

Disease name	Found in Alaska/US?	Likelihood of coming to Alaska	Symptoms (signs) of disease	Affects what part of reindeer?	Transmissible from reindeer to other animals or humans?
Brucellosis	Yes	Present	Spontaneous abortion; Swollen joints & testicles. <i>Other conditions caused by the agent include spondylitis, metritis, and bursitis</i>	Reproductive disease; Decreased production	Yes; Undulant fever in humans
Parsites (various)	Yes	Current big concerns are warbles, nasal bots	Changed appearance &/or behavior; Warbles - lesions under hide	Decreased productivity	Not if meat is cooked well
Bovine tuberculosis (TB)	Not for reindeer	Not likely	None in reindeer	At least lungs; ongoing research about lesions	Probably, but virtually no data at this time
West Nile Virus	Not in Alaska, Yes in Lower 48	Possible - via migratory birds	Abnormal behavior, fever, head tilt, difficulty swallowing, paralysis	Affects eating; Paralysis; Fatal	Not likely
Chronic Wasting Disease (CWD)	Not in AK/US reindeer; Yes other deer sp. In Canada, Lower 48	Unknown threat to reindeer; small threat to SE AK deer/elk	(As seen in other deer species): Chronic weight loss; Abnormal behavior; Increased drinking, urination. <i>In most cases, CWD occurs in adult animals.</i>	Fatal	Unknown
Foot-and-Mouth Disease (FMD)	No	Unknown	Blisters in mouth, on feet; Excessive salivation; lameness	Very contagious; Weight loss; decreased productivity	No, but humans can carry & spread disease

Disease name	Can live in environment, outside of the animal?	Testing	Testing required?	Treatment
Brucellosis	Yes. <i>Under selected environmental conditions (darkness, cool temperatures, high CO2) agent can survive up to 2 years.</i>	UAF RRP tests blood	Yes, for intrastate & interstate transport	Vaccinate 1/lifetime after 6 mon old. <i>Antibiotic can be effective.</i>
Parsites (various)	Yes	None used here. <i>Serological test could be used to screen for Sarcocysts and Toxoplasma</i>		Ivermectin every winter, Levamisol 1/ year
TB	Yes, contaminated food & water. <i>TB agent can survive in manure deposited by the diseased animals onto a pasture, and also in droplets of saliva coughed into the air.</i>	Current skin test flawed; research for new blood test, better skin test.	In many, but not all cases	Not practical for livestock
West Nile Virus	Yes in mosquitoes, birds	Brain, spinal cord tissue analysis	Yes, if any signs of WNV appear	UAF RRP is researching vaccine
Chronic Wasting Disease (CWD)	Yes, Infective prions can survive in the soil for over 5 years	Brain, spinal cord tissue analysis	Yes, if any signs of CWD appear	None
Foot-and-Mouth Disease (FMD)	Not likely	Lab test required to determine exact disease	Yes, if any signs of FMD appear	No treatment, Vaccines exist

Disease name	State program	Federal program
Brucellosis	5-year disease-free certification program. <i>Brucellosis is nationally notifiable disease and reportable to local health authority.</i>	
Parsites (various)		
TB	Varies by state	Requirements for interstate movements
West Nile Virus	Surveillance of wild birds; Testing	Surveillance of wild birds, domestic animals; Treatment research; Testing. <i>VMOs are to notify APHIS of livestock that offered for slaughter with CNS clinical signs of WNV or any other CNS disorders.</i>
Chronic Wasting Disease (CWD)	CWD Certification Program, No cervid importation; Test research; Monitor hunted deer, elk. <i>In each State where CWD has been detected in wildlife, State wildlife agencies have enacted response/ or management plans.</i>	Surveillance of herds; If infection - herd is quarantined or killed
Foot-and-Mouth Disease (FMD)	Surveillance; Depopulation if FMD occurs	Surveillance; Depopulation if FMD occurs

Disease name	Additional comments
Brucellosis	
Parsites (various)	
TB	<p>Uniform Methods and Rules, developed by federal and state animal health authorities and the livestock industry, give procedures for eradication of bovine TB. <i>TB is a notifiable disease in wild, park and farm deer the Tuberculosis (deer) Order 1989. Surveys for TB have been conducted in free-ranging deer each year since 1997 in Michigan state. 340 cases of bovine TB have been found in nearly 64, 000 free-ranging whitetail deer examined since 1995</i></p>
West Nile Virus	
Chronic Wasting Disease (CWD)	<p><i>Surveillance for CWD in free-ranging deer and elk in Colorado and Wyoming has been ongoing since 1983. An extensive nationwide surveillance effort was started in 1997-98 to better define the geographic distribution of CWD in free-ranging cervids in the US.</i></p>
Foot-and-Mouth Disease (FMD)	

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Mad Cow Disease: other TSE's besides CWD, <i>Bovine Spongiform Encephalopathy (BSE)</i>	No	Not likely	Depression, incoordination, abnormal behavior, <i>Abnormal neurological signs or behavior.</i>	Brain; nervous system; Fatal	Possible through eating meat. <i>BSE does not spread horizontally by contact</i>
References:					
1) http://www.cattle.ca/INDUSTRY/FactSheets/FAQ%20TB.pdf					
Frequently asked questions on Bovine TB (Canadian Cattlement's Association)					
2) http://www.cdc.gov/ncidod/dbmd/diseaseinfo/brucellosis_g.htm					
General Information on Brucellosis.					
3) http://www.cdc.gov/ncidod/dbmd/diseaseinfo/brucellosis_t.htm					
Technical Information on Brucellosis.					
4) http://www.defra.gov.uk/animalh/diseases/notifiable/disease/tb.htm					
Disease surveillance and Control					
5) http://aphisweb.aphis.usda.gov/vs/nahps/cwd/					
Chronic Wasting Disease					
6) Surveillance for Bovine TB in the United States, Robert M. Meyers DVM, MS, USDA, APHIS, Veterinary Services; April 1, 2001					
7) http://www.aphis.usda.gov/lpa/issues/bse/bse-overview.html					
Bovine Spongiform Encephalopathy (BSE), an overview					
8) http://www.fsis.usda.gov/OPPDE/rdad/FSISNotices/12-03.htm					
FSIS NOTICE- West Nile Virus (WNV).					
9) Notes from Managing Reindeer Health: A Workshop on Reindeer Diseases , July 2-3, 2003, Pioneer Hall, Nome, Alaska					
(notes taken by Kumi Rattenbury, Rose Fosdick)					

Disease name	Additional comments
Mad Cow Disease: other TSE's besides CWD, <i>Bovine Spongiform Encephalopathy (BSE)</i>	

