Web-based public health information
Dutch and European examples

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INPES 2009 Prevention Days,
April 2, session 4: Inquire, inform, act and decide

Health Atlas
Health Compass
Intervention Database
www.EUPHIX.org
Outline

- Netherlands
- prevention & health promotion in the Netherlands
- role of RIVM (National Institute of Health)
- **Web-based public health information:**
Netherlands

- ± 16,000,000 people
- ± 400 municipalities
Web-based systems

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Intervention Database
Mumps, Measles and Rubella vaccination 1-1-2005
by municipality, cohort 2002, first vaccination babies (14 months)

Lowest vaccination rates in the 'Bible-Belt'

Vaccinations for mumps, measles and rubella (in Dutch called 'Kinderontwikkelings-Programma'). In the Netherlands, unlike in many other countries, it is not compulsory for both adults and children. However, almost all parents allow their children to receive the vaccinations in the so-called ‘Health Care Centre’ for babies and pre-schoolers.

This map shows that the percentage of vaccinated children in most municipalities is below 95%. A region where this percentage under 95% can be found is the so-called 'bible-belt'. This region includes the countryside of Zuid-Holland and Utrecht up to the northern part of the Veluwe (Lissemeen) (Knippenberg et al., 1996, Knippenberg, 1997).

An indication that this is a regional clustering of kindred spirits, is shown by the map with the high concentration of votes for the Reform Party (see map of SGP-voters). Among such voters there is a strong anti-vaccination programme. The people that refuse vaccinations are not only geographically related, they share important social institutions (church, school, job and leisure time) and live among each other.

As the concentration of non-vaccinated people is clustered in a regional area, the outbreak of mumps in 1999/2000 was facilitated. The outbreak of mumps in 1999/2000 is a nationwide example of how the percentage of unvaccinated babies reached epidemic status in 2004/2006. In 2005 98.27% of children that were vaccinated against rubella. After some years of decline this percentage has been rising since 2010.

<table>
<thead>
<tr>
<th>Year</th>
<th>Cohort</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>2002</td>
<td>96.27%</td>
</tr>
<tr>
<td>2004</td>
<td>2001</td>
<td>96.75%</td>
</tr>
<tr>
<td>2003</td>
<td>2000</td>
<td>95.22%</td>
</tr>
<tr>
<td>2002</td>
<td>1999</td>
<td>96.36%</td>
</tr>
<tr>
<td>2001</td>
<td>1998</td>
<td>95.63%</td>
</tr>
<tr>
<td>2000</td>
<td>1997</td>
<td>95.68%</td>
</tr>
</tbody>
</table>
Mumps, Measles and Rubella vaccination 1-1-2005
by municipality, cohort 2002, first vaccination babies (14 months)

Percentage:
- < 80
- 80 - 90
- 90 - 95
- ≥ 95

Source: LVE

Orthodox calvinist party (SGP) - voters 2006
by municipality, Elections for Parliament

Percentage voters:
- 0 - 1
- 1 - 5
- 5 - 10
- 10 - 15
- 15 - 35

Source: Ministry of Interior; Kiesraad
Web-based systems

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Intervention Database
In het Nationaal Kompas Volksgezondheid kunt u antwoorden vinden op allerlei vragen over de volksgezondheid in Nederland. Het Kompas biedt informatie over gezondheid en zieke, geboorte, preventie, zorg, bevolking en internationale vergelijkingen.

Het Kompas is vooral bedoeld voor de professionele gebruiker, maar biedt ook informatie die voor een breder publiek interessant kan zijn.

Klik op het logo om te starten of bekijk het overzicht van de meest recente informatie.

Gemaakt in opdracht van

Health Compass: www.nationaalkompas.nl

Product van het centrum Volksgezondheid Toekomst Verkenningen van het RIVM in samenwerking met o.a.

Volledige lijst met meewerkende instellingen

Nationaal Kompas Volksgezondheid, versie 3.12, 13 december 2007
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Web-based systems

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Intervention Database
EUPHIX: EU Public Health Information & Knowledge System

EUPHIX is a web-based knowledge system for health professionals, policy makers and others. It presents structured European public health information, giving a special insight into similarities and differences between EU Member States.

Information presented in EUPHIX:

- **EUphact**, presenting data and explanatory text on topics related to:
  - Health Status (perceived health, mortality, diseases, etc.)
  - Determinants of health (lifestyle, environment, biological, etc.)
  - Health interventions & systems (promotion, care, resources, etc.)
  - Health policies (broad policies and specific policies)
  - Demography (population projections, age distributions, etc.)

- **EUphocus**, covering:
  - broader public health themes, often linking interrelated EUphacts or showing the outcomes of European public health projects.

Tools for easy access and information:

- Search option, see top menu.
- Sitemap shows current content of EUPHIX.
- User guide for more user information.
- Materials for information purposes.
- Newsletter for latest updates.
- Contact the EUPHIX project team.

Project details

EUPHIX is developed by the EUPHIX project team and is funded by DG SANCO and RIVM. EUPHIX content is written and reviewed by the EUPHIX Expert Network. To join or to find out more, contact the EUPHIX project team.

EUPHIX serves as an information source for the Health-EU Portal.

EUPHIX, version 1.8, 5 June 2008
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EUPhact

European Union Public Health Information System

Home > EUPhact

Health Status
- Determinants of health
- Health interventions & systems
- Health policies
- Demography

EUPhact

In EUPhacts health knowledge is presented as text, tables, graphs and/or maps, references and links. The selection and scope of topics is based on the ECHI-shortlist of EC Health Indicators. The EUPhact menu follows the ECHI structure, with implemented EUPhacts highlighted in red.

List of EUPhacts that have been implemented

EUPhacts that are limited to data presentations of EC Health Indicators are marked*. 

Health status
- Life expectancy*
- Healthy life expectancy*
- Perceived general health*
- Total mortality*
- Disease-specific mortality*
- Infant mortality*
- Drug-related deaths*
- HIV/AIDS
- Lung cancer
- Breast cancer
- Ischaemic heart disease
- Diabetes
- COPD
- Suicide (attempt)*

Determinants of health
- Employment*
- Poverty, income distribution*
- Social support
- Airborne particulate matter
- Smoking
- Alcohol use
- Drug use*
- Physical activity
- Breastfeeding
- Overweight
- Blood pressure

Health interventions & systems
- Childhood vaccinations*
- Cancer survival*
- Physicians employed*
- Nurses employed*
- MRI units, CT scanners*
- Average length of stay (ALOS)*
- GP utilisation*

Health policies
- Alcohol policies
- Smoking policies

Demography
- Population by gender/age*
- Crude birth rate*
- Mothers' age distribution*
- Fertility rate*
- Population projections*

Latest updates
Breast cancer

Status
It has been internally edited.

Summary
Definition and scope
Occurrence
Mortality
Consequences for individual and society
Causes and risk factors
Interventions

Links
Related EUpacts and EUphoci
Relevant databases, organisations and projects

Data presentation
Figures, underlying data and maps

Authors, editors and reviewers
Authors, editors and reviewers breast cancer EUphact

Literature and data sources
Breast cancer has a large impact on patients
Intention-to-cure treatment may take 6 to 12 months during which the patient’s ability to attend to her normal activities is deeply disrupted. It is estimated that every day in the EU-25 countries at least 1.1 million women required treatment and health care for breast cancer in 2006.

Premature deaths have impact on the population level
Years of life lost due to premature death (YLL) is an important measure of health outcome (Lopez et al., 2006). The WHO estimated that in 2002, 50% of the YLL due to breast cancer in the WHO EURO region, which includes the Russian Federation and the countries of Central Asia, occurred before age 60 years and 92% before age 70 years.

No comparable expenditure measures for breast cancer care
There are no comparable measures of expenditure for breast cancer care and of indirect costs due to the disease, in the EU or Europe. Spending on health varies significantly within the EU-25 (Eurostat, 2007) but expenditure is not the main determinant of health outcomes, even for diseases, the fate of which depends a lot on management quality, as in the case of breast cancer (Smith, 2002). Outcomes can be improved by more effective use of resources and high quality standards (Howard, 2006; Perry et al., 2009).

Also see Estimated incidences, survival rates and trend in mortality of breast cancer throughout Europe (interactive – click on indicators to select desired topic).
Breast cancer

Breast cancer has a large impact on policies. On average, 20% to 30% of breast cancer cases in Europe occur in young women before the age of 50 years. 35% occur at age 50-64, and the remaining in elderly women. The incidence of breast cancer is highest in the UK, France, and Germany, but also varies significantly between different countries.

Breast cancer has a large impact on policies and generates substantial costs. In the EU alone, it costs €11 billion per year in direct medical costs and lost productivity. The international guidelines recommend mammography screening for women aged 50-70 years, and some countries offer screening for younger women with a family history of breast cancer.

More than half of the cases occur before the age of 65 years.

Breast cancer Prognosis has improved. New drug treatments for early stage breast cancer have increased the years of survival for breast cancer patients diagnosed in 1955-1969 from 59% to 80% in 1998-2002. Age-adjusted 5-year survival for breast cancer patients diagnosed in the Czech Republic is 83%. Sweden. On average, the sex relative rate of breast cancer patients diagnosed in the 1955-1969 in Europe was 75%. (Gammon et al., 2003). The figure may be an optimistic and accurate adaption of the results and may not reflect the actual results of the data presented in the graph. The graph is based on a general trend of increasing survival rates for breast cancer patients over time.

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Breast cancer: Breast cancer - Consequences for individual and society

Breast cancer

Breast cancer - Consequences for individual and society

More than half of the cases occur before the age of 65 years

On average, 20% to 30% of breast cancer cases in Europe occur in young women below the age of 50 years. 33% occur at age 50-64 and the remaining in elderly women (Curado et al., 2007). It is therefore a disease that affects a large number of women in the most demanding years of their lives professionally and within the family.

Breast cancer prognosis has improved

Treatment is very effective for early cancers. 5-year survival among cases detected when the tumour is less than 2 cm in size and only a few lymph nodes are involved can be as high as 85%. 99% of the very early in situ cancers are cured if properly treated (Lee et al., 2000; Saini et al., 2000). Prognosis and survival are less favourable the greater the size of the tumour and the deeper the involvement of other tissues.

Generally speaking, the 5-year relative survival of breast cancer patients has increased in European countries in recent years see Survival of female breast cancer patients diagnosed in 1990-1994 and in 1995-1999. Age-adjusted relative 5-year survival for cases diagnosed in 1995-1999 ranged from 69.3% in the Czech Republic to 84.3% in Sweden. On average, the 5-year relative survival of breast cancer patients diagnosed in 1995-1999 in Europe was 79.5% (Berrino et al., 2007). This figure may be an optimistic estimate for the pool of the EU because countries and regions where organized screening is in place are over-represented in the Eurocare working group gathering the data.

Also see Interventions.

Breast cancer has a large impact on patients

Intention-to-cure treatment may take 6 to 12 months during which the patient’s ability to attend to her normal activities is deeply disrupted. It is estimated that every day in the EU-25 countries at least 1.1 million women required treatment and health care for breast cancer in 2006.

Premature deaths have impact on the population level

Years of life lost due to premature death (YLL) is an important measure of health outcome (Lopez et al., 2006). The WHO estimated that in 2002, 60% of the YLL due to breast cancer in the WHO EURO region, which includes the Russian Federation and the countries of Central Asia, occurred before age 60 years and 52% before age 70 years.

No comparable expenditure measures for breast cancer care

There are no comparable measures of expenditure for breast cancer care and of indirect costs due to the disease, in the EU or Europe. Spending on health varies significantly within the EU-25 (Eurostat, 2007) but expenditure is not the main determinant of health outcomes, even for diseases, the fate of which depends a lot on management quality, as in the case of breast cancer (Smith, 2002). Outcomes can be improved by more effective use of resources and high quality standards (Howard, 2006; Panay et al., 2008).

Also see Estimated incidences, survival rates and trend in mortality of breast cancer throughout Europe (interactive - click on indicators to select desired topic).


EUPHIX, version 1.8, 5 June 2008 © RIVM, Bilthoven.
Breast cancer - Consequences for individual and society

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Breast cancer >> Estimated incidence of breast cancer >> 2006

Country | Data
---|---
Austria | 91.5
Belgium | 137.6
Bulgaria | 74
Cyprus | 88.4
Czech Republic | 94.8
Denmark | 122.6
Estonia | 71.1
Finland | 119.8
France | 127.4
Germany | 121.2
Greece | 91.8
Hungary | 118
Ireland | 131.4
Italy | 105.3
Latvia | 64.6
Lithuania | 88.7
Luxembourg | 116.9

Description
Estimated incidence of breast cancer throughout Europe in 1990 and 2006. Age-standardised annual rates (ASR)

Map Layers
- Background

Natural Breaks Legend
- 61.20 - 74.10
- 74.11 - 94.50
- 94.51 - 109.10
- 109.11 - 122.60
- 122.61 - 137.80
- No Data

Time series
Country Rank
---|---|---|---|---
137.00 | 122.40 | 107.10 | 91.84 | 76.52 | 61.20
Web-based systems

Health Compass

Health Atlas

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Intervention Database
• about 4000 lifestyle interventions
• database completed and updated by ‘owners’ of interventions
What provides it & for who?

- Sharing public health knowledge (about and between municipalities, regions, nations!)
- Easy access to general and specific information
- References for more detailed information
- Users working in public health research, promotion & prevention; policy employees; students.
Thank you

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