

# Overseas briefs

## *World Health Organization*

This material has been summarised from information on the World Health Organization Internet site. A link to this site can be found under 'Other Australian and international communicable diseases sites' on the Communicable Diseases Australia homepage.

## *Yellow fever in Senegal*

As of 28 November 2002, the Ministry of Health has confirmed 60 cases of yellow fever and 11 deaths. The outbreak has affected 14 districts in 7 regions. Immunisation campaigns in 5 districts will begin within the next week. The World Health Organization is supporting these immunisation campaigns with both technical assistance and vaccine supplies.

## *West Nile virus*

### **United States of America**

As of 26 November 2002, the World Health Organization Collaborating Centre for Arthropod-Borne Viruses — Western Hemisphere, at the Centers for Disease Control and Prevention, has reported 3,737 human cases of the West Nile virus, with 214 deaths occurring in 39 states and the District of Columbia. During 2002, West Nile virus activity (evidence of infections in birds, humans, mosquitoes, and other animals, primarily horses) has been documented in 43 states and the District of Columbia. For more information about this outbreak see the Centers for Disease Control and Prevention's website at: <http://www.cdc.gov/ncidod/dvbid/westnile/surv&control.htm>.

### **Canada**

As of 12 November 2002 Health Canada has reported a total number of 141 human cases of West Nile virus infection: 84 suspected cases and 57 confirmed cases and 2 deaths. One confirmed case was resident in the province of Alberta, one suspected case and 7 confirmed cases were resident in the province of Quebec, and the remaining 83 suspected cases and 49 confirmed cases were resident in the province of Ontario. One additional death in a confirmed case and 5 deaths in suspected cases are under investigation in Ontario to determine whether these can be attributed to West Nile virus infection. The one confirmed case in Alberta and one confirmed case in Ontario most likely acquired the infection while travelling in the United States of America whereas all other cases acquired their infection within their home province.

For more information about this outbreak see the Health Canada website at: <http://www.hc-sc.gc.ca/pphb-dgspsp/wnv-vwn/index.html>

## *Meningococcal disease in the Great Lakes area, Burundi*

As of 22 September 2002 the Ministry of Health in Burundi had reported a total of 934 cases of meningococcal infection and 68 deaths. Between 23 and 27 September, two cases were laboratory confirmed as *Neisseria meningitidis* serogroup W135. To date, only serogroup A had been identified in 53 samples from all affected provinces. Systematic sampling of suspected cases is ongoing in order to detect whether there has been a shift in the dominant serogroup from group A to group W135. In the meantime, the vaccination campaign with the current polysaccharide bivalent vaccine for serogroups A and C will continue in the affected provinces.

## *ProMED-mail*

This material has been summarised from information provided by ProMED-mail (<http://www.promedmail.org>). A link to this site can be found under 'Other Australian and international communicable diseases sites' on the Communicable Diseases Australia homepage.

## *Dengue update*

### **Taiwan**

Source: *Taipei Times*, 28 December 2002 (edited)

There have been a record number of dengue fever cases (5,227) reported in Taiwan in 2002. Outbreaks of dengue fever may occur throughout the year in Taiwan even without imported cases. The epidemic may not be wiped out in southern Taiwan this winter. Outbreaks of dengue fever in Taiwan in the past few years have been caused by dengue virus type 2.

### **Kelantan, Malaysia**

Source: *New Straits Times (Malaysia) online*, 17 December 2002 (edited)

A total of 1,166 cases of dengue had been detected in the Kelantan State capital since early 2002, with one confirmed death. The figures show an increase on the 626 cases reported for the whole of 2001.

### **Malaysia**

Source: *Borneo Bulletin (Brunei)*, Agence France Presse, 17 December 2002 (edited)

In the first 10 months of 2002, the dengue fever outbreak in Malaysia had claimed the lives of 40 people. In September 2002, Malaysia placed its capital city, Kuala Lumpur, and four states, on dengue fever alert following an alarming surge in cases.

### *Health-care facilities — Washington State, United States of America*

Source: Karen Steingart (edited)

In December 2002, two retirement centres in Clark County, Washington reported outbreaks of gastrointestinal illness. Over the course of the following 3 weeks, 8 similar outbreaks were reported from nursing homes, health care facilities, and the county jail. A case was defined as acute onset of gastrointestinal illness, including vomiting or diarrhoea, with onset of symptoms after 30 November 2002 in a person working or residing in one of the outbreak settings. Three hundred and fifty-four cases were identified, of which 326 (92%) were associated with four facilities.

The following preliminary analysis is based on cases from these four facilities. Eight cases were hospitalised. One of the 8 cases subsequently died of complications of pneumonia. Stool cultures from ill persons at one of the facilities were negative for enteric pathogens, however, stool samples from 2 patients at two different sites were positive for noroviruses by reverse transcriptase-polymerase chain reaction. Inspections of food preparation and handling practices at all of the facilities have not suggested a foodborne etiology. Control measures have included excluding ill staff from work; emphasising hand hygiene; and requiring meticulous cleaning of environmental surfaces with a 10 per cent solution of household bleach or other virucidal agent. While the origin of the outbreaks has not been identified, the distribution of onset dates suggests person-to-person transmission.

### *Cruise ships — United States of America*

Source: *The State/NY Daily News*, 24 December 2002 (edited)

In recent months, there have been major outbreaks of gastrointestinal illness involving several thousand passengers in more than 20 outbreaks on cruise lines in the United States of America. This is triple the number from last year and more than the 4 previous years combined, according to the Centers for Disease Control and Prevention's vessel sanitation program. The health agency declares an outbreak when 3 per cent or more of cruise ship's passengers or crew members get the stomach illness. More passengers than ever are taking cruises. The industry expects to tally 7.5 million passengers by the end of this year, a 50 per cent increase since 1997.

### *Hospitals — British Columbia, Canada*

Source: *Canada.com*, 24 December 2002 (edited)

At Nanaimo Regional General Hospital, British Columbia, two units are now closed after being hit by norovirus infection. The transitional care unit reports that 9 patients and 4 staff have symptoms, while 8 patients and one staff member have come down with the virus in the psychiatric input unit.

Lady Minto Hospital on Saltspring Island reports 33 staff and 16 patients in extended care have had norovirus infection symptoms since 10 December 2002. A further 38 patients and an unknown number of staff at Mount Tolmie extended-care facility are showing norovirus infection symptoms.

### *Tuberculosis — Russia*

Source: *Dr Alina Martynov* (edited)

There is increasing tuberculosis (TB) morbidity in the territory of the Russian Primorsky region in the far eastern area of Russia. Tuberculosis has increased from 45 cases per 1,000 population in 1997 to 167 cases per 1,000 population in 2002. In addition, there has been a 54 per cent to 140 per cent increase in the rate of TB-related deaths among adults aged 25–44 years.

A vital contributing factor is HIV co-infection. A recent review of autopsy reports from the Vladivostok AIDS Centre showed that 67 (42.4 per cent) of 158 adult patients with AIDS were diagnosed with TB, indicating that this disease is the most common opportunistic infection for persons with AIDS. Commensurate with the increase in TB cases is a surge in the prevalence of multi-drug resistant tuberculosis in adult patients. Tuberculosis laboratories have reported an increase in the prevalence of multi-drug resistant strains of *Mycobacterium tuberculosis* from 12.5 per cent in 2000 to 17.8 per cent in 2002.

### *Glycopeptide intermediate resistant Staphylococcus aureus death in Scotland*

Source: *Eurosurveillance Weekly Issue 51*, 19 December 2002 (edited)

Laboratory tests have confirmed that a patient who died in Scotland last week was infected with a glycopeptide intermediate resistant *Staphylococcus aureus* (GISA).<sup>1</sup> GISA has increased resistance to first line antibiotics used for treating infections caused by methicillin resistant *Staphylococcus aureus* (MRSA), namely, vancomycin and teicoplanin.<sup>2</sup> This is the second report of an infection with this organism in Scotland and possibly the first report in the United Kingdom of an associated death.<sup>3</sup>

The patient, a woman in her early 50s, was admitted for routine bowel surgery but contracted MRSA while in an intensive therapy unit. Although the patient was treated for over 70 non-consecutive days with either vancomycin or teicoplanin in combination with meropenem or gentamicin or rifampin, the MRSA persisted and eventually developed resistance to glycopeptide antibiotics (vancomycin minimum inhibitory concentration 8 mg/L). Postmortem findings confirmed tricuspid endocarditis with metastatic abscesses throughout the lungs. The patient had been previously fit and well, apart from mild obesity and hypertension.

All patients, staff, and family members in contact with the patient during the period in which the MRSA acquired this additional resistance, have been offered screening as a precautionary measure. There is little evidence to show transmission of this organism from person to person and it is unlikely that there is any danger to the general public.<sup>4</sup> The unit was closed, cleaned, and screened before reopening.

### References

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2. Hiramoto K, Hanaki H, Ino T, Yabuta K, Oguri T, Tenover FC. Methicillin-resistant *Staphylococcus aureus* clinical strain with reduced vancomycin susceptibility. *J Antimicrob Chemother* 1997;40:135–136.
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### *Human European bat lyssavirus death — Scotland*

Source: *Eurosurveillance Weekly*, vol. 6, issue 50, 12 December 2002 (edited)

A human case of European bat lyssavirus (EBL) 2 infection in Scotland in November 2002 was confirmed by the Veterinary Laboratories Agency. This is the first confirmed human infection of EBL 2 in the United Kingdom (UK), and the first human rabies-like infection acquired in the United Kingdom since 1902. The man who became infected was admitted to hospital with an acutely progressing neurological illness and died on 24 November 2002. The clinical presentation was compatible with rabies and the man was a licensed bat handler who had been bitten by bats on several occasions in Scotland, including once during the period of incubation before he developed this illness. He had not recently travelled abroad to countries where rabies is endemic. The

patient had not received rabies immunisation before or after exposure to bat bites.

This is the fourth confirmed human EBL infection in the world and only the second one with EBL 2. Prior to the recent diagnosis of rabies-like infection in Scotland, two EBL 2 infections have been confirmed in bats in the UK, one in Newhaven on the southern coast of England in 1996 and another in Lancashire in 2002. Both of these bat rabies cases were in Daubenton's bats. It was thought in 1996 that the bat might have migrated from continental Europe. However, the finding in 2002 of an infected bat well away from mainland Europe and the infection of a bat handler is consistent with EBL being now endemic in UK bats, although probably at very low levels. The Veterinary Laboratories Agency in the UK tests about 200 bats every year for this virus and has not so far identified EBL in any bats other than the two cases in 1996 and 2002.

EBL 1 and 2 are rabies-like viruses that are carried by insectivorous bats in Europe. They are from the same family of viruses (the Rhabdoviridae) as cause terrestrial rabies and bat rabies in the Americas and Australia, and are classified in the genus *Lyssavirus*, but differ in genotype and serotype. In a global context, classical rabies remains a greater public health burden than EBL, with 30,000 to 50,000 deaths per year. EBL 1 and 2 continue to present a small risk to human health in countries in Western Europe that are otherwise rabies-free.

### *vCJD update — United Kingdom*

Source: *UK Department of Health, press release 2002/0507, 2 December 2002 (edited)*

On 6 December 2002, the United Kingdom Department of Health issued the latest information about the numbers of known cases of Creutzfeldt-Jakob disease. This includes cases of variant Creutzfeldt-Jakob disease (vCJD); the form of the disease thought to be linked to bovine spongiform encephalopathy. The following is a summary of vCJD cases:

- Deaths from definite vCJD (confirmed): 93
- Deaths from probable vCJD (without neuropathological confirmation): 25
- Deaths from probable vCJD (neuropathological confirmation pending): 1
- Number of deaths from definite or probable vCJD (as above): 119
- Total number of definite or probable vCJD (dead and alive): 129

### *Hepatitis A — New Zealand*

Source: Lester Calder

In the first 5 months of 2002, 81 cases of hepatitis A virus infection were notified in New Zealand. This sharp increase was investigated with descriptive and analytical epidemiology, virology, product trace back, and an orchard investigation.

Consumption of raw blueberries was the only significant risk factor identified (adjusted odds ratio 7.6; 95 per cent confidence intervals 2.6–22.4). Trace-back of product through retailers and wholesalers implicated a single commercial orchard. hepatitis A virus was detected in cases' faeces and in blueberries from the orchard. A sanitary audit of the orchard revealed multiple opportunities for faecal contamination of product by pickers and the possibility of contamination by sewage-contaminated ground water. A child with confirmed hepatitis A was in the orchard during harvest. Extensive food safety improvements in the berry fruit industry are under way.

### *Campylobacter in chickens — United Kingdom*

Source: Telegraph (UK), 20 November 2002 (edited)

Free-range and organic chickens are twice as likely to carry the food poisoning bacteria *Campylobacter* than battery hens, research said yesterday. The study investigated 60 organic and 130 conventional flocks and found *Campylobacter* in 58 per cent of indoor-reared flocks, but in 100 per cent of organic flocks. All chickens studied were destined for human consumption.

*Campylobacter jejuni* has become a major public health hazard and the main etiologic contributor — at least, quantitatively — to food poisoning in many countries, with contaminated raw poultry meat playing the main role. A survey conducted in the United Kingdom indicated that 50 per cent of United Kingdom-produced retail chickens are contaminated with *Campylobacter*. The emergence of quinolone and macrolide resistance in *Campylobacter jejuni* is a reason for additional concerns. Reducing *Campylobacter* levels in chickens is an essential part of cutting food poisoning cases in the UK.

### *Viral gastroenteritis*

These reports have been edited to replace 'flu-like', 'Norwalk-like', 'bug', etc, with the ICTV approved designation 'Norovirus' for the agent responsible for sudden onset viral gastroenteritis.

### *Clinic-acquired cluster of hepatitis C — United States of America*

Source: AP Online, 19 November 2002 (edited) and Nebraska Health and Human Services System, 19 November 2002 (edited)

At least 81 people treated at a Nebraska cancer clinic have tested positive for hepatitis C virus in an outbreak that may have been caused by a contaminated vial of medicine. Poor medical practices at the clinic may be to blame. The patients, who were suffering from cancer or blood disorders, were treated at the clinic in 2000 and 2001. It is possible that a clinic worker used a syringe to administer medicine to a patient who had hepatitis C, then drew more medicine from the same vial for the patient with the same syringe.

Of the 612 patients of the oncology clinic who received letters advising them to be tested, 485 chose to be tested for the virus, and of these, 81 tested positive. The apparent attack rate of 17 per cent (81 cases out of 485 tested) is high and suggests that unsafe injection practices were occurring over a period of time.

### *Malaria*

#### **Virginia, United States of America**

Source: Donald Roberts. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5141a1.htm>

Local transmission of *Vivax malaria* in Virginia and Maryland have been recently reported.

The evidence consists of 2 locally-acquired cases of *Vivax malaria* and a remarkable abundance of competent malaria vector mosquitoes. Cases occurred in Virginia, close to the Potomac River, which is popular with people who fish along the river at all hours of the day and night. A proportion of people using the river comes from other countries. In 2001 there were 34 documented cases of imported malaria in Montgomery County, Maryland alone.

The residences of the locally-acquired cases were about 7 miles from Dulles International airport. The probability that a single mosquito was carried by plane then travelled 7 miles to transmission sites and successfully transmitted malaria to 2 individuals is thought to be remote.

During this outbreak investigation, mosquitoes, *Anopheles quadrimaculatus* in particular, have been collected from many localities around the Potomac River. *Anopheles quadrimaculatus*, which is historically the primary malaria vector in this region, has been the overwhelmingly dominant mosquito in Maryland collections since early August 2002. Mosquitoes collected in the vicinity of the 2 malaria cases, and in other locations, were also predominantly *Anopheles quadrimaculatus*.

The epidemiological factors listed above and cited in the Centers for Disease Control and Prevention's Morbidity and Mortality Weekly Report of 5 October 2002 suggest that local transmission of *Vivax malaria* occurred in late summer on at least two occasions on the Virginian side of the Potomac River.

### *Malaria and mosquito genomes decoded*

Source: Press Release WHO/75 (edited)

The decoding of the genomes of the most dangerous malaria parasite, *Plasmodium falciparum*, and of the most important mosquito which transmits it, *Anopheles gambiae*, signals a turning point for global public health.

Malaria infects more than 300 million people every year, killing at least one million of them. About 90 per cent of the deaths are in children aged under 5 years. Both the mosquito and the parasite have evolved

mechanisms to escape the limited, affordable technologies available in the developing world. Drugs targeting the parasite are losing their effectiveness. Today, resistance to chloroquine, the cheapest and most widely used antimalarial, is common throughout Africa.

*Anopheles gambiae* is an extremely efficient transmitter of the disease because of its strong preference for humans, and humans within its range can be bitten hundreds of times a day.

The breakthroughs announced in the journals *Nature* and *Science* open an entirely new field to public health researchers. With this new knowledge, malaria scientists will be able to design new insecticides, repellents, and drugs. TDR has for the last 2 years been training over 100 scientists from Latin America, Africa, and Asia in how to search the genomes, identify vulnerabilities, and build new genetically based drugs and insecticides.