

# Fish Consumption Rates & Risk Levels for Carcinogens Used in Human Health Criteria Calculations

*A Compilation of Fish Consumption Rates (FCR) and Risk Levels for Carcinogens used by Assorted States and Tribes to Calculate Surface Water Quality Human Health Criteria\**

*\* Data compiled from information provided to Ecology by the Environmental Protection Agency, Region 10, in January 2013.*

Entity	EPA Region	Fish Consumption Rate* (measured in grams/day)	Additional Information for FCR	Risk Level for Carcinogens*	Additional Information for Risk Levels
Alabama	4	30		10 <sup>-6</sup>	Except for Arsenic, which uses 10 <sup>-5</sup>
Alaska	10	6.5	Criteria in National Toxics Rule are also applicable.	10 <sup>-5</sup>	
Arizona	9	17.5		10 <sup>-6</sup>	
Arkansas	6	7.5		10 <sup>-5</sup>	
Bad River Band of Lake Superior Tribe of Chippewa Indians of the Bad River Reservation (WI)	5	142.4		None Listed	

Entity	EPA Region	Fish Consumption Rate* (measured in grams/day)	Additional Information for FCR	Risk Level for Carcinogens*	Additional Information for Risk Levels
California	9	6.5	Mercury criterion is 18.7 grams/day (fresh water, enclosed bays and estuaries) and 19.5 grams/day (ocean waters). More recent site-specific mercury criteria in CA apply the methylmercury tissue criterion and a rate of 32 grams/day. Criteria in the National Toxics Rule and California Toxics Rule are also applicable.	10 <sup>-6</sup>	
Colorado	8	17.5		10 <sup>-6</sup>	
Confederated Salish and Kootenai Tribes of the Flathead Indian Reservation	8	17.5		10 <sup>-6</sup>	
Confederated Tribes of the Chehalis Reservation	10	6.5		10 <sup>-6</sup>	
Confederated Tribes of the Colville Reservation	10	narrative criteria		N/A	
Confederated Tribes of the Umatilla Indian Reservation of Oregon	10	389		10 <sup>-6</sup>	
Confederated Tribes of the Warm Springs Indian Reservation of Oregon	10	170		10 <sup>-6</sup>	
Connecticut	1	17.5 or 6.5	17.5 grams/day used for most parameters.	10 <sup>-6</sup>	

Entity	EPA Region	Fish Consumption Rate* (measured in grams/day)	Additional Information for FCR	Risk Level for Carcinogens*	Additional Information for Risk Levels
Coeur d'Alene	10	17.5	Initial WQS submission - EPA has not acted on the submission.	10 <sup>-6</sup>	
Delaware	3	17.5		10 <sup>-6</sup>	
District of Columbia	3	17.5		10 <sup>-6</sup>	
Florida	4	6.5	Florida is proposing to update criteria with an approach that calculates the criterion level necessary to achieve the minimum risk to Florida's population. This approach is currently being reviewed as part of the public comment process.	10 <sup>-6</sup>	
Georgia	4	17.5		10 <sup>-6</sup>	
Grand Portage Band of the Minnesota Chippewa Tribe	5	142.4		10 <sup>-6</sup>	Concentrations of carcinogenic chemicals from point or non-point sources, singly or in mixtures, must not exceed risk levels of one chance in 1,000,000 in surface waters.
Hawaii	9	19.9		10 <sup>-6</sup>	
Idaho	10	6.5	Idaho proposed a rate of 17.5 grams/day in 2006, which was disapproved by EPA in 2012.	10 <sup>-6</sup>	
Illinois	5	15 (Great Lakes Basin); 20 (outside Great Lakes Basin)		10 <sup>-5</sup>	Great Lakes Initiative

Entity	EPA Region	Fish Consumption Rate* <i>(measured in grams/day)</i>	Additional Information for FCR	Risk Level for Carcinogens*	Additional Information for Risk Levels
Indiana	5	15 (Great Lakes Basin); 6.5 (outside Great Lakes Basin)		10 <sup>-5</sup>	Great Lakes Initiative
Iowa	7	17.5		10 <sup>-5</sup>	
Kalispel Indian Community of the Kalispel Reservation	10	17.5	Nickel, arsenic, and chloroform use a FCR of 6.5 g/day.	10 <sup>-6</sup>	
Kansas	7	6.5 or 17.5	Criteria in National Toxics Rule are also applicable. Kansas is proposing to adopt updated criteria based on EPA's recommended §304(a) criteria in its current revision.	10 <sup>-6</sup>	
Kentucky	4	17.5		10 <sup>-6</sup>	
Lac du Flambeau Band of Lake Superior Chippewa Indians of the Lac du Flambeau Reservation	5	32		10 <sup>-6</sup>	
Louisiana	6	20	6.5 grams/day for Monte Sano Bayou.	10 <sup>-6</sup>	Except for 2,3,7,8-Tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) and hexachlorocyclohexane (lindane, gamma BHC), in which case 10 <sup>-5</sup> is used.
Lummi Nation	10	142.4		10 <sup>-6</sup>	

Entity	EPA Region	Fish Consumption Rate* (measured in grams/day)	Additional Information for FCR	Risk Level for Carcinogens*	Additional Information for Risk Levels
Maine	1	32.2		10 <sup>-6</sup>	Maine recently adopted new arsenic criteria based on a 10 <sup>-4</sup> cancer risk level and a FCR of 138 g/day.
Makah Tribe	10	142.4		10 <sup>-6</sup>	
Maryland	3	17.5		10 <sup>-5</sup>	
Massachusetts	1	17.5 or 6.5		10 <sup>-6</sup>	
Miccosukee Tribe Indians of Florida	4	17.5		10 <sup>-6</sup>	
Michigan	5	15 (Great Lakes Basin); 15 (outside Great Lakes Basin)		10 <sup>-5</sup>	Great Lakes Initiative
Minnesota	5	30		10 <sup>-5</sup>	Great Lakes Initiative
Mississippi	4	6.5	Mississippi completed a WQS revision in June 2012, with criteria based on consumption rate of 17.5 grams/day (will be submitted to EPA).	10 <sup>-6</sup>	
Missouri	7	6.5		10 <sup>-6</sup>	

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Superior Tribe of the Chippewa Indians, Sokaogon Chippewa Community	5	15		None Listed	
Montana	8	17.5		10 <sup>-6</sup>	
Nebraska	7	6.5	Mercury criterion uses 32.4 grams/day	10 <sup>-6</sup>	
Nevada	9	6.5	Mercury criterion uses 18.7 grams/day. Criteria in National Toxics Rule are also applicable.	10 <sup>-5</sup>	
New Hampshire	1	6.5		10 <sup>-6</sup>	
New Jersey	2	17.5			
New Mexico	6	17.5		10 <sup>-5</sup> and 10 <sup>-6</sup>	
New York	2	33		10 <sup>-6</sup>	
North Carolina	4	17.5		10 <sup>-6</sup>	
North Dakota	8	17.5		10 <sup>-6</sup>	
Ohio	5	15 (Great Lakes Basin); 6.5 (outside Great Lakes Basin)		10 <sup>-5</sup>	Great Lakes Initiative
Oklahoma	6	6.5	Oklahoma intends to update criteria using 17.5 grams/day in next triennial revision.	10 <sup>-5</sup>	

Entity	EPA Region	Fish Consumption Rate* (measured in grams/day)	Additional Information for FCR	Risk Level for Carcinogens*	Additional Information for Risk Levels
Oregon	10	175		10 <sup>-6</sup>	Except for arsenic which uses 10 <sup>-5</sup> for organism only and 10 <sup>-4</sup> for water + organism
Pennsylvania	3	17.5		10 <sup>-6</sup>	
Port Gamble S'Klallam Tribe	10	142.4		10 <sup>-6</sup>	
Puyallup Tribe of Indians	10	6.5	Puyallup Tribe has proposed rate of 142.4 grams/day, but has not submitted to EPA.	10 <sup>-6</sup>	
Rhode Island	1	17.5		10 <sup>-6</sup>	
Saint Regis Mohawk Tribe	2	33		10 <sup>-6</sup>	
South Carolina	4	17.5		10 <sup>-6</sup>	
South Dakota	8	17.5		10 <sup>-6</sup>	
Spokane Tribe of Indians	10	86.3	Spokane Tribe submitted revised standards to EPA in 2010 using rate of 865 grams/day, but EPA has not acted on this submittal.	10 <sup>-6</sup>	
Tennessee	4	17.5		10 <sup>-6</sup>	
Texas	6	17.5 (carcinogens); 5.6 (non-carcinogens, childhood exposure factors)	Mercury criteria use 10 grams/day (fresh water) and 15 grams/day (salt water).	10 <sup>-5</sup>	

Entity	EPA Region	Fish Consumption Rate* <i>(measured in grams/day)</i>	Additional Information for FCR	Risk Level for Carcinogens*	Additional Information for Risk Levels
The Fond du Lac Band of the Minnesota Chippewa Tribe	5	60		None Listed	
Utah	8	17.5		10 <sup>-6</sup>	
Vermont	1	6.5		10 <sup>-6</sup>	
Virginia	3	17.5		10 <sup>-5</sup>	
Washington	10	6.5	Applicable human health criteria are in the National Toxics Rule.	10 <sup>-6</sup>	
West Virginia	3	17.5		10 <sup>-6</sup>	
Wisconsin	5	20		10 <sup>-5</sup>	Great Lakes Initiative
Wyoming	8	17.5		10 <sup>-6</sup>	

## Environmental Protection Agency Regions

