

BOARD MEMBERS

DEAN COMPART, Board President, Swine Producer, Nicollet
PETER RIPKA, Cattle Producer, Swanville
DR. MATT ANDERSON, Veterinarian, Zumbrota
DR. GRAHAM BRAYSHAW, Veterinarian, Minneapolis
ERICA SAWATZKE, Poultry Producer, Kensington

BOARD MEETINGS

September 20, 2017

December 13, 2017

February 28, 2018

April 12, 2018

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 and provider.

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LETTER FROM THE STATE VETERINARIAN

We've concluded another year full of hard work, challenges and success at the Minnesota Board of Animal Health. We licensed, inspected and engaged producers, exhibitions, sales, markets and other stakeholders as part of our mission to protect animal health. New animal disease outbreaks emerged around the globe, and we remained watchful as these potential threats to Minnesota's livestock producers made headlines. We proved this preparedness when we succeeded in a national emergency exercise testing our state's ability to respond to a disease outbreak.



The Board welcomed a newly appointed member to one of its livestock producer positions during its third quarterly meeting of the year. Erica Sawatzke is an excellent addition to our Board, with years of experience in Minnesota's turkey industry as both a sixth generation farmer and former Minnesota Turkey Growers Association employee.

In the past several months we hired a new senior veterinarian and several support staff to advance our programs like farmed cervidae and exhibitions. Additionally, we hired a program administrator responsible for our policies, rule changes and data requests. These new team members bring a lot of experience and ambition to our ranks. We look forward to the increased services we'll be able to offer the public and producers we oversee.

One of the first major events for the Board this past year was the release of a program audit conducted by the Office of the Legislative Auditor. The audit report focused on the farmed cervidae program and how we implement it, specifically working with producers to gain compliance with laws and rules, while managing diseases like chronic wasting disease. Some recommendations in the report related directly to the new positions we hired, and those staff are a huge benefit to our stakeholders and the public as we uphold our mission to protect the health of Minnesota's domestic animals.

Another milestone memory for the Minnesota Board of Animal Health this year was participation of our staff in a multi-state exercise, responding to a simulated outbreak of foot and mouth disease. The three day event tested our emergency plans, engagement with partner agencies, and ability to work with affected livestock industry and producers to stop the disease while keeping the flow of business open. You can read more about the exercise in the emergency planning section of this report.

African swine fever is by no means a new disease; it has, however, stimulated our work, and our attention is on this virus, with expanding detections in Europe and Asia. The world is becoming smaller as livestock and animal product movements cross international borders in a constant stream. While this global trade opens up markets for Minnesota's producers to do business, it also increases the scope of diseases we must guard against. I'm confident in my staff and our ability to respond to the spectrum of foreign animal diseases circulating around the world. We train, prepare and have plans in place to respond in the face of an emergency, and stand ready to maintain the health of Minnesota's domestic animals.

Beth Thompson

Executive Director and State Veterinarian





DOGS AND CATS

Commercial Dog and Cat Breeders

The Board currently licenses and inspects 125 breeders registered with Minnesota's Commercial Dog and Cat Breeder program. A commercial breeder is defined by Minn. Stat. §347.57 as, "a person who possesses or has an ownership interest in animals and is engaged in the business of breeding animals for sale or for exchange in return for consideration, and who possesses ten or more adult intact animals and whose animals produce more than five total litters of puppies or kittens per year." Licenses are renewed annually, and licensees submit a fee of \$10 per adult intact animal, up to a maximum of \$250. Inspections include assessment of facilities, standards of animal care, animal identification, records, and veterinary care to ensure compliance with Minnesota law.

The Board formed an advisory task force this year to develop a Commercial Breeder Excellence Program. The task force is comprised of commercial dog and cat breeders, veterinarians and Board inspectors. The program will recognize breeders who exceed the standards and practices required of all breeders under the Board's licensing program.

Kennels

This year, the Board licensed and inspected 86 kennels qualified by Minnesota's kennel law. Licenses are renewed annually and licensees submit a fee of \$15. Inspections focus on compliance with the law and include assessment of facilities, standards of animal care, animal identification, records, veterinary care, and holding periods for impounded, stray and abandoned animals.

Minnesota law requires any person who operates a kennel where dogs or cats are kept, congregated or confined to be licensed and inspected by the Board of Animal Health if the dogs or cats were obtained from municipalities, pounds, auctions, or by advertising for unwanted dogs or cats, or dogs or cats strayed, abandoned or stolen (Minn. Stat. §347.31 and §347.34).

This requirement does not apply to a pound owned and operated by any political subdivision of the state, a person's home where dogs or cats are kept as pets, a veterinarian licensed to practice in the state of Minnesota who keeps, congregates, or confines dogs or cats in the normal pursuit of the practice of veterinary medicine, or kennels used for the sole purpose of boarding or training dogs or cats for individual pet owners.

DEER AND ELK

A number of changes to the farmed cervid program occurred this year, with new leadership and an Office of the Legislative Auditor (OLA) program evaluation and report with key recommendations for implementation by the Board. Retired assistant director, Dr. Paul Anderson, was replaced by assistant director, Dr. Linda Glaser, who oversees the program.

The OLA audit was initiated in October 2017 and animal health staff worked with the OLA project leader for several months, including office staff providing multiple interviews, field staff visiting farmed cervid sites with the project leader, and the project leader reviewing and analyzing the data collected by the Board in the farmed cervid program. The OLA report was finalized and published on April 20, 2018, and included several key recommendations for the program. The Board is working to implement those recommendations.

Two new education materials were developed for farmed cervid producers. One explained the regulations of the program in plain language and the other was a chronic wasting disease (CWD) sampling procedure booklet with pictures demonstrating the techniques and handling methods for collecting and submitting the appropriate samples to test for CWD in harvested cervids.

In the fall of 2017, additional CWD infected wild deer were identified in Fillmore County during the hunting season. The locations where the animals were harvested required

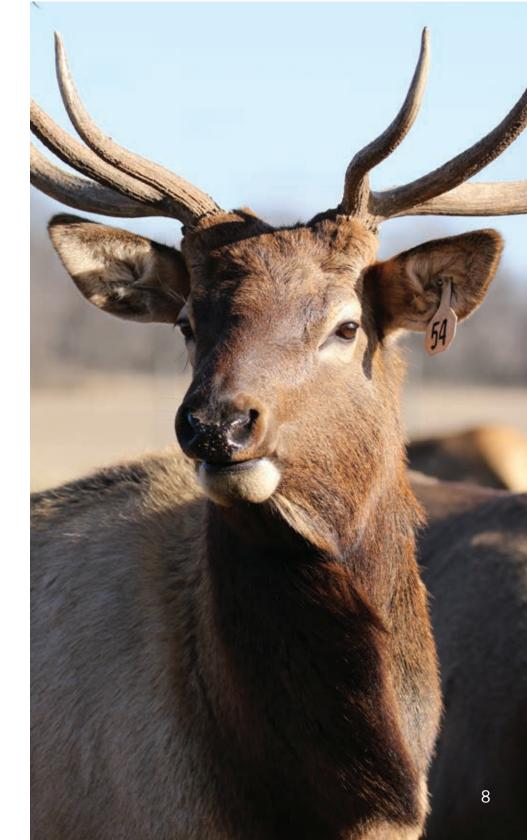
expanding the Board's CWD Endemic Area. Currently, eight farmed cervid herds are in the CWD Endemic Area; three of these producers have exclusionary fencing around their herd to prevent commingling of farmed and wild cervids. This fencing is inspected each year by field staff to ensure it continues to prevent this commingling so that these producers will not be restricted from moving any animals into their herd or to other locations in Minnesota.

In November of 2017, a small farmed cervid herd of white-tailed deer in Winona County was found to be infected with CWD. It was the eighth farmed cervid herd in Minnesota found infected with CWD since the first farm was identified in 2002. The herd had been established for 18 years, with eight animals remaining in the herd. The owner accepted indemnity for the herd from the U.S. Department of Agriculture and the animals were harvested and tested for CWD; seven of the eight animals tested positive for CWD. The epidemiological investigation found the taxidermy practices of the producer were the greatest risk factor for introduction of CWD into the herd.

At the end of this state fiscal year, there were 395 farmed cervid herds in the program. The table to the right outlines the type of herds and number of animals in the farmed cervid program. Certified herds are those herds that meet the criteria of the federal herd certification program to be able to move their animals interstate. They are a subset of the total number of herds in each group.

Fiscal Year 2018 Farmed Cervidae Herds in Minnesota

Species	Herds	Animals	Average Herd Size	Certified Herds
Elk	87	3623	42	58
White Tailed Deer	238	2052	9	84
Mixed Species	70	2331	33	27
TOTAL:	395	8006	20	169





HORSES

Equine Infectious Anemia

Equine infectious anemia (EIA) is a reportable viral disease affecting horses, donkeys, and mules. It is spread primarily by large biting flies, and is found worldwide. The Minnesota Board of Animal Health quarantines infected horses for life because they remain a reservoir for the disease. Horses must have a negative blood test (Coggins test) for the disease within 12 months of importation into Minnesota or exhibition at a public event.

During fiscal year 2018, 24 Minnesota veterinary clinics and laboratories were federally approved to conduct EIA testing. No new cases of EIA were found, and no EIA infected horses are currently under quarantine.

Equine Herpesvirus Myeloencephalopathy

Equine Herpesvirus Myeloencephalopathy (EHM) is a reportable, highly contagious, potentially fatal, neurologic syndrome that develops as a result of EHV-1 infection. The Board of Animal Health continues to rely on the state's EHM control plan developed by animal health officials with input from Minnesota's equine industry.

The control plan requires infected and exposed horses to be quarantined. In addition, all horses on a premises where an EHM positive horse is identified must be monitored closely for fever or symptoms of illness consistent with EHV-1, have rectal temperatures taken and recorded every 12 hours, and be officially tested for EHV-1 if they have a fever greater than or equal to 102°F or exhibit clinical symptoms consistent with EHV-1 infection. Quarantines are released 21 days after all horses with clinical symptoms of illness consistent with EHV-1 infection have recovered. During fiscal year 2018, no new cases of EHM in Minnesota were reported.

The Board also continues to educate horse owners about the importance of adhering to rigorous and routine biosecurity practices to prevent the spread of disease.

Equine Encephalitis Virus and West Nile Virus

Eastern and Western Encephalitis (EEE, WEE) and West Nile Virus (WNV) are endemic diseases in the United States. Positive test results for these diseases are reportable to the Board of Animal Health.

In fiscal year 2018, one case of West Nile Virus was confirmed in a Minnesota horse. No cases of EEE or WEE were reported.



CATTLE

Stats of interest:

57,127 cattle were vaccinated for Brucellosis.

4,132 cattle and bison tested for Brucellosis.

27,588 cattle and bison were caudal fold tested (CFT) for Tuberculosis.

1,200 of the CFT tests above were performed as part of TB trace investigations.

The Minnesota Board of Animal Health continues working with cattle and bison producers, livestock auction markets, accredited veterinarians, and other individuals dedicated to protecting Minnesota's valuable livestock industry in this state. These efforts have resulted in Minnesota maintaining the state's TB free status, which we cooperatively worked to regain in 2011, following a temporary loss.

The Board continued receiving TB traces for cattle associated with three South Dakota infected cattle herds that were identified in 2017. A total of 66 bovine tuberculosis traces were performed this year. Board personnel worked with five different states and traced 3,172 head of potentially TB exposed cattle to 36 different premises. Four exposed animals were found and confirmed based on a producer brand from the infected herd. All four animals were determined to be free of bovine tuberculosis. All cattle herds tested as part of the investigations, totaling 1,200 head caudal fold tested, were also cleared as negative.

SWINE

Minnesota ranks second in the nation in value and number of market pigs raised. The state continues to produce healthy animals, and the industry continues to lead in areas of biosecurity and bio-exclusion, disease recognition, and innovations in diagnostics.

With more than 8,000 swine premises registered with the Board, state and federal animal health officials recognize the importance of working with swine producers, veterinarians and producer groups across the state.

The Board continues to support research and programs that provide valuable information and services to Minnesota swine producers including the Swine Health Monitoring Project and Secure Pork Supply. This year, the Board secured funding to support a veterinarian, Dr. Dave Wright, to enhance the Secure Pork Supply Plan in Minnesota. Our mission aligns with the key components of these programs including disease monitoring, traceability, enhanced biosecurity and Foreign Animal Disease training response and surveillance.

We partner with federal animal health officials, the University of Minnesota, swine veterinarians and industry stakeholders to help producers and swine systems prepare for an animal health emergency or foreign animal disease outbreak. These relationships have been reaffirmed this year as African Swine Fever spreads around Europe and Asia. We have been in constant contact with all of these groups to develop plans and uphold biosecurity practices to keep Minnesota, and the U.S., free from ASF.





POULTRY

After the catastrophic 2015 Highly Pathogenic Avian Influenza (HPAI) events in Minnesota, the Board and Minnesota's poultry industry remain alert for signs of disease with on-going surveillance programs and preparedness activities. The Board continued its active partnership with Minnesota poultry producers and the University of Minnesota through meetings of the Emergency Disease Management Committee (EDMC). The EDMC is the Board's advisory group for the implementation of the Minnesota H5/H7 Low Pathogenic Avian Influenza (LPAI) Initial State Response and Containment Plan (The Minnesota Plan).

The EDMC met several times for a number of action items. These tasks include updating the process to issue avian influenza disease alerts, discussion of permitted movements during an HPAI event, revising The Minnesota Plan using updated guidance documents from the United States Department of Agriculture (USDA), receiving updates from the USDA on indemnity and compensation funding, and planning for a poultry depopulation field exercise.

When minimum Biosecurity Principles were adopted at the 2016 National Poultry Improvement Plan (NPIP) Biennial Conference, there was an expectation that a Final Rule would tie biosecurity plans to HPAI Indemnity Claims. USDA published an HPAI Interim Rule that allowed indemnity payments to be split between poultry and egg owners and their contracted growers, adopted biosecurity principles established by the NPIP, and notified poultry owners that auditable biosecurity plans need to be in place for larger-sized operations to receive indemnity payments when the HPAI Final Rule would be published.

The NPIP Biosecurity Principles, which became effective July 5, 2017, require an audit at least once every two years by the Official State Agency (Board of Animal Health) to ensure compliance. The Board and the University of Minnesota worked extensively through producer

meetings, social media outlets, web page postings and numerous phone calls to get the message out that poultry producers need auditable biosecurity plans. With the initial surge of biosecurity plans submitted and reviewed, 28 company biosecurity plans have been audited and all have been graded as satisfactory. An estimated 250 poultry companies/ operations in Minnesota will need an audit within the next two years.

Board staff attended the 2018 NPIP Biennial Conference at which existing Salmonella, Mycoplasma and Avian Influenza programs were updated. Board staff served on the NPIP Technical Committee and submitted numerous proposals, which were approved as part of updating the NPIP Provisions and Program Standards. The NPIP Provisions have been the baseline for the Board's monitoring of poultry breeding flocks for vertically, or hatchery, transmitted diseases such as Salmonella and Mycoplasma for decades. Additionally, all commercial poultry breeding flocks are routinely monitored for avian influenza and all meat-type birds are tested for avian influenza before being moved to market. This testing helps to not only ensure our poultry populations are healthy, but also facilitates interstate and international movements of Minnesota poultry and poultry products.

Board and USDA field staff visit with producers and inspect their operations to verify facilities are maintained as clean and sanitary, and records are kept to aid in potential traceability activities to ensure NPIP certification program compliance.

Inspections related to NPIP programs:

7 commercial poultry hatcheries.

75 commercial poultry breeding flock facilities.

115 waterfowl, exhibition poultry and gamebird breeding flocks/hatcheries.

238 poultry dealers.

3 raised for release upland gamebird premises.

6 commercial slaughter plants.

41 commercial egg-layer facilities.

Fiscal Year 2018 Poultry Industry in Minnesota

Type of poultry	Number of flocks participating in NPIP programs	Number of birds in the flocks
Commercial Egg-Type Chicken Breeders	1	42,521
Commercial Meat-Type Chicken Breeders	42	581,011
Commercial Turkey Breeders	60	980,466
Waterfowl, Exhibition Poultry and Game Birds	118	32,497
Commercial Egg-Type Chickens	223	20,307,865
Commercial Meat-Type Chickens	1,339	62,649,040
Commercial Meat-Type Turkeys	1,671	42,730,307

MINNESOTA POULTRY TESTING LABORATORY

The Minnesota Poultry Testing Laboratory (MPTL) is a joint venture between the University of Minnesota Veterinary Diagnostic Laboratory (VDL) and the Minnesota Board of Animal Health. The MPTL serves as the official, or authorized, laboratory for the National Poultry Improvement Plan (NPIP) in Minnesota.

The extensive renovation and expansion of the MPTL in 2016 continues to benefit Minnesota's poultry industry as the services provided continue to increase. The additional working space, equipment and personnel have provided for new and expanded diagnostic opportunities. Molecular based testing for numerous poultry diseases such as avian influenza, Newcastle disease, avian metapneumovirus, Mycoplasma and reovirus has significantly increased with the laboratory renovation and new laboratory work flow testing. With the addition of a poultry pathologist, 198 poultry necropsy/general tissue cases were completed. The support of additional diagnostic testing using a daily courier between the MPTL and VDL allowed the timely movement and testing of samples between laboratories.

When the MPTL became a National Animal Health Laboratory Network (NAHLN) Level 1 Branch Laboratory of the VDL, one requirement was for staff to complete proficiency training to ensure competency. MPTL staff completed and passed their annual proficiency tests for avian influenza and APMV-1 (Newcastle Disease). In addition, the MPTL was successful in passing the biennial NPIP Authorized Laboratory Certification (November 2017). Also, in May 2018, MPTL was accredited by the American Association of Veterinary Laboratory Diagnosticians (AAVLD) which occurs every five years. These laboratory designations position Minnesota as a leader in poultry disease surveillance and disease response with the ability to communicate diagnostic outcomes in a timely manner and meet poultry diagnostic needs during animal disease outbreaks.

The MPTL continues to conduct all the testing for NPIP and Board certification programs. In addition, it conducts a number of non-program test procedures which provide information back to poultry producers about the health and vaccination status of their flocks. In FY18, 220,964 services (test procedures) for Board and NPIP programs were conducted, along with 130,385 services (test procedures) conducted for poultry producers at the MPTL.



RABIES

Working collaboratively with the Minnesota Department of Health, the University of Minnesota Veterinary Diagnostic Laboratory, private veterinary practitioners, and physicians, the Board of Animal Health conducts investigations when Minnesota domestic animals are exposed or potentially exposed to rabies. This program is exemplary of Minnesota's One Health Initiative, with the goal of limiting the spread of this fatal virus.

In fiscal year 2018, 2,193 samples were submitted for rabies testing. Domestic and wild animals tested included: 733 bats, 654 dogs, 548 cats, 90 domestic livestock (cows, deer, elk, goats, horses and sheep), 22 skunks, and 146 other wildlife species.

The Board conducted 175 rabies investigations resulting in the official quarantine of four domestic animals. Investigators recommended that 542 potentially exposed domestic animals be observed for clinical signs associated with rabies.

A total of 32 Minnesota animals tested positive for rabies this fiscal year. Skunks and bats continue to be the predominant wildlife carriers with just over 3 percent of submitted bats and just over 27 percent of submitted skunks testing positive for the rabies virus.

Fiscal Year 2018 Rabies Cases in Minnesota

Species	Number Rabies Positive
Bat	24
Cat	1
Horse	1
Skunk	6
TOTAL:	32





SHEEP AND GOATS

Ovine Progressive Pneumonia

The Minnesota Board of Animal Health continues to partner with the Ovine Progressive Pneumonia (OPP) Concerned Sheep Breeders Society, Minnesota USDA-APHIS Veterinary Services, Minnesota Lamb and Wool Producers, Minnesota Grown, and the University of Minnesota Veterinary Diagnostic Laboratory to support Minnesota's producer-driven OPP eradication program. Currently, 11 Minnesota flocks are enrolled and complete annual testing requirements and flock management guidelines in an effort to achieve OPP free status. The program began with the Minnesota Project OPP Eradication Trial in 2013, which culminated at the end of 2017. Results of the trial are available on the Board's website.

ANIMAL DISEASE TRACEABILITY

We live in a world where many animals travel more than people. Tracking these animal travelers can be a straightforward process with some basic tenets of traceability: livestock records, official identification, and electronic data capture. These tenets form the foundation for an efficient and effective animal disease traceability system.

The Board continues to work to educate livestock producers regarding the importance of maintaining records for all livestock coming, going, and residing on their property. These records provide valuable information during disease investigations and directly impact the scope of each investigation. Complete records allow investigators to be more efficient, effective, and thorough. Poor records impede progress, result in more producers—and their herds—being impacted, and are resource intensive.

Free official ear tags were distributed to Minnesota livestock producers and veterinarians to assist the livestock industry with meeting state and federal livestock identification requirements. The Board distributed 178,157 United States Department of Agriculture (USDA) national uniform ear tagging system (NUES) metal tags this past year.

The Board continues to consider options to advance methods for electronic data capture. A continued movement toward electronic data allows faster access to better quality information during an animal disease event, which results in faster response times and a better protected livestock industry. The Board's animal health database, CoreOne by Trace First, houses all captured information, which can be utilized in the event of an animal health emergency. This year, the Board began working with Trace First on a new database feature to further advance electronic data capture goals and animal disease traceability efforts.

Fiscal Year 2018 Animal Imports and Exports

Animal	Interstate Imports	Interstate Exports
Cattle	734,920	265,433
Swine	6,447,995	2,842,460
Sheep	14,000	7,678
Goats	6,224	3,205
Farmed Cervidae	88	1,083
Horses	8,225	10,613
Poultry	53,025,000	62,955,000
Cats and Dogs	17,646	17,135



EMERGENCY PLANNING

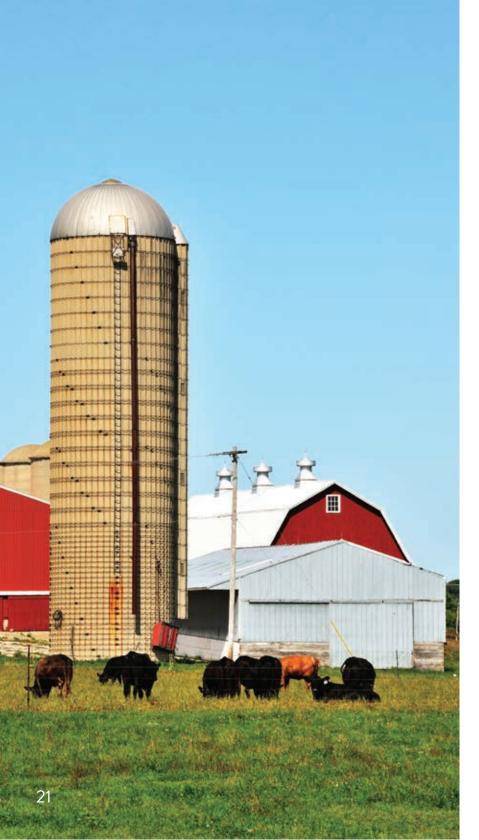
This fiscal year, there were 118 Foreign Animal Disease (FAD) investigations in Minnesota. A total of 107 were swine vesicular investigations, usually leading to a diagnosis of Senecavirus A (SVA). Additionally, six were unusual poultry mortality events, three were bovine vesicular investigations, and two were investigations in horses. All of these investigations were done by Board of Animal Health and USDA Veterinary Services veterinarians, who are trained as Foreign Animal Disease Diagnosticians (FADD). All investigations were negative for an FAD.

Swine vesicular cases continue to be an issue for Minnesota pork producers and the upper Midwest. We communicate with the swine industry, livestock dealers, and pork processors about SVA detection and the FAD investigation process. Concerns about vesicular cases in exhibition pigs were discussed with the official veterinarians at the county fairs, and we assisted the Minnesota State Fair veterinarian with having an FADD on call to respond within four hours.

We continue to investigate all swine vesicular cases as a potential FAD.

This past May, Minnesota participated in the national Agriculture Response Management and Resources (ARMAR) Foot and Mouth Disease (FMD) Functional Exercise 2018. This was a multi-state, multi-agency functional exercise that simulated an expanding FMD event in the United States. Our response was evaluated and an After Action Report with Improvement Plan will be developed and submitted. We will use this information to improve our Response Plans for the future.

We remain vigilant to any possible FAD introduction into Minnesota. Our FADDs receive ongoing refresher training in order to respond to any possible FAD event. We also partner with the Minnesota Veterinary Reserve Corp in making FAD response presentations to practicing veterinarians and other livestock stakeholders throughout Minnesota.



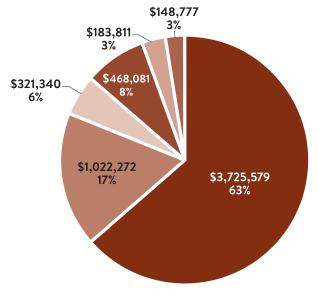
COMPLIANCE

The Board continues to make improvements to the way we administer and apply progressive enforcement actions. Our ultimate goal is ensuring compliance with Federal regulations, Minnesota Statutes, and Board of Animal Health rules and policies to protect the health of Minnesota's domestic animals. When violations are discovered, our staff make every effort to resolve them with minimal enforcement action while still achieving resolution and compliance within time limits set by the Board. We strive to minimize economic losses for affected parties to preserve livelihood and to minimize the time and resources allocated to enforcing non-compliant parties. In fiscal year 2018, the Board issued 144 Notice of Violation and Correction Orders and assessed 10 civil penalties for violations of Minnesota law.

BUDGET

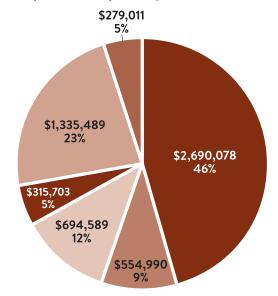
During Fiscal Year 2018, the Board expended \$5,869,860 to carry out its many animal health and disease programs. The following two charts show how the Board used the funding that was provided to us:

Board of Animal Health: Fiscal Year 2018 Total Expenses by Category \$5,869,860



- Payroll, \$3,725,579 (63%)
- Professional Technical Services, \$1,022,272 (17%)
- Space Rental, Maintenance and Utilities, \$321,340 (6%)
- Information Technology, \$468,081 (8%)
- Travel, \$183,811 (3%)
- Other Expenses, \$148,777 (3%)

Board of Animal Health: Fiscal Year 2018 Total Expenses by Program \$5,869,860



- Miscellaneous Disease Control Activity, \$2,690,078 (46%)
- Executive/Administration, \$554,990 (9%)
- All Other Animal Health Programs, 694,589 (12%)
- Emergency Planning, \$315,703 (5%)
- MN Poultry Testing Lab and Poultry Programs, \$1,335,489 (23%)
- Dog and Cat Breeder, \$279,011 (5%)

The following charts show the sources of our funding. During Fiscal Year 2018, the Board expended \$5,869,860 to carry out its many animal health and disease programs. Funding for these programs came from the following sources.

Board of Animal Health: Fiscal Year 2018 Funding Sources

Source of Funds	Fiscal Year 2018 Expenditures
State Appropriations	\$5,114,019
Federal	\$694,589
Other	\$61,252
Total:	\$5,869,860

Board of Animal Health: Historical Spending

Historical Spending	Fiscal Year 08-09	Fiscal Year 10-11	Fiscal Year 12-13	Fiscal Year 14-15	Fiscal Year 16-17
General Funds	\$13,052,441	\$10,256,347	\$9,642,071	9,983,014	\$10,674,382
Federal Funds	\$2,375,214	\$2,241,723	\$1,406,109	\$1,363,920	\$1,482,059
Other Funds	\$29,823	\$405,194	\$584,115	\$160,074	\$118,903
Totals:	\$15,457,478	\$12,903,264	\$11,632,355	\$11,507,008	\$12,275,344

VETERINARY DIAGNOSTIC LABORATORY (VDL)

VDL: Fiscal Year 2018 Procedures by Laboratory

Laboratory Section	Number
Bacteriology	47,835
Clinical Pathology	179
Electron Microscopy	608
Histology	42,027
Immunohistochemistry	7,530
MN Poultry Testing Lab*	216,373
Molecular Diagnostics	433,838
Necroscopy	17,957
Outsourced Lab Service	13,801
Parasitology	4,943
Receiving, Reporting and Admin	1,161
Serology	224,034
Udder Health	150,255
Virology	16,452
Waste Disposal	18
MN Poultry Testing Lab+	124,520
Non-Accredited Research Lab	2,813
Total:	1,304,344

VDL: Fiscal Year 2018 Procedures by Species

Species	Number
Bovine	233,690
Canine	13,931
Cervidae	9,259
Equine	5,891
Feline	4,631
Fish	4,631
Avian, Miscellaneous	6,025
Miscellaneous Mammals	4,411
Non-Animal Submission	908
Other	1,129
Porcine	656,620
Poultry	349,144
Small Ruminant	12,889
Total:	1,304, 344

VDL: Fiscal Year 2018 Animals Submitted

Species	Animals
Bovine	153,988
Canine	5,064
Cervidae	3,874
Equine	4,645
Feline	1,166
Fish	2,190
Avian, Miscellaneous	3,170
Miscellaneous Mammals	1,613
Non-Animal Submission	714
Other	158
Porcine	298,970
Poultry	165,134
Small Ruminant	8,815
Total:	649,501



^{*} Board-funded testing.

⁺ Producer-funded testing.



Healthy Animals for Healthy People and Communities

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