

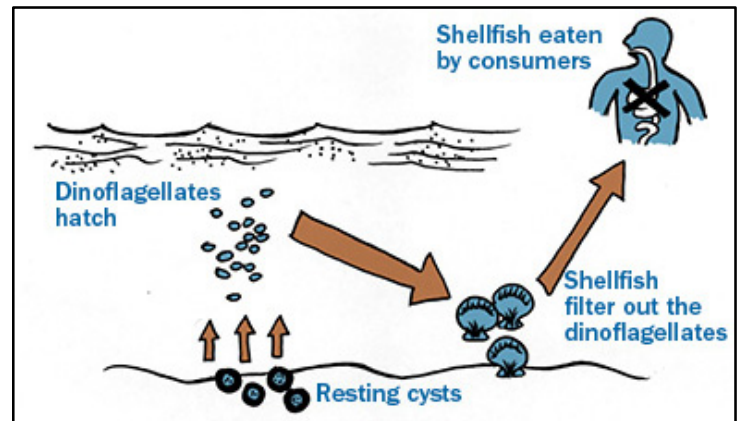
Amnesic Shellfish Poisoning (ASP)

What you need to know

What is Amnesic Shellfish Poisoning?

Amnesic Shellfish Poisoning, also known as ASP, is an illness caused by consuming shellfish containing a toxin called domoic acid. ASP was first documented in Canada in 1987 when 143 people became ill and 4 patients died (Source: New England Journal of Medicine).

Today, we understand much more about ASP and how it works. As shellfish feed, they filter ocean water and can store toxins in their tissue. One of the toxins they can store is domoic acid, which is produced by the phytoplankton *Pseudo-nitzschia*, a type of marine algae. Humans or wildlife that ingest shellfish with high levels of toxins may experience ASP.

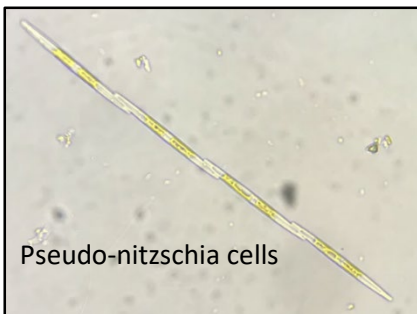


Source: fish.wa.gov.au

Why Care About Harmful Algal Blooms?

When harmful algae “blooms,” more toxins may be produced by the increased number of algae. It is normal for harmful algae to be present in our oceans. However, changing ocean conditions are causing harmful algal blooms to become more frequent. Many tribes and scientists are working to understand what conditions produce harmful algal blooms and how our changing environment may have an impact.

Symptoms of ASP in Humans Can Include:



- Vomiting, nausea, diarrhea and/or abdominal cramping
- Headache, dizziness and/or confusion
- Severe cases can cause short-term memory loss, coma, seizure, or death

The onset of symptoms usually begins within 24-48 hours of shellfish consumption. Please call 911 or your local clinic immediately if you notice symptoms after eating shellfish.

How Can I Tell If My Shellfish Are Safe to Eat?

There is no way to visually inspect your shellfish for safety. Getting your shellfish tested is the only way to know if toxins are present. Toxins cannot be removed by cooking, freezing, or soaking shellfish. We are currently monitoring for three types of toxins in Kodiak: saxitoxin causing Paralytic Shellfish Poisoning (PSP), domoic acid causing Amnesic Shellfish Poisoning (ASP), and okadaic acid causing Diarrhetic Shellfish Poisoning (DSP).



Please visit the following links for more information on shellfish testing:

Kodiak Area Native Association (KANA): http://kodiakhealthcare.org/monitoring_harmful_algal_blooms/

Southeast Tribal Ocean Research (SEATOR): <https://www.seator.org/lab/>

Alaska Department of Environmental Conservation (DEC): <https://dec.alaska.gov/eh/fss/shellfish/resources/bivalve-shellfish-biotoxin-monitoring-plan>

Amnesic Shellfish Toxin (AST) Results

Kodiak, Summer 2020



When KANA's sampling team observes high levels of *Pseudo-nitzschia* during weekly collections, shellfish samples are sent to the Sitka Tribe of Alaska Environmental Research Lab (STAERL) for AST testing. The FDA Action Level for AST is 20mg/kg. Anything above this level is considered unsafe for consumption. The following report contains testing results for ASTs from June 17, 2020 to August 19, 2020. No samples tested during this time period detected the presence of domoic acid in shellfish tissue. Sampling is continuing; however, the laboratory has been unable to process our most current samples from 2021.

Sampling Locations



KANA is not a regulatory agency and the consumption of wild shellfish in Alaska is considered 'dig at your own risk'. Commercially harvested shellfish are regulated by the Department of Environmental Conservation and are considered safe for consumption.

Amnesic Shellfish Toxin (AST) Results

Kodiak, Summer 2020



Date Collected	Location	Butter Clams (mg/kg)	Blue Mussels (mg/kg)
August 19, 2020	North Trident Basin	NST	NST
August 18, 2020	South Trident Basin	NTD	NTD
August 18, 2020	Mission Beach SW	---	NTD
August 18, 2020	Mission Beach NE	NTD	NTD
August 4, 2020	South Trident Basin	NTD	NTD
August 4, 2020	Mission Beach SW	---	NTD
August 4, 2020	Mission Beach NE	NTD	NTD
July 22, 2020	South Trident Basin	NTD	NTD
July 22, 2020	Mission Beach SW	---	NTD
July 22, 2020	Mission Beach NE	NTD	NTD
July 15, 2020	South Trident Basin	NST	NTD
July 7, 2020	North Trident Basin	NTD	NST
July 5, 2020	South Trident Basin	NTD	NTD
July 5, 2020	Mission Beach SW	---	NTD
July 5, 2020	Mission Beach NE	NTD	NTD
July 1, 2020	South Trident Basin	NST	NTD
June 25, 2020	South Trident Basin	NST	NTD
June 19, 2020	South Trident Basin	NTD	NTD
June 19, 2020	Mission Beach SW	---	NTD
June 19, 2020	Mission Beach NE	NTD	NTD
June 17, 2020	South Trident Basin	NST	NTD

*Only blue mussels are collected at Mission Beach Southwest.

**NTD = No Toxins Detected; NST = No Sample Tested