

The Federation of Tour Operators and Association of British Travel Agents have been informed about these cases. They are taking steps to alert their members about this issue, and the need to remind travellers to malarious areas to seek medical advice prior to departure.

This series of cases in people returning from The Gambia is associated predominantly with tourism. However, most malaria cases in the UK occur in former residents of malaria-endemic countries, mainly West Africa, who return home to visit friends or family [10]. Most have not taken appropriate chemoprophylaxis. All travellers to such areas, irrespective of where they were born, should take medical advice and appropriate preventive measures to reduce their risk of malaria.

Travellers who fall ill following a visit to a malarious area should seek prompt medical attention, and be aware that malaria can present up to a year or more after return [10]. Healthcare professionals should always take a travel history from anyone with a fever or flu-like illness, and be aware that absence of fever does not exclude the diagnosis of malaria. If the travel history includes travel to a malarious area in the previous year, blood films should be examined without delay.

*This article is adapted by the authors from reference 1.*

## SHORT REPORTS

### FIRST ISOLATION OF *CLOSTRIDIUM DIFFICILE* PCR RIBOTYPE 027, TOXINOTYPE III IN BELGIUM

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Outbreaks of diarrhoea due to *Clostridium difficile* ribotype 027, toxinotype III have been reported in North America, United Kingdom, and the Netherlands [1-4], and this toxinotype has also been isolated from patients in Belgium. Recently, it has been suggested that the severity of the disease is associated with hyperproduction of toxins A and B by this new variant strain [5].

By 19 September 2005, four patients in the Jan Yperman hospital in Leper, southwest Belgium, had been infected. There was one death due to complications of *C. difficile*-associated diarrhoea and an underlying condition. All patients were female, aged over 70 and had spent longer than 2 weeks in hospital. Two patients were treated with quinolones, a third patient with a betalactam antibiotic and the fourth patient, who had a milder form, received no antibiotics at all. In the Jan Yperman hospital, the incidence of *C. difficile*-associated diarrhoea increased from 10 per 10 000 admissions in January – August 2005 to 33 per 10 000 patient admissions in September 2005.

The strain was characterised as PCR ribotype 027 and toxinotype III at the reference laboratory at Leiden University Medical Center. It also contained the binary toxin and had an 18bp deletion in a toxin regulator gene (*tcdC*). As determined by E-tests, the isolates were resistant to ciprofloxacin (MIC>32 mg/l) and susceptible to clindamycin (MIC=2 mg/l) and metronidazole (MIC=0.19 mg/ml). These characteristics are similar as the strain that has been isolated from outbreaks in the United States, Canada, the UK and the Netherlands.

Contact tracing did not reveal the origin of this strain. The hospital has taken additional infection control measures and used the guidelines recently published by Centre for Infectious Disease Control at the National Institute for Public Health and the Environment (RIVM) in Bilthoven (<http://www.rivm.nl>). Subsequently, the Health

## References

1. HPA. Malaria deaths in travellers returning from The Gambia. Commun Dis Rep CDR Weekly 2005 ; 15(49): news. (<http://www.hpa.org.uk/cdr/>).
2. World Tourism Organization (WTO). Yearbook of tourism statistics. 2002. Madrid: WTO; 2002.
3. AC Nielson TravelTrack report, 2005.
4. Malaria country profiles: The Gambia. World Health Organization Regional Office for Africa website [online] 2004 [cited 8 December 2005] (<http://www.afro.who.int/malaria/country-profile/gambia.pdf>).
5. Unpublished data supplied by the Health Protection Agency Malaria Reference Laboratory, December 2005.
6. National Travel Health Network and Centre. Travel Health information sheets: Insect bite avoidance. (<http://www.nathnac.org/pro/factsheets/iba.htm>).
7. Moore DAJ, Grant AD, Armstrong M, Stümpfle R, Behrens R. Risk factors for malaria in UK travellers. Trans R Soc Trop Med Hyg 2004; 98: 55-63.
8. Bradley DJ, Bannister B, on behalf of the Health Protection Agency Advisory Committee on Malaria Prevention for UK Travellers. Guidelines for malaria prevention in travellers from the United Kingdom for 2003. Commun Dis Public Health 2003; 6(3): 180-99. ([http://www.hpa.org.uk/cdph/issues/CDPHvol6/No3/6\(3\)p180-99.pdf](http://www.hpa.org.uk/cdph/issues/CDPHvol6/No3/6(3)p180-99.pdf)).
9. Health Protection Agency. Consequences of failure to use malaria prophylaxis in The Gambia. Commun Dis Rep CDR Wkly 2003; 13(49): news. (<http://www.hpa.org.uk/cdr/archives/2003/cdr4903.pdf>).
10. Health Protection Agency. Foreign travel-associated illness. England, Wales, and Northern Ireland – Annual Report 2005. London: Health Protection Agency Centre for Infections; 2005. ([http://www.hpa.org.uk/hpa/publications/travel\\_2005/default.htm](http://www.hpa.org.uk/hpa/publications/travel_2005/default.htm)).

Inspectorate and the Clostridium Reference Centre in Brussels, Belgium, were informed.

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## References

1. Eggertson L. *C. difficile*: by the numbers. CMAJ. 2004;171:1331-32.
2. Outbreak of Clostridium difficile in a hospital in south east England. CDR weekly 2005;15(24): news. (<http://www.hpa.org.uk/cdr/archives/archive05/News/news2405.htm>).
3. McDonald C. Clostridium difficile: responding to a new threat from an old enemy. Infect Control and Epidemiol. 2005;26:672-5.
4. Kuijper EJ, Debast SB, van Kregten E, Vaessen N, Notermans DW, van den Broek PJ. Clostridium difficile ribotype 027, toxinotype III in the Netherlands. Ned Tijdschr Geneesk. 2005; 49:2087-9.
5. Warny M, Pepin J, Fang A, Killgore G, Thompson A, Brazier J, Frost E, McDonald T. Toxin production by an emerging strain of Clostridium difficile associated with outbreaks of severe disease in North America and Europe. Lancet. 2005;366:1079-84.

### RUBELLA OUTBREAK IN AN UNVACCINATED RELIGIOUS COMMUNITY IN THE NETHERLANDS LEADS TO CASES OF CONGENITAL RUBELLA SYNDROME

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The first children with congenital rubella syndrome (CRS) associated with the recent rubella outbreak in the Netherlands [1] have been born. During the outbreak, which started in September 2004, 387 serologically confirmed cases of rubella were notified. The most recent postnatally acquired case had an onset date around mid-September, suggesting that circulation of the virus has now ended. The geographical location of the outbreak closely matched areas of low vaccine coverage (see [http://www.rivm.nl/vtv/object\\_map/o1503n21466.html](http://www.rivm.nl/vtv/object_map/o1503n21466.html)). The rubella outbreak predominantly affected an