**Issue:** Infectious Salmon Anemia (ISA) viral outbreak reported in Chilean aquaculture industry (August 01, 2007)

**Background:**

ISA virus is considered a Reportable Disease by the OIE (World Organization for Animal Health). The viral disease was first reported in Norway in 1984 and has since been diagnosed in Scotland, Ireland, Eastern Canada, Maine. There are many strains of ISA virus; each is slightly different than the other, and each may (or may not) cause problems in various types of fin fish. The ISA virus is considered ‘exotic’ to some countries and ‘endemic’ (normally found) in others. A viral infection can eventually develop into a fish disease resulting in initially low levels of fish death if specific biological circumstances arise. ISA disease seems to be a recently emerging situation in southern Chile.

**Discussion:**

There has been evidence of ISA virus, and ongoing investigation, of farmed fish in Chile since 2001. The cause of the recent ISA outbreak in the Chile’s farmed salmon is likely due to a combination of: over-crowding fish and farms, fish stress and the use of water re-circulation systems resulting in the amplification of the viral particles within fish rearing facilities.

The numbers of fish farms in southern Chile have increased greatly in the past 15 years and there are large concentrations of farms in close proximity to one another. The importation of live fish eggs to Chile and the common practice of moving live fish of various ages back-and-forth to farm sites contribute to the development ISA infection. These high-risk activities are not allowed in BC.

**First Nations Considerations:**
First Nations and the coastal communities have expressed concerns about the potential for exotic viral diseases to emerge in BC fish or salmon eggs.

**Strategic Analysis:**
- This remains an unofficial report of ISA in southern Chile although Intrafish has published a news story (Aug 01, 2007).
- ISA virus is not a human health or food safety concern.
- The Ministry remains confident that farmed fish in BC are free of ISA disease.
• Company veterinarians and BCMAL’s fish health audit and surveillance program is well suited to detect any viral problems, including ISAv, at fish farms as early as possible.
• The most likely source for ISA in BC is from migrating wild fishes from other regions of the Pacific Ocean as there is no importation of live Atlantic salmon or eggs to BC.
• All farming companies continue to take steps to prevent infections on farms.
• New entry fish from BC hatcheries to marine fish farms are free of ISA virus.

**Financial Implications:** ISA outbreak(s) generally begin as a low-level mortality but has potential to increase in intensity. The presence of ISA would profoundly impact a company’s business due to initial slaughter orders of entire populations and subsequent bio-containment activity.

**Next Steps:** BCMAL is well aware of ISA. Our monitoring and surveillance activity will continue. We will consider elevating the numbers of surveillance samples in 2008. We plan to increase the frequency of reporting FHASP results to the Animal Health Branch website.

Contact: Dr. Mark Sheppard, Aquatic Animal Health Veterinarian

Telephone: 250 897-7546

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