Paralytic Shellfish Poisoning

Fact Sheet



Paul R. LePage, Governor

Mary C. Mayhew, Commissioner

What is Paralytic Shellfish Poisoning (PSP)?

PSP is caused by certain toxins produced by marine organisms. These organisms concentrate in large algal blooms often referred to as "harmful algal blooms" (HAB's). The toxins are naturally occurring chemicals that can contaminate certain seafood. The seafood contaminated with these chemicals frequently looks, smells, and tastes normal. When humans eat such seafood, poisoning can result.

How is PSP transmitted?

When there is a large concentration of these toxins, certain types of shellfish may be contaminated. These include shellfish with two shells, such as mussels, cockles, clams and oysters, as well as the digestive tissues of scallops and the digestive tissues (tomalley) of lobsters and crabs. An individual may get PSP if any of these shellfish are consumed during "red tide" primarily April through October. Cooking this contaminated shellfish does not kill the toxin.

What are the symptoms of PSP?

Symptoms are generally mild, and begin with numbness or tingling of the face, arms, and legs. This is followed by headache, dizziness, nausea, and muscular un-coordination. Patients sometimes describe a floating sensation. In cases of severe poisoning, muscle paralysis and respiratory failure can occur, and in these cases death may occur in 2 to 25 hours.

When do symptoms appear?

Symptoms begin anywhere from 15 minutes to 10 hours after eating the contaminated shellfish, although usually within 2 hours.

What is the treatment for PSP?

There is no treatment, only supportive care of symptoms.

Who can get PSP?

Any individual that eats contaminated shellfish can get sick.

What can be done to prevent PSP?

- Check with local health officials before collecting shellfish, and look for Department of Marine Resources advisories about algal blooms, accessed at http://www.maine.gov/dmr/rm/public_health/index.htm or the Hotline at 1-800-232-4733.
- Do not eat finfish or shellfish sold as bait. Bait products do not need to meet the same food safety regulations as seafood for human consumption.
- Do not harvest shellfish from floating containers or harvested from open ocean
- Consume shellfish from certified dealers only.
- Avoid consuming lobster or crab tomalley.

What other shellfish toxins cause illness and where can I get more information?

For more information contact your healthcare provider or local health center. You can also go to the Maine Department of Marine Resources site at http://www.maine.gov/dmr/index.htm, the Maine Center for Disease Control and Prevention at www.maine.gov/idepi or call 1-800-821-5821. The federal Centers for Disease Control and Prevention website http://www.cdc.gov is another excellent source of health information.