

The Use of Pertussis Vaccine in Adults

Background

The Travel Team has received enquiries from travellers going to Australia concerning pertussis vaccine.

There have been large outbreaks of pertussis in Australia and USA over the last 3-5 years. Travellers have become concerned either because of risk of contracting pertussis themselves or because, if infected, they may put very young children who are too young to be vaccinated at risk (e.g. grandparents visiting new grandchildren).

In many countries reported cases of pertussis are increasing among infants and adolescents. Adults who are not immune to pertussis may transmit the disease to children. Children too young to be vaccinated against pertussis are particularly vulnerable and may be infected by their own parents or grandparents¹.

Immunisation against pertussis in adults

Immunity following infection and clinical disease wanes with time, as does that provided by vaccination. There is no definitive data available on the duration of protection following a childhood vaccination course. A number of studies have evaluated the duration of protection after immunisation with whole-cell vaccine. Those that provide the longest period of evaluation indicate that protection declines by 50% over a period of 6-12 years².

There is no serological test available to determine immunity to pertussis³

Immunisation against pertussis is not recommended for children over the age of 10 or adults in the U.K. (Green Book) but in many countries, including Australia, U.S.A and Canada, a booster dose in adolescence is part of the national vaccination schedule⁴.

There is no monovalent pertussis vaccine available in the U.K. There is a combined vaccine (diphtheria, tetanus, pertussis, polio – dTap-IPV) licensed for children / adolescents / adults (Sanofi Pasteur MSD, Repevax®) in the U.K. which would be suitable for use in situation where immunising adults would be desirable⁵.

Repevax can be purchased from Sanofi Pasteur MSD

<http://www.spmsd.co.uk/home.asp?catid=3>

Advice for travellers

1. Evidence of immunisation against pertussis is not a condition of entry into Australia
2. Adults travelling from the U.K. to Australia are unlikely to be immune to pertussis unless they have received a pertussis-containing vaccination in recent years. The risk of infection with pertussis as a visitor to Australia is likely to be small, however, specific groups of travellers such as those travelling to carry out medical work may be at increased risk and the traveller should be discussed with their employer.

3. Travellers wishing to be immunised against pertussis to reduce the risk of their being infected and transmitting the disease (for example grandparents travelling to visit new grandchildren) should arrange to receive the vaccine when they arrive at their destination.
4. If (3) is not possible, it is possible for an adult to be vaccinated against pertussis in the U.K. using Repevax. The vaccine is licensed for this use but it would be outwith the recommendations of the Green Book and would be at the discretion of the vaccinator. Travellers should discuss this with their GP in the first instance.
5. The vaccine would not normally be supplied free to travellers. A private prescription can be written and the vaccine supplied by a high street chemist, or the GP surgery or clinic can buy a supply of the vaccine direct from Sanofi Pasteur – V@xishop

References

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