



Surveillance Report

Animal Disease Notification and Surveillance

May 2024



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1. Compulsory notification and general surveillance

On behalf of the Icelandic Food and Veterinary Authority (MAST), district veterinary officers are responsible for monitoring animal health within each district. All private practicing veterinarians are obliged to be alert and to report any suspicion regarding the diseases, to MAST. Furthermore, according to Act No 25/1993, any person who has a reason to believe that an animal is suffering from an infectious disease covered by the legislation, shall immediately report this to any veterinarian who can be reached or to the police, who shall immediately contact a veterinarian. If a veterinarian sees a reason to take action, he/she shall immediately take steps to confirm the diagnosis and prevent the disease from spreading. If testing shows or a suspicion arises of an infectious disease, previously unknown in the country or specified in Regulation No 52/2014, MAST shall immediately be informed, and precautionary biosecurity measures applied.

Serious notifiable animal diseases (Regulation No 52/2014)

| Multiple species: | | |
|--------------------------|---------------------------------------|--|
| B052 | Aujeszky's-veiki | Aujeszky's disease – Pseudorabies – Herpesviridae |
| A090 | Blátunga | Bluetongue – Reoviridae |
| A010 | Gin- og klaufaveiki | Foot and Mouth Disease – Picornaviridae |
| B352 | Hérasótt | Tularemia – Francisella tularensis |
| B058 | Hundaæði | Rabies – Rhabdoviridae |
| B051 | Miltisbrandur | Anthrax – Bacillus anthracis |
| A020 | Munnblöðrubólga | Vesicular stomatitis – Rhabdoviridae |
| A080 | Rift Valley veiki | Rift Valley fever – Bunyaviridae |
| B103/B253 | Smitandi fósturlát/Brúsellósa | Brucellosis – Brucella-abortus/B. suis/B. melitensis |
| Horses | | |
| A110 | Afríkönsk hrossapest | African horse sickness – Reoviridae |
| B202 | Dúrín | Dourine – Ondartet beskjelersyke – Trypanosoma equiperdum |
| B205 | Smitandi blóðleysi | Equine infectious anemia (EIA) – Retroviridae |
| B209 | Sníf | Glanders – Pseudomonas mallei |
| Cattle: | | |
| B105 | Berklar | Tuberculosis – Mycobacterium bovis/tuberculosis |
| A070 | Húðþrimlaveiki | Lumpy skin disease – Poxviridae |
| A060 | Illkynja brjóstthimnubólga | Contagious bovine pleuropneumonia – Mycoplasma mycoides mycoides |
| B115 | Kúariða | Bovine spongiform encephalopati (BSE) – Prion |
| A040 | Nautapest | Rinderpest – Kvegpest – Pestis bovum – Paramyxoviridae |
| B110 | Smitandi barkabólga/fósturlát | IBR/IPV – Herpesviridae |
| B108 | Smitandi hvítblæði | Enzootic bovine leucosis (EBL) – Retroviridae |
| Sheep and goats | | |
| I301 | Bítlaveiki | Border disease – Hairy shaker disease – Flaviviridae |
| A100 | Fjárbólusótt/geitabólusótt | Sheep pox and goat pox – Poxviridae |
| A050 | Fjárpest | Peste des petits ruminants (PPR) – Paramyxoviridae |
| B156 | Fósturlát í ám | Enzootic abortion of ewes (EAE) – Chlamydia psittaci |
| B155 | Geitakregða | Contagious caprine pleuropneumonia – Mycoplasma F38 |
| B154 | Kregðujúgurbólga | Contagious agalactia – Mycoplasma ssp. |
| B161 | Mæði (purramæði)/Visna | Maedi/Visna – Retroviridae |
| B160 | Riðuveiki | Scrapie – Prion |
| B159 | Salmonella-fósturlát | Salmonellosis – Salmonella abortus ovis |
| B153 | Smitandi liða- og heilabólga í geitum | Caprine arthritis and encephalitis (CAE) – Retroviridae |
| B157 | Votamæði | Jaagsiekte – Ovine pulmonary adenomatosis – Retroviridae |
| Pigs | | |
| A120 | Afríkönsk svínapest | African swine fever (ASF) – ASF-like virus |

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|-----------------------------------|--------------------------------|--|
| I401 | Blöðrupot í svinum | Vesicular exanthema of swine (VES) – Caliciviridae |
| A140 | Illkynja grísalömun | Teschen disease – Picornaviridae |
| B254 | Smitandi maga- og garnabólga | Transmissible gastroenteritis (TGE) – Coronaviridae |
| A030 | Svínafár | Swine vesicular disease (SVD) – Picornaviridae |
| A130 | Svínapest | Classical swine fever – Hog cholera – Flaviviridae |
| Dogs, cats and fur animals | | |
| B353 | Lifardrep | Rabbit haemorrhagic disease (VHD) – Parvoviridae |
| I501 | Maurakláði | Sarcoptes mange – Sarcoptes spp. |
| I502 | Plasmacytósa | Plasmacytosis – Aleutian disease – Parvoviridae |
| I503 | Refafár/Minkafár | Distemper – Paramyxoviridae |
| I504 | Sullaveikifár | Echinococcosis – Echinococcus multilocularis |
| Poultry | | |
| A150 | Hæsnapest | Avian influenza (AI) – Fowl plague – Orthomyxoviridae |
| B313 | Hænsnatyfus | Fowl typhoid – Salmonella gallinarum |
| B308 | Kjúklingasótt | Pullorum disease – Salmonella pullorum |
| I601 | Nef- og barkabólga | Avian rhinotracheitis (ART) – Pneumoviridae |
| A160 | Newcastle-veiki | Newcastle Disease (ND) – Paramyxoviridae |
| B302 | Smitandi kverka- og barkabólga | Infectious laryngotracheitis (ILT) – Herpesviridae |
| B305 | Veirugarnabólga í öndum | Duck virus enteritis (DVE) – Herpesviridae |
| B304 | Veirulífrabólga í öndum | Duck virus hepatitis (DVH) – Picornaviridae |
| Fish | | |
| B413 | EHN-veiki | Epizootic haematopoietic necrosis – Iridoviridae |
| B415 | Herpesveiki/OMV-veiki | Herpesvirus salmonis/H. scophthalmi Oncorhynchus masou virus disease |
| B405 | IHN-veiki | Infectious haematopoietic necrosis – Rhabdoviridae |
| I701 | IPN-veiki | Infectious pancreas necrosis – Birnaviridae |
| I702 | ISA-veiki | Infectious salmon anemia – Orthomyxoviridae |
| I703 | Roðflyðrusýki | Gyrodactylosis – Gyrodactylus salaris |
| B404 | SVC-veiki | Spring viraemia of carp – Rhabdoviridae |
| B401 | VHS-veiki | Viral haemorrhagic septicaemia – Rhabdoviridae |
| I704 | VNN-veiki | Viral nervous necrosis – Nodaviridae |
| Molluscs | | |
| B434 | Marteilúveiki | Marteiliosis – Marteilia refringens/M. sydneyi |
| B436 | Mykrocytos-veiki | Mikrocytosis – Mykrocytos mackini/M. roughleyi |
| B431 | Ostruveiki | Bonamiosis – Bonamia ostreae/B. sp. |
| B433 | Perkinsus-veiki | Perkinsosis – Perkinsus marinus/P. olseni |
| B432 | Sumarveiki í ostrum | Haplosporidiosis – Haplosporidium costale/H. nelsoni |
| I801 | Velar-veiki | Oyster velar virus disease – Iridoviridae |
| Crustaceans | | |
| I901 | Humarveiki | Gaffkemi – Aerococcous viridans |
| I902 | Krabbapest | Crayfish plague – Aphanomyces astaci |

Other notifiable animal diseases (Regulation No 52/2014)

| Multiple species | | |
|-------------------------|-----------------------|--|
| I001 | Blóðsviti | Parafilariosis – <i>Parafilaria</i> spp. |
| C702 | Fótrot | Footrot – <i>Fusobacterium necrophorum</i> |
| B059 | Garnaveiki | Paratuberculosis – <i>Mycobacterium avium paratuberculosis</i> |
| I002 | Hringskyrfi | Ringworm – <i>Microsporum</i> spp./ <i>Trichophyton</i> spp. |
| B107 | Hrýfi | Dermatophilosis – <i>Dermatophilus congolensis</i> |
| B056 | Leptóspírósa/Gulusótt | Leptospirosis – <i>Leptospira</i> spp. |
| I003 | Neosporosis | Nesosporosis – <i>Neospora caninum</i> |

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| B057 | Q-hitasótt | Q-fever – <i>Coxiella burnetii</i> |
| C619/C855 | Salmonella-sýkingar | Intestinal salmonella infections – <i>Salmonella</i> spp. (Other than <i>Salmonella gallinarum</i> / <i>S. pullorum</i>) |
| B104 | Smitandi fósturlát | Bovine genital campylobacteriosis – <i>Campylobacter fetus fetus</i> |
| B053 | Sullaveiki | Echinococcosis – Hydatidosis – <i>Echinococcus granulosus</i> |
| B255 | Tríkínuveiki | Trichinosis – <i>Trichinella spiralis</i> |
| Horses | | |
| B206 | Hestainflúensa | Equine influenza – <i>Orthomyxoviridae</i> |
| B210 | Hrossabóla | Horse pox – <i>Poxviridae</i> |
| B213 | Hrossakláði | Sarcoptic mange – <i>Sarcoptes scabiei var equi</i> |
| C753 | Kverkeiðabólga | Strangles – <i>Streptococcus equi equi</i> |
| B208 | Smitandi háls- og lungnakvef | Equine viral rhinopneumonitis/Equine abortion virus (EHV-1/EHV-4) – <i>Herpesviridae</i> |
| B204 | Smitandi heilabólga | Eastern & Western equine encephalomyelitis – <i>Alphaviridae</i> |
| B201 | Smitandi legbólga | Contagious equine metritis (CEM) – <i>Taylorella equigenitalis</i> |
| B211 | Smitandi slagæðabólga | Equine viral arteritis (EVA) – <i>Arteriviridae</i> |
| B203 | Smitandi sogæðabólga | Epizootic lymphangitis – <i>Histoplasma farciminosum</i> |
| B216 | Venezuela-heilabólga | Equine Venezuelan encephalomyelitis – <i>Alphaviridae</i> |
| Cattle | | |
| B112 | Fósturlát í kúm | Trichomonosis – <i>Trichomonas foetus</i> |
| B114 | Illkynja slímhúðarbólga | Malignant catarrhal fever (AHV-1) – <i>Herpesviridae</i> |
| C652 | Smitandi slímhúðarpest | Bovine viral diarrhoea/Mucosal disease (MD/BVD) – <i>Flaviviridae</i> |
| I201 | Smitandi öndunarfærabólga | Bovine respiratory syncytial virus (BRSV) – <i>Paramyxoviridae</i> |
| I202 | Veiruskita | Viral diarrhoea – <i>Coronaviridae</i> |
| B106 | Vöðvasullur | Bovine cysticercosis – <i>Taenia saginata</i> |
| Sheep and goats: | | |
| I302 | Fellilús | Sheep biting louse – <i>Damalinia ovis</i> |
| I303 | Fjárkláði | Sheep scab – <i>Psoroptes ovis</i> |
| C706 | Fótakláði | Sheep mange – <i>Chorioptes ovis</i> |
| I304 | Færilús | Sheep keds – <i>Melophagus ovinus</i> |
| B151 | Lypudrep | Ovine epididymitis – <i>Brucella ovis</i> |
| I305 | Vöðvasullur | Ovine cysticercosis – <i>Taenia ovis</i> |
| Pigs | | |
| I402 | Illkynja lungnabólga | Pleuropneumonia – <i>Actinobacillus pleuropneumonia</i> |
| B257 | PRRS-veiki | Porcine respiratory and reproductive syndrome (PRRS) |
| I403 | Smitandi veiruskita | Porcine epidemic diarrhoea (PED) – <i>Coronaviridae</i> |
| B252 | Svínabandormur | Porcine cysticercosis – <i>Taenia solium</i> |
| I404 | Svínainflúensa | Swine influenza – Hog flue – <i>Orthomyxoviridae</i> |
| B256 | Ælu- og vanþrifapest | Vomiting & wasting disease – Hemagglutinating encephalomyelitis virus (HEV) – <i>Coronaviridae</i> |
| Dogs, cats and fur animals | | |
| I505 | Hundafár | Canine distemper – <i>Paramyxoviridae</i> |
| B501 | Leishmaníu-veiki | Canine leishmaniosis – <i>Leishmania</i> spp. |
| I506 | Lungnafár í mink | Hemorrhagic pneumonia – <i>Pseudomonas aeruginosa</i> |
| I507 | Refavanki | Nosematosis – <i>Encephalitozoon cuniculi</i> |
| I508 | Veiruskita í mink | Mink viral enteritis – <i>Parvoviridae</i> |
| Poultry | | |
| B303 | Fuglaberklar | Avian tuberculosis – <i>Mycobacterium avium</i> |
| B307 | Fuglabólusótt | Fowl pox – <i>Poxviridae</i> |
| B306 | Fuglakólera | Fowl cholera – <i>Pasteurella multocida</i> |
| B311 | Fuglakregða | Avian mycoplasmosis – <i>M. gallisepticum</i> / <i>M. meleagridis</i> |

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| B309 | Gumboro-veiki | Gumboro disease – Infectious bursal disease (IBD) – <i>Birnaviridae</i> |
| B310 | Hænsnalömun | Marek's disease – <i>Herpesviridae</i> |
| C853 | Mæ nubólga | Avian encephalomyelitis (AE) – <i>Picornaviridae</i> |
| I602 | Paramyxóveirusýkingar | Avian paramyxovirus (other than Newcastle disease) – <i>Paramyxoviridae</i> |
| B312 | Páfagaukaveiki | Avian chlamydiosis – Psittacosis – Ornithosis – <i>Chlamydia psittaci</i> – (annað en fósturlát í ám) |
| B301 | Smitandi berkjubólga | Infectious bronchitis (IB) – <i>Coronaviridae</i> |
| I603 | Varpröskun | Egg drop syndrome (EDS) – <i>Adenoviridae</i> |
| Fish | | |
| I705 | Blóðfrumuveirusótt | Erythrocytic inclusion body syndrome (EIBS) – <i>Togaviridae</i> |
| I706 | Hindberjaveiki | Proliferative kidney disease (PKD) |
| I707 | Hitraveiki | Coldwater vibriosis – <i>Vibrio salmonicida</i> |
| I708 | Hvirfilveiki | Whirling disease – <i>Myxobolus cerebralis</i> |
| I709 | Kýlaveiki | Furunculosis – <i>Aeromonas salm. spp. salmonicida</i> |
| I710 | Laxalús/Fiskilús | Salmon louse infection – <i>Lepeophtheirus salmonis</i> Marine louse infection – <i>Caligus elongatus</i> |
| I711 | Nýrnaveiki | Bacterial kidney disease (BKD) – <i>Renibacterium salmoninarum</i> |
| I712 | PD-veiki/Brisveiki | Pancreas disease (PD) – <i>Togaviridae</i> |
| I713 | Piskirickettsíuveiki | Piscirickettsiosis – <i>Piscirickettsia salmonis</i> |
| I714 | Rauðmunnaveiki | Enteric red mouth (ERM) – Yersiniosis – <i>Yersinia ruckeri</i> |
| I715 | Spírónúkleusveiki | Systemic spironucleosis – <i>Spironucleus barkhanus</i> |
| I716 | Sundmagasótt | Swimbladder nematode of eel – <i>Anguillicola crassus</i> |
| Molluscs | | |
| I802 | Sæeyrnaskelormur | Sabellid polychaete – <i>Terebrasabella heterouncinata</i> |
| Crustaceans | | |
| I903 | Postulínsveiki | Porselenssyke – <i>Thelohania contejeani</i> |
| I904 | Sveppablettaveiki | Brannflekkasyke – <i>Ramularia astaci</i> |
| Bees | | |
| B453 | Evrópsk býflugnapest | European foulbrood – <i>Streptococcus pluton</i> |
| B452 | Illkynja býflugnapest | American foulbrood – <i>Bacillus larvae</i> |
| B451 | Loftsekkjaveiki | Acariosis of bees – <i>Acarapis woodii</i> |
| B454 | Þarmaveiki | Nosemosis of bees – <i>Nosema apis</i> |
| B455 | Varróaveiki | Varroosis – <i>Varroa jacobsonii</i> |

Diseases subject to compulsory registration (Regulation No 52/2014)

| Multiple species | | |
|-------------------------|--------------------|---|
| C612 | Bogfrymlasótt | Toxoplasmosis – <i>Toxoplasma gondii</i> |
| I003 | Bólusótt | Pox disease – <i>Poxviridae</i> |
| C615 | Bótulismi | Botulism – <i>Clostridium botulinum</i> |
| C616 | Clostridíasýkingar | Clostridiosis – <i>Clostridium</i> ssp. (Other than <i>Clostridium chauvoei</i> , <i>Cl. perfringens</i> type C og <i>Cl. botulinum</i>) |
| C620 | Hníslasótt | Coccidiosis – <i>Eimeria</i> spp./ <i>Isospora</i> spp. |
| C611 | Hvanneyrarveiki | Listeriosis – <i>Listeria monocytogenes</i> |
| C613 | Ígerðarsótt | Melioidosis – <i>Burkholderia pseudomallei</i> |
| C618 | Kjálkabris | Actinomycosis – <i>Actinomyces</i> ssp. |
| C705/C752 | Kýlapest | Caseous lymphadenitis – Ulcerative lymphangitis – <i>Actinobacillus lignieresii/Corynebacterium pseudotuberculosis</i> |
| I004 | Lungnapest | Pasteurellosis – <i>Pasteurella multocida/P. haemolytica</i> |

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| C617 | Lungnadrep | Other pasteurellosis – <i>Pasteurella</i> ssp. (Other than <i>Pasteurella multocida</i>) |
| C614 | Pestbjúgur | Blackleg – <i>Clostridium chauvoei</i> |
| C621 | Ögðuveiki | Liver fluke disease – Distomatosis – <i>Fasciola hepatica</i> |
| Horses | | |
| I101 | Herpeskvef | Equine herpesvirus 2 (EHV-2) – <i>Herpesviridae</i> |
| C751 | Herpesútbrot | Equine coital exanthema (EHV-3) – <i>Herpesviridae</i> |
| I102 | Húðsveppur | <i>Trichophyton equinum/T. mentagrophytes</i> |
| Sheep and goats | | |
| C701 | Smitandi munnangur | Orf – Contagious ecthyma (CE) – <i>Poxviridae</i> |
| I306 | Tannlos | Broken mouth |
| Pigs | | |
| I405 | Bjúgveiki | Edema disease – <i>E. coli</i> O138/O139/O140/O141 |
| I406 | Blóðskita | Swine dysentery – <i>Brachyspira hyodysenteriae</i> |
| I407 | Garnadrep | Necrotic enteritis – <i>Clostridium perfringens</i> type C |
| I408 | Gothi | Mastitis-metritis-agalactia syndrome (MMA) |
| C801 | Rauðsýki | Swine erysipelas – <i>Erysipelothrix rhusiopathiae</i> |
| I409 | Smitandi fósturdauði | Porcine parvovirus (PPV) – <i>Parvoviridae</i> |
| B251 | Snúðtrýni | Atrophic rhinitis of swine – <i>Pasteurella multocida</i> tox + |
| I410 | Svínakláði | Sarcoptes mange – <i>Sarcoptes scabiei</i> var. <i>suis</i> |
| I411 | Svínakregða | Endemic pneumonia (EP) – <i>Mycoplasma pneumonia</i> |
| I412 | Þarmabólga | Porcine intestinal adenomatosis (PIA) – <i>Lawsonia intracellularis</i> |
| Dogs, cats and fur animals: | | |
| I509 | Eyrnamaur | Ear mites – <i>Otodectes cynotis</i> |
| I510 | Kattafár | Feline leukemia virus – <i>Retroviridae</i> |
| I511 | Kattamaur | Cheyletiellosis – <i>Cheyletiella parasitovorax</i> |
| I512 | Smáveirusótt | Canine parvovirus – <i>Parvoviridae</i> |
| I513 | Smitandi heila- og lifrabólga | Hepatitis contagiosa canis (HCC)/Fox encephalitis – (CAV-1) – <i>Adenoviridae</i> |
| Poultry: | | |
| I604 | Blávængjaveiki | Chicken infectious anemia (CIA) – <i>Parvoviridae</i> |
| C856 | Hvítblæði | Avian leucosis – <i>Retroviridae</i> |
| I605 | Fuglakregða | Avian mycoplasmosis – (Other than <i>M. gallisepticum</i> and <i>M. meleagridis</i>) |
| Fish | | |
| I718 | Fiskaberkjar | Mycobacteriosis – <i>Mycobacterium marinum</i> |
| I719 | Kýlaveikibróðir | Ulcer disease – <i>Aeromonas salm.</i> spp. <i>achromogenes</i> |
| I720 | Klamydíuveiki | Epitheliocystis – <i>Chlamydia</i> spp. |
| I721 | Roðdrep í klaklaxi | Ulcerative dermatic necrosis (UDN) |
| I722 | VEN-veiki | Viral erythrocytic necrosis – <i>Iridoviridae</i> |
| I723 | Vetrarsár | Winter ulcers – <i>Moritella viscosa</i> |
| I724 | Víbríuveiki | Vibriosis – <i>Vibrio anguillarum</i> |
| I725 | Vörtuveiki | Papillomatosis – <i>Herpesviridae</i> |

2. Animal disease surveillance

Infections which can be latent and diseases which do not have clear clinical symptoms are monitored by routine sampling. Farms are selected at random with the limitation that samples must be taken on all farms within a certain time interval. The aim of the surveillance is to detect with 95% confidence at least one positive unit (animal or farm) if the infection is present at a maximum of 5% prevalence. The expected prevalence may vary based on the nature of the disease. The within-herd sample size is determined by the number of animals available for blood sampling. The following sections contain information about sampling and results of analyses for the active surveillance.

2.1. Cattle diseases

2.1.1. *Enzootic bovine leucosis*

Enzootic bovine leucosis has never been detected. It is a notifiable disease, according to Act No 25/1993. At slaughterhouses, all tumours, suspected to be lymphosarcoma, are reported and sent for diagnosis at the official laboratory at Keldur. In 1993 a serological survey was carried out. Systematic surveillance has been carried out since 2007. See table below.

Table 1 Number of samples analysed for enzootic bovine leucosis

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 1993 | 51 | 21 | 0 | 0 |
| 2001 | 35 | - | 0 | 0 |
| 2007 | - | 97 | 0 | 0 |
| 2008 | - | 75 | 0 | 0 |
| 2009 | - | 79 | 0 | 0 |
| 2010 | - | 87 | 0 | 0 |
| 2011 | - | 80 | 0 | 0 |
| 2012 | - | 80 | 0 | 0 |
| 2013 | - | 70 | 0 | 0 |
| 2014 | - | 78 | 0 | 0 |
| 2015 | - | 63 | 0 | 0 |
| 2016 | - | 73 | 0 | 0 |
| 2017 | - | 70 | 0 | 0 |
| 2018 | - | 75 | 0 | 0 |
| 2019 | - | 70 | 0 | 0 |
| 2020 | - | 65 | 0 | 0 |
| 2021 | - | 74 | 0 | 0 |
| 2022 | - | 81 | 0 | 0 |
| 2023 | - | 82 | 0 | 0 |

2.1.2. *Infectious bovine rhinotracheitis/ Infectious pustular vulvovaginitis*

Infectious bovine rhinotracheitis/infectious pustular vulvovaginitis is a notifiable disease, according to Act No 25/1993. It was detected for the first time in Iceland in September 2012 in a bulk tank sample from one farm, taken according to the annual surveillance programme; no clinical symptoms were detected at the farm. Immediate notification was sent to OIE. Decision was made to cull all infected animals. In 1993 a serological survey was conducted, and a systematic surveillance has been carried out since 2007. See table below.

Table 2 Number of samples analysed for IBR/IPV

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 1993 | 51 | 21 | 0 | 0 |
| 2000 | 10 | 1 | 0 | 0 |
| 2001 | 39 | - | 0 | 0 |
| 2007 | - | 97 | 0 | 0 |
| 2008 | - | 76 | 0 | 0 |
| 2009 | - | 79 | 0 | 0 |
| 2010 | - | 87 | 0 | 0 |
| 2011 | - | 80 | 0 | 0 |
| 2012 | - | 80 | 1 | 1 |
| 2013 | 36 | 7 | 0 | 0 |
| 2014 | - | 78 | 0 | 0 |
| 2015 | - | 63 | 0 | 0 |
| 2016 | - | 73 | 0 | 0 |
| 2017 | - | 70 | 0 | 0 |
| 2018 | - | 75 | 0 | 0 |
| 2019 | - | 70 | 0 | 0 |
| 2020 | - | 65 | 0 | 0 |
| 2021 | - | 74 | 0 | 0 |
| 2022 | - | 81 | 0 | 0 |
| 2023 | - | 82 | 0 | 0 |

* In response to this positive result, samples were taken at all dairy farms in the country (656). One additional sample was positive. All infected animals were slaughtered and a year later it was confirmed that the infection had been eradicated.

2.1.3. Bovine virus diarrhoea

Bovine virus diarrhoea has never been detected. It is a notifiable disease, according to Act No 25/1993. In 1992 and 1994 serological surveys were conducted. Systematic surveillance has been carried out since 2007. See table below.

Table 3 Number of samples analysed for bovine virus diarrhoea

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 1992 | - | 120 | 0 | 0 |
| 1994 | - | 167 | 0 | 0 |
| 2000 | 10 | 1 | 0 | 0 |
| 2001 | 39 | - | 0 | 0 |
| 2007 | - | 97 | 0 | 0 |
| 2008 | - | 75 | 0 | 0 |
| 2009 | - | 79 | 0 | 0 |
| 2010 | - | 87 | 0 | 0 |
| 2011 | - | 80 | 0 | 0 |
| 2012 | - | 80 | 0 | 0 |
| 2016 | - | 73 | 0 | 0 |
| 2017 | - | 70 | 0 | 0 |
| 2018 | - | 75 | 0 | 0 |

| | | | | |
|------|---|----|---|---|
| 2019 | - | 70 | 0 | 0 |
| 2020 | - | 65 | 0 | 0 |
| 2021 | - | 74 | 0 | 0 |
| 2022 | - | 81 | 0 | 0 |
| 2023 | - | 82 | 0 | 0 |

2.1.4. *Salmonella* spp and *S. Dublin*

Salmonella Dublin has never been detected. It is a notifiable disease according to Act No 25/1993. Serological surveillance was initiated in 2012, see table below.

Table 4 Number of samples analysed for *Salmonella* Dublin

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 2012 | - | 80 | 0 | 0 |
| 2013 | - | 70 | 0 | 0 |
| 2014 | - | 78 | 0 | 0 |
| 2015 | - | 63 | 0 | 0 |
| 2016 | - | 73 | 0 | 0 |
| 2017 | - | 70 | 0 | 0 |
| 2018 | - | 75 | 0 | 0 |
| 2019 | - | 70 | 0 | 0 |
| 2020 | - | 65 | 0 | 0 |
| 2021 | - | 74 | 0 | 0 |
| 2022 | - | 81 | 0 | 0 |
| 2023 | - | 82 | 0 | 0 |

2.1.5. Q-fever

Coxiella burnetti has never been detected in animals. It is a notifiable disease, according to Act No 25/1993. Serological surveillance was initiated in 2012, see table below.

Table 5 Number of samples analysed for *Coxiella burnetti*

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 2012 | - | 80 | 0 | 0 |
| 2013 | - | 70 | 0 | 0 |
| 2014 | - | 78 | 0 | 0 |
| 2015 | - | 63 | 0 | 0 |
| 2016 | - | 73 | 0 | 0 |
| 2017 | - | 70 | 0 | 0 |
| 2018 | - | 75 | 0 | 0 |
| 2019 | - | 70 | 0 | 0 |
| 2020 | - | 65 | 0 | 0 |
| 2021 | - | 74 | 0 | 0 |
| 2022 | - | 81 | 0 | 0 |
| 2023 | - | 82 | 0 | 0 |

2.1.6. Bovine brucellosis

Bovine brucellosis has never been detected in Iceland. It is a notifiable disease, according to Act No25/1993. In 1993 a serological survey was carried out. Systematic surveillance has been carried out since 2007. See table below.

Table 6 Number of samples analysed for bovine brucellosis

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 1993 | 51 | 21 | 0 | 0 |
| 2008 | 80 | 16 | 0 | 0 |
| 2009 | 75 | 15 | 0 | 0 |
| 2010 | 90 | 18 | 0 | 0 |
| 2011 | 80 | 16 | 0 | 0 |
| 2012 | 45 | 9 | 0 | 0 |
| 2013 | 36 | 7 | 0 | 0 |
| 2014 | 76 | 15 | 0 | 0 |
| 2016 | 82 | 16 | 0 | 0 |
| 2017 | 83 | 17 | 0 | 0 |
| 2018 | 84 | 18 | 0 | 0 |
| 2019 | 81 | 16 | 0 | 0 |
| 2020 | 75 | 15 | 0 | 0 |
| 2021 | 80 | 20 | 0 | 0 |
| 2022 | 75 | 15 | 0 | 0 |
| 2023 | 85 | 17 | 0 | 0 |

2.1.7. Bovine spongiform encephalopathy

Bovine spongiform encephalopathy has never been detected. It is a notifiable disease, according to Act No 25/1993. Since 1968, it has been prohibited to import meat- and bone meal and greaves for use in feeding stuffs for livestock, and there has been a ban on feeding meat- and bone meal to ruminants since 1978 and all food producing animals

since 2001. In 2004, Iceland was recognized as a negligible BSE risk country, by the OIE International Committee. Since 2000 samples have been taken systematically every year, see table below. Until 2009 samples were taken from cattle displaying behavioural or clinical signs consistent with BSE and cattle more than 24 months of age within the categories of fallen stock, casualty slaughter and routine slaughter. Since 2010 the age criterium has been 30 months for fallen stock and casualty slaughter and 36 months for the category routine slaughter. Only in 1999, 2000, 2006, 2009, 2010 and 2014 cattle were tested due to clinical symptoms, one each year.

Table 7 Number of samples analysed for BSE

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|-------------|--------------------------------------|--------------------------------|-----------------------------------|---------------------------------|
| 2000 | 28 | - | 0 | 0 |
| 2001 | 422 | - | 0 | 0 |
| 2002 | 64 | - | 0 | 0 |
| 2003 | 73 | - | 0 | 0 |
| 2004 | 120 | - | 0 | 0 |
| 2005 | 191 | - | 0 | 0 |
| 2006 | 65 | - | 0 | 0 |
| 2007 | 91 | - | 0 | 0 |
| 2008 | 148 | - | 0 | 0 |
| 2009 | 99 | - | 0 | 0 |
| 2010 | 101 | - | 0 | 0 |
| 2011 | 120 | - | 0 | 0 |
| 2012 | 99 | - | 0 | 0 |
| 2013 | 100 | - | 0 | 0 |
| 2014 | 240 | 170 | 0 | 0 |
| 2015 | 75 | 43 | 0 | 0 |
| 2016 | 140 | 87 | 0 | 0 |
| 2017 | 897 | 266 | 0 | 0 |
| 2018 | 91 | 36 | 0 | 0 |
| 2019 | 12 | 11 | 0 | 0 |
| 2020 | 14 | 12 | 0 | 0 |
| 2021 | 10 | 9 | 0 | 0 |
| 2022 | 216 | 146 | 0 | 0 |
| 2023 | 438 | 395 | 0 | 0 |

2.1.8. Paratuberculosis

In cattle, paratuberculosis was first diagnosed in 1945. Samples are taken from cattle when suspicion of the disease arises and in connection with movement of cattle between surveillance zones. See table below.

Table 8 Number of cattle samples analysed for paratuberculosis

| Year | Number of samples from ileum | Number of blood samples (farms) | Number of positive farms |
|------|------------------------------|---------------------------------|--------------------------|
| 2000 | 1356 | 945 | 1 |
| 2001 | 1705 | 427 | 3 |
| 2002 | 450 | 349 | 2 |
| 2003 | 1940 | 455 | 0 |
| 2004 | 32 | 649 | 0 |
| 2005 | 450 | 684 | 1 |
| 2006 | 52 | 430 | 0 |
| 2007 | ? | 231 | 0 |
| 2008 | 10 | 0 | 0 |
| 2009 | 2 | 23 | 0 |
| 2010 | 14 | 111 | 1 |
| 2011 | 1 | 40 | 0 |
| 2012 | 0 | 43 | 0 |
| 2013 | 69 | 69 (1) | 0 |
| 2014 | 19 | 2 (1) | 1 |
| 2015 | 19 | 0 | 1 |
| 2016 | 18 | 1 | 2 |
| 2017 | 5 | 0 | 0 |
| 2018 | 3 | 0 | 0 |
| 2019 | 19 | 0 | 0 |
| 2020 | 1 | 0 | 0 |
| 2021 | 0 | 51 (20) | 1 |

2.2. Sheep diseases

2.2.1. Scrapie

Scrapie has been endemic since 1878. A decision was made in 1986 to start an eradication programme. On farms where scrapie is detected, all sheep are culled. Areas where scrapie has been detected are kept under special surveillance for 10 years. Samples are taken annually from sheep at slaughter and sheep displaying clinical signs compatible with scrapie. See table below.

Table 9 Number of samples analysed for scrapie

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 2000 | 7826 | - | 4 | 3 |
| 2001 | 7647 | - | 9 | 1 |
| 2002 | 5621 | - | 12 | 2 |
| 2003 | 7208 | - | 19 | 5 |
| 2004 | 9590 | - | 19 + 2 NOR98 | 7 + 1 NOR98 |
| 2005 | 3551 | - | 9 | 4 |
| 2006 | 3815 | - | 21 | 2 |
| 2007 | 5057 | - | 15 + 1 NOR98 | 3 + 1 NOR98 |
| 2008 | 3087 | - | 57 + 1 NOR98 | 1 + 1 NOR98 |
| 2009 | 1717 | 123 | 7 | 2 |
| 2010 | 3666 | 353 | 5 | 1 |
| 2011 | 3527 | 197 | 0 + 1 NOR98 | 0 + 1 NOR98 |
| 2012 | 2732 | - | 0 | 0 |
| 2013 | 3664 | 155 | 0 + 2 NOR98 | 0 + NOR98 |
| 2014 | 3949 | 193 | 2 | 1 |
| 2015 | 5172 | 294 | 29 + 1 NOR98 | 3 + 1 NOR98 |
| 2016 | 2742 | 127 | 11 | 2 |
| 2017 | 3678 | 217 | 9 | 1 |
| 2018 | 3630 | 291 | 21 | 2 |
| 2019 | 3909 | 313 | 21 | 1 |
| 2020 | 7612 ^{*1} | 260 | 53 | 6 |
| 2021 | 6239 ^{*2} | 262 | 56 | 3 |
| 2022 | 4230 | 378 | 0 | 0 |
| 2023 | 4849 | 42 | 5 | 4 |

*1 Including 2412 samples analysed in connection with culling of herds due to scrapie

*2 Including 1452 samples analysed in connection with culling of herds due to scrapie

2.2.2. Paratuberculosis

In sheep, paratuberculosis was first diagnosed in 1933. In 1966 a vaccination programme was established. Blood samples are taken if suspicion arises in live animals. At the slaughterhouses, ileum of all adult sheep is inspected and if considered necessary samples are submitted to the official laboratory at Keldur. See table below.

Table 10 Number of sheep samples analysed for paratuberculosis

| Year | Number of samples from ileum (farms) | Number of blood samples (farms) | Number of positive farms |
|------|--------------------------------------|---------------------------------|--------------------------|
| 2000 | 15482 | 138 | 5 |
| 2001 | 21417 | 846 | 12 |
| 2002 | 8353 | 161 | 10 |
| 2003 | 11681 | 231 | 11 |
| 2004 | 2922 | 118 | 7 |
| 2005 | 20400 | 262 | 7 |
| 2006 | 10575 | 205 | 13 |
| 2007 | 14821 | 90 | 5 |
| 2008 | 8609 | ? | 10 |
| 2009 | 387 | 5 | 0 |
| 2010 | 22 | 170 + 13 goats | 3 |
| 2011 | 741 | 735 | 6 |
| 2012 | 34 | 0 | 0 |
| 2013 | 89 | 266 | 1 |
| 2014 | 62 (15) | 205 (5) | 6 |
| 2015 | 93 (31) | 72 (18) | 13 |
| 2016 | 17 (7) | 0 | 2 |
| 2017 | 10 (10) | 0 | 3 |
| 2018 | 23 | 0 | 3 |
| 2019 | 59 (30) | 0 | 6 |
| 2020 | 30 (24) | 0 | 3 |
| 2021 | 10 (6) | 2 (1) | 5 |
| 2022 | 10 (4) | 0 | 0 |
| 2023 | 7 (3) | 0 | 2 |

2.2.3. *Ovine Brucellosis*

Ovine Brucellosis (*Brucella melitensis*) has never been detected. It is a notifiable disease, according to Act No 25/1993. Systematic surveillance has been carried out since 2010. See table below.

Table 11 Number of sheep samples analysed for Ovine Brucellosis

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 2010 | 100 | 19 | 0 | 0 |
| 2012 | 85 | 18 | 0 | 0 |
| 2014 | 100 | 20 | 0 | 0 |
| 2015 | 45 | 8 | 0 | 0 |
| 2016 | 80 | 16 | 0 | 0 |
| 2017 | 50 | 10 | 0 | 0 |
| 2018 | 75 | 15 | 0 | 0 |
| 2019 | 86 | 17 | 0 | 0 |
| 2020 | 100 | 20 | 0 | 0 |
| 2021 | 100 | 20 | 0 | 0 |
| 2022 | 75 | 15 | 0 | 0 |
| 2023 | 86 | 17 | 0 | 0 |

2.2.4. *Maedi-visna*

Maedi-visna has not been detected since 1965. It is a notifiable disease, according to Act No25/1993. Systematic surveillance has been carried out since 2012. See table below.

Table 12 Number of sheep samples analysed for maedi-visna

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 2012 | 85 | 18 | 0 | 0 |
| 2013 | 61 | - | 0 | 0 |
| 2014 | 100 | 20 | 0 | 0 |
| 2015 | 45 | 8 | 0 | 0 |
| 2016 | 80 | 16 | 0 | 0 |
| 2017 | 78 | 10 | 0 | 0 |
| 2018 | 75 | 15 | 0 | 0 |
| 2019 | 86 | 17 | 0 | 0 |
| 2020 | 100 | 20 | 0 | 0 |
| 2021 | 100 | 20 | 0 | 0 |
| 2022 | 75 | 15 | 0 | 0 |
| 2023 | 86 | 17 | 0 | 0 |

2.2.5. Border Disease

Border Disease has never been detected. It is a notifiable disease, according to Act No 25/1993. Systematic surveillance has been carried out since 2018. See table below.

Table 13 Number of sheep samples analysed for Border Disease

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|-------------|--------------------------------------|--------------------------------|-----------------------------------|---------------------------------|
| 2018 | 75 | 15 | 0 | 0 |
| 2019 | 86 | 17 | 0 | 0 |
| 2020 | 100 | 20 | 0 | 0 |
| 2021 | 100 | 20 | 0 | 0 |
| 2022 | 75 | 15 | 0 | 0 |
| 2023 | 86 | 17 | 0 | 0 |

2.3. Swine diseases

2.3.1. Aujeszky's disease

Aujeszky's disease has never been detected. It is a notifiable disease, according to Act No25/1993. Samples have been taken occasionally since 1994. See table below.

Table 14 Number of samples analysed for Aujeszky's disease

| Year | Number of individuals sampled | Number of farms | Number of positive samples | Number of positive farms |
|------|-------------------------------|-----------------|----------------------------|--------------------------|
| 1994 | - | 20 | 0 | 0 |
| 1995 | - | 1 | 0 | 0 |
| 1997 | - | 1 | 0 | 0 |
| 1998 | - | 1 | 0 | 0 |
| 2007 | 240 | 8 | 0 | 0 |
| 2014 | 232 | 4 | 0 | 0 |

2.3.2. Transmissible gastroenteritis and porcine respiratory corona virus

TGE and PRCV have never been detected. They are notifiable diseases, according to Act No 25/1993. Samples have been taken occasionally since 1994. See table below.

Table 15 Number of samples analysed for TGE and PRCV

| Year | Number of individuals sampled | Number of farms | Number of positive samples | Number of positive farms |
|------|-------------------------------|-----------------|----------------------------|--------------------------|
| 1994 | - | 20 | 0 | 0 |
| 1998 | - | 1 | 0 | 0 |
| 2007 | 240 | 8 | 0 | 0 |
| 2013 | 226 | 4 | 0 | 0 |
| 2018 | 89 | 8 | 0 | 0 |

2.3.3. Porcine respiratory and reproductive syndrome

PRRS has never been detected. It is a notifiable disease, according to Act No 25/1993. Samples have been taken occasionally since 1994. See table below.

Table 16 Number of samples analysed for PRRS

| Year | Number of individuals sampled | Number of farms | Number of positive samples | Number of positive farms |
|------|-------------------------------|-----------------|----------------------------|--------------------------|
| 1994 | - | 20 | 0 | 0 |
| 1995 | - | 1 | 0 | 0 |
| 1997 | - | 1 | 0 | 0 |
| 1998 | - | 1 | 0 | 0 |
| 1999 | - | 3 | 0 | 0 |
| 2007 | 240 | 8 | 0 | 0 |
| 2009 | 119 | - | 0 | 0 |
| 2010 | 210 | - | 0 | 0 |
| 2011 | 240 | 9 | 0 | 0 |
| 2012 | 225 | 8 | 0 | 0 |
| 2013 | 226 | 4 | 0 | 0 |
| 2014 | 232 | 4 | 0 | 0 |
| 2015 | 229 | 8 | 0 | 0 |
| 2016 | 225 | 8 | 0 | 0 |
| 2017 | 242 | 8 | 0 | 0 |
| 2018 | 209 | 8 | 0 | 0 |
| 2019 | 285 | 8 | 1* | 0 |
| 2020 | 360 | 8 | 3* | 0 |
| 2021 | 240 | 8 | 0 | 0 |
| 2022 | 239 | 8 | 0 | 0 |
| 2023 | 229 | 8 | 0 | 0 |

* Test result was uncertain. Assumed to be false-positive as all other sample from the farm were negative.

2.3.4. Swine influenza

Clinical signs of swine influenza have only been detected in connection with an outbreak of the subtype H1N1 in people. It is a notifiable disease, according to Act No25/1993. Samples have been taken occasionally since 1994. See tables below.

Table 17 Number of samples analysed for swine influenza subtype H3N2

| Year | Number of individuals sampled | Number of farms | Number of positive samples | Number of positive farms |
|------|-------------------------------|-----------------|----------------------------|--------------------------|
| 1994 | - | 20 | 0 | 0 |
| 1997 | - | 1 | 0 | 0 |
| 1998 | - | 3 | 1* ¹ | - |
| 1999 | - | 3 | 5* ¹ | - |
| 2007 | 240 | 8 | 0 | 0 |
| 2009 | 239 | 8 | 0 | 0 |
| 2010 | 210 | 8 | 0 | 0 |
| 2011 | 240 | 9 | 33* ² | 9* ² |
| 2012 | 225 | 8 | 0 | 0 |
| 2013 | 226 | 4 | 0 | 0 |
| 2014 | 232 | 4 | 69* ² | 4* ² |
| 2015 | 229 | 8 | 57* ² | 7* ² |

*1 Positive serology. No clinical signs. Repeated sampling negative. Considered false positive.

*2 Positive serology. No clinical signs.

Table 18 Number of samples analysed for swine influenza subtype H1N1

| Year | Number of individuals sampled | Number of farms | Number of positive samples | Number of positive farms |
|------|-------------------------------|-----------------|----------------------------|--------------------------|
| 1999 | - | 3 | 5* ¹ | 0 |
| 2009 | 370 | 8 | 25* ² | 2 |
| 2010 | 210 | 8 | 39* ² | 3 |
| 2011 | 240 | 9 | 0 | 0 |
| 2012 | 225 | 8 | 0 | 0 |
| 2013 | 226 | 4 | 2* ¹ | 1 |
| 2014 | 232 | 4 | 46* ¹ | 3 |
| 2015 | 229 | 8 | 13* ¹ | 2 |

*1 Positive serology. No clinical signs.

*2 Considered H1N1 pan2009.

Table 19 Number of samples analysed for Influenza A

| Year | Number of individuals sampled | Number of farms | Number of positive samples | Number of positive farms |
|------|-------------------------------|-----------------|----------------------------|--------------------------|
| 2016 | 225 | 8 | 24 | 1 |

2.4. Horse diseases

2.4.1. Equine infectious anaemia

Equine infectious anaemia has never been detected. It is a notifiable disease, according to Act No 25/1993. Samples were taken from horses intended for export in the period from 1990-2002. A total of 13.082 samples were analysed and all turned out to be negative. Systematic surveillance has been carried out since 2008. See table below.

Table 20 Number of samples analysed for equine infectious anaemia

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|-------------|--------------------------------------|--------------------------------|-----------------------------------|---------------------------------|
| <2003 | 13.082 | - | 0 | 0 |
| 2008 | 30 | - | 0 | 0 |
| 2009 | 60 | - | 0 | 0 |
| 2010 | 50 | - | 0 | 0 |
| 2011 | 50 | - | 0 | 0 |
| 2012 | 50 | 50 | 0 | 0 |
| 2013 | 50 | 50 | 0 | 0 |
| 2022 | 65 | 51 | 0 | 0 |
| 2023 | 50 | 50 | 0 | 0 |

2.4.2. Equine influenza

Equine influenza has never been detected. It is a notifiable disease, according to Act No 25/1993. Samples have been taken occasionally since 1990. Systematic surveillance has been carried out since 2008. See table below. Samples are taken from stallions which have had a close contact with at least 100 horses for the past three months prior to sampling and horses with clinical symptoms, if any.

Table 21 Number of samples analysed for equine influenza

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|-------------|--------------------------------------|--------------------------------|-----------------------------------|---------------------------------|
| 1990 | 18 | - | 0 | 0 |
| 1995 | 4 | - | 0 | 0 |
| 1998 | 7 | - | 0 | 0 |
| 2000 | 15 | - | 0 | 0 |
| 2004 | 5 | - | 0 | 0 |
| 2008 | 30 | - | 0 | 0 |
| 2009 | 60 | - | 0 | 0 |
| 2010 | 50 | - | 0 | 0 |
| 2011 | 50 | - | 0 | 0 |
| 2012 | 50 | 50 | 0 | 0 |
| 2013 | 50 | 50 | 0 | 0 |
| 2014 | 50 | 50 | 0 | 0 |
| 2015 | 50 | 50 | 0 | 0 |
| 2016 | 45 | 45 | 0 | 0 |
| 2017 | 50 | 50 | 0 | 0 |
| 2018 | 50 | 50 | 0 | 0 |
| 2019 | 50 | 50 | 0 | 0 |
| 2020 | 50 | 50 | 0 | 0 |
| 2021 | 50 | 50 | 0 | 0 |
| 2022 | 65 | 51 | 0 | 0 |
| 2023 | 50 | 50 | 0 | 0 |

2.4.3. Equine rhinopneumonitis (EHV-1)

Equine rhinopneumonitis has never been detected. It is a notifiable disease, according to Act No 25/1993. Samples have been taken occasionally since 1990. Systematic surveillance has been carried out since 2008. See table below. Samples are taken from stallions which have had a close contact with at least 100 horses for the past three months prior to sampling and horses with clinical symptoms, if any.

Table 22 Number of samples analysed for equine rhinopneumonitis

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|--------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 1990 | 18 | - | 0 | 5*1 |
| 1994 | 4 | - | 0 | 3*1 |
| 1998 | 29 | - | 0 | 0 |
| 2000 | 11 | - | 0 | 0 |
| 2004 | 5 | - | 0 | 0 |
| 2008*2 | 35 | - | 0 | 0 |
| 2009*2 | 60 | - | 0 | 0 |
| 2010*3 | 50 | - | 0 | 0 |
| 2011*3 | 50 | - | 0 | 0 |
| 2012*2 | 50 | 50 | 0 | 1*1 |
| 2013*2 | 49 | 49 | 0 | 1*1 |
| 2014 | 50 | 50 | 0 | 0 |
| 2015 | 48 | 48 | 0 | 0 |
| 2016 | 50 | 50 | 0 | 0 |
| 2017 | 50 | 50 | 0 | 0 |
| 2018 | 50 | 50 | 0 | 0 |
| 2019 | 50 | 50 | 0 | 0 |
| 2020 | 50 | 50 | 0 | 0 |
| 2021 | 50 | 50 | 0 | 0 |
| 2022 | 65 | 51 | 0 | 0 |
| 2023 | 50 | 50 | 0 | 0 |

*1 No clinical signs. Considered a cross-reaction to EHV-4

*2 Diagnostic method: ELISA (enzyme-linked immunosorbent assay).

*3 Diagnostic method: CF (compliment fixation test).

2.4.4. Equine viral arteritis

Equine viral arteritis has never been detected. It is a notifiable disease, according to Act No 25/1993. Systematic surveillance was initiated in 2013. See table below. Samples are taken from stallions which have had a close contact with at least 100 horses for the past three months prior to sampling and horses with clinical symptoms, if any.

Table 23 Number of samples analysed for equine viral arteritis

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|-------------|--------------------------------------|--------------------------------|-----------------------------------|---------------------------------|
| 2013 | 48 | 48 | 0 | 0 |
| 2014 | 50 | 50 | 0 | 0 |
| 2015 | 50 | 50 | 0 | 0 |
| 2016 | 50 | 50 | 0 | 0 |
| 2017 | 50 | 50 | 0 | 0 |
| 2018 | 50 | 50 | 0 | 0 |
| 2019 | 50 | 50 | 0 | 0 |
| 2020 | 50 | 50 | 0 | 0 |
| 2021 | 50 | 50 | 0 | 0 |
| 2022 | 65 | 51 | 0 | 0 |

2.5. Poultry diseases

2.5.1. Newcastle disease

Newcastle disease has never been detected. It is a notifiable disease, according to Act No 25/1993. Samples have been taken occasionally since 1993. Systematic surveillance has been carried out since 2008. See table below.

Table 24 Number of samples analysed for Newcastle disease

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 1993 | 100 | - | 0 | 0 |
| 1994 | 100 | - | 0 | 0 |
| 1995 | 100 | - | 0 | 0 |
| 1996 | 100 | - | 0 | 1*1 |
| 1997 | 100 | - | 0 | 0 |
| 1998 | 100 | - | 0 | 0 |
| 2000 | 100 | - | 0 | 0 |
| 2002 | 100 | - | 0 | 9*1 |
| 2007 | 200 | 5 | 0 | 1*1 |
| 2008 | 120 | 6 | 0 | 0 |
| 2009 | 238 | 6 | 0 | 0 |
| 2010 | 180 | 6 | 0 | 0 |
| 2011 | 190*2 | 8*3 | 0 | 0 |
| 2012 | 120*2 | 6*4 | 0 | 0 |
| 2013 | 90 | 3 | 0 | 0 |
| 2014 | 59 | 2 | 0 | 0 |
| 2015 | 221 | 5 | 0 | 0 |
| 2016 | 153 | 5 | 0 | 0 |
| 2017 | 70 | 10 | 0 | 0 |
| 2018 | 66 | 5 | 0 | 0 |
| 2019 | 139 | 11 | 0 | 0 |
| 2020 | 234 | 23 | 0 | 0 |
| 2021 | 319 | 18 | 0 | 0 |
| 2022 | 209 | 14 | 0 | 0 |
| 2023 | 320 | 18 | 0 | 0 |

*1 No clinical symptoms. Repeated sampling negative. Probably not APMV-1.

*2 100 samples from back-yard flocks.

*3 Five back-yard flocks.

*4 Three back-yard flocks.

2.5.2. Avian infectious laryngotracheitis

Avian infectious laryngotracheitis has never been detected. It is a notifiable disease, according to Act No 25/1993. Samples have been taken occasionally since 1995. See table below.

Table 25 Number of samples analysed for avian infectious laryngotracheitis

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 1995 | 100 | - | 1* | 0 |
| 1998 | 100 | - | 0 | 0 |
| 2000 | 100 | - | 1* | 0 |
| 2002 | 100 | - | 12* | 0 |
| 2007 | 200 | 5 | 7* | 0 |
| 2008 | 120 | 6 | 0 | 0 |
| 2009 | 238 | 6 | 0 | 0 |
| 2012 | 58 | 3 | 0 | 0 |
| 2013 | 20 | 1 | 0 | 0 |

* No clinical signs. Repeated sampling negative.

2.5.3. Avian rhinotracheitis

Avian rhinotracheitis has never been detected. It is a notifiable disease, according to Act No 25/1993. Samples have been taken occasionally since 1998. See table below.

Table 26 Number of samples analysed for avian rhinotracheitis

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 1998 | 100 | - | 0 | 0 |
| 2000 | 100 | - | 0 | 0 |
| 2002 | 100 | - | 0 | 0 |
| 2007 | 200 | 5 | 0 | 0 |
| 2008 | 120 | 6 | 0 | 0 |
| 2009 | 20 | 1 | 0 | 0 |

2.5.4. Avian encephalomyelitis

Avian encephalomyelitis is a notifiable disease, according to Act No 25/1993. Clinical disease has never been detected. Samples have been taken occasionally since 1993. See table below

Table 27 Number of samples analysed for avian encephalomyelitis

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 1993 | 100 | - | 0 | 0 |
| 1994 | 100 | - | 0 | 0 |
| 1995 | 100 | - | 0 | 0 |
| 1996 | 102 | - | 1* ¹ | 0 |
| 1997 | 100 | - | 0 | 0 |
| 1998 | 100 | - | 0 | 0 |
| 2000 | 100 | - | 2* ¹ | 0 |
| 2002 | 100 | - | 17* ¹ | 0 |
| 2008 | 120 | 6 | 0 | 0 |
| 2009 | 238 | 6 | 2* ² | 0 |

*¹ No clinical signs. Repeated sampling negative.

*² No clinical signs. Considered false positive.

2.5.5. Avian mycoplasmosis (*Mycoplasma synoviae*)

Large proportion of poultry parent flocks was infected by *Mycoplasma synoviae* during the period from 1995 to 2003 when vaccination was started. Now the infection is considered eradicated. Infections due to *Mycoplasma synoviae* are subject to compulsory registration. Samples have been taken occasionally since 1995. See table below.

Table 28 Number of samples analysed for *Mycoplasma synoviae*

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|--------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 1995 | 110 | - | 59 | - |
| 1996 | 102 | - | 21 | - |
| 1997 | 100 | - | 58 | - |
| 1998 | 100 | - | 48 | - |
| 2000 | 100 | - | 0 | 0 |
| 2002/3 | 100 | - | 40 | - |
| 2009 | 238 | 6 | 0 | 0 |
| 2010 | 180 | 6 | 0 | 0 |
| 2014 | 90 | 3 | 0 | 0 |

2.5.6. Avian mycoplasmosis (*Mycoplasma gallisepticum*)

Mycoplasma gallisepticum has never been detected. Infections due to *Mycoplasma gallisepticum* are notifiable, according to Act No 25/1993. Samples have been taken occasionally since 1995. See table below.

Table 29 Number of samples analysed for *Mycoplasma gallisepticum*

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|--------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 1995 | 110 | - | 0 | 0 |
| 1996 | 102 | - | 0 | 0 |
| 1997 | 100 | - | 0 | 0 |
| 1998 | 100 | - | 0 | 0 |
| 2000 | 100 | - | 0 | 0 |
| 2002/3 | 100 | - | 0 | 0 |
| 2007 | 207 | 14 | 0 | 0 |
| 2008 | 120 | 6 | 0 | 0 |
| 2009 | 238 | 6 | 0 | 0 |
| 2011 | 200 | 2 | 0 | 0 |
| 2013 | 100 | 1 | 0 | 0 |
| 2014 | 100 | 1 | 0 | 0 |
| 2015 | 100 | 1 | 0 | 0 |
| 2020 | 340 | 4 | 0 | 0 |

2.5.7. Avian mycoplasmosis (*Mycoplasma meleagridis*)

Mycoplasma meleagridis has never been detected. Infections due to *Mycoplasma meleagridis* are notifiable, according to Act No 25/1993. A survey was conducted in 2011. See table below.

Table 30 Number of samples analysed for *Mycoplasma meleagridis*

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 2011 | 100 | 1 | 0 | 0 |

2.5.8. Infectious bronchitis

Infectious bronchitis was frequently detected during the period from 1995 to 2002 but for the last few years it has not been detected in routine surveillance. It is a notifiable disease, according to Act No 25/1993. Samples have been taken occasionally since 1995. See table below

Table 31 Number of samples analysed for infectious bronchitis

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 1995 | 110 | - | 84 | - |
| 1996 | 102 | - | 40 | - |
| 1997 | 100 | - | 27 | - |
| 1998 | 100 | - | 87 | - |
| 2000 | 100 | - | 70 | - |
| 2002 | 100 | - | 7* | 0 |
| 2010 | 180 | 6 | 0 | 0 |
| 2011 | 180 | 6 | 0 | 0 |
| 2012 | 58 | 3 | 0 | 0 |
| 2014 | 20 | 4 | 0 | 0 |

* No clinical symptoms. Repeated sampling negative.

2.5.9. Gumboro disease

Gumboro disease was last detected in 1998. One survey was conducted in 2014. Following clinical signs in one broiler farm samples were taken on 13 farms. All samples were negative apart from samples from the farm with clinical signs. See table below.

Table 32 Number of samples from poultry analysed for Gumboro disease

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 2014 | 20 | 4 | 0 | 0 |
| 2019 | 149 | 13 | 6 | 1 |

2.5.10. Avian influenza

Avian influenza is a notifiable disease, according to Act No 25/1993. Clinical disease has never occurred. Samples have been taken occasionally since 1995. Systematic surveillance has been carried out since 2006. See tables below.

Table 33 Number of samples from poultry analysed for AI antibodies

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 1994 | 100 | | 0 | 0 |
| 1995 | 100 | - | 0 | 0 |
| 1998 | 100 | - | 0 | 0 |
| 2000 | 100 | - | 0 | 0 |
| 2002 | 100 | - | 0 | 0 |
| 2006 | 352 | | 4* | 1 |
| 2007 | 200 | 5 | 0 | 0 |
| 2008 | 120 | 6 | 0 | 0 |
| 2009 | 238 | 6 | 0 | 0 |
| 2010 | 180 | 6 | 0 | 0 |
| 2011 | 90 | 3 | 0 | 0 |
| 2012 | 60 | 2 | 0 | 0 |
| 2013 | 90 | 3 | 0 | 0 |
| 2014 | 59 | 2 | 0 | 0 |
| 2015 | 221 | 5 | 0 | 0 |
| 2016 | 153 | 5 | 0 | 0 |
| 2017 | 70 | 10 | 0 | 0 |
| 2018 | 181 | 18 | 0 | 0 |
| 2019 | 155 | 11 | 0 | 0 |
| 2020 | 234 | 23 | 0 | 0 |
| 2021 | 318 | 18 | 0 | 0 |
| 2022 | 229 | 15 | 0 | 0 |
| 2023 | 320 | 18 | 0 | 0 |

* H5 positive. No clinical signs.

Table 34 Number of samples from poultry analysed for AI virus (PCR)

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 2022 | 11 | 1 | 0 | 0 |

Table 35 Number of samples from back-yard birds analysed for AI virus (PCR)

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|-----------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 2011 | 104 | 5 | 2* ¹ | - |
| 2012 | 60 | 3 | 3* ² | - |
| 2014 | 100 | 5 | 8* ² | - |
| 2015 | 81 | 4 | 7* ³ | - |
| 2016 | 80 | 4 | 0 | 0 |
| 2017 | 3 | 2 | 0 | 0 |
| 2018 | 55 | 6 | 0 | 0 |
| 2022 (H1) | 15 | 10 | 1 farm | 1 |
| 2022 (H2) | 1 | 1 | 0 | 0 |

*1 1 x InfA CT36, 1 x InfA CT42, H5 negative.

*2 InfA CT>40, H5 negative.

*3 H5 and H7 negative.

Table 36 Number of faecal samples from wild birds analysed for AI

| Year | Number of individuals sampled | Number of places sampled | Number of positive samples | Number of positive sites |
|---------|-------------------------------|--------------------------|----------------------------|--------------------------|
| 2006 | 1093 | - | 1* ¹ | |
| 2007 | 465 | - | 0 | |
| 2008 | 375 | - | 2* ² | |
| 2009 | 411 | - | 1* ³ | |
| 2010 | 205 | - | 4* ³ | |
| 2010/11 | 1078* ⁴ | - | 29* ⁵ | |
| 2017 | 214 | - | 0 | |
| 2018 | 21 | 6 | 0 | |
| 2019 | 2 | 1 | 0 | |
| 2020 | 9 | 8 | 0 | |
| 2021 | 17 | 13 | 1 | 1 |
| 2022 | 167 | 114 | 54 | |
| 2023 | 68 | | 8 | |

*1 LPH5 positive.

*2 H5 and H7 negative.

*3 H5 negative.

*4 Samples taken in connection with a study done by the US National Wildlife Health Centre and Náttúrustofa Suðurlands in Iceland.

*5 H2N5, H3N6, H4N8, H5N2, H6N5, H6N8, H10N5, H11N2, H16N3

[More information about avian influenza surveillance in wild birds.](#)

2.6. Fish diseases

All Icelandic fish farms have been included in the official national health control programme since 1985. The surveillance also includes farms dealing with wild salmonids. The sampling and diagnostic methods regarding viral examination have been along the lines given in Commission Decision 2001/183/EC, including relevant amendments. Screening of important virus agents causing serious infectious diseases, like *Infectious salmon anaemia* (ISA), *Pancreas disease* (PD), *Infectious pancreatic necrosis* (IPN), *Viral haemorrhagic septicaemia* (VHS) and *Infectious haematopoietic necrosis* (IHN), has been a big part of the surveillance program. Until spring 2009, the diagnostic methods were mainly based on EPC, BF-2 and CHSE-214 cell-lines in the routine screening, in addition to clinical signs, gross pathology and histopathological examination of vital organs. In the first years of screening, 150 samples were taken from all farms four times a year. After achieving a “disease-free status”, the sample size was decreased down to 30 samples per brood stock farm each year. However, exporting brood fish, farms must deliver at least 60 samples from every year-class of fish with 9 months interval. This frequency of sampling will be unchanged in the future regarding virus screening in general. In the beginning of May 2009, we started up with examination of ISA and PD (and to a large extent also of IPN) by Real-time RT-PCR technique. All stripped males and females in exporting farms have been tested for those diseases since then. Bacterial examination is in general based on the use of blood agar (with or without 2% NaCl, and 5% horse blood). An ELISA method has been used for the detection of BKD (*Renibacterium salmoninarum*) since 1991, with indirect fluorescent antibody test (IFAT) and/or RT-PCR methodology for confirmation.

2.6.1. *Viral haemorrhagic septicaemia (VHS)*

Viral haemorrhagic septicaemia is a notifiable disease, according to Act No 25/1993. In October 2015, VHS-virus was detected for the first time in lumpfish of wild origin in Iceland in a marine research farm which had had no connection with the salmonid aquaculture. The lumpfish VHS-virus was sequenced by the European Reference Laboratory for Fish Diseases in Denmark and blasted towards other known genotypes. The results showed a totally new appearance of VHSV subtype, most likely a highly host specific and a unique variant for lumpfish. Iceland obtained formally a disease-free status for VHS by the fish health authority of the European Union in 2004. Following the virus detection in the wild lumpfish in 2015 the disease-free status was suspended temporarily. After stamping out in the research farm, Icelandic authorities started up with a new process of achieving VHS-free status for the broodfish companies of Atlantic salmon and Arctic char. This recognition was confirmed on 2 May 2016. Routine sampling has been performed since 1985 and since 2016 VHS samples have also been analysed by Real-time RT-PCR, in addition to culture on cell-lines. See tables below.

2.6.2. *Infectious haematopoietic necrosis (IHN)*

Infectious haematopoietic necrosis has never been detected. It is a notifiable disease, according to Act No 25/1993. Routine sampling has been performed since 1985. See table below.

2.6.3. *Infectious pancreatic necrosis (IPN)*

Infectious pancreatic necrosis is a notifiable disease, according to Act No 25/1993. An avirulent marine IPNV was detected for the first time in farmed Atlantic salmon in a sea-cage farm in late 2019. Routine sampling has been performed since 1985 and test results from tens of thousands of samples show no indication of disease at freshwater sites. Consequently, Iceland is regarded as being free from IPN. Since 2010, samples have been analysed for IPN partly on cell lines and partly by Real-time RT-PCR. See tables below.

Table 37 Number of samples analysed for VHS, IHN, IPN, ISA, EHN and OM (cellculture)

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 1985 | 1.214 | - | 0 | 0 |
| 1986 | 5.591 | - | 0 | 0 |
| 1987 | 9.121 | - | 0 | 0 |
| 1988 | 10.503 | - | 0 | 0 |
| 1989 | 4.854 | - | 0 | 0 |
| 1990 | 6.831 | - | 0 | 0 |
| 1991 | 5.603 | - | 0 | 0 |
| 1992 | 2.763 | - | 0 | 0 |
| 1993 | 949 | - | 0 | 0 |
| 1994 | 610 | 16 | 0 | 0 |
| 1995 | 775 | 18 | 0 | 0 |
| 1996 | 601 | 17 | 0 | 0 |
| 1997 | 945 | 21 | 0 | 0 |
| 1998 | 806 | 19 | 0 | 0 |
| 1999 | 860 | 17 | 0 | 0 |
| 2000 | 696 | 15 | 0 | 0 |
| 2001 | 706 | 15 | 0 | 0 |
| 2002 | 533 | 12 | 0 | 0 |
| 2003 | 885 | 13 | 0 | 0 |
| 2004 | 1.109 | 16 | 0 | 0 |
| 2005 | 725 | 13 | 0 | 0 |
| 2006 | 524 | 13 | 0 | 0 |
| 2007 | 669 | 16 | 0 | 0 |
| 2008 | 812 | 15 | 0 | 0 |
| 2009 | 963 | 15 | 0 | 0 |
| 2010 | 1.220 | 13 | 0 | 0 |
| 2011 | 310 | 12 | 0 | 0 |
| 2012 | 335 | 12 | 0 | 0 |
| 2013 | 394 | 10 | 0 | 0 |
| 2014 | 432 | 12 | 0 | 0 |
| 2015 | 753 | 13 | - | 1*1 |
| 2016 | 1.155 | 12 | 0 | 0 |
| 2017 | 1.127 | 13 | 0 | 0 |
| 2018 | 966 | 12 | 0 | 0 |
| 2019 | 1.178 | 13 | - | 1*2 |
| 2020 | 1.509 | 11 | 0 | 0 |
| 2021 | 1.046 | 13 | 0 | 0 |
| 2022 | 935 | 12 | 0 | 0 |
| 2023 | 1.002 | 11 | 0 | 0 |

*1 VHS-virus positive lumpfish of wild origin in one farm

*2 IPN-virus Atl. Salmon in one marine farm (avirulent without any clinical symptoms and mortality).

Table 38 Number of samples analysed for VHSV (qPCR)

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 2016 | 462 | 5 | 0 | 0 |
| 2017 | 614 | 5 | 0 | 0 |
| 2018 | 1.094 | 5 | 0 | 0 |
| 2019 | 931 | 5 | 0 | 0 |
| 2020 | 1.253 | 4 | 0 | 0 |
| 2021 | 637 | 3 | 0 | 0 |
| 2022 | 802 | 7 | 0 | 0 |
| 2023 | 1.944 | 7 | 0 | 0 |

Table 39 Number of samples analysed for IHN (qPCR)

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 2017 | 22 | 2 | 0 | 0 |
| 2018 | 636 | 3 | 0 | 0 |
| 2019 | 228 | 3 | 0 | 0 |
| 2020 | 481 | 3 | 0 | 0 |
| 2021 | 209 | 3 | 0 | 0 |
| 2022 | 183 | 6 | 0 | 0 |
| 2023 | 583 | 4 | 0 | 0 |

Table 40 Number of samples analysed for IPN (qPCR)

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 2010 | 928 | 4 | 0 | 0 |
| 2011 | 3.450 | 4 | 0 | 0 |
| 2012 | 1.988 | 3 | 0 | 0 |
| 2013 | 332 | 2 | 0 | 0 |
| 2015 | 2.570 | 2 | 0 | 0 |
| 2016 | 784 | 2 | 0 | 0 |
| 2017 | 2.030 | 2 | 0 | 0 |
| 2018 | 1.459 | 6 | 0 | 0 |
| 2019 | 912 | 6 | - | 1*1 |
| 2020 | 1.355 | 5 | 0 | 0 |
| 2021 | 2.422 | 10 | - | 1*1 |
| 2022 | 5.751 | 11 | 0 | 0 |
| 2023 | 4.719 | 9 | 0 | 0 |

*1 IPN-virus positive Atl. Salmon in one marine farm (avirulent without any clinical symptoms and mortality).

2.6.4. Viral nervous necrosis/ viral encephalopathy and retinopathy (VNN/VER)

Viral nervous necrosis has never been detected. It is a notifiable disease, according to Act No 25/1993. Routine sampling was performed during halibut farming from 2000 to 2010. See table below.

Table 401 Number of samples analysed for VNN/VER

| Year | Number of individuals sampled | Number of farms sampled | Number of negative samples | Number of positive samples |
|-------------|--------------------------------------|--------------------------------|-----------------------------------|-----------------------------------|
| 2000 | 45 | 1 | 45 | 0 |
| 2001 | 140 | 1 | 140 | 0 |
| 2002 | 75 | 1 | 75 | 0 |
| 2003 | 90 | 1 | 90 | 0 |
| 2004 | 90 | 1 | 90 | 0 |
| 2005 | 30 | 1 | 30 | 0 |
| 2006 | 30 | 1 | 30 | 0 |
| 2007 | 30 | 1 | 30 | 0 |
| 2008 | 30 | 1 | 30 | 0 |
| 2009 | 30 | 1 | 30 | 0 |
| 2010 | 32 | 1 | 32 | 0 |

Halibut farming ceased in 2011.

2.6.5. Infectious salmon anaemia (ISA)

Infectious salmon anaemia has never been detected. It is a notifiable disease, according to Act No 25/1993. Routine sampling has been performed since 2009. See table below.

Table 42 Number of samples analysed for ISA

| Year | Number of individuals sampled | Number of farms sampled | Number of ISA HPR0 positive samples | Number of ISA HPR-del positive farms |
|------|-------------------------------|-------------------------|-------------------------------------|--------------------------------------|
| 2009 | 2.764 | 2 | 48 ^{*1} | 0 |
| 2010 | 4.644 | 4 | 56 ^{*1} | 0 |
| 2011 | 8.206 | 3 | 67 ^{*1} | 0 |
| 2012 | 8.230 | 2 | 47 ^{*1} | 0 |
| 2013 | 10.777 | 2 | 118 ^{*1} | 0 |
| 2014 | 10.310 | 3 | 46 ^{*1} | 0 |
| 2015 | 14.151 | 8 | 49 ^{*1} | 0 |
| 2016 | 13.427 | 8 | 39 ^{*1} | 0 |
| 2017 | 13.296 | 8 | 31 ^{*1} | 0 |
| 2018 | 10.817 | 8 | 55 ^{*1} | 0 |
| 2019 | 7.391 | 7 | 12 ^{*1} | 0 |
| 2020 | 7.078 | 5 | 4 ^{*1} | 0 |
| 2021 | 8.403 | 12 | 21 ^{*1} | 1 ^{*2} |
| 2022 | 17.222 | 19 | 25 ^{*1} | 1 ^{*2} |
| 2023 | 14.239 | 20 | 33 | 0 |

*1 Low/non pathogenic ISAv (HPR0).

*2 Pathogen ISAv (HPR-del)

2.6.6. Pancreas disease (PD/SAV)

Pancreas disease has never been detected. It is a notifiable disease, according to Act No 25/1993. Routine sampling has been performed since 2009. See table below.

Table 43 Number of samples analysed for PD/SAV

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 2009 | 1.908 | 2 | 0 | 0 |
| 2010 | 4.504 | 2 | 0 | 0 |
| 2011 | 8.206 | 3 | 0 | 0 |
| 2012 | 7.530 | 2 | 0 | 0 |
| 2013 | 8.506 | 2 | 0 | 0 |
| 2014 | 8.772 | 2 | 0 | 0 |
| 2015 | 9.247 | 4 | 0 | 0 |
| 2016 | 5.644 | 3 | 0 | 0 |
| 2017 | 5.074 | 4 | 0 | 0 |
| 2018 | 7.390 | 5 | 0 | 0 |
| 2019 | 4.488 | 6 | 0 | 0 |
| 2020 | 4.323 | 5 | 0 | 0 |
| 2021 | 3.437 | 11 | 0 | 0 |
| 2022 | 3.362 | 10 | 0 | 0 |
| 2023 | 3.447 | 6 | 0 | 0 |

2.6.7. Piscine myocarditis virus disease

Piscine myocarditis virus has never been detected. Surveillance was initiated in 2013. See table below.

Table 44 Number of samples analysed for piscine myocarditis virus.

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive samples |
|------|-------------------------------|-------------------------|----------------------------|----------------------------|
| 2013 | 902 | 3 | 0 | 0 |
| 2014 | 4.713 | 3 | 0 | 0 |
| 2015 | 3.369 | 7 | 0 | 0 |
| 2016 | 1.689 | 7 | 0 | 0 |
| 2017 | 3.094 | 5 | 0 | 0 |
| 2018 | 6.497 | 6 | 0 | 0 |
| 2019 | 3.286 | 5 | 0 | 0 |
| 2020 | 3.233 | 3 | 0 | 0 |
| 2021 | 2.708 | 4 | 0 | 0 |
| 2022 | 3.083 | 5 | 0 | 0 |
| 2023 | 2.747 | 5 | 0 | 0 |

2.6.8. Heart and skeletal muscle inflammation (HSMI)

Heart and skeletal muscle inflammation is widespread. According to Act No 25/1993 detection shall be reported to the veterinary authorities. Routine sampling has been performed since 2011. See table below.

Table 45 Number of samples analysed for HSMI

| Year | Number of individuals sampled | Number of farms sampled | Percentage of positive samples |
|------|-------------------------------|-------------------------|--------------------------------|
| 2011 | 60 | 1 | 0 – 100% |
| 2013 | 60 | 3 | 0 – 100% |
| 2015 | 567 | 6 | 0 – 100% |
| 2016 | 840 | 6 | 0 – 70% |
| 2017 | 2.707 | 5 | 0 – 60% |
| 2018 | 2.385 | 4 | 31% |
| 2019 | 2.116 | 5 | 1,1% |
| 2020 | 3.482 | 8 | 4,1% |
| 2021 | 3.694 | 10 | 5,6% |
| 2022 | 6.102 | 23 | 14,6% |
| 2023 | 7.174 | 28 | 12,8% |

2.6.9. Salmon Gill Pox (SGP)

Salmon Gill Pox is widespread. Routine sampling has been performed since 2017. See table below.

Table 46 Number of samples analysed for HSMI

| Year | Number of individuals sampled | Number of farms sampled | Percentage of positive samples |
|------|-------------------------------|-------------------------|--------------------------------|
| 2017 | 52 | 5 | 38% |
| 2018 | 450 | 4 | 1,3% |
| 2019 | 1.388 | 5 | 11,2% |
| 2020 | 1.531 | 8 | 4,3% |
| 2021 | 1.888 | 13 | 6,6% |
| 2022 | 3.314 | 14 | 13,2% |
| 2023 | 3.943 | 16 | 7,5% |

2.6.10. Enteric Redmouth Disease (ERD)

Enteric Red Mouth is widespread. Routine sampling has been performed since 2015. See table below.

Table 47 Number of samples analysed for HSMI

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|-------------|--------------------------------------|--------------------------------|-----------------------------------|---------------------------------|
| 2015 | 31 | 2 | 0 | 0 |
| 2016 | 496 | 2 | 0 | 0 |
| 2017 | 1.263 | 2 | 0 | 0 |
| 2018 | 1.444 | 2 | 0 | 0 |
| 2019 | 943 | 2 | 0 | 0 |
| 2020 | 1.235 | 2 | 0 | 0 |
| 2021 | 2.214 | 2 | 0 | 0 |
| 2022 | 3.811 | 4 | 0 | 0 |

2.6.11. Bacterial kidney disease (BKD)

Bacterial kidney disease occurs sporadically. It is a notifiable disease, according to Act No 25/1993. Routine sampling has been performed since 1985. See tables below.

Table 48 Number of samples from farmed salmon analysed for BKD

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 1991 | 435 | 12 | 0 | 0 |
| 1992 | 558 | 13 | - | 1 |
| 1993 | 453 | 14 | - | 1 |
| 1994 | 522 | 12 | - | 4 |
| 1995 | 431 | 8 | - | 1 |
| 1996 | 594 | 8 | 0 | 0 |
| 1997 | 337 | 10 | 0 | 0 |
| 1998 | 362 | 8 | - | 1 |
| 1999 | 316 | 7 | 0 | 0 |
| 2000 | 361 | 6 | 0 | 0 |
| 2001 | 312 | 6 | 0 | 0 |
| 2002 | 357 | 7 | - | 1 |
| 2003 | 713 | 6 | - | 1 |
| 2004 | 1.306 | 8 | - | 3 |
| 2005 | 2.052 | 16 | - | 3 |
| 2006 | 3.048 | 19 | - | 4 |
| 2007 | 3.169 | 16 | - | 1 |
| 2008 | 3.134 | 11 | 0 | 0 |
| 2009 | 3.930 | 19 | 0 | 0 |
| 2010 | 2.839 | 12 | 0 | 1 |
| 2011 | 1.006 | 11 | - | 2 |
| 2012 | 1.399 | 12 | 0 | 0 |
| 2013 | 1316 | 10 | 0 | 0 |
| 2014 | 1.989 | 13 | - | 2 |
| 2015 | 1.994 | 12 | 0 | 0 |
| 2016 | 1.393 | 18 | - | 3 |
| 2017 | 3.800 | 23 | - | 2 |
| 2018 | 5.550 | 25 | - | 1 |
| 2019 | 5.464 | 21 | 0 | 0 |
| 2020 | 5.196 | 21 | 0 | 0 |
| 2021 | 3.790 | 26 | - | 1 |
| 2022 | 4.567 | 23 | 0 | 0 |
| 2023 | 5.326 | 25 | 1 | 1 |

Table 49 Number of samples from wild salmon analysed for BKD

| Year | Number of individuals sampled | Number of rivers sampled | Number of positive samples | Number of positive rivers |
|------|-------------------------------|--------------------------|----------------------------|---------------------------|
| 1991 | 569 | 49 | 8 | 5 |
| 1992 | 470 | 55 | 13 | 8 |
| 1993 | 403 | 50 | 3 | 3 |
| 1994 | 333 | 38 | 2 | 2 |
| 1995 | 349 | 38 | 4 | 2 |
| 1996 | 253 | 38 | 1 | 1 |
| 1997 | 407 | 45 | 0 | 0 |
| 1998 | 291 | 37 | 0 | 0 |
| 1999 | 240 | 40 | 0 | 0 |
| 2000 | 242 | 38 | 1 | 1 |
| 2001 | 602 | 38 | 1 | 1 |
| 2002 | 530 | 49 | 3 | 2 |
| 2003 | 827 | 50 | 4 | 2 |
| 2004 | 1.279 | 51 | 35 | 6 |
| 2005 | 1.160 | 48 | 7 | 1 |
| 2006 | 1.359 | 52 | 157 | 26 |
| 2007 | 1.757 | 54 | 174 | 32 |
| 2008 | 1.775 | 48 | 463 | 35 |
| 2009 | 1.370 | 44 | 340 | 33 |
| 2010 | 905 | 38 | 87 | 15 |
| 2011 | 929 | 33 | 97 | 20 |
| 2012 | 620 | 25 | 38 | 10 |
| 2013 | 664 | 29 | 23 | 16 |
| 2014 | 628 | 24 | 14 | 6 |
| 2015 | 639 | 18 | 13 | 4 |
| 2016 | 767 | 14 | 27 | 3 |
| 2017 | 863 | 14 | 16 | 4 |
| 2018 | 666 | 15 | 39 | 9 |
| 2019 | 543 | 15 | 5 | 3 |
| 2020 | 728 | 18 | 10 | 4 |
| 2021 | 797 | 17 | 16 | 6 |
| 2022 | 634 | 21 | 6 | 4 |
| 2023 | 665 | 22 | 15 | 4 |

2.7. Molluscs

2.7.1. *Marteilia refringens*

As far as known, *Marteilia refringens* does not exist in blue mussel (*mytilus edulis*) at the Icelandic shore. Samples were taken in 2010, 2011, 2015, 2016 and 2017. See table below.

Table 50 Number of samples analysed for *Marteilia refringens*.

| Year | Number of individuals sampled | Number of sites sampled | Number of positive samples | Number of positive sites |
|------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 2010 | 60 | 2 | 0 | 0 |
| 2011 | 30 | 1 | 0 | 0 |
| 2015 | 30 | 1 | 0 | 0 |
| 2016 | 30 | 1 | 0 | 0 |
| 2017 | 60 | 2 | 0 | 0 |
| 2020 | 60 | 2 | 0 | 0 |

2.7.2. *Perkinsus marinus*, *Microcytos mackini*, *Haplosporidium spp.*

Pacific oyster (*Crassostrea gigas*) was imported for the first time in 2013. Surveillance for *Perkinsus marinus*, *Microcytos mackini* and *Haplosporidium spp* started in 2018. See table below.

Table 51 Number of samples analysed for *Perkinsus marinus*, *Microcytos mackini*, *Haplosporidium spp.*

| Year | Number of individuals sampled | Number of sites sampled | Number of positive samples | Number of positive sites |
|------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 2018 | 41 | 1 | 0 | 0 |

2.8. Fur animals

2.8.1. Plasmacytosis

Plasmacytosis has been detected a few times in farmed mink, last time in 2008. It is a notifiable disease, according to Act No 25/1993. Routine sampling was performed voluntarily by farmers for many years but it was made mandatory in 2007. See table below.

Table 52 Number of samples from farmed mink analysed for plasmacytosis

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 2006 | 2.731 | 21 | 0 | 0 |
| 2007 | 3.220 | 22 | 0 | 0 |
| 2008 | 3.153 | 21 | 3 | 1 |
| 2009 | 3.201 | 21 | 0 | 0 |
| 2010 | 3.235 | 20 | 0 | 0 |
| 2011 | 3.999 | 22 | 0 | 0 |
| 2012 | 3.822 | 22 | 0 | 0 |
| 2013 | 4.486 | 27 | 0 | 0 |
| 2014 | 4.703 | 29 | 0 | 0 |
| 2015 | - | - | - | - |
| 2016 | 4.160 | 30 | 0 | 0 |
| 2017 | 3.346 | 22 | 0 | 0 |
| 2018 | 2.643 | 15 | 0 | 0 |
| 2019 | 1.385 | - | 0 | 0 |
| 2020 | 1.020 | 7 | 0 | 0 |
| 2021 | 1.833 | 9 | 0 | 0 |
| 2022 | 1.787 | 8 | 0 | 0 |
| 2023 | 1.527 | 8 | 1*1 | 0 |

*1 No clinical nor pathological symptoms. Repeated sampling and analysis negative. Considered false positive.

2.8.2. SARS-CoV-2 (Covid-19)

SARS-CoV-2 has never been detected in mink. Sampling was initiated in November 2020.

Table 53 Number of samples from farmed mink analysed for SARS-CoV-2

| Year | Number of individuals sampled | Number of farms sampled | Number of positive samples | Number of positive farms |
|------|-------------------------------|-------------------------|----------------------------|--------------------------|
| 2020 | 125 | 9 | 0 | 0 |

2.9. Dogs

2.9.1. *Echinococcus granulosus*

Echinococcus granulosus has not been detected in animals since 1979 in a sheep. It is a notifiable disease, according to Act No 25/1993. Routine sampling has been performed since 2016. See table below.

Table 54 Number of samples from dogs analysed for *Echinococcus granulosus*

| Year | Number of individuals sampled | Number of places sampled | Number of positive samples |
|------|-------------------------------|--------------------------|----------------------------|
| 2016 | 36 | - | 0 |
| 2017 | 44 | - | 0 |
| 2018 | 42 | - | 0 |

2.9.2. *Echinococcus multilocularis*

Echinococcus multilocularis has never been detected. It is a notifiable disease, according to Act No 25/1993. Routine sampling has been performed since 2016. See table below.

Table 55 Number of samples from dogs analysed for *Echinococcus multilocularis*

| Year | Number of individuals sampled | Number of places sampled | Number of positive samples |
|------|-------------------------------|--------------------------|----------------------------|
| 2016 | 36 | - | 0 |
| 2018 | 42 | - | 0 |

2.10. Wild foxes

2.10.1. *Echinococcus granulosus*

Echinococcus granulosus has not been detected in animals since 1979 in a sheep. It is a notifiable disease, according to Act No 25/1993. Routine sampling has been performed since 2016. See table below.

Table 56 Number of samples from dogs analysed for *Echinococcus granulosus*

| Year | Number of individuals sampled | Number of places sampled | Number of positive samples |
|------|-------------------------------|--------------------------|----------------------------|
| 2016 | 19 | - | 0 |
| 2017 | 40 | - | 0 |
| 2018 | 31 | - | 0 |

2.10.2. *Echinococcus multilocularis*

Echinococcus multilocularis has never been detected. It is a notifiable disease, according to Act No 25/1993. Routine sampling has been performed since 2016. See table below.

Table 57 Number of samples from dogs analysed for *Echinococcus multilocularis*

| Year | Number of individuals sampled | Number of places sampled | Number of positive samples |
|------|-------------------------------|--------------------------|----------------------------|
| 2016 | 19 | - | 0 |
| 2017 | 40 | - | 0 |
| 2018 | 31 | - | 0 |

2.11. Vectors

2.11.1. *Culicoides* spp

Surveillance for *Culicoides* spp was initiated in 2015. See table below.

Table 58 Number of samples analysed for Culicoides spp

| Year | Number of traps | Number of samples | Number of <i>Culicoides</i> |
|------|-----------------|-------------------|-----------------------------|
| 2015 | 3 | 9 | 0 |
| 2016 | 5 | 24 | 3* ¹ |
| 2017 | 2 | 9 | 0 |
| 2018 | 3 | 15 | * ² |

*1 Two *C. grisescens* and one *C. riouxi*

*2 Results not yet available

2.12. Reindeer

2.12.1. Chronic Wasting Disease

Chronic Wasting Disease has never been detected. Routine sampling has been performed since 2016. See table below.

Table 59 Number of samples from reindeer analysed for Chronic Wasting Disease

| Year | Number of individuals sampled | Number of positive samples |
|-------------|--------------------------------------|-----------------------------------|
| 2016 | 15 | 0 |
| 2017 | 54 | 0 |
| 2018 | 100 | 0 |
| 2019 | 114 | 0 |
| 2020 | 33 | 0 |
| 2021 | 3 | 0 |
| 2022 | 76 | 0 |
| 2023 | 51 | 0 |