

Since this is not the first outbreak of invasive meningococcal disease among newly recruited soldiers in Poland, a discussion of how to protect this population group has begun at national level, expressing a need to better monitor their health status and adopt procedures for immediate prophylaxis and treatment. Other countries, such as the United Kingdom, have introduced vaccination against meningococcal disease after establishing that armed forces recruits had a significantly increased risk of disease when compared with age-matched civilian counterparts [4].

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## TWENTY YEARS OF ACTIVE PAEDIATRIC SURVEILLANCE IN THE UK AND REPUBLIC OF IRELAND

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In July 2006 the British Paediatric Surveillance Unit (BPSU, <http://bpsu.inopsu.com/>) celebrated its twentieth year of surveillance. The unit was founded in 1986 by the Public Health Laboratory Service (now the Health Protection Agency), the Royal College of Paediatrics and Child Health, the Institute of Child Health (London), the Royal College of Physicians (Ireland) and the Scottish Centre for Infection and Environmental Health (now Health Protection Scotland). The unit's aim was, and is, to undertake surveillance of rare conditions in childhood (0 to 15 years), including infections, and to provide a mechanism to rapidly investigate acute public health events affecting children.[1] The unit was created to address concerns from paediatricians and communicable disease consultants that conditions such as Reye's syndrome, haemolytic uraemic syndrome (HUS), Kawasaki disease and the then newly emerging condition of paediatric-AIDS were not being reported to existing 'passive' surveillance systems in sufficient numbers to enable meaningful analyses of data. The BPSU therefore set about establishing an 'active' surveillance system, seeking monthly reports from all consultant paediatricians in the United Kingdom and Ireland. Clinicians are asked to report any cases from a menu of conditions listed on the monthly report card and are asked to choose 'nothing to report' if no cases had been seen.

This active surveillance system has encompassed over 70 conditions during its first 20 years of operation, many of which have been related to infection. Compliance with reporting to the system has been high, with an average of over 90% of monthly reports completed per year [1].

The effectiveness of the BPSU's surveillance methodology has had a major impact on national policy on infectious diseases and related conditions. The BPSU has made important contributions to the monitoring of childhood diseases targeted by vaccination

programmes as well as the safety of vaccines. Findings from reports of meningoencephalitis after MMR contributed to the withdrawal of the Urabe strain of the vaccine's mumps component [2]. Reports of congenital rubella contribute to monitoring the effectiveness of the national immunisation programme and the impact of the recent decline in coverage of MMR vaccination in the UK [3]. Surveillance of subacute sclerosing panencephalitis undertaken through the BPSU over 15 years, has provided good evidence that this known complication of measles infection is not associated with receipt of the measles component of the MMR vaccine [4]. BPSU data have contributed to evaluation of the effectiveness of the newly introduced *Haemophilus influenzae* b vaccine. Finally, a study of the incidence and severity of varicella infection in children admitted to hospital provided a baseline of the disease burden due to this infection in the pre-vaccination era and contributed to informing the development of national vaccination policy [5].

Throughout its history the BPSU has also provided a mechanism for responding to and investigating emerging public health concerns. Emerging diseases are usually rare and may remain unrecognised, potentially allowing the condition to spread. The HUS survey, undertaken in the 1980s through the BPSU, was one of the first studies to confirm the link between *Escherichia coli* 0157 and paediatric HUS in the UK. The study was replicated in the late 1990s in response to the Pennington Report [6], which highlighted the effectiveness of the BPSU methodology in identifying *E. coli* 0157 outbreaks. In 1997, a BPSU study clarified that diagnosed hepatitis C in children was largely the result of horizontal transmission through blood products rather than vertical transmission from mother to child [7]. More recently, childhood tuberculosis and malaria infection have been included in BPSU surveillance. In response to public health concern about the potential impact of variant Creutzfeldt-Jakob disease (vCJD) on children in the UK, the BPSU is currently undertaking surveillance for cases of progressive intellectual and neurological deterioration in order to identify cases of vCJD and has reported six cases in children since 1997 [8].

Findings from the BPSU have influenced national screening policies. The BPSU's surveillance of HIV in children contributed to the policy introduced in England in 2000 to offer antenatal screening to all pregnant women [9]. Information about disease prevalence and the burden of disease for other neonatal and congenital infections, such as toxoplasmosis, herpes simplex and Group b streptococcal infections, has contributed to decisions not to initiate screening programmes for these conditions.

In summary, on review after 20 years of operation, there is evidence that the system is acceptable, sustainable and is producing high quality data about a range of relatively rare but important childhood conditions that are informing and influencing a variety of activities concerned with child health in the UK. The success of the BPSU surveillance system has encouraged similar surveillance schemes in the UK and abroad. In 1998, the International Network of Paediatric Surveillance Units (INoPSU, <http://www.inopsu.com/>) was established. This network now covers 14 countries (including eight within the European Union), and involves 10 000 paediatricians covering a population of 50 million children [10].

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## CASE OF LASSA FEVER IMPORTED INTO GERMANY FROM SIERRA LEONE

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A 68 year old man who recently travelled from Sierra Leone to Germany via Belgium has been diagnosed with Lassa fever [1].

The patient had a history of progressive neurological deterioration over several months in Sierra Leone. On 5 July 2006, he developed high fever and his neurological symptoms worsened. On 10 July the patient travelled by air from Freetown (Sierra Leone) via Abidjan (Ivory Coast) to Brussels, Belgium. All of this journey was in the same aeroplane. In Brussels, the patient changed plane for the connecting flight to Frankfurt, where he arrived on 11 July.

Immediately after arriving, he was taken to the university hospital in Münster. On 16 July, the patient's condition worsened, and he was intubated and treated in isolation. Although the patient's clinical presentation was in accordance with his known underlying disease, additional tests for tropical infectious diseases were carried out. On 20 July, IgG for Lassa virus was detected in a cerebrospinal fluid sample and RT-PCR was positive. On 21 July, an RNA-PCR for Lassa virus was detected in blood, urine and sputum.

A message was posted on the confidential European Early warning and Response System on Friday 21 July. While the risk to co-passengers is judged to be low, passengers on the following flights are being traced and contacted to inform them about the risk.

- SN Brussels Airlines flight SN 207 on 10 July from Brussels (Belgium) via Freetown (Sierra Leone) to Abidjan (Cote d'Ivoire) in seat rows 23 to 29
- SN Brussels Airlines flight SN 207 on 10 July from Freetown (Sierra Leone) via Abidjan (Cote d'Ivoire) to Brussels (Belgium) in seat rows 23 to 29
- SN Brussels Airlines flight SN 2607 on 11 July, which departed Brussels (Belgium) to Frankfurt (Germany) at 0630, all seats

The patient has been transferred to a special treatment centre in Frankfurt. Flight crew members as well as aeroplane cleaning personnel are being contacted by public health authorities.

Since 1970, at least 16 cases of Lassa fever have been imported into Europe or North America; in none of these has onward transmission to another person been reported. The last reported imported case into Europe was in 2003 in a soldier from the United Kingdom who had been serving in Sierra Leone [2]. In 2000, a European meeting to discuss the management of Lassa fever cases was held, after several importations in 1999/2000 [3,4,5,6].

The World Health Organization has produced a Lassa fever fact sheet which can be found here: <http://www.who.int/mediacentre/factsheets/fs179/en/>

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## UNEXPECTED INCREASE IN CASE FATALITY OF INVASIVE GROUP B STREPTOCOCCAL INFECTIONS IN INFANTS IN NORWAY, JANUARY-JULY 2006

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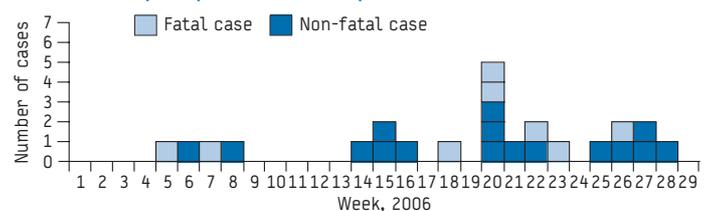
<http://www.eurosurveillance.org/ew/2006/060727.asp#2>

A marked increase in case fatality has been observed among reported cases of invasive group B streptococcal infections (GBS) in infants younger than 90 days old (thereafter referred to as 'infant') in Norway since the beginning of 2006. Twenty four cases of GBS in infants were reported to the Norwegian communicable disease notification system (MSIS) between 1 January and 21 July, and eight cases (33%) have been fatal [1].

The 24 cases were reported from nine hospitals: thirteen of the cases were in boys (54%). Four of the eight deaths were in girls and four in boys, and occurred in six major hospitals in southern Norway. The distribution of all reported cases of infant GBS infection does not show any difference from previous years in relation to geographical distribution. Clinical data were available for all cases: three cases developed meningitis (13%), fourteen had signs of sepsis (58%), and two cases had both (8%). One case had pneumonia (4%), and other clinical symptom has been reported in four cases (17%). Nineteen cases occurred in the second quarter of 2006, between the 15th and 29th week in 2006 (Figure 1).

## FIGURE 1

### Fatal and non-fatal cases of invasive GBS infection in infants under 90 days, by week, Norway, weeks 1-29, 2006 (n=24)



The average incidence rate of invasive GBS infections was 0.7/1000 live births (range 0.45-1.0) in 2000-2005, comparable with recent findings in other European countries [2]. The estimated incidence rate in the first six months of 2006 based on the number of cases reported as of 21 July is 0.85/1000 live births. The case-fatality (CF), however,