Chronic Wasting Disease in Texas 2015-2016

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CWD Characteristics and History

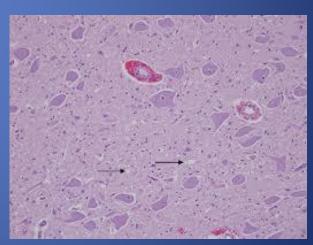


Chronic Wasting Disease

 Transmissible spongiform encephalopathy characterized by proteins called prions that accumulate in the brain and lymphatic system

Other TSE's

- Bovine Spongiform Encephalopathy
- Scrapie (sheep and goats)
- Creutzfeldt-Jakob Disease (humans)
- Feline Spongiform Encephalopathy
- Transmissible Mink Encephalopathy





Chronic Wasting Disease

- Affected Species:
 - White-tailed Deer
 - North American Elk
 - Mule Deer
 - Moose
 - Sika Deer
 - Red Deer
 - Reindeer
 - Hybrids of above species

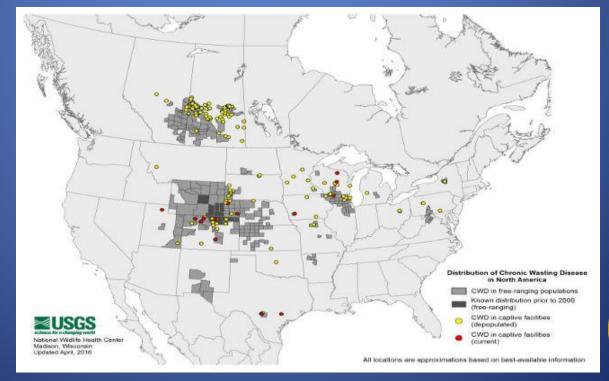


Chronic Wasting Disease

- CWD is a progressive, fatal, degenerative neurologic disease
- CWD has a long incubation period
- Clinical signs include tremors, salivation, incoordination, weight loss, lack of appetite
- Transmission
 - Prions shed in saliva, urine, blood, feces, soft antler material, and decomposing carcass
 - Transmitted from Animal to Animal, or to Animals in CWD contaminated environment
 - Prions accumulate in environment
 - Prevalence increases over time

CWD Distribution in US

- 1967 First found in Colorado Research Facility
- Currently in 21 states and 2 Canadian Provinces





CWD Chronology in Texas

- July 2012 discovered in free-ranging mule deer in far west Texas
- July 2015-discovered in Texas captive white tailed deer herd
- February 2016-discovered in free-ranging mule deer in Texas Panhandle.



Overall Total-12 CWD Positive Cases (as of May 9, 2016)

4 Breeder Facilities

- First Index Herd (Medina Co.): 4 (2013) bucks
- Second Index Herd(Lavaca Co.): 5 (2013) bucks
- Third Index Herd (Medina Co.): 1 (2013) buck
- Fourth Index Herd (Medina Co.): 1 (2013) Doe

1 Release Site

Release Site of Third Index Herd (Medina Co.):
 1 (2012) buck



TAHC working with facilities linked to four CWD affected herds

Category	Number
CLOSED FACILITY	45
MET REQUIREMENTS OF HOLD ORDER	170
HERD PLAN	55
HOLD ORDER, PLAN PENDING	68
Total	338



TAHC CWD Herd Certification Program

Total Enrollment

- 238 herds
- >19,000 animals

Texas Administrative Code: Agriculture, Part

2: Chapter 40: Rule \$40.3

Herd Status Plans for Cervidae

Adopted 1999; amended 2011, 2013

Certified Herds: 72

- 5 elk (2 certified)
- 5 mule deer (3 certified)
- 2 reindeer (2 certified)
- 1 fallow (1 certified)
- 1 sika
- 1 red deer
- 223 white tailed deer (64 certified)





TAHC CWD "Susceptible" Species Program

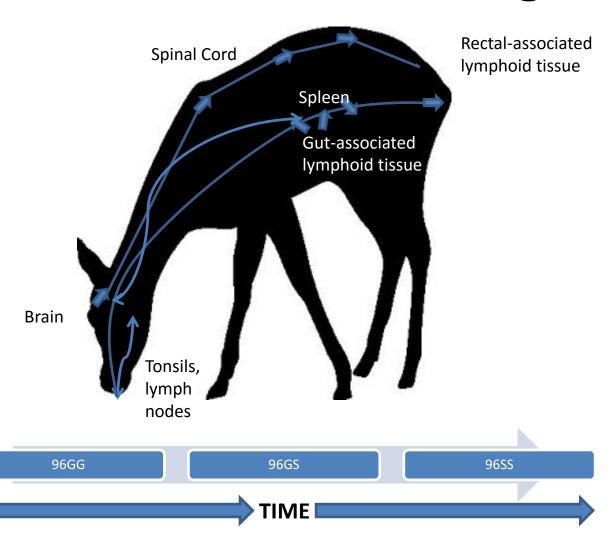
Texas Administrative Code, Agriculture: Part 2: Chapter 40: Rule \$40.5: Movement requirements for CWD Susceptible species (adopted 2013)



- CWD Susceptible Species-Elk or wapiti, red deer, Sika deer, moose, and any associated subspecies and hybrids
- ID Requirement prior to movement (i.e. RFID, NUES)
- Transfer Permit Document submitted to TAHC
- Annual CWD Susceptible Species Estimated Inventory submitted to TAHC
- Test 20% of reported mortalities for CWD 16 months of age or older



CWD Prion Trafficking

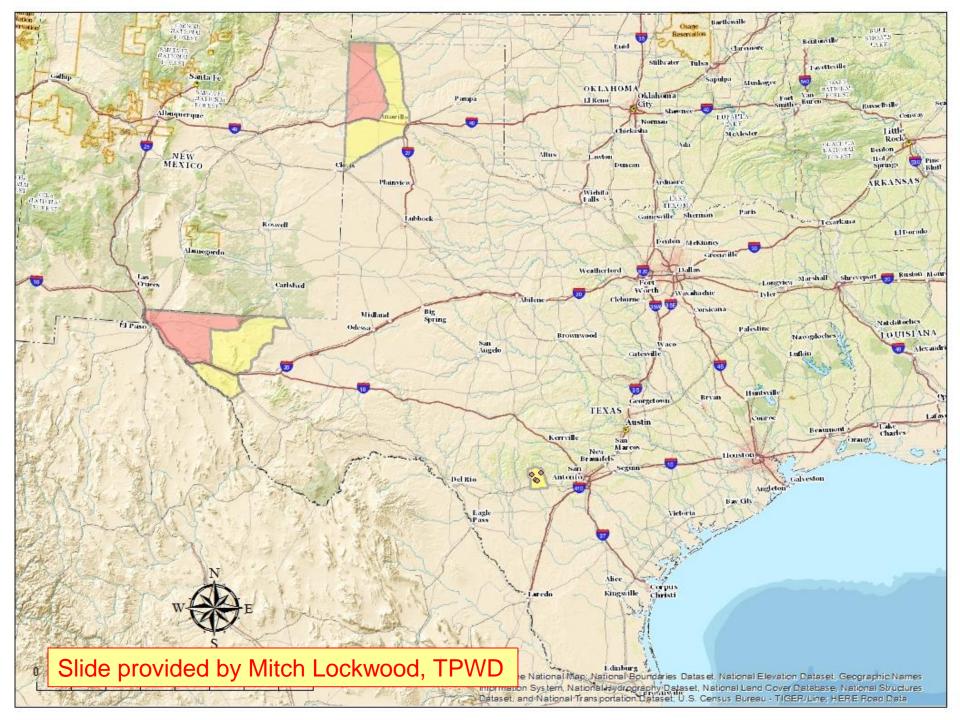


Ante-mortem Testing As A Risk Assessment Tool in Trace Herds

Associated	Tissue Sampled	
Index Herd	Tonsil	MRPLN
1	198	0
2	0	0
3	237	133
4	57	6
TOTAL	492	139

Ante-mortem testing for CWD utilizing tonsil and MRPLNs is being utilized to test a statistical sample of deer in trace facilities to detect disease at a 1% prevalence and at a 99% confidence





QUESTIONS?



