monitor swine movements during an ASF outbreak. Communications between states and producers were practiced as well as establishing local and system-based control areas. The exercise allowed for participants to provide feedback to AgView administrators to continue developing the program.

Feral Swine

Feral swine have served as initial sources of incursion and spread of ASF in all countries currently affected by the virus. Primary concern in the U.S. is in southern states with historically established areas of uncontrolled increases in populations as well as expansion of territories where feral pig damage is reported. More alarming reports of "Super Pigs" in Canada have raised concerns in northern states, which historically enjoyed a geographic buffer from the problem. Researchers say the source of the feral Eurasian Wild Board/ domestic hybrids in Canada are from previous agriculture incentives to create novel livestock ventures. When those programs dried up, pigs either escaped or were set loose. Combining the best traits of both species, the "Super Pigs" have proven hardy enough to survive in hostile climates with limited food sources while maintaining relatively high reproductive rates of domestic pigs. Canadian officials warned United States Animal Health Officials they are no longer able to remove feral pigs and their focus has now turned to controlling their spread. Some of the Canadian feral herd sightings are getting closer to international boundaries, including Minnesota's northern border.

While Minnesota maintains a "feral swine free" status, Minnesota Department of Natural Resources (DNR) officials have reported detection of feral swine DNA in samples tested from international waterways. The state is vigilant and strives to quickly remove any possible incursion of feral swine into Minnesota. The Board and MDA partnered to purchase three feral swine traps to be deployed strategically along our northern border as surveillance mechanisms. The DNR and USDA Wildlife Services also partner in efforts to trap and dispatch these invasive species. The feral swine traps are designed to be remotely operated and include night vision and thermal imaging to identify what's in the trap. Traps are large enough to capture entire sounders (herds) of feral swine and can be triggered to close after all swine are inside the trap. The DNR or USDA

Wildlife Services will euthanize, and test captured pigs for disease as well as genetic analysis to determine lineage of feral swine compared to a nationwide database.



ANIMAL MOVEMENTS/TRACEABILITY

Producers and veterinarians can help control animal diseases by applying official identification and keeping accurate movement records. The Board utilizes USDA funding to encourage the use of electronic identification and streamlined record keeping in Minnesota. Cattle and bison producers can also take advantage of the USDA's no-cost program for RFID in replacement heifers. Veterinarians are encouraged to transition to electronic Certificates of Veterinary Inspection (eCVIs) and can contact the Board with questions about the transition. Similar to other states, the Board will be phasing out the use of paper CVIs and supporting eCVIs by 2025 to save time and resources and improve Minnesota's Animal Disease Traceability program.

CVIs by Species: Electronic versus Paper

Species	Number of CVI s Issued	Electronic	Paper
Bison	25	20%	80%
Bovine	7,024	48%	52%
Cats	440	55%	45%
Dogs	4,238	27%	73%
Equine	4,804	73%	27%
Farmed Cervidae	162	49%	51%
Goats	415	49%	51
Regulated Animals	14	43%	57%
Sheep	692	37%	63%
Swine	3,790	98%	2%
Swine Semen	518	80%	20%
Other (other than species listed)	174	70%	30%
TOTAL:	22,370	58%	42%

RABIES

The Board, MDH, Minnesota Veterinary Diagnostic Laboratory (VDL) and Minnesota Public Health Laboratory (PHL) work hand in hand to conduct rabies surveillance and investigate possible rabies exposures in both people and animals. Domestic animals exposed, or potentially exposed, to an animal suspected or confirmed to be infected with the rabies virus are confined and observed, or officially quarantined at the direction of the Board.

The incidence of rabies infection in wildlife continues to decline in Minnesota, and bats and skunks remain the most common wild carriers. Decrease in the number of wild carriers as well as increasing rabies vaccination rates have led to fewer cases of rabies in domestic animals. Education and vaccination continue to be the most important measures to reduce the risk of rabies.

The Board and MDH continue to collaborate to educate Minnesota veterinarians, physicians, animal control personnel and the public about risks of exposure to this deadly virus. Together, we develop, and regularly improve, resources to assist Minnesotans in recognizing the signs of rabies, submitting animals for rabies testing, and protecting domestic animals and people from rabies. The Board also communicates rabies case information and other updates to Minnesota veterinarians through Rabies Alerts and Animal Bytes newsletters.



Rabies Cases: Fiscal Year 2023 Number of Rabies Investigations: 185

EMERGENCY PREPAREDNESS

Emergency preparedness continues to be a top priority of the Board. Being prepared to appropriately respond to any reportable disease event within Minnesota is part of our mission statement of "Protecting the health of the state's domestic animals." We continually work with our partners at the USDA, Minnesota Department of Agriculture, University of Minnesota, and others to develop and refine our response plans.

As a result of the HPAI response this year, we learned more people need to be trained in the disposal of carcasses through composting. We hosted a three-day, hands-on composting certification course for poultry and swine industry personnel at the University of Minnesota research station in Lamberton. Around 40 people were trained to build compost piles and how to manage them to eliminate disease risk. The goal is for companies to deploy these trained staff in an outbreak for a more rapid response and to alleviate state resources.

This year, we stayed busy following up on Foreign Animal Disease Investigations (FADI) mainly in swine. These investigations allow us to rule out a foreign animal disease, particularly foot-and-mouth Disease (FMD). The swine investigations primarily found Seneca Valley Virus, a vesicular disease of pigs caused by a picornavirus, which is related to the viruses that cause FMD. Clinically affected pigs develop cutaneous vesicular lesions, mainly on the snout and coronary bands. Investigating clinical signs is important to rule out the more detrimental FMD.

Foreign Animal Disease Investigations by Species: Fiscal Year 2023

577SwineRabbit33PoultryBovine

Equine

1 Ovine

COMPLIANCE

Over the last year the compliance team focused on improving and streamlining the process flow for compliance actions, with the goal to better align with our mission to protect the animals in the state through education and cooperation of our constituents. We kicked off the year making observations, taking a deep dive into the state regulations and rules, and getting feedback from our field staff regarding our current processes. Using these data, we have been able to determine a more consistent and effective way to implement our compliance actions across all programs. Additionally, we added an agricultural advisor to the Board based in the southern part of the state, provided compliance action training for our staff, and began collaborating more consistently with program staff on compliance needs. The focuses of FY2024 will be improving our inspections guidelines and processes, and creating more opportunities for our agricultural advisors and consultants to do educational outreach and training.

Compliance Actions: Fiscal Year 2023

Program	Notice of violation/ Correction Order	Civil Penalty
Animal Disease Traceability	2	0
Carcass Disposal	2	1
Commercial Dog and Cat Breeders	11	8
Dealers	0	0
Exhibitions	2	1
Farmed Cervidae	13	3
Food Waste to Livestock	0	0
Import/Intrastate Movement	3	1
Kennels	5	3
Markets	1	0
Poultry	3	0
Rabies	0	0
Sales	1	0
Scrapie	0	0
Testing Authorization/ Certification	0	0
Tuberculosis	0	0
Veterinary Accreditation	0	0
TOTAL:	43	17

BUDGET

Expenses Charged to Revenue Source: Fiscal Year 2023

Source of funds	Fiscal Year 2023 expenditures
State - General Appropriation	\$5,716,404
State - Emergency Planning and Preparedness	\$134,298
Federal	\$1,156,512
Restricted Miscellaneous Special Revenue	\$93,426
TOTAL:	\$7,100,640

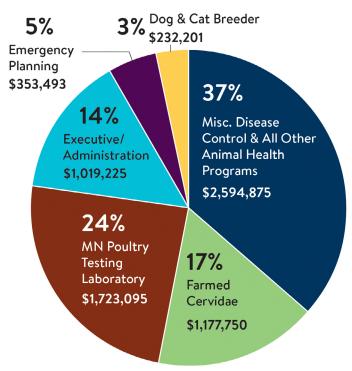
Legislative update: CHAPTER 43--S.F.No. 1955

After 2023 regular session ended, the Board was allotted the next biennium's general appropriation funding. The Board received \$6,241,000 for fiscal year 2024 and \$6,401,000 for fiscal year 2025. The Board will see an increase of \$160,000 for fiscal year 2024 and an increase of \$320,000 for fiscal year 2025 to maintain the current levels of service.



During FY23, the Board expended \$7,100,640 to carry out its animal health and disease programs. The following two charts show how the Board used the funding:

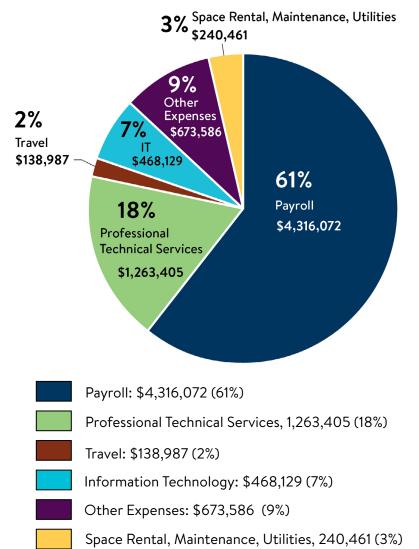
Board of Animal Health: Fiscal Year 2023 Total Expenses by Program - \$7,100,640



Miscellaneous Disease Control and All Other Animal Health Programs: \$2,594,875 (37%) Farmed Cervidae Program: \$1,177,750 (17%) Minnesota Poultry Testing Laboratory and Poultry Programs: \$1,723,095 (24%) Executive Administration: \$1,019,225 (14%) Emergency Planning: \$353,493 (5%)

Dog and Cat Breeder \$232,201 (3%)

Board of Animal Health: Fiscal Year 2023 Total Expenses by Category - \$7,100,640



MINNESOTA VETERINARY DIAGNOSTIC LABORATORY & MINNESOTA POULTRY TESTING LABORATORY

The University of Minnesota Veterinary Diagnostic Laboratory is the official laboratory for state testing and provides diagnostic services to the Board and others. The University of Minnesota operates two laboratory sites: the main laboratory, referred to as the "VDL," on the St. Paul campus of the University of Minnesota, and the Minnesota Poultry Testing Laboratory, or "MPTL," at a stand-alone facility in Willmar. The University's labs are the only diagnostic laboratory Diagnosticians and are Level-one members of the USDA National Animal Health Laboratory Network.

During FY23 the MPTL continued to be a critical component of the state's response to HPAI, especially during the second wave of cases experienced in the fall of 2022. The VDL performed tests for HPAI with more focus on wildlife and backyard farms. Combined, the two laboratories performed more than 14,000 PCR tests for avian influenza during the HPAI event in FY23.

In partnership with state and federal agencies, the Minnesota Veterinary Diagnostic Laboratory contributes to the surveillance of animal diseases in Minnesota. The VDL collected more than 2,000 brain samples from multiple animal species in FY23 to be tested for rabies at the Minnesota Department of Health. In collaboration with the USDA, the VDL also participates in foreign animal disease surveillance programs and investigations. During FY23, the VDL tested more than 2,500 samples for African Swine Fever and Classical Swine Fever, as part of a national surveillance program. Other reportable disease investigations involved cases of rabbit hemorrhagic disease, tularemia in cats, avian encephalomyelitis in turkeys, canine influenza, and Q-fever in a goat.

VDL Fiscal Year 2023: Procedures by Laboratory

/	
Laboratory	Number
Bacteriology	33,274
Clinical Pathology	74
Histology	30,159
Immunohistochemistry	2,065
MN Poultry Testing Lab+	170,186
MN Poultry Testing Lab*	121,006
Molecular Diagnostics	322,573
Necropsy	9,840
Necropsy/Histopathology Only	6,627
Non-Accredited Research Laboratory	220
Outsourced Lab Service	13,235
Parasitology	3,217
Receiving, Reporting and Admin	4,459
Serology	134,434
Udder Health	93,877
Virology	9,900
GRAND TOTAL:	951,146

+Producer-funded testing

*Board-funded testing

VDL Fiscal Year 2023: Animals Submitted

Species	Number
Amphibian	46
Avian, Chicken	47,123
Avian, Miscellaneous	2,236
Avian, Turkey	141,343
Bovine	95,415
Canine	2,357
Caprine	2,813
Cervidae	2,592
Equine	3,128
Feline	959
Fish	1,518
Miscellaneous Mammals	1,800
Non-Animal Submission	202
Ovine	5,827
Porcine	207,361
Reptile	29
GRAND TOTAL:	514,750

VDL Fiscal Year 2023: Procedures by Species

Species	Number
Amphibian	349
Avian, Chicken	63,759
Avian, Miscellaneous	4,894
Avian, Turkey	235,345
Bovine	139,091
Canine	7,379
Caprine	4,208
Cervidae	6,542
Equine	4,326
Feline	3,551
Fish	3,206
Invertebrates	12
Miscellaneous Mammals	4,923
Non-Animal Submission	260
Ovine	6,910
Porcine	463,272
Reptile	288
GRAND TOTAL:	951,146



Healthy animals for healthy people and communities.

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