

Climate change effects on the epidemiology of infectious diseases and the impacts on Northern societies Climate sensitive infectious diseases in Arctic and northern animals

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Factors considered when Climate Sensitive Infections was selected and characterised



## Retrospective Animal Disease Data - Swedish Board of Agricultural

<b>Climate Sensitive</b>	Nb. of	Retrived from	Wild vs De	omesticated
Infections	incidence	year	anim	nals (%)
			Wild	Domestic
Anthrax	11	2008-2016	18	82
Babesiosis	24	2005-2016	0	100
Botulism	51	2000-2016	4	96
Brucellosis	4	2008-2014	0	100
Echinococcosis	11	2000-2016	64	36
Leptospirosis	202	2000-2016	2	98
Listeriosis	551	2000-2016	2	98
Q-fever	37	2009-2011	0	100
Rabies	3	2010	100	0
Salmonellosis	530	2008-2012	9	91
Schmallenberg virus	3	2012	0	100
Trichinellosis	36	2002-2012	100	0
Tularemia	99	2004-2016	95	5
Vtec/EHEC	21	2000-2012	14	86

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## Sampling of new materials





## Preliminary results from screening of reindeer microorganisms

- 20 reindeer/location, sampled in the nose and from the gut
- To identify microorganism a sequencing of the microbes genome is performed and then compared to a library of microbial genomes



Country	South	Middle	North
Sweden	Equine pegivirus 1 Macavirus	Bovine parvovirus 3 Bovine adenovirus 3 Reindeer* papillomavirus*	Equine pegivirus 1
Norway	Bovine respirovirus 3		Roselovirus
Finland			Macavirus Sheep faeces associated smacovirus 1



