# RED TIDE in Texas



## **Red Tide Facts**

- In Texas, red tides are caused by high concentrations of a microscopic alga (a plant-like microorganism) called *Karenia* brevis or K. brevis. These high concentrations (called blooms) may cause the water to appear red, light or dark green, or brown.
- Karenia brevis produces a toxin, called brevetoxin, which can
  affect the central nervous system of fish, birds, mammals and
  other animals. The most visible result of red tide is dead fish on
  the beach or floating in the water.
- Karenia brevis is a naturally-occurring organism that is likely always present at low concentrations in the Gulf of Mexico and is believed to have been around for centuries. Scientists are investigating the factors that cause this species to bloom.
- Red tide blooms most often begin in late summer or early fall and can last days, weeks or months. Bloom locations can change daily due to wind conditions.
- Pets can be affected by red tide, so pet owners are advised to keep them away from beaches during a bloom. Inhaling the brevetoxin can cause respiratory difficulties and discomfort for your pet. Dead fish containing the toxin can remain on beaches for weeks or months following a bloom; allowing your pet to consume the dead fish can cause severe illness and sometimes death.



### REPORTING RED TIDE

To report fish kills or suspected red tides 24 hours a day, call the Texas Parks and Wildlife Department at (512) 389-4848 (Austin) or (281) 842-8100 (Houston).

To learn more about red tide and to check current red tide locations, go to http://www.tpwd.state.tx.us/hab/.

# **Health Tips**

- People with respiratory problems may be especially affected by aerosolized toxins during red tides. If red tide-affected areas cannot be avoided by these individuals, they should use a short-acting inhaler.
   If you have symptoms, leave the beach and seek air conditioning.
   If symptoms persist, consult your doctor.
- Symptoms common when breathing red tide toxins include coughing, sneezing, and watery, burning eyes; these are usually temporary and may be lessened by wearing a particle filter mask or using over-thecounter antihistamines. Check the marine forecast. Fewer toxins are in the air when the wind is blowing offshore.
- Red tide can also cause skin irritation. If your skin is easily irritated, avoid red tide-affected water. If you experience irritation, get out of the water and thoroughly wash with fresh water.
- Be careful of fish spines and bones on the beach. Puncture wounds can get infected. Infections appearing after contact with coastal waters should be checked by a doctor. Swimming near dead fish is not recommended since bacteria levels associated with decomposition may be high.

# **Red Tide and Seafood Safety**

- Brevetoxin is heat-stable and is not killed during the cooking process.
- Commercial seafood found in restaurants and grocery stores is strictly regulated and is harvested from waters free of red tide.
- For recreational anglers fishing in red tide-affected waters:
  - · Finfish caught live are safe to eat after being gutted.
  - Shrimp and crabs are safe to eat. Though these crustaceans are commonly referred to as shellfish, they are not affected by red tide.
  - It is illegal to harvest distressed or dead animals. Do not touch or eat fish floating on the water or washed up on shore.
- Call the Texas Department of State Health Services at (800) 685-0361 for a 24-hour recording of the status of harvesting areas for oysters, clams, whelks, and mussels. Additional questions concerning harvesting areas can be addressed to the Austin central office at (512) 834-6757.
  - Clams, mussels, whelks, oysters and other filter-feeding shellfish become toxic during red tides and should not be eaten. They can cause a serious food poisoning in humans called Neurotoxic Shellfish Poisoning. These shellfish can be toxic without any visible sign of red tide.

To request free copies of this card, send an e-mail with your mailing address to redtide@tpwd.state.tx.us.



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