

Italy hosts 1600 different spider species. They are essentially generalist predators who eat other arthropods (insects, other spiders, centipedes, acari etc) they capture with silky traps or by hunting them directly. Preys are normally immobilized and bitten, in order to release a venom that kills them and starts a partial tissue digesting process. Man is not a potential prey for these animals: they usually escape for safety or hide in their den when disturbed. Biting of a human is therefore an incidental event, occurring when the spider is involuntarily touched or crushed. In most cases, consequences of the bite resolve themselves in a relatively short time, without any complication; nevertheless some species' bite can lead to relevant medical issues.

How to protect from spider bites?

-Avoid to handle animals with bare hands.
-Wear proper gloves and shoes in case of outdoor activities of concern (contact with wood, gardening, handling old card boxes, removing spider webs, etc).
-Pesticides or specific disinfestations are not useful as long as these animals are not infesting; their removal has to be done with direct capture or by suctioning them with normal vacuum cleaners.

What to do if you suspect a bite?

Never underestimate a bite of a spider.

- Avoid to manipulate or carve the site of the bite.
- Wash carefully with soap and water; do not use strong disinfectants, but diluted chlorine ("Amuchina").
- Notice any symptom surging, even though the bite was not noticed at first.
- Consult a doctor if the wound appears of increased consistency, painful, reddened, hot, surrounded by a pale or violaceous halo, if it is crusty and dark, if itching, sensitivity alteration, nausea, vomit or fever appear.
- Contact a Poison Control Center (Milan: 02 66 1010 29)
- If it is possible, catch the spider and store it up in a closed jar, bring it to the ER for identification. It can be identified even if it has been crushed.
- Record the wound with serial photos in order to monitor its evolution.

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Milan Poison Control Center

SPIDERS OF MEDICAL RELEVANCE IN ITALY





Mediterranean Recluse Spider
(Loxosceles rufescens)

It is a brown-yellowish spider with long legs, whose body can reach a length of 7mm (male) to 9mm (female). It has a Mediterranean origin, but it has to be considered a "cosmopolitan" species, being spread all over the world due to passive transportation. In Italy it lives mainly in the Mediterranean area, in unfrequented, dry environments, under stones or in cracks in the rocks. It can often be found in flats and warehouses, while in northern Italy it lives almost exclusively in houses. It is a nocturnal spider, which hides in clefts and cracks during the daytime; in houses, it can find shelter behind pieces of furniture, baseboards, cardboard boxes, or even in gloves, shoes and bed linen, especially in bathrooms, basements and attics.

Features of the bite: it is initially painless, and without any alteration in the interested area; in the next few hours, a reddened wound starts to appear, with itching, tingling and burning. In the next 48-72h the wound can turn to necrotic and ulcerated. The bite, in addition to venom injection, can convey anaerobic bacteria in the tissues, and those, developing themselves, can complicate the course of the wound, causing progressive necrotizing fasciitis. The most serious cases, in addition to fever, ecchymosis and skin rash, may present muscular damage, haemorrhage and kidney failure.

Yellow Sac Spider
(Cheiracanthium punctorium)

A central Asiatic European species which is spread all over Italy, where it is possible to find it in grass and bushes in open and sunny environments. It is rarely findable in houses, where he can penetrate accidentally. Its body can reach 15mm; it is brown anteriorly and yellow-greenish on the abdomen with a lanceolate, dark spot on its back. In the daytime it stays hidden in its silky, bag shaped den which it uses to build between plants' leaves.

Features of the bite: it unleashes an intense, burning pain almost immediately after the event, which goes hand in hand with a strong itching. Later, turgidity and loss of sensitivity appear locally, but necrosis is rare. In some severe cases it may cause systemic symptoms such as nausea, fever, malaise, headache and vertigos: these symptoms regress in 24-48h, while local ones tend to last few days.



Mediterranean/European Black Widow
(Latrodectus tredecimguttatus)

It is spread from Mediterranean to China, and in Italy it can be found in Mediterranean areas. The *Latrodectus tredecimguttatus* is recognizable by the typical red dots on its black back: females have a longer body (7-15mm) while males reach the length of 4-7mm. It creates irregularly-shaped spider webs in low vegetation in dry areas, dunes and rural, unfrequented zones. Usually it cannot be found in houses.

Features of the bite: the bite is not usually perceived: later, a red spot of approximately 0,5 cm appears. After a few hours, the wound can reach a diameter of 5 cm, and it appears pale and achy, surrounded by a blue-reddish area. Sensitivity can be affected. Less frequently, in severe cases, it may cause skin rash, high fever, stiffness, sweating, shock, arrhythmias, hypertensive peaks, lymph nodes and juncture pain, dyspnoea and hepatic damage. Its venom, in order to immobilize preys, contains a neurotoxin that can lead the patient to paralysis.