



## WAC 246-282 summary of changes, Marine Biotoxin Requirements, & *Vibrio parahaemolyticus* control plan requirements

Shellfish Licensing and Certification

# Team Members

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# Agenda

Time	Topic	
5 minutes	Intro, housekeeping, etc.	
60 minutes	Rulemaking Updates– Significant Changes to WAC	All operations
5 minutes	<i>BREAK</i>	
40 minutes	Biotoxin training	All growers & harvesters
5 minutes	<i>BREAK</i>	
60 minutes	<i>Vibrio parahaemolyticus</i> training	Those who harvest oysters from May 1 through Sept 30

# House Keeping

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A survey will be in the chat after each training to put your name, operation name, and email.



At least 1 person from your operation must take this course.



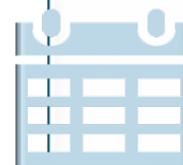
PowerPoint presentation will be posted to our website



Get ready for knowledge checks



2-pagers for each topic are available



More training dates—  
Spanish available soon

# Definitions



# Updated Definitions (WAC 246-282-010)

- Some definitions were removed because they are redundant. They are already in RCW or Model Ordinance

Beach Wet Storage (new)	Shellstock greater than maximum seed size is harvested from one site and placed in another for less than 14 days.
Marina (new)	Means any water area with a structure including, but not limited to, docks, basins, floating docks, or mooring buoys used for docking and constructed to provide temporary or permanent docking or buoy moorage space for more than 10 boats. This only includes boats with a marine sanitation device.
Mooring area (new)	Means any portion of a growing area that is used to provide temporary or permanent anchorage or attachment to a mooring buoy for more than 10 boats. This only includes boats with a marine sanitation device.
Mooring buoy (new)	Mooring buoy means a floating marker permanently secured to a waterway bed with an anchoring line that can be used by boats instead of a dock.
Seed (revised)	"Seed" means shellfish that are less than market size for human consumption and have a maximum shell length of: (a) Thirteen millimeters (1/2 inch) for mussels; (b) Twenty-five millimeters (1 inch) for scallops; (c) Nineteen millimeters (3/4 inch) for Olympia oysters; (d) Nineteen millimeters (3/4 inch) for Kumamoto oysters; (e) <b>Thirty-eight</b> millimeters ( <b>1 and 1/2</b> inches) for other oyster species; (f) Thirty-eight millimeters (1 and 1/2 inch) for geoducks; and (g) Thirteen millimeters (1/2 inch) for other clam species.
Transplant (new)	Means when shellstock greater than maximum seed size is moved from one harvest site and placed in another harvest site for 14 days or more.
Wet Storage (revised)	Means the <b>placement of harvested</b> shellstock in containers or floats in natural bodies of water or in tanks containing natural or synthetic seawater. <b>Types of wet storage include beach wet storage, flow-through wet storage, and recirculating wet storage.</b>

## Seed Size, WAC 246-282-010

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Rule change: Other oyster species (i.e. Pacifics and Virginicas) have a **maximum seed size of 1.5”** instead of 2”

Questions to ask yourself:

1. Do you grow or buy Pacific or Virginica oyster seed from an **unclassified** or **Prohibited** area?
2. If yes, then at what size do you remove the seed from the FLUPSY?
3. If it is <1”, then this change will **not impact you**
4. If it is 1-1.5”, **you will need to do extra record keeping**

## POLL

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- ❖ Do you **grow or buy** Pacific or Virginia oyster seed that is **1” or larger** from **Prohibited or unclassified** areas?



# Tagging

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# Tagging Requirements, WAC 246-282-080

**XYZ Shellfish Company**  
123 Oyster LN, Shelton, WA 98000  
Cert # WA-9999-SS

Original Shipper's Cert. No. (if other than above): \_\_\_\_\_

Harvest Date: **11/15/25**

Harvest Location: **WA-Totten Inlet** **TOT500**

Type Of Shellfish: **Pacific Oysters**

Quantity of Shellfish: Bushels \_\_\_\_ Dozen **200** Pounds \_\_\_\_ Count \_\_\_\_

**THIS TAG IS REQUIRED TO BE ATTACHED UNTIL CONTAINER IS EMPTY OR IS RETAGGED AND THEREAFTER KEPT ON FILE, IN CHRONOLOGICAL ORDER, FOR 90 DAYS. RETAILERS: DATE WHEN LAST SHELLFISH FROM THIS CONTAINER SOLD OR SERVED (INSERT DATE)\_\_\_\_\_.**

 **HEALTH**

**Harvest Site ID is required on the tag and HSC**  
The tag **MUST** match the HSC

## Harvest Site Certificate

Print Date: November 1, 2025

**Company Name:** XYZ SHELLFISH COMPANY

**Company Owner:** JOHN DOE

**Address:** 123 Oyster LN, Shelton

**License Number:** WA-9999-SS

**License End Date:** 01/01/2026

### Harvest Sites

NSSP Growing Area: Totten Inlet

Application Number	MWSS Number and Classification	Site Number	Lease Expires	Signed CAAMP on file	Classification Date
2024-920	148 Approved	Parcel: Thurston 12912320500	04/17/2027	N/A	12/05/2024
	Owner: John Z. Doe	7637 78th LP NW, Olympia	Acre: 1.00		Site ID: TOT500
	Harvest Type: Aquaculture	Species: Manila Clams, Oysters			
2011-740	143 Approved	Parcel: Mason 220315000065		N/A	12/04/2011
	Owner: Albert Smith	1251 SE Somers DR, Shelton	Acre: 4.00		Site ID: TOTSMITH
	Harvest Type: Aquaculture	Species: Manila Clams, Oysters			

### Examples of acceptable harvest site IDs:

- DOH Application Number (2024-92)
- Property Owner
- Parcel Number
- Something else!

## If purchasing and retagging

- Transfer the harvester's site ID to your tag
- No ID on the tag? Don't accept the shipment.

<b>XYZ Shellfish Company</b> 1195 Commercial Way, Metropolis, WA 98000 Cert # WA-9999-SS	
Original Shipper's Cert. No. (if other than above): <b>WA-8888-SS</b>	
Harvest Date: <b>11/19/25</b>	
Harvest Location: <b>WA-Samish Bay</b>	Harvest Site ID: <b>SAM12</b>
Type of Shellfish: <b>Manila Clams</b>	
Quantity of Shellfish: Bushels ___ Dozen ___ Pounds <b>120</b> Count ___	
<b>THIS TAG IS REQUIRED TO BE ATTACHED UNTIL CONTAINER IS EMPTY OR IS RETAGGED AND THEREAFTER KEPT ON FILE, IN CHRONOLOGICAL ORDER, FOR 90 DAYS. RETAILERS: DATE WHEN LAST SHELLFISH FROM THIS CONTAINER SOLD OR SERVED (INSERT DATE) _____.</b>	

# Need to Update Your Harvest Site Certificate (HSC)?

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- 1. Obtain the most current copy of your HSC.**
  - Email [shellfish@doh.wa.gov](mailto:shellfish@doh.wa.gov) if you need it from us.
- 2. Decide how you are going to identify your site on the tags.**
  - This can be the harvest site application number, parcel number, or whatever you choose.
- 3. Fill in your HSC**
  - On your HSC, write in your harvest site ID if you are not using the application number or parcel number.
- 4. Take a picture or scan your completed HSC to [shellfish@doh.wa.gov](mailto:shellfish@doh.wa.gov).**

# POLL



❖ Do you already have a way of identifying each of your harvest sites?

Examples: property owner name, street name, parcel, etc.



## Harvest Site Certificate

Print Date: November 1, 2025

**Company Name:** XYZ SHELLFISH COMPANY

**Company Owner:** JOHN DOE

**Address:** 1195 COMMERCIAL WAY, METROPOLIS

**License Number:** WA-9999-SS

**License End Date:** 06/30/2026

### Harvest Sites

NSSP Growing Area: Totten Inlet

Application Number	MWSS Number and Classification	Site Number	Lease Expires	Signed CAAMP on file	Certification Date
2024-920	148 Approved	Parcel: Thurston 12912320500	04/17/2027	N/A	12/05/2024
	Owner: John Z. Doe	7637 78th LP NW, Olympia	Acres: 1.00		Site ID: TOT500
	Harvest Type: Aquaculture	Species: Manila Clams, Oysters			
2011-740	143 Approved	Parcel: Mason 220315000065		N/A	12/04/2011
	Owner: Albert Smith	1251 SE Somers DR, Shelton	Acres: 4.00		Site ID: TOTSMITH
	Harvest Type: Aquaculture	Species: Manila Clams, Oysters			

Transplant

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# Transplant WAC 246-282-044

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## What is **Transplant**?

- Moving market size shellstock from one beach to another and storing it there for ***more than 14 days*** (long term storage)
- After 14 days, the shellstock will take on the characteristics of the transplant site.
- While in transit, transplanted shellstock are exempt from Vp time to cooling requirements.

## Requirements:

- ✓ Must have a valid operation license
- ✓ The original and final sites must be listed on your harvest site certificate
- ✓ During transit, the shellstock must be identified by tagging or approved means
- ✓ Records of the original harvest site, transplant method, and destination must be kept for 1 year

# Examples of Tags and Records

**TRANSPLANT ONLY**

**XYZ Shellfish Company**  
 123 Oyster LN, Shelton, WA 98000  
 Cert # WA-9999-SS

Original Shipper's Cert. No. (if other than above): \_\_\_\_\_

Harvest Date: **3/26/25 10:25am by truck**

Harvest Location: **WA-Hood Canal 1 (Smith) to Hood Canal 4 (Johnson)**

Type Of Shellfish: **Pacific Oysters**

"Bulk" Quantity of Shellfish: Bushels \_\_\_\_ Dozen 1,000 Pounds \_\_\_\_ Count \_\_\_\_

**THIS TAG IS REQUIRED TO BE ATTACHED UNTIL CONTAINER IS EMPTY OR IS RETAGGED AND THEREAFTER KEPT ON FILE, IN CHRONOLOGICAL ORDER, FOR 90 DAYS.**

All shellstock containers in this lot have the same harvest date and area of harvest" along with the number of individual containers in the unit.

Example 1: Use existing bulk tag

XYZ Shellfish Company, WA-9999-SS  
 123 Oyster LN, Shelton, WA 98000

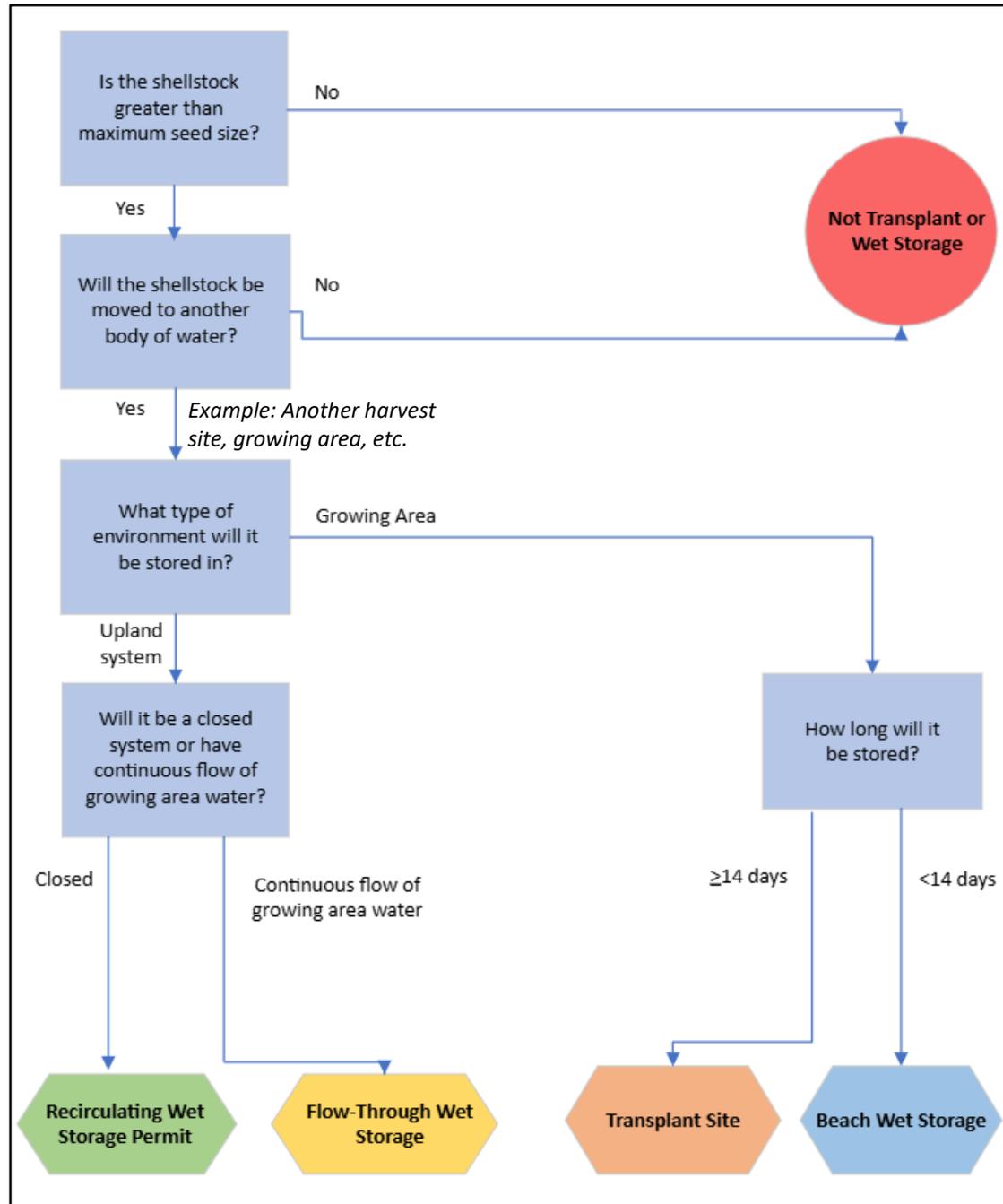
**Transplant Log**

Date & Time	Type & Method	Quantity	Original Site	Grow-Out Site
3/26/25 10:25am	Pac Oysters By truck	1,000 dz	Smith-Hood Canal #1	Johnson-Hood Canal #4
4/8/25 3:03am	Pac Oysters By boat	5,000 dz	2025-800 Hood Canal #2	2025-950 Hood Canal #2

Example 2: Use a transplant log

\*Records must be kept for 1 year. If using a bulk tag to identify, you'll need to keep that tag for 1 year.

# Are you transplanting or wet storing?



\*If seed, might need AQ or wild seed permit

Moving shellstock that is greater than maximum seed size to another harvest site for greater than 14 days

## Knowledge Check



What documents are required when transplanting shellstock? (choose all that apply)

- a) Transplant Log or Bulk Tag
- b) DOH license
- c) DOH harvest site certificate
- d) This is a trick—no documents are needed

Moving shellstock that is greater than maximum seed size to another harvest site for greater than 14 days

## Knowledge Check



What documents are required when transplanting shellstock? (choose all that apply)

- a) **Transplant Log or Bulk Tag**
- b) **DOH license**
- c) **DOH harvest site certificate**
- d) This is a trick—no documents are needed

# Guidelines for Implementation

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- Rules are in effect on January 15, 2026
- Delayed implementation to May 1, 2026
- Inspectors will be doing a lot of education during your renewal inspections coming up.
- 2-pager educational documents are available on our website

Questions?

Please fill out the survey in the chat!

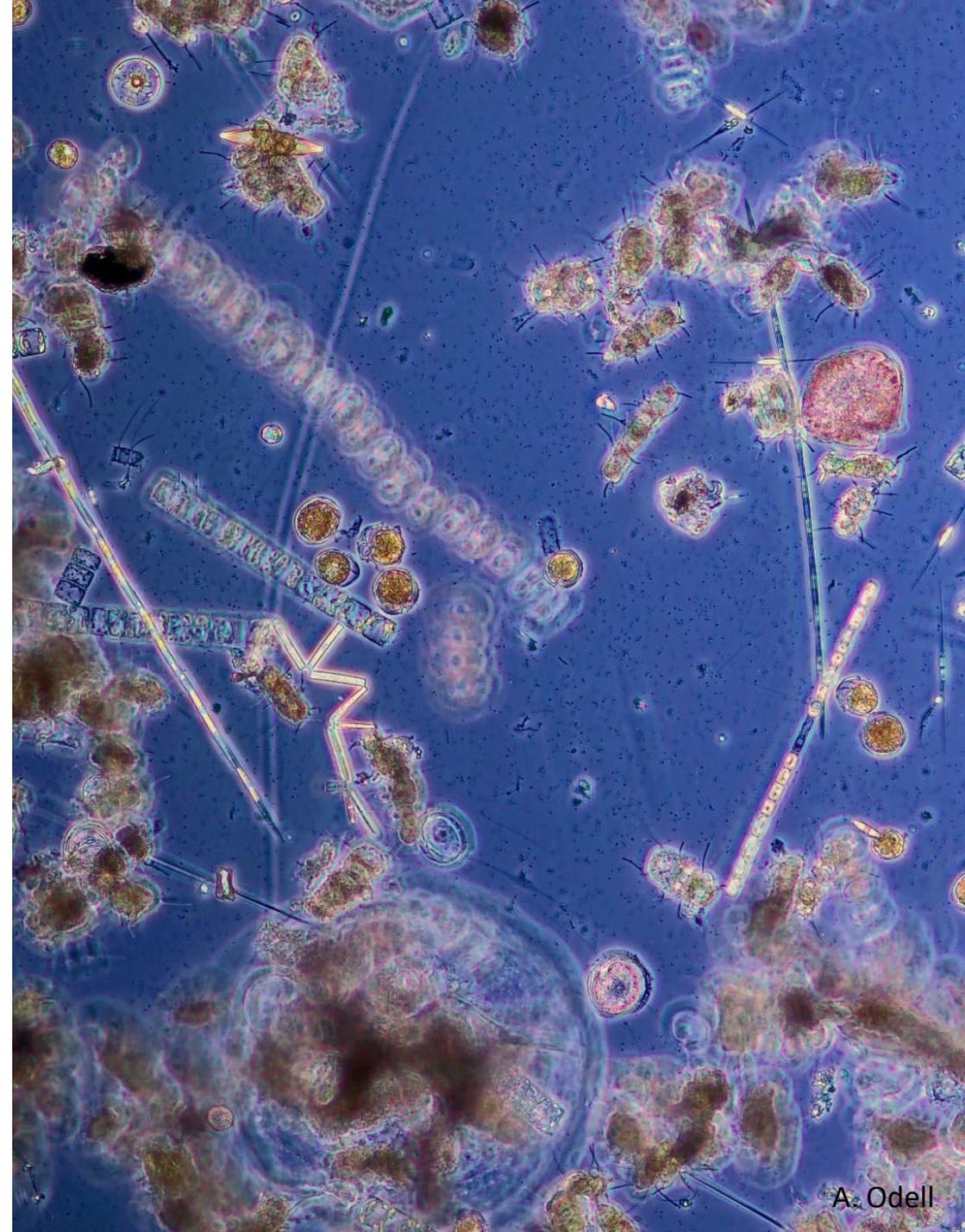
This will be used to make your certificate.



**UP NEXT: BIOTOXIN TRAINING**

# Biotoxin Training Overview

- Marine Biotoxins
- Washington Biotoxins
- MO Requirements
- MO Biotoxin Management
- MO Biotoxin Control
- Anatomy of a Biotoxin Event
- Q&A

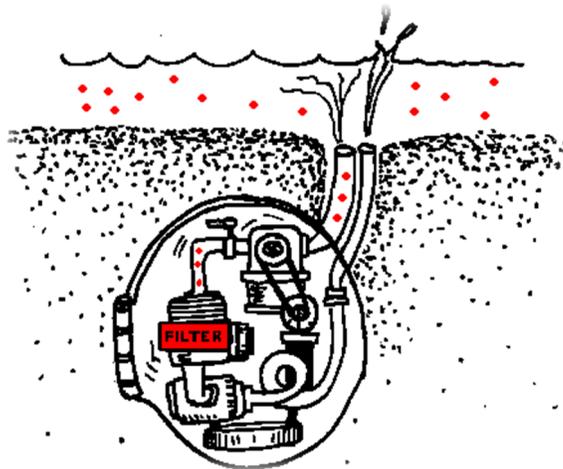


# Marine Biotoxin as Hazards

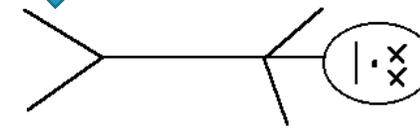
Shellfish are filter feeders - they eat phytoplankton (algae)

Some phytoplankton produce biotoxins and the toxins are accumulated and incorporated into shellfish meat

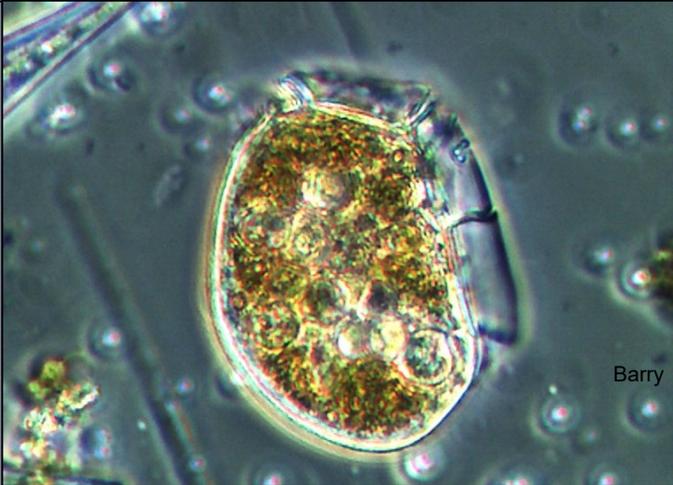
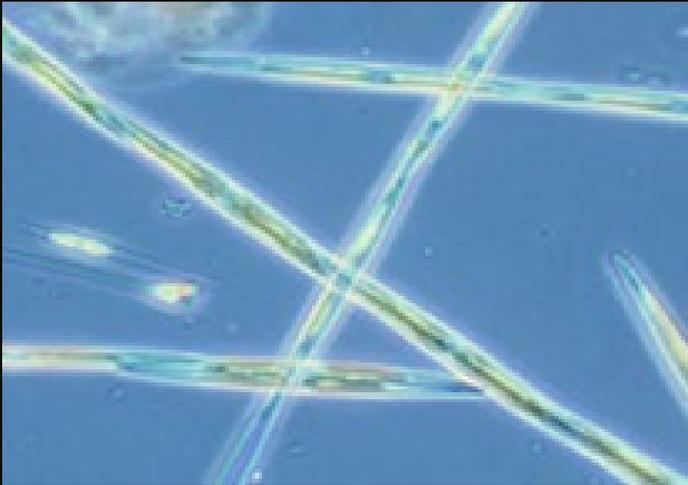
**So... Biotoxins cannot be cleaned, cooked, or frozen out**



If people eat shellfish contaminated with biotoxins, they can get very ill or potentially die



The only way to avoid getting sick from biotoxins is to avoid contaminated shellfish

Syndrome	Paralytic Shellfish Poisoning (PSP)	Diarrhetic Shellfish Poisoning (DSP)	Amnesic Shellfish Poisoning (ASP)
			
<b>Caused by</b>	Dinoflagellate <i>Alexandrium</i> spp.	Dinoflagellate <i>Dinophysis/Phalacroma</i> spp.	Diatom <i>Pseudo-nitzschia</i> spp.
<b>Toxin</b>	Saxitoxins	Okadaic Acid/DTXs	Domoic Acid
<b>Monitoring</b>	1957	2012	1991
<b>Last WA Illness</b>	2022	2011	1991
<b>Samples/year</b>	~3000 tests/year	~2500 tests/year	~2000 tests/year
<b>Action Level</b>	≥80 µg/100g tissue	≥16 µg/100g tissue	≥20 ppm in tissue

# Paralytic Shellfish Poisoning (PSP, saxitoxins or “red tide”)

**Action Level:  $\geq 80 \mu\text{g}/100 \text{g}$**

Symptoms Onset: Minutes to hours (Death reported within 15 minutes)

## Gastrointestinal symptoms

- Vomiting, diarrhea, & abdominal pain

## Neurological Symptoms (within 48 hours)

- Paresthesias (tingling/numbness) of mouth & extremities
- Coordination loss
- Muscular paralysis\*
- Respiratory arrest



# Diarrhetic Shellfish Poisoning (DSP or okadaic acid/DTXs)

**Action Level:  $\geq 16 \mu\text{g}/100 \text{g}$**

Symptoms Onset: 30 min to 36 hours

## Gastrointestinal symptoms (within 24 hours)

- Nausea
- Vomiting
- Debilitating diarrhea\*
- Chills
- Headache
- Abdominal pain
- May be tumor promoting



# Amnesic Shellfish Poisoning (Domoic Acid)

**Action Level:  $\geq 20$ ppm**

Symptoms Onset: within 24 – 48 hours

## Gastrointestinal symptoms (within 24 hours)

Vomiting, abdominal cramps, diarrhea, nausea

## Neurological Symptoms (within 48 hours)

Headache, dizziness

Confusion, disorientation

Short term memory loss\*

Motor weakness

Seizures, coma

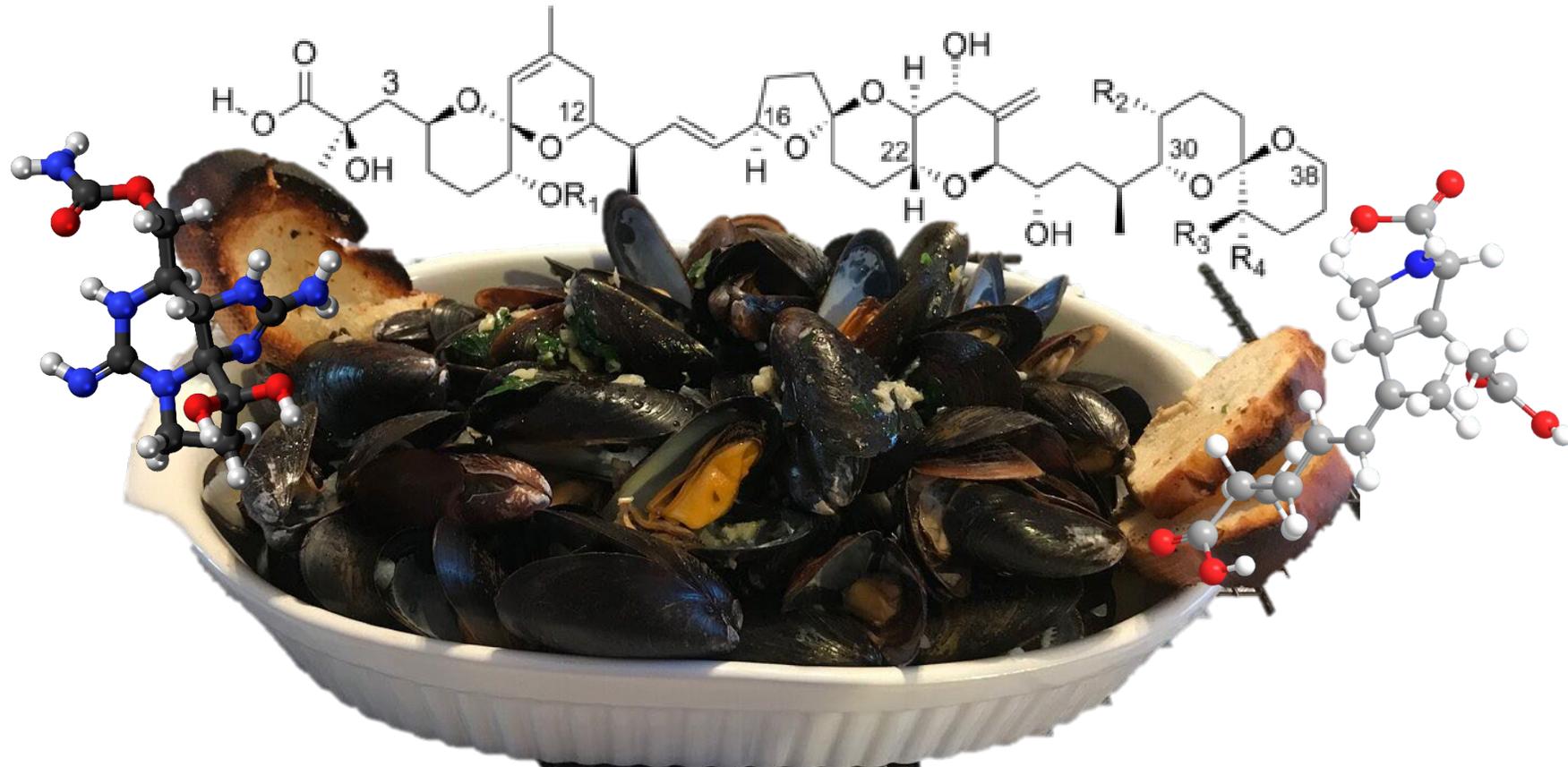
Death

## Sea lion deaths linked to severe brain damage caused by toxic algae bloom

Sea lions on US west coast beaches that ingest domoic acid may face neurological problems that impair behavior and survival abilities, new study finds

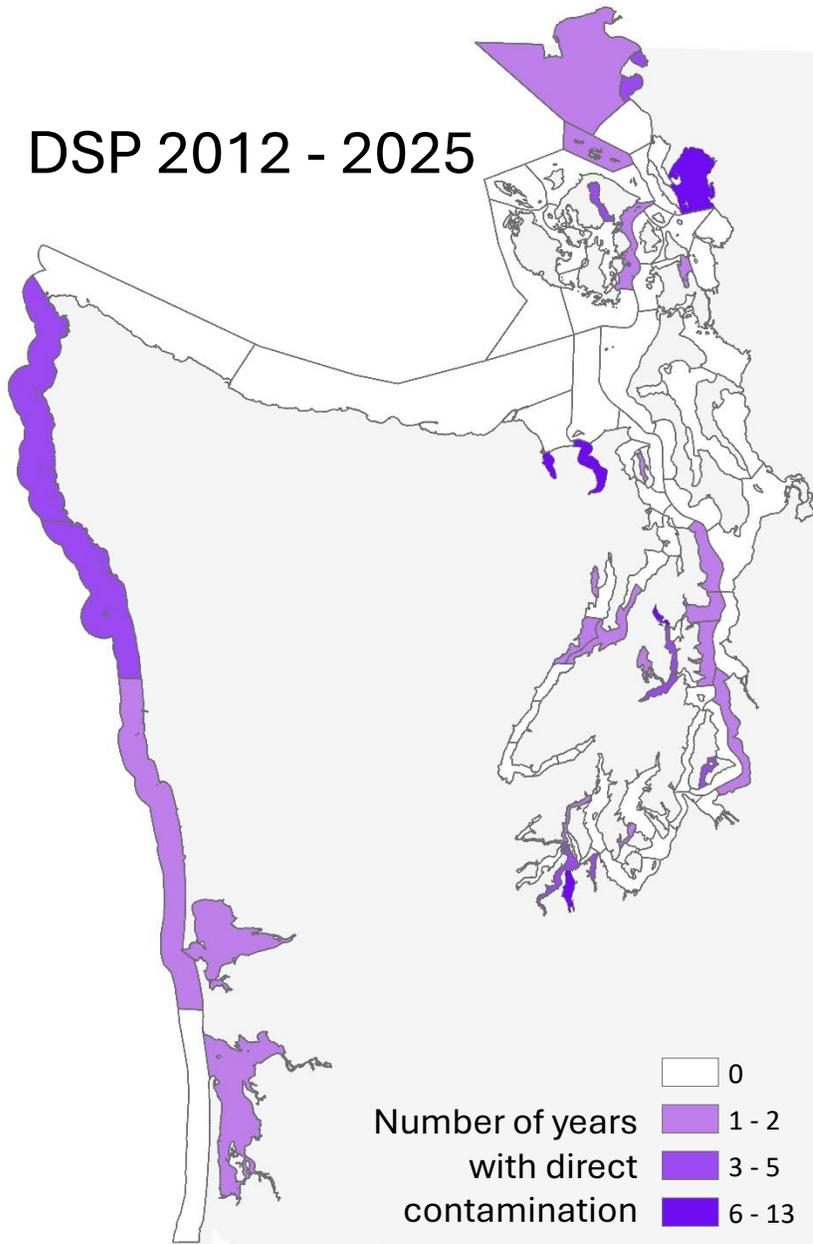


# Cleaning/Cooking/Freezing Shellfish **DOES NOT** Eliminate Biotoxins

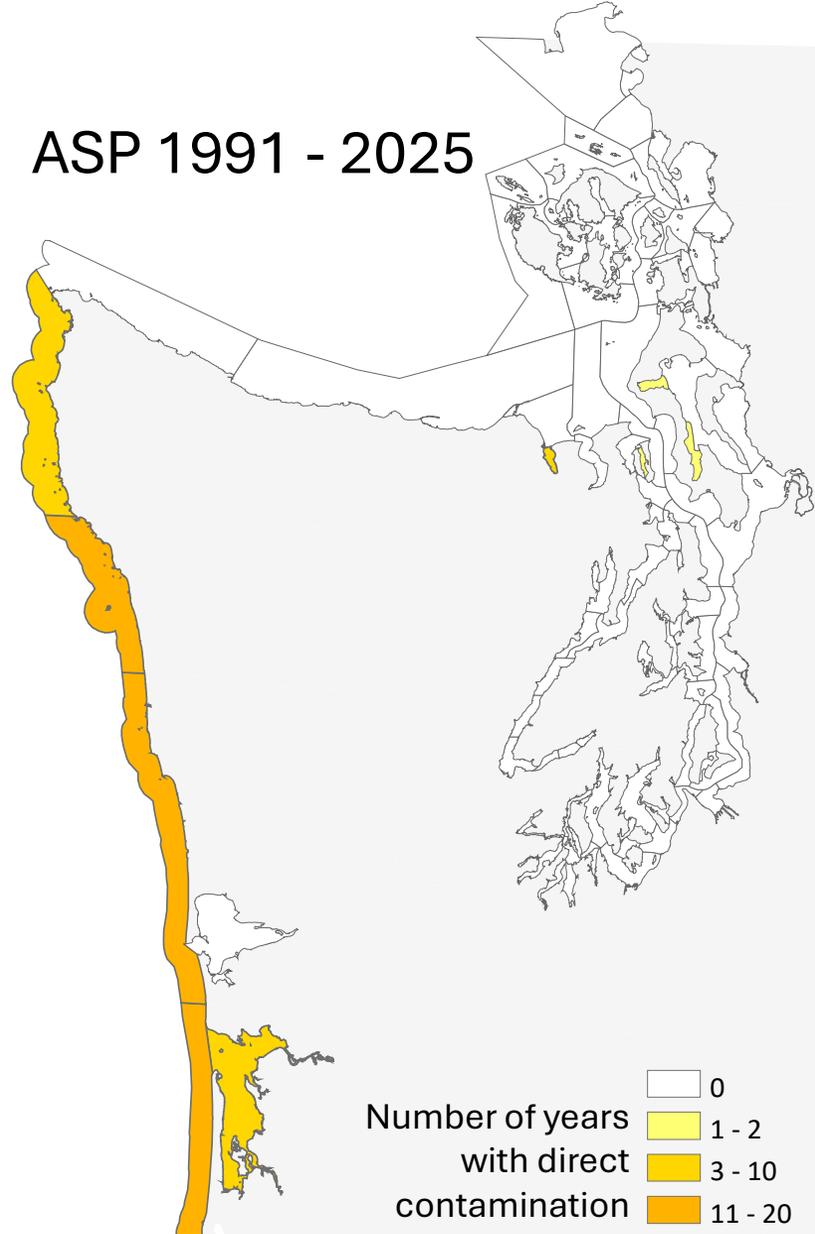


# Biotoxin Hotspots

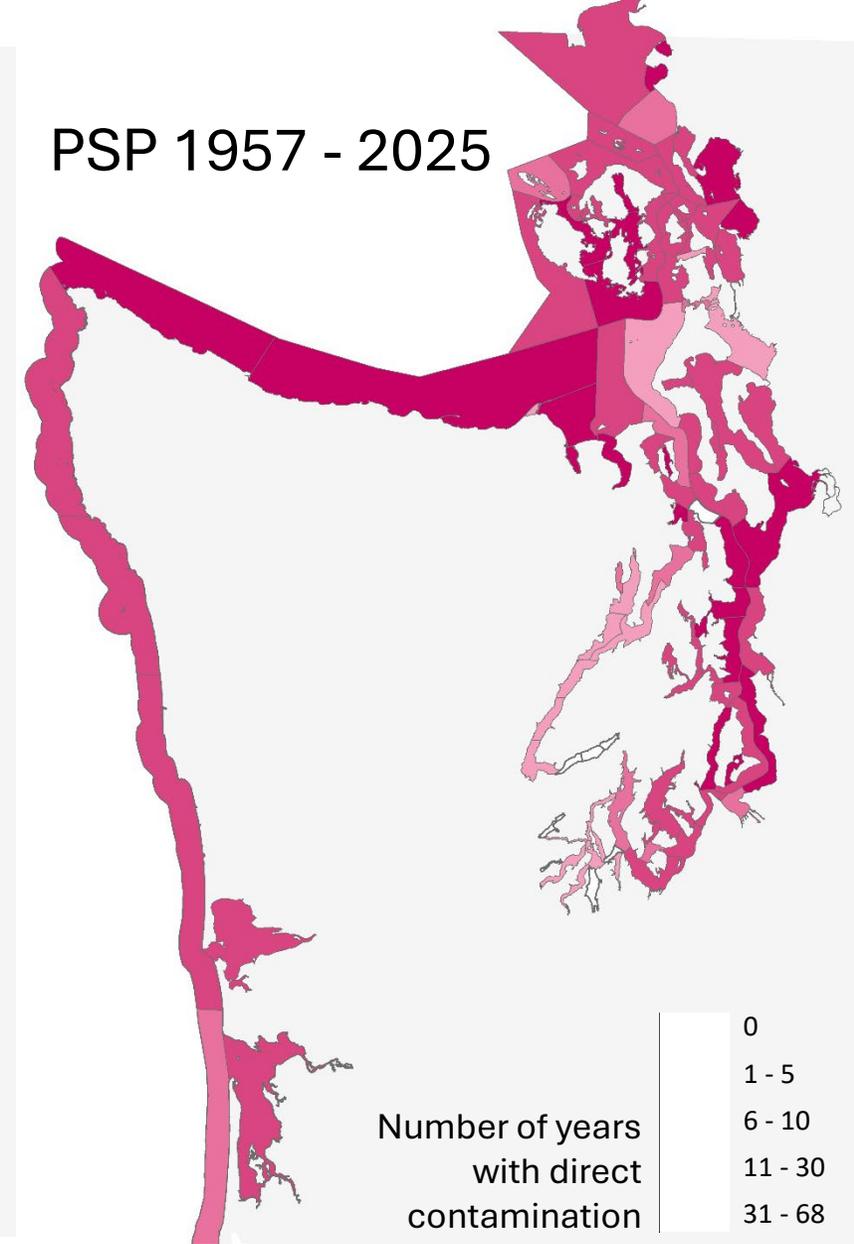
## DSP 2012 - 2025



## ASP 1991 - 2025



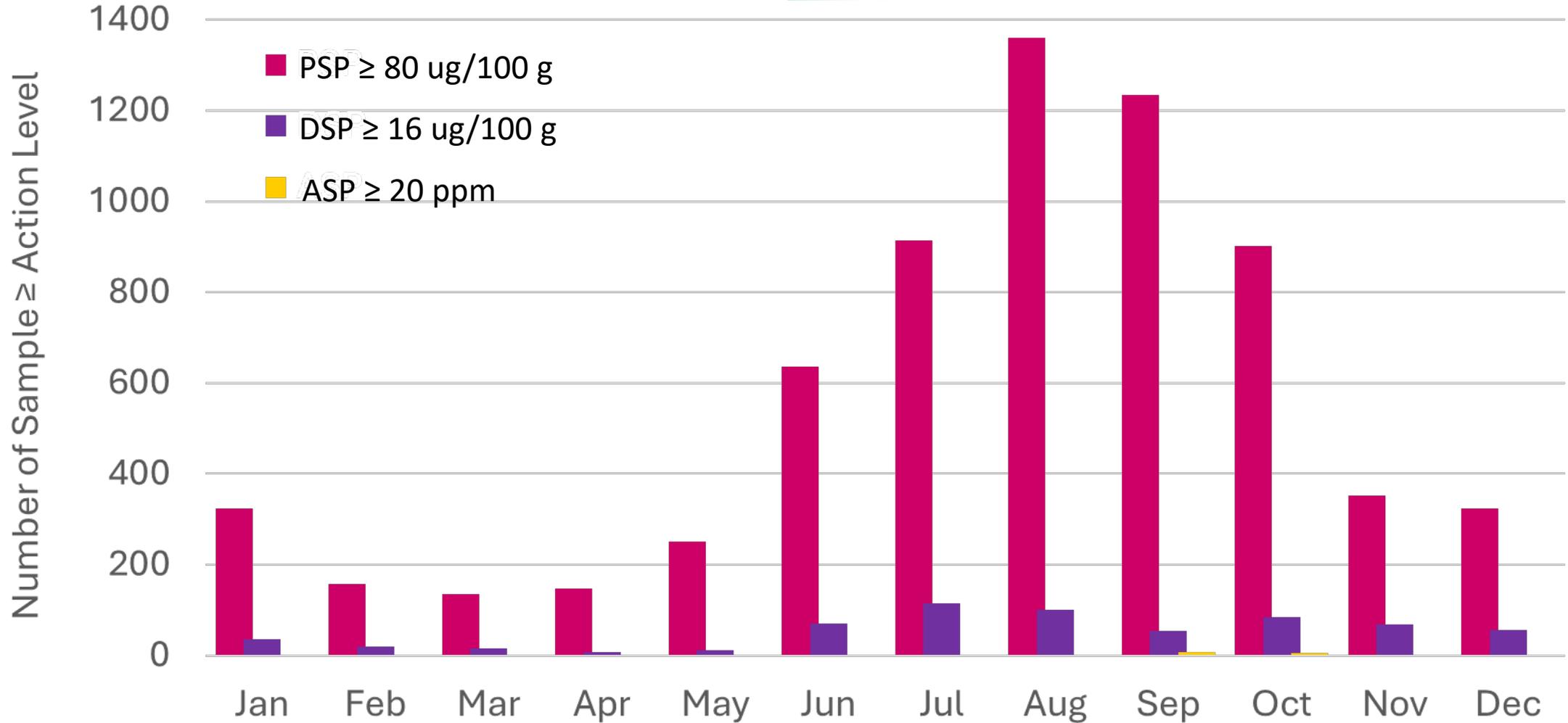
## PSP 1957 - 2025



Direct contamination: samples tested from defined area were above action level

# Seasonality of Biotoxins

## Strait & Puget Sound 2000-2025



# Every Marine Area in Washington is at risk for biotoxin contamination

- Sporadic/unpredictable
- Earlier and ending later
- New areas
- Dual toxicity
- Water color is not an indicator
- The only way to prevent illness is to not eat contaminated shellfish
- Illnesses can be severe, permanent and deadly

**The only way to know shellfish are contaminated with biotoxins is to test them**

## Knowledge Check

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Which Washington growing areas are at risk of biotoxin contamination?

(Choose one)

- a) Bellingham Bay
- b) Totten Inlet
- c) All growing areas
- d) Grays Harbor

## Knowledge Check

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Which Washington growing areas are at risk of biotoxin contamination?

(Choose one)

- a) Bellingham Bay
- b) Totten Inlet
- c) All growing areas**
- d) Grays Harbor

# State Authority

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- WAC 246-282-005

- Must meet or be more stringent than the controls in the Model Ordinance

- RCW 43.70.185

- (1) ... The department may take any reasonably necessary samples to determine whether such species or any lot, batch, or quantity of such species is safe for human consumption.

- RCW 69.30

- Department may take such samples or specimens as may be reasonably necessary to determine whether there exists a violation of this chapter or rules adopted under this chapter.

# MO Minimum Requirements

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- Ch. I Shellfish Sanitation Program for the Authority
  - @.01 (1) (a) regulate the classification of shellfish growing areas
- Ch. IV Shellstock Growing Areas
  - @.03 (5) (a) (b) (c) Growing area status separate from classification.
  - Growing area status can be: open, closed or controlled access
  - Status can change due to biotoxins, sewage, Vibrio, oil spill, etc.
    - See Ch II, IV .08 Action Levels, Tolerances and Guidance Levels for Poisonous or Deleterious Substances in Seafood

# MO Requirements Ch IV @.04 Marine Biotoxin Control

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- Goal:
  - Prevent illness or death among the shellfish consuming public
  - By preventing harvest of contaminated shellfish using “indicator station” and “critical species” concepts for early warning of biotoxin contamination
- States required to create:
  - Marine Biotoxin Management Plan for HABs with known history and
  - Contingency Plan for others (NSP, AZP)
- Requires growing areas be placed in closed status when biotoxins in shellfish are:
  - PSP  $\geq$  80  $\mu\text{g}/100$  g tissue
  - DSP  $\geq$  16  $\mu\text{g}/100$  g tissue
  - ASP  $\geq$  20 ppm

# MO Requirements @.04 Marine Biotoxin Control

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## ● Summary of @.04 Marine Biotoxin Control

- (1) Create marine biotoxin management plan
  - (a) Sampling program
  - (b) Close growing areas;
  - (c) Prevent harvest of contaminated species
  - (d) Product recall;
  - (e) Share information about toxic algal blooms and toxic shellfish meat to partners (State and Federal, shellfish industry, local health, etc.)
  - (g) Reopening criteria including the number of samples over what period of time
  - (h) Ensure that all shellfish harvested meet sanitary shellfish requirements prior to being sold. This includes all sampling, testing or product holds.

# MO Requirements @.04 Marine Biotoxin Control

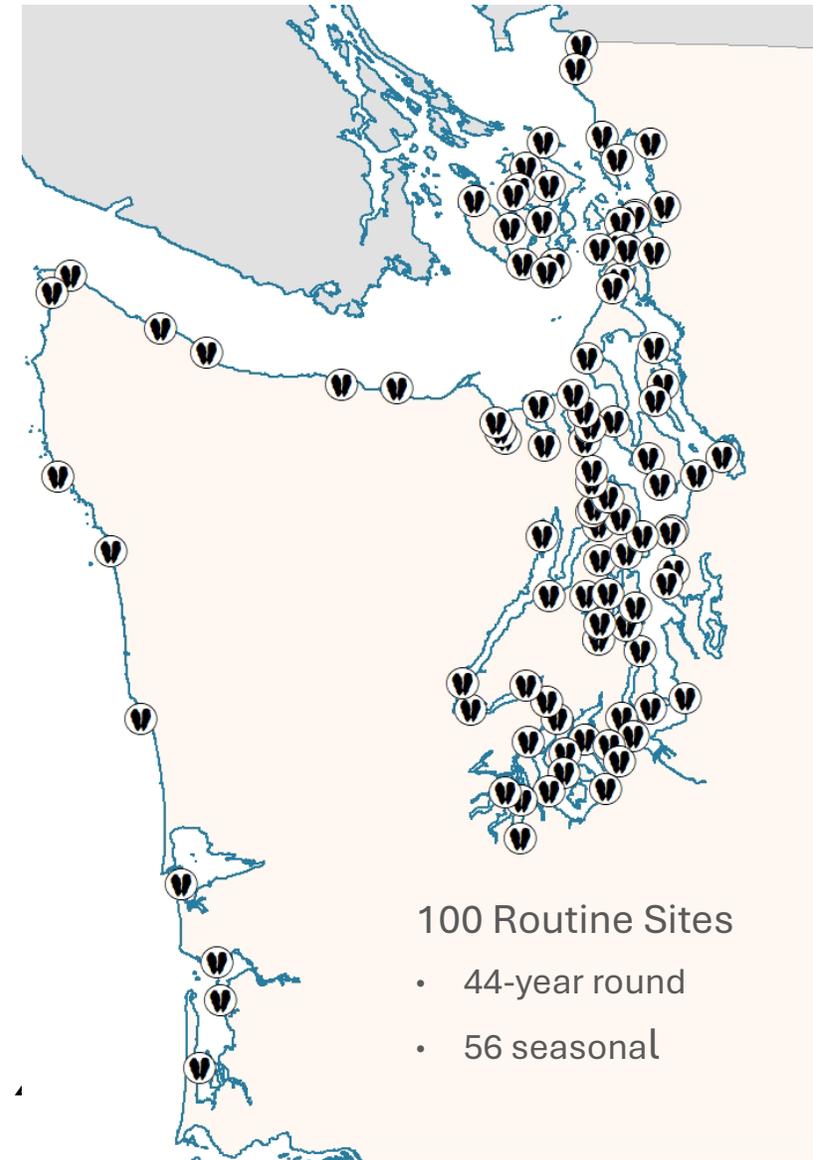
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## ● (4) Strategies

- (a) Phytoplankton – complementary – enhances predictive capability
- (b) Routine monitoring – use highest risk species unless species-specific testing
- (c) Pre-harvest testing in advance of harvest – permits harvesting for a short period of time (typically 1 week)
- (d) lot testing – after harvest – when biotoxins are detected in commercial species
- (e) Pre-harvest & lot testing

# Washington Marine Biotoxin Management Strategy

1. Routine Toxicity Monitoring
  - Sentinel Mussel Program
  - Subsistence/Recreational
2. Pre-Harvest Toxicity Monitoring
  - Expanded Commercial Monitoring – weekly testing
  - Shellfish Species Specific Plans
    - Geoduck
    - Razor Clams
3. Shellfish Lot Testing
  - All Scallops
  - Toxins present in commercial species
4. Phytoplankton Monitoring (complementary)



# MO Requirements @.04 Marine Biotoxin Control

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- Summary of @.04 Marine Biotoxin Control
- C. Closed or Controlled Access Status of Growing Areas.
  - (1) Close growing area based on action levels
  - (2) Use best available information for biotoxins in contingency plan
  - (3) Can exempt or selectively close for some species when results support
  - (4) Closed until toxins in growing area are below action levels
  - (5) Consider toxin levels in adjacent areas
  - (6) Adequately documented
  - (7) Controlled access status if Authority determines additional requirements are necessary – restricted tags
- (3) Precautionary closures based on shellfish toxicity screening or phytoplankton sample results as defined in their marine biotoxin management plan.

# MO Requirements @.04 Marine Biotoxin Control

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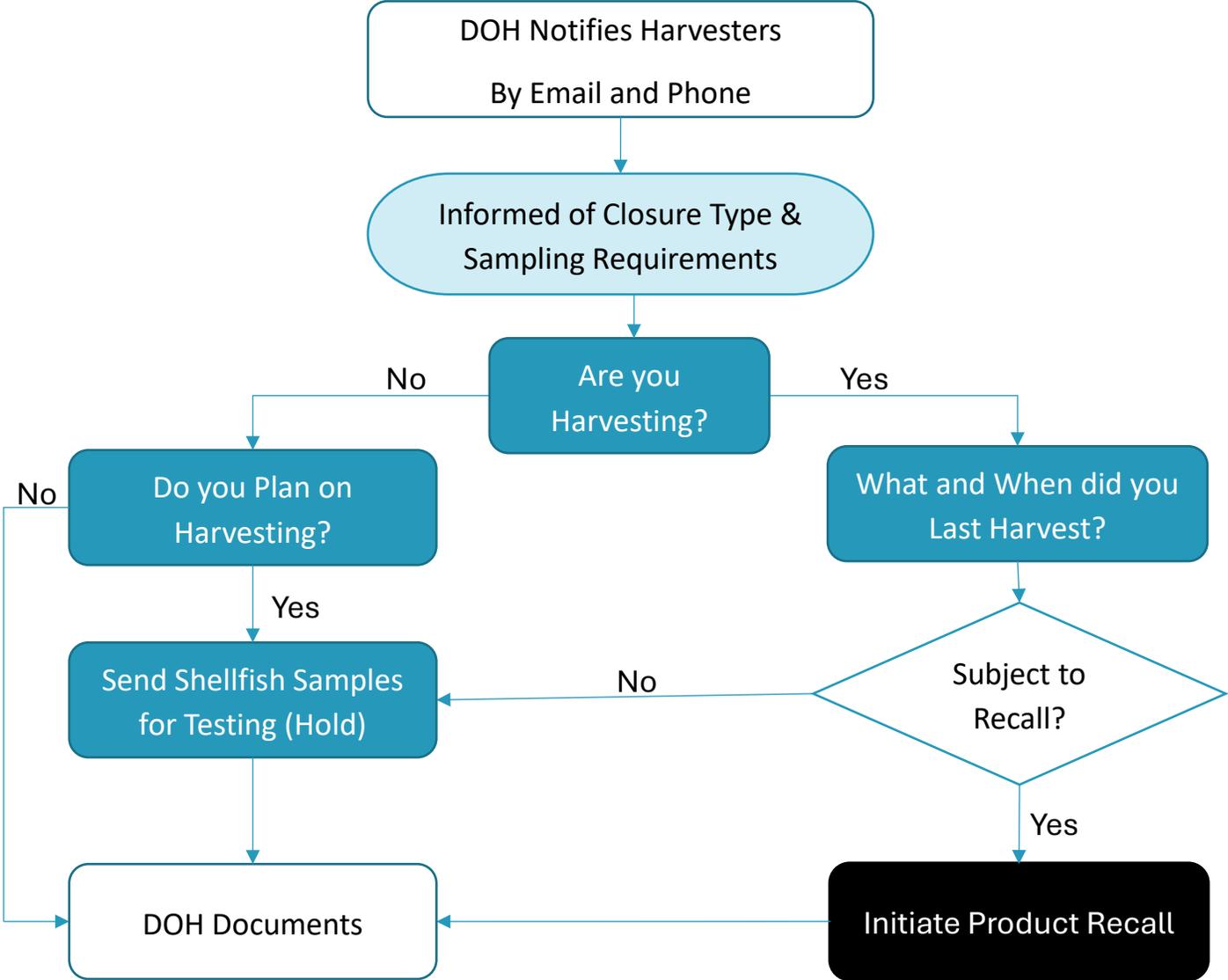
1. Reopening Criteria
2. At **minimum**, 2 samples taken 7-10 days apart, both below the action level with no increasing trend. (MO recommends 3 in 14 days)
3. Consider biotoxin test results & phytoplankton monitoring from nearby areas

# MO Requirements @.04 Marine Biotoxin Control

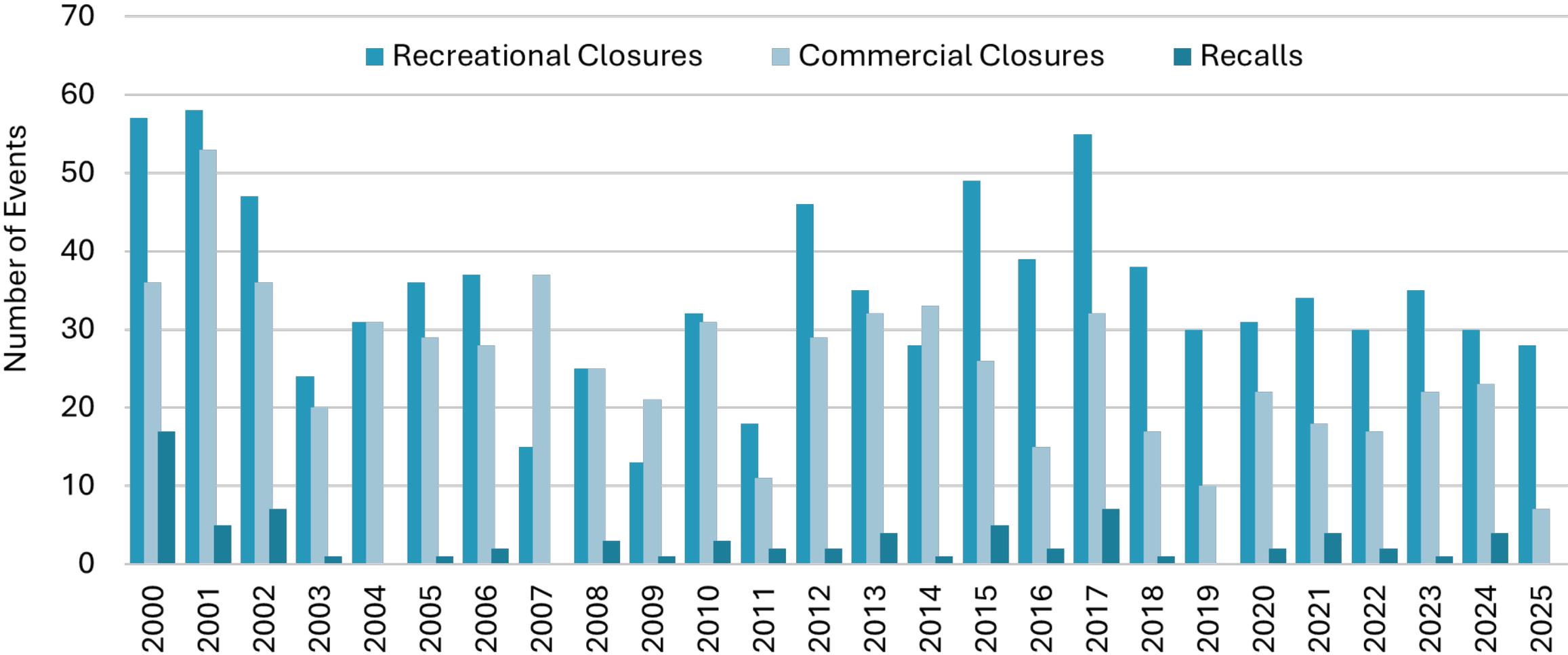
- (4) Strategies

<ul style="list-style-type: none"><li>■ (a) Phytoplankton – complementary – enhances predictive capability</li><li>■ (b) Routine monitoring – use highest risk species unless species-specific testing</li></ul>	Sampling Program & Close & Open & Notify
<ul style="list-style-type: none"><li>■ (c) Pre-harvest testing in advance of harvest – permits harvesting for a short period of time (typically 1 week)</li><li>■ (d) lot testing – after harvest – when biotoxins are detected in commercial species</li><li>■ (e) Pre-harvest &amp; lot testing</li></ul>	Close & Open & Exempt Some Species & Prevent Harvest of Contaminated Shellfish*requires close monitoring

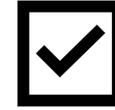
# Biotoxin Notification Process



# Biotoxin Closures & Recalls



## Knowledge Check



Which marine biotoxin is most widespread, reaches lethal levels each year, and causes the most biotoxin closures and recalls in Washington?

(Choose one)

- a) ASP/domoic acid
- b) DSP
- c) PSP

## Knowledge Check

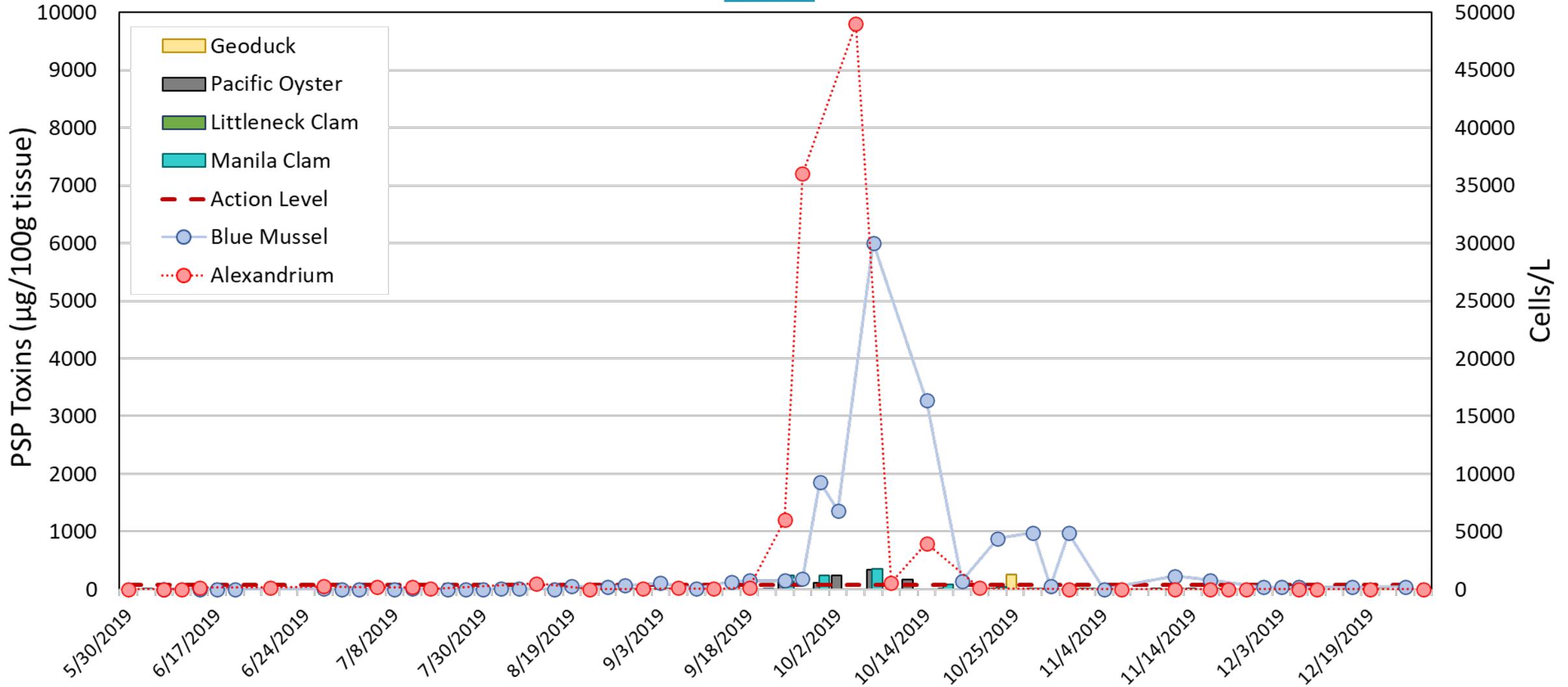


Which marine biotoxin is most widespread, reaches lethal levels each year, and causes the most biotoxin closures and recalls in Washington?

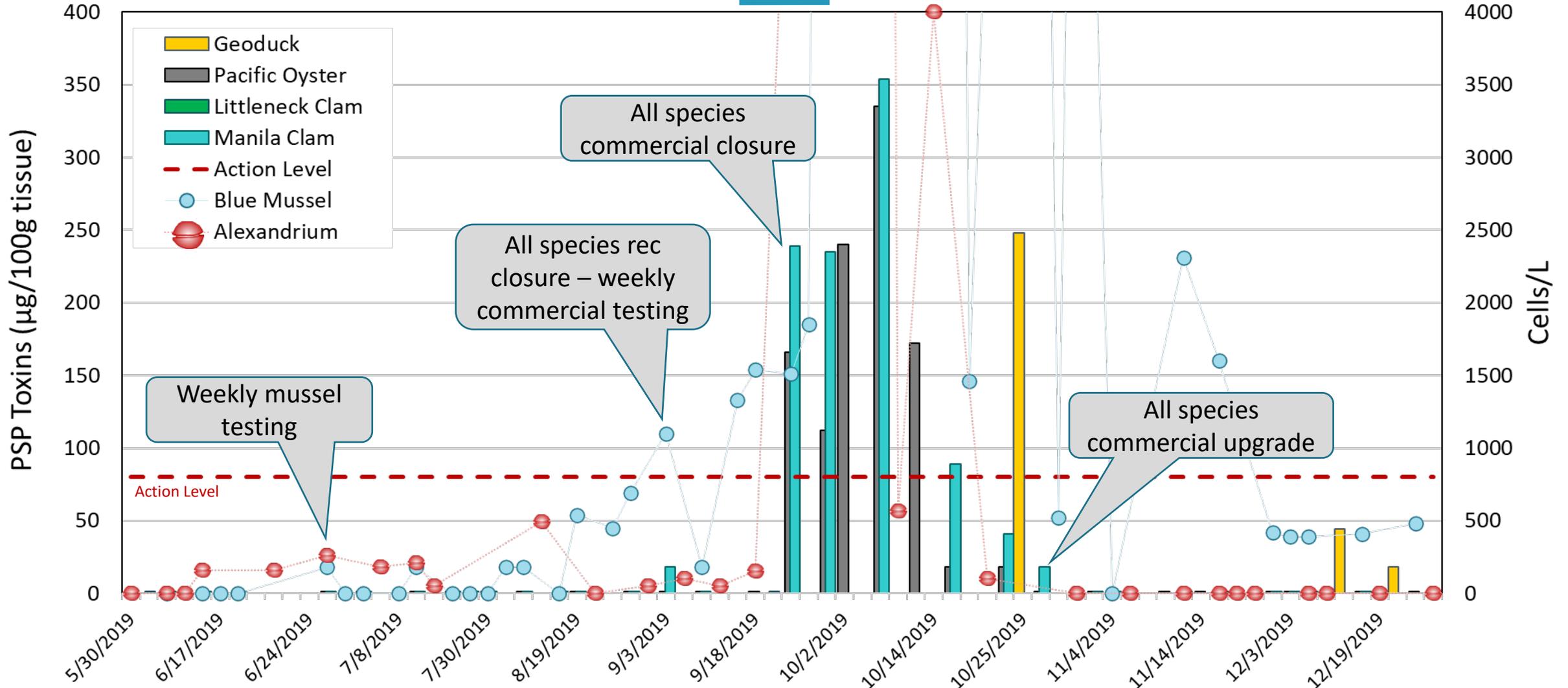
(Choose one)

- a) ASP/domoic acid
- b) DSP
- c) **PSP**

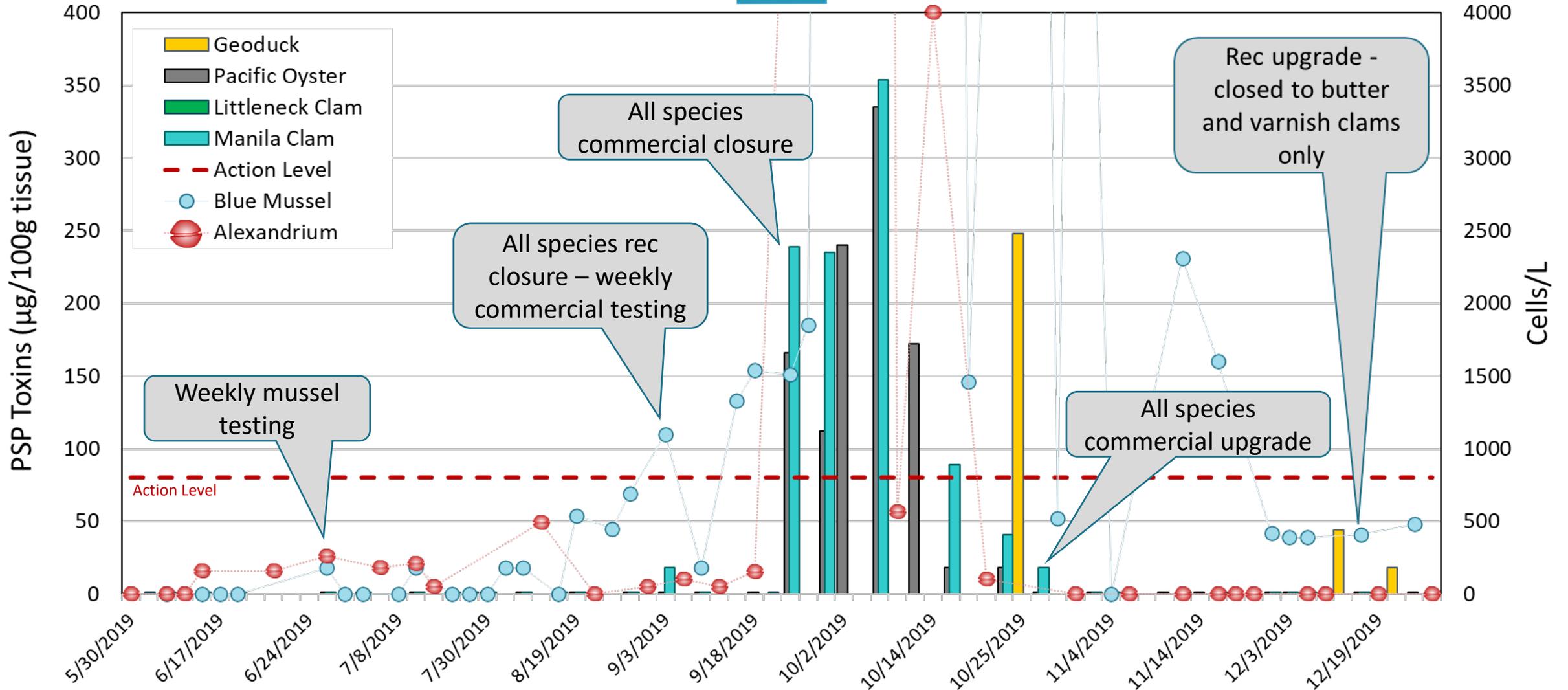
# PSP in Shellfish & *Alexandrium* Cell Counts Sequim Bay 2019



# PSP in Shellfish & *Alexandrium* Cell Counts Sequim Bay 2019



# PSP in Shellfish & *Alexandrium* Cell Counts Sequim Bay 2019



# What to Expect & How to Prepare

1

- You WILL receive a phone call and email
- *We require to get a response from you*

2

- We will inform you of testing requirements  
*There are biotoxin testing animal number and tissue weight requirements*

3

- Discuss harvest schedule & lab considerations

4

- Required weekly or more frequent sampling of all species being actively harvested from all parcels until bloom/event is over

- *Note on Wet Storage* – using flow through or beach wet storage in an area with active biotoxins can contaminate shellfish

## Knowledge Check

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What best practice can help avoid a biotoxin recall when commercial biotoxin sampling is required?

(Choose one)

- a) Weekly sampling
- b) Holding product until biotoxin test results are completed
- c) Nothing
- d) Beach wet storing product in an area where a biotoxin is active

## Knowledge Check



What best practice can help avoid a biotoxin recall when commercial biotoxin sampling is required?

(Choose one)

- a) Weekly sampling
- b) Holding product until biotoxin test results are completed**
- c) Nothing
- d) Beach wet storing product in an area where a biotoxin is active



Washington State  
Department of Health

# TOXIC MUSSEL

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Questions?

Please fill out the survey in the chat!

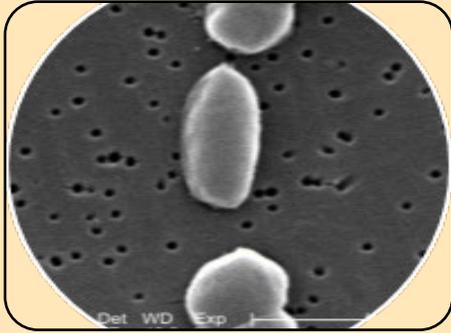
This will be used to make your certificate!

Break—Back at 10:17

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**UP NEXT: VP TRAINING & UPDATES**

# What are *Vibrio*?



*Vibrio* are a genus of bacteria.

They are naturally occurring in marine and estuarine environments.

Present in higher numbers as water temps increase.

Vibriosis is the illness caused by some *Vibrio* species

~20 types of *Vibrio* can cause illness in humans.

Most people become infected by eating undercooked shellfish.

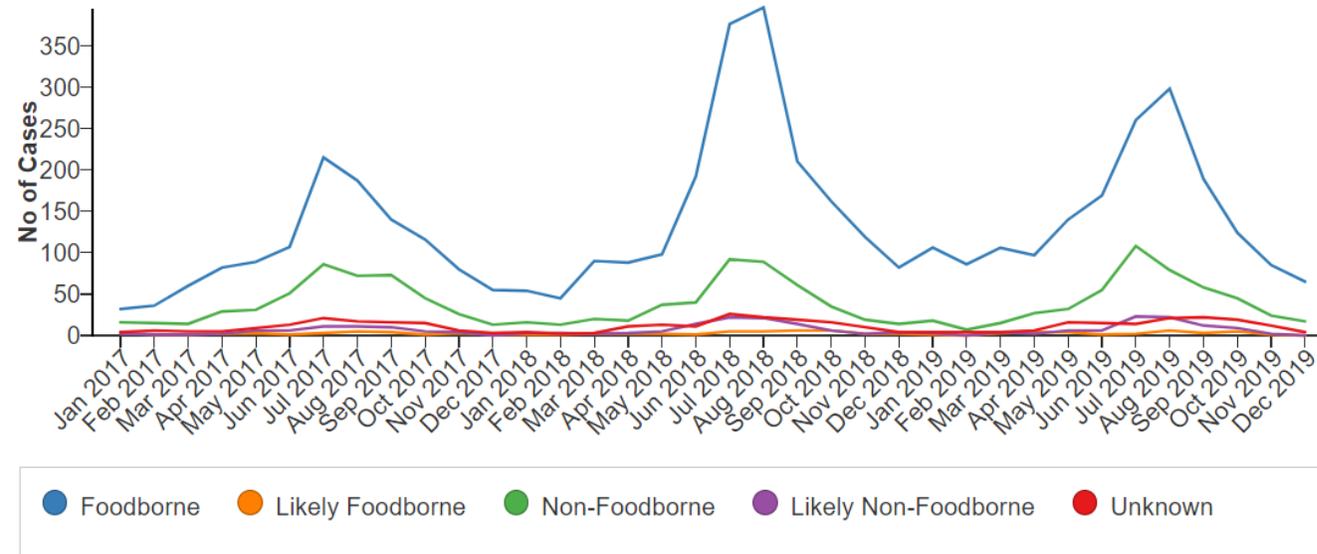
*Vibrio parahaemolyticus* (Vp) is the most common cause of Vibriosis in Washington.

*Vibrio vulnificus* (Vv) is also found in the PNW in oyster tissue but has not caused foodborne illness yet.

# Confirmed Vibrio cases in US in 2019

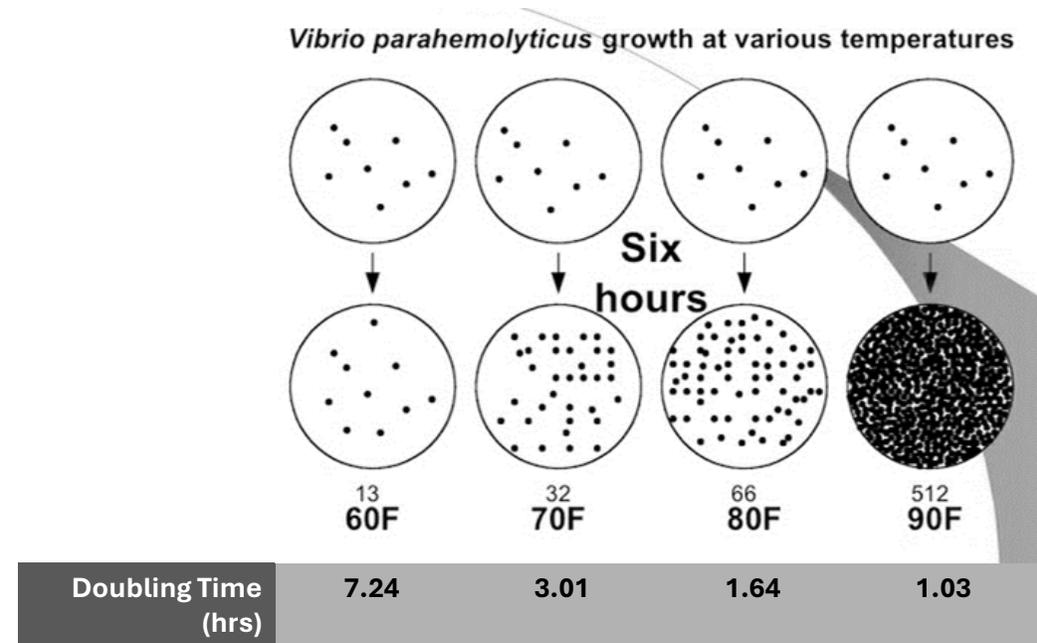
Genus/species	Cases	% Hospitalizations	% Deaths
V. parahaemolyticus	655	20%	1%
V. vulnificus	158	87%	21%

Frequency of domestically acquired vibriosis cases,\* by month† and transmission route, United States, 2017–2019 (N=7,004)

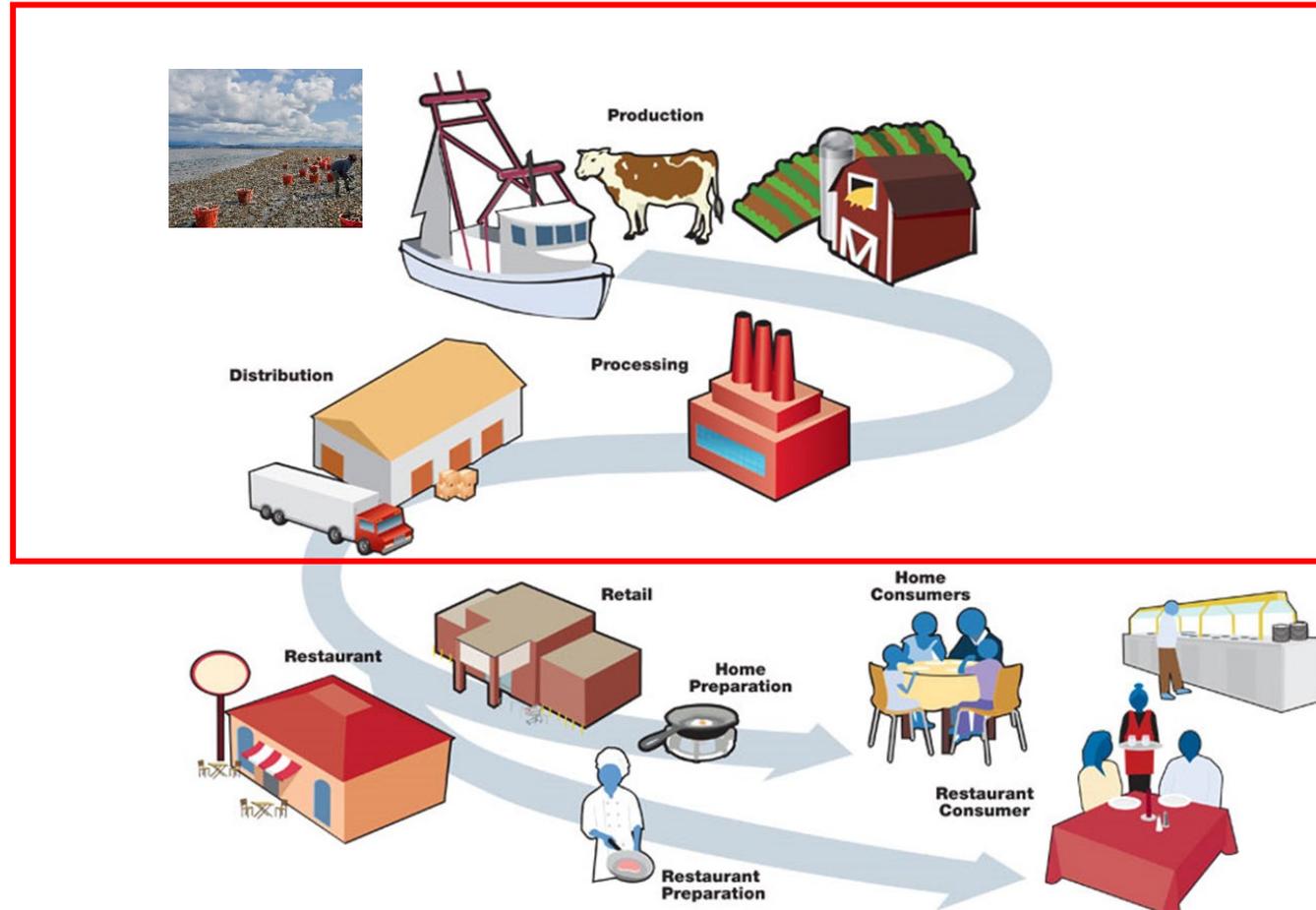


# *Vibrio parahaemolyticus*

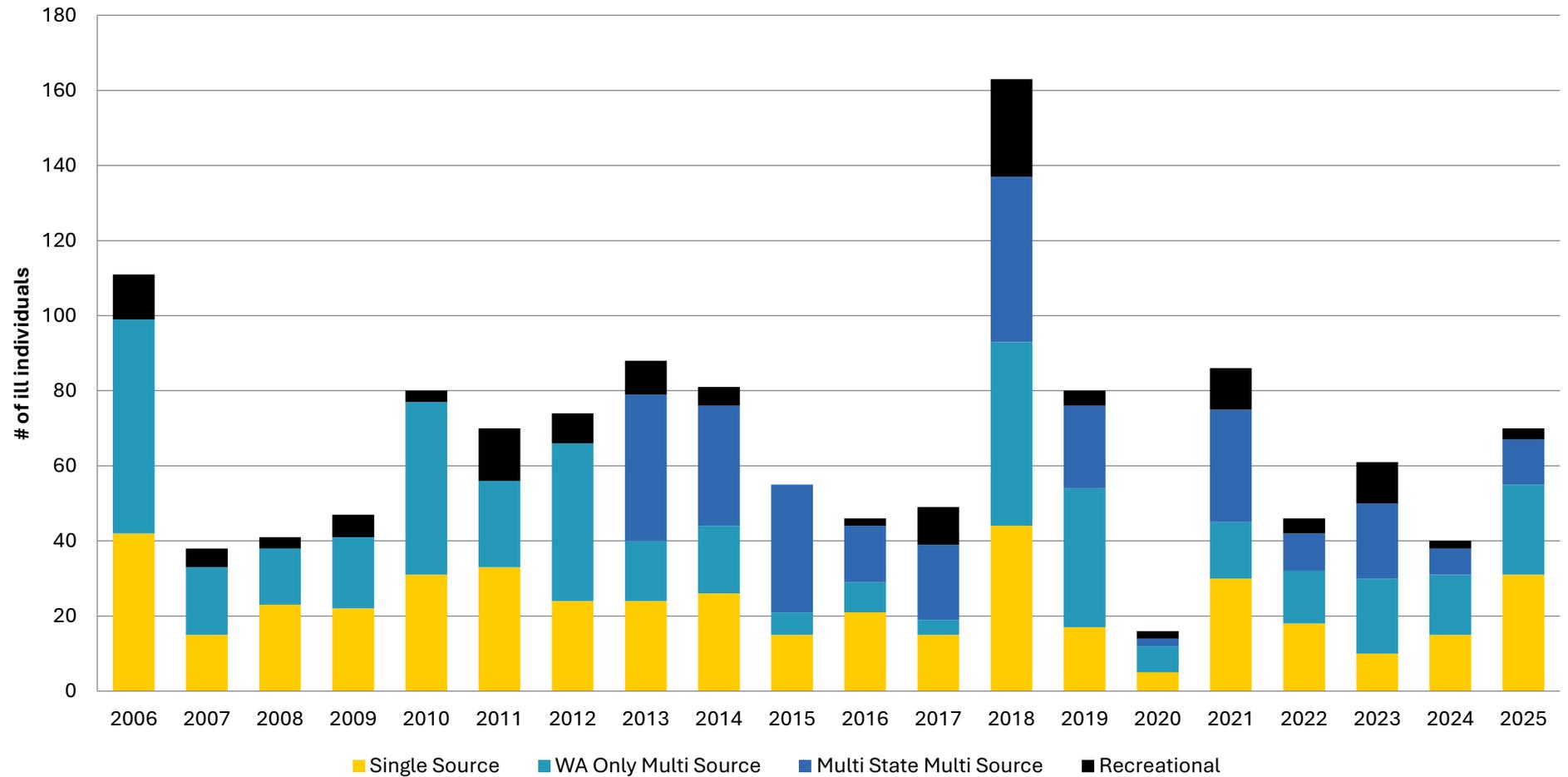
- Highly temperature dependent
  - Post-harvest cooling important to limit growth
- Many strains, but only some cause illness
- Genetic markers to identify presence and likelihood to cause illness
  - *tlh*
  - *tdh*
  - *trh*



# From the Beach To the Table



# Confirmed *Vp* Illnesses Attributed to Oyster Shellstock from Washington from 2006 to 2025



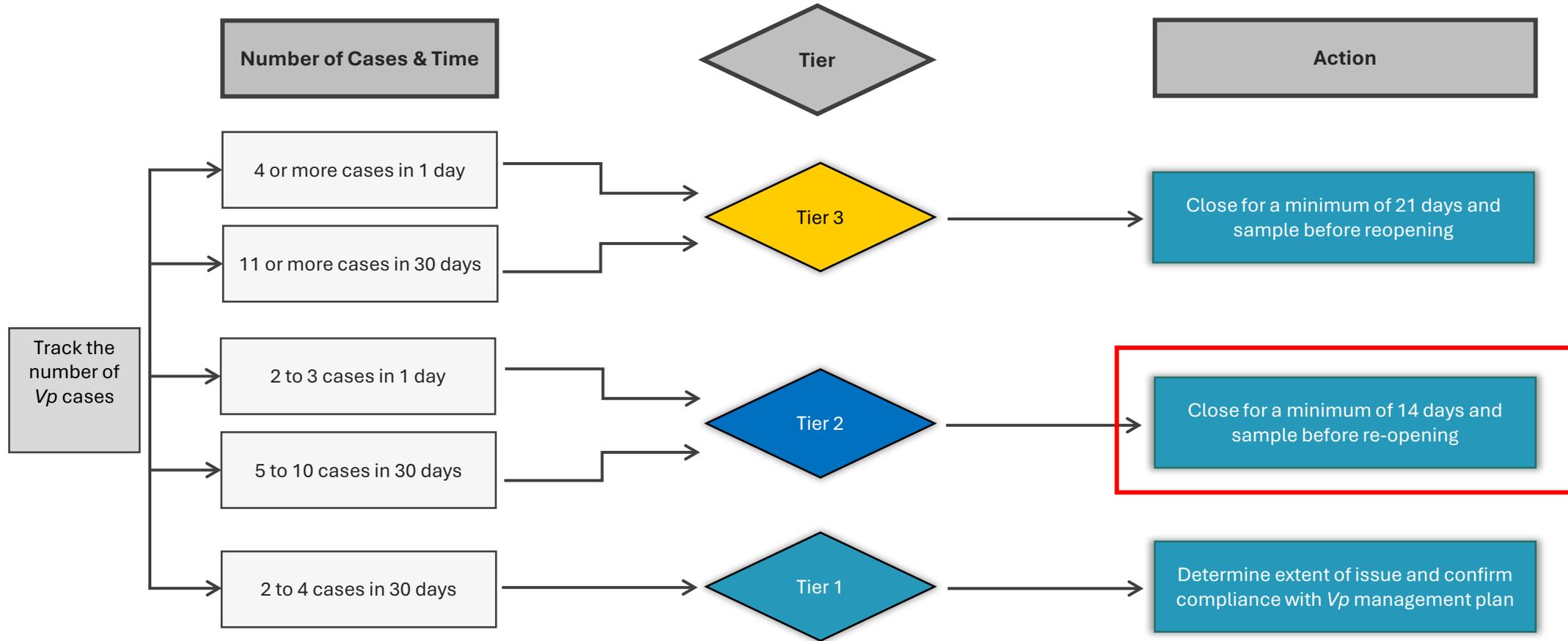
# Summary of Confirmed *Vp* Associated Illnesses

Year	2025	2024	2023	2022	2021
<b>Commercial Single-Source</b>	<b>31</b>	15	10	18	30
<b>Commercial Multi-Source</b>	<b>35</b>	23	40	22	44
<b>WA Only</b>	<b>24</b>	16	20	13	16
<b>WA &amp; Other States</b>	<b>12</b>	7	20	9	24
<b>Non- Commercial (Recreational &amp; Private)</b>	<b>3•</b>	2	11	3	11
<b>Shucked Oysters</b>	<b>1*</b>	0	2	1	3

\*1 shucked meats cases involved Sm and Ss, and was counted as multisource illness

• 1 additional case included rec and commercial oyster exposures and was counted as a multisource case

# Model Ordinance Closure Requirements



## WAC 246-282-006 *Vp* Control Plan

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- § means there is a significant change in the section
  - Not just re-numbering or grammatical
- Slides will be posted on our website
- Guidance documents available for changes

# WAC 246-282-006 *Vp* Control Plan

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## **Section 1:**

- Establishes control plan and control months: May 1 through September 30
- Requirements in WAC are in addition to Model Ordinance

## **Section 2:**

- Exempts oysters harvested and delivered to certified shucker-packer for shucking or PHP.
- Requires appropriately labeled harvest tag.

## **Section 3:**

- Requirement to report oyster production data by growing area, species, month, and size (Pacifics)
- May not harvest May-Sept if not reported
- Production Data due Jan 15th

## WAC 246-282-006 *Vp* Control Plan §

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### **Section 4 §:**

Requires a harvest plan be:

- Signed and dated each year
- Submitted at least **2 weeks** before first planned harvest

### **Section 5:**

Harvest plan must include:

- Harvest Temperatures, cooling and conveyance methods
- Examples or harvest temp record
- Identify harvest temp as water or internal oyster temp

## WAC 246-282-006 *Vp* Control Plan §

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### **Section 6 §:**

- Department shall review and either approve or deny the harvest plan within **14 days** of receipt.
- Harvest cannot happen within the control months without an approved plan.

### **Section 7:**

- The operation must follow their approved harvest plan.
- Failure to follow could lead to enforcement action.

## WAC 246-282-006- *Vp* Control Plan

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### Section 8: Risk Categories

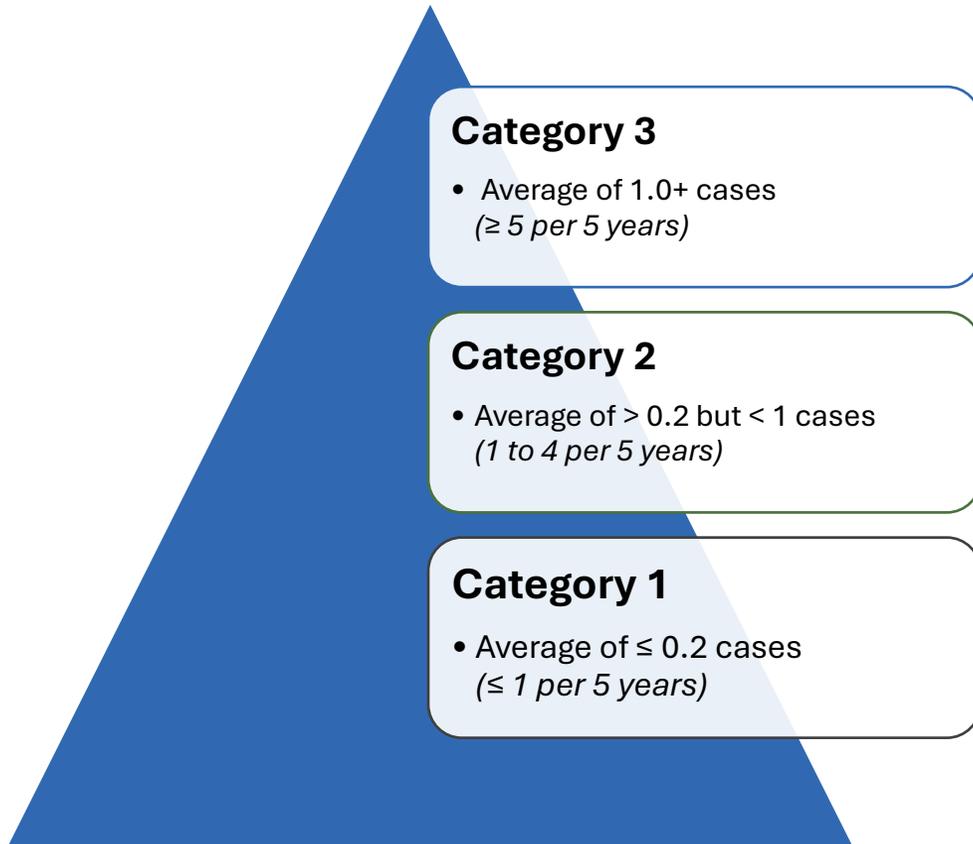
- Time to cooling is determined by risk category of each growing area.
- Categories are determined by illness cases

#### Each Case Must:

- ✓ Be associated with commercially harvested shellstock
- ✓ Not involve documented post-harvest abuse
- ✓ Can be traced back to a single growing area
- ✓ Be culture confirmed *Vp*
- ✓ Occurred during the previous consecutive 5-year period
- ✓ Occurred within the control months of May-Sept

# WAC 246-282-006- Vp Control Plan

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## Section 9

- Requires the department to complete and publish risk categories no later than February 1<sup>st</sup> annually

## Knowledge Check

How far in advance do you need to submit your harvest plan before planned harvest?

- a) 30 days
- b) 14 days
- c) March 1<sup>st</sup>
- d) After I started harvesting

## Knowledge Check

How far in advance do you need to submit your harvest plan before planned harvest?

- a) 30 days
  - b) 14 days**
  - c) March 1<sup>st</sup>
  - d) After I started harvesting
- This new requirement allows for more flexibility for growers and no longer sets a hard date for submittal.

## Knowledge Check

How are risk categories calculated? (choose all that apply)

- a) Production data
- b) Illness complaints, not lab confirmed
- c) 5-year average of single source, confirmed Vp illnesses
- d) 5-year average of multisource cases

## Knowledge Check

How are risk categories calculated? (choose all that apply)

- a) Production data
- b) Illness complaints, not lab confirmed
- c) 5-year average of single source, confirmed Vp illnesses**
- d) 5-year average of multisource cases

## WAC 246-282-006 Vp Control Plan §

**Risk Category 1 (Old Version)**

Requirements	Time to Cooling
Except as noted below, the time of harvest to cooling requirement from June 1 <sup>st</sup> through September 30 <sup>th</sup> is:	9 Hours
When ambient air temperature at harvest is greater than 90°F, the time of harvest to cooling requirement is:	7 Hours
When harvest temperature is between 68°F and 70°F from July 1 <sup>st</sup> through August 31 <sup>st</sup> , the time to cooling requirement is:	5 Hours
<b>Harvest Control: From July 1<sup>st</sup> through August 31<sup>st</sup>, Harvest is not allowed for 24 hours when harvest temp is above 70°F</b>	

**Risk Category 1 (New Version)**

Condition at Harvest:	Time of Harvest to Cooling:
Except as noted below, the time of harvest to cooling requirement is:	9 Hours
When <b>ambient air temperature</b> is 90.0°F or above:	7 Hours
When <b>harvest temperature</b> is 68.0°F to 70.0°F:	5 Hours
When <b>harvest temperature</b> is above 70.0°F:	Harvest is not allowed for 24 hours

## WAC 246-282-006 Vp Control Plan §

Risk Category 2 (Old Version)

Requirements	Time to Cooling
Except as noted below, the time of harvest to cooling requirement from May 1 <sup>st</sup> through September 30 <sup>th</sup> is:	7 Hours
When ambient air temperature at harvest is greater than 85°F, the time of harvest to cooling requirement is:	5 Hours
When harvest temperature is between 66°F and 68°F from July 1 <sup>st</sup> to August 31 <sup>st</sup> , the time	3 Hours
<b>Harvest Control: From July 1<sup>st</sup> through August 31<sup>st</sup>, harvest is not allowed for 24 hours when harvest temp is above 68°F</b>	

Risk Category 2 (New Version)

Condition at Harvest:	Time of Harvest to Cooling:
Except as noted below, the time of harvest to cooling requirement is:	7 Hours
When <b>ambient air temperature</b> is 85.0°F or above:	5 Hours
When <b>harvest temperature</b> is 66.0°F to 68.0°F:	3 Hours
When <b>harvest temperature</b> is above 68.0°F:	Harvest is not allowed for 24 hours

## WAC 246-282-006 Vp Control Plan §

**Risk Category 3 (Old Version)**

Requirements	Time to Cooling
Except as noted below, the time of harvest to cooling requirement from May 1 <sup>st</sup> through September 30 <sup>th</sup> is:	5 Hours
When ambient air temperature at harvest is greater than 80°F, the time of harvest to cooling requirement is:	3 Hours
When harvest temperature is between 64°F and 66°F from July 1 <sup>st</sup> to August 31 <sup>st</sup> , the time to cooling requirement is:	1 Hours
<b>Harvest Control: From July 1<sup>st</sup> through August 31<sup>st</sup>, harvest is not allowed for 24 hours when harvest temp is above 66°F</b>	

**Risk Category 3 (New Version)**

Condition at Harvest:	Time of Harvest to Cooling:
Except as noted below, the time of harvest to cooling is:	5 Hours
When <b>ambient air temperature</b> is 80.0°F or above:	3 Hours
When <b>harvest temperature</b> is 64.0°F to 66.0°F:	1 Hours
When <b>harvest temperature</b> is above 66.0°F:	Harvest is not allowed for 24 hours

# Knowledge Check



You are harvesting from a risk category 2 growing area on June 15<sup>th</sup>. Your ambient air temperature is 82.7F and your harvest temperature is 66.0F. How many hours do you have to cool?

- a) 7 hours
- b) 5 hours
- c) 3 hours
- d) I can't harvest for 24 hours

Condition at Harvest:	Time of Harvest to Cooling:
Except as noted below, the time of harvest to cooling requirement is:	7 Hours
When <b>ambient air temperature</b> is 85.0°F or above:	5 Hours
When <b>harvest temperature</b> is 66.0°F to 68.0°F:	3 Hours
When <b>harvest temperature</b> is above 68.0°F:	Harvest is not allowed for 24 hours

# Knowledge Check



You are harvesting from a risk category 2 growing area on June 15<sup>th</sup>. Your ambient air temperature is 82.7F and your harvest temperature is 66.0F. How many hours do you have to cool?

- a) 7 hours
- b) 5 hours
- c) **3 hours**
- d) I can't harvest for 24 hours

Condition at Harvest:	Time of Harvest to Cooling:
Except as noted below, the time of harvest to cooling requirement is:	7 Hours
When <b>ambient air temperature</b> is 85.0°F or above:	5 Hours
When <b>harvest temperature</b> is 66.0°F to 68.0°F:	3 Hours
When <b>harvest temperature</b> is above 68.0°F:	Harvest is not allowed for 24 hours

# WAC 246-282-006 Vp Control Plan §

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## Section 10(d) §:

- Requires a harvester who places oysters in a container, but does not remove them from the harvest site as part of their harvest to meet the following conditions:
  - a) Have a valid site certification for that site;
  - b) The oysters in the container or conveyance **must be returned to approximately the same tidal level or lower than where they were collected**; and
  - c) The oysters must be covered by the tide for a minimum of four hours before harvest can be completed.

### *Example:*

*You like to bag your shellstock for harvest the next day. Those bagged oysters must be placed back in approximately the same tidal elevation or lower than where they were collected and they have to be covered by the tide for at least 4 hours before harvesting.*



# WAC 246-282-006 Vp Control Plan §

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## Section 12 §:

Requirement to take temperatures with either:

- a) A **thin-tip digital thermometer** that is verified **monthly** using manufacturer specifications or with a method approved in a harvest plan; or
- b) **A thermometer certified by the National Institute of Standards and Technology (NIST) with a manufacturer certificate that does not need to be verified monthly.**

### What is a NIST certified thermometer?

- **National Institute of Standards and Technology** (NIST), ensures it provides reliable measurements for critical applications like lab calibration, food safety, and pharmaceutical monitoring, and comes with a certificate detailing its corrections and uncertainties.

**Traceability:** Its accuracy is linked back to NIST's national standards through a documented calibration process.

**Certificate Included:** Comes with a document showing specific calibration points, correction factors, and measurement uncertainties.

**High Accuracy:** Used for verifying and calibrating other temperature-measuring devices (like RTDs, thermocouples).

**Specific Points:** Often calibrated at several critical temperature points relevant to its intended use (e.g., 0°C, 50°C, 100°C).



## Knowledge Check



What conditions must be met in order to containerize oysters prior to harvest?  
(Select all that apply)

- a) Have a valid site certificate for that harvest site
- b) Utilize verified containers
- c) Oysters must be placed back at approximately the same tidal height or lower
- d) The oysters must be covered by the tide for a minimum of 4 hours before harvest

## Knowledge Check



What conditions must be met in order to containerize oysters prior to harvest?  
(Select all that apply)

- a) **Have a valid site certificate for that harvest site**
- b) Utilize verified containers
- c) **Oysters must be placed back at approximately the same tidal height or lower**
- d) **The oysters must be covered by the tide for a minimum of 4 hours before harvest**

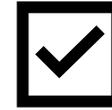
## Knowledge Check



How often does a thin-tip digital thermometer need to be verified?

- a) Monthly
- b) Weekly
- c) Annually
- d) Only need to maintain a certificate from the manufacturer

## Knowledge Check



How often does a thin-tip digital thermometer need to be verified?

- a) **Monthly**
- b) Weekly
- c) Annually
- d) Only need to maintain a certificate from the manufacturer

# WAC 246-282-006 *Vp* Control Plan §

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## Section 15:

- Cool oysters as quickly as possible, ensuring that the *Vp* growth is minimized and maximum time of harvest to cooling hours is not exceeded.

## Section 16 §:

- If shellstock is beach wet stored or stored in a flow-through wet storage system in a growing area with a different risk category than where it was harvested, the **more stringent time of harvest to cooling** requirement must be used.

## Section 17:

If cooling requirements are not met, one of the following corrections must be made:

- a) Destroy oysters
- b) Place oysters in an approved growing area for at least 14 days before harvesting again
- c) Deliver oysters to a certified shucker-packer for shucking or PHP and attach and appropriately labeled harvest tag

# WAC 246-282-006 Vp Control Plan §

## Section 18 §:

If ownership of oysters is transferred before the oysters are cooled, the harvester shall provide the following information to the receiving dealer:

- a) Air and Harvest temperatures
- b) Date, time, and name of the person or entity who received the oysters;
- c) Growing area risk category for the harvested oysters; and
- d) **The total time of harvest to cooling for the oysters based on the growing area risk category.**  
If shellstock is wet stored after purchase, the purchasing dealer should use the most stringent time to cooling

**Example:**

**[Your Company Name]**  
*[Your Company Slogan]*

[Street Address]  
[City, ST ZIP Code]  
Phone [(509) 555-0190] Fax [(509) 555-0191]

**TO:**  
[Name]  
[Company Name]  
[Street Address]  
[City, ST ZIP Code]  
[Phone]

**FOR:**  
[Project or service description]  
[P.O. #]

**INVOICE**  
INVOICE #[100]  
DATE: OCTOBER 9, 2011

DESCRIPTION	HOURS	RATE	AMOUNT
Harvest Date: 7/11/25 Harvest Time: 6:00am Air Temp:60°F Water Temp: 60°F Risk Category 3 Time to cool: 5 hrs			
TOTAL			

Make all checks payable to [Your Company Name]  
Total due in 15 days. Overdue accounts subject to a service charge of 1% per month.

Thank you for your business!

Include time to cool to 50°F  
in the information passed  
on to dealer

# WAC 246-282-006 *Vp* Control Plan

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## Section 19:

- ❖ An initial *Vibrio parahaemolyticus* training must be completed prior to harvesting/shipping oysters during the control months.
- ❖ Complete refresher training within one year following a rule revision or at least every 5 years
- ❖ Those responsible for the on-site management of harvest activities must be trained by either:
  - Harvester and dealer at their operation who complete a DOH approved training; or
  - DOH staff
- ❖ Record information of those who have received training in operational records

# WAC 246-282-006- Vp Control Plan

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## **Section 20:**

An operation may request a waiver for specific requirements of this chapter. The waiver must:

- Be in writing;
- State the requirement requesting to be waived;
- Reason for the waiver; and
- Provide supporting information

## **Section 21:**

- DOH may grant a waiver if it is consistent with the applicable standards and intent of this section AND protects public health.

## **Section 22:**

- If approved, DOH must notify the operation in writing

## **Section 23:**

- If denied, DOH must notify the operation in writing stating the reason of denial.

# Vp Control Plan Changes Review!

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## ➤ Revised time to harvest

- To harvest during control months, plans must be submitted to DOH for review at least 14 days before harvest.

## ➤ Changed the strictest time to cooling dates

- When applicable, the strictest time to cooling temps are now in effect May 1<sup>st</sup> to Sept 30<sup>th</sup>

## ➤ Added requirement to store containerized oysters

- Oysters must be stored at approximately the same tidal height or lower than where they were collected

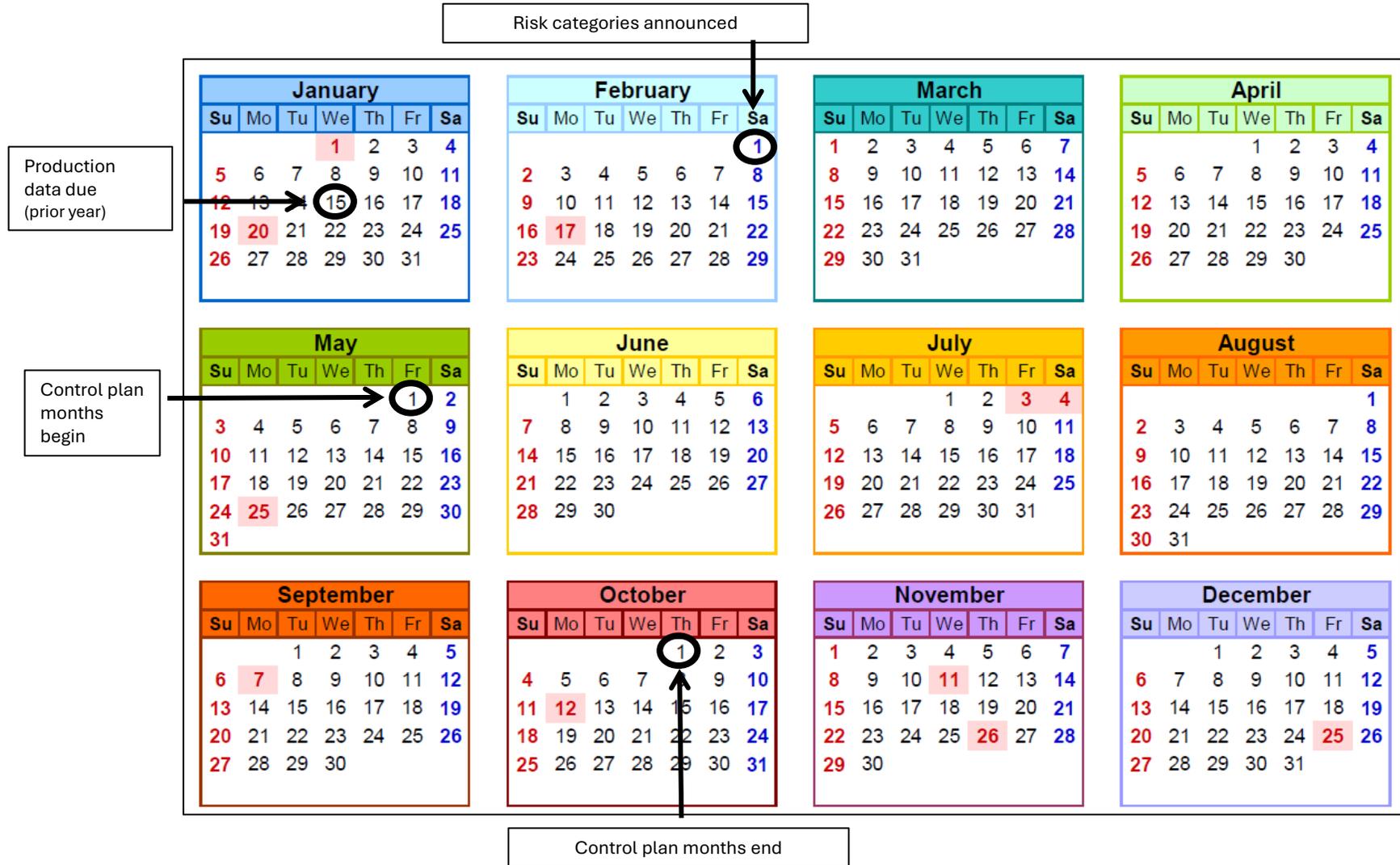
## ➤ Changed thermometer requirements

- Digital thermometers are required, and if it is NIST certified, it does not need to be certified monthly

## ➤ Added requirement for harvester if they are not cooling oysters

- Harvesters now need to include the time to cool for the risk category if not cooling to 50 °F

# Timeline of Important Dates



# Guidelines for Implementation

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- Rules are in effect on January 15, 2026
- Delayed implementation to May 1, 2026
- Inspectors will be doing a lot of education during your renewal inspections coming up.
- 2-pager educational documents are available on our website

# Questions?

Email: [shellfish@doh.wa.gov](mailto:shellfish@doh.wa.gov)

Please fill out the survey in the chat!

This will be used to make your certificate!



To request this document in another format, call 1-800-525-0127. Deaf or hard of hearing customers, please call 711 (Washington Relay) or email [civil.rights@doh.wa.gov](mailto:civil.rights@doh.wa.gov).