Typhoid vaccine for travellers

The PHPU has been notified of 3 cases of typhoid this year, all of which were imported from Pakistan and India. One of the contacts of these cases is a food worker who has been excluded from work until microbiological clearance.

As international travel increases, many health authorities have been reporting an increase in cases of typhoid (*Salmonella typhi*). The disease is usually contracted from ingestion of food or water that is contaminated with faeces containing typhoid bacteria. Typhoid is common in countries with substandard sanitation and poor food hygiene. The risk of disease is highest in the Indian subcontinent.

Typhoid bacteria enter the bloodstream and have a varying effect in severity of symptoms. Clinical features include fever, diarrhoea, myalgia and headache, with disseminated disease and multi-organ involvement in some cases. Between 2-4% of acute cases of typhoid become carriers. The risk of long-term carriage of the organism increases with age (especially in females) and with those who have biliary tract abnormalities. Asymptomatic carriers are a natural reservoir for typhoid and serve to maintain the disease in endemic form. Outbreaks of typhoid are often traced to infected food handlers; therefore public health applies stringent exclusion criteria to chefs who have contracted typhoid.

Typhoid vaccine is recommended for people who travel to endemic areas such as South Asia, parts of South East Asia, Central and South America, the Middle East and Africa, especially if the traveller is staying with or visiting the local population.

The vaccines are estimated to be around 50-70% effective in protection against typhoid. The vaccine is poorly immunogenic in infants and young children. The polysaccharide Typhim Vi vaccine is licensed for use in infants aged 18 months and older. The polysaccharide Typherix vaccine is licensed for use in infants aged 2 years and over. The vaccine offers no protection against paratyphoid. Combined vaccines containing hepatitis A also exist for adults.

Protection begins to have effect about 7 days after vaccination and reaches its peak at about one month after vaccination. **Travellers are advised to receive the vaccine at least 2 weeks before possible exposure to typhoid.** Due to antibody depreciation with time, revaccination is recommended every 3 years.

Measles cases in Roma family

The PHPU was made aware of a laboratory-confirmed case of measles in a child just under four years of age, who had been admitted to RHSC in early May. The child made a full recovery and was discharged home 3 days later. On investigation, it was found that the child belonged to a Roma family, who had arrived in Scotland a week earlier from Romania, and was not registered with a local GP.

Prodromal symptoms commenced in the child a few days before admission to hospital, and public health staff are therefore confident that the case was imported from Romania. Within the family home there were several adults and 4 children none of whom had been immunised against measles. One of the children who had symptoms suggestive of measles was also admitted to RHSC and later confirmed as a case.

The PHPU worked closely with the South East Glasgow CHCP to ensure that all of the family were registered with a GP practice. The children were given one dose of MMR with recommendation for a further dose one month later. The local surgery has been asked to encourage other members of the nearby Roma community to come forward for MMR and other vaccines as required.

Since this group of people is known generally to have low immunisation-uptake, the PHPU would encourage all practices to consider targeting Roma people and other low-uptake ethnic groups for MMR and other vaccinations required within the UK schedule. GPs are reminded to report any suspected cases of measles to the PHPU upon which salivary-testing kits will be sent out. Salivary samples obtained are sent to the Health Protection Agency in Colindale, London.

NHS care staff are reminded that those who have not received 2 doses of MMR, and are therefore susceptible, should contact their occupational health department.

**Menitorix - porcine material**

Please note that materials of animal origin are not used as excipients in the Hib-MenC conjugate vaccine. However, during the preparation of the active ingredients Haematin which is of animal origin is, or has been, used.

Haematin is a protein originally purified from porcine blood and used as an additive during the generation of the master seed and bulk culture of *Haemophilus influenzae* Type B (Hib).
HIV & sexual health training
Three training events in sexual health will take place in June, July and August and are aimed at health professionals working in primary care settings and those who work with asylum seekers and refugees. For further information on the content of the courses and/or to book, call 211 8639. Please note that these events are free.

1. HIV & Other Bloodborne Viruses
   For health care professionals working with asylum seekers/refugees
   Thursday 14th June 2007 (2-4pm)
   Venue: The Seminar Room (4th Floor)
   Sandyford Initiative
   Claremont House
   20 North Claremont Street
   Glasgow G3 7LE

2. Common Sexually Transmitted Infections
   For health care professionals working with asylum seekers/refugees
   Wednesday 18th July 2007 (2-4pm)
   Venue: The Seminar Room (4th Floor)
   Sandyford Initiative
   Claremont House (see above)

3. GP Practice HIV Education Day
   For health care professionals working in GP practices
   Wednesday 29th August 2007 (2-7pm)
   Venue: Boardrooms 1&2
   Dalian House
   350 St Vincent Street
   Glasgow G3 8YZ

Malaria and UK travellers
New figures from the Health Protection Agency (HPA) show that there were 1758 cases of malaria reported in UK travellers in 2006 of which 8 were fatal. Of these cases, 1386 were due to the potentially fatal Plasmodium falciparum which is a major international health risk and kills more than a million people a year in Africa. Plasmodium vivax, which causes a debilitating disease, but is rarely fatal, was responsible for 219 cases. These cases reinforce the public health message that people visiting malaria-endemic countries must take all appropriate precautions. This is particularly important for 2nd and 3rd generation immigrants born in the UK but going back to countries of their parents'/grandparents' origin to visit relatives.

Also in 2006 there was the first imported case of Plasmodium knowlesi (a primate malaria parasite found in parts of Southeast Asia which can occasionally be transmitted to humans). P. knowlesi infection of humans can be prevented in the same way as for other malaria parasites. However, this should not distract attention from the serious problems posed by P. falciparum.

A detailed report on Scottish cases will appear in the next Travel Health surveillance report (in HPS Weekly Report no 2007/27).

Pertussis PCR at Yorkhill
Bordetella pertussis, the organism responsible for causing whooping cough, can be difficult to culture in the microbiology laboratory using traditional culture techniques. The time required to grow the organism, often 7-10 days, results in prolonged isolation of patients and a delay in tracing possible contacts.

As part of the aim to continually improve infectious disease diagnosis at Royal Hospital for Sick Children (Yorkhill), real-time PCR method has been developed to test clinical specimens for Bordetella pertussis and Bordetella parapertussis (a related less virulent organism). This new method can be used in conjunction with traditional culture using the same pernasal swabs or naso-pharyngeal aspirates. PCR allows improved sensitivity and shortens the time taken for diagnosis with results being available within two working days of the specimen reaching the microbiology department at Yorkhill.

This service has been opened up to accept specimens from other microbiology labs in the Greater Glasgow and Clyde area initially. Specimens from labs. outwith RHSC would be set up for culture in their originating labs. and forwarded to Yorkhill for PCR testing.

GPs wishing to take advantage of this service should contact their local microbiology lab. which will be able to provide appropriate swabs and receive the inoculated specimens. Due to potential problems with transport and patient identification, Yorkhill is unable to receive specimens directly. All results and lab. reports will be returned to the referring lab.

Repevax/Infanrix IPV® supplies
Both Repevax (dTaP/IPV) and Infanrix IPV® (dTaP/IPV) can be used as a booster following the completed 3-dose primary childhood immunisation schedule.

The Department of Health awarded a joint contract to GSK and Sanofi Pasteur MSD to supply these vaccines to the UK during 2006/7 and to stabilise stockholding, only Infanrix IPV® (GSK) is now being issued to vaccine-holding centres from the national stockholding depot.

During June/July, the holding centres will commence issuing Infanrix IPV® on receipt of orders for the booster vaccine.

Please note that Infanrix IPV® should be administered using the specific Infanrix IPV® PGD and not the Repevax PGD currently in circulation.

Error in May's edition - Hep B
In May’s newsletter immunisation staff were wrongly advised that Hep B vaccine for babies should be obtained on prescription through primary care and not ordered from Leverndale pharmacy. In fact, it should be ordered directly from Leverndale pharmacy and not from local pharmacies. However, the arrangement for obtaining vaccine for adults remains unchanged and GPs should either write a prescription or obtain it through stock order.

If you would like to comment on any aspect of this newsletter please contact Marie Laurie on 201 4933 or at marie.laurie@gpc.scot.nhs.uk