# **EPI-NEWS**

NATIONAL SURVEILLANCE OF COMMUNICABLE DISEASES

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SSI AND SURVEILLANCE IN EU

Statens Serum Institut has entered into an agreement with the EU Commission to coordinate the surveillance of measles, rubella, mumps, whooping cough and chickenpox in the 25 EU countries as well as Norway, Iceland, Switzerland, Bulgaria, Croatia, Romania and Turkey. The project, EUVAC.NET, will be coordinated by the Department of Epidemiology until the end of 2008.

#### **Background**

The project has its origin in the EU Programme of Community action in the field of public health, in which SSI has coordinated the surveillance networks for measles and whooping cough since 1999. The new agreement involves more participating countries as well as more diseases. The project will make use of both previous experience and new knowledge in the surveillance of vaccine-preventable diseases. The main objectives are an improved surveillance of infectious diseases in the EU and the integration of the surveillance in the European Centre for Disease Prevention and Control (ECDC). Another priority is closer collaboration with the World Health Organization (WHO) to achieve goals including the elimination of circulating measles and rubella virus in Europe by 2010.

More information on the project, incidence of measles and whooping cough as well as the vaccination programmes in the individual countries: www.euvac.net.

#### Measles in Europe 2001-2004

2002 had the highest annual incidence of notified cases of measles. The marked decline in the number of notified cases in 2004 reflects mainly the end of outbreaks in Italy and Germany, table 1. Five countries reported no cases of measles in 2003 and/or 2004: Denmark, Finland, Iceland, Luxembourg and Malta. This indicates that these countries are well on their way to reaching the WHO goal.

During 2001-2004, an average of 62% of the reported cases of measles were unvaccinated, in 30% of cases the vaccination status was unknown, and 8% had been vaccinated with at least one dose of measles vaccine. 16 cases of encephalitis and three deaths due to measles were reported.

(M. Muscat, S. Glismann, Department of Epidemiology)

Table 1. Number of reported measles cases 2001-2004 in the EU, Iceland, Norway, and Switzerland. Incidence per 10<sup>5</sup> in ()

|             | Number  |       |         |        |         |        |         |       |  |
|-------------|---------|-------|---------|--------|---------|--------|---------|-------|--|
|             | 20      | 001   | 2002    |        | 2003    |        | 2004    |       |  |
| Belgium     | 83      | (2.5) | No      | data   | 44      | (0.4)  | 61      | (0.6) |  |
| Denmark     | 12      | (0,2) | 32      | (0.6)  | 0       | (0)    | 0       | (0)   |  |
| Finland     | 1       | (0)   | 0       | (0)    | 0       | (0)    | 0       | (0)   |  |
| France      | No data |       | No data |        | No data |        | No data |       |  |
| Greece      | 12      | (0.1) | 5       | (0,1)  | 8       | (0.1)  | 1       | (0)   |  |
| Netherlands | 17      | (0.1) | 3       | (0)    | 4       | (0)    | 5       | (0)   |  |
| Ireland     | 244     | (6.4) | 268     | (6.9)  | 561     | (14.3) | 325     | (8.2) |  |
| Iceland     | 0       | (0)   | 0       | (0)    | 0       | (0)    | 0       | (0)   |  |
| Italy       | 799     | (4.0) | 18,312  | (31.9) | 10,939  | (9.1)  | 676     | (1.2) |  |
| Luxemburg   | 7       | (1.6) | 0       | (0)    | 1       | (0.2)  | 0       | (0)   |  |
| Malta       | 2       | (0.5) | 7       | (1.8)  | 0       | (0)    | 6       | (1.5) |  |
| Norway      | 4       | (0.1) | 5       | (0.1)  | 8       | (0.2)  | 7       | (0.2) |  |
| Portugal    | 21      | (0.2) | 7       | (0.1)  | 7       | (0.1)  | 1       | (0)   |  |
| Spain       | 54      | (0.1) | 79      | (0.2)  | 255     | (0.6)  | 26      | (0.1) |  |
| Sweden      | 5       | (0.1) | 8       | (0.1)  | 3       | (0)    | 5       | (0.1) |  |
| Switzerland | 61      | (0.9) | 47      | (0.7)  | 575     | (8.0)  | 39      | (0.5) |  |
| Germany     | 6,033   | (7.4) | 4,665   | (5.7)  | 778     | (1.0)  | 122     | (0.2) |  |
| UK          | 73      | (0.1) | 327     | (0.6)  | 469     | (8.0)  | 202     | (0.3) |  |
| Austria     | No data |       | No data |        | 44      | (0.6)  | 16      | (0.2) |  |
| Total       | 7,428   | (2.4) | 2,3765  | (7.6)  | 1,3696  | (4.2)  | 1,492   | (0.5) |  |

#### SCREENING OF PREGNANT **WOMEN FOR HEPATITIS B**

As of 1 November 2005, general screening of pregnant women for hepatitis B virus (HBV) infection was introduced as a two-year trial. This took place in accordance with agreement 195 of 15 June 2005. The schedule replaces selective screening. The objective is to ensure that all children who are born to women with chronic HBV infection are vaccinated against hepatitis B at birth. Transmission from mother to child is prevented effectively if immunoglobulin and hepatitis B vaccination are given immediately after birth, followed by a further three vaccinations when the child is one, two and 12 months old, respectively. In December 2005, the National Board of Health prepared a guide to screening of pregnant women. (National Board of Health)

#### TRAVEL AND DISEASES -**NEW SSI WEBSITE**

A new service is provided on the SSI website, www.ssi.dk. The site is an interactive feature, which presents the global incidence and current outbreaks of relevant infectious diseases. The site also presents foreign travel vaccination recommendations. The site is in Danish only.

(P.H. Andersen, Department of Epidemiology)

### **AVIAN INFLUENZA IN TURKEY**

Infection with avian influenza A H5N1 in humans has been diagnosed in at least 15 persons since 1 January 2006. For four patients, of whom two died, tests were laboratory confirmed by a WHO reference laboratory. In collaboration with ECDC and the EU Commission, WHO has sent experts to Turkey to investigate the outbreak together with the national health authorities. The first investigations suggest that the virus has not become more infectious. Most patients are children and all had contact with dead or ill poultry. Measures to combat outbreaks of disease among birds include culling poultry and an extensive information campaign. Avian influenza A H5N1 among poultry in Turkey was reported for the first time in October 2005. Since then, the virus has been detected among poultry in 10 of the 81 provinces, and is assumed to continue to spread to other parts of the country. There is an import ban on all poultry products from Turkey, but otherwise there are no travel restrictions to the country. Nevertheless, travellers to the affected areas are advised to avoid contact with poultry. There is no risk involved in eating poultry that has been boiled or thoroughly roasted or fried. (S. Glismann, Department of Epide-

miology)

11 January 2006

## Individually notifiable diseases

Number of notifications received in the Department of Epidemiology, SSI (2006 figures are preliminary)

| Epidemiology, SSI (2006 figure | _              | _                       |              |
|--------------------------------|----------------|-------------------------|--------------|
| Table 1                        | Week 1<br>2006 | Cum. 2006 <sup>1)</sup> | Cum. 2005 1) |
| AIDS                           | 1              | 1                       | 2            |
| Anthrax                        | 0              | 0                       | 0            |
| Botulism                       | 0              | 0                       | 0            |
| Cholera                        | 0              | 0                       | 0            |
| Creutzfeldt-Jakob              | 1              | 1                       | 0            |
| Diphtheria                     | 0              | 0                       | 0            |
| Food-borne diseases            | 16             | 16                      | 7            |
| of these, infected abroad      | 1              | 1                       | 1            |
| Gonorrhoea                     | 7              | 7                       | 9            |
| Haemorrhagic fever             | 0              | 0                       | 0            |
| Hepatitis A                    | 0              | 0                       | 3            |
| of these, infected abroad      | 0              | 0                       | 0            |
| Hepatitis B (acute)            | 1              | 1                       | 2            |
| Hepatitis B (chronic)          | 5              | 5                       | 0            |
| Hepatitis C (acute)            | 0              | 0                       | 1            |
| Hepatitis C (chronic)          | 2              | 2                       | 4            |
| HIV                            | 3              | 3                       | 11           |
| Legionella pneumonia           | 3              | 3                       | 3            |
| of these, infected abroad      | 0              | 0                       | 1 1          |
| Leprosy                        | 0              | 0                       | 0            |
| Leptospirosis                  | 0              | 0                       | 0            |
| Measles                        | 0              | 0                       | 0            |
| Meningococcal disease          | 0              | 0                       | 4            |
| of these, group B              | 0              | 0                       | 3            |
| of these, group C              | 0              | 0                       | 1            |
| of these, unspec. + other      | 0              | 0                       | 0            |
| Mumps                          | 0              | 0                       | 0            |
| Neuroborreliosis               | 3              | 3                       | 5            |
| Ornithosis                     | 1              | 1                       | 1            |
| Pertussis (children < 2 years) | 4              | 4                       | 6            |
| Plague                         | 0              | 0                       | 0            |
| Polio                          | 0              | 0                       | 0            |
|                                | 0              | 0                       | 0            |
| Purulent meningitis            | 0              | 0                       | _            |
| Haemophilus influenzae         | 0              | 0                       | 0            |
| Listeria monocytogenes         | 0              | 0                       | 0            |
| Streptococcus pneumoniae       | 0              | 0                       | 4            |
| Other aethiology               | 0              | 0                       | 0            |
| Unknown aethiology             | 0              | 0                       | 0            |
| Under registration             | 3              | 3                       | -            |
| Rabies                         | 0              | 0                       | 0            |
| Rubella (congenital)           | 0              | 0                       | 0            |
| Rubella (during pregnancy)     | 0              | 0                       | 0            |
| Shigellosis                    | 3              | 3                       | 1            |
| of these, infected abroad      | 2              | 2                       | 0            |
| Syphilis                       | 1              | 1                       | 2            |
| Tetanus                        | 0              | 0                       | 0            |
| Tuberculosis                   | 7              | 7                       | 7            |
| Typhoid/paratyphoid fever      | 1              | 1                       | 2            |
| of these, infected abroad      | 0              | 0                       | 2            |
| Typhus exanthematicus          | 0              | 0                       | 0            |
| VTEC/HUS                       | 3              | 3                       | 6            |
| of these, infected abroad      | 0              | 0<br>ding peri          | 2            |

<sup>1)</sup> Cumulative number 2006 and in corresponding period 2005

## Selected laboratory diagnosed infections

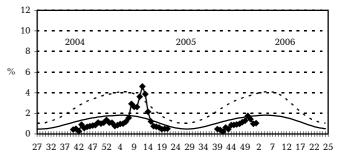
Number of specimens, isolates, and/or notifications received in SSI laboratories

| received in 551 laboratories                     |                |                            |                            |  |  |  |  |
|--|----------------|----------------------------|----------------------------|--|--|--|--|
| Table 2  | Week 1<br>2006 | Cum.<br>2006 <sup>2)</sup> | Cum.<br>2005 <sup>2)</sup> |  |  |  |  |
| Bordetella pertussis                             |                |                            |                            |  |  |  |  |
| (all ages)                                       | 8              | 8                          | 20                         |  |  |  |  |
| Gonococci  | 5              | 5                          | 11                         |  |  |  |  |
| of these, females                                | 0              | 0                          | 0                          |  |  |  |  |
| of these, males                                  | 5              | 5                          | 11                         |  |  |  |  |
| Listeria monocytogenes                           | 1              | 1                          | 1                          |  |  |  |  |
| Mycoplasma pneumoniae                            |                |                            |                            |  |  |  |  |
| Resp. specimens <sup>3)</sup>                    | 20             | 20                         | 72                         |  |  |  |  |
| Serum specimens 4)                               | 16             | 16                         | 26                         |  |  |  |  |
| Streptococci 5)                                  |                |                            |                            |  |  |  |  |
| Group A streptococci                             | 5              | 5                          | 3                          |  |  |  |  |
| Group B streptococci                             | 3              | 3                          | 1                          |  |  |  |  |
| Group C streptococci                             | 3              | 3                          | 0                          |  |  |  |  |
| Group G streptococci                             | 5              | 5                          | 5                          |  |  |  |  |
| S. pneumoniae                                    | 78             | 78                         | 38                         |  |  |  |  |
| Table 3  | Week 51        | Cum.                       | Cum.                       |  |  |  |  |
| Table 5  | 2005           | 2005 2)                    | 2004 2)                    |  |  |  |  |
| Pathogenic int. bacteria <sup>6)</sup>           |                |                            |                            |  |  |  |  |
| Campylobacter                                    | 24             | 3,646                      | 3,666                      |  |  |  |  |
| S. Enteritidis                                   | 2              | 642                        | 541                        |  |  |  |  |
| S. Typhimurium                                   | 6              | 563                        | 463                        |  |  |  |  |
| Other zoon. salmonella                           | 7              | 559                        | 516                        |  |  |  |  |
| Yersinia enterocolitica                          | 3              | 240                        | 223                        |  |  |  |  |
| 2) Consolition when 2006 and in some single 2005 |                |                            |                            |  |  |  |  |

<sup>&</sup>lt;sup>2)</sup> Cumulative number 2006 and in corresponding period 2005

## Sentinel surveillance of the influenza activity

Weekly percentage of consultations, 2004/2005/2006



Week no.

Sentinel ——Basal curve — Alert threshold

Sentinel: Influenza consultations

(as percentage of total consultations)

Basal curve: Expected frequency of consultations

under non-epidemic conditions

Alert threshold: Possible incipient epidemic

<sup>3)</sup> Resp. specimens with positive PCR

<sup>4)</sup> Serum specimens with pos. complement fixation test

 $<sup>^{5)}</sup>$  Isolated in blood or spinal fluid

<sup>6)</sup> See also www.germ.dk