Government of Canada Gouvernement du Canada

Reducing disease risks

In a shared aquatic environment, strong protocols must be in place to minimize the risk of disease, recognize sick fish quickly and treat effectively. The National Aquatic Animal Health Program (NAAHP), delivered by the Canadian Food Inspection Agency in partnership with Fisheries and Oceans Canada, establishes and enforces protocols for control and management of fish health. The Program is supported by Fisheries and Oceans Canada's internationally recognized national laboratory system that delivers accurate, reliable and consistent test results for disease detection. This capability is strengthened by technology development, targeted research and access to effective treatment options in the event disease outbreaks occur. It provides Canada with a sound scientific foundation to protect its wild and farmed animal populations. This program also supports the certification of exported animals and products.

All cultured finfish must be free of clinical signs of disease before they enter the marine environment. Controlling the spread of disease, disease agents, and parasites, within the site, from one site to another, or from farms to the external environment is achieved through strict biosecurity measures. These may include on-farm biosecurity practices, controlled harvesting methods, or developing area or bay-management systems requiring year-class segregation and the rotation of sites to allow for fallowing. These measures are applied mainly through provincial veterinary and regulatory programs or Fisheries and Oceans Canada (DFO) staff in British Columbia (BC), as well as associated industry Standard Operational Procedures and Codes of Practice.

As the regulator of the aquaculture industry in BC, DFO requires operators of marine finfish facilities to follow a Health Management Plan (HMP) under their Conditions of Licence for Finfish Aquaculture. These HMPs are designed to encompass all aspects of fish health management in order to minimize the risk of disease, parasites and pathogens to farmed fish and their transfer to wild species. In BC:

- Facility operators are required to regularly report on the health of their stocks. These reports are reviewed by veterinarians in DFO's Aquaculture Management team to assess whether appropriate measures are being taken to protect the health of the fish, and to detect any potentially serious diseases as early as possible.
- In addition to reviewing reports submitted by industry, Aquaculture Management staff conducts regular inspections of finfish facilities under the Fish Health Audit and Surveillance (FHAS) component of the Fish Health Program. It is mandatory for aquaculture licence holders to provide DFO staff with access to fish carcasses for sampling.
- In the course of its surveillance activities, DFO tests for specific diseases and pathogens that may affect fish movement.
- On average, five to eight of the "fresh silver" carcasses are selected for standard histopathology, bacteriology, and molecular diagnostics / virology. Samples are sent to the provincial Animal Health Centre in Abbotsford for extensive evaluation. The centre is an American Association of Veterinary Laboratory Diagnosticians accredited full-service diagnostic laboratory. The use of an accredited laboratory provides confidence in the diagnostic results due to the high standards of quality assurance and quality control.