

# Chronic Wasting Disease Management 2021 - 2022

Melia DeVivo  
Ungulate Research Scientist



# Agenda

- Background and History
- CWD Management Plan
  - Chapters = Objectives
    - What we have accomplished to date
    - What we are currently working on and planning for in 2022





# What is Chronic Wasting Disease (CWD)?

Order

Artiodactyla  
(Even-toed  
Ungulates)

Family

Bovidae

Cervidae

Genus

Ovis

Bos

Cervus

Alces

Odocoileus

Rangifer

Species

*Ovis aries*

*Bos taurus*

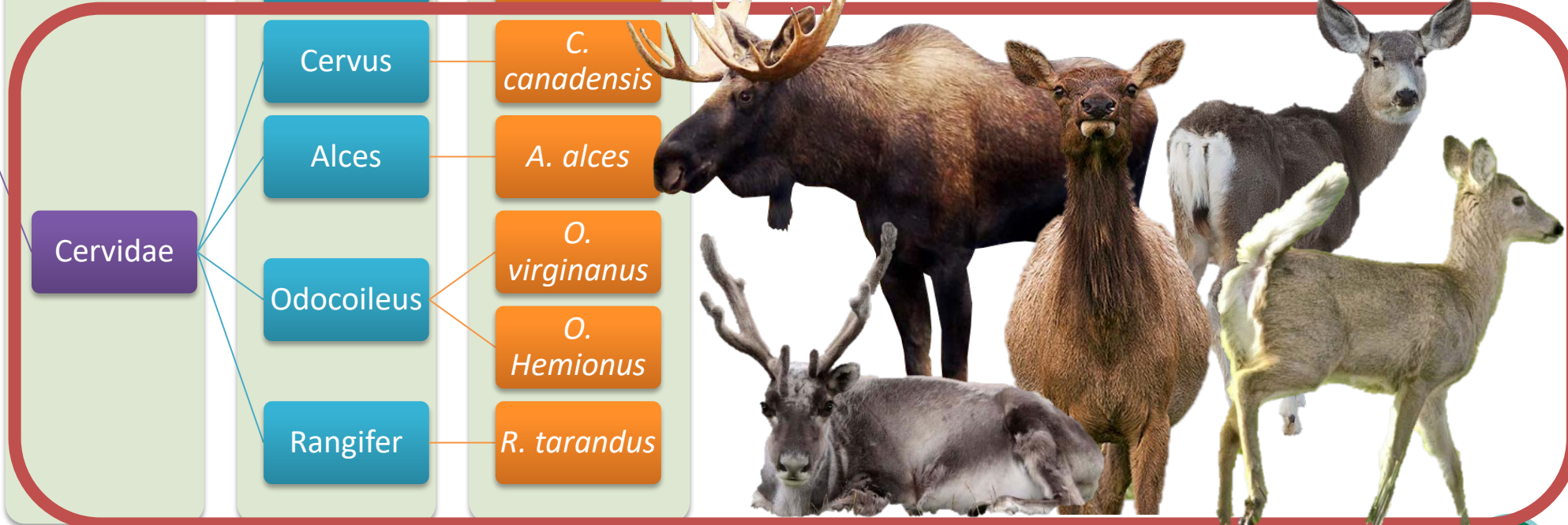
*C. canadensis*

*A. alces*

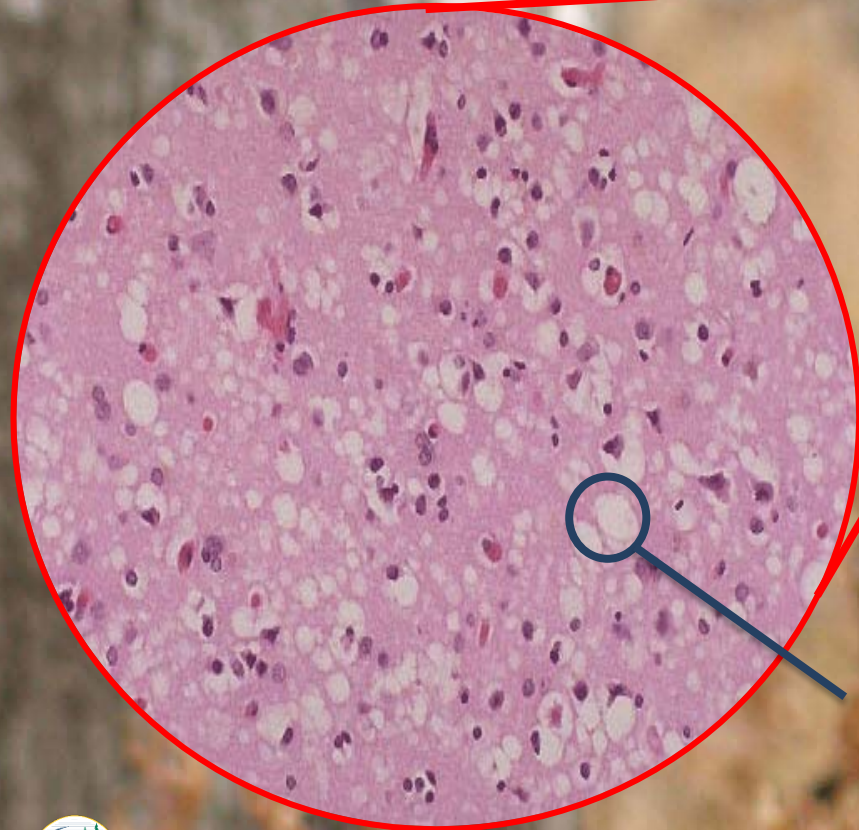
*O. virginianus*

*O. Hemionus*

*R. tarandus*



# Transmissible Spongiform Encephalopathy

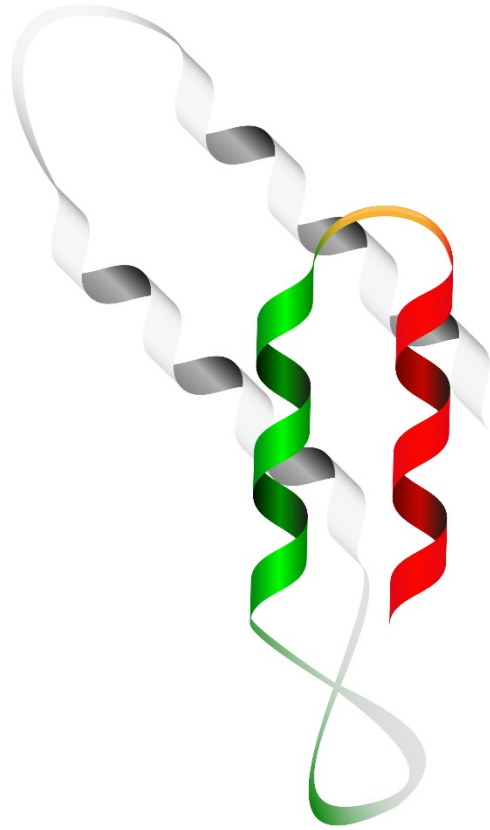


Sponge-like lesion



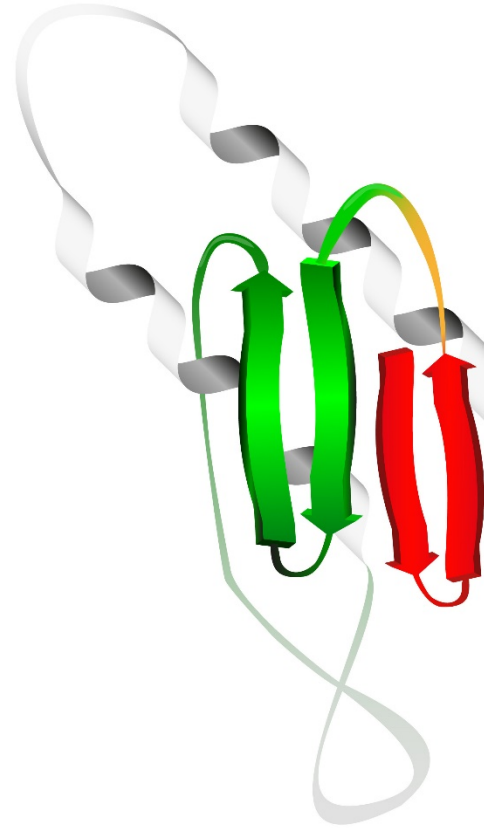
**PrP<sup>C</sup>**

is a normal protein



**PrP<sup>Sc</sup>**

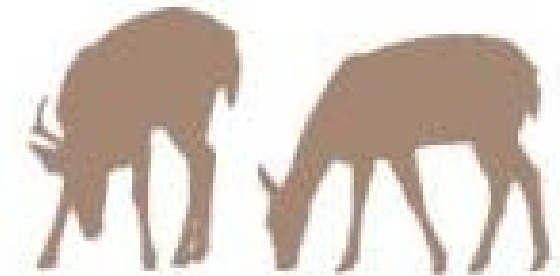
the disease-causing form of the  
prion protein



# Transmission



Direct Transmission



Indirect Transmission



# Most CWD infected animals look normal



The only way to know is to test!



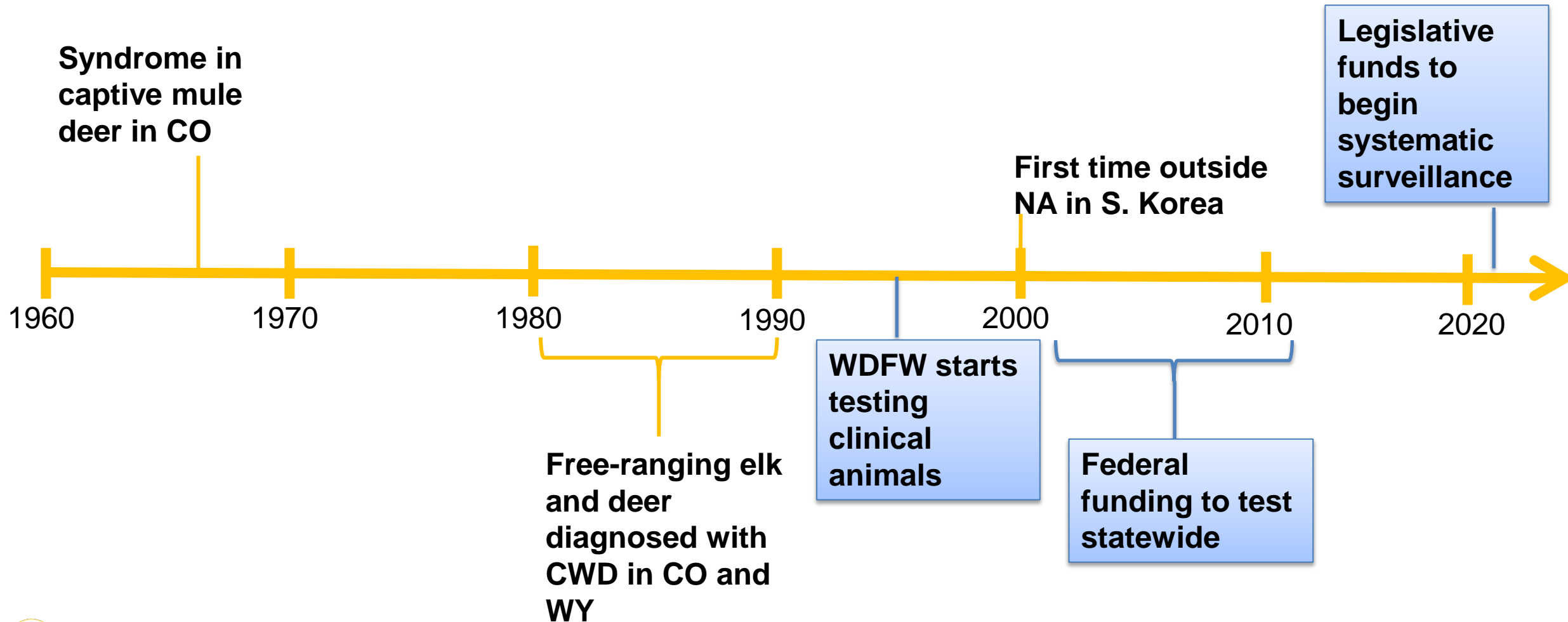


# Wildlife Populations

- Increased wildlife-vehicle collisions
- Changes to age-structure and genetics
- Predator-prey dynamics
- Population declines

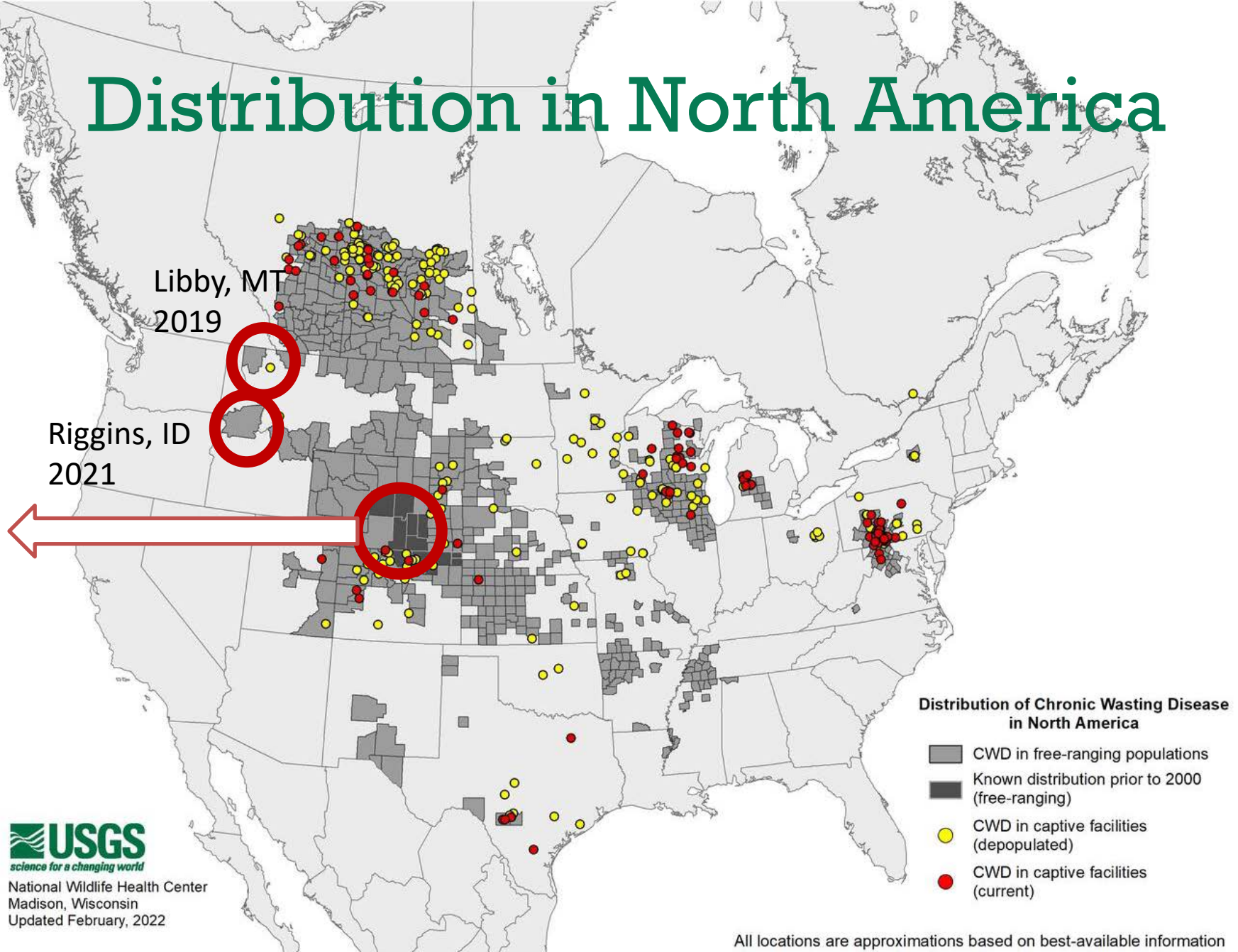


# History of CWD surveillance



# Distribution in North America

First detections  
in 1960s



All locations are approximations based on best-available information



# Washington's CWD status



No cases of CWD detected to date, but limited testing prevents detection at low prevalence



The risk of natural transmission increased significantly in the last several years with new detections in MT and ID



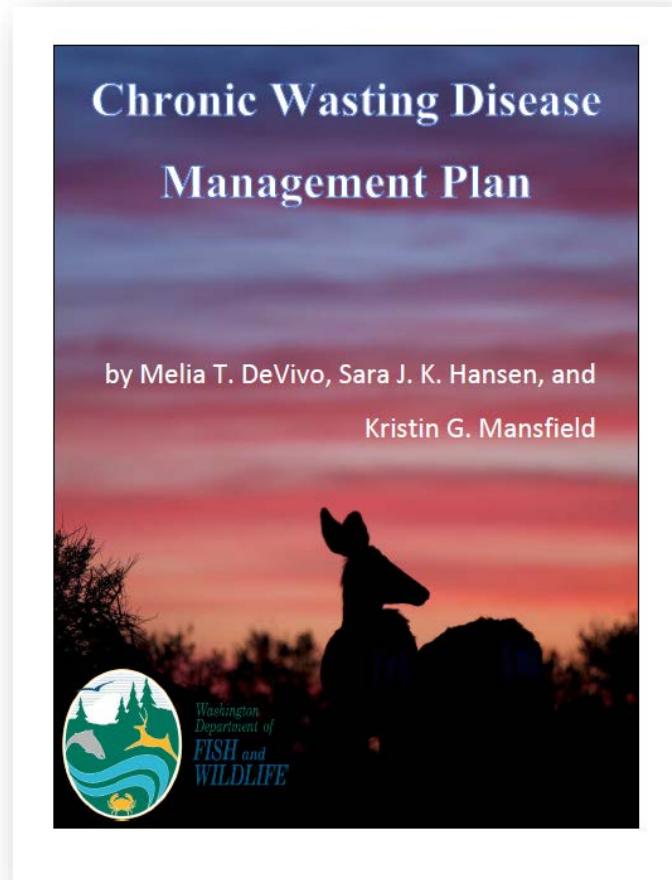
Rules and regulations aimed at reducing human-assisted CWD transmission are in place, but more can be done





# CWD Management Plan

# Plan Chapters



1. CWD Background
2. Public Outreach and Communication
3. Risk Assessment and Minimization
4. Pre-Detection Surveillance
5. Initial Emergency Response

DeVivo, M. T., S. J. K. Hansen, and K. G. Mansfield. 2021. Washington State Chronic Wasting Disease (CWD) Management Plan. Washington Department of Fish and Wildlife, Olympia, Washington, USA.



# Plan Objectives

1. Proactively build trust with and support from the public



# Public Outreach Efforts 2021-2022

## Presentations

**Sept. 2021** - Presentation to Cattle Producers of Washington

**Oct. 2021** - Presentation at INWC meeting about CWD and surveillance efforts

**Jan. 2022** - Update on CWD surveillance at the Annual USFS WDFW Coordination Meeting

**Jan. 27, 2022** - Changes to importation rules as a result of CWD included in Rule Making news release

**Feb. into Mar. 2022** - CWD Management Plan featured on home page banner for almost a month

**Mar. 18, 2022** - CWD seminar at the Big Horn Show

**April 15, 2022** - Presentation to Society of American Foresters

## WDFW social media posts

**Dec. 10, 2020** blog post [Hunter's help needed to avoid spreading chronic wasting disease | by The Washington Department of Fish and Wildlife | Medium](#)

**Jan. 12, 2021** <https://twitter.com/WDFW/status/1481326714898714625>

**Sept. 16, 2021** [Request for hunters to stop at check stations](#)

**Oct., 2021** <https://www.mywdfw.com/hunting-highlights-october-2021/>

**Oct. 27 2021** [Hunter check station reminder](#)

**Nov. 3, 2021** [Late season hunter check station reminder](#)

**Dec. 28, 2021** [Check salvaged deer](#)

## Media/other coverage

Aug. 26, 2020 [https://www.dailyrecordnews.com/outdoors/playing-outside-aug-26-2020/article\\_1ac3af49-56d8-52d9-8dfc-ceacc0c736b8.html](https://www.dailyrecordnews.com/outdoors/playing-outside-aug-26-2020/article_1ac3af49-56d8-52d9-8dfc-ceacc0c736b8.html)

Dec. 10, 2020 <https://lcvalley.dailyfly.com/Home/ArtMID/1352/ArticleID/57535/Hunter%E2%80%99s-Help-Needed-To-Avoid-Spreading-Chronic-Wasting-Disease>

Sept. 25, 2021 <https://nwsportsmanmag.com/ne-wa-whitetail-hunters-asked-to-help-wdfw-survey-for-cwd-this-fall/>

Sept. 27, 2021 [https://www.khq.com/news/department-of-fish-and-wildlife-warns-of-chronic-wasting-disease-in-white-tail-deer/article\\_1ea0572e-1829-11ec-8f2a-fb1463f84c63.html](https://www.khq.com/news/department-of-fish-and-wildlife-warns-of-chronic-wasting-disease-in-white-tail-deer/article_1ea0572e-1829-11ec-8f2a-fb1463f84c63.html)

Oct. 6, 2021 [https://www.goldendale sentinel.com/features/the-washington-outdoors-report-a-difficult-deer-season-ahead/article\\_cead4b24-26e1-11ec-a60d-47026a9e0c6e.html](https://www.goldendale sentinel.com/features/the-washington-outdoors-report-a-difficult-deer-season-ahead/article_cead4b24-26e1-11ec-a60d-47026a9e0c6e.html)

Oct. 17, 2021 [Washington Wildlife Officials Sample for Chronic Wasting Disease on Opening Day of Deer Hunting Season | The Daily Chronicle \(chronline.com\)](#)

Oct. 17, 2021 [For first time in decade, Washington wildlife officials sample for chronic wasting disease on deer season opener | The Seattle Times](#)

Oct. 17, 2021 <https://www.spokesman.com/stories/2021/oct/17/for-the-first-time-in-a-decade-washington-wildlife/>

Oct. 26, 2021 <https://www.qgerald.com/outdoors/washington-outdoor-report-week-oct-24>

Nov. 10, 2021 [https://www.wenatchee world.com/news/washington-wildlife-officials-surveying-for-cwd-struggling-to-gather-enough-samples-from-hunters/article\\_af0ceea3-ad92-5fb4-8fad-9a5f293345f4.html](https://www.wenatchee world.com/news/washington-wildlife-officials-surveying-for-cwd-struggling-to-gather-enough-samples-from-hunters/article_af0ceea3-ad92-5fb4-8fad-9a5f293345f4.html)

Nov. 19, 2021 <https://www.kxly.com/washington-dept-of-fish-and-wildlife-highly-concerned-about-chronic-wasting-disease/>

Nov. 19, 2021 [https://www.bigcountrynewsconnection.com/local/washington-residents-who-hunt-in-idaho-or-manitoba-asked-not-to-import-deer-elk-and/article\\_d58f6f3a-498c-11ec-9223-af782bb03778.html](https://www.bigcountrynewsconnection.com/local/washington-residents-who-hunt-in-idaho-or-manitoba-asked-not-to-import-deer-elk-and/article_d58f6f3a-498c-11ec-9223-af782bb03778.html)

Nov. 24, 2021 <https://www.wcgazette.com/story/2021/11/24/news/restrictions-on-hunters-follow-disease-outbreak/36412.html>

Dec. 1, 2021 <https://komonews.com/news/local/chronic-wasting-disease-a-concern-for-eastern-washington-deer-population>

Dec. 3, 2021 [New CWD Guidelines for Out-of-State Washington Hunters | Rocky Mountain Elk Foundation \(rmef.org\)](#)

Jan. 31, 2021 [For first time in decade, Washington wildlife officials sample for chronic wasting disease on deer season opener | The Seattle Times](#)

Jan. 31, 2022 <https://www.kpq.com/wdfw-proposes-rule-changes-for-2022-2023-hunting-season/>

Feb. 25, 2022 [WDFW Commission OKs One Petition, Denies Second - \(nwsportsmanmag.com\)](#)

## Misc.

**July 2021** - KCVL Question of the Week- one CWD question/answer aired per week each Wednesday during July during the 9 a.m., noon and 5 p.m. news times

**Aug. 24, 2021** - KCVL Question of the Week on stopping at hunter check stations

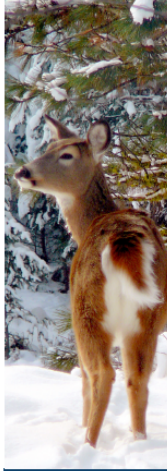
**Jan. 27, 2022** - [Proposed CWD Rule Change video](#) posted to YouTube and WDFW website





# Outreach Materials and Website Updates

## Chronic Wasting Disease (CWD) surveillance program

The Washington Department of Fish and Wildlife (WDFW) is initiating a surveillance program during the 2021 general deer hunting season.

CWD is a fatal neurologic disease caused by an infectious prion protein in contaminated environments. The stages of the disease when the animal is most contagious are during salivation and urination, and when the animal is being hunted. CWD has not been detected in Washington (being Montana), and 4 Canadian provinces (Alberta, Saskatchewan, Manitoba, and Ontario).

### How can you help?

If you hunt or roadkill salvage (Douglas, 111 (Aladdin), 113 (Spokane), or 127 (Mica Peak)) for CWD at a game check station, please see the second page.

During the modern firearm season at the Colville District Office Regional Office (2315 N Diao Thursday from 4 pm - 6 pm Market St, Spokane; call 509-325-4131 for more information. Look up your CWD test result ID in the test results lookup tool. WDFW will notify you if you are notified by another state that has tested positive for CWD.

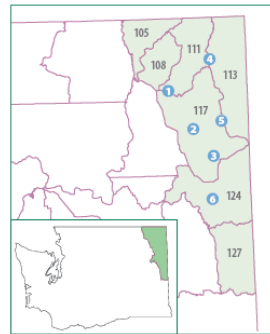
- To prevent spreading prions that can be transmitted to other animals, please follow these guidelines:
- Harvested animal at the kill site or bag and place them in your house
  - If you harvest deer, elk, or moose (220-413-0330), only the following:
    - Meat that has been de-boned
    - Skulls and antlers, antlers attached to the skull
    - Hides or capes without heads
    - Tissue imported for use by a taxidermist
    - Finished taxidermy mounts.
  - If you are notified by another state that has tested positive for CWD.

For more information on chronic wasting disease, please go to: [wdfw.wa.gov/cwd](https://wdfw.wa.gov/cwd)

### Health and Human Safety

While there is no scientific evidence of CWD being transmitted to humans from animals, the Centers for Disease Control and Prevention recommends not consuming animals that test positive for CWD. WDFW advises hunters to:

- Avoid harvesting any animal that appears sick or behaves strangely.
- Wear disposable gloves while field dressing game.
- Thoroughly wash hands and equipment after processing carcasses.
- Avoid consuming parts where the CWD prions accumulate including brain, spinal cord, eyes, spleen, pancreas, tonsils, and lymph nodes.
- Avoid cutting through bone, brain, or spinal cord.
- Disinfect processing tools by soaking in household bleach (5-2% free chlorine) at a 40% solution (with water) for a minimum of 5 minutes. Remove any tissue pieces from tools before soaking. Rinse tools after soaking.



Hunter Check Stations	
Dates	Time
Saturday, October 16 - Sunday, October 17, 2021	9:30 am - 8:00 pm
Saturday, October 23 - Sunday, October 24, 2021	9:30 am - 8:00 pm
Saturday, November 6 - Sunday, November 7, 2021	9:30 am - 8:00 pm
Friday, November 12 - Sunday, November 14, 2021	9:30 am - 7:00 pm
Thursday, November 18 - Friday, November 19, 2021	9:30 am - 7:00 pm
Locations	
1 Colville WDFW District Office - 755 S Main Street, Colville, WA 99114	
2 Chewelah Intersection of Sand Canyon Road and HWY 395, DOT Gravel Lot	
3 Deer Park Weigh Station - 65 N Arlington Rd, Deer Park, WA 99006	
4 Lone, Tiger Store/Museum, 390372 State Rte 20, Cusick, WA 99119	
5 Usk, Crossroads Restaurant - 421341 State Rte 20, Usk, WA 99180	
6 HWY 2 Weigh Station - Across highway from Spokane Regional Solid Waste	

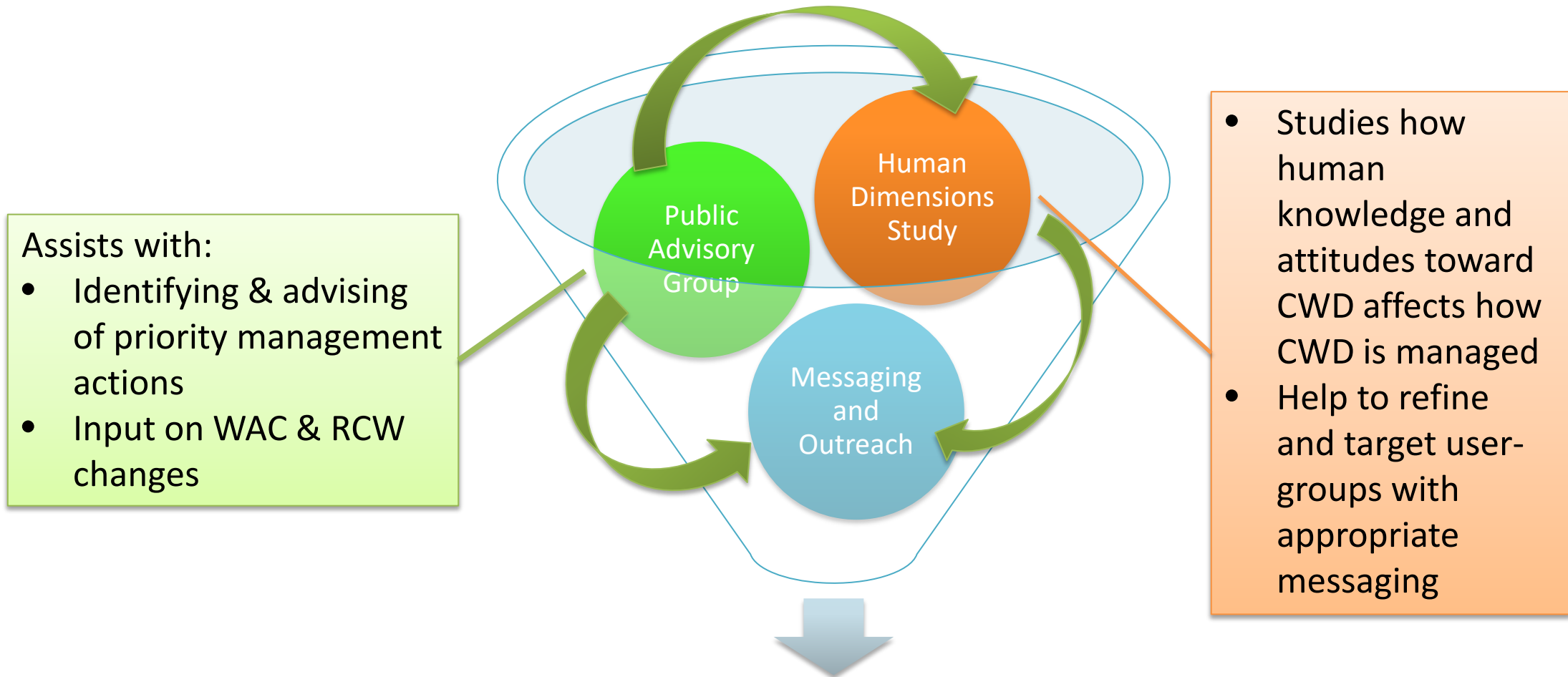
For more information on chronic wasting disease, please go to [wdfw.wa.gov/cwd](https://wdfw.wa.gov/cwd)

Chronic Wasting Disease (CWD) is a fatal illness of deer, elk, and moose that has not been detected in Washington. WDFW is conducting surveys in this area for potential CWD incidents. Visit the [WDFW CWD webpage](#) for more details on the disease, the surveillance program, and how you can voluntarily get your animal tested.

**Road Notes\***  
Provide a street name or highway route# (and nearest mile post marker), matching the mapped salvage location as much as possible. This will help staff verify the mapped location against this note and will reduce the need for staff to follow up.



# Upcoming Outreach Efforts for 2022



**Public Trust and Support = Effective CWD Management**



# Upcoming Activities and Timeline

Year	Month	Advisory Group	HD Research
2022	March		Recruit Post-Doc
2022	April	Recruit Members	
2022	May		
2022	June	Periodic Meetings	Project on-going with deliverables within 12 months
2022	July		
2022	August		
2022	September		
2022	October		
2022	November		
2022	December		
2023	January - June		



# Plan Objectives

1. Proactively build trust with and support from the public
2. Reduce known risks for CWD entering WA



# Risk Assessment and Minimization



- **Current Risk** – from a CWD transmission perspective
- **Recommendation** – based on the Association of Fish & Wildlife Agencies' BMP for prevention, surveillance, and management of CWD published 2018

## Carcass Import and Disposal

- Currently only restrict importation of whole deer, elk, and moose carcasses from areas that have detected CWD in wild populations
  - *Emergency rule filed November 19, 2021, after Idaho's detection*
- Restrict importation of whole deer, elk, moose, and caribou carcasses from all areas outside of WA regardless of CWD status
  - *WAC 220-413-030 (Importation and Retention of Dead Nonresident Wildlife) is pending adoption that reflects these recommendations*



# Risk Assessment and Minimization



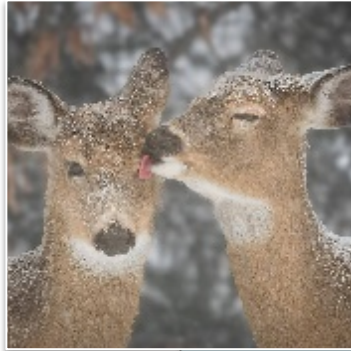
- **Current Risk – from a CWD transmission perspective**
- **Recommendation – based on the Association of Fish & Wildlife Agencies' BMP for prevention, surveillance, and management of CWD published 2018**

## Baiting and Feeding

- Currently no restrictions on feeding and restrict amount and placement of bait for the purpose of hunting
- Prohibit the feeding of wild cervids, including baiting for the purposes of hunting deer or elk
  - Address baiting for the purposes of hunting deer and elk after advisory group process and HD project can inform recommended changes to WAC 220-414-030



# Risk Assessment and Minimization



- Current Risk – from a CWD transmission perspective
- Recommendation – based on the Association of Fish & Wildlife Agencies' BMP for prevention, surveillance, and management of CWD published 2018

## Live Cervid Movement

- Currently allow import/transport of some captive non-native cervid species and relocation of native wild cervids
- Prohibit importation and transport of live cervids (*originating from areas with CWD and require federal CWD herd certification*)
  - Updates to WACs 16-54-180 (Wild and Exotic animals - Importation and Testing Requirements), 220-450-030 (Live Wildlife), and 220-640-200 (Deleterious Exotic Wildlife)
  - Address in coordination with WSDA and CWD advisory group



# Risk Assessment and Minimization



Urine-based  
scents/attractants

- Current Risk – from a CWD transmission perspective
- Recommendation – based on the Association of Fish & Wildlife Agencies' BMP for prevention, surveillance, and management of CWD published 2018

- Currently no restrictions, production and sales in WA are not regulated by any agency
- Prohibit the use or possession of urine-based scents and lures for deer and elk hunting
  - The use of urine-based scents and attractants is currently allowed in Washington under WAC 220-414-030
  - Bans or restrictions on the use of urine-based scents and attractants for hunting cervids exist in 12 states and 4 Canadian provinces and are being considered in another 5 states
  - Address once advisory group process and HD project can inform recommended changes to WAC 220-414-030





# Upcoming Activities and Timeline

Year	Month	WAC Amendments
2022	April	WAC 220-413-030
2022	May	Other WAC amendments timed to allow advisory group and HD project to inform recommendations
2022	June	
2022	July	
2022	August	
2022	September	
2022	October	
2022	November	
2022	December	
2023	January - June	



# Plan Objectives

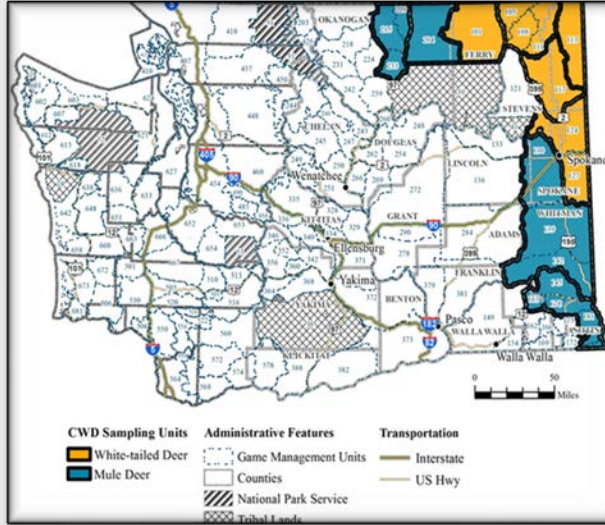
1. Proactively build trust with and support from the public
2. Reduce known risks for CWD entering WA
3. Implement a pre-detection surveillance program



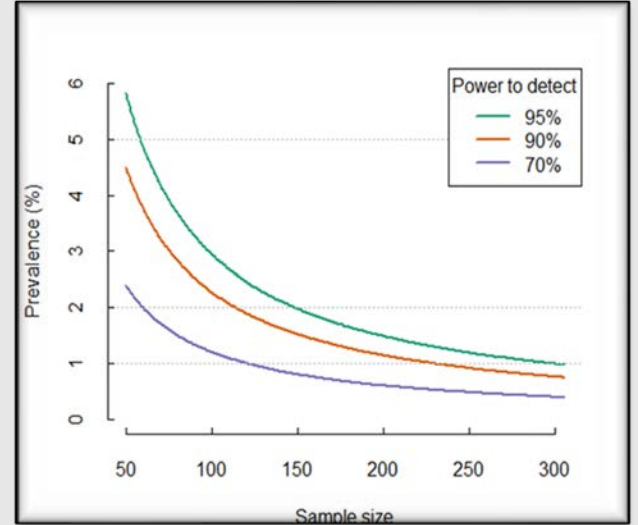
# Pre-detection Surveillance



Collect and Test



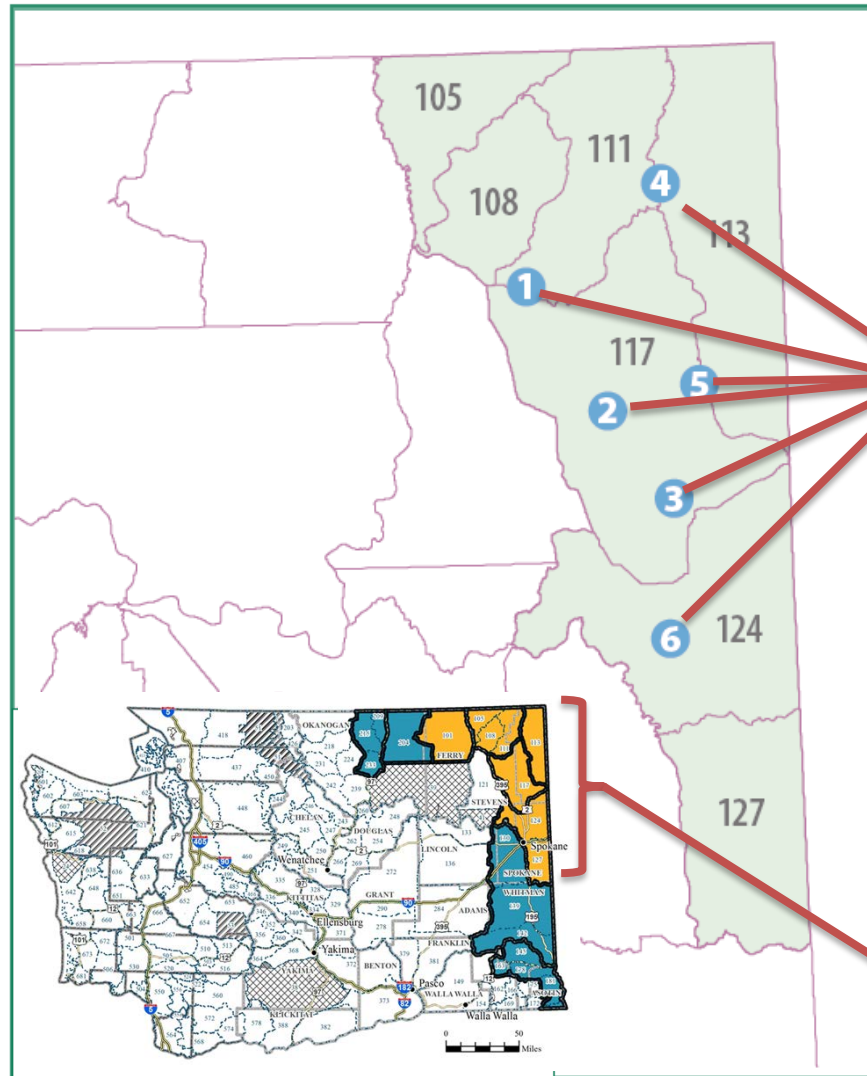
Optimize Sampling



Detect at <1%



# 2021-2022 Surveillance Program



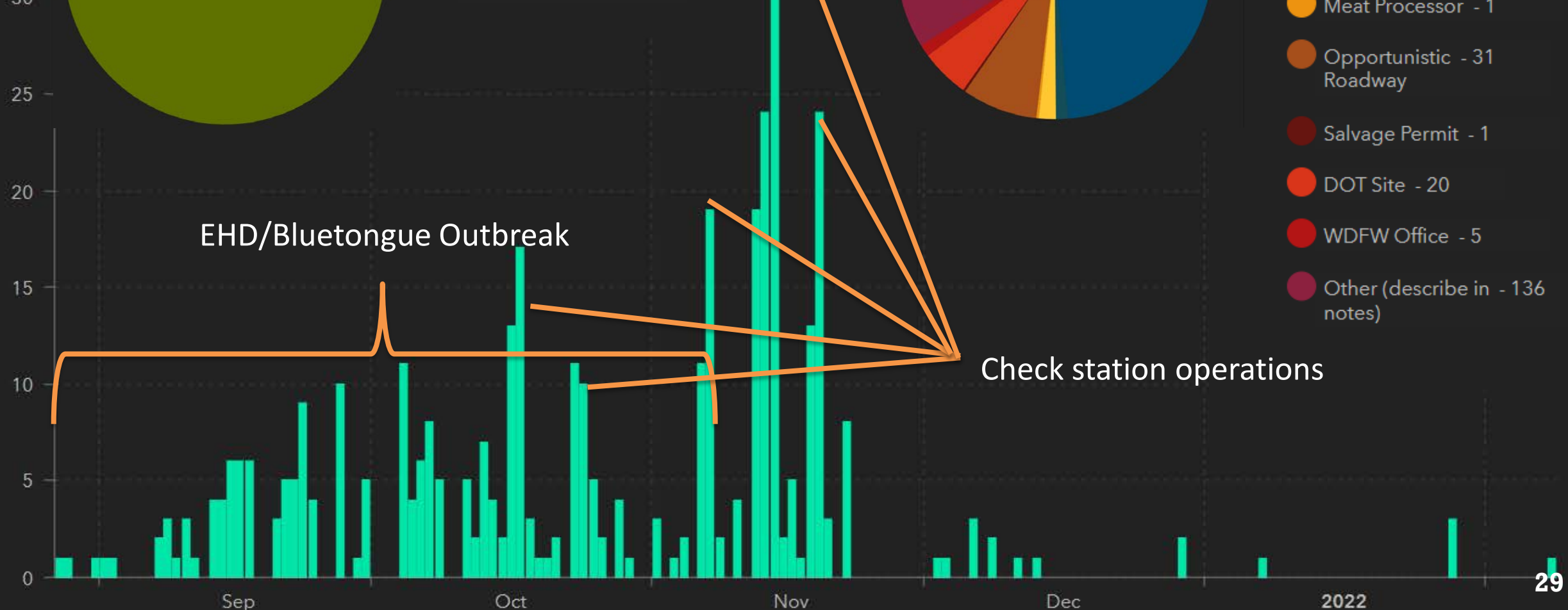
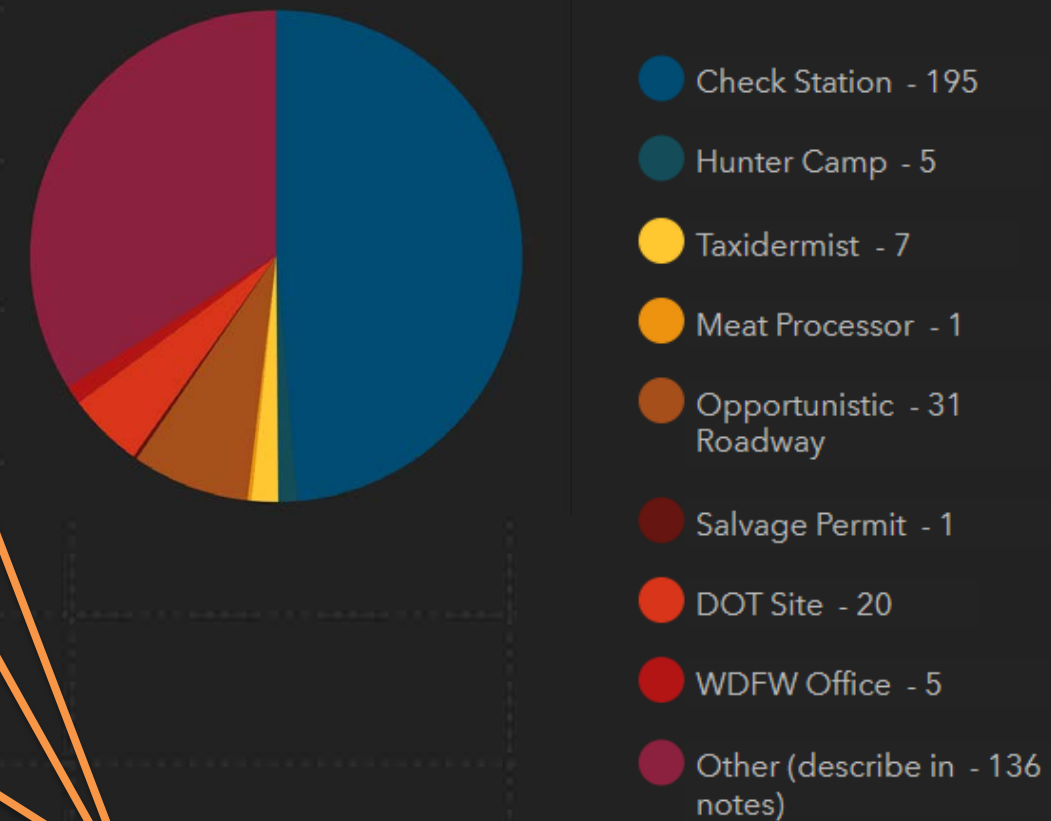
Adult white-tailed deer

Check stations, WSDOT road-kill pits, taxidermists, by appointment

Four surveillance units containing 7 GMUs

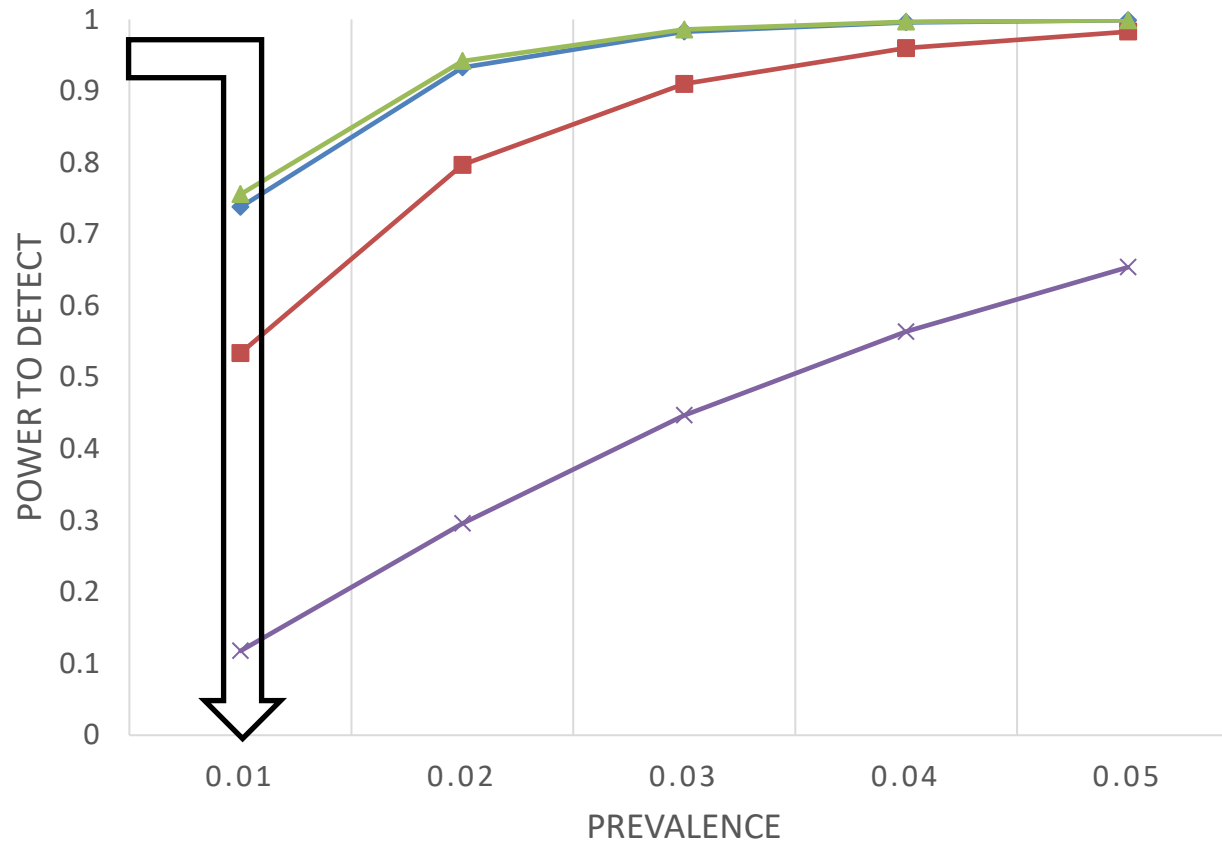


Samples collected per day

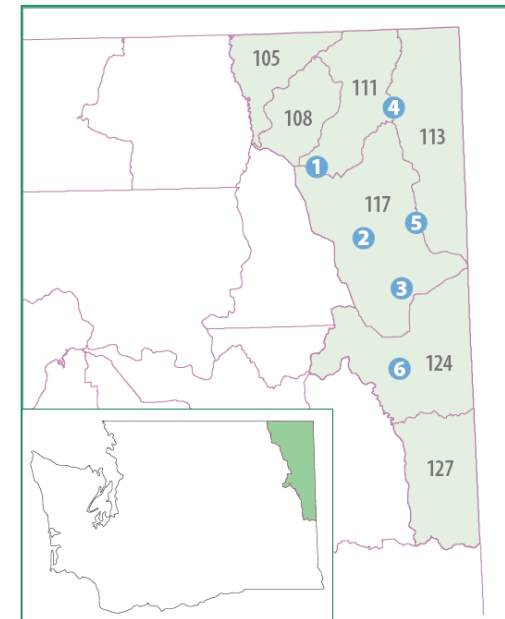


# 2021-2022 Surveillance

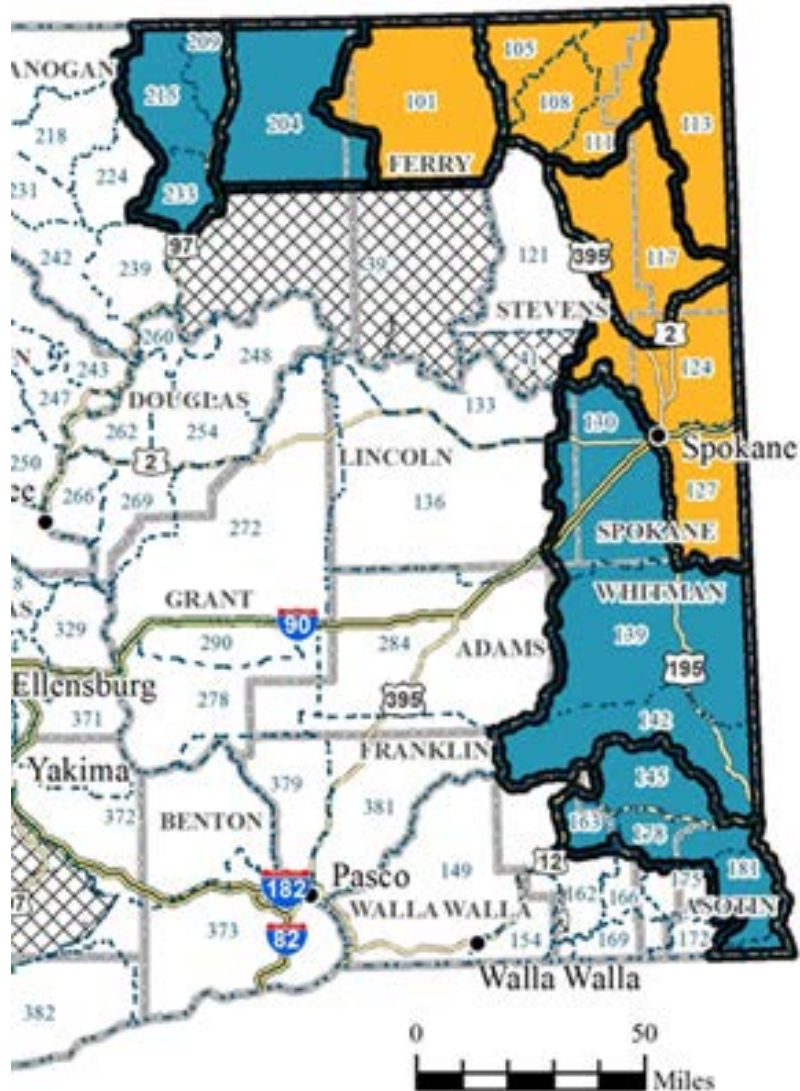
**Goal: Detect with 95% confidence at or below 1% prevalence**



- W7 (GMU 117)
- W581 (GMUs 105, 108, 111)
- W47 (GMUs 124, 127)
- W3 (GMU 113)



# 2022-2023 Surveillance Program



Harvest, road-kills, opportunistic carcasses, salvaged deer and elk

Adult white-tailed deer and mule deer

Check stations, WSDOT road-kill pits, taxidermists, by appointment, drop-off locations

Expanding to all surveillance units along eastern border



# Upcoming Activities and Timeline

Year	Month	Surveillance
2022	March	Pilot Surveillance Program without technicians
2022	April	
2022	May	
2022	June	
2022	July	
2022	August	
2022	September	Expanded Surveillance Program with technicians
2022	October	
2022	November	
2022	December	Continue expanded surveillance program without technicians
2023	January - June	



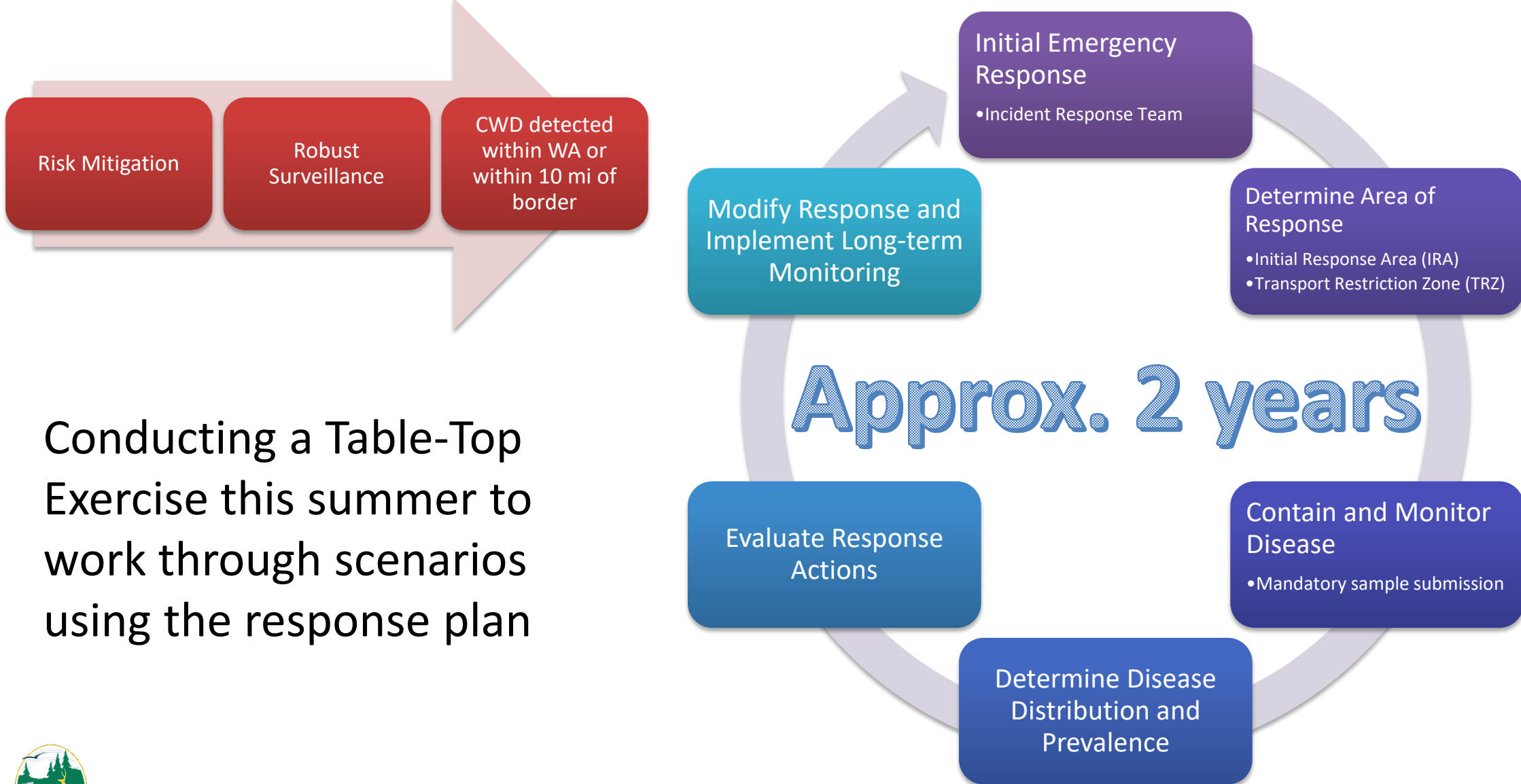


# Plan Objectives

1. Proactively build trust with and support from the public
2. Reduce known risks for CWD entering WA
3. Implement a pre-detection surveillance program
4. **Minimize negative long-term effects of CWD**



# First Detection of CWD



Conducting a Table-Top Exercise this summer to work through scenarios using the response plan



# Upcoming Activities and Timeline

Year	Month	Table-Top Exercise
2022	March	Secure Vendor
2022	April	
2022	May	Facilitated TT Exercise
2022	June	
2022	July	Address issues and revise Response Plan based on TT Exercise outcome
2022	August	
2022	September	
2022	October	
2022	November	
2022	December	
2023	January - June	



# Upcoming Activities and Timeline

Year	Month	Advisory Group	HD Research	Table-Top Exercise	Surveillance	WAC Amendments
2022	March		Recruit Post-Doc	Secure Vendor	Pilot Surveillance Program without technicians	
2022	April	Recruit Members				WAC 220-413-030
2022	May					
2022	June	Periodic Meetings	Project on-going with deliverables within 12 months	Facilitated TT Exercise	Expanded Surveillance Program with technicians	
2022	July					
2022	August					
2022	September					
2022	October					
2022	November					
2022	December					
2023	January - June				Continue expanded surveillance program without technicians	



# Resources

Melia.DeVivo@dfw.wa.gov  
Kristin.Mansfield@dfw.wa.gov

WDFW CWD Management  
Plan

[wdfw.wa.gov/cwd](http://wdfw.wa.gov/cwd)

[cwd-info.org](http://cwd-info.org)

