

Washington State Department of Health
Office of Shellfish & Water Protection

Razor Clam Biotxin Monitoring Plan

Purpose & Scope

It is the purpose of this document to identify procedures to be followed for preventing the dangers to public health that arise as a result of marine biotoxins in razor clams in Washington. It is not the purpose of this document to determine, or limit, tribal treaty shellfishing rights. Secondly, this document is to provide information to the staff of the Office of Shellfish & Water Protection about where and under what conditions razor clam harvesting is occurring in Washington.

1. Biotxin Monitoring Areas

Major Areas (See attached maps)

Long Beach Peninsula

Sub-Areas

A -- Cranberry Approach

XA -- Klipsan Approach

XB

OY -- Oysterville Approach

D

E -- WDFW Reserve

Willapa Harbor Spits

Twin Harbors

Sub-Areas

G -- Midway Approach

H

CL -- WDFW Reserve

XH -- Grayland Approach

I

Copalis

Sub-Areas

K -- Pacific Ave. Approach

XK

L

XL -- WDFW Reserve

M

N

GS -- Griffith Priday State Park

QBR -- Quinault Beach Resort

Mocrocks

Sub-Areas

CR

BC -- Boone Creek

CP

JC

MP -- Moclips Approach

Quinault Reservation

Sub-Areas

A0, A1.5, A2, B1, B2, C1, C2, D1, D2, E1, E2

Olympic National Park

Sub-Areas

Kalaloch

Kalaloch Beach South (Trail 2)

Kalaloch Beach North (Trail 3)

Second Beach

Third Beach

Quileute Reservation

Sub-Areas

First Beach

Sampling Plan & Schedule

2. Commercial Harvest

A. Beach Opening Criteria

The criteria for lifting a health advisory for commercial harvest requires at least two consecutive sample sets collected between seven and ten days apart that are below 20ppm of domoic acid and below 80µg of PSP toxin. All the sub-area samples must meet the above standard. An area will remain closed if even one sub-area sample exceeds these standards.

B. Beach Closure Criteria

The criteria for closing an area to commercial harvest are as follows:

(1) If one or more samples exceed the above standards.

(2) A failure to collect samples within the ten-day sample period may cause the area to

be closed.

C. Commercial Product Recall

Product recalls and embargoes may occur when a sample taken during open season indicates unacceptable levels of marine biotoxins. When that occurs, an emergency closure will become necessary and DOH will notify all commercial razor clam operations. All products that have been harvested on or after the day of the elevated sample will be embargoed immediately. If DOH suspects that clams harvested before the sample collection date may contain dangerous levels of toxin, additional lots of clams may need to be recalled or embargoed. The clams will be withheld from the market, until adequate testing of the harvested lot of clams indicates whether or not dangerous levels of toxin are present.

D. Commercial Harvest Areas

1. Willapa Spits - The exposed spits in the mouth of Willapa Harbor are the only areas open to the general public to commercially harvest razor clams. (See Map B)
2. Copalis, Mocrocks, Quinault Reservation - These areas are harvested commercially by the Quinault Nation.

E. Sampling Requirements & Procedures

1. During Commercial Open Season

a. Sample Sites

During open season, one to three samples must be collected from the Willapa Spits. For Copalis, Mocrocks and the Quinault Reservation, one to two samples must be collected. The number of samples required will be determined by the Marine Biotoxin Program (MBP) staff at the time of each sampling.

b. Frequency of Sampling

During open season, samples must be collected at least every ten days. This ten-day count begins on the first day after the sampling date.

c. Sample Procedure

Each sample shall contain no less than six (6) unbroken clams. Whenever possible, 12 clams are preferred for each sample. If the clams are small (shell length below three inches), additional clams will be necessary. To complete both PSP and domoic acid testing, a minimum of 104 grams of clam tissue is necessary. The clams shall be shipped whole with the shell on, or if frozen, the clams must be shucked. The sample shall be shipped in a plastic bag with a completed sample form and gel-ice. (See attachment 1)

d. Sampling Responsibilities

(1). For the Willapa Spits, the pre-season samples may be collected by WDF&W or by a commercial company identified by WDF&W or DOH. During the open season, the commercial industry will be responsible for sampling. The individual company that will do the sampling will be identified prior to the opening of the season.

(2). Sample collection for the Quinault Nation commercial season is the responsibility of the Quinault Fisheries Division.

2. During Closed Season

a. During the closed season, the only time samples will be collected from the Willapa Spits, will be in preparation for opening the season.

b. During the commercial closed time period, the Quinault Fishery Division may, at their discretion, choose to collect samples for ceremonial and subsistence harvest.

F. Deviation from Established Sampling Policy

Under certain conditions, DOH will consider requests for deviation from the established sampling policy. Such a request will be in writing and will apply on an individual case basis. For such a request to be considered, the following conditions must exist.

1. The toxin levels of all samples in the area under consideration must be below 5ppm of domoic acid and below 40µg of PSP toxin. The level of both toxins must appear to be stable, with no evidence of an increasing trend.

2. Secondly, to extend the ten days between sample collections, the sampling conditions must be such that an earlier sample cannot be collected. This could result from unfavorable tide condition, high surf conditions, rainstorms or failure of clam shows. Lack of available personnel to collect samples will not be considered as a valid reason for a request for deviation.

3. Recreational Harvest

A. Beach Opening Criteria

All Recreational razor clam beaches are closed except when Washington Department of Fish & Wildlife (WDF&W) enacts a special regulation to open a "major area" for a limited time period. One of the criteria for opening the beaches is an advisory from the Department of Health (DOH) that indicates that the biotoxin levels are safe for the area being considered for opening. The criteria for lifting a health advisory for closure for a "major area" requires at least two consecutive expanded sample sets collected seven to ten days apart, which are below 20ppm of domoic acid and below 80µg of PSP toxin. All samples from the entire "major area" must meet these standards. An expanded sample is defined as: a sample collection from 3 sub-area sampling stations, except for Kalaloch

and Mocrocks, where 2 sub-area sampling stations are acceptable. Lifting an advisory will not be considered for individual sub-areas alone.

B. Beach Closing Criteria

The criteria for closure of an open "major area" is as follows: If one or more samples from within a "major area" equals or exceeds 20ppm of domoic acid or 80µg of PSP toxin, DOH will issue an emergency order, to close the affected area. The 1995 Legislature enacted legislation under Title 43 RCW, Chapter 43.70, that authorizes DOH to prohibit the recreational harvest of marine species that presents a potential risk of substantial harm to public health. See attachments 4 & 5) Elevated levels of biotoxin in razor clams would present such a risk. Failure to collect samples within the ten-day period will result in a recommendation for closure.

C. Sampling Requirements & Procedures

1. During Recreational Open Season

a. Sample Sites

During open season, samples must be collected from at least three sub-area sample sites in each "major area", except Kalaloch and Mocrocks, where two sub-area sample sites are acceptable. During periods of low toxicity, DOH may allow an exception to this requirement.

b. Frequency of Sampling

During open season, samples must be collected between seven and ten (10) days apart. This ten-day count begins on the first day after the sampling date.

c. Sample Procedure

Sample procedures are the same as described above for commercial harvest.

2. During Closed Season

a. Sample Sites

During closed season, WDF&W may conduct one of two possible sampling plans. When preparing for an upcoming planned opening, the expanded sampling required during an open season described above will be conducted. During the rest of the year, monthly samples will be collected from a single sample site per each major area. This type of sampling is referred to as "background" sampling and is optional.

b. Frequency of Sampling

During closed season, the background samples will be collected on a schedule

to be determined by WDF&W. For the pre-season samples, the sampling should be no more than ten days apart, as described above for open season.

c. Sample Procedure

The sample procedure will remain the same as for open season described above.

D. Deviation from Established Sampling Policy

Under certain conditions, DOH will consider requests for deviation from the established sampling policy. Such a request will be in writing and will apply on an individual case basis. For such a request to be considered, the following conditions must exist:

1. The domoic acid levels for all samples in the area under consideration must be below 5ppm; PSP levels must be below 40µg; and the level of both toxins must appear to be stable, with no evidence of an increasing trend.
2. Secondly, to extend the ten days between sample collections, the sampling conditions must be such that an earlier sample cannot be collected. This could be due to no harvestable tide condition, high surf conditions, rainstorms or failure of clam shows. Lack of available personnel to collect samples will not be considered as a valid reason for a request for deviation.

4. Tribal Ceremonial and Subsistence Harvest

A. Tribes

The coastal tribes that conduct ceremonial and subsistence (C & S) harvest for razor clams are the Quinault Indian Nation, Hoh Indian Tribe, Quileute Indian Tribe and the Makah Indian Tribe.

B. C & S Beach Opening Criteria

The sampling schedule, monitoring criteria and determination that shellfish are safe for human consumption for C & S harvesting is determined by the Quinault Fisheries Division, the Quileute Department of Natural Resources, the Hoh Tribal Office and the Makah Tribal Office. When samples are submitted to the DOH laboratory for marine biotoxin testing for C & S harvesting, the cost of conducting the tests is charged to the tribe that collected the samples.

C. C & S Beach Closure Criteria

The decision to issue and post warnings and to close a C & S beach is the responsibility

of the tribal offices described above.

5. Data Management

A. Handling & Reporting

The PSP and domoic acid test results are entered into the department database by the laboratory staff. When the data has been verified for accuracy, the Marine Biotoxin Program (MBP) of the Office of Shellfish Programs is notified by phone. The results are printed by the MBP staff. WDF&W and the coastal tribes are notified by the MBP by phone, email and fax. (See attachments 2 & 3)

B. Storage & Reports

Domoic acid and PSP data are electronically transferred to the biotoxin computer program. Copies of the original PSP data forms are forwarded to the MBP by the DOH Laboratory. MBP edits the PSP and domoic acid data and makes any necessary changes to the database and places the forms in storage. Each day that razor clam biotoxin tests results are reported by the lab, a report is prepared by MBP and faxed to fifteen agencies, tribes and elected officials. For the notification list, see attached form. Monthly, a county by county summary is prepared by MBP and mailed to interested parties. The monthly summary includes all species of shellfish including razor clams that are tested for biotoxins. Yearly, MBP prepares a marine biotoxin summary as part of the Annual Inventory report. Razor clam biotoxin data is a part of this report. The report is distributed to other state agencies and tribes as well as many other interested parties.