

## Overseas briefs

### *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 fever: global update*

#### **El Salvador**

El Salvador has reported 1,773 cases of dengue infection, six of which died. All areas (departments) of the country have been affected; based on overall rates, the worst affected departments are San Salvador, Santa Ana, Cabanas, and Cuscatlan.

#### **Malaysia**

In Malaysia, there have been 3,156 dengue fever cases in Selangor. So far, 5 people have died from the disease. 'There has been a 38 per cent increase in the total number of cases so far this year compared to the same period last year,' (an official) said. Most of the cases were dengue fever while 183 cases were the more deadly form, dengue haemorrhagic fever. Of the total number of reports, 1,222 cases or 38.7 per cent were confirmed cases. Control measures being taken include fogging at all areas where cases were reported, eliminating breeding spots, destroying *Aedes* larvae and deploying residents to get involved in clean-ups.

#### **Honduras**

Source: [http://www.nacion.co.cr/In\\_ee/2002/julio/15/mundo7.html](http://www.nacion.co.cr/In_ee/2002/julio/15/mundo7.html)

The government of Honduras announced that the number of deaths due to dengue haemorrhagic fever in the past 6 months might increase to twenty-three. The official reports indicate that as of 15 July 2002, the disease has been responsible for 9 deaths. As of 15 July 2002, there have been more than 6,262 cases of classical dengue fever and 545 cases of dengue haemorrhagic fever identified in the country. With the arrival of the rainy season at the end of May, the government has mobilised a large number of brigades with instructions to eliminate standing water where the *Aedes aegypti* mosquito breeds.

#### **Taiwan**

Source: *Taipei Times*, 15 July 2002 (edited) <http://www.taipeitimes.com/news/2002/07/15/story/0000148315>

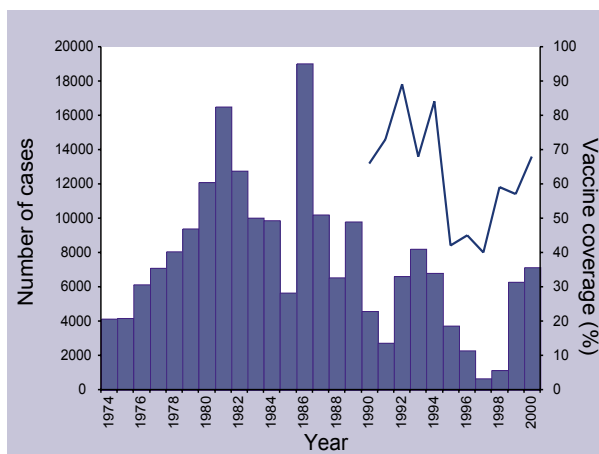
Southern Taiwan is experiencing a major outbreak of dengue fever with an average of 10 confirmed cases reported every day. As of 15 July 2002, there were 283 confirmed cases, including 202 in Kaohsiung City, 80 in Kaohsiung County, and one in Taipei County. Three of the cases have been confirmed as dengue haemorrhagic fever, which can be fatal if not recognised and treated properly.

### *Measles - Papua New Guinea*

A measles outbreak in the Western Highlands of Papua New Guinea has killed at least 102 children in the past 4 months. Over 1,200 paediatric measles patients were admitted to the Mt Hagen hospital between January and April 2002, with 426 cases in April alone. Limited supplies of drugs to treat the disease were received from the Australian Agency for International Development on 29 April 2002, but one medical officer said that would not be sufficient to curb the outbreak.

The severity of this outbreak is unusual and suggests either low vaccination coverage in the affected area or perhaps a breakdown in the cold chain for the vaccine distribution. Historical notifications and recent rates of vaccine coverage are illustrated in the Figure. The medications would be used for treatment of complications and symptoms of measles, but would not interrupt transmission of the virus. The only intervention that would interrupt transmission of the virus would be vaccination of the high-risk population with potent measles vaccine.

**Figure. Number of measles cases and measles vaccine coverage rates, Papua New Guinea**



Source: ProMed

## *Recombinant forms of HIV spreading globally*

The human immunodeficiency virus type 1 (HIV-1) is currently classified into 3 major groups: M, N, and O. Group M encompasses the global spread of HIV-1 and comprises several subtypes or clades, designated A to H, that have appeared in different geographic settings. Genetic interaction between these subtypes and the apparent evolution of new genotypes of as-yet-unknown disease-producing potential are described in two new reports.

Newly identified recombinant forms of the HIV-1 are being spread to diverse geographic regions, which could have implications for the development of an AIDS vaccine. Researchers at the Laboratoire Retrovirus in Montpellier, France, characterised the genome sequences of isolates from an individual in Senegal and one in Mali. The 2 isolates matched two others described in patients from Burkina Faso and Mali. All 4 isolates comprised a mosaic genome structure that included fragments from HIV subtypes A, G, K, and J. They matched isolates from Burkina Faso, Mali, the Ivory Coast, and Nigeria. The strains have also been isolated from patients in France and Australia, indicating global spread. The group notes the importance of seeking biological differences among subtypes and circulating recombinant forms and tracking their molecular epidemiology; 'because recombination may introduce genetic and biological consequences that are far greater than those resulting from the steady accumulation of single mutations'.<sup>1</sup>

In another report, Spanish researchers detail the characterisation of the first reported recombinant to originate in Western Europe. Its genome is made up primarily of subtype G, with the extracellular portion subtype B's env. The researchers also note that a parental non-recombinant subtype strain has been isolated in the same area, implying that the recombinant virus was most likely generated locally in north-western Spain or in Portugal.<sup>2</sup>

### **References**

1. *J Acquir Immune Defic Syndr* 2002;29:522-30.
2. *J Acquir Immune Defic Syndr* 2002;29:536-43.

## *Toxic ingestion, sodium nitrite — USA (New York)*

A food preservative was to blame for the sudden outbreak of illness that triggered a chemical-contamination scare in downtown New York. Six

victims were taken to St Joseph's Medical Center with severe breathing problems, bluish pallors and mental confusion. Because the cause was not immediately known, police, firefighters, hazardous-materials workers and anti-terrorist agents were deployed. The victims had been at a dinner party featuring a dish that included processed food from Egypt. Officials narrowed their hunt for a cause to a substance in a packet labelled in English and Arabic, that the victims said they had sprinkled on their meal. "A sample from a packet labelled 'refined iodised table salt' did not contain table salt — it was 100 per cent sodium nitrite" said an official.

Accidental excessive ingestion of sodium nitrite (saltpetre) has been responsible for prior cases or outbreaks of methemoglobinemia following food ingestion. Accidental mis-labelling of powdered substances that make their way into food preparation is, unfortunately, not an uncommon event.

## *New 'superbug' found in hospital: the ESBL bacterium can break down antibiotics - UK*

A new 'superbug' which can neutralise antibiotics and cause fatal blood poisoning has been found at a Lanarkshire hospital. The extended-spectrum beta-lactamases (ESBL) superbug is reported to have claimed the life of one patient at one of Scotland's most modern hospitals, which opened in 2001. Between July 2001 and April 2002, 41 patients contracted the bacteria, which produce enzymes that break down common antibiotics. A report, published by the Scottish Centre for Infection and Environmental Health claims the 'bug' could become the new methicillin resistant *Staphylococcus aureus*.<sup>1</sup> Last month, cardiac surgery at Edinburgh Royal Infirmary was halted after it emerged that 13 patients had contracted the superbug.

First described in Europe in the early 1980s, ESBL-containing Gram negative bacilli have become a widespread problem<sup>2</sup> especially in western and southern Europe.

### **References**

1. [http://www.show.scot.nhs.uk/scieh/PDF/weekly\\_report.pdf](http://www.show.scot.nhs.uk/scieh/PDF/weekly_report.pdf)
2. Paterson DL. Extended-spectrum beta-lactamases: the European experience. *Curr Opin Infect Dis* 2001;14:697-701.

## *Poliomyelitis eradication — European Region certified*

Source: World Health Organization (edited)  
<<http://www.who.int/inf/en/pr-EURO.2002-12.02.html>>

The historic decision to certify the European Region of the World Health Organization (WHO) polio-free was announced today. The European Region has been free of indigenous poliomyelitis for over 3 years. Europe's last case of indigenous wild poliomyelitis occurred in eastern Turkey in 1998. Poliovirus imported from polio-endemic countries remains a threat. A decade ago, imported poliovirus paralysed 71 people and caused 2 deaths in a community in the Netherlands that refused vaccination.

The path to a polio-free European Region began in 1988, following the call of the World Health Assembly to eradicate poliovirus. Success was achieved through an unprecedented series of coordinated national immunisation campaigns, known as Operation MECACAR. Some 60 million children under 5 years of age received 2 extra doses of polio vaccine every year from 1995 to 1998. This synchronisation of immunisation among neighbouring countries has become a model for eradicating the disease globally.

Since the Global Polio Eradication Initiative was launched in 1988, 2 WHO regions have been certified polio-free: the Americas in 1994 and the Western Pacific in 2000. Poliomyelitis cases have dropped from an estimated 350,000 in 125 countries in 1988 to just 480 reported cases in only 10 polio-endemic countries in 2001.

## *Influenza B virus, Hong Kong strain; late-season outbreak in Texas*

A rare strain of influenza not protected against by the current United States of America influenza vaccine has caused a late-season outbreak in Houston. In what is probably an omen of the upcoming winter influenza season, the Hong Kong strain of influenza B virus made several hundred school-age children in Houston, Galveston, El Paso, and Austin ill in March, April, and May 2002.

The outbreak was noteworthy because of the lateness of its occurrence and the rarity of the strain. It is highly unusual for Texas to have outbreaks in May, and it may indicate continued transmission over the summer. Doctors confirmed that the first Texas case occurred on 6 March 2002

and the most recent case on 28 May 2002. There have been no cases in June. The outbreak was attributed to a change in the virus and susceptibility built up by years of non-exposure to the virus, which last caused an epidemic in the United States in 1988-1989. Except for South-East Asia, where it has consistently circulated, the viral strain has been absent from much of the world since the early 1990s.

Influenza B viruses generally cause less severe outbreaks of respiratory infection in man. The influenza B viruses appear to go through cycles of prevalence. In contrast to influenza A viruses, which have natural reservoirs in pigs, horses, and birds, the influenza B viruses are mainly isolated from humans.

## *Shigella sonnei — Canada*

A week after the first recall of a potentially contaminated Greek pasta salad was issued across Ontario, about 500 people had fallen ill with shigellosis — 114 in Toronto alone. The current outbreak occurred after people ate Greek pasta salad bought at stores. The manufacturer issued a recall of its salad on 18 May 2002, after federal food inspectors told the company that people had complained of stomach cramping, bloody diarrhoea, headaches, and other symptoms of shigellosis. A day later, more than 40 people had fallen ill. By 27 May that number had risen to 504 ill people.

The manufacturer has been making the salad for years, shipping it to hundreds of supermarkets and stores across Ontario and eastern Canada. The salad will not be shipped out again until investigators figure out what could have caused contamination. The company continues to produce hundreds of other products, including various salads, chicken dishes, and desserts.

## *Poland reports first case of BSE*

After a massive 2-day search, on 5 May 2002, Polish officials located the place where the country's first case of mad cow disease may have originated, but are still unsure how the animal got infected. Inadequate documentation about the 9-year-old cow's history forced police and veterinary services to conduct a village-by-village search before tracing its origin to the tiny farming community of Swiebodzin.

No other diseased animal had been found so far but 3 other cows in the same abattoir had also been destroyed as a precaution. The labour-intensive search illustrated the problems caused by Poland's antiquated agricultural infrastructure. Poland has delayed implementing the European Union (EU) livestock identification norms due to logistical problems and poor planning.

Veterinary authorities of the Ukraine and Estonia have banned beef imports from Poland after the first bovine spongiform encephalitis (BSE) case was detected in Poland on 4 May 2002.

### *Israel reports first case of BSE*

*Source: Reuters News Agency via The Globe and Mail Website, 4 June 2002 (edited)*

On 4 June 2002 Israel confirmed its first case of mad cow disease, found in a cow in a kibbutz in the Golan Heights. The Agriculture Ministry said it would launch an emergency plan to examine brains of all cattle over the age of 30 months that are sent

to slaughterhouses, before releasing their meat to the market. The Israeli-born animal, bred in Kibbutz Ortal, was 'probably infected by poultry fish meal imported from Europe'. In addition to the plan for examining the brains of slaughtered cattle, the internal organs of slaughtered cattle over the age of one year will be destroyed.

The Israel Dairy and Meat Board opened a phone line on 5 June 2002 to provide information to the public on questions concerning beef consumption in the wake of the confirmation of Israel's first case of mad cow disease.

The 5 cows related to the cow that died last week of BSE had been put down and cremated. Of these, two that were put down were the same age as the infected animal and came from the same herd in the Beit She'an Valley. The cows were put down because of the high likelihood that they had been fed on the same feed as the contaminated animal. The infected cow's 3 offspring were also put down.