Louisiana Pharmacists Association Educates Patients About Home Treatment of Insect Bites and Stings

For many people in Louisiana, the arrival of warmer weather means camping, fishing, gardening, and enjoying some great food outdoors with family and friends. While participating in these activities is fun, many people do not realize that they are at risk for insect bites and stings. Many people in Louisiana can probably agree that the most common and bothersome insect is the mosquito, because they have experienced the itchy aftermath of its bite. Although mosquitos are the most infamous, fleas, bedbugs, and spiders are also common throughout the state of Louisiana. Bites from ticks and chiggers are also possible, but they are not as common. When it comes to insect stings, the most common offenders include wild honeybees, wasps, hornets, yellow jackets, and fire ants. The pain and itching associated with insect bites and stings can be a nuisance; however, there are many products available over-the-counter that can be used to specifically alleviate symptoms.

Prevention of insect bites and stings is the ultimate solution, even though preventative efforts may not always be successful. Although it is not practical to completely avoid the outdoors, there are some things that can be done to help protect against insect bites and stings. One can wear protective clothing, spray DEET (4-100%) on clothing and exposed body surfaces, and use nets when sleeping outdoors. Repellents, such as DEET and picaridin, work by emitting vapors that discourage the latching of ticks and contact from just about all of the insects. To help control mosquitos near the home, empty any toys, fountains, or buckets that have collected water. Also, healthy hygiene can help with preventing bedbug infestations. Even with prevention, insect bites and stings are sometimes inevitable. Fortunately, many insect bites may be treated at home.

Mosquitoes, fleas, bedbugs, and chiggers are some of the most common sources of insect bites. These bites are usually small, red, raised areas that may be accompanied by pain and itching. Most insect bites may be self-treated at home, due to their nonvenomous nature. However, if redness from the bite spreads or if symptoms are experienced away from the site of the bite, treatment by a medical professional should be sought. The first step in alleviating symptoms is to refrain from scratching. It may be appropriate for children to wear mittens or gloves to prevent scratching. To relieve pain and itching, the bite should be iced with an ice pack wrapped in a wash cloth for 10-minute intervals. If pain and itching does not subside after using the ice pack, topical anesthetics, hydrocortisone cream, topical antihistamines, counterirritants, or a skin protectant may be applied to the site. The table below lists some examples of these products, and there are also several combination products available. To help prevent infection, topical antibiotics or an antiseptic may also be applied to the site of the bite. Examples of these include hydrogen peroxide, rubbing alcohol, and Neosporin®. All over-the-counter products should be used for a maximum of 7 days in patients over the age of 2 years old. If irritation persists past 7 days or if a child is under the age of 2 years old, treatment from a medical professional should be sought.

Bites from ticks and spiders are more serious and should be treated by a medical professional. This is due to the venomous nature of spiders and the disease-spreading potential of ticks. Most spiders, however, are unable to penetrate skin and inject their

venom, due to their short, weak fangs. Unfortunately, this is not the case for the brown recluse, black widow, and Hobo spiders. Bites from the black widow and brown recluse spiders may lead to flu-like symptoms such as fever, pain, joint stiffness, and chills. A delayed episode of pain and an open sore or wound at the bite site is also not uncommon. Additionally, bites from Hobo spiders are known for causing slow-healing wounds. Even if you are unsure of what caused the bite, it is important to be aware of the previously listed symptoms and to seek medical attention as soon as possible if any of these symptoms present. Ticks, on the other hand, can literally be seen latched onto the skin, swelling up as they drink the blood. Tweezers should be used to remove the tick fully intact. Caution must be taken to avoid squeezing the body, which may cause the tick to regurgitate, further increasing the risk of transmitting tick-borne illnesses. Also, failing to remove the mouthparts may lead to profound itching and development of nodules that require surgical removal.

Like insect bites, insect stings generally only cause a local reaction, but they do have the potential to be problematic and can lead to an allergic reaction or even life-threatening anaphylaxis in those who may be sensitive to chemicals in the insect's saliva. Some of the most commonly encountered stings are those inflicted by wild honeybees, wasps, hornets, yellow jackets, and fire ants. Like insect bites, prevention is key when it comes to insect stings. It is important to be aware that the following put you at a higher risk for insect stings: wearing scented lotions, perfumes, and deodorants; wearing brightly colored clothing; walking barefoot while outdoors; provoking or disturbing stinging insects; eating and drinking outdoors; wearing clothing that is soiled with food or drink; and having nests of stinging insects near homes or other living areas.

In the event that preventative measures are not successful and one is stung by an insect, most stings can be treated at home with over-the counter products. When inspecting the area that was stung, it is important to look for a stinger. Wild honeybees have barbed stingers that become embedded in the skin and continuously inject venom, even if the bee is brushed off or flies away. Wasps, hornets, and yellow jackets do not have barbed stingers; however, their stingers enable them to sting repeatedly. Removing the stinger quickly is important, because it continues to inject venom for approximately 2-3 minutes following the initial sting. The stinger can be scraped away with a piece of gauze, a fingernail, or the edge of a credit card. Never use tweezers on a stinger, because this will only encourage the release of more venom. Once the stinger is removed, hydrogen peroxide or alcohol should be applied to the affected area. Once the affected area is stinger-free, an ice pack should be used to help with itching, swelling, and pain. The ice pack should be applied 2-3 times daily in 10-minute intervals. As with insect bites, it is just as important with insect stings to not scratch the affected area. Even though many over-the-counter products say that they can be used to treat insect bites, it is typically fine to use them to treat insect stings as well. It is recommended to use topical anesthetics and skin protectants for insect bites, unless a drug allergy is present. In the case of drug allergies, topical antihistamines, hydrocortisone, and counterirritants may be used. Examples of these can be found in the table below. Although most over-the-counter products for insect bites and stings may be used 3-4 times a day for 7 days, it is still important to follow the directions listed on the product. If symptoms resolve after 7 days of treatment, use of the product should be discontinued.

Although many insect stings can be treated at home with over-the-counter products, there are instances where home treatment is not appropriate. Evaluation by a medical professional is appropriate in the following cases: patients younger than 2 years of age, substantial allergic response located away from the site of the sting, previous sting by a honeybee, wasp, or hornet, previous severe reactions to insect bites, a personal or family history of significant allergic reactions (e.g. hay fever), and symptoms that have become worse or have not resolved after 7 days of treatment. Allergic reactions, especially severe ones, will require immediate medical attention. The following symptoms indicate that emergency medical attention should be sought: hives, excessive swelling, dizziness or fainting, weakness, nausea, vomiting, diarrhea, difficulty breathing, chest tightness, facial flushing, and swollen tongue, lips, or face. Those with severe allergic reactions caused by insect stings should consider wearing a medical necklace, bracelet, or ID that states the nature of their allergy.

For additional information on home treatment of insect bites and stings or for help with product selection, please contact your local pharmacist.

Selected Products for Home Treatment of Insect Bites and Stings

Types of Drugs	Ingredients to Look for	Over-the-Counter Products
Topical Antihistamines	Diphenhydramine	Benadryl topical spray or gel Anti-Itch Continuous Spray
Topical Steroids	Hydrocortisone 1%	Cortizone-10 Easy relief liquid Cortaid Cooling Spray Aveeno Anti-itch cream
Counterirritants	Camphor 0.1 - 3% and/or Menthol(less than 1%)	Campho-Phenique Liquid Blue Star Ointment Sarna Anti-Itch Lotion
Topical Anesthetics	Pramoxine HCl 1% Benzyl alcohol 10% Benzocaine 20% Benzethonium chloride 0.2% Lidocaine 0.5%	Gold Bond Multi-Symptom Aspercreme with Lidocaine Lanacaine Spray
Skin Protectants	Calamine 8% Zinc Oxide 8%	Calamine Lotion Caladryl Lotion Aveeno Anti-Itch Concentrated Lotion

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