

! RISK FACTORS

The main risk factor for cutaneous DCS is your dive profile. However, women and divers with a large patent foramen ovale (PFO)—a fairly common, congenital, generally benign hole between the heart's left and right chambers—may be at increased risk. A history of repeated cutaneous DCS or of DCS accompanied by other symptoms frequently leads to identification of a previously unsuspected PFO.

**FIRST AID**

It is essential to abstain from further diving if you observe any skin changes that could be DCS-related. In addition, your recent dive profiles should be examined for decompression risk. In cases of skin mottling or swelling, supplemental oxygen is recommended. In cases of associated pain, muscular weakness, difficulty breathing, a change in consciousness or a drop in blood pressure, emergency measures must be initiated immediately. Call the DAN Emergency Hotline at +1-919-684-9111 for assistance.

**TREATMENT**

Any skin change that might be DCS-related should be evaluated by a physician. A rash unaccompanied by other symptoms usually doesn't need to be treated by recompression. But if your physician discovers signs of neurological effects, hyperbaric oxygen treatment in a recompression chamber is usually advised. Appropriate treatment for skin mottling or swelling will depend on the results of a physical examination. Skin changes associated with any other manifestations of DCS should be treated as an emergency.

**PRESERVING THE EVIDENCE**

If you experience any skin change after a dive, be sure to take a photo of it because it may have disappeared by the time you are able to see a physician. We also invite you to send such photos, along with a description of your symptoms and any treatment you received, to DAN, at research@dan.org, to help educate other divers.



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HEALTH & DIVING REFERENCE SERIES

DECOMPRESSION SICKNESS: SKIN BENDS



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SKIN MANIFESTATIONS OF DECOMPRESSION SICKNESS

A postdive itch or change in the color or texture of your skin, such as a rash or a marbled appearance, may be decompression-related.

Skin manifestations of decompression sickness (DCS), also known as cutaneous DCS, are more common than you might think. Divers often mistake cutaneous DCS for a rash due to another cause, such as contact with marine life or an allergic reaction, or they may just ignore such symptoms. Although cutaneous DCS is usually a mild and self-limiting disease, disregarding, it can sometimes lead to more severe manifestations of decompression sickness.

ONSET AND EVOLUTION

DCS-related skin changes usually occur within several minutes to several hours after a dive. The more severe your dive exposure, the more quickly symptoms are likely to be evident. An itch is usually the first symptom to go away. A rash may resolve within 24 hours. Marbling usually fades out over a few days and never changes color to blue-green, as a bruise does. Lymphatic DCS may go away on its own, but both marbling and swelling will disappear more quickly with treatment.

OTHER ACCOMPANYING SYMPTOMS

About 20% of divers affected by cutaneous DCS also experience neurological effects that they may not be aware of. These may include visual disturbances similar to a migraine aura. Some affected divers also report feelings of fatigue and breathing difficulties.

EMERGENCY WARNINGS

Abdominal, back or chest pain accompanied by skin mottling can quickly evolve into severe DCS and should be treated on an emergency basis. The shorter the time between a dive and the onset of symptoms, the more likely it is that severe DCS will develop.



AN ITCHY RASH

The mildest form of cutaneous DCS is a rash, most commonly on the torso—the chest, belly, back, shoulders, arms or buttocks. Such rashes may look like a sunburn and are usually itchy; some people say it feels as if tiny insects are crawling on their skin. Divers frequently overlook a DCS-related rash, attributing it to other factors or assuming it is nothing serious. Such rashes usually go away in a matter of hours.



CUTIS MARMORATA

A condition called cutis marmorata, characterized by a marbled pattern on the skin, is a more severe form of cutaneous DCS. Such lesions typically appear on the same parts of the body as milder DCS rashes but are usually bright red, purplish or even bluish, with an uneven pattern. The coloration may appear in patches or, in severe cases, may begin on the chest and spread downwards. Cutis marmorata may be extremely itchy, and affected areas sometimes feel tender to the touch. Often, however, divers with cutis marmorata don't feel anything and become aware of the change in their skin only when they see it.



LYMPHATIC DCS

Lymphatic DCS affects your lymph system, a network of fluid-filled vessels that works in concert with your circulatory and immune systems. Its primary symptom is a swelling of the skin, most often on the chest or arms. Swollen areas will have a pitted appearance, like the skin of an orange, and may be painful. If a swollen area is pressed lightly with the tip of a finger, the resulting indentation will remain for a few moments. If you're affected by lymphatic DCS, you will usually be aware something is wrong.

For more information, explore [DAN.org/HEALTH](https://dan.org/HEALTH).