



Public Health
England



FALSE WIDOW SPIDER: PUBLIC HEALTH BRIEFING FOR LOCAL AUTHORITIES

Background

In October 2018, sightings of the false widow spider (*Steatoda nobilis*) in East London led to a number of schools closing for eradication treatment in the boroughs of Newham, Enfield, and Redbridge. Similar responses occurred in Tower Hamlets in 2015.

In attempting to eradicate this species, other risks were introduced such as disruption to education and childcare, unintentional eradication of other species of spider or insect, and potential for human exposure to pesticides.

It is important that the response to false widow spiders remains proportionate to the actual risk posed. To help you plan any further response to these spiders, PHE, the British Arachnological Society, conservation charity Buglife and other spider experts have prepared this briefing.

Spiders in the UK

There are 670 species of spider in the UK. (1) There are 12 species capable of biting humans, but none are considered to have a bite or envenomation that is dangerous. (2)

False widow spider

The false widow spider is considered to be naturalised in the UK, having been introduced around 1879. Sightings of false widow spiders mostly occur between July and November. It is common in London and the South East, and reasonably widespread across the South West, East Anglia, the Midlands, and Ireland. (3) They tend to remain within or near their webs. The false widow spider is mildly venomous and can bite, though this is uncommon. Advice from the British Arachnological Society and Buglife is that the false widow spider is a non-aggressive species which is only likely to bite if deliberately or unintentionally provoked. (4) (5) (6)

False widow bites

Spider bites in the UK are rare, and reported bites are often unwitnessed. This has resulted in a relative lack of research being carried out on UK species. However, case studies from Britain, Ireland and Chile suggest that a false widow spider bite is usually of mild medical significance. Symptoms usually include localised pain, swelling, and itching, often lasting for between one and 12 hours. In some cases, people experience nausea, headaches, and malaise, which usually subside within three days. (7)

There are no reports of anaphylaxis in response to a false widow spider bite. Scientific debate continues about the rare possibility that a false widow spider bite could directly or indirectly lead to necrosis around the bite site (8).

Managing false widow spiders

The public health risk associated with false widow spiders is very low. Eradication attempts are likely to be unsuccessful (spiders can return to buildings within weeks) and have negative consequences. Most notably, eradication requires schools to close, which causes significant and prolonged disruption to education and childcare plus financial cost. Other adverse effects include damage to the local ecosystem, potential for human exposure to pesticides, and reinforcement of arachnophobia in school children.

There are a number of factors which may have led to disproportionate responses to false widow spiders in the past:

- Social and cultural aversion to spiders (9)
- Misreporting of spider bites, often because the bite itself was unwitnessed, and the symptoms are difficult to distinguish from other causes (10)
- Reporting that fails to distinguish between the effect of the bite and the effect of a secondary skin infection (11)
- Sensational and fearful media coverage

These factors may combine to put pressure on schools to close and undertake eradication measures. In most circumstances, schools should be advised against this, given the disruption it causes.

Schools should be reminded of simple first aid measures in response to spider bites: the bite should be cleaned with soap and water. Ice packs and oral painkillers can be used to manage pain or discomfort. Medical attention should be immediately sought if there is severe swelling, or you are feeling faint, feverish or generally "unwell", with cramping and/or sweating, or symptoms of an allergic reaction. Schools and parents may be reassured using information in the false widow spider factsheet.

The PHE London information sheet for the public has been circulated with this briefing.

Further resources

Further information on spider bites can be found on the NHS website:

www.nhs.uk/Livewell/bites-and-stings/Pages/insects-bugs-that-bite-sting.aspx

Further information on false widow spiders can be found here:

British Arachnological Society

britishspiders.org.uk/wiki2015/index.php?title=False_Widow_Spiders

Natural History Museum

www.nhm.ac.uk/natureplus/community/identification/blog/2014/12/23/fact-sheet-false-widow-spiders--steatoda-spp.html

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