

WASHINGTON STATE DEPARTMENT OF HEALTH

WASHINGTON STATE SHELLFISH TREATY TRIBES

WASHINGTON STATE DEPARTMENT OF FISH AND WILDLIFE

WASHINGTON STATE DEPARTMENT OF AGRICULTURE

STRATEGY FOR PREVENTING CONSUMER EXPOSURE TO DOMOIC ACID

FROM DUNGENESS CRAB

In 1992, the Food and Drug Administration adopted a policy directed at preventing consumer exposure to domoic acid from commercial Dungeness Crab. The F.D.A. will take regulatory action on any Dungeness crab in interstate commerce found to contain 30 ppm or more domoic acid in cooked viscera. The F.D.A. encouraged states to implement programs to detect domoic acid in crab and to prevent consumer exposure to hazardous levels of domoic acid.

In keeping with F.D.A. policy, the Departments of Agriculture, Fish and Wildlife, and Health and the Washington State Shellfish Treaty Tribes are continuing to follow the strategy for dealing with the presence of domoic acid in crab for the 2008-2009 crab harvest season. The strategy will require the active participation and cooperation of all involved agencies, tribes, and the industry to assure optimal public health protection and to maximize harvest opportunities.

Specific elements of the strategy are as follows:

PUBLIC INFORMATION

One crab sample consists of six (6) crab viscera from six (6) whole cooked Dungeness crabs.

If the toxin levels in the viscera of three crabs in a single sample set of six (6) crab, equal or exceed 30 ppm, the Department of Health (DOH) will issue a closure announcement of the commercial crab fishery in that zone. Additional advisories on consumption of crab may be issued as warranted based on the toxin levels detected through the monitoring program.

MONITORING PROGRAM

Due to the sporadic nature of marine biotoxin episodes, a sampling strategy based on geographic zones could maximize harvest opportunity. If operated effectively, such a plan will allow for closure of defined areas if necessary, rather than the entire fishery. Eight (8) distinct geographic zones, five Outside Coast, North and South Willapa Bay and Grays Harbor, have been delineated in order to allow

effective closure and reopening in the event domoic acid levels reach or exceed closure levels. See attached Zone Map.

This will require the development of procedures to assure crab samples collected at the processor level can be identified as coming from a described zone. Historically, such samples were collected once a month. For the 2008/2009, crab harvest season, the crab-sampling frequency will remain on a monthly schedule. If there is an increase in toxin in the razor clams, more frequent sampling may be required. DOH will notify the appropriate samplers if it becomes necessary to increase the frequency of sampling.

Outside Coastal Zones

Outside Coastal Zones to be included in the routine monitoring program are:

Cape Disappointment to Pt. Brown (PAPO056)	Toleak Pt. To Sand Pt. (CCPO052)
Pt. Brown to Queets River (GHPO054)	Sand Pt. to Neah Bay (CCPO053)
Queets River to Toleak Pt. (JCPO053)	Grays Harbor (GHGH056)
	North Willapa Bay (PAWB056)
	South Willapa Bay (PAWB057)

Inside Waters to include the Strait of Juan de Fuca and Puget Sound

In the event that shellfish samples indicate a significant domoic acid bloom event inside the Strait of Juan de Fuca or Puget Sound, DOH may require samples of crab from the impacted area. In that event, DOH will notify the Departments of Agriculture, Fish and Wildlife, and any Washington State Treaty Tribe in the impacted area and request crab samples for testing. Should the test results show elevated levels of domoic acid, the same procedures used to monitor the outside coastal crab fishery will be implemented for the inside waters crab fishery. This includes sample size and frequency, closure levels, reopening levels, crab in the market place and alternatives to closure.

OPENING-REOPENING CRITERIA

Any decision with regard to opening or reopening of a zone will be based on the laboratory analysis of six (6) crab viscera from six (6) whole cooked Dungeness crabs.

Opening of a zone at the beginning of the crab season will require one (1) crab sample set, with all six crab showing domoic acid levels below 30 ppm in the viscera. If razor clam samples show elevated levels of 20 ppm or higher, opening a crab zone will require two (2) consecutive sample sets of crab, that are not less than seven (7) days apart, with all six crab in the sample showing levels below 30 ppm in the viscera.

Reopening a zone that has been closed due to toxic test results, will require two (2) consecutive crab sample sets, not less than seven (7) days apart, with all six crab in each set, testing below 30 ppm in the viscera.

CLOSURE CRITERIA

Any decision with regard to closure of a zone may be based on the laboratory analysis of one crab sample set, consisting of six (6) crab viscera from six (6) whole cooked Dungeness crabs. Lack of

adequate crab samples in a zone, in the face of elevated domoic acid in adjacent zones, or in other species, also, may result in the closure of that zone until, adequate information is gathered to determine the zone is safe to be reopened.

If an individual crab viscera, from a zone shows a level of 30 ppm or higher, sampling will be increased.

If three (3) or more crab viscera from a zone show domoic acid levels of 30 ppm or higher, the zone will be closed. If any single crab sample of **meat** shows domoic acid levels of 20 ppm or higher, the zone will be closed.

Other environmental indices, such as phytoplankton data, high levels in other species or high levels in adjacent zones may trigger extra sampling in a zone or all zones.

Unusually high levels (≥ 80 ppm) in a single crab sample may result in closure of a zone in order to evaluate the situation.

The Department of Health will issue an official closure order when a zone or the entire coast needs to be closed.

CRAB IN THE MARKET PLACE

In keeping with the F.D.A. policy, specific lots of crab known to contain domoic acid levels of 30 ppm or greater in the viscera will be embargoed. Such crab must be either eviscerated prior to sale or destroyed. The embargoed crabmeat must be sampled prior to sale or consumption. The sample of crabmeat must have a domoic acid level of less than 20 ppm before any crabs can be eviscerated. Crabmeat found with domoic acid levels of 20 ppm or higher cannot be eviscerated and sold. All such lots of crab meat must be destroyed.

ALTERNATIVE TO CLOSURE

Evisceration of crab from zones showing elevated levels of domoic acid in crab viscera may be an alternative to closure. Such an alternative would require careful consideration of whether adequate public health protection could be achieved. Tight controls on harvest, landing and processing of crab from the zones would be necessary, before evisceration would be approved as a method of biotoxin control. Such controls must be integrated into the processor's HACCP plan, to include record-keeping methods that ensure crab lots are identified by harvest zone.

COMMUNICATIONS

In the event closure of a zone(s) is required, the Department of Health will notify the four coastal tribes; Quinalt Indian Nation, Quileute Indian Tribe, Hoh Tribe and the Makah Tribe; Department of Fish and Wildlife; Department of Agriculture and the United States Food and Drug Administration.

Department of Agriculture will notify Oregon Department of Agriculture and all commercial crab processors, and will, in turn, request crab processors to notify crab harvesters.

The United States Food and Drug Administration will notify British Columbia and Oregon counterparts by broadcast email.

Each tribe will notify their license holders.

The Department of Fish and Wildlife will notify the crab boats in the applicable zones, each of their license holders and Oregon Department of Fish and Wildlife.