A Primer To Help Beachgoers Know The Difference

Florida red tides, which most Florida beachgoers and residents have heard of, are caused by a microscopic organism people CANNOT see with the naked eye. It's sometimes confused with a different kind of macroalgae, called red drift algae that beachgoers CAN see with the naked eye.

Below is an information box to help you sort out the differences between the two. To see the Beach Conditions Report, which covers beaches from Pinellas to Collier counties, and whether they are being affected by red tide or red drift algae, click here.

	Red Tide	Red Drift Algae
What is it?	The Florida Red Tide is caused by Karenia brevis, an organism that you can only see with a microscope. It's always present in the Gulf of Mexico in small amounts, but when it "blooms" and occurs in larger amounts, it sometimes discolors the waters, giving them a reddish or brownish appearance, hence the name "red tide."	Red Drift Algae is any of a number of larger species of algae that can be seen with the naked eye. These species, which vary in color and can be red, brown, green or white occur naturally in the environment and can sometimes detach from the bottom and wash up along area beaches. These species are called macroalgae because they can be seen without aid of a microscope.
What does it do?	When blooms occur, their toxins can kill fish and other marine animals. When their toxins become airborne, they can also have respiratory affects on people at beaches.	These algae are not harmful and are non-toxic but, when they wash up on beaches, can smell bad as they decompose.
Where is it found?	In the Gulf of Mexico and occasionally the Atlantic coast, from 50 miles offshore into Intercoastal waterways and bays.	They occur on the bottom, then detach and float in the wrack line in the surf and sometimes wash up on beaches. They originate a few miles or less offshore.
When is it found?	Has occurred in every month of the year, with September to January the most common.	Any month of the year.
How do they form?	Blooms form offshore in Gulf of Mexico waters and are brought inshore by water current patterns, with duration and intensity issues still under investigation.	Growth might be correlated with seasonal nutrient runoff but that is still under investigation.

Why do we care?	Aerosols are toxic to inhale (especially for those with underlying lung diseases) and ingestion of shellfish contaminated with toxins can make people very ill. Shellfish or fish bought in restaurants or at the fish market are safe to eat as they are harvested from red-tide free waters.	While red drift algae are not toxic, it can be smelly as it decomposes, especially if marine animals such as fish have been caught in it. Some beachgoers may also find it unsightly.
What is being done about?	By providing this website, we encourage beachgoers to make smart decisions on their health and the beaches they use. In addition to studying health impacts, scientists are investigating the causes of red tide and exploring potential options to lessen its impacts on the public.	The connection between nutrients and red drift algae is being investigated. Local officials also sometimes choose to remove large amounts from beaches to lessen cosmetic impacts. Those decisions are made on a beach-by-beach basis.