# Climate change accelerates arrival of disease-carrying mosquitoes in the UK



Two species of disease-carrying mosquitoes have been detected in the UK, raising concerns over potential public health risks as climate change alters the country's mosquito landscape. The Egyptian mosquito (Aedes aegypti) and Asian tiger mosquito (Aedes albopictus), typically found in tropical and subtropical regions, were recently discovered in surveillance monitoring at a freight warehouse near London Heathrow Airport and a motorway service station near Kent, respectively.

Researchers from the UK Health Security Agency (UKHSA) highlighted these findings in a peer-reviewed study published in PLOS Global Public Health, warning that without timely intervention, invasive mosquito populations could become established, especially in urban areas like London. The study noted that rising temperatures and milder winters are making southern England increasingly hospitable to these species, which are known vectors for serious diseases such as yellow fever, dengue, chikungunya, Zika, and dirofilariasis. These illnesses pose significant health challenges, sometimes leading to severe complications and prolonged suffering.

The UKHSA coordinates an extensive invasive mosquito surveillance programme targeting high-risk sites including airports, ports, service stations, seaports, ferry terminals, and distribution hubs. This involves setting ovitraps that detect mosquito eggs, followed by immediate action if invasive eggs are found, including searching for breeding grounds within a 300-metre radius and collaborating with local authorities to eliminate potential habitats. The aim is to prevent these mosquitoes establishing breeding populations in the UK, thus mitigating future disease risks.

Officials have underscored that climate change is a driving force behind the shifting distribution of these mosquitoes. Warmer temperatures speed up mosquito development and survival, while increased rainfall creates suitable breeding environments. Combined with factors like international trade and travel, these environmental changes enable invasive species such as the Asian tiger mosquito to spread into new areas previously unsuitable for their life cycles.

The UKHSA emphasises that its comprehensive surveillance systems provide early warnings of potential mosquito threats and facilitate rapid responses. By working with local governments, healthcare professionals, and the public, the agency seeks to strengthen detection and intervention capabilities to forestall the establishment of disease-carrying mosquitoes and avoid an increased burden of vector-borne diseases on the UK’s healthcare system.

This alert follows warnings from European agencies, including the European Centre for Disease Prevention and Control, which has reported rising dengue cases across countries like Italy and France, with more than four million cases and over 2,500 deaths worldwide in recent months. The accelerated spread of these diseases into western Europe reinforces the urgency for robust surveillance and proactive measures in the UK.

In summary, the discovery of Egyptian and Asian tiger mosquitoes in England marks a critical public health development. With climate trends favouring their establishment, and the severe illnesses they carry, experts stress the importance of continued vigilance and decisive action to protect public health.

### 📌 Reference Map:

* Paragraph 1 – [[1]](https://www.express.co.uk/news/uk/2116159/uk-warning-disease-carrying-mosquitoes), [[3]](https://www.the-independent.com/news/uk/home-news/experts-asian-zika-africa-england-b2837892.html), [[6]](https://news.sky.com/story/two-species-of-disease-carrying-mosquitoes-found-in-uk-13442175)
* Paragraph 2 – [[1]](https://www.express.co.uk/news/uk/2116159/uk-warning-disease-carrying-mosquitoes), [[3]](https://www.the-independent.com/news/uk/home-news/experts-asian-zika-africa-england-b2837892.html), [[4]](https://ukhsa.blog.gov.uk/2024/12/03/how-we-monitor-invasive-mosquitoes-and-stop-them-spreading-in-the-uk/)
* Paragraph 3 – [[2]](https://www.gov.uk/guidance/invasive-mosquito-surveillance), [[4]](https://ukhsa.blog.gov.uk/2024/12/03/how-we-monitor-invasive-mosquitoes-and-stop-them-spreading-in-the-uk/)
* Paragraph 4 – [[7]](https://www.gov.uk/guidance/mosquito-summary-hecc-chapter-8-climate-and-vector-borne-diseases), [[1]](https://www.express.co.uk/news/uk/2116159/uk-warning-disease-carrying-mosquitoes)
* Paragraph 5 – [[1]](https://www.express.co.uk/news/uk/2116159/uk-warning-disease-carrying-mosquitoes), [[4]](https://ukhsa.blog.gov.uk/2024/12/03/how-we-monitor-invasive-mosquitoes-and-stop-them-spreading-in-the-uk/)
* Paragraph 6 – [[1]](https://www.express.co.uk/news/uk/2116159/uk-warning-disease-carrying-mosquitoes), [[7]](https://www.gov.uk/guidance/mosquito-summary-hecc-chapter-8-climate-and-vector-borne-diseases)
* Paragraph 7 – [[1]](https://www.express.co.uk/news/uk/2116159/uk-warning-disease-carrying-mosquitoes), [[3]](https://www.the-independent.com/news/uk/home-news/experts-asian-zika-africa-england-b2837892.html), [[5]](https://www.standard.co.uk/news/health/experts-asian-africa-european-zika-b1250812.html), [[6]](https://news.sky.com/story/two-species-of-disease-carrying-mosquitoes-found-in-uk-13442175)

Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

1. <https://www.express.co.uk/news/uk/2116159/uk-warning-disease-carrying-mosquitoes> - Please view link - unable to able to access data
2. <https://www.gov.uk/guidance/invasive-mosquito-surveillance> - The UK Health Security Agency (UKHSA) coordinates invasive mosquito surveillance to monitor species like Aedes albopictus, known for transmitting diseases such as dengue, chikungunya, and Zika virus. Surveillance focuses on high-risk sites, including airports, ports, and service stations, using ovitraps to detect eggs. If invasive mosquito eggs are found, immediate actions are taken to prevent their spread, including inspecting a 300-meter radius for breeding grounds and collaborating with local authorities to eliminate potential habitats. The program aims to prevent the establishment of invasive mosquito populations in the UK.
3. <https://www.the-independent.com/news/uk/home-news/experts-asian-zika-africa-england-b2837892.html> - Research by the UK Health Security Agency (UKHSA) has identified two species of disease-carrying mosquitoes in the UK: Aedes aegypti (Egyptian mosquito) and Aedes albopictus (Asian tiger mosquito). These species, known vectors for diseases like yellow fever, dengue, chikungunya, Zika, and dirofilariasis, were detected in surveillance traps across England, Wales, and Northern Ireland. The findings highlight the potential public health risk posed by these invasive species, emphasizing the need for enhanced surveillance and timely action to prevent their establishment in the UK.
4. <https://ukhsa.blog.gov.uk/2024/12/03/how-we-monitor-invasive-mosquitoes-and-stop-them-spreading-in-the-uk/> - The UK Health Security Agency (UKHSA) monitors invasive mosquitoes, particularly Aedes albopictus (Asian tiger mosquito), to prevent their spread in the UK. This species, native to Southeast Asia, has been involved in transmitting diseases like dengue, chikungunya, and Zika virus in Europe. UKHSA's surveillance programme focuses on high-risk sites such as seaports, ferry terminals, and distribution centres. When invasive mosquito eggs are detected, immediate actions are taken, including enhanced surveillance and collaboration with local authorities to eliminate potential breeding sites, aiming to prevent the establishment of these mosquitoes in the UK.
5. <https://www.standard.co.uk/news/health/experts-asian-africa-european-zika-b1250812.html> - Research has identified two species of disease-carrying mosquitoes in the UK: Aedes aegypti (Egyptian mosquito) and Aedes albopictus (Asian tiger mosquito). These species, known vectors for diseases like yellow fever, dengue, chikungunya, Zika, and dirofilariasis, were detected in surveillance traps across England, Wales, and Northern Ireland. The findings highlight the potential public health risk posed by these invasive species, emphasizing the need for enhanced surveillance and timely action to prevent their establishment in the UK.
6. <https://news.sky.com/story/two-species-of-disease-carrying-mosquitoes-found-in-uk-13442175> - Two species of disease-carrying mosquitoes, Aedes aegypti (Egyptian mosquito) and Aedes albopictus (Asian tiger mosquito), have been found in the UK. These species, known vectors for diseases like yellow fever, dengue, chikungunya, Zika, and dirofilariasis, were detected in surveillance traps set by the UK Health Security Agency. The findings highlight the potential public health risk posed by these invasive species, emphasizing the need for enhanced surveillance and timely action to prevent their establishment in the UK.
7. <https://www.gov.uk/guidance/mosquito-summary-hecc-chapter-8-climate-and-vector-borne-diseases> - Climate change is influencing the distribution and seasonality of mosquito species in the UK. Increased rainfall and warmer temperatures create new habitats for mosquitoes, while warmer conditions accelerate their development and survival rates. These changes, along with factors like international trade and travel, contribute to the spread of invasive mosquito species, such as Aedes albopictus, which can transmit diseases like dengue, chikungunya, and Zika. Surveillance is crucial to identify and prevent the establishment of these species in the UK.