

# Paralytic Shellfish Poisoning

## What you need to know about “red tide”

© Jan Rimes

*Alexandrium* cells under a microscope.

### What is PSP?

“Paralytic Shellfish Poisoning”, or PSP, is an illness people can contract from eating shellfish that’s been contaminated with toxins from a harmful algal bloom (also known as a “red tide”). These toxins can temporarily paralyze you, causing death in serious cases by making it impossible to breathe. Early symptoms include numbness and tingling in your lips and fingertips and can develop either immediately or several hours after consuming the contaminated shellfish. With medical care, patients with PSP can recover fully in hours or days.

PSP toxins are produced by *Alexandrium*, a genus of microscopic marine plants (phytoplankton). When *Alexandrium* multiply especially rapidly and start producing toxins, shellfish feeding on those plankton can become contaminated. Even cooking or freezing the shellfish does not make them safe.



### What are the risks and how can I reduce them?

While there is no way to cook or freeze the toxin that causes PSP to make it inactive, there are other ways to reduce your risk of exposure. First, be aware of what phytoplankton genera have been seen in your area lately by checking on [seator.org](http://seator.org). Bear in mind that some clam species can retain toxins long after a harmful bloom has passed through, however. Second, you can get your shellfish tested directly for toxins at the Sitka Tribe’s Environmental Lab (information below). Third, know that shellfish toxins are often highly localized. Do not assume that your favorite beach is safe simply because a nearby one has been tested. Gather your shellfish from a tested beach or get them tested yourself. Finally, reduce your risk of PSP from less common sources like crabs and shrimp by removing the viscera before cooking them.



### Deadly Myths

- **Shellfish are safe to eat during months containing the letter “r”.** Actually, there have been PSP cases every month of the year in Alaska.
- **If you’re tongue doesn’t tingle after sucking on a small piece of shellfish, it’s safe.** Symptoms, even serious ones, can take hours to develop.
- **If the water is clear, there is no danger of “red tide” poisoning.** Many harmful algal blooms are colorless. Shellfish can also retain their toxins for months after a bloom.
- **If wildlife has been eating the shellfish, it must be safe.** Every animal has a different tolerance to PSP toxins.



### Testing Information

Contact Michael Jamros, the Sitka Tribe of Alaska’s Environmental Lab Manager, for information on testing availability and protocols. Phone: 747-7356 Email: [seator@sitkatriben-nsn.gov](mailto:seator@sitkatriben-nsn.gov)