

Strengthening One Health vector-borne disease (VBD) surveillance in England

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Strengthening VBD surveillance in England is a priority as climate and environmental changes expand the range and activity of endemic and invasive vectors and associated pathogens. Recent UK detections of invasive mosquitoes like Usutu and West Nile and increasing dengue and chikungunya transmission in France and Italy underline the need for early, coordinated detection to prevent sustained transmission.

In England, VBD monitoring includes vector; wildlife and livestock and human surveillance; and active monitoring of blood donors and risk groups. While these provide a strong foundation, they operate across multiple sectors and are often reactive to detections. Our aim is to establish a One Health (OH) VBD surveillance framework to unify efforts into a cohesive national surveillance system.

A OH VBD surveillance framework will involve collaboration between OH organisations in England to jointly plan and enhance surveillance and response. Additionally, a new OH VBD surveillance report will synthesise data across vector, animal and human surveillance alongside international epidemiological intelligence and research.

During 2025, OH partners collaborated to investigate detections of Usutu, West Nile and tick-borne encephalitis viruses and plan surveillance activities.

The annual OH VBD surveillance report will provide a comprehensive synthesis of England's evolving VBD epidemiology. Annual publication aligned with vector seasons will help identify surveillance gaps and strengthen data-sharing to optimise responses each season.

Strengthened and integrated OH VBD surveillance in England will enable earlier detection of changing risk and support targeted public health responses, helping delay the establishment of non-endemic diseases in the UK and reduce VBD impacts.