

Paralytic Shellfish Poisoning (PSP)

Over Memorial Day weekend, Oregon Health Authority was alerted to several cases of paralytic shellfish poisoning after consuming self-harvested shellfish on the northern Oregon coast.

What is PSP?

PSP is caused by ingesting shellfish containing saxitoxins. Saxitoxins are heat-stable toxins produced by a type of phytoplankton called dinoflagellates. Molluscan shellfish (with hinged shells such as clams, mussels, oysters, geoduck, etc.) are filter feeders that ingest the phytoplankton and concentrate the toxins. When humans eat shellfish containing these toxins, within minutes to a few hours we develop neurologic and gastrointestinal symptoms that usually resolve within a few days. However, in severe cases, patients can experience loss of coordination, difficulty speaking or swallowing, total muscle paralysis with respiratory arrest, and even death if left untreated.

How do we interview PSP cases?

Suspect cases of PSP should be interviewed. **In addition to Orpheus interview, please use the PSP-focused questionnaire*** regarding details of shellfish consumption in the hour to 2 days prior to symptom onset (site of harvest/purchase, and date of harvest/ purchase). Identify sources of shellfish particularly from Washington, Oregon, coastal Texas, and Canadian coastal provinces. If there are leftovers, ask case to freeze and retain for testing by the Oregon Department of Fish and Wildlife (ODFW). Identify other persons who ate the same shellfish or experienced a similar illness. Immediately contact persons with a shared exposure who are still in their incubation period. Provide information about symptoms and where to seek treatment if symptoms develop.

How do we respond to a case or outbreak of PSP?

PSP is reportable in Oregon. Report all confirmed, presumptive, and suspect cases to the Oregon Public Health Division **immediately**.

1. **Report** cases to OHA.
2. **Interview** cases (Orpheus and with PSP-focused questionnaire*).
3. **Contact** other exposed persons.
4. **Share** leftovers with ODFW for testing.

How can we prevent PSP?

PSP is not an infection and cannot be transmitted from person to person. PSP is acquired by eating shellfish containing the toxin. **Cooking or freezing does not inactivate the toxin.** Shellfish should only be eaten from safe areas, either commercial products or from beaches open to harvest.

Additional Resources

- Check for current shellfish safety closures at [ODA's website](#), or by calling the shellfish harvest hotline at 1-800-448-2474.
- Direct clinicians to complete the [Memento Morbi Confidential Report Form](#) to capture patient and illness information. This information is routed to the LPHA associated with the patient's county of residence.

*Contact rosalie.trevejo2@oha.oregon.gov or June.e.bancroft@oha.oregon.gov if you need PSP questionnaire.