

Stony Coral Tissue Loss Disease

Frequently Asked Questions About Monitoring



A partnership between:



How can I tell if what I'm seeing is stony coral tissue loss disease (SCTLD)?

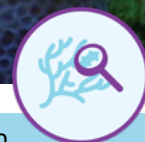
- Which species are affected? Some species are more susceptible than others. See the table below.
- How prevalent is the disease? Check for a higher than normal percentage of diseased corals in the species that are known to be most susceptible to SCTLD. Before SCTLD, rates of disease prevalence of 2-3% were commonly observed on Caribbean coral reefs. On reefs affected by SCTLD, disease prevalence can be as high as 66 – 100% in the most susceptible species.
- Are multiple lesions present? Corals with SCTLD often show more than one lesion and they may have smooth, irregular or bleached margins (Neely, 2020). You may also see tissue sloughing off pillar, great star, maze or other corals.
- How quickly is the disease spreading? SCTLD spreads rapidly in affected corals and among corals on infected reefs. Check periodically for high rates of new mortality. Significant changes may be noticed within a week or up to months for large or less susceptible corals.
- See MPAConnect's ID poster for a summary of these factors: <https://www.gcfi.org/emerging-issues-florida-coral-disease-outbreak/>

Which coral species are most susceptible to the disease?

High susceptibility	Intermediate susceptibility	Presumed susceptibility	Low/No susceptibility
<i>Colpophyllia natans</i> (Boulder brain coral)	<i>Orbicella annularis</i> (Lobed star coral)	<i>Madracis auretenra</i> (Pencil coral)	<i>Porites porites</i> (Finger coral)
<i>Dendrogrya cylindrus</i> (Pillar Coral)	<i>Orbicella faveolata</i> (Mountainous star coral)	<i>Favia fragum</i> (Golfball coral)	<i>Porites divaricata</i> (Thin finger coral)
<i>Dichocoenia stokesii</i> (Elliptical star coral)	<i>Orbicella franksi</i> (Boulder star coral)	<i>Isophyllia sinuosa</i> (Sinuous cactus coral)	<i>Porites furcata</i> (Branched finger coral)
<i>Diploria labyrinthiformis</i> (Grooved brain coral)	<i>Montastraea cavernosa</i> (Great star coral)**	<i>Porites astreoides</i> (Mustard hill coral)	<i>Acropora palmata</i> (Elkhorn coral)
<i>Eusmilia fastigiata</i> (Smooth flower coral)	<i>Solenastrea bournoni</i> (Smooth star coral)	<i>Oculina diffusa</i> (Diffuse ivory bush coral)	<i>Acropora cervicornis</i> (Staghorn coral)
<i>Meandrina meandrites</i> (Maze coral)	<i>Stephanocoenia intersepta</i> (Blushing star coral)		<i>Oculina</i> spp. (Bush corals)
<i>Pseudodiploria strigosa</i> (Symmetrical brain coral)	<i>Madracis decactis</i> (Ten-ray star coral)		<i>Cladocora arbuscula</i> (Tube coral)
<i>Pseudodiploria clivosa</i> (Knobby brain coral)	<i>Agaricia agaricites</i> (Lettuce coral)*		<i>Scolymia</i> spp. (Disc corals)
<i>Meandrina jacksoni</i> (Whitevalley maze coral)	<i>Agaricia</i> spp. (Plate / saucer corals)		<i>Isophyllia rigida</i> (Rough star coral)
<i>Siderastrea siderea</i> (Massive starlet coral)*	<i>Mycetophyllia</i> spp. (Cactus corals)		
	<i>Mussa angulosa</i> (Spiny flower coral)		

* varies from no to high susceptibility; **sometimes high susceptibility;

Adapted from Atlantic and Gulf Rapid Reef Assessment Program, (AGRRA) 2020 and J. Lang (pers. comm.)



What can I do to monitor for SCTLD?

MPAConnect has developed a [suggested reporting template](#) for SCTLD that you could use or adapt to your needs.

Management need	Recommended monitoring approach
Detect new occurrence of disease	Stakeholder reporting Awareness during other monitoring
Approximate prevalence of SCTLD	Roving diver surveys
Track progression of SCTLD	Marked colonies, establish sentinel reef sites, photo series
Quantify spatial extent of SCTLD	AGRRA-type surveys (or standard national protocol)
Assess SCTLD interventions	Visual inspection of treated lesions, photo series
Determine impacts on coral reef ecosystems, including fish	6-monthly repeat of AGRRA-type surveys at long-term monitoring sites affected and unaffected by SCTLD

What are roving diver surveys and how do I conduct them?

Roving diver surveys are census surveys that are conducted while snorkeling or diving. They will allow you to focus specifically on the species that are most susceptible to SCTLD. During a roving diver survey each diver/snorkeler will swim around the site looking for susceptible corals and

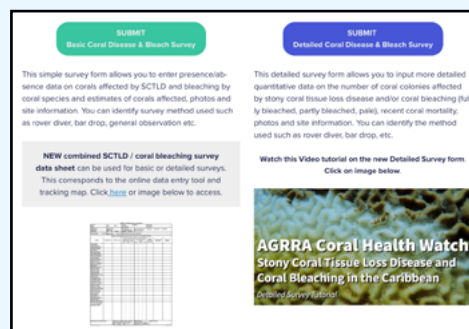
tally how many are affected, or not, by the disease. To ensure accurate counts it is best if divers are spread out across the reef to make sure no double counting occurs.

What should I do if I find SCTLD?

If you suspect SCTLD, then please report your observations to your local marine natural resource manager and to AGRRA. SCTLD survey data can **either** be collected with a combined SCTLD/coral bleaching [survey data sheet](#) or a Coral SCTLD Datasheet by Species Common Names (which is available in [English](#), [Spanish](#) or [French](#)).

SCTLD surveys can be submitted to the [AGRRA website](#) using an online basic or detailed data form.

See the [helpful tutorial](#) on how to submit the data forms.



Where does SCTLD occur in the Caribbean?

Survey sites submitted to AGRRA initially appear on the interactive SCTLD Tracking Map as purple markers while the information is being reviewed. Once the review is complete, the markers turn Green if SCTLD is not present/confirmed, Yellow if it appears that SCTLD may be present, or Red if presence of SCTLD has been confirmed.



Where can I find more information on SCTLD?

For more information on identifying SCTLD go to:
<https://www.gcfi.org/initiatives/mpa-capacity-program/peer-to-peer-workshop-viii/> or
<https://www.gcfi.org/emerging-issues-florida-coral-disease-outbreak/>

Additional resources such as webinars, reports, current disease locations and other resources may be found on AGRRA's website at: <https://www.agrra.org/coral-disease-outbreak/>

References

Atlantic and Gulf Rapid Reef Assessment Program. Coral Disease Identification Aids. Retrieved August 29, 2020 from <https://www.agrra.org/coral-disease-identification/>.

Neely, K. Appearance of Stony Coral Tissue Loss Disease (SCTLD) on Susceptible Species. Retrieved August 29, 2020 from <https://www.agrra.org/wp-content/uploads/2019/05/Disease-Identification-v3-Author-Karen-Neely.pdf>.