



State of Alaska Food Safety and Sanitation Program

Shellfish Harvester Education Program

Alaska Department of Environmental
Conservation
Division of Environmental Health -Food Safety
and Sanitation Program
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<http://www.dec.alaska.gov/eh/fss/index.htm>

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INTRODUCTION

All Shellfish Harvesters are required to complete the Alaska Department of Environmental Conservation (ADEC), Food Safety and Sanitation (FSS) Program **Shellfish Harvester Education Training**. **The training must be completed prior to receiving a Shellfish Harvester Permit to Operate. The certificate is good for 2 years, and must be renewed every two years thereafter.**

Reviewing this booklet, signing the certificate at the end, and submitting it to ADEC will satisfy this education component. For questions and additional information please contact:

George Scanlan, Shellfish Permit Coordinator
Phone: (907)269-7638
Fax: (907)269-7510
George.scanlan@alaska.gov

Alaska's Shellfish

There are four main types of shellfish that are harvested from Alaska's waters:

1. Clams
2. Mussels
3. Oysters
4. Scallops (whole animals only)

The harvest and subsequent processing of shellfish are regulated cooperatively by ADEC and Federal Food and Drug Administration (FDA) using the National Shellfish Sanitation Program (NSSP). The NSSP is

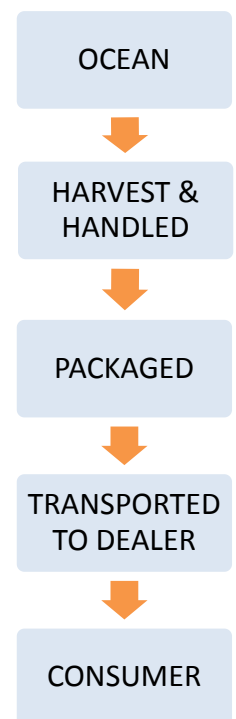


Figure 1: Flow of shellfish after harvest.

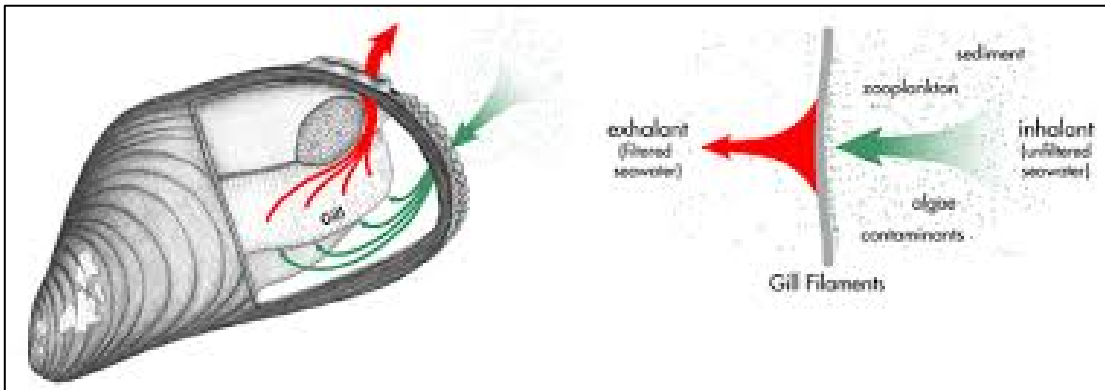
recognized by the Interstate Shellfish Sanitation Conference (ISSC) for the sanitary control of shellfish produced and sold for human consumption.

Complying these regulations allows your product to be sold commercially for human consumption.

Hazards

Shellfish are filter-feeders that are often eaten raw or lightly cooked. Filter feeders take in nutrients from the ocean by drawing water over filtration structures. The ocean water can include things like **bacteria, viruses, and chemicals**. If there is enough it can accumulate in the shellfish and may make people sick. **Even cooked shellfish can contain chemicals that can make people sick.**

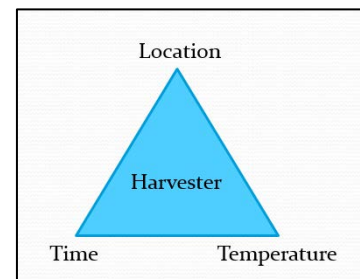
Illnesses commonly associated with shellfish include Paralytic Shellfish Poisoning (PSP), Norovirus, Hepatitis A, and vibriosis. For this reason it is important to know the hazards and take appropriate steps to control them.



Controlling the Hazards

To control the hazards (**bacteria, viruses, and chemicals**) three things must be considered:

- Time
- Temperature
- Location



Location



The first step in ensuring that shellfish is safe is to make sure it comes from waters that are open, classified, and approved for growing or harvesting. Many considerations go into determining if an area can be used to harvest or grow shellfish including:

- Location of human habitation or industry developments
- Fisheries
- Presence of streams, wild animals, or resident and migrating bird populations
- Harvest periods and methods
- Species to be grown or harvested
- Recreational use of the area
- Proposed boundaries and topography

In addition the growing or harvest area waters must meet the fecal coliform standards set out in the NSSP. This means the water must be regularly tested for the presence of fecal coliform.

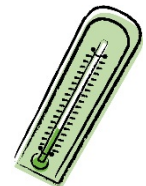
Harvesting shellfish from closed or prohibited areas is illegal.

For more information on how waters are classified visit:

<http://dec.alaska.gov/eh/fss/seafood/Docs/shellfishclass.pdf>

Temperature

For all shellstock to prevent bacteria from growing, temperature control must be applied as soon as the harvest is no longer submerged. This can be done by placing shellfish in ice or in a mechanically refrigerated unit. All shellstock must be maintained at:



- an ambient temperature of 45°F or less; or
- an internal temperature of 50°F or less.

Time



For oysters time requirements are applied in addition to temperature requirements to prevent bacteria like *Vibrio parahaemolyticus* (Vp) from growing. The amount of time allowed for cooling depends on the month the oysters were harvested in.

- **June to September:** shellstock must be harvested and chilled to an ambient temperature of 45°F ambient or 50°F internal temperature within **5 hours** of harvest. Primary Dealers receiving shellstock has up to **10 hours** to keep the shipment in cold storage at ≤45°F or ≤50°F internal temperature.

- **October to May:** shellstock must be harvested and chilled to an ambient temperature of 45°F ambient or 50°F internal temperature within **36 hours**.

Handling

After shellstock has been removed from the water, steps must be taken to protect shellstock from exposure to cross contamination and/or temperature abuse. Failure to take preventive measures will increase the likelihood for a food borne illnesses associated with the consumption of shellfish since shellfish is largely consumed raw.

Oysters. Protect oysters from contamination during handling by making sure work surface is covered and protected from the elements including the sun, and bird droppings. The sort table is kept clean and sanitized.

Clams. Protect clams from contamination during handling by rinsing any mud or sand with clean water and store covered in clean plastic totes. Observe the same protective actions in oysters above.

When harvesting take care not to mix shellfish lots. A lot is considered one day of harvested shellfish of a specific species. For example, razor clams harvested on January 1st would be labeled Lot A while razor clams harvested on January 2nd would be Lot B.

Transportation

During transporting shellstock must be protected from contamination. The shellstock must be clean and the temperature maintained at:

- an ambient temperature of 45°F or less; or
- an internal temperature of 50°F or less.

If the shellfish are transported on a vessel, keep shellstock away from the deck of the boat where it could come into contact with bilge water, fuel, or sewage.

Vessel Condition and Sanitation

To keep your shellstock safe during transport on your vessel the following should be considered:

- An approved marine sanitation device must be on board the vessel to contain sewage.

- The vessel must be constructed in such a way to prevent contamination of water with shellstock.
- Potential sources of contamination (such as fuel cans) must be kept away from shellstock storage.

Tagging

Correct shellstock identification is very important in protecting consumer health. In the event of a shellfish related illness, tags and records are used to trace the shellstock from the consumer back through to where the product was harvested. Harvester tags need to include:

- Who
- When
- Where
- What

HARVEST TAG			
Name	John Smith		
Address	123 Shellfish Rd		
Phone #	555-555-5555		
Harvester's Cert. No.	SPL 11111		
Harvest Date:	3/11/13 7:00 AM		
Harvest Area:	E-5		
Type & Quantity			
Oyster	Bu.	Clams	#
1			
THIS TAG IS REQUIRED TO BE ATTACHED UNTIL CONTAINER IS EMPTY AND THEREAFTER KEPT ON FILE FOR 90 DAYS			
TO:			

Shipping your Shellstock

Harvested shellstock must be tagged and held at 45°F ambient or below. All shipments must be accompanied by a shipping document stating the time and temperature at harvest and the time and temperature at Shipping. The receiving dealer must check and verify the time and temperature of the shellstock at time of receiving.

Congratulations!

You have successfully completed the Shellfish Harvester Training. Please fill out the certificate on the following page and send to George Scanlan, Shellfish Permit Coordinator.

State of Alaska DEC - Food Safety and Sanitation Program
 George Scanlan, Shellfish Permit Coordinator
 555 Cordova St, Anchorage AK 99501
 Phone: (907)269-7638, Fax: (907)269-7510
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CERTIFICATE OF SHELLFISH HARVESTER EDUCATION TRAINING

NAME: _____

Has successfully completed the Shellfish Harvester Education Training provided by

STATE OF ALASKA FOOD SAFETY AND SANITATION PROGRAM



SIGNED _____

DATE _____