EUVAC.NET
A surveillance network for vaccine-preventable diseases

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Viral Hepatitis Prevention Board Meeting
15-16 November 2007
Athens, Greece
To operate a Community surveillance network for vaccine-preventable infectious diseases (VPD) using epidemiological and laboratory surveillance methods
The Main Objectives

- To develop standardised surveillance methods
- To identify strengths and weaknesses in surveillance systems for VPD
- To disseminate and exchange information on VPD occurrence
- To detect and report on outbreaks in EU
EUVAC.NET’s main collaborating partners

Public health and surveillance institutions of all 27 EU Member States + Croatia, Iceland, Norway, Switzerland and Turkey

Hub

Department of Epidemiology

World Health Organization Regional Office for Europe

www.euvac.net
Countries participating

15 EU member states
+ Iceland, Norway and Switzerland

Malta

Croatia

11 new EU member states
+ Turkey

EU funding period*


Establishment of EUVAC.NET

Establishment of ECDC

*Gaps funded solely by Statens Serum Institut
VPD Surveillance

Data collected

Data to be collected

Data being collected

A = Annual data
M = Monthly data
The revised objectives for 2010 are:

- To eliminate endemic measles
- To eliminate endemic rubella
- To prevent congenital rubella syndrome
  (<1 per 100,000 live births)
1. Achieve and sustain >95% coverage with two doses of measles through high-quality routine immunization services

2. Provide a second opportunity for measles immunization to susceptible groups

3. Provide rubella vaccination opportunities, to all susceptible children, adolescents and women of child bearing age

4. **Strengthen surveillance systems**

5. Improve the availability of information for health professionals and the public on the benefits and risks associated with immunization

EUVAC.NET actively contributes to the measles elimination plan through its measles surveillance activities
EUVAC.NET’s collaboration with ECDC on:

- EU case definitions
- Data variables for reporting
Rubella (rubella virus) case definition

From 2007 onwards will EUVAC.NET will use the ECDC case definition. Below is the definition as finalised by the ECDC in September 2006. It is presented here as a working case definition until it is endorsed by the EU commission.

General information on the use of case definitions provided here should be consulted before applying case definitions.

Clinical criteria:
Any person with sudden onset of generalised maculo-papular rash

and at least one of the following five:
- Cervical adenopathy
- Sub-occipital adenopathy
- Post-auricular adenopathy
- Arthralgia
- Arthritis

Laboratory criteria:
Laboratory criteria for case confirmation

Laboratory testing of the following:
Strengthening surveillance systems

Percentage of data with known status, 2001-2006* (19 case-base reporting countries 2001-2006)

- Hospitalisation status
- Outbreak status
- Importation status
- Vaccination status

% known data

*Provisional

Map: Case-base reporting countries, 2001-2006
Molecular epidemiology:

- a useful and a necessary component of an enhanced surveillance system required in the measles elimination phase.

- plays an important role in documenting the interruption of endemic measles transmission.

Amplification by RT-PCR and agarose gel electrophoresis

Photo source: Department of Virology, Statens Serum Institut
EUVAC.NET reporting on measles surveillance

Public health and surveillance institutions of all 27 EU Member States + Croatia, Iceland, Norway, Switzerland and Turkey

Data Management

www.euvac.net

World Health Organization Regional Office for Europe

Graphic reports  Scientific publications  Annual reports

www.euvac.net
This website provides information on EUVAC.NET and disseminates information on the vaccine preventable diseases occurrence and immunization in the EU and other participating countries. It is intended for use by both the scientific community and the general public.

**Latest News:**

**Hungary:** Local mumps outbreak in Hungary, 2007 (published 29.03.2007)

**Bulgaria:** Mumps outbreak in Bulgaria, 2007: a preliminary report (published 22.03.2007)

**Serbia:** Current measles outbreak in Serbia: a preliminary report (published 15.03.2007)

Recent important issues relating to measles, mumps, rubella and pertussis are found in the latest news feature above.

Measles surveillance data and a pertussis surveillance report can be found on this website.

You can also find updated information on national childhood vaccination schedules.
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VPD outbreak information sharing in "Forum" site

<table>
<thead>
<tr>
<th>Forum</th>
<th>Topics</th>
<th>Posts</th>
<th>Last Post</th>
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</table>
Reported measles cases by year, 2001-2006
(19 case-base reporting countries 2001-2006)

Data source: EUVAC.NET
* Provisional data
Reported incidence of indigenous measles per 100,000 inhabitants by country, 2006 \((n=7,827)\)

- **Zero cases**: 11 countries
- **<0.1**: 17 countries
- **0.1-1.0**: 8 countries
- **>1**: 7 countries

**No. of countries**

- Germany: 2,282 cases
- Romania: 3,169 cases

Data source: EUVAC.NET
Changes in indigenous incidence of measles per 100,000 inhabitants from 2005 to 2006

- Austria
- Denmark
- Latvia
- Poland
- Spain
- Turkey
- Switzerland
- Greece
- Ireland
- Belgium
- Italy
- Romania
- Sweden
- Malta
- Turkey
- Rest
- <0.1
- 0.1-1.0
- >1
- 0.1-1.0
- <0.1
Measles in Europe – Highlights 2006

- Still a problem in many European counties
- Large outbreaks at national level
- Anti-vaccination lobbying
- Identified susceptible groups:
  - Unvaccinated persons
  - Increasing age groups
  - Imported cases
  - "Hard-to-reach" communities
Mumps surveillance at national level

- Case-based data from mandatory reports
- Aggregated data from mandatory reports
- Sentinel surveillance clinician-based
- No national surveillance
Countries with mandatory reporting systems for mumps providing data for 2000-2005 \((n=24)\)

- All clinical, laboratory confirmed and epidemiologically-linked cases were included
- 24 countries
No. of reported mumps cases in 24 EUVAC.NET countries, 2000-2005 \((n=837,839)\)
Pertussis data collection previous contract

19 countries participated

- 1998-2002
- 1998-2001
- No data provided

Report is available at: http://www.euvac.net/graphics/euvac/pdf/pertussis.pdf
No. of reported pertussis cases in 14 EUVAC.NET participating countries, 1998-2002 \( (n=77,419) \)

Note: No data from Spain and Sweden 2002. Denmark provided data only on population 0-2 years of age. Only data from former East Germany was available for this period.
No. of reported pertussis cases in 14 EUVAC.NET participating countries by country, 1998-2002 (n=77,419)
All clinical, laboratory confirmed and epidemiologically-linked cases were included

- 14 countries
No. of reported varicella cases in 14 EUVAC.NET participating countries, 2000-2006 (n=3,421,957)
# The Greek Childhood Vaccination Schedule

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<thead>
<tr>
<th>Age Group</th>
<th>DTaP</th>
<th>Hib¹</th>
<th>IPV</th>
<th>MMR</th>
<th>HepB²</th>
<th>MenC³</th>
<th>PCV7⁴</th>
<th>Var⁵</th>
<th>BCG</th>
<th>dT⁶</th>
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</table>

*The Greek Childhood Vaccination Schedule as on 10 April 2007*
MMR vaccination schedules overview on website

www.euvac.net
"National Plans of Action” on website

Measles

Measles and Rubella/congenital rubella

Such national plans provide essential guidelines towards the elimination of measles and rubella and are therefore highly commendable.

The "national plans" page on the euvac.net website serves as a source of information and inspiration to countries that have not yet published such a document.


σας ευχαριστούμε

Statens Serum Institut, Copenhagen, Denmark