**Pseudonitzschia spp.**

**BACKGROUND**

*Pseudonitzschia* is a single-celled, naturally occurring organism belonging to a group of microscopic algae called diatoms. Diatoms can bloom when cells divide rapidly, resulting in high cell concentrations. *Pseudonitzschia* blooms can be found year-round in Florida waters. Blooms of this organism in the Gulf of Mexico, as well as in other US coastal systems, have been linked to upwelling of deep ocean water, nutrient runoff, and/or freshwater discharges. There are currently more than 40 species in this genus, and at least 10 species occur in the Gulf of Mexico. Some species of *Pseudonitzschia* produce a neurotoxin called domoic acid, which can sicken or kill marine mammals and seabirds. Toxins can also affect humans, causing shellfish poisoning if shellfish contaminated with toxins are consumed.

**SEAFOOD SAFETY**

Shellfish, including clams, scallops, oysters, and mussels can accumulate domoic acid. Domoic acid has no taste, smell, or color, and can not be destroyed by cooking. If contaminated shellfish are eaten, people can become ill with Amnesic Shellfish Poisoning (ASP). In Florida, commercial shellfish harvesting is closed to protect human health if toxic *Pseudonitzschia* blooms are detected near harvesting areas. To date, no cases of ASP have been documented in Florida.

**HEALTH**

Symptoms of ASP can be gastrointestinal and neurological. Gastrointestinal symptoms can include nausea, vomiting, abdominal cramps, and diarrhea. Neurological symptoms can include short-term memory loss, dizziness, headache, seizures, disorientation, confusion, respiratory distress, and coma. Gastrointestinal symptoms usually appear 24 hours after ingestion and neurological symptoms may take several hours or up to three days to develop. The duration of illness, which varies from person to person, can last several weeks.

**STAY CONNECTED**

For red tide status reports and general information on red tide and other harmful algal blooms (HABs) in marine and estuarine waters of Florida, visit the FWC Red Tide Status page. For the current status of shellfish harvesting areas and information on closures, visit the Florida Department of Agriculture and Consumer Services website. For public health related information, visit the Florida Department of Health website, and to report an illness, call Poison Control immediately at (800) 222-1222. To report fish kills, visit the FWC Fish Kill Hotline reporting page or call the Florida Fish and Wildlife Conservation Commission’s Fish Kill Hotline at (800) 636-0511. To report concerns related to wildlife, visit the FWC Injured Wildlife Report page or call the Wildlife Alert Hotline at (888) 404-3922. For information on conditions at Florida beaches, including respiratory irritation associated with red tides, visit the Mote Marine Laboratory’s Beach Conditions Reporting System. For information on the Florida Fish and Wildlife Conservation Commission’s Red Tide Volunteer Monitoring Program or to volunteer, visit the FWRI Red Tide Offshore Monitoring Program (RTOMP) page.