




Lauren Zeise, Ph.D., Director
Matthew Rodriguez, Secretary for Environmental Protection
Gavin Newsom, Governor

MEMORANDUM

TO: Charlton H. Bonham, Director
California Department of Fish and Wildlife
1416 Ninth Street, 12th Floor
Sacramento, California 95814

FROM: Lauren Zeise, Ph.D. 
Director

DATE: January 7, 2019

SUBJECT: RECOMMENDATION TO DELAY THE OPENING OF THE
COMMERCIAL DUNGENESS CRAB FISHERY FROM PATRICK'S
POINT TO THE OREGON BORDER (HUMBOLDT AND DEL NORTE
COUNTIES)

The Office of Environmental Health Hazard Assessment (OEHHA), in consultation with the California Department of Public Health (CDPH), recommends that the opening of the commercial Dungeness crab fishery be delayed in state waters from Patrick's Point (41° 8.00' N. latitude) north to the California/Oregon border (Humboldt and Del Norte counties). This recommendation is based on a finding of elevated levels of domoic acid in the viscera of some Dungeness crab that were collected from this area and analyzed by CDPH laboratories, as shown in the table below.

Domoic acid poisoning in humans may occur within minutes to hours after consumption of affected seafood and can result in signs and symptoms ranging from vomiting and diarrhea to permanent loss of short-term memory (Amnesic Shellfish Poisoning), coma, or death.

Current federal action levels for domoic acid are 20 parts per million (ppm) for all fish, with the exception of 30 ppm in the viscera of Dungeness crabs.

CDPH and OEHHA recommend as a best preparation practice that consumers avoid eating the viscera (internal organs, also known as "butter" or "guts") because they usually contain much higher levels of domoic acid than the meat.

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January 7, 2019

Page 2

CDFW, CDPH, and OEHHA are continuing to monitor and analyze Dungeness crab to determine when the commercial crab fishery between Patrick's Point and the California/Oregon border can be opened safely.

If you have questions, please contact me at Lauren.Zeise@oehha.ca.gov or (916) 322-6325.

Dungeness Crab Sampling Results

PORT	AREA	SAMPLE COLLECTION DATE	NUMBER OF SAMPLES	TISSUE TYPE	SAMPLE RESULTS: RANGE	AVERAGE LEVEL	SAMPLES EXCEEDING ACTION LEVEL*
Crescent City	George Reef	10/2/2018	6	Viscera	23 - 61 ppm	41.7 ppm	83%
		10/24/2018	6	Viscera	39 - 70 ppm	46.5 ppm	100%
		11/4/2018	6	Viscera	57 - 110 ppm	75.7 ppm	100%
		11/25/2018	6	Viscera	27 - 88 ppm	51.5 ppm	67%
		12/5/2018	6	Viscera	21 - 60 ppm	45.5 ppm	83%
		12/12/2018	6	Viscera	6.7 - 70 ppm	37.1 ppm	67%
		12/22/2018	6	Viscera	11 - 63 ppm	35.5 ppm	50%
		12/29/2018 – 1/3/2019	6	Viscera	7.4 – 53 ppm	21.7 ppm	17%
	Klamath River	10/2/2018	6	Viscera	19 - 28 ppm	24.8 ppm	0%

PORT	AREA	SAMPLE COLLECTION DATE	NUMBER OF SAMPLES	TISSUE TYPE	SAMPLE RESULTS: RANGE	AVERAGE LEVEL	SAMPLES EXCEEDING ACTION LEVEL*
Trinidad	Trinidad North	9/27/2018	6	Viscera	3.3 - 46 ppm	19.2 ppm	33%
		10/17/2018	6	Viscera	12 - 32 ppm	21.0 ppm	17%
		11/3/2018	6	Viscera	17- 48 ppm	29.2 ppm	33%
		11/19/2018	6	Viscera	23 - 53 ppm	39.3 ppm	67%
		12/2/2018	6	Viscera	11 - 110 ppm	43.7 ppm	67%
		12/9/2018	6	Viscera	13 - 48 ppm	27.5 ppm	33%
		12/22/2018	6	Viscera	2.9 - 15 ppm	8.6 ppm	0%
		12/29/2018	6	Viscera	4.2 - 44 ppm	14.1 ppm	17%
	Trinidad South	9/27/2018	6	Viscera	3.0 - 30 ppm	12.9 ppm	0%

*The action level for viscera is 30 ppm.