

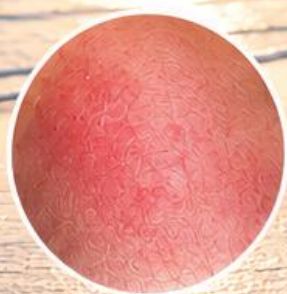
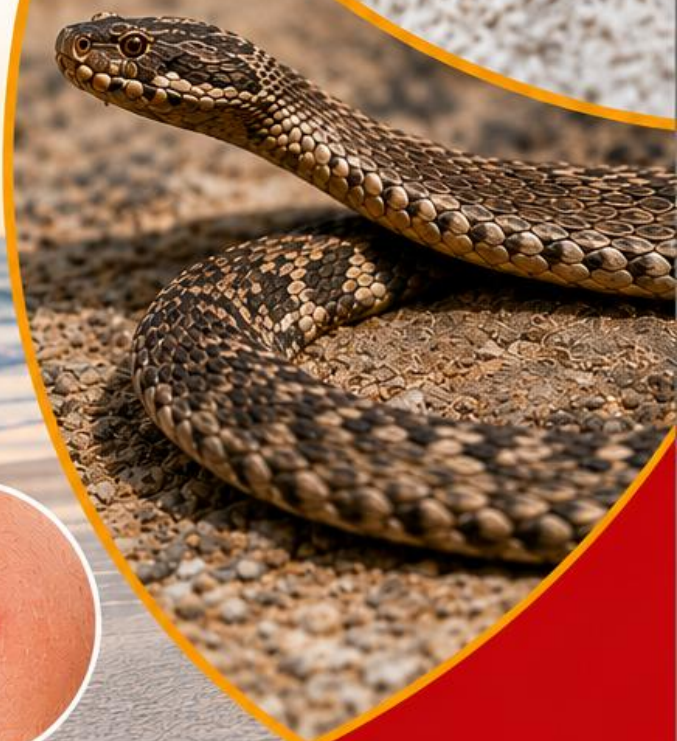
How to Respond to Stings and Bites from Venomous Animals During the Summer in Spain

Jellyfish, spiders, and snakes.
What to do—and what not to do—to prevent complications.

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Jellyfish: what to do and what to avoid

Along the Spanish coasts there are around ten species of jellyfish capable of causing skin irritation.



MOST COMMON SYMPTOMS

- Pain
- Itching
- Redness
- Inflammation
- Necrosis (in some species, such as the Portuguese man o' war)

THE GREATER OR LESSER SEVERITY OF SYMPTOMS DEPENDS ON:

- 1 The density of stinging cells.
- 2 The area of the body affected. The trunk is the most sensitive area due to the ease with which the venom enters the bloodstream.
- 3 The amount of venom injected.
- 4 The age and weight of the person.
- 5 Previous exposure to the jellyfish venom may increase the effects.

HOW TO ACT? KEY STEPS



Seawater



Rigid cards
(e.g., credit card,
ID card, etc.)



Dry protected
ice



In Portuguese man o' war stings, local heat can help inactivate the venom: apply local heat by immersing in hot water (around 45°C) for 30 minutes. This may help neutralize the venom.



The Portuguese man o' war is characterized by having long tentacles and a crest/sail that usually floats on the water surface and may display bluish or purple tones.

Jellyfish have stinging cells that, when in contact with our skin, trigger symptoms. The duration of symptoms is usually no more than a few hours. Only in severe cases may systemic effects such as headache, nausea/vomiting or agitation occur.

Among them, the **Portuguese man o' war** (*Physalia physalis*) stands out for being **the only species capable of causing skin necrosis**, especially dangerous in children due to its smaller body surface area.



WHAT TO DO

- ✓ Wash the area with plenty of seawater for 20 minutes.
- ✓ Remove any remaining tentacles or jellyfish cells using a rigid card (e.g., a credit card, ID card, etc.), scraping gently.
- ✓ Apply dry protected ice (wrapped in a bag or cloth) to relieve pain and swelling, avoiding direct contact of the ice with the skin.
- ✓ Take an analgesic for pain and/or an antihistamine if the local reaction is intense.
- ✓ Go to a medical center in case of systemic symptoms.



WHAT NOT TO DO

- ✗ Do not rub the area with towels, clothing or sand, as this may release the venom from the stinging cells that remain on our skin.
- ✗ Do not remove tentacle remains with your hands, as this may transfer the negative effects to your hands.
- ✗ Do not wash with fresh water, as changes in salinity can trigger the release/activation of the venom from the stinging cells.
- ✗ Do not apply alcohol, rubbing alcohol, lemon juice, vinegar, urine or other liquids, as they can intensify the venom's reaction.
- ✗ Do not use ice directly on the skin.
- ✗ Do not apply bandages.
- ✗ Do not try to remove or extract the jellyfish from the water, even if it is dead, as it can release venom for up to 48 hours after its death.



Go to a medical center if you experience systemic symptoms such as headache, nausea/vomiting or agitation.

Mediterranean Recluse Spider: prevention at home

In Spain, only the Mediterranean recluse spider or corner spider (*Loxosceles rufescens*) can occasionally cause relevant health problems, including skin necrosis, especially on hands, arms and feet.



WHAT IS THE MEDITERRANEAN RECLUSE SPIDER?

-  It has a violin-shaped mark on the cephalothorax.
-  It has long, thin legs.

BITE: HOW DOES IT ACT?

Its venom has proteolytic effects and takes time to de-neutralize, up to 8 weeks. The bite is usually painless, but between 6–8 hours intense inflammation appears, with blisters and cyanosis. In 5–7 days it can lead to skin necrosis and necrotic lesions or ulcers.



6–8 hours



24–48 hours



5–7 days

PREVENTION AT HOME



Keep the home clean and tidy.



Move and organize objects regularly.



Shake out and wash clothes before wearing.



Ventilate the rooms.



Check toys and stored items.



Keep beds away from the wall by at least 20 centimeters.

The Mediterranean recluse spider is an indigenous species in Spain and lives with us. It mainly inhabits the Ebro Basin, in the south of the Duero River and in the Balearic Islands and the Canary Islands.



Keeping the home clean and tidying up dark corners, stored objects and stored clothing are key measures to prevent bites.



WHAT TO DO



Wash the affected area with water and soap.



Apply cold (ice wrapped in a cloth) to relieve pain and inflammation.



Keep the affected limb elevated.



Do not use tourniquets or compression bandages.



Go to a healthcare center for evaluation and treatment.



WHAT NOT TO DO



Do not rub or massage the area.



Do not make incisions or try to extract the venom.



Do not apply alcohol, ammonia, bleach or other chemicals.



Do not apply direct heat.



Do not self-medicate with antibiotics or corticosteroids.



If you develop spreading redness, severe pain, fever or feel unwell in general, seek immediate medical attention.

Snake Bites: stay calm and act quickly

On the Iberian Peninsula there are **four species of venomous snakes** capable of causing health problems, although they do not usually pose a life-threatening risk.

Approximately half of snake bites are “dry,” meaning no venom is injected.

In some cases we have an antidote: antivenom. Quick and correct action during the first minutes can significantly reduce complications.

EFFECTS OF VENOM

The effects of snake venom can appear quickly, in as little as **10 minutes**.

Symptoms range from **local reactions**: pain, swelling, inflammation, bruising; to **severe systemic symptoms** such as low blood pressure, nausea/vomiting, diarrhea, mental alterations, muscle weakness, arrhythmias and neurotoxicity.



WHAT TO DO

In the event of any snake bite, the following is recommended:



Stay calm and at rest, as an increased heart rate due to anxiety can help the venom spread more quickly.



Keep the affected area or limb as still as possible and positioned below heart level to slow the spread of the venom.



Remove rings, watches or tight clothing, as swelling in the area may be severe and could cut off circulation and cause ischemia in fingers or toes.



Clean the wound with solution (saline solution) or water and soap.



Photograph the snake if possible to help identify it.



Go to a healthcare center or call 112 as soon as possible, even if you feel well, as the condition can worsen quickly.



WHAT NOT TO DO



No cuts or incisions.



No sucking out the venom.



No tourniquets.



No apply cold or heat.



No give **medications**: the effect of snake venom may be counteracted by anticoagulants and acetylsalicylic acid (aspirin) and NSAIDs may worsen the effect.



IMPORTANT

Symptoms can appear within minutes. Even if the person seems well, they should be evaluated at a healthcare center as soon as possible.



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Authors and bibliographic references



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BIBLIOGRAPHIC REFERENCES AND RECOMMENDED READING

- Bergillos Gasion F, Rivas Fernandez MA.
*Clinical Toxinology I and II: injuries caused
by stings and bites from animals,*
Madrid: Bubok Publishing, 2018.



Spanish Wound Healing Society (SEHER)

Promoting prevention, scientific knowledge
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