Infectious Diseases in Europe: Facts, strategies, challenges

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Prague, 15 April 2009
TB in Europe: unevenly distributed risk

- Sweden general population: 5.5/100k
- EU average: 17/100k
- Romania: 118/100k
- Prison: Spain: 226/100k
- Sierra Leone migrants (screened): 500/100k
Rate of newly diagnosed cases of HIV reported in 2006

- < 20
- 20–99
- 100–199
- 200+
- Data not available
Measles incidence in Europe

- More than 5600 cases in EU in 2008
- More than 550 reported so far in 2009
- Estimated 3 million EU citizens with no immunity
- Elimination of measles in EU by 2010 very unlikely
Europeans still die of infectious diseases (1)

According to ECDC’s analysis, each year in the EU...

- ... approximately 4 million people catch healthcare-associated infections: 37,000 deaths directly attributable to healthcare-associated infections
- ... 25 to 50 million people catch influenza: 40,000 to 200,000 deaths from seasonal influenza
Europeans still die of infectious diseases (2)

According to ECDC’s analysis, each year in the EU …

• …around 90,000 people diagnosed with tuberculosis: 7,800 deaths from tuberculosis

• …approximately 30,000 people diagnosed with HIV/AIDS: 1,800 deaths from AIDS-related diseases

• …upsurge of measles in EU in 2007/2008 (over 5600 cases reported in 2008): reporting delay, but there will be deaths attributable to measles
Epidemics still happen in our era

SARS in 2003 spread internationally at alarming speed

Measles outbreaks in Switzerland-Austria-Germany-[…]-[…]

**Figure 3**

Epidemiologic curve of the measles outbreak in Switzerland, September 2006 to 13 February 2008, by canton (mandatory notifications, n=1,466)


Source for Austria: Bundesministerium für Gesundheit, Familie und Jugend, Wien

Source for Germany: Baden-Württemberg; Regierungspräsidium Stuttgart Landesgesundheitsamt
Why was ECDC established?

1. Free Movement of People
2. Free Movement of Services
3. Free Movement of Goods
4. Free Movement of Capital
5. Free Movement of Micro-organisms

"I would like to consult Europe - but do not know the number." (Henry Kissinger)

MSs, institutions, experts, NGOs in and outside Europe should all know "the number of ECDC":

www.ecdc.europa.eu
What is the role of ECDC?

Identify, assess and communicate current and emerging health threats to human health from communicable diseases.
— ECDC Founding Regulation (851/2004), Article 3

- EU level disease surveillance and epidemic intelligence
- Scientific opinions and studies
- Early Warning System and response
- Technical assistance and training
- Communication to scientific community
- Communication to the public
Is there any legal basis to deal with vaccination programmes at EU level?

- Immunisation policy is exclusive Member State competence.

- However, the Commission can facilitate **cooperation** and propose **incentive measures** designed to protect and improve human health, **excluding any harmonization** of the laws and regulations of the Member States (Article 152 of the Treaty).
ECDC activities on vaccination

- Support to global partnerships
- Surveillance
- Early warning on outbreaks and incidence
- Facilitating collection and dissemination of knowledge and best practise relating to vaccinations (VENICE II)
- Health communications – including tools to support MS
- Scientific advice to support MS vaccination policies
What vaccination programmes have achieved

- Smallpox and polio eradicated
- Measles and congenital rubella elimination goal established
- Tetanus and diphtheria fairly under control
- 90% reduction in pertussis cases
- 5-folds reduction of hepatitis B cases
- Dramatic impact on *Haemophilus influenzae b* infection
Challenges

- **Prevention** – strengthening vaccination programmes
- **Public perceptions** – people think infectious diseases no longer a threat. More likely to question value and safety of vaccination.
- **Co-ordination** – building partnerships
- **Determinants of communicable diseases** – migrating populations, urbanisation, life-style, poverty, environment…
- **New discoveries** – cancer and infectious diseases
- **Economics** – economic impact of infectious diseases as well as impact of present economic situation on health and infectious diseases
Perceptions about infectious diseases are changing

30,000 paralytic polio cases in Europe every year in the pre-vaccine era
Vaccine safety concerns

Disease incidence
Variety of influencing factors

- Vaccination scepticism
  - Ideological positions
  - Shift of risk perception from the disease to the vaccine
  - Mistrust

- Communication
  - Vaccine efficacy and safety
  - Timely, understandable, tailor-made

- Health service related: accessibility, affordability
- Public health vis-à-vis individual benefit
VENICE II - an ECDC network of experts

Vaccine European New Integrated Collaboration Effort

As the most important tool of primary prevention, vaccination targets large number of healthy individuals in each Member State.
Currently in the European area there are many vertical projects addressing single diseases or infections, but no project in the Public Health field is addressing vaccination within a EU perspective.
There is the need to improve knowledge on how vaccinations are performed across EU, to agree on indicators for monitoring vaccination programs, to define models of decision taking process and to integrate the available information identifying gaps and added values.
The Venice project aim is to encourage collection and dissemination of knowledge and best practice relating to vaccination and to further develop collaboration and partnership between Member States.
The ECDC MMR communication toolkit

- A practical toolkit to support communication in MS
- Ready-to-use material
- Guidance on how to establish effective communication
- Use of new communication routes like the Web
Perception about infectious diseases is changing...

New York, 1939
People in line for getting the smallpox vaccine
Conclusions

- Vaccinations among other public health measures have brought an impressive benefit to the European citizens.

- We have to work together to pool the European knowledge to better understand the challenges in order to define and implement common/complementary strategies.

- Beneficial collaboration has been established between the ECDC, Member States, European Commission, and relevant international partners – in particular WHO.

- A coordinated and concerted approach can bring a clear added value to the fight against infectious diseases in Europe.
Thank you