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Qdenga® dengue vaccine guidance

Joint Committee on Vaccination and Immunisation (JCVI) deliberations on Qdenga® vaccine now available

A live, attenuated (weakened) dengue vaccine called Qdenga® is licensed in the United Kingdom (UK). The Joint Committee on Vaccination and Immunisation (JCVI) Travel Sub-Committee (TSC) has reviewed the vaccine information and the minutes of their meeting and the main JCVI meeting are now available on the [JCVI website](#).

The JCVI has recommended that the following groups could be offered the Qdenga® vaccine:

Individuals aged 4 years of age and older who have had **dengue infection in the past** and who are:

- Planning to travel to areas where there is a risk of dengue infection or areas with an ongoing outbreak of dengue.

or

- Exposed to dengue virus through their work, for example, laboratory staff working with the virus.

Guidance is being developed with the UK Health Security Agency (UKHSA) Rare and Imported Pathogens Laboratory on best practice for investigating possible previous dengue infection. This guidance, and a new dengue chapter for the UKHSA 'Immunisation against infectious disease', also known as the 'Green Book' is currently being developed and should be available in the coming weeks.

At the current time JCVI have stated that Qdenga® vaccination could not be advised for seronegative individuals in the UK. The information from clinical trials to date is insufficient to make a recommendation for these individuals. There is a theoretical risk of severe dengue if a person with no previous dengue infection is vaccinated and then is later infected with dengue virus DENV 3 or DENV 4 serotypes (see dengue overview below).

Qdenga® is contraindicated in:

- Pregnant women.
- Breastfeeding women.
- Immunocompromised individuals ([see chapter 6 of the 'green book'](#)).
- Those with hypersensitivity to any component of the vaccine.
- Children under 4 years of age.

Travellers must be informed of the risks of dengue and instructed on mosquito avoidance measures.

Dengue overview

Dengue is a viral infection spread by mosquitoes which mainly feed during daytime hours. It causes a flu-like illness, which can occasionally develop into a more serious life-threatening illness. Severe dengue is rare in travellers.

There are four distinct serotypes of dengue virus: DENV 1, DENV 2, DENV 3 and DENV 4. Most people with dengue have mild or no symptoms and will get better in 1-2 weeks. However, there is an increased risk of severe dengue with the second dengue infection [1].

There has been a dramatic increase in dengue cases worldwide over the past two decades [2]. Since the beginning of 2023, the World Health Organization (WHO) has reported an increase in dengue cases and deaths in known risk countries, with further spread to areas previously considered dengue free. More than five million dengue cases and over 5,000 dengue-associated deaths have been recorded across all six WHO world regions [3].

Advice for health professionals

Qdenga® guidance is being drafted for the 'Green Book'. Health professionals offering this vaccine must ensure they are adequately informed on the safe use of the vaccine. Health professionals must recognise and work within the limits of their competence. As determining previous dengue infection can be complex, health professionals may wish to wait for the 'Green Book' guidance before providing this vaccine to travellers.

As Qdenga® is new to the UK market, it will be intensively monitored by the Medicines and Healthcare products Regulatory Agency (MHRA). All suspected adverse reactions to Qdenga® should be reported on the [yellow card scheme](#) and to the manufacturers Takeda UK Ltd, email AE.GBR-IRL@takeda.com. Further guidance on reporting adverse reactions to Qdenga® is in development and will be published in coming weeks.

Another dengue vaccine Dengvaxia® is licensed in a small number of endemic countries for use in the local population [1]. Dengvaxia® is not available in the UK. The vaccine has been shown to be efficacious and safe in persons who have had a previous dengue infection but carries an increased risk of severe dengue in those who experience their first natural dengue infection after vaccination.

Resources

- [Dengue factsheet](#)
- [UK Health Security Agency and NaTHNaC: Mosquito bite avoidance: advice for travellers](#)
- [UK Health Security Agency on behalf of the joint Human Animal Infections and Risk Surveillance \(HAIRS\) group: HAIRS risk assessment: Dengue](#)

References

- [World Health Organization, Dengue and severe dengue, 17 March 2023 \[Accessed 21 March 2024\]](#)
- [World Health Organization, Dengue - Global situation, 21 December 2023. \[Accessed 21 March 2024\]](#)
- [World Health Organization, Dengue: WHO Health Emergency Appeal 2024, 15 January 2024. \[Accessed 21 March 2024\]](#)