

Arizona Game and Fish Department

FY2025 CHRONIC WASTING DISEASE REPORT
Wildlife and Sport Fish Restoration Act Fund

AZGFD Wildlife Health Program

Ann Fan, DVM, MS
Assistant State Wildlife Veterinarian

Arizona Game and Fish Department
5000 W. Carefree Highway
Phoenix, AZ 85086

June, 2025



TABLE OF CONTENTS

EXECUTIVE SUMMARY	2
INTRODUCTION	2
OBJECTIVES	3
METHODS	4
RESULTS	7
FUTURE MONITORING EFFORTS	12
LITERATURE CITED	15
TABLES	17
FIGURES	21
APPENDIX A. INSERTS IN THE 2024 HUNTING REGULATIONS BOOKLETS.	27
APPENDIX B. VOLUNTEER RECRUITMENT FLYER	29
APPENDIX C. LETTERS SENT TO PARTICIPATING BUSINESS AND NON-RESIDENT HUNTERS.	30
APPENDIX D. PUBLIC NEWS MEDIA RELEASES, WEBSITE	32
APPENDIX E. ADDITIONAL INFORMATION FOR BUSINESSES	37

ARIZONA GAME AND FISH DEPARTMENT
CHRONIC WASTING DISEASE FY2025 REPORT

EXECUTIVE SUMMARY

The Arizona Game and Fish Department (AZGFD) has been surveying for chronic wasting disease (CWD) since 1998, testing over 31,000 samples to date. As of the publication of this report, CWD has not been detected in Arizona's cervid populations. The Department continues monitoring efforts for early detection of CWD in Arizona. During the 2024-2025 season, the Department collected and tested a total of 1,570 animals, 28% more than the previous two years (n=1,231 for both years). In total, we tested samples from 1546 deer and elk harvested within Arizona and 24 samples from animals harvested out-of-state. Of the samples originating from Arizona, 1,532 samples came from AZGFD game management units (GMUs), ten came from hunts occurring on tribal lands, and four came from unknown units.

As in past years, the Department focused on the areas of highest likelihood of CWD introduction, including the GMUs along the northern, eastern, and portions of the southern borders, as well as animals harvested outside of Arizona that are brought into the state. Samples collected along the northern border of the state (12A/B, 13A/B) and high-priority units along the eastern and southern borders accounted for 16.0% (n = 251), 16.4% (n = 257), and 13.1% (n=205) respectively, of all samples from Arizona. Samples collected from out-of-state harvests accounted for 1.5% (n = 24) of all samples.

Due to the lethal nature of CWD, the Department will continue to monitor the state's deer and elk populations closely. Engaging and educating the hunting and non-hunting public is essential for increasing awareness of the disease. Once introduced, CWD has devastating impacts on herds and is, perhaps, the most significant disease confronting our wild cervid populations. The Department CWD response and management plan was updated in 2021 and will guide the response to CWD detection within the state.

INTRODUCTION

Chronic wasting disease (CWD) is an untreatable and always-fatal neurologic disease affecting free-ranging and captive cervids and is characterized by progressive weight loss, abnormal behavior, and eventual death. North American species affected include mule deer (*Odocoileus hemionus*), white-tailed deer (*Odocoileus virginianus*), elk (*Cervus elaphus canadensis*), moose (*Alces alces*), and caribou (*Rangifer tarandus*), as well as the farmed, non-native red deer (*Cervus elaphus*). Chronic wasting disease belongs to a group of diseases called transmissible spongiform encephalopathies (TSEs) and is similar to scrapie in sheep, bovine spongiform encephalopathy (also known as mad cow disease) in cattle, and variant Creutzfeldt-Jakob disease (vCJD) in humans. These disease syndromes are associated with the accumulation of abnormal prions, a cell regulation protein, in the brain of affected animals. CWD is transmitted via infected

bodily fluids (including blood, saliva, urine, feces, antler velvet, and semen) and carcasses, and can stay infective on the landscape for decades (Kramm et al. 2019, Mathiason et al. 2006). There is evidence that CWD can be transmitted vertically (from mother to fetus *in utero*) and that deer can be born positive for CWD and become symptomatic. Additionally, it has been associated with higher rates of nonviable or failure-to-thrive offspring (Bravo-Risi 2021, Nalls et al. 2021, Nalls et al. 2013). Our understanding of the behavior of the disease in free-ranging deer and elk is increasing dramatically. Data suggests that in an area where CWD occurs, older animals are more likely to be infected and are the source for lateral transmission in a population (Samuel and Storm 2016). Chronic wasting disease was first identified in captive deer in Colorado in 1967 and has since been detected in free-ranging cervids in 36 states, five Canadian provinces, Norway, Finland, Sweden, and in a small number of cervids imported into South Korea (CDC 2025). Arizona has not detected CWD, but the state shares borders with four states where CWD occurs: California, Utah, Colorado, and New Mexico; and the status of CWD in Mexico is largely unknown.

The Department began conducting CWD surveillance in 1998 and has since tested over 31,000 samples. Samples are acquired through four different processes: a reimbursement program established with taxidermy and meat processing businesses throughout Arizona, at the check station on the Kaibab Plateau, by regional personnel from hunter-harvested animals, targeted/opportunistic surveillance from sick, dead, confiscated animals, and voluntary hunter submissions to regional offices or head freezers.

OBJECTIVES

Surveillance

1. To conduct statistically meaningful surveillance using hunter-harvested and targeted/opportunistic sampling of deer and elk throughout the state of Arizona.
2. To maximize surveillance efforts in areas bordering CWD-positive states in Region 1 (FOR1), Region 2 (FOR2), and Region 5 (FOR5; Figure 1).
3. To maximize sampling of cervids harvested outside of Arizona that are brought back into the state.
4. To increase sample intake by enrolling additional meat processors, taxidermists, and hunt outfitters in the CWD surveillance program and placing freezers for sample drop off in high-value areas.

Communications

1. To disseminate messages through the news media, Department e-newsletters, websites, social media, and other electronic/print communications to the general public in order to promote understanding of agency actions, provide accurate information about CWD, and gain public cooperation in CWD sample collection.

2. To provide information to hunters going out of state and out-of-state hunters coming to AZ regarding the regulations for harvest transport across state lines and the need to adhere to the regulations to reduce the possibility of introducing CWD into new areas.
3. To provide training as needed to Department personnel, participating businesses, and outside entities on proper sample collection and storage, and data collection.
4. To educate the public about CWD by providing training to hunters in workshops with the goal of increasing sample submission and general awareness of risks to wildlife and public health.
5. To inform AZGFD personnel and the public about CWD sample distribution in the state through an annual report.

METHODS

Surveillance

Hunter-Harvested Sample Collection

Samples were obtained from hunter-harvested animals by several methods. On the larger deer hunts located on the Kaibab Plateau, Department personnel were present to immediately collect samples at the Jacob Lake Check Station. In addition, AZGFD law enforcement personnel often collected CWD samples during their hunt patrol duties. Hunters could also directly submit heads of harvested animals or samples to one of AZGFD regional offices or drop off at collection freezers located in various parts of the state for testing.

As in previous years, we partnered with various meat processors and taxidermists throughout the state and trained them to collect samples. This collaboration has saved the program a considerable amount of staff time and money. Partnering businesses collected and stored samples, and collected pertinent data (i.e. hunt number, game management unit (GMU), date of kill, hunter name and phone number, species, and sex) until they could be picked up by Department staff. Meat processors and taxidermists were compensated per head or sample submitted. In accordance with surveillance objectives, we asked businesses to focus on collecting samples from animals in Arizona's high-priority CWD areas, as well as samples from deer and elk harvested in out-of-state and tribal lands. The compensation rates for 2024-2025 were \$10/head (retropharyngeal lymph node - RPLN or obex) for Arizona animals and \$15/head for out-of-state animals. Businesses were offered a bonus of \$5/head if they provided the obex from harvested elk (in addition to RPLN). This was to incentivize the collection of the obex from elk, as research has shown CWD can be detected in the obex before becoming detectable in the tonsil or retropharyngeal lymph nodes (Spraker et al. 2004). When necessary, testing results of animals harvested out-of-state were communicated to the respective management agency.

CWD collection “kits” (a small plastic bag containing a sample bag and a pre-printed tag for the submitter to fill out) labeled with unique identifying numbers were disbursed to Department personnel, regional offices, partnering businesses, and at hunter workshops for consistent and efficient sample submission (Appendix E, Figure 19).

For the 2024-2025 season, a CWD volunteer program was instituted (Appendix B, Figure 11). Volunteers were enlisted through the AZGFD volunteer page and the University liaisons of the Department with Arizona State University, Northern Arizona University, Grand Canyon University, and the University of Arizona. Outside of AZGFD, primarily from universities, 32 volunteers signed up. A total of 22 volunteers attended initial training, and 13 contributed actively to the 2024-2025 season. Their contribution included sample collections, sample transportation, and sample preparation and packaging for shipment to the diagnostic laboratory.

Targeted and Opportunistic Animal Sample Collection

Wildlife managers and biologists in each region were instructed to collect fresh samples from deer and elk killed by vehicle collisions, those that were apparently ill with clinical signs of neurologic disease, and those found dead of no apparent cause. These animals are grouped together as opportunistic samples. Research has found that CWD-affected deer have a higher vulnerability to vehicular-caused mortalities than non-infected deer, thus emphasizing the importance of sample collection from these animals (Krumm et al. 2005). To date, none of these targeted or opportunistic samples have tested positive for CWD. However, these cases often lead to the discovery of other diseases as the cause of abnormal behavior and give the Wildlife Health Program insight into current disease hotspots around the state.

Spatial Distribution

Arizona has ranked areas for surveillance since 2010/2011 based on proximity to states where CWD has been found in wild cervid populations, or where the status of CWD is largely unknown. GMUs were grouped based on their locations and categorized as high priority, medium priority, and low priority (Figure 1). For populations within each priority area, rough population size estimates of cervids (estimated from AZGFD’s survey data) were used to determine a sample size that would allow for the detection of a 1% prevalence of CWD at a 95% confidence interval using a simple sample size formula (Thrusfeld 2007). In 2022-2023, we analyzed previous sampling efforts and incorporated recently identified epidemiological, demographic, and population factors to determine our target sample size (Clement et al. 2023). The desired sample quotas were 1000, or 70%, of samples from high-priority units and 30% of samples from medium and low-priority units (Clement et al. 2023).

Prior to the work by Clement et al. (2023), sampling efforts were guided by desired quotas for each of our priority classifications. However, these quotas only factored in the spatial component of sample distribution and did not account for the distribution of age or sex of animals that our samples came from. Chronic wasting disease literature often points to higher prevalence in males and older cervids. To increase the likelihood of detecting CWD if it does occur in Arizona, we worked with our biometrician during the 2021/2022 to identify areas in which we could increase our detectability at a given prevalence rate. For instance, our current methods yield a high confidence in detecting CWD (97-99%) if the disease was present in 1% of deer and elk across the state. However, if prevalence dropped to 0.04% (4 in 10,000 animals CWD-positive), then

our confidence in detecting CWD decreased to just 17-40%. Results from our analysis indicate that confidence in detecting CWD when at low prevalence rates (<1%) can be improved by allocating CWD tests to male deer and elk (Clements et al., 2023). Further analysis is needed to determine estimated detection probability variation among age classes; other research indicates that we should focus efforts on testing older animals (Samuel and Storm 2016).

Age Distribution

Age of the animal and minimum incubation period of the disease was also considered in sampling efforts. For our surveillance purposes and ease of classification by taxidermists, meat processors, hunters, and wildlife managers, samples were classified into one of four categories: juvenile (<1.5 years), sub-adult (1.5 years to 2.5 years), adult (>2.5 – 4.5 years), or old adult (≥5 years). While we will accept and test samples from any aged animal, our surveillance program has generally focused on adult animals.

Male:Female Distribution

Although we don't have a specific target for male:female sample ratio, we strive to test as many males as possible. The prevalence of CWD has also been shown to vary by sex in free ranging, wild cervids; CWD is up to three times more prevalent in free ranging adult male deer and males were found to have higher mortality rates than females (Samuel and Storm 2016). These higher prevalence rates are often attributable to behavioral differences, particularly during the breeding season when males travel more widely and interact directly with other males, increasing the risk of infection (Koutnik 1981, Miller and Williams 2003).

Diagnostics

In the 2024-2025 season, we contracted Colorado State University Veterinary Diagnostic Laboratory (CSU VDL) to perform our testing. The medial retropharyngeal lymph node was the predominant sample collected and submitted for testing. Medial retropharyngeal lymph nodes are the preferred sample for testing deer. When not obtainable, the tonsil, parotid lymph node, or submandibular lymph node were collected and submitted. Since CWD has been shown to progress differently in deer and elk, whenever available, the obex (brainstem) was collected from elk to increase detectability (Spraker et al. 2004, Keane et al. 2008). For reporting purposes, multiple tissues from the same animal are considered one sample. Testing was performed via the Bio-Rad enzyme-linked immunosorbent assay (ELISA), and any suspected cases were confirmed by immunohistochemistry (IHC).

Communications

Hunters are informed about CWD as part of the Hunter Education curriculum, the AZGFD website, and information inserts in hunting regulations. At the start of the sample collection season, Wildlife Health staff offer hands-on training sessions in sampling techniques to AZGFD personnel and the public in a series of workshops held at the different regional offices. Periodically, throughout the sampling season, the Wildlife Health Program shares CWD sampling progress through internal emails to all Department staff. In addition to internal emails and updates, Wildlife Health works with the Department's Information Branch to release public updates through various media outlets, social media, and AZGFD's website. At the end of the sampling season, this annual report is completed and made accessible to all Department

personnel through the AZGFD U-drive (a department-wide shared folder) and to the public on the Department website.

RESULTS

During the 2024-2025 season, the Department collected and tested a total of 1,570 animals, 28% more than the last two years (n=1,231 for both years). Within these samples, we tested samples from 1546 deer and elk harvested within Arizona and 24 samples from animals harvested out-of-state. Of the samples originating from Arizona, 1,532 samples came from AZGFD game management units (GMUs), ten came from hunts occurring on tribal lands, and four came from unknown units.

Samples were tested through the Colorado State University Veterinary Diagnostic Laboratory (CSU VDL). In most cases, samples were lymph nodes; in some elk, in-line with current science, both the RPLN and obex were tested. The cost of diagnostic testing was \$47,256.00

Surveillance

Hunter-Harvested Sample Collection

Hunter-harvested animals accounted for 94.2% (n = 1,480) of the samples submitted. Collection of these samples was accomplished by AZGFD personnel and participating taxidermists and meat processors. Hunter-harvested samples came from Arizona, tribal lands, and out-of-state hunts.

On the larger deer hunts located on the Kaibab Plateau (FOR2), AZGFD personnel were present and collected a total of 179 hunter-harvested samples at the Jacob Lake check station, slightly more than last year's total of 158. Wildlife Health Program personnel, Department volunteers, and Department contractors were present at the check station for three weeks and additional weekends from October to December during elk and deer hunts. Across the state and in addition to the Kaibab hunts, AZGFD law enforcement, regional personnel, and the Wildlife Health program collected samples from 515 hunter-harvested deer and elk. AZGFD personnel as a whole collected 694 hunter-harvest samples across the state, representing 44.2% of all samples collected.

As in the 2023-2024 season, FOR1 and the Wildlife Health Program were able to continue the joint funding for a contract position that was partly supported by a USDA-APHIS-WS grant AP23WSNWRC00C091. This position was primarily utilized to collect CWD samples from hunter-harvested deer and elk that were brought into game meat processors in that region, but opportunistic collections were also performed for cervids that were found dead due to roadkill or other causes. The contractor not only contributed significantly to the total number of samples taken by department staff from FOR1 (135 out of 298 samples, or 45.3%), but also made contributions to the overall sample collection and increased the efficiency and capacity of the regular Wildlife Health Program staff due to reduced travel. In the 2024-2025 sampling season, FOR1 totaled 32.4% more samples compared to the previous year (n=225).

The Wildlife Health Program coordinated with 20 Arizona-based businesses (Table 3) for the season of 2024-2025. Taxidermists and meat processors collected a total of 784 samples, which accounted for 49.9% of the samples tested. This does not include samples collected at the meat processors by the Wildlife Health program volunteers. Compensation to businesses participating in the surveillance program was \$8,055. Some businesses did not wish to be compensated, citing instead their wish to help contribute.

For the 2024-2025 season, we attributed the increase in total sample size largely due to the institution of our CWD volunteer program. Over 50 samples were collected by the volunteers. However, the significance of the contribution is beyond the samples collected, as the volunteers allowed extra time and resources for the department staff to perform other tasks related and un-related to CWD surveillance. For example, after training, the volunteers were stationed at the meat processors and hunt camps to collect samples, which allowed the Wildlife Health staff to go to different hunt camps or businesses. The volunteers at different regions were also able to pick up the collected samples from local taxidermists and meat processors. Once the samples were picked up, they were either transported to the regional offices or to the Phoenix Headquarters. This significantly reduced the time and effort needed for the Wildlife Health staff to obtain these samples.

A total of 24 samples from hunter-harvested animals came from five states other than Arizona: Alabama, Colorado, New Mexico, Texas, and Utah. This was similar to the 5-year average of 29 out-of-state samples from 2019-2023. All of these 5 states report the presence of CWD in either captive or free-ranging cervids (Table 1). Additionally, ten samples were obtained from hunts on tribal lands and those samples are included in the data published in this report, except where noted. Out-of-state hunters who drew Arizona elk or deer tags this season were contacted via email (if that information was available) approximately 2-4 weeks before their hunt start date and notified of Arizona's carcass importation regulations. This email also encouraged out-of-state hunters to check the importation regulations of their home state and provided a link with that information. AZGFD will continue to stress the importance of collecting CWD samples from out-of-state harvests as we closely monitor importation of potentially contaminated carcasses, animal parts, or products. All pertinent test results and hunt information have been provided to each state.

As with last year, the Wildlife Health program established freezer drop off locations in 2024-2025 for successful hunters to voluntarily submit the head or the tissue of their harvest for CWD testing. The purpose of the freezer drop-off locations is to create a convenient location for the hunters, therefore increasing samples submitted from the public voluntarily. The drop-off sites were located in various towns and cities throughout southern and eastern Arizona where there is a higher risk of CWD introduction and fewer available taxidermists, meat processors, or regional offices. However, finding the appropriate locations for the freezers has been challenging. We haven't had any success yet for the past two years in finding locations that are convenient, accessible, visible, and with the site owners' willingness for the freezer placement.

Targeted and Opportunistic Sample Collection

Ninety-three opportunistic CWD samples were collected. This has been an area of focus for improvement based on results of the previous years, and the sample number increased 2.7-fold

compared to last year (n=35). Within the 93 animals, 24 animals were found dead of unknown causes, 48 were roadkill carcasses, and 21 were targeted animals that were either reported to the Department or observed by AZGFD staff. The Wildlife Health Program continues to collect samples opportunistically throughout the year and will submit CWD samples from deer and elk for testing when warranted.

Spatial Distribution

Table 2 indicates the number of samples tested by GMU priority, broken down by species and surveillance method.

We tested 710 samples from our high-priority Arizona GMUs in the 2024-2025 season. This is the highest number ever collected in these units (Figure 3). In addition, these samples represented 46.8 percent of the total samples collected. This is slightly higher than the average of the previous five years of data (41.3%). There is a continuous effort to increase the total number and the percentage of samples collected in the high-priority units. The trend has shown an improvement in the percentage of samples collected and tested in these units in recent years, with it being over 40% for the past 4 years (Figure 4). The total number of samples collected from all high-risk areas (Arizona high-priority GMUs, tribal, and out-of-state samples combined) was 744, 47.4% of all tested samples. Figure 5 shows the breakdown of the samples collected from high-risk units by year. The samples were more evenly distributed among the regions compared to the previous years.

As in past years, the Department focused on the areas of highest likelihood of CWD introduction, including the GMUs along the northern, eastern, and portions of the southern borders, as well as animals harvested outside of Arizona that are brought into the state. Samples collected along the northern border of the state (12A/B, 13A/B) and high-priority units along the eastern and southern borders accounted for 16.0%, 16.4%, and 13.1% respectively (reference Figure 1 for specific GMUs).

It is important to note that in 2021-2022 we designated additional GMUs along our southern border as high-priority CWD samples areas. This new high-priority subset includes units 30B, 34A/B, 35A/B, and 36A/B/C, all of which were previously considered to be medium-priority.

We tested 87 samples from medium-priority units, which consisted of 31 samples from GMUs in FOR1 and 56 samples from FOR5. 731 samples came from animals in low-priority units. Samples from low-priority were scattered across the state. Given the sporadic nature of disease detection, these samples are still considered a valuable part of our surveillance program. As an example, in 2021, Idaho detected the disease in the central part of the state in a game management unit that was considered low priority.

Total estimated hunter harvest was 8607 for elk and 13859 for deer for the 2024-2025 season. We were able to sample roughly 7% of these animals, which is consistent with previous statistics (Figure 6). Although we significantly increased the total number of samples collected in 2024-2025, it has been a continuous challenge to reach the goal of having 70% of samples from high-priority units. One major factor was the reduction in tags issued for the Kaibab youth and

general hunts in units 12A East and 12A West, where successful hunters are required to check their deer at the Jacob Lake Check Station.

Age Distribution

Because prevalence of CWD has been shown to increase in older animals (Gear et al. 2010, O'Hara et al. 2013), an additional focus has been to increase the number of samples taken from older animals (adult and old adult age classes). In 2024-2025, we collected samples from 124 juveniles, 306 sub-adults, 950 adults, and 125 samples from animals estimated to be >5 years old; remaining samples were submitted without age data. See Figure 7 for percentage age distribution by species, and Figure 8 for number of samples per age class breakdown by year for the last five years.

Male:Female Distribution

We are interested in understanding our ratio of male:female (M:F) samples across Department managed GMUs (not including out of state, tribal lands, or unknown GMU, species or age). Wildlife Health went through previous years sample data to develop M:F ratios for each year back to 2014. In 2024-2025, our M:F ratios were 1.2, 12.8, and 69.3 for elk, mule deer, and white-tailed deer, respectively (Table 4). From 2014 to 2020, our M:F ratios averaged 1.9, 3.1, and 132.7 for elk, mule deer, and white-tailed deer, although they varied significantly across the years. With the exception of elk, we have been consistently testing more males than females and this should remain the target for our CWD surveillance program. The Department has limited female deer hunts and the majority of the available female deer tags occur in hunt units heavily biased toward mule deer. Therefore, our white-tailed deer M:F ratios are quite extreme and not representative of our testing efforts, but are an artifact of our lack of opportunities to sample hunter-harvested female white-tailed deer. Table 4 provides a breakdown of species, age, and sex for all samples collected from known GMUs over the last five years (does not include samples from unknown species, unknown age, unknown GMU, tribal lands, or out of state samples).

Diagnostics

During the 2024-2025 sampling season, we sent samples from 1,570 deer and elk to Colorado State University Veterinary Diagnostic Lab for testing. All samples were tested using ELISA, and CWD was not detected in any samples from animals harvested in Arizona. None of the 24 samples from out-of-state hunts tested positive for CWD.

When possible, obex samples plus retropharyngeal lymph nodes (RPLN) from elk were both tested. A total of 565 samples from elk were taken. We submitted combined (RPLN and obex) samples for 33.5% (n=189) of elk, obex-only samples for 14 elk (2.5%), and lymphoid tissue for the remaining elk (n=362, 64%). It has been shown that CWD-positive elk can have detectable levels of prion protein (PrP^{CWD}) in lymphoid tissue and obex simultaneously, or exclusively in one or the other (Spraker et al. 2004). To increase our ability to detect CWD as early as possible, we should continue to focus on submitting both the RPLN and obex from elk.

For mule deer and white-tailed deer, while obex is an acceptable sample, Keane et al. (2008) found that by the time CWD is detectable in the obex of white-tailed deer, it is also detected in lymphoid tissues. In addition, they found no instances in which CWD was detectable in the obex and not detectable in the lymphoid tissues of white-tailed deer. This is representative of the

progression of CWD in deer; the highest concentrations of CWD prions occur first in the lymphoid tissues, then progress to the obex. It is for this reason that lymph nodes are the priority samples from our deer species. In 2024-2025, a total of 999 samples from deer were submitted. There were only obex for submissions for five animals (0.5%). There were eight animals for which both RPLN and obex were collected. However, only RPLN was submitted for these animals based on the reasoning above.

Communications

During the 2024-2025 reporting season, several CWD-related documents were produced in the format of hunt regulation booklet inserts (Appendix A), mailed or emailed letters (Appendix C) and public news media releases (Appendix D).

In order to gain support from hunters in CWD sample collection, informational inserts were placed in the 2024 Pronghorn and Elk Hunt Draw Information (Appendix A, Figure 9) and in the 2024-2025 Arizona Hunting Regulations (Appendix A, Figure 10). These inserts encouraged hunters to submit samples for testing. The AZGFD Wildlife Health Program website (<https://www.azgfd.com/wildlife-conservation/wildlife-diseases-2/chronic-wasting-disease-what-hunters-should-know/>) contains current information about CWD as well as details pertaining to the AZGFD's surveillance program.

To inquire about their availability for the 2024-2025 sample season, a retention letter was mailed to businesses that had participated in the CWD surveillance program in past years (Appendix C, Figure 12). To gauge interest and availability of new taxidermist and meat processors, a recruitment letter was mailed to all taxidermy and meat processors currently registered with the Department (Appendix C, Figure 13). This letter contained a brief description of CWD, program objectives, Wildlife Health Program contact information, and a CWD surveillance priority map by GMU (Figure 1). At the close of the 2024-2025 CWD surveillance season, certificates for recognition were sent to each participating business that submitted samples for testing or facilitated sampling by Department staff or volunteers at their location (Appendix E, Figure 20).

The Wildlife Health program made efforts to send a digital letter to non-resident hunters to remind hunters of carcass importation laws across North America to aid in the return home from their hunt. This letter was sent approximately 2-4 weeks before the hunt opened, and briefly explained Arizona's historic efforts in statewide CWD surveillance with no detections of the disease. The document asks hunters to review the carcass importation rules and regulations to aid in the prevention of introducing CWD into Arizona. A scannable QR code was provided which gave the letter recipient direct access to the carcass importation rules and regulations per state.

In August and September 2024, the Wildlife Health Program held a series of CWD sample training workshops that were open to the public. These events were held at Department regional offices in Mesa, Tucson, Pinetop, Phoenix, Flagstaff, Kingman and Yuma and were announced via social media, a press release (Appendix D, Figure 14), and information on the agency website. Two more news releases on August 8 and 15, 2025 were created to increase awareness and boost the number of attendees. Those who attended the workshops were members of the public, hunters, volunteers, and Department personnel. At the events, Wildlife Health staff gave a short lecture about CWD, the current surveillance program goals and metrics, and trained

attendees on CWD sample collection through a hands-on session. From less than 5 to over 50 participants attended each workshop, with the most heavily attended being the workshops held at the Tucson and Mesa offices.

A 3D printed replica of a deer head with removable lymph nodes and obex was purchased by the Wildlife Health program via funds from the previously mentioned USDA-APHIS-WS grant with the intent of having an alternative to actual heads for demonstrations when attaining heads was difficult or the setting might be inappropriate or unsuitable. It was and will continue to be a useful resource for future workshops and educational events.

A media release occurred on the AZGFD website in December (Appendix D, Figure 15). The article was intended to inform the public of CWD, encourage members of the public to submit their own samples, and to remind out-of-state hunters of Arizona's carcass transport rules. The article was posted to the AZGFD News website.

The AZGFD website was updated this year, which included the Wildlife Health Program page (Appendix D, Figure 17) now easily accessed at azgfd.com/healthy. On the main Wildlife Health page, a content box is titled "Chronic Wasting Disease" and has links to carcass transport regulations for every U.S. state as well as answers to common questions and general knowledge for Arizona hunters about the disease and surveillance in the state, including a how-to video of taking a CWD sample (Appendix D, Figure 18). A media campaign ran digital advertising on Facebook and Google Performance Max from Oct. 1 through Nov. 30, 2024, with a goal to educate and update the public on the necessity and status of CWD testing in Arizona. The CWD campaign resulted in over 2.1 million impressions and over 37.2K clicks during the two-month flight. During this period, the CWD landing page on azgfd.gov saw a significant spike in web sessions (+1,258%) and new users (+2,469%) when compared to the two months prior. Google Performance Max ads delivered more than 230K impressions throughout the flight and drove over 7.2K clicks to the campaign microsite. Facebook ads served over 1.8 million impressions and delivered over 30K clicks to the site. The total cost of this campaign was \$10,000.

When collecting samples directly from successful hunters, Department staff informed hunters that they could contact Wildlife Health personnel if they wanted results for their harvested animal. Department personnel responded to CWD result inquiries within 48 hours, or immediately after results became available. All data is made available to AZGFD personnel upon request. This report is made available in a similar manner.

A press release announcing the end of the 2024-2025 sampling season and summarizing the sampling efforts was released on the AZGFD website on May 18, 2025 (Appendix D, Figure 16). The numbers were still preliminary, which is why they don't exactly match the numbers published in this report.

FUTURE MONITORING EFFORTS

Due to decreasing tag availability in our northern high-priority units, specifically 12A East/West as discussed above, efforts should be made to increase samples coming from the Kaibab strip. Wildlife managers and biologists in the region should collect as many opportunistic CWD

samples as possible. Additionally, taxidermists and meat processors in southern Utah could be enlisted in our CWD surveillance program since it is possible that many mule deer harvested in our northern units are transported back to Utah for processing.

This same strategy could be applied in our eastern and southern high-priority units. Many of the deer and elk harvested in eastern Arizona may be transported into New Mexico for processing. Enrolling western New Mexico taxidermists and meat processors would increase our sample production for FOR1 and FOR5 high-priority units.

Wildlife Health is working with other programs at the Department to create social media content and other educational material to increase awareness of CWD across Arizona and inform the public, both hunting and non-hunting, on how they can help monitor for CWD. We are also considering enclosing CWD kits or providing more information regarding our surveillance program in the letters to the hunters, especially for drawn deer and elk hunters in our high-priority areas.

This year's sampling effort reminds us that our relationships with taxidermists and meat processors are invaluable. Local businesses play an irreplaceable role in CWD monitoring in Arizona and in testing samples from out-of-state harvests. AZGFD must continue to ensure that samples are collected from out-of-state harvests and, if CWD is detected, CWD-positive animal products are disposed of at licensed and regulated landfills and businesses. The Department has instituted rules regarding the importation of carcasses from outside the state and will be increasing enforcement. The Department needs to continue to monitor for infractions in order to better understand the level of priority this mode of transmission represents for Arizona wildlife. Department personnel will continue to sample targeted and opportunistic animals throughout the remainder of the year. Sampling efforts will resume in the fall of 2025 on hunter-harvested deer and elk.

One resource that should be developed further is enlisting the assistance of hunting outfitters to assist with surveillance efforts. Various outfitters across the state were contacted at the beginning of summer with information regarding the CWD surveillance program and enrollment. Some businesses were interested in participating in the program, but did not attend or schedule training with the Wildlife Health program for sample collection demonstration. Although efforts to enroll hunting outfitters were unsuccessful this year, efforts to enroll hunting outfitters should become a priority in the following surveillance season as they could be an integral part of hunter education and sample collection.

The CWD volunteers have contributed significantly for the season of 2024-2025. We plan to continue focusing on recruiting and training volunteers in the early 2025-2026 season, so they can be proficient in different tasks associated with the CWD surveillance program as soon as the hunting season starts. The goal will be to have at least one active volunteer at each region, but especially FOR 1, 2, and 5 will be the most crucial with our concentrated effort in the high-priority GMUs.

Lastly, the Wildlife Health program is working to establish new freezer drop-off locations for successful hunters to voluntarily submit the head or tissue of their harvest for CWD testing.

Ideally, the drop off testing sites should be located in various towns and cities throughout southern and eastern Arizona where there is a higher risk of CWD introduction, and fewer taxidermists, meat processors, or regional Arizona Game and Fish Department offices. We will be surveying hunters to find out what challenges they face in collecting and submitting samples. To facilitate the management of these freezers, the Wildlife Health program is considering approaching hunting and wildlife-related non-profits in the state to help “adopt” a freezer, where a representative from the group would regularly collect samples from freezers and facilitate their transport to the headquarters office in Phoenix, as well as encourage members and hunters to submit samples. Increasing our sampling specifically from high risk units is vitally important to achieve confidence that we would detect CWD if it were present. Allocating resources should focus on this goal.

LITERATURE CITED

Bravo-Risi, F., Soto, P., Eckland, T., Dittmar, R., Ramírez, S., Catumbela, C. S. G., Soto, C., Lockwood, M., Nichols, T., & Morales, R. 2021. Detection of CWD prions in naturally infected white-tailed deer fetuses and gestational tissues by PMCA. *Scientific reports* 11(1), 18385.

Centers for Disease Control and Prevention [CDC]. 2025. Chronic Wasting Disease (CWD). <<https://www.usgs.gov/media/images/distribution-chronic-wasting-disease-north-america-0>>

Clement, M. J., Justice-Allen, A., & Heale, J. D. (2023, January 5). Optimal risk-based allocation of disease surveillance effort for clustered disease outbreaks. *Preventive Veterinary Medicine*.

Grear, D. A., M. D. Samuel, J. A. Langenberg, and D. Keane. 2010. Demographic patterns and harvest vulnerability of chronic wasting disease infected white-tailed deer in Wisconsin. *Journal of Wildlife Management* 70:546-553.

Keane D. P., D. J. Barr, J. E. Keller, S. M. Hall, J. A. Langenberg, and P. N. Bochsler. 2008. Comparison of retropharyngeal Lymph Node and Obex Region of the Brainstem in Detection of Chronic Wasting Disease in white-tailed deer (*Odocoileus virginianus*). *Journal of Veterinary Diagnostic Investigation* 20(1):58-60.

Koutnik, D. L. 1981. Sex-related differences in the seasonality of agonistic behavior in mule deer. *Journal of Mammalogy* 62:1–11.

Kramm, C., R. Gomez-Gutierrez, C. Soto, G. Telling, T. Nichols, R. Morales. 2019. In Vitro detection of Chronic Wasting Disease (CWD) prions in semen and reproductive tissues of white-tailed deer bucks (*Odocoileus virginianus*). *PLoS ONE*. 14, e0226560.

Krumm, C. C., M. M. Conner, M. W. Miller. 2005. Relative vulnerability of chronic wasting disease infected mule deer to vehicle collisions. *Journal of wildlife diseases* 41(3), 503–511.

Mathiason, C. K., J. G. Powers, S. J. Dahmes, D. A. Osborn, K. V. Miller, R. J. Warren, G. L. Mason, S. A. Hays, J. Hayes-Klug, and D. M. Seelig, et al. 2006. Infectious prions in the saliva and blood of deer with chronic wasting disease. *Science* 314, 133–136.

Miller M. W., and E. S. Williams. 2003. Prion disease: horizontal prion transmission in mule deer. *Nature* 425:35–36.

Nalls, A. V., McNulty, E. E., Mayfield, A., Crum, J. M., Keel, M. K., Hoover, E. A., Ruder, M. G., & Mathiason, C. K. (2021). Detection of Chronic Wasting Disease Prions in Fetal Tissues of Free-Ranging White-Tailed Deer. *Viruses*, 13(12), 2430.

Nalls, A.V., E. McNulty, J. Powers, D.M. Seelig, C. Hoover, N.J. Haley, J. Hayes-Klug, K. Anderson, P. Stewart, W. Goldmann, E.A. Hoover, and C.K. Mathiason. 2013. Mother to offspring transmission of chronic wasting disease in Reeves' muntjac deer. *PLoS ONE* 8(8):e71844. doi: 10.1371/journal.pone.0071844.

Samuel, M. D., D. J. Storm. 2016. Chronic wasting disease in white-tailed deer: infection, mortality, and implications for heterogeneous transmission. *Ecology* 97(11):3195-3205.

Spraker, T. R., A. Balachandran, D. Zhuang, and K. I. O'Rourke. 2004. Variable patterns of distribution of PrP^{CWD} in the obex and cranial lymphoid tissues of Rocky Mountain elk (*Cervus elaphus nelsoni*) with subclinical chronic wasting disease. *The Vet Record* 155(10):295-302.

Thrusfeld, M. 2007. Veterinary epidemiology. Blackwell Science Ltd. Oxford, UK. 610 pgs.

Williams, E. S., M. W. Miller, T.J. Kreeger, and T. E. Thorne. 2002. Chronic wasting disease of deer and elk: a review with recommendations for management. *The Journal of Wildlife Management* 66:551-563.

TABLES

Table 1. Out of state samples collected during the 2024-2025 season per species.

* - Denotes a state that has detected CWD in a captive or wild population

State	Number of samples per species				
	Elk	Mule Deer	White-Tailed Deer	Unknown	Total
Alabama*	-	1	-	-	1
Colorado*	2	1	1	-	4
New Mexico*	11	1	-	-	12
Texas*	-	-	4	-	4
Utah*	-	3	-	-	3
Total out-of-state samples submitted					24

Table 2. CWD samples collected in Arizona and tested by assessed priority area during 2024-2025 sampling.

Region	Species	Hunter Harvested	Targeted/ Opportunistic	Total Tested
High Priority - FOR 1	Elk	170	26	196
	Mule Deer	44	6	50
	White-tailed Deer	11	0	11
High Priority - FOR 2	Elk	2	0	2
	Mule Deer	239	6	245
	White-tailed Deer	1	0	1
	Unknown Species	3	0	3
High Priority - FOR 5	Elk	0	0	0
	Mule Deer	50	2	52
	White-tailed Deer	148	2	150
	Unknown Species	3	0	3
Medium Priority - FOR 1	Elk	17	3	20
	Mule Deer	4	7	11
	White-tailed Deer	0	0	0
Medium Priority - FOR 5	Elk	0	0	0
	Mule Deer	27	0	27
	White-tailed Deer	29	0	29
Low Priority	Elk	315	17	332
	Mule Deer	293	19	312
	White-tailed Deer	82	2	84
	Unknown Species	2	0	2
Tribal Lands	Elk	0	0	0
	Mule Deer	5	0	5
	White-tailed Deer	5	0	5
Out-of-state	Elk	13	0	13
	Mule Deer	6	0	6
	White-tailed Deer	5	0	5
Unknown GMU	Elk	3	0	3
	Mule Deer	1	0	1
	White-tailed Deer	1	0	1
Total		1479	91	1570

^aTargeted/Opportunistic samples include animals displaying clinical symptoms of chronic wasting disease that were euthanized, roadkill specimens, and animals found dead of no apparent causes.

Table 3. List of businesses participating in the CWD surveillance program in 2024-2025.
 * - Denotes business was new to the surveillance program in 2024.

Business Name	City
Authentic Taxidermy	Chino Valley
Backyard Skulls*	Huachuca City
Casey's Processing	Flagstaff
Coconino Game Processing	Flagstaff
Coues Ridge Custom Taxidermy	Tucson
Desert Edge Taxidermy*	Waddell
Grand Canyon Wildlife Artistry	Peoria
Hinton Taxidermy	Safford
Hunters Choice Big Game Processing	Prescott
Krueger's Creations	Phoenix
Lippert/Doyle Taxidermy	Tucson
Miller's Southwest Processing	Alpine, Forest Lakes, Clints Well
Mogollon Taxidermy	Payson
Professional Taxidermy Services	Tucson
Rusty's Meat Shop	Eagar
Signature Taxidermy	Flagstaff
Southwest Wildlife Taxidermy	Scottsdale
T-Basix Taxidermy	Tucson
White Mountain Meat Packing	Pinetop-Lakeside
Wes' Western Taxidermy	Phoenix

Table 4. Age classification of animals tested for Chronic Wasting Disease during the 2020-2021 to 2024-2025 sampling periods. This table does not include samples with unknown species, unknown age classification, samples from tribal lands, or those harvested outside of Arizona.

Sampling Season	Species	Age Class								M:F Ratio
		Juvenile (<1.5)		Sub-Adult (1.5 - 2.5)		Adult (>2.5 - 4.5)		Old Adult (5+)		
		M	F	M	F	M	F	M	F	
2020-2021	Elk	4	10	42	26	170	145	36	18	1.3
	Mule Deer	17	-	132	22	364	97	54	16	4.2
	White-tailed Deer	11	2	66	-	273	3	37	-	77.4
	Age Class Total	44		288		1052		161		
2021-2022	Elk	10	10	49	9	285	60	23	11	4.1
	Mule Deer	35	7	120	2	264	38	33	3	9.0
	White-tailed Deer	9	-	43	4	156	2	19	-	37.8
	Age Class Total	71		227		805		89		
2022-2023	Elk	9	5	38	23	185	97	11	9	1.8
	Mule Deer	40	1	121	3	226	11	40	4	22.5
	White-tailed Deer	12	-	72	-	210	2	30	1	108.0
	Age Class Total	67		257		731		115		
2023-2024	Elk	13	6	30	26	163	167	12	2	1.1
	Mule Deer	27	1	124	3	286	15	44	-	25.3
	White-tailed Deer	13	-	51	-	181	2	18	-	131.5
	Age Class Total	60		234		663		76		
2024-2025	Elk	20	28	51	28	192	189	30	9	1.2
	Mule Deer	57	2	168	3	357	42	46	2	12.8
	White-tailed Deer	17	-	56	-	166	4	38	-	69.3
	Age Class Total	124		306		950		125		

FIGURES

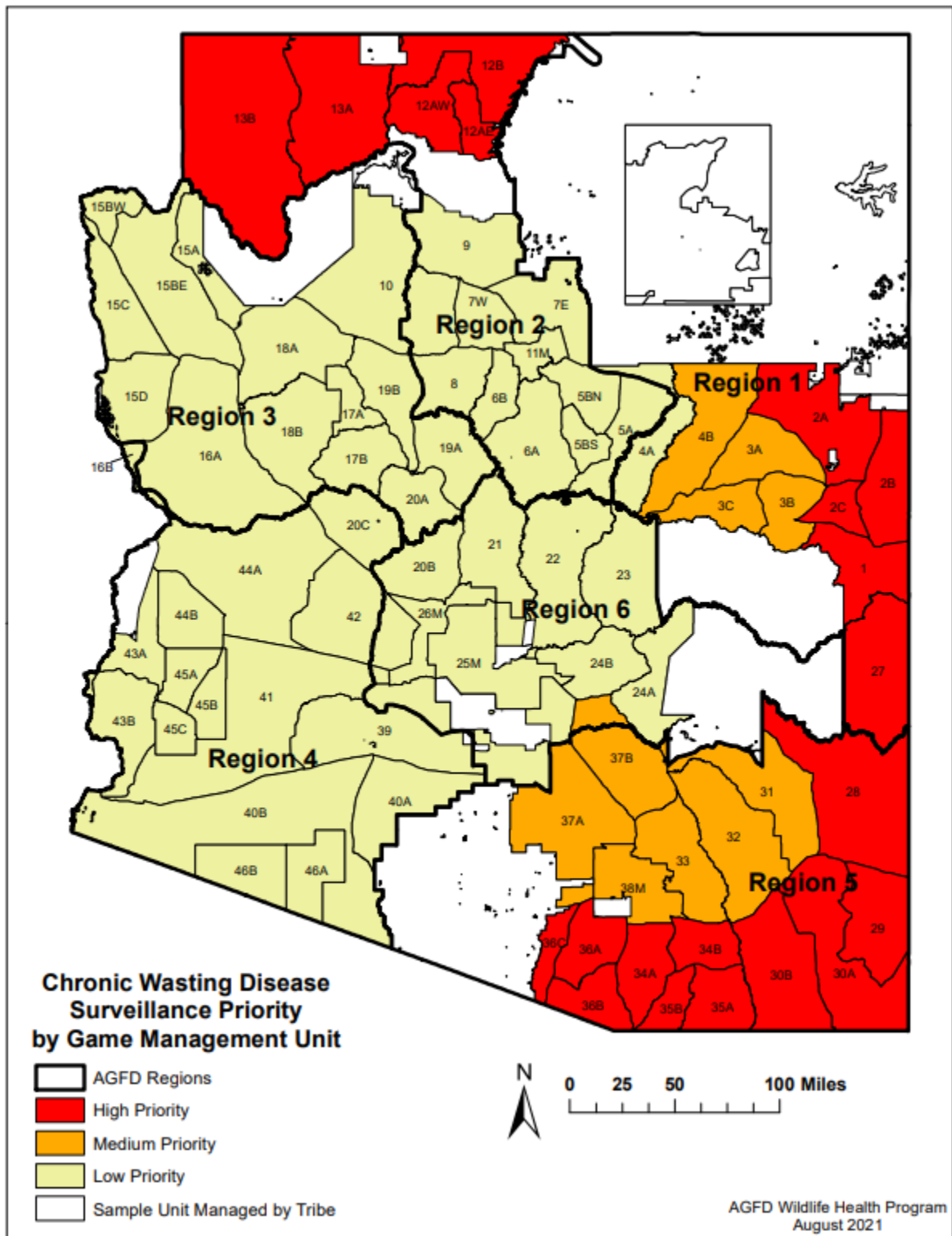


Figure 1. Map of game management units in Arizona classified by chronic wasting disease sampling priority.

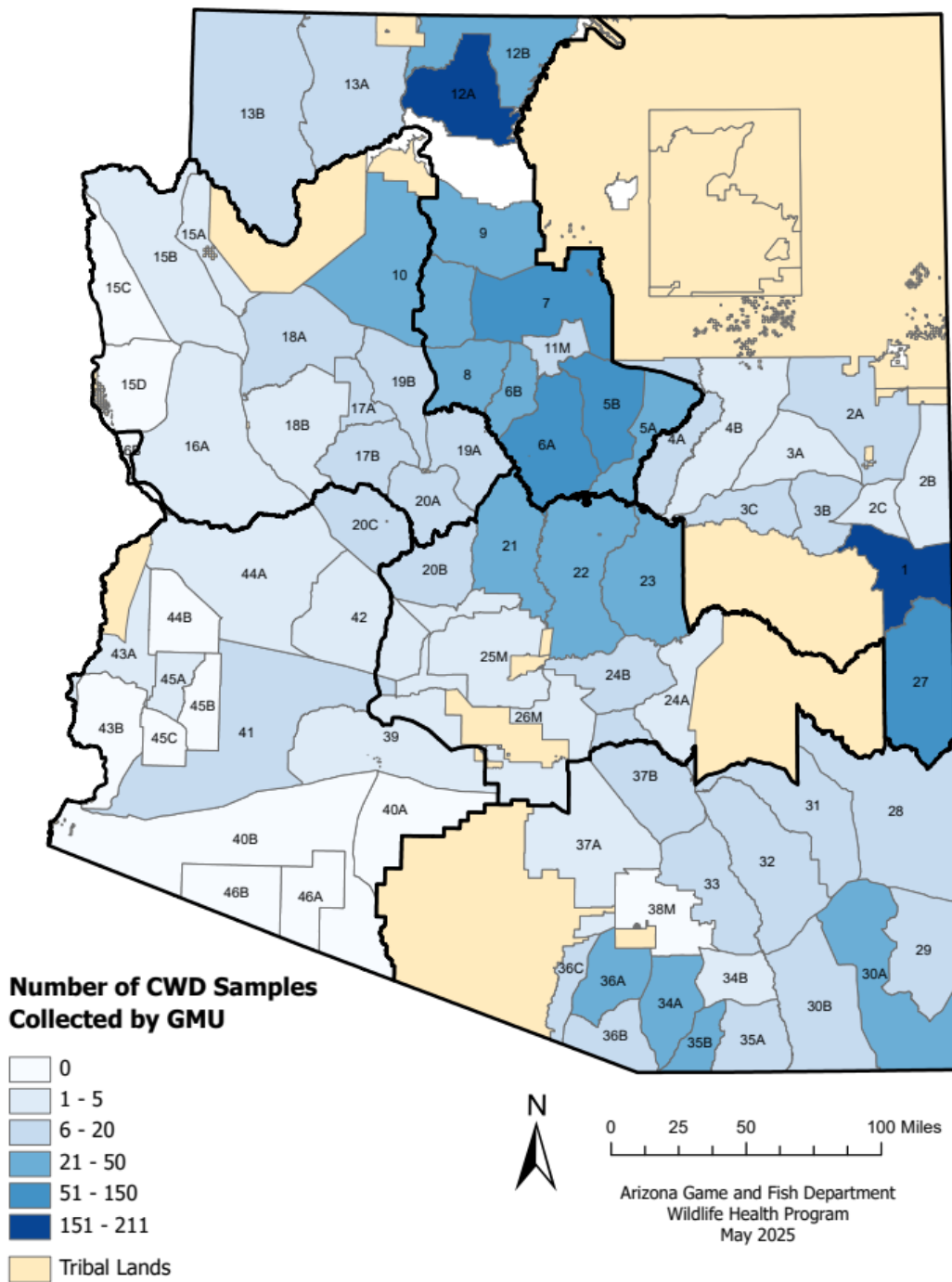


Figure 2. Map showing the number of chronic wasting disease samples in each game management unit (GMU) during the 2024-2025 sample collection season. For animals harvested during hunts that took place in multiple GMUs, the total number of samples was divided between GMUs, if multiple units were listed. Does not include samples for which the GMU was unknown.

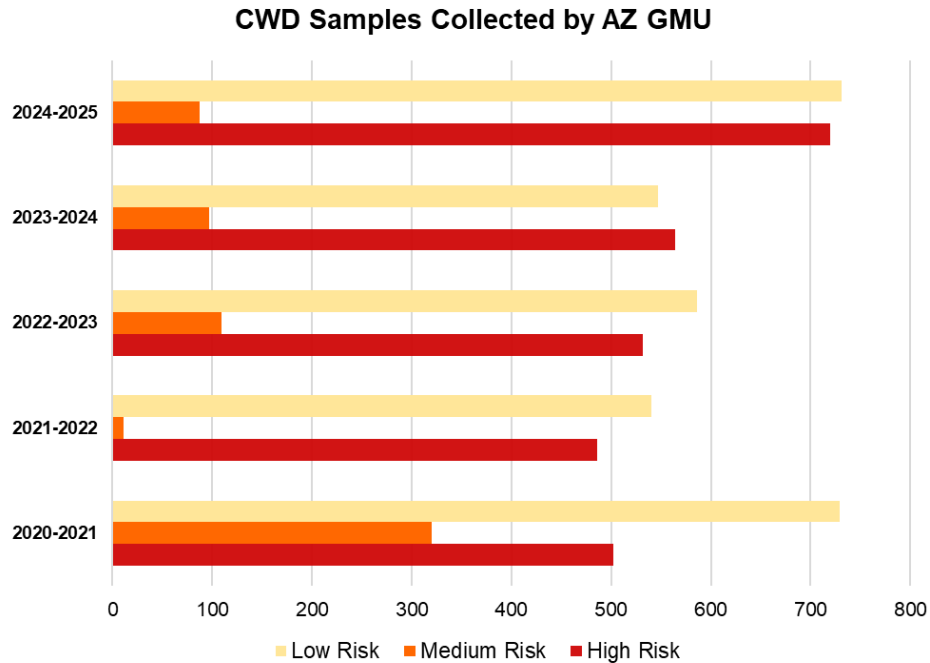


Figure 3. Number of CWD samples collected in Arizona from 2020 to 2025 broken down by designated priority area. Does not include those samples collected from unknown game management units (GMUs), tribal lands, or out-of-state.

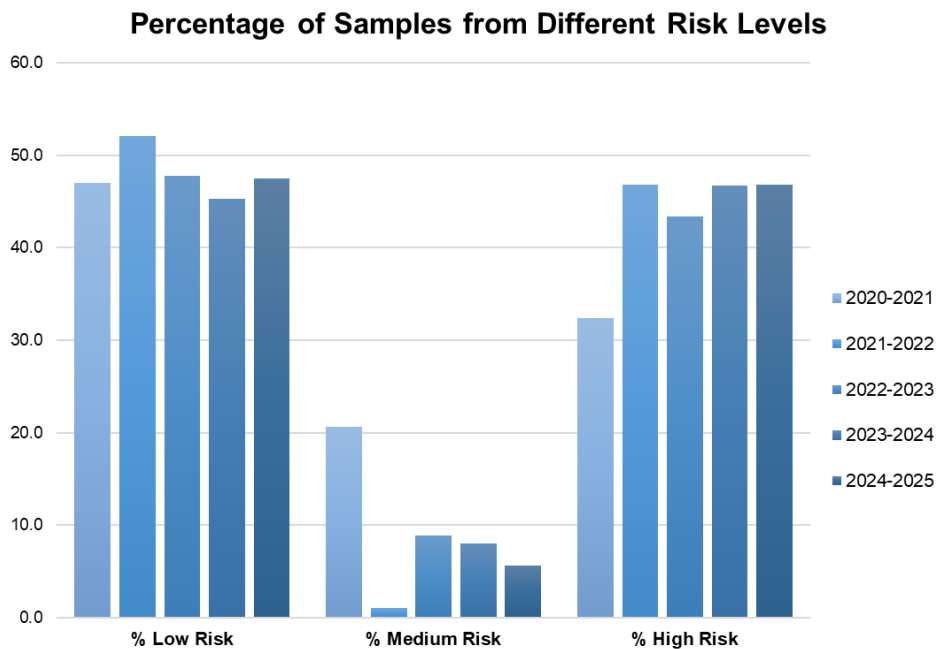


Figure 4. Percentage of CWD samples collected from different priority areas broken down by year. Does not include those samples collected from unknown game management units (GMUs), tribal lands, or out-of-state.

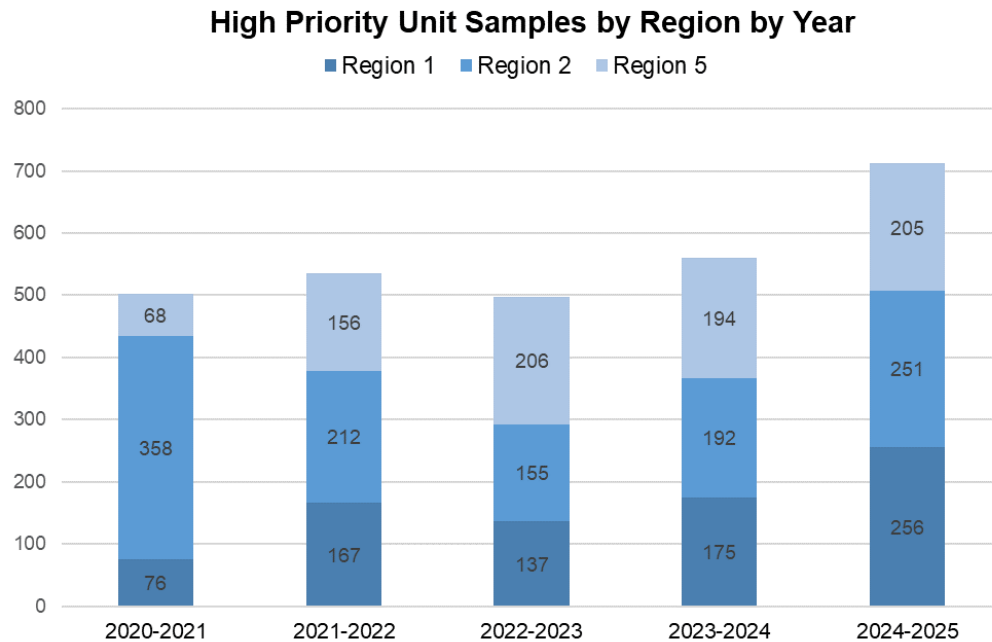


Figure 5. Number and proportion of CWD samples collected from high-priority GMUs within each region. * Note, that in 2021-2022, GMUs were added to the Region 5 High Priority list, changing GMUs 30B, 34A, 34B, 35A, 35B, 36A, 36B, 36C from medium to high priority.



Figure 6. Total number and percentage of the elk and deer that were hunter-harvested in Arizona in the 2024-2025 season that were sampled for CWD vs the total number of animals harvested.

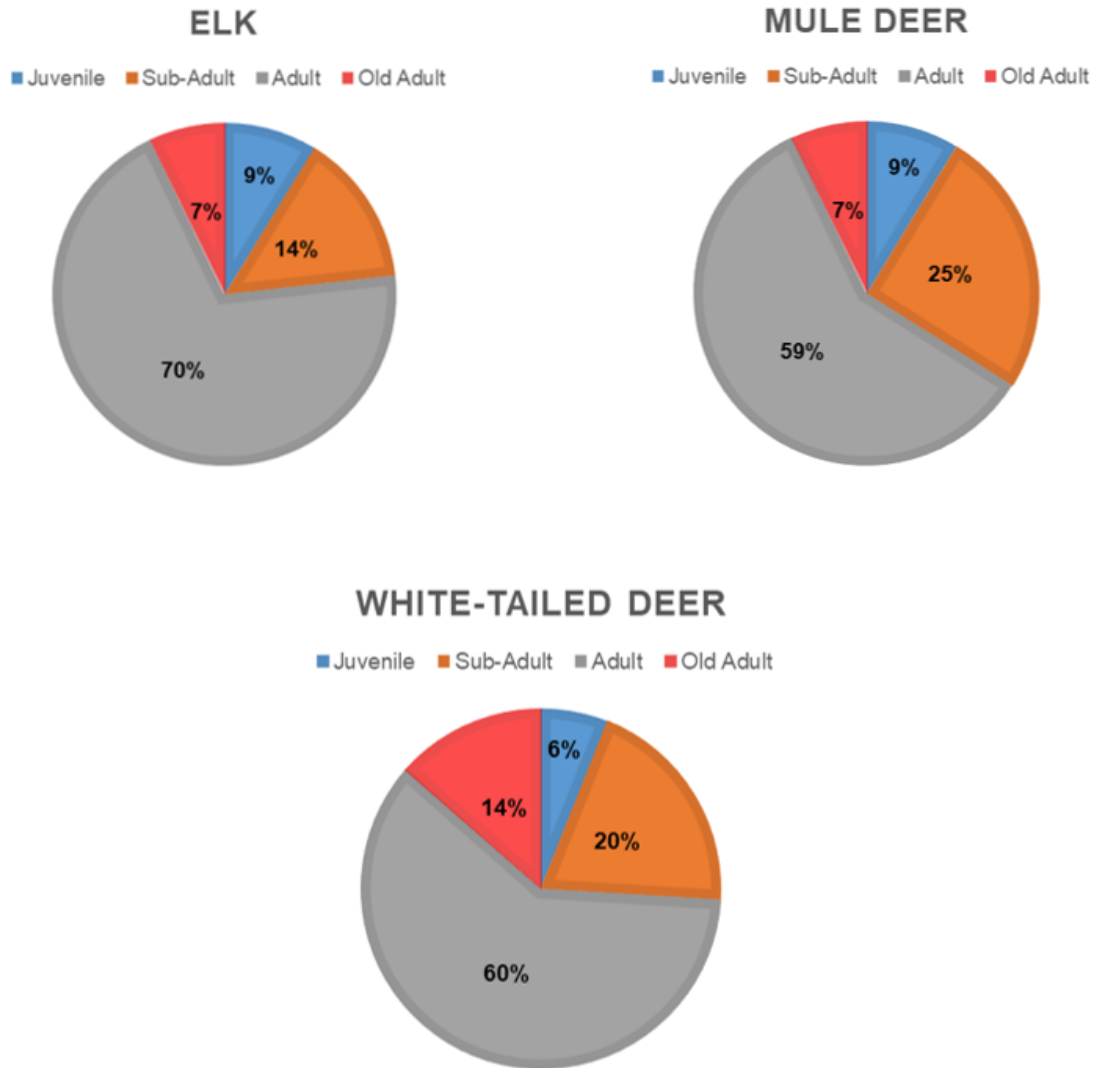


Figure 7. Age percentage distribution of 2024-2025 CWD sampled elk, mule deer, and white-tailed deer.

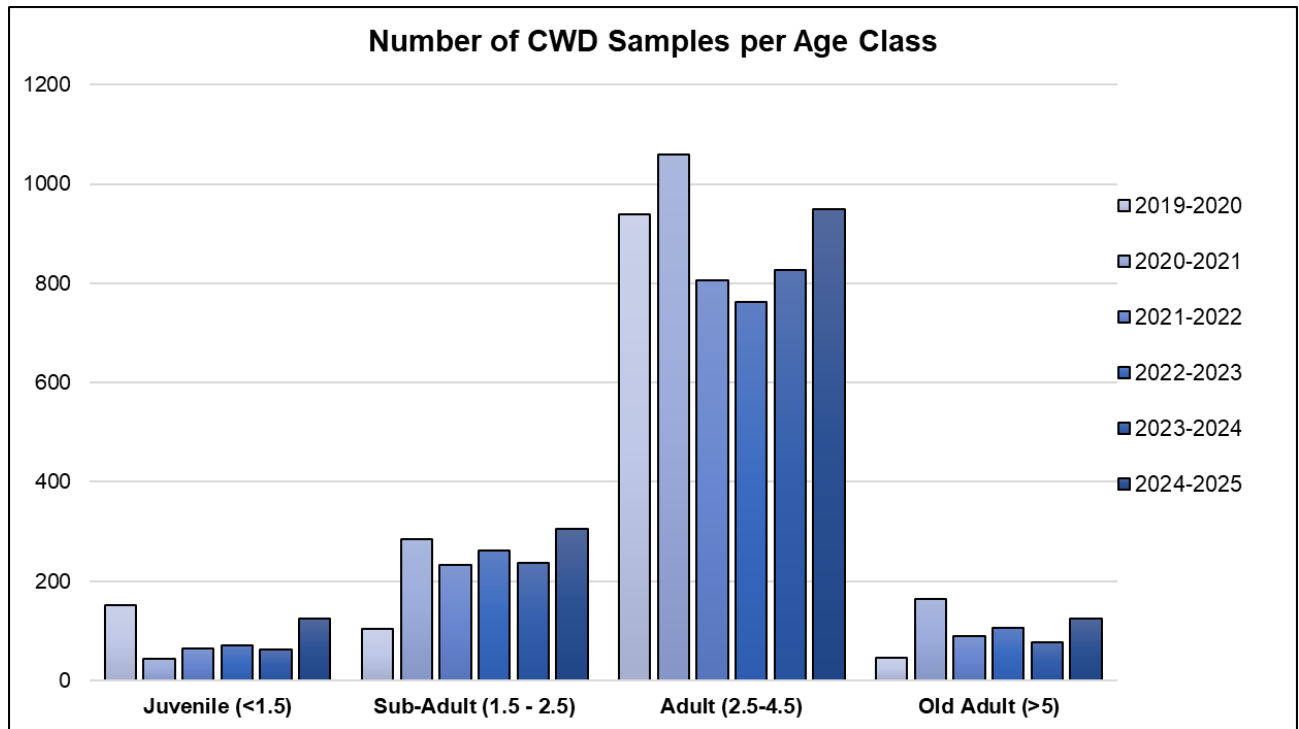


Figure 8. Total number of CWD samples by age class for all species by year for the last six years.

APPENDIX A. INSERTS IN THE 2024 HUNTING REGULATIONS BOOKLETS.

Hunters: Help Protect Arizona Wildlife with Chronic Wasting Disease Surveillance

Your assistance is needed to help the Department detect the introduction of CWD. You may call any Department office (see page 3) to **schedule an appointment** to have a sample collected from the head of your recently harvested deer or elk or contact the CWD program at **CWD@azgfd.gov** to obtain a sampling kit and instructions for collecting your own sample. Samples may be dropped off at any Department office from 8 a.m. to 5 p.m. Monday through Friday. We also have several sample submission freezers around the state (see the website for the locations).

There is no charge to the hunter for CWD testing. Hunters that are successful in units 1, 2A/B/C, 27, 28, 29, 30A/B, 34A/B, 35A/B and 36A/B/C are especially encouraged to submit heads because these units are close to New Mexico, a state that has detected CWD in deer and elk.

It is best if the head or sample has been kept cool and is submitted within a day

of harvest. The head may be placed in a garbage bag for delivery. You will be asked to provide information about your harvested elk (hunt number, permit number, game management unit, and date of harvest) and where you can be reached (phone number) in case the test is positive. No CWD has been detected in Arizona's deer or elk to date.

Help keep CWD out of Arizona

To protect Arizona's deer and elk herds from Chronic Wasting Disease, regulations have been placed on movement of animal parts into the state.

Hunters are required to take these precautions when hunting deer or elk out-of-state:

- Do not bring the brain, intact skull, or spinal column into Arizona.

The following elk or deer parts harvested out-of-state are OK to bring back into Arizona:

- Boneless portions of meat, or meat that

has been cut and packaged;

- Clean hides and capes with no skull or soft tissue attached;
- Antlers, clean skull plates or skulls with antlers attached with no meat or soft tissue remaining, including velvet;
- Finished taxidermy mounts or products, including treated antlers with velvet, and
- Upper canine teeth (buglers, whistlers, ivories) with no meat or tissue attached.

CWD is present in the neighboring states of Utah, Colorado, and New Mexico, as well as many other popular hunting destinations for deer and elk. Many states have strict regulations governing carcass movement and importation, so we encourage you to contact the wildlife agency where you travel for any applicable regulations.

Figure 9. Insert in the 2024 Pronghorn and Elk Hunt Draw Information booklet.

Hunters: Help Protect Arizona Wildlife with CWD Surveillance

Your assistance is needed to help the Arizona Game and Fish Department detect the introduction of CWD. You may call any Department office (see page 3) to schedule an appointment to have a sample collected from the head of your recently harvested deer or elk or review the information on our website (www.azgfd.gov/cwd) to learn how to collect your own sample.

Samples may be dropped off at any Department office from 8 a.m. to 5 p.m. Monday through Friday. We also have several sample submission freezers around the state (see the website for the locations).

There is no charge to the hunter for CWD testing. Hunters that are successful in units 1, 2A/B/C, 27, 28, 29, 30A/B, 34A/B, 35A/B and 36A/B/C are especially encouraged to submit heads because these units are close to New Mexico, Colorado, or Utah; all states that have detected CWD in deer and elk.

It is best if the head or sample has been kept cool and is submitted within a day of harvest. It could also be kept frozen until brought to the Department. The head may be placed in a garbage bag for delivery. You will be asked to provide information about your harvested elk (hunt number, permit number, game management unit, and date of harvest) and where you can be reached (phone number) in case the test is positive.

No CWD has been detected in Arizona's deer or elk to date.

To protect Arizona's deer and elk herds from Chronic Wasting

Disease, regulations have been placed on movement of animal parts into the state.

Hunters are required to take these precautions when hunting deer or elk out-of-state:

- Do not bring the brain, spinal column, or guts into Arizona.

The following elk or deer parts harvested out-of-state are OK to bring back into Arizona:

- Boneless portions of meat, or meat that has been cut and packaged;
- Clean hides and capes with no skull or soft tissue attached;
- Antlers, clean skull plates or skulls with antlers attached without meat or soft tissue remaining, including velvet;
- Finished taxidermy mounts or products, including treated antlers with velvet; and
- Upper canine teeth (buglers, whistlers, ivories) with no meat or tissue attached.

CWD is present in neighboring states and many other popular hunting destinations for deer and elk. Many states have strict regulations governing carcass movement and importation, so we encourage you to contact the wildlife agency where you travel for any applicable regulations.

Learn more: www.azgfd.gov/cwd



Figure 10. Insert in the 2024-2025 Arizona Hunting Regulations booklet.

APPENDIX B. VOLUNTEER RECRUITMENT FLYER



The flyer features a green and white color scheme with silhouettes of deer, elk, and evergreen trees. At the top, the title "Chronic Wasting Disease Volunteer Corps" is prominently displayed in a large, bold, green font. Below the title, the Arizona Game & Fish Department logo is centered. The text explains that CWD is a 100% fatal neurological disease affecting cervids and that while it has not been detected in Arizona, surveillance is crucial due to the state's proximity to CWD+ states. It highlights the Wildlife Health Program's annual collection of over 1200 samples, emphasizing the role of volunteers. A section titled "Volunteer Responsibilities:" lists tasks such as sample collection, public education, transportation, and processing. To the right, a "Join us now!" section encourages scanning a QR code or visiting the website volunteer.azgfd.gov.

Chronic Wasting Disease Volunteer Corps



Chronic Wasting Disease (CWD) is a **100% fatal** neurological disease that affects cervids such as **deer and elk**.

Although CWD has **not been detected in Arizona**, surveillance is important since Arizona borders **four CWD+ states**.

Each year, the **Wildlife Health Program** at **AZ Game & Fish** collects **1200+ samples** with the help of department staff, local businesses, and volunteers like **YOU!**

Volunteer Responsibilities:

- Sample collection at local businesses, check stations
- Public education and sampling at hunt camps
- Sample transportation
- Checking in with local business needs
- Sample processing for submission

Join us now!

Scan the QR code below
or visit volunteer.azgfd.gov



Figure 11. Recruitment flyer for CWD volunteers

APPENDIX C. LETTERS SENT TO PARTICIPATING BUSINESS AND NON-RESIDENT HUNTERS.



June 7, 2024

Dear Business Owner,

This fall, the Arizona Game and Fish Department (AZGFD) will again collect deer and elk lymph nodes for our Chronic Wasting Disease (CWD) Surveillance Program.

Your participation in the 2023-2024 sampling season was critical in helping the CWD Surveillance Program test over 1,200 samples. If your business is again willing to participate, the Department will continue to provide financial compensation in return for collecting, labeling, and storing lymph nodes, as well as completing the accompanying CWD data collection form (see attached). For deer harvested in-state, the compensation rate for the 2024-2025 sampling season is \$10 when lymph node samples are collected (obex are not accepted or reimbursed for deer). For elk harvested in-state, the compensation will be \$10 when the lymph nodes or obex is collected and \$15 when the lymph node and obex is collected. Samples from deer and elk harvested out-of-state are compensated at \$15 per animal. If you are unable or unwilling to take samples yourself, AZGFD can also provide volunteers to take samples at your place of business. However, we would be unable to provide you with compensation for samples collected by AZGFD volunteers. If you would prefer to have a volunteer, please let us know. The following will continue to be required of all businesses participating in the 2024-2025 sampling season.

1. Samples must be stored in a freezer until they can be picked up by department personnel. Program personnel will contact businesses every 2-3 weeks to organize sample pick-ups. Businesses can request additional pick-ups at any time by contacting the Wildlife Health Program.
2. Businesses must be sure that all crucial data (i.e. hunter name, phone number, hunt and permit number, game management unit (GMU), species, harvest date, and animal's approximate age) is complete and legible on the data cards before submitting samples. Reimbursements **will not** be made for cards missing these data.
3. Both the businesses and AZGFD will keep a written record of samples collected. Businesses must submit an invoice at the end of the sampling season to be reimbursed. Please confirm sample numbers with program personnel before submitting an invoice. Reimbursement typically occurs mid-March to early April.

As you are aware, AZGFD has divided the state into high, medium, and low risk areas based on proximity to states where CWD has been found in wild cervid populations (see attached map). We ask that businesses concentrate sample collection efforts on animals harvested from the high and medium risk Game Management Units (GMU). However, we encourage businesses to collect **all samples** received from throughout the state, as well as those brought in from other states or at the hunter's request.

If you decide to continue your participation in the CWD Surveillance Program, AZGFD will provide sampling kits, sample collection instructions, and a map of risk designations of GMUs. These supplies will be delivered in August. Additional supplies will be provided upon request.

To verify your participation, or if you have any questions, comments, or concerns regarding the program, please feel free to contact me at any time.

Sincerely,

Sathvik Nallagatla
Wildlife Health Intern
snallagatla@azgfd.gov
Office: (623) 236-7674

Katie Schwartz, DVM
Assistant Wildlife Veterinarian
kschwartz@azgfd.gov
Office: (623) 236-7227

Anne Justice-Allen, DVM
Wildlife Veterinarian
Wildlife Health Program Supervisor
AJusticeAllen@azgfd.gov

azgfd.gov | 602.942.3000

5000 W. CAREFREE HIGHWAY, PHOENIX AZ 85086

GOVERNOR: KATIE HOBBS COMMISSIONERS: CHAIRMAN TODD G. GEILER, PRESCOTT | CLAY HERNANDEZ, TUCSON | MARSHA PETRIE SUE, SCOTTSDALE
JEFF BUCHANAN, PATAGONIA | JAMES E. GOUGHNOUR, PAYSON DIRECTOR: TY E. GRAY DEPUTY DIRECTOR: TOM P. FINLEY

Figure 12. Recruitment letter to taxidermists and meat processors that did participate in past sampling years asking for chronic wasting disease sample collection for the 2024-2025 sampling season. Priority area map and example head tag were also provided.



June 7, 2024

Dear Business Owner,

Each fall, the Arizona Game and Fish Department (AZGFD) collects deer and elk lymph nodes for our Chronic Wasting Disease (CWD) Surveillance Program. In the past, we solicited the help of local taxidermists, meat processors and hunt guides in order to attain our target sample size and get a wide geographic representation of samples. With your help, we can better keep Arizona's deer and elk herds healthy and prevent the spread of CWD into Arizona.

If your business is willing to participate, the Department will provide financial compensation in return for collecting, labeling, and storing the lymph nodes, as well as completing the accompanying CWD data collection form (see attached sample). For deer harvested in-state, the compensation rate for the 2024-2025 sampling season is \$10 when lymph node samples are collected (obex are not accepted or reimbursed for deer). For elk harvested in-state, the compensation will be \$10 when the lymph nodes or obex is collected and \$15 when the lymph node and obex is collected. Samples from deer and elk harvested out-of-state are compensated at \$15 per animal. The following will be required of all businesses participating in the 2024 sampling season:

1. All individuals who will be sampling lymph nodes must participate in AZGFD training, which we will provide at your place of business.
2. Samples must be stored in a freezer until they can be picked up by department personnel. Program personnel will contact businesses every 2-3 weeks to organize sample pick-ups. Businesses can request additional pick-ups at any time by contacting the Wildlife Health Program.
3. Businesses must be sure that all crucial data (i.e., hunter name; phone number; game management unit (GMU); hunt and permit numbers; and species, harvest date, and animal's approximate age) is complete and legible on the data cards before submitting samples. Reimbursements **will not** be made for cards missing these data.
4. Both the business and AZGFD will keep a written record of samples collected. Businesses must submit an invoice at the end of the sampling season to be reimbursed. Please confirm sample numbers with program personnel before submitting an invoice. Reimbursement typically occurs mid-March to early April and requires registration and enrollment in the Arizona Procurement Portal (APP).

AZGFD has divided the state into high, medium and low risk areas based on proximity to areas in other states where CWD has been found in wild cervid populations (see attached map). We ask that businesses concentrate sample collection efforts on animals harvested from the high and medium risk Game Management Units (GMU). However, we encourage businesses to collect **all samples** received from throughout the state, as well as those brought in from other states or at the hunter's request.

If you decide to participate in the CWD Surveillance Program, AZGFD will provide training, sampling kits, sample collection instructions, and a map of risk designations of GMUs. These supplies will be **delivered by August**. Additional supplies will be provided upon request. Taxidermists, meat processors and outfitters play an especially essential role in our program as they often collect the majority of our samples, greatly expanding our capacity to monitor our state's deer and elk herds.

We sincerely appreciate the help we receive from our local businesses in keeping Arizona a CWD free state. Thank you for your support of the CWD Surveillance Program, we hope that your business will be interested in participating in during the sampling season. If you would like to participate, have any questions, comments or concerns regarding the program, please feel free to contact me.

Sincerely,

Sathvik Nallagatla

Wildlife Health Intern

snallagatla@azgfd.gov

Office: (623) 236-7674

Anne Justice-Allen, DVM

Wildlife Veterinarian

Wildlife Health Program Supervisor

AJusticeAllen@azgfd.gov

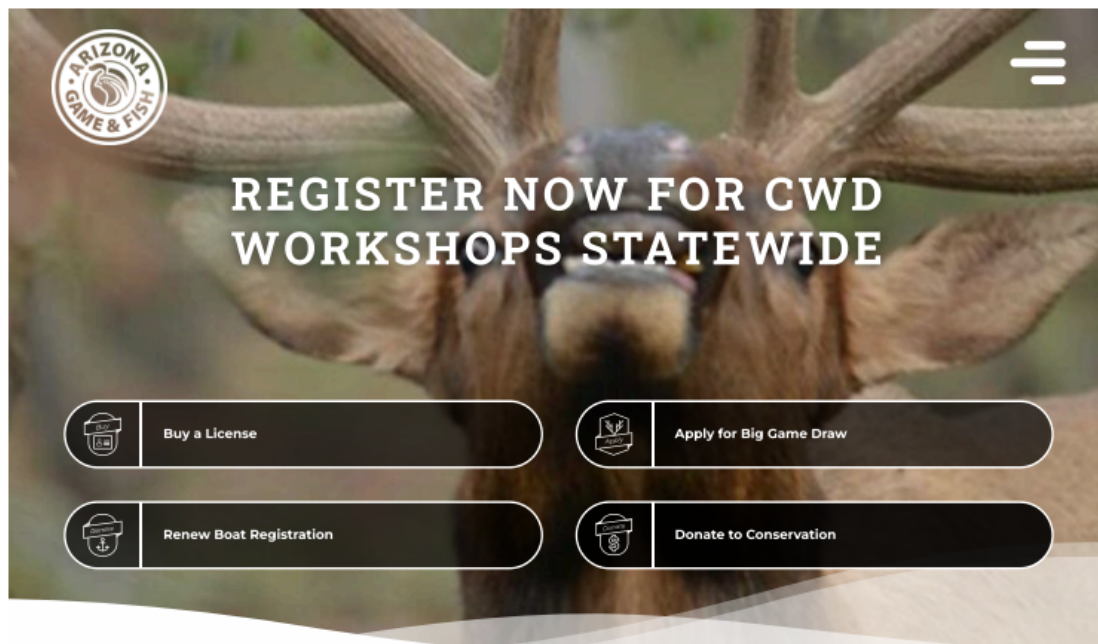
azgfd.gov | 602.942.3000

5000 W. CAREFREE HIGHWAY, PHOENIX AZ 85086

GOVERNOR: KATIE HOBBS COMMISSIONERS: CHAIRMAN TODD G. GEILER, PRESCOTT | CLAY HERNANDEZ, TUCSON | MARSHA PETRIE SUE, SCOTTSDALE
JEFF BUCHANAN, PATACONIA | JAMES E. GOUGHNOUR, PAYSON DIRECTOR: TY E. GRAY DEPUTY DIRECTOR: TOM P. FINLEY

Figure 13. Letter to new taxidermists, meat processors, and outfitters that had not participated in past sampling years asking for chronic wasting disease sample collection for the 2024-2025 sampling season. Priority area map and example head tag were also provided.

APPENDIX D. PUBLIC NEWS MEDIA RELEASES, WEBSITE



NEWS RELEASE

July 30, 2024

PHOENIX — The Arizona Game and Fish Department (AZGFD) encourages all deer and elk hunters to attend an upcoming workshop about Chronic Wasting Disease (CWD), a fatal wildlife disease that affects the nervous system of cervid animals.

A total of eight workshops will be conducted at department headquarters and regional offices. All of the workshops will include a short lecture (20 to 30 minutes), followed by an outdoor demonstration (also 20 to 30 minutes) on how to collect and submit the required lymph node tissue sampling for testing. There also will be opportunities to speak with wildlife health personnel.

Hunters can register by sending an email to: snallagatia@azgfd.gov and include name, phone number, email address for each registrant, and preferred workshop date and location. Or register [here](#).

The workshops:

- **10 a.m. Aug. 3:** 3500 S. Lake Mary Road, **Flagstaff.**
- **6 p.m. Aug. 6:** 5000 W. Carefree Highway, **Phoenix.**
- **10 a.m. Aug. 10:** 9140 E. 28th St., **Yuma.**
- **6 p.m. Aug. 13:** 555 N. Greasewood Road, **Tucson.**
- **10 a.m. Aug. 17:** 2878 E. White Mountain Blvd., **Pinetop.**
- **10 a.m. Aug. 24:** 5325 N. Stockton Hill Road, **Kingman.**
- **10 a.m. Sept. 14:** 555 N. Greasewood Road, **Tucson.**
- **10 a.m. Sept. 21:** 7200 E. University Drive, **Mesa.**

AZGFD has been testing for the presence of the disease in Arizona since 1998 and has tested more than 30,000 samples. While CWD has been found in the neighboring states of California, Utah, New Mexico and Colorado, the disease has not been detected in Arizona. CWD has not been documented to cause disease in people.

SUBSCRIBE TO OUR NEWSLETTER

Figure 14. News media release encouraging hunters to attend CWD sampling training seminar at each of the regional offices in late summer/early fall of 2024.



NEWS RELEASE

Dec. 11, 2024

PHOENIX — The Arizona Game and Fish Department (AZGFD) is asking hunters to continue doing their part to help keep Chronic Wasting Disease (CWD) at bay. CWD is a fatal wildlife disease that affects the nervous system of deer and elk.

All successful deer and elk hunters are encouraged to bring the head of their harvested animal — especially bucks and bulls — to any [department office statewide](#) between 8 a.m. and 5 p.m. Monday through Friday. The department is requesting that hunters call in advance before delivering a head for sampling.

The preferred method for storage is to place the head in a heavy-duty plastic trash bag, and keep it cold or frozen until it can be sampled. The department also requests hunters to provide accurate hunter information (name, telephone number), as well as hunt information (hunt number, game management unit in which the animal was harvested, state, and hunting license number). This information is crucial should CWD be detected in a sample.

As an alternative, hunters can view an instructional video on how to collect their own samples on AZGFD's website (www.azgfd.com/healthy), then bring those samples to any department office statewide.

AZGFD is hoping to sample 1,500 deer and elk this season.

Department officials have not detected any cases of CWD in the 750-plus deer (mule and white-tailed) and elk that have been harvested by hunters and voluntarily submitted for testing this fall. Game and Fish has been testing for the presence of the disease in Arizona since 1998. While CWD has been found in the neighboring states of Utah, New Mexico and Colorado, the disease has not been detected in Arizona. CWD has not been documented to cause disease in people.

CWD is transmitted and spread by animal movement and direct contact, which means the illegal importation of a cervid carcass or parts with brain or spinal column tissue of an infected animal could introduce the disease into Arizona. For that reason, AZGFD urges hunters who return to Arizona with a harvested deer or elk from another state to follow these guidelines:

- Boneless portions of meat, or meat that has been cut and packaged.
- Clean hides and capes with no skull or soft tissue attached.
- Antlers, clean skull plates or skulls with antlers attached with no meat or soft tissue remaining.
- Finished taxidermy mounts or products (hunters may ship their harvested animal to a taxidermist).
- Upper canine teeth with no meat or tissue attached.
- Do not bring the brain, intact skull or spinal column of a deer or elk harvested in another state back into Arizona.

It may take longer than a year before an infected deer or elk develops symptoms of CWD, which can include drastic weight loss (wasting), stumbling, being unaware of its surroundings, and other neurological symptoms. CWD can infect deer and elk animals of all ages, although it's most frequently noticed in older animals. CWD is fatal, and there are no treatments or vaccines.

All hunters are advised not to shoot, handle or consume any animal that is acting abnormally or appears to be sick. Wear latex or rubber gloves when field dressing deer or elk. All hunters are asked to contact the department at 623-236-7201 if they see or harvest an animal that appears to be sick.

For information about importation of harvested animals in other states, contact that state's wildlife management agency. For more information about CWD, visit www.azgfd.com/healthy.

Figure 15. News media release encouraging hunters to follow CWD transportations regulations.



NEWS RELEASE

May 18, 2025

PHOENIX — The Arizona Game and Fish Department (AZGFD) has announced that Arizona continues to be clear of Chronic Wasting Disease (CWD), a fatal wildlife disease that affects the nervous system of deer and elk.

CWD has now been detected in 36 states and five Canadian provinces, with some states reporting depressed deer and elk populations as a result of the disease.

Department officials did not find any cases of CWD in the 1,543 deer (mule and white-tailed) and elk that were sampled in 2024. AZGFD collected 711 samples from animals that were harvested and voluntarily submitted by hunters, and another 787 samples through partnerships with game processors and taxidermists. An additional 45 samples were obtained from high priority animals that were involved in vehicle collisions or subject to other fatalities.

The department has prioritized sample collections based on the occurrence of the disease in neighboring states — 733 samples were collected from high priority areas. AZGFD also tested 22 samples from animals that were harvested outside of Arizona. As a reminder, hunters should only bring packaged meat, quarters, cleaned skulls, or finished taxidermy mounts into the state.

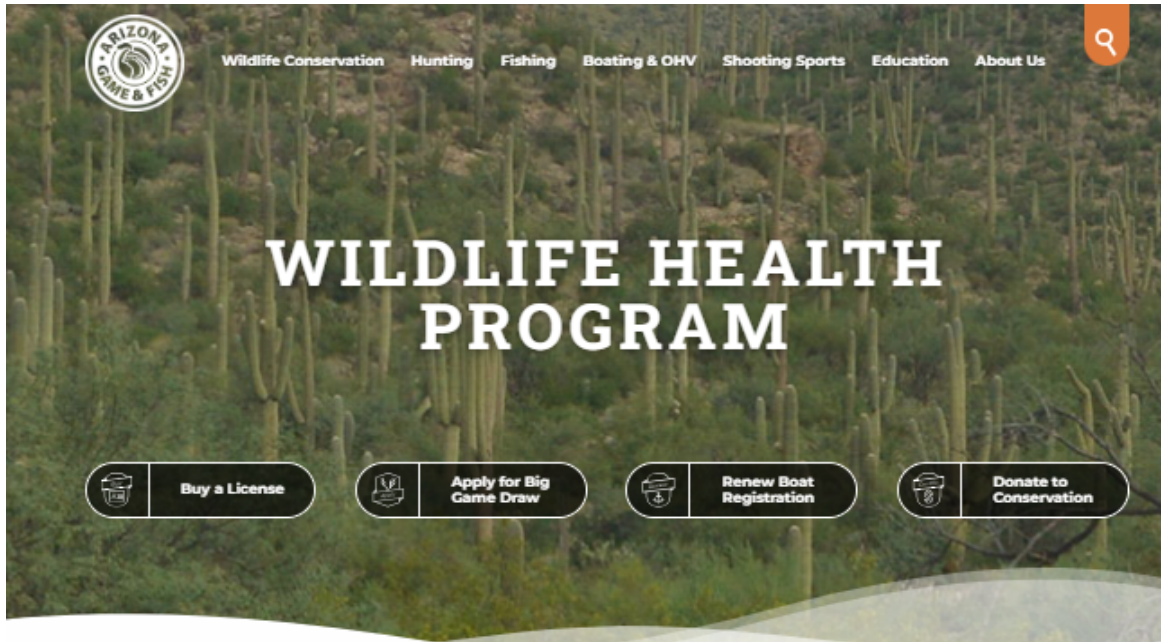
AZGFD has been testing for the presence of the disease in Arizona since 1998. While CWD has been found in the neighboring states of Utah, New Mexico, Colorado, and California, the disease has not been detected in Arizona. CWD has not been documented to cause disease in people.

AZGFD appreciates the assistance of hunters who submit deer and elk heads for testing, as well as the cooperation of game processors and taxidermists. For more information about CWD, visit www.azgfd.com/healthy.

SUBSCRIBE TO OUR NEWSLETTER

SUBSCRIBE >

Figure 16. News release summarizing the end of the 2024-2025 sampling season. Results were preliminary at release time.

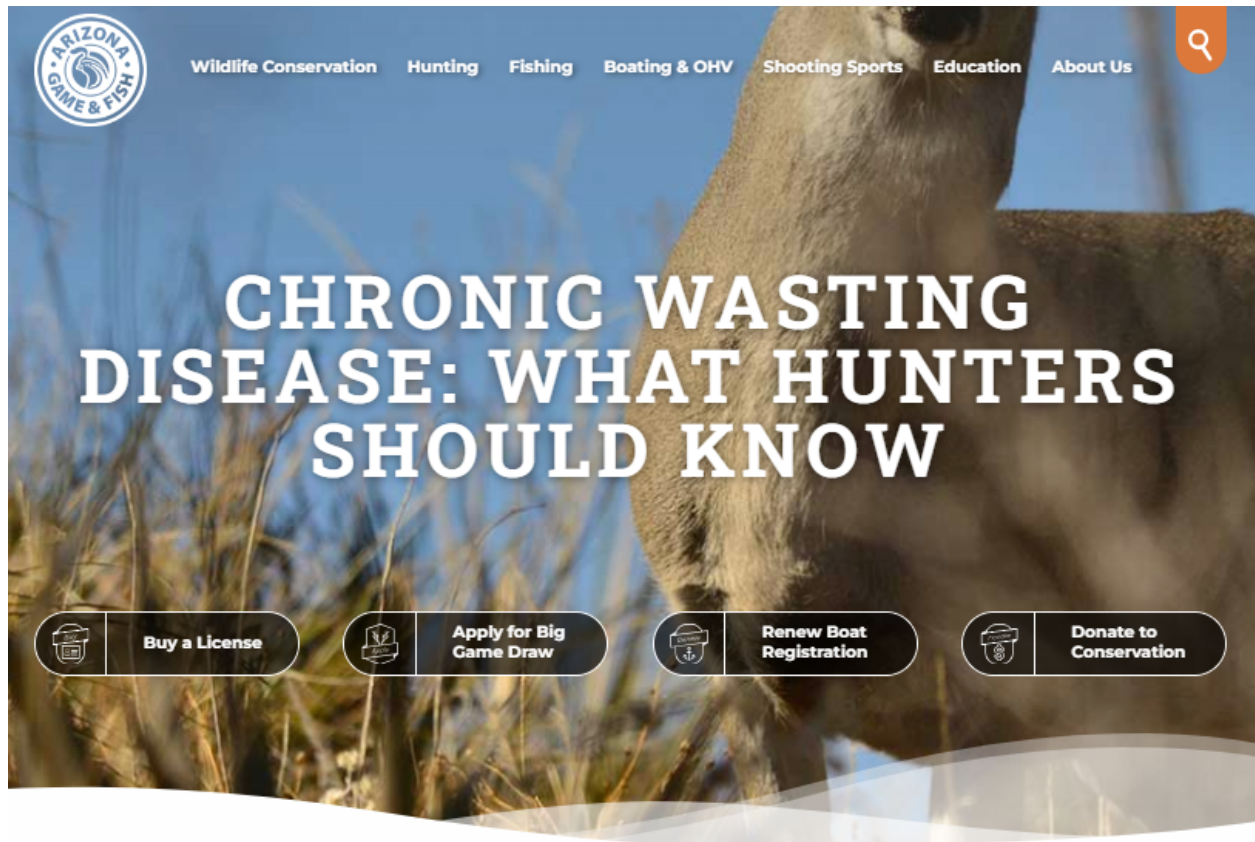


Wildlife Associated Diseases and Health Monitoring

Wildlife resources are under constant change due to human population growth, introduction of invasive species, and habitat loss and degradation. These factors can contribute to the emergence of infectious diseases. Wildlife species are subject to diseases resulting from exposure to bacteria, viruses, parasites, toxins, and other biological and physical agents. Wildlife species can be natural hosts for diseases that affect humans. The diseases which are directly transmitted from animals to humans are referred to as zoonotic diseases. Diseases transmitted from animals to human via vectors (usually through insect bites) are referred to as vector-borne diseases. The Department investigates significant wildlife disease and mortality events.

This image shows a section of the AZGFD website dedicated to Chronic Wasting Disease (CWD). On the left is a photograph of a deer's head with large, velvet-covered antlers. To the right of the photo, the text 'CHRONIC WASTING DISEASE' is displayed in bold, blue, sans-serif capital letters. Below this, there are two lines of text in a smaller, blue, sans-serif font, both underlined: 'Chronic Wasting Disease – What to Know Before the Hunt' and 'State Carcass Transport Regulations'.

Figure 17. Front page of the Wildlife Health Program page on the AZGFD website, accessed at azgfd.com/healthy.



Help Keep Arizona Herds Healthy

Chronic wasting disease has not been detected in Arizona's deer or elk, and the Arizona Game and Fish Department wants to do everything it can to keep it that way. Hunters can help by providing samples from harvested animals and following requirements when bringing game meat into Arizona from another state.

Figure 18. CWD information page, accessed from the Wildlife Health Program page (azgfd.com/healthy). Scrolling provides general information on CWD and surveillance in Arizona, answers to common questions, carcass transport regulations, a how-to video for CWD sampling, and more.

APPENDIX E. ADDITIONAL INFORMATION FOR BUSINESSES

 Arizona Game and Fish Department Chronic Wasting Disease Monitoring	
Hunt Information	
GMU: _____	Hunt #: _____
Harvest Date: _____	Permit #: _____
Hunter Information	
Name: _____	
First	Last
Phone Number: () _____	
Animal Information	
Species ☐ Mule Deer ☐ Elk ☐ WT Deer	Age ☐ Juvenile (< 1.5 years) ☐ Sub-Adult (1.5 – 2.5 years) ☐ Adult (2.5 – 4.5 years) ☐ Old Adult (>5 years) If adult, estimate age in years
Sex ☐ Male ☐ Female	
Surveillance Method	Collector
☐ Hunter Harvested ☐ Roadkill ☐ Found Dead ☐ Targeted	Business: _____ Name: _____ _____

 Arizona Game and Fish Department Chronic Wasting Disease Monitoring	
Sample Collection	
Date: _____	
☐ <i>Check if sampled by head collector</i>	
Business: _____	
Name: _____	
Sample Collected	
☐ RPLN ☐ SMLN ☐ PLN ☐ Tonsil ☐ Obex	<i>Place CWD Sample ID Sticker Here</i>
Comments	

Figure 19. Imagery created for CWD head collector tags (internal release only).

ARIZONA GAME AND FISH DEPARTMENT

Certificate of Appreciation



presented to

Business

***For your assistance during the 2024-2025
Chronic Wasting Disease Surveillance Program***



Dr. Ann Fan, Assistant State Wildlife Veterinarian

Dr. Anne Justice-Allen, State Wildlife Veterinarian

Figure 20. Certificate of appreciation sent to 2024-2025 participating businesses.