

Total Mercury Concentrations in Alaskan Fishes
Update August 2011

Species	Tissue Type	N	ND	Total Mercury (ppm wet weight)			Weight (pounds)		
				Mean ± Std. Dev.	Min.	Median	Max.	Min.	Max.
Pacific Halibut (<i>Hippoglossus stenolepis</i>)	M	1685	7	0.29 ± 0.27	<MRL	0.19	1.9	4.42	338
Pacific Cod (<i>Gadus macrocephalus</i>)	M	145	1	0.13 ± 0.093	<MRL	0.10	0.50	1.77	23.27
Sablefish (<i>Anoplopoma fimbria</i>)	M	227	6	0.18 ± 0.20	<MRL	0.10	1.2	1.77	16.75
Walleye Pollock (<i>Theragra chalcogramma</i>)	M	186	118	0.043 ± 0.061	<MRL	<MRL	0.39	0.66	7.29
Lingcod (<i>Ophiodon elongatus</i>)	M	215	0	0.44 ± 0.31	0.029	0.370	1.7	2.65	56.36
Black Rockfish (<i>Sebastes melanops</i>)	M	68	1	0.12 ± 0.089	<MRL	0.096	0.53	2.65	8.40
	W	4	0	0.11 ± 0.11	0.050	0.057	0.27	2.85	3.71
China Rockfish (<i>Sebastes nebulosus</i>)	M	1	0			0.37			
Copper Rockfish (<i>Sebastes caurinus</i>)	M	3	0	0.21 ± 0.095	0.12	0.20	0.31	2.21	4.20
Dusky Rockfish (<i>Sebastes ciliatus</i>)	M	43	0	0.14 ± 0.12	0.013	0.089	0.42	0.84	4.75
	W	14	0	0.16 ± 0.15	0.036	0.12	0.61	1.81	2.74
Pacific Ocean Perch (<i>Sebastes alutus</i>)	M	78	32	0.056 ± 0.054	<MRL	0.041	0.26	0.46	2.48
Quillback Rockfish (<i>Sebastes maliger</i>)	M	13	0	0.43 ± 0.23	0.14	0.41	1.0	2.21	3.98
Rougheye Rockfish (<i>Sebastes aleutianus</i>)	M	38	0	0.17 ± 0.16	0.046	0.12	0.87	1.33	4.64
Silvergrey Rockfish (<i>Sebastes brevespinus</i>)	M	7	1	0.14 ± 0.14	<MRL	0.095	0.43	2.87	7.07
Yelloweye Rockfish (<i>Sebastes ruberrimus</i>)	M	102	1	0.55 ± 0.32	<MRL	0.49	1.3	2.65	19.89
Yellowtail Rockfish (<i>Sebastes flavidus</i>)	M	2	0		0.029	0.038	0.047	1.99	2.43
Rockfish (unidentified)	M	3	0	0.33 ± 0.15	0.19	0.32	0.49		
Pacific Herring (<i>Clupea pallasii</i>)	CW	11	1	0.016 ± 0.004	<MRL	0.016	0.021	0.13	0.45
Eulachon (<i>Thaleichthys pacificus</i>)	CW	7	7		<MRL	<MRL	<MRL	0.11	0.15
Rainbow Smelt (<i>Osmerus mordax</i>)	W	10	1	0.019 ± 0.007	<MRL	0.021	0.028	0.06	0.19
Capelin (<i>Mallotus villosus</i>)	CW	1	1			<MRL		0.03	
Pacific Sand Lance (<i>Ammodytes hexapterus</i>)	CW	1	1			<MRL		0.02	
Saffron Cod (<i>Eleginus gracilis</i>)	W	10	0	0.019 ± 0.008	0.012	0.018	0.040	0.08	0.20
Kelp Greenling (<i>Hexagrammos decagrammus</i>)	M	11	0	0.084 ± 0.042	0.010	0.085	0.17	0.24	2.83
	W	8	0	0.27 ± 0.16	0.12	0.19	0.52	1.33	2.43
Rock Greenling (<i>Hexagrammos lagocephalus</i>)	M	2	0		0.15	0.18	0.20	2.08	2.98
	W	14	0	0.11 ± 0.081	0.051	0.082	0.32	0.84	1.64
Atka Mackerel (<i>Pleurogrammus monoptyerygius</i>)	M	5	0	0.063 ± 0.037	0.016	0.057	0.12	1.50	3.09
	W	4	0	0.048 ± 0.011	0.038	0.046	0.064		

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Red Irish Lord (<i>Hemilepidotus hemilepidotus</i>)	M	7	0	0.060 ± 0.019	0.041	0.052	0.098	0.86	1.88
	W	6	0	0.061 ± 0.014	0.042	0.062	0.076	0.88	2.30
Yellow Irish Lord (<i>Hemilepidotus jordani</i>)	M	4	0	0.30 ± 0.28	0.049	0.25	0.66	1.33	2.08
	W	8	0	0.19 ± 0.12	0.095	0.15	0.44	1.19	3.32
Great Sculpin (<i>Myoxocephalus polyacanthocephalus</i>)	M	1	0			0.069		3.60	
	W	1	0			0.068		1.94	
Shorthorn Sculpin (<i>Myoxocephalus scorpius</i>)	M	1	0			0.19			
	W	1	0			0.11			
Starry flounder (<i>Platichthys stellatus</i>)	M	1	0			0.062			
Butter Sole (<i>Isopsetta isolepis</i>)	M	1	0			0.051		2.43	
Northern Rock Sole (<i>Lepidopsetta polyxystra</i>)	M	5	0	0.046 ± 0.050	0.020	0.024	0.14	0.99	3.20
	W	14	0	0.060 ± 0.024	<MRL	0.067	0.094	0.49	2.98
Southern Rock Sole (<i>Lepidopsetta bilineata</i>)	M	1	1			<MRL		0.29	
Arctic Lamprey (<i>Lampetra camtschatica</i>)	W	10	0	0.029 ± 0.007	0.018	0.028	0.040	0.15	0.34
Blue Shark (<i>Prionace glauca</i>)	M	1	0			1.3		44.20	
Salmon Shark (<i>Lamna ditropis</i>)	M	95	0	1.3 ± 0.29	0.76	1.3	2.1	265	475
Spiny Dogfish (<i>Squalus acanthias</i>)	M	49	0	0.80 ± 0.25	0.095	0.83	1.3	4.20	8.40
Big Skate (<i>Raja binoculata</i>)	M	92	0	0.15 ± 0.087	0.062	0.12	0.48	4.86	119
Longnose Skate (<i>Raja Rhina</i>)	M	94	0	0.40 ± 0.20	0.10	0.37	1.0	6.63	34.70
Chinook Salmon (<i>Oncorhynchus tshawytscha</i>)	CW	10	3	0.029 ± 0.022	<MRL	0.028	0.075	<0.01	0.25
	M	238	2	0.064 ± 0.025	<MRL	0.062	0.16	1.33	32.22
	W	15	0	0.044 ± 0.015	0.020	0.044	0.067	5.54	15.12
Sockeye Salmon (<i>Oncorhynchus nerka</i>)	CW	1	0			0.058		<0.01	
	M	240	27	0.038 ± 0.014	<MRL	0.038	0.082	0.88	9.86
	W	12	0	0.036 ± 0.007	0.028	0.034	0.051	3.18	7.20
Coho Salmon (<i>Oncorhynchus kisutch</i>)	CW	8	3	0.024 ± 0.025	<MRL	0.021	0.082	0.01	0.15
	E	17	15	<MRL	<MRL	<MRL	0.013	5.43	11.93
	M	315	27	0.039 ± 0.014	<MRL	0.039	0.11	<0.01	16.24
	W	93	14	0.028 ± 0.013	<MRL	0.029	0.061	0.01	16.24
Chum Salmon (<i>Oncorhynchus keta</i>)	M	281	11	0.041 ± 0.014	<MRL	0.039	0.10	2.87	13.92
	W	2	2		<MRL	<MRL	<MRL	5.41	8.92
Pink Salmon (<i>Oncorhynchus gorbuscha</i>)	M	186	104	0.040 ± 0.069	<MRL	<MRL	0.36	0.55	7.09
Arctic Cisco (<i>Coregonus autumnalis</i>)	M	21	0	0.019 ± 0.003	0.015	0.019	0.025	0.51	1.37
Least Cisco (<i>Coregonus sardinella</i>)	M	26	0	0.050 ± 0.018	0.026	0.045	0.098	0.50	1.48
Broad Whitefish (<i>Coregonus nasus</i>)	M	34	2	0.065 ± 0.039	<MRL	0.067	0.21	3.78	7.12

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Humpback Whitefish (<i>Coregonus pidschian</i>)	M	74	1	0.068 ± 0.029	<MRL	0.066	0.17	0.66	5.90
Round Whitefish (<i>Prosopium cylindraceum</i>)	M	12	1	0.075 ± 0.056	<MRL	0.068	0.20	0.33	1.77
Rainbow Trout (<i>Oncorhynchus mykiss</i>)	M	41	0	0.11 ± 0.074	0.016	0.075	0.33	0.24	3.27
Lake Trout (<i>Salvelinus namaycush</i>)	M	18	0	0.30 ± 0.17	0.11	0.26	0.74	1.56	10.61
Dolly Varden (<i>Salvelinus malma</i>)	M	21	0	0.12 ± 0.16	0.011	0.054	0.55	0.04	2.67
Arctic Char (<i>Salvelinus alpinus</i>)	M	3	0	0.21 ± 0.053	0.15	0.23	0.25	1.92	4.69
Grayling (<i>Thymallus arcticus</i>)	CW	1	0			0.048		0.01	
	M	44	0	0.084 ± 0.032	0.033	0.081	0.18	0.02	1.94
Sheefish (<i>Stenodus leucichthys</i>)	M	16	0	0.13 ± 0.053	0.084	0.12	0.26	5.97	20.04
Northern Pike (<i>Esox lucius</i>)	M	532	1	0.42 ± 0.29	<MRL	0.350	1.4	0.22	18.03
Burbot (<i>Lota lota</i>)	M	27	1	0.33 ± 0.28	<MRL	0.25	0.85	0.26	12.35
Longnose Sucker (<i>Catostomus catostomus</i>)	M	3	0	0.071 ± 0.012	0.059	0.073	0.082		
Pacific Littleneck Clam (<i>Protothaca staminea</i>)	W	4	1	0.011 ± 0.004	<MRL	0.012	0.014		
Pacific Razor Clam (<i>Siliqua patula</i>)	W	2	2		<MRL	<MRL	<MRL		
Geoduck Clam (<i>Panopea abrupta</i>)	M	7	0	0.041 ± 0.011	0.027	0.035	0.054		
Pacific Oyster (<i>Crassostrea gigas</i>)	W	16	4	0.012 ± 0.006	<MRL	0.011	0.023		
Pacific Weathervane Scallop (<i>Patinopectin caurinus</i>)	W	20	0	0.032 ± 0.006	0.016	0.032	0.042		
Pacific Blue Mussel (<i>Mytilus trossulus</i>)	W	23	4	0.018 ± 0.012	<MRL	0.014	0.053		
Dungeness Crab (<i>Cancer magister</i>)	M	4	0	0.053 ± 0.019	0.031	0.054	0.071		
Octopus sp. (unidentified)	M	6	1	0.015 ± 0.006	<MRL	0.016	0.021		
Squid sp. (unidentified)	CM	5	5		<MRL	<MRL	<MRL		

Results reported in parts per million (ppm)

ND: not detected at the MRL

MRL: Method Reporting Limit (0.010 to 0.025 ppm wet weight)

Individual results below the MRL are calculated as 1/2 of the MRL for that sample

Tissue Type

C: composite (fry or smolt)

CM: composite of skinless muscle tissue

CW: composite of whole body tissue

E: eggs

F: fillet

M: skinless muscle tissue (fish-skinless fillet tissue; bivalves- muscle tissue only; crustaceans-muscle tissue only)

W: whole body sample (fish-all tissues, including bones and skin; invetebrates-all soft tissue)