28 Jun 2024

Rabies vaccine shortage: advice for health professionals

Important advice on rabies vaccine shortage for health professionals

• This updates the news item of 17 June 2024

<u>Rabies</u> is a vaccine-preventable viral disease spread mostly by contact with saliva from any rabies-infected wild or domestic animal, via a bite, scratch, lick to an open wound or with the eyes, mouth or nose (mucous membranes).

Bats can also carry rabies, including in the United Kingdom (UK) [1].

In humans, rabies is almost always fatal, once symptoms develop [1, 2]. Rabies can be prevented by avoiding animals and seeking prompt medical attention if in contact with saliva from a rabies-infected wild or domestic animal, including pets.

When pre-exposure rabies vaccine products are in short supply, health professionals may need to:

- Prioritise vaccine doses and schedules for those at highest risk, such as travellers to endemic areas for extended periods, young children and those who will have contact with animals such as vets or animal handlers.
- Consider alternative licensed regimens.
- Delay vaccination for a few days until vaccine is back in stock (there is no need to restart the course). Information on <u>interrupted vaccination schedules</u> is available.
- Consider if the traveller can complete their course when abroad. The ISTM Global Travel Clinic Directory provides details of clinics at travel destinations, if vaccine courses need to be completed abroad.

Verorab® was given a UK licence on 1 November 2023 [3].

As of June 2024, Rabipur® rabies vaccine is out of stock in the UK until 24 July 2024 and supplies of Verorab® rabies vaccine are limited [4].

In addition to the three-dose rabies vaccine regimen, the current licence for Verorab[®] and Rabipur[®] rabies vaccines allows a two-dose intramuscular injection course seven days apart.

With Verorab®, there is also provision for an intradermal two-dose (one injection in each arm for adults and children or each anterolateral thigh for infants and toddlers) seven days apart [3]. Intradermal rabies vaccination is only reliable if the whole 0.1 ml dose is given properly into the dermis and should only be given by health professionals experienced in intradermal technique. The intradermal route should not be used for travellers taking chloroguine as malaria prophylaxis [1].

The UK Health Security Agency Immunisation against infectious disease (the Green Book) Rabies chapter does not currently reflect this new licensing information. The World Health Organization (WHO) do advise that pre-exposure rabies vaccine can be given by the intradermal or intramuscular route [5].

A two-dose schedule would be considered as partially immunised in the UK [6]. However, WHO and the US Centers for Disease Control and Prevention both recommend a two-dose pre-exposure rabies vaccine course [5, 7].

Travellers at occupational risk, who cannot complete their vaccine schedule, should be advised to contact their Occupational Health department/employer so they can consider any additional mitigation/protective measures needed.

All at risk travellers should be counselled about animal bite avoidance measures and what to do if they are bitten, scratched or licked, regardless of whether they have received pre-exposure vaccine before travel.

A practical guide to <u>undertaking a risk assessment of potential rabies exposures and the correct use</u> <u>of post-exposure treatment</u> (PET) is available from the UK Health Security Agency [6].

Resources

- Outbreak Surveillance
- Rabies factsheet
- Rabipur® rabies vaccine: Summary of Product Characteristics
- Verorab® rabies vaccine: Summary of Product Characteristics
- <u>UKHSA rabies post exposure treatment: management guidelines</u>
- Rabies information leaflet for travellers

References

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- 2. World Health Organization. Rabies Fact sheet. 5 June 2024. [Accessed 28 June 2024]
- 3. Sanofi. Verorab®, powder and solvent for suspension for injection. Last updated on emc: 22 May 2024. [Accessed 28 June 2024]
- 4. UK Health Security Agency. Vaccine update: issue 345, May 2024. 3 June 2024. [Accessed 28 June 2024]
- 5. World Health Organization. Rabies vaccines and immunoglobulins: WHO position. 3 June 2018. [Accessed 28 June 2024]
- **6.** <u>UKHSA.</u> Rabies post-exposure treatment: management guidelines. Last updated 1 May 2024. [Accessed 28 June 2024]
- 7. US Centers for Disease Control and Prevention. Rabies Pre-exposure Vaccination. 15 May 2024. [Accessed 28 June 2024]