



EUVAC.NET AND MEASLES IN THE EU

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EUVAC.NET was established in December 1999 as a European Union network for the surveillance of vaccine preventable diseases. The Department of Epidemiology is coordinating the network and is responsible for the surveillance of measles, mumps and rubella. The Italian Istituto Superiore di Sanità is responsible for the surveillance of whooping cough, EPI-NEWS 3/00. The project is now approaching the end of the implementation phase, where the activities have initially focused on measles and whooping cough. An agreement has been reached between WHO and EUVAC.NET to coordinate efforts for the elimination of naturally occurring measles in Europe before 2010. In cooperation with the Public Health Laboratory Service in the UK, new measles diagnostics using saliva will be introduced, and a database for genotyping measles virus will be established. EUVAC.NET now regularly receives detailed measles data from most of the participating countries. A website (www.euvac.net) has been set up to facilitate the distribution of information about the network's activities. Surveillance reports on the incidence of measles in 2001 and 2002 are also available. The site also provides a list of publications on measles, mumps, rubella and whooping cough. National vaccination schedules of the EU countries, the 10 future EU countries, as well as Switzerland, Norway and Iceland, are presented schematically and are continuously updated.

Measles data for 2001 and 2002

Most - 16 of the 19 participating countries - have delivered case-based data about notified cases of measles to EUVAC.NET. Data for 2002 are provisional. The quality of the data has generally improved in the course of the two years. For example, the proportion of notified cases with known vaccination status increased from 66% in 2001 to 72% in 2002.

A total of 7428 notified cases were reported in 2001, and 10206 in 2002, representing an increase of 37%, [table 1](#). This increase is particularly due to an outbreak in Italy, while the number of notified cases in Germany dropped by 23% in 2002. Three countries, Finland, Iceland and Luxembourg, had no notified cases of measles in 2002.

Some of the participating countries report an incidence of measles of less than 0.1 per 10⁵, which may indicate

Table 1. No. of notified cases of measles in the EU, 2001-2002

	Total		Incidence/10 ⁵	
	2001	2002	2001	2002
Austria ¹	-	-	-	-
Belgium ²	83	-	2.48	-
Denmark	12	32	0.23	0.60
Finland	1	0	0.02	0
France ¹	-	-	-	-
Germany	6033	4664	7.36	5.69
Greece	12	5	0.11	0.05
Iceland	0	0	0	0
Ireland	244	242	6.35	6.24
Italy	799	4835	1.39	8.42
Luxemb.	7	0	1.58	0.00
Malta	2	7	0.51	1.78
Netherl.	17	3	0.11	0.02
Norway	4	5	0.09	0.11
Portugal	21	4	0.21	0.04
Spain	54	40	0.14	0.10
Sweden	5	8	0.06	0.09
Switzerl.	61	47	0.85	0.66
UK	73	314	0.12	0.53
Total	7428	10206	2.36	3.27

¹No data received

²French community of Belgium

that the elimination phase is approaching.

Most cases of measles were in the age group of 1-9 years, but in both years adult cases were also notified. Most cases of measles occurred between January and April.

Of those with known vaccination status, 50% were unvaccinated in 2001. In 2002, the proportion was 66%. In countries with relatively good vaccination coverage, e.g. Norway, the Netherlands and Denmark, a large proportion of cases of measles were unvaccinated. This is consistent with the theory that a susceptible cohort accumulates in the "honeymoon period" - the period after the introduction of the MMR vaccine, when there is suboptimal coverage with vaccination but at the same time also a low incidence of measles.

EUVAC.NET and the future

For some countries, surveillance continues to be inadequate, leading to under-reporting. Although the current data do not yet permit a deeper analysis, however, it contributes to provide a picture of the measles situation in Europe. Thus, there is still a basis for future cooperation within EUVAC.NET with a view to enhanced surveillance of diseases that are preventable through vaccination, just as there is a need for comparable data for vaccination coverage.

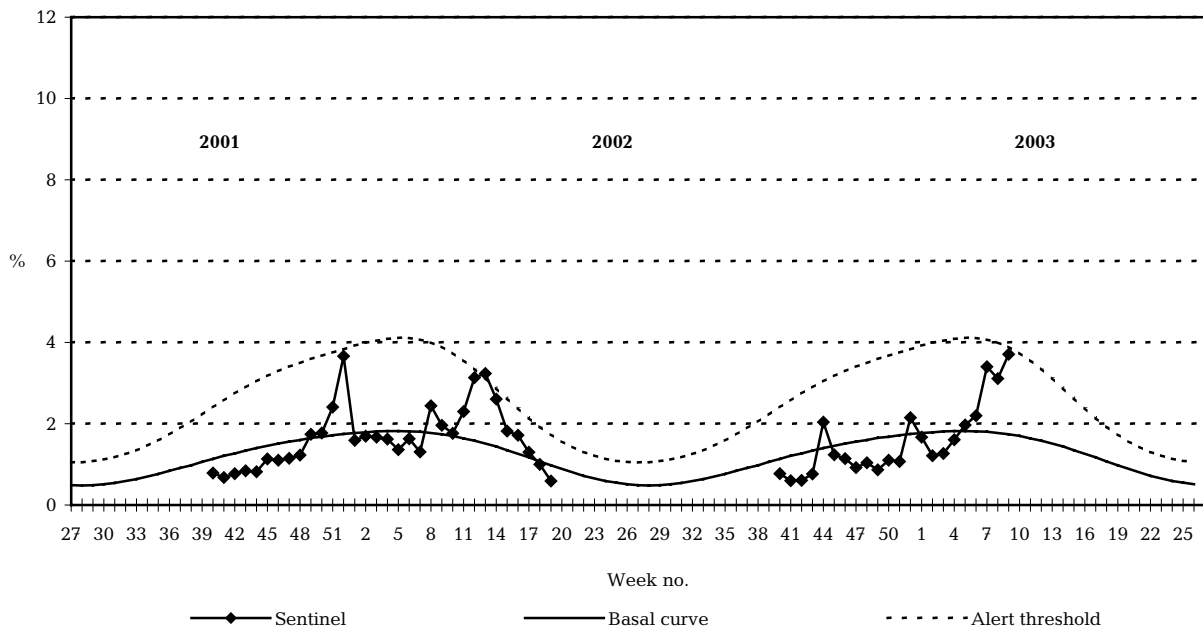
Activities for the next three years are currently being planned in EUVAC.NET, based on the EU's new public health programme from 2003 to 2008, as well as the establishment of a centre for disease prevention and control, as described below. The plan is to establish databases for the incidence of mumps and rubella, in addition to measles and whooping cough, as well as vaccination coverage in the participating countries. Last but not least, the 10 new countries in the EU are expected to participate in EUVAC.NET from 2004. As a new feature, EUVAC.NET will approach the Commission and offer to function as secretariat for a forum for the development of vaccination strategies and policies. This will secure the integrated management of infectious diseases that are preventable by vaccination, involving the expertise within the existing network as well as other stakeholders. Furthermore, this forum will be able to contribute to the identification and facilitation of applied research and research results for the prevention and control of infectious diseases in Europe.

EU CENTRE FOR DISEASE PREVENTION AND CONTROL

Ten years have now passed since the Maastricht Treaty placed illness and health on the agenda in the EU. The European Parliament subsequently decided in 1998, to establish epidemiological surveillance of infectious diseases in Europe, EPI-NEWS 46/98. As a result, what is known as a "network of networks" has been established, where EUVAC.NET is one of several that jointly manage surveillance in the EU. This development has resulted in a fragmented structure, with highly disease-specific surveillance networks, and has revealed the need for a centralised coordination of activities, quality control and outbreak management. As a result of this, the Commission has decided that a European centre for disease prevention and control is to be established in 2005. The centre is expected to be of modest size, with a high academic capacity as its strength and priority. The existing surveillance networks will be integrated in the centre, but the more precise organisational framework and geographical location of the centre have not yet been determined. (S. Glismann, M. Muscat, Department of Epidemiology)

Sentinel surveillance of influenza activity

Weekly percentage of consultations, 2001/2002/2003



- Sentinel:** Influenza consultations as percentage of total consultations
Basal curve: Expected frequency of influenza consultations under non-epidemic conditions
Alert threshold: Possible incipient epidemic

(Dept. of Epidemiology)

Sentinel specimens received 2002/2003

Week	40-3	4	5	6	7	8	9
Specimens received, total no	26	13	11	19	14	17	19
Influenza A							
Moscow/10/99 (H3)-like		2	4	2	1	1	
New Caledonia/20/99 (H1)-like			1				
Influenza A, not typed							2
Influenza B							
Hong/Kong/330/01-like		2	1	4	5	3	
Influenza B, not typed						1	4

The influenza activity of week 9 has increased compared to the preceding two weeks. This may be interpreted as a possible incipient epidemic.

The numbers refer to the whole country and it is not possible to estimate any differences occurring on county level.

During week 9, four influenza B- and two influenza A strains were isolated, see table above.

As influenza B often has a milder course, affected persons do not usually consult their GP as frequently as those with other influenza types. Hence, the influenza curve may not reach the anticipated level.

The curve shows the number of influenza patients who consult their GP in percentage of the total number of influenza consultations.

The influenza strains found in Denmark so far are covered by the vaccine of this season and correspond to the strains diagnosed in Europe.

Information on the influenza situation in the rest of Europe is accessible on www.eiss.org.

(Depts. of Epidemiology and Virology)