Evaluation of the PD - control strategy in Norway

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Background

An increasing number of SAV outside the endemic zone

A new genotype : marine SAV-2

Economic losses : cost/benefit

The source??

- From wild Norwegian fish
- From SAV 3
- From Scotland with well boat ★

After the introduction:

- From farm to farm through the water
 Fish farming related activities
- Fish farming related activities
 - transportation of fish/transport water
- Wild fish
- Escapees



- A PD-utbrudd forårsaket av SAV2-lignende
- PD-utbrudd 2012 (jan-mars)
- PD-utbrudd 2011
- PD-utbrudd 2010

Hustadvika





Is the old boarder (Hustavika) effective?

- Effective for SAV-3
- Not effective for SAV-2
- Water transport:
 18 km with no fish farms,
 Northbound current 15-40 cm/s
 15 cm/s: 36 h





Does SAV 2 differ from SAV 3?

- Transmission: Same pattern
- Pathology: Same
- Mortality: Probably somewhat less virulent??
- Vaccination: Little information



Conclusion:

The same biosecurity measures can be applied for both viruses.

SAV3 and SAV2 can be regarded as two different epidemics

What kind of scenarios can we expect?? Cost/benefit??

| Scenario | Cost PD SAV2 | Benefit vs. scenario 1 |
|--|-------------------------|---------------------------|
| PD SAV 2 endemic, 50% new cases | -13,2 mill | |
| 2) PD SAV2 exsotic, 10% new cases | -8,5 mill | + 4,7 mill |
| 3) PD SAV2 excotic, 20% new cases | -15,7 mill ¹ | -2,5 mill |

Estimated cost-benefit for industry and society depending on control

- Modell depending on prices and parameters
- 10% stamping out vs 50% endemic
 - + 5 mill per site
- «Tipping point» stamping out one site vs endemic
 three new cases

A new control regime?



Soneforskrift for PD SAV 2



- Prevent the spread of SAV 2 from the protection zone
- Reduce the consequences of SAV 2 in protection zone
- Combating the spread of SAV 2 in Norway

Measures

- Fish Health control and screening
- Zooning- fallowing
- Restrictions on transportation of smolt within and through the zone.
- Restrictions on slaughtering.
- Restriction on fish movement
- Well boats and supply boats
- Documentation of transportation and movement
- Net and net cleaning