

Facts & Figures Norwegian Veterinary Institute 2024



Norwegian Veterinary Institute (NVI)

- A public-sector research institute, organised under the Norwegian Ministry of Agriculture and Food. Carries also out tasks for the Ministry of Industry and Fisheries.
- A national and an international reference laboratory, with a wide range of international activities.
- NVI's preparedness and development of expertise is guided by the UN sustainability goals.



Our values, vision and mission

- The Norwegian Veterinary Institute shall be scientifically ambitious, forward-looking and cooperative.
- NVI works towards sustainable agriculture and bio-economy using a One Health approach to ensure good health and welfare for animals and fish, and safe food and environment.
- NVI supplies independent research-based expertise and support to the authorities and sustainable bio-production.

All photo: Bente Paulson, Bryndis Holm, Colourbox, Eivind Røhne, Eivind Senneset, Ingebjørg H. Nymo, Jannicke Wilk-Nielsen, Jan Harald Tomassen, Karin Lagesen, Ketil Skår, Mari M. Press, Roar Sandodden and Shape Calviu



Key moments in 2023

- African Swine Fever was detected in Sweden in 2023. Since then, the NVI has
 contributed with support and advice to the Norwegian Food Safety Authority and
 information to the general public to spread knowledge about the disease and
 how to prevent infection to Norway.
- The outbreak of Highly Patogenic Avian influenza (HPAI) in Norway and Europe resulted in several extensive contributions from NVI in form of advice, mapping, and risk assessments to authorities and industry.
- The ringworm situation in cattle developed negatively in 2023. NVI contributed with competence support and training of advisers assisting farmers with ringworm in order to make good remediation plans.
- Norway experienced more major foodborne outbreaks in 2023 than in previous years, which involved NVI by analysing samples and give advice to the authorities.
- NVI increased its activity in the wild fish area. This includes challenges linked to monitoring the infection status of pink salmon in Norwegian rivers.
- Continuing the important mapping of the prevalence and spread of CWD, an
 essential prerequisite for implementing measures to limit or eradicate this
 disease by the authorities.
- No MRSA detected in pigs in 2023, for the fourth year in a row. The monitoring program for MRSA in pigs shows that we manage to keep this under control in Norway.

2 Shane Colvin.

Key figures 2023

- 337 employees
- 140 employees with PhD
- 104 scientific publications
- Employees from over 40 nations
- 174 000 samples analysed
- 580 MNOK in total income
- 6 locations in Norway



The picture to the left shows researcher Ingebjørg H. Nymo doing fieldwork in reindeer herds in Troms county. The picture to the right shows the team in Tromsø that works in the Norwegian Reindeer Health Advisory Service. From left: Emma Vangen, Rebecca K. Davidson, Line Olsen, Torill Mørk and Ingebjørg H. Nymo.

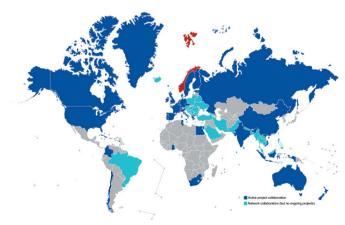
Services

- Research, analyses, risk assessment and diagnostics
- Knowledge production and development
- Over 40 national surveillance programmes
- National reference laboratory for more than 30 diseases of terrestrial and aquatic animals
- WOAH International reference laboratory for 4 diseases
 - · Infection with infectious salmon anaemia virus
 - Infection with Gyrodactylus salaris
 - · Infection with salmonid alphavirus
 - Chronic Wasting Disease
- WOAH Collaborating Centre for:
 - Epidemiology and Risk Assessment for Aquatic Animal Diseases
 - Economics of Animal Health

International cooperation within animal health, animal welfare and food safety in 2023



International cooperation within fish health and fish welfare in 2023



4

Research activities

- Around 100 current research projects, funded by national and international research funding agencies, including EU programs.
- Scientific outputs from research projects include scientific publications in international scientific journals.
- Active participation in PhD education.
- Participation in international networks and collaborations.
- Co-publishing in scientific journals with authors from around 90 countries.



A fish barrier was built in Tana in 2023 to combat pink salmon.

Former Minister of Climate and Environment, Espen Bart Eide, visiting the fish barrier in Tana.



PAHW: European partnership on animal health and welfare that aims to reduce the risk of animal infections threatening public health by enhancing cross-sector collaboration in a One Health perspective.

ECONOMY OF ANIMAL HEALTH: Focuses on aquaculture and aims to contribute with a more comprehensive knowledge base when authorities and industries make decisions about measures related to animal health.

MOLECULAR PATHOLOGY: To create a platform for advanced visualization of pathogens, and use the methods in research, diagnostics and preparedness.

PARC: European project aiming to develop next-generation chemical risk assessment to protect the environment, as well as human and animal health.

NavAzole: Research of the development and spread of azole resistance. The project aims to establishment methods, networks and routines for diagnostics and monitoring in Norway.

SHELLFEED: Provide knowledge about the toxicity of the algal toxins in salmon after dietary exposure, and potential carry-over of these toxins into fish fillets or by-products.

CRC-3p: Documenting the cause and effect between processed foods and colorectal cancer in humans. The project will look at the effect of protein source, processing and dietary patterns.

WEADS: A cooperation between the Nordic countries that aims to develop methods to best use and share sequence data across national borders in monitoring and outbreak investigation related to infectious diseases.





International collaboration for a sustainable future

Norway is committed to international collaborations towards achieving the UN sustainability goals by 2030. NVI contributes to research, diagnostics and development support in both land-based and aquatic ecosystems projects worldwide through:

- Improving implementation and operation of a One Health platform to combat rabies in Malawi.
- Building competence in One Health education at university level in Ethiopia and Malawi funded by NORAD.
- Participation in the NORAD program «Fish for development» in Ghana and Colombia (Fish Health Management).
- Project to increase knowledge about antibiotic resistance in Tanzania.
- Collaboration with Worldfish on fish health, epidemiology and health economics in Sub-Saharan Africa and southern Asia.
- Collaboration with the Food and Agriculture Organization (FAO) in developing the Progressive Management Pathway for Aquaculture Biosecurity concept.
- Leadership of the working group of G. Salaris of the NASCO (North Atlantic Salmon Conservation Organization).
- Participation in WOAH's Collaborating Centre for the Economics of Animal Health to develop and promote systematic use of financial data related to animal health in EU.





Key historic dates

- 891 Established as the first diagnostic laboratory for animal diseases in the Nordic countries
- 1914 Moved to Adamstua in Oslo
- 1924 The first doctoral degree in fish health in Norway awarded
- 1937 The last major outbreak of anthrax in Norway
- 1952 Bovine brucellosis and foot-and-mouth disease eradicated
- 1960 Started working on fish diseases and aquatic health
- 1963 Bovine tuberculosis eradicated in Norway
- 1991 Integration of regional laboratories in Bergen, Harstad, Sandnes, Trondheim and Tromsø
- 1995 Food Safety became a core activity
- 1998 The prion disease scrapie Nor98 was diagnosed for the first time
- 2003 The first annual Fish Health Report published by NVI
- 2015 Aquatic biosecurity and emerging aquatic diseases became new initiatives
- 2016 CWD detected for the first time in Europe and for the first time in wild reindeer
- 2017 Contributing to the Traffic Light System for more sustainable aquaculture production
- 2018 NVI designated as WOAH International Reference Laboratory for CWD in Europe
- 2020 Opening of the institute's new premises in Tromsø
- 2021 Moved to new headquarters at Ås, officially opened with H. M. Queen Sonja present
- 2023 BSL3 laboratory moved from Oslo to Ås and the new building at Ås was in full operation
- 2023 Fish Health Economics a new initiative

Great opportunities at Ås

The facilities at Ås are a powerhouse for knowledge, teaching, diagnostics and preparedness against health threats to animals, fish and humans. The new building raises the level of knowledge-based services provided by the Norwegian Veterinary Institute.







From the visit of the minister of Fisheries at As in February 2024.





10

