

Average Mortality Rate ( Quarter 4 2010 )					
Fish Health SubZone	Species	Life stages	# Fish Group	# Site	Rate
All Zones	Atlantic salmon	"Early"	17	20	2.60%
2-3	Atlantic salmon	"Later"	13	13	0.48%
2-4	Atlantic salmon	"Later"	12	12	1.12%
3-1 + 3-2	Atlantic salmon	"Later"	19	18	2.40%
3-3	Atlantic salmon	"Later"	23	18	1.29%
3-4 + 3-5	Atlantic salmon	"Later"	13	12	0.36%
All Zones <sup>4</sup>	Atlantic salmon	"Later"	57	74	1.79%
All Zones	Pacific salmon	"Early"	38	39	2.44%
All Zones	Pacific salmon	"Later"	22	3	8.65%

### Notes

1 Rate figures are aggregate weighted averages (agreed to with BC MAFF April 25, 2003)

2 Definitions for lifestages:

"Early"	Eyed Egg -->	Alevin / Larvae / Fry -->	Pre-smolt (= parr)
"Later"	Smolt -->	Grow-out / Harvest (= immature adult) Broodstock -->	Spent/Post-Spawn (public facilities) -->

3	The following participants' data are in the system for this quarter	Companies/ participants not yet on the system	Data in the system for this quarter but may be incomplete
	Creative Salmon Grieg Seafoods Heritage Salmon Marine Harvest Canada/ Stolt Seafarms Mainstream (Pacific National Aquaculture) Panfish Canada (Omega Salmon Group) Target Marine Products West Coast Fish Culture	AgriMarine Industries Omega Pacific Saltstream Engineering Totem Oysters Yellow Island Aquaculture  Freshwater Fisheries Society of BC (some data in the system)	Fisheries and Oceans Canada

4 This field has been added to encompass a small number of later lifestage Atlantic salmon (e.g., broodstock) raised in areas other than the subzones shown above.

Fish Health Events ( Quarter 4, 2010 )						
Fish Health SubZone	Species	Life Stage	Veterinary Diagnosis	Count of Fish Health Events <sup>1,2,3</sup>		
				New	Ongoing/Recurring	Relapsing
All	Atlantic Salmon	"Early"	Renibacterium salmoninarum Infection	0	1	0
All zones <sup>5</sup>	Atlantic Salmon	"Later"	N/A	0	0	0
2-3	Atlantic Salmon	"Later"	Lepeophtheirus Infection	0	2	0
			Myxobacterial Infection	1	0	0
			Viral Haemorrhagic Septicemia Virus Infection	0	6	0
			Aeromonas salmonicida Infection	1	2	0
			Piscirickettsia salmonis Infection	0	2	0
2-4	Atlantic Salmon	"Later"	Renibacterium salmoninarum Infection	1	0	0
			N/A	0	3	0
			Lepeophtheirus Infection	1	0	0
			Aeromonas salmonicida Infection	2	0	0
			Myxobacterial Infection	0	2	0
3-1 + 3-2	Atlantic Salmon	"Later"	Lepeophtheirus Infection	9	0	0
			Renibacterium salmoninarum Infection	1	0	0
			Myxobacterial Infection	0	2	0
3-3	Atlantic Salmon	"Later"	Lepeophtheirus Infection	1	1	0
			Viral Haemorrhagic Septicemia Virus Infection	0	1	0
			Myxobacterial Infection	1	1	0
3-4 + 3-5	Atlantic Salmon	"Later"	Lepeophtheirus Infection	4	1	0
All zones	Pacific Salmonids	"Early"	Renibacterium salmoninarum Infection	0	1	0
			Aeromonas Salmonicida infection	0	1	0
			Myxobacterial Infection	1	0	0
All zones	Pacific Salmonids	"Later"	Renibacterium salmoninarum Infection	0	4	0

1 Reporting reflects life stage rather than water type. See notes 1 - 2 of Average Mortality Rate report.

2 Counts of veterinary diagnosis are based on FISH GROUP (not site); more than one fish group may exist at a site

3 Fish Health Events reflect the following categories:

New First time occurrence; new event  
Ongoing/recurring Repeat or ongoing occurrence from previous calendar quarter  
Relapsing Repeat occurrence from calendar quarter at least two quarters preceding the current one

4 "Case worked up but no diagnosis" category requires workup and management steps taken, e.g., further investigation, husbandry change etc.

5 This field has been added to encompass a small number of later lifestage Atlantic salmon (e.g., broodstock) raised in areas other than the subzones shown above.

Mortality Rates by Cause (Quarter 4 2010) <sup>1,2</sup>						
Early Life stages						
Fish Health SubZone	Species	# Fish Groups	Background Mortality	Systems Related	Fresh	Culls / Quality Control
All Zones	Atlantic salmon	17	1.21%	0.05%	0.84%	0.49%
All Zones	Pacific salmon	38	2.16%	0.27%	0.00%	0.01%

Mortality Rates by Cause ( Quarter 4 2010 )									
Later Life stages									
Fish Health SubZone	Species	# Fish Groups	Environmental	Fresh "Silvers"	Handling / Transport	Matures	Old	Poor Performers	Predators
All Zones	Atlantic salmon	57	0.00%	0.65%	0.17%	0.71%	0.14%	0.08%	0.04%
2-3	Atlantic salmon	13	0.02%	0.17%	0.12%	0.01%	0.07%	0.05%	0.05%
2-4	Atlantic salmon	12	0.00%	0.47%	0.36%	0.02%	0.23%	0.05%	0.04%
3-1 + 3-2	Atlantic salmon	19	0.00%	1.49%	0.02%	0.65%	0.08%	0.08%	0.07%
3-3	Atlantic salmon	23	0.00%	0.14%	0.26%	0.53%	0.21%	0.12%	0.02%
3-4 + 3-5	Atlantic salmon	13	0.00%	0.02%	0.13%	0.00%	0.08%	0.07%	0.06%
All Zones	Pacific salmon	22	0.38%	0.15%	0.04%	5.49%	0.14%	2.43%	0.02%

#### Notes

- 1 See notes for Average Mortality Rate report
- 2 Sum of individual Proportional Mortality Rates reconciles to Average Mortality Rate to 0.005% (rounding errors)