

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.

Imported case of Lassa fever in The Netherlands - Update

The 48-year-old surgeon who was infected with Lassa fever virus while working in Kenema, Sierra Leone died on 25 July in Leiden University Hospital, The Netherlands, where he was being treated. He was initially treated for malaria in Sierra Leone on 11 July, and then travelled to The Netherlands (arrived 14 July) to visit relatives. He was admitted to the hospital on 15 July. Lassa fever was suspected when his condition worsened on 20 July and treatment with ribavirin was started. On 22 July, the Bernhard Nocht Institute for Tropical Medicine in Hamburg, Germany, reported that Lassa virus was detected in a blood sample sent for diagnostic testing.

While the risk of infection for those who travelled with this person from Freetown to Amsterdam is minimal, potential contacts are being traced and monitored in both The Netherlands as well as in Africa. As mentioned in the posting, this is the fourth case of Lassa fever imported into Europe this year: see previous reports. All four patients have died, although the death of one case was not the direct result of the acute infection.

Measles in Ireland

As of 29 July 2000, the National Disease Surveillance Centre, Ireland, has reported 1,376 cases of measles, including 2 deaths since 1 January 2000. Most of the cases occurred in the north Dublin city area. Control measures now being implemented include an intensification of the routine immunization programme, with increased advice given to parents in schools where cases of measles occurred and close follow-up of defaulters, and adjustments in the immunization schedule to better respond to the current epidemiological situation. For further information about the outbreak, visit the web site of the National Disease Surveillance Centre, Ireland, (<http://www.ndsc.ie>) as well as the article in the July 2000 issue of their online journal, EPI-INSIGHT (http://www.ndsc.ie/epi_insight.htm).

Meningococcal disease in Ethiopia

As of 17 August, a total of 855 cases and 19 deaths has been reported in Addis Ababa since the beginning of the current outbreak of meningococcal disease, which began in March 2000. *Neisseria meningitidis* serogroups A (90%) and C (10%) have been detected using latex agglutination tests in 311 of the patients. The age group most affected is <30 years. According to available data, no major outbreaks had been reported in Addis Ababa since 1989.

Ethiopia is in the African meningitis belt, and is regularly affected by both the endemic and epidemic forms of the disease. Outbreaks have been recorded since 1935. The most recent major outbreak affecting the whole country occurred in 1988-1989, with nearly 50,000 cases and

990 deaths, and an overall attack rate of 133 per 100,000. A major outbreak is anticipated in 1999-2000, and the regions of Amhara, Gambella and Tigray experienced an increase in the number of cases reported in March-April 2000.

Regional health authorities are conducting active surveillance in public and private health facilities, and committees are ensuring community surveillance. Cases are managed at hospital level by IV antibiotics (penicillin and chloramphenicol). The Ministry of Health has some stocks of oily chloramphenicol, but stock levels need to be carefully monitored. Mass immunization in Addis Ababa is under way with 1,000,000 people vaccinated to date, and external support may be needed depending on the evolution of outbreak.

Meningococcal disease in Rwanda

An outbreak of meningococcal disease in Kabgayi district (Gitarama prefecture) was confirmed on 10 August by a team comprising national medical personnel and WHO staff. *Neisseria meningitidis* serogroup A has been isolated. As of 22 August, 164 cases and 10 deaths had been reported since the beginning of the outbreak in mid-July. The outbreak has occurred in an area bordering the road between Rwanda and Burundi, 53 km from Kigali. Mass immunization of those affected or at risk (a population of 70,000) was started on 14 August. The national health authorities and WHO are monitoring the situation closely.

Yellow fever in Liberia

On 16 August 2000, the Ministry of Health (MOH), Liberia, confirmed an outbreak of yellow fever (YF) in Grand Cape Mount County. To date, the authorities have detected 29 cases meeting the case definition, including three deaths, originating from districts in the county. A report of one case in a third district has not yet been verified. Laboratory results have confirmed yellow fever IgM in one of five clinical samples sent to Institut Pasteur, Abidjan, Côte d'Ivoire, for testing; virus detection is now under way in this and the other samples.

These cases were detected following training in integrated surveillance for district surveillance officers in the county. As this training is introduced in the other counties, the outbreak may prove to be more extensive. Other districts are now beginning to detect suspected cases. All cases, which have been investigated, have occurred among unvaccinated persons. The most recent YF vaccination campaign in the area was conducted in 1999 but was limited to a single refugee camp. Most of the refugees who were vaccinated in that exercise have left the area. A nationwide YF vaccination campaign was conducted in 1995, but coverage was reported to be low, leaving much of the population susceptible.

The population in the Grand Cape Mount County lives in small villages or towns of approximately 5-10,000 people. There is a lot of movement across the border with Sierra Leone. The road between Grand Cape Mount County and the capital of Liberia, Monrovia, is in good condition and there is a considerable amount of traffic to and from Monrovia. If YF were introduced in Monrovia there would be 1.5 million people at risk.

In response to the outbreak, the MOH, Liberia, WHO, and health sector non-governmental organizations (NGOs) have agreed to:

- implement a mass vaccination campaign targeting the 150,000 population immediately at risk. WHO is providing vaccine and autodestruct syringes for this campaign;
- intensify vaccination and surveillance in the affected communities and other districts not yet known to be affected.

WHO is seeking to mobilize support for YF detection and response activities.

Acute haemorrhagic fever syndrome in Afghanistan - Update 2

A follow-up mission will leave for Herat, Afghanistan, on 27 August to train local health care workers in barrier nursing techniques and infection control procedures. The team consists of an infection control nurse and infectious diseases physician from Switzerland. They will be working with WHO, Afghanistan, national public health officials and United Nations organizations and non-governmental organizations (NGOs) involved in health services in the area.

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.

nvCJD iatrogenic dental transmission risk

Contributed by Paul N Goldwater, The Women's & Children's Hospital, North Adelaide.

The potential for dental transmission of the infectious prion protein of Creutzfeldt-Jakob Disease (CJD) and its (new) variant form (nvCJD) has not received wide attention. No doubt SEAC is exploring this possibility in its investigation of the Leicestershire cluster of cases. Whilst retrospective epidemiological studies have not revealed an association between dental treatment and CJD, there are reports of clusters of CJD cases possibly linked to dental procedures^{1,2} or surgery for trigeminal neuralgia.³

Recent experimental data from an animal model warrants a fresh approach to this public health issue. Ingrosso et al,⁴ using a hamster model, have demonstrated high levels of infectivity of scrapie prion in gingival and dental pulp tissues. Furthermore, successful transmission of the agent was achieved in all animals inoculated via the tooth pulp - a nerve-rich tissue. The implications of these findings, in the context of the evolving nvCJD epidemic in the wake of the epidemic of bovine spongiform encephalopathy (BSE), are obvious.

1. Will RG, Matthews WB. Evidence for case-to-case transmission of Creutzfeldt-Jakob disease. *J Neurol Neurosurg Psychiatry* 1982;45:235-238.
2. Arakawa K, Nagara H, Itoyama Y, Doh-ura K, Tomokane N, Tateishi J, Goto I. Clustering of three cases of Creutzfeldt-Jakob disease near Fukuoka City, Japan. *Acta Neurol Scand* 1991;84:445-447.
3. Matthews WB. Epidemiology of Creutzfeldt-Jakob disease in England and Wales. *J Neurol Neurosurg Psychiatry* 1975;38: 210-213.
4. Ingrosso L, Pisani F, Pocchiari M. Transmission of the 263K scrapie strain by the dental route. *J Gen Virol* 1999;80: 3043-3047.

Editorial note. SEAC is the Spongiform Encephalopathy Advisory Committee, which advises the UK government on the BSE and nvCJD outbreaks. The Committee estimated the risk of iatrogenic transmission through dental procedures to be real, but as yet hypothetical and not quantifiable. No special advice regarding the sterilization of dental instruments was issued by the Committee.

Pacific Public Health Surveillance Network

The Pacific Public Health Surveillance Network serves to disseminate information about communicable diseases in the Pacific region through Pacnet. Pacnet may be accessed, on registration, through the South Pacific Commission website (<http://www.spc.org.nc>).

Typhoid fever in Samoa

Dr Satupaitea Viali has provided a situational report, dated 9 August 2000, that typhoid fever is on the rise again in Samoa - with one death so far. This year from January to July there have been 122 cases of typhoid, 74 (61%) of which have been culture-proven. This contrasts with 30 to 40 cases per year of clinical and culture-proven typhoid fever reported for the previous 3 years.

Initially, patients usually presented to hospital in the 2nd to 4th week of their illness. With more public awareness and education, patients are now being seen earlier. The majority of the cases have been children under 15 years (~55%). Upolu is the most affected with 84% of the cases; most of these have been concentrated around the Apia region with around 62% of total culture-proven cases.

All patients have been investigated with 1-2 blood cultures, and stool cultures. Of the 74 culture-proven cases, two were diagnosed from stool culture alone, one from blood and stool culture, and the rest (96%) from blood culture. The medical unit's current management is such that if a patient was very sick intravenous chloramphenicol has been used first line, but for less sick patients Septrin or Ciprofloxacin has been given.