Back to Basics: 
Regional Progress Towards Measles and Rubella Elimination and Introduction of New Vaccines
WHO European Regional Office

SAGE, Geneva
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Prevent. Protect. Immunize


Did you know that measles still kills people in Europe?
Did you know that one unprotected child gets measles every hour?
Did you know that, every year, 600,000 children in Europe are not fully vaccinated by their second birthday?
Did you know that an unvaccinated child is a health risk to others?

We need your help. Please watch this film and share it with everyone you know who cares about children’s health. It is important for all of us!

For more information about immunization in your country:
Presentation outline

- **Progress towards measles elimination goal**
  - Status of implementation of strategies
  - Challenges to reaching the goal
  - Feasibility of reaching elimination goal by 2010
  - What is needed to reach the goal

- **Challenges to new vaccine introduction in the Region**
  - Status of new vaccine introduction
  - Challenges and solutions
  - WHO EURO strategy
Strengthen national immunization systems through eliminating measles and rubella and preventing congenital rubella infection

- Resolution EUR/RC55/R7
- Endorsed by all Member States in 2005
- Updated RC in 2008
Measles coverage (MCV1) and cases of disease, WHO European Region, 1980-2008

MCV1 and MCV2 coverage
WHO European Region, 2007-2008

<table>
<thead>
<tr>
<th>Year</th>
<th>Both MCV1 and MCV2 ≥ 95%</th>
<th>Either MCV1 or MCV2 &gt; 95%</th>
<th>Both MCV1 and MCV2 &lt; 95%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Source: Admin Coverage WHO UNICEF JRF, 2008 (WHO UNICEF Coverage Estimates used if Admin coverage not provided)
Measles and rubella supplementary immunization activities, WHO European Region, 2000-2010

Period of latest MR SIA
- 2000-2004
- 2005-2007
- 2008-2010
Measles incidence and major outbreaks
WHO European Region, 2008-2009

Measles outbreaks in 2008 - 2009

*CISID as of 24 September 2009
Reported measles cases,
WHO European Region, 2004 - 2009 *

*Source: Monthly MR Surveillance data, CISID (As of Sep 30 2009)
Vaccination status of measles cases
WHO European Region, 2004-2008

Source: Monthly MR surveillance data reporting
## Monitoring Progress Towards Measles Elimination

**WHO European Region 2007-2009**

<table>
<thead>
<tr>
<th>Category</th>
<th>Target</th>
<th>2007</th>
<th>2008</th>
<th>2009* (annualized)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Incidence</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confirmed measles cases (confirmed by lab, epidemiologic linkage or clinically)</td>
<td>&lt; 1.0 per 1 000 000</td>
<td>7.86</td>
<td>10.45</td>
<td>8.05</td>
</tr>
<tr>
<td>Absence of endemic measles virus</td>
<td>Absent</td>
<td>Present</td>
<td>Present</td>
<td>Present</td>
</tr>
<tr>
<td><strong>High Quality Surveillance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National reporting of discarded measles cases</td>
<td>≥ 2 per 100 000</td>
<td>0.03</td>
<td>0.14</td>
<td>0.05</td>
</tr>
<tr>
<td>% of districts reporting ≥ 1/100 000 discarded measles cases</td>
<td>≥ 80%</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>% of suspected cases with adequate investigation</td>
<td>≥ 80%</td>
<td>8.79%</td>
<td>8.62%</td>
<td>9.44%</td>
</tr>
<tr>
<td>% of suspected cases with blood specimens</td>
<td>≥ 80%</td>
<td>66%</td>
<td>79%</td>
<td>83%</td>
</tr>
<tr>
<td>% of specimens with lab results ≤ 7 days after arrival to lab</td>
<td>≥ 80%</td>
<td>65%</td>
<td>65%</td>
<td>58%</td>
</tr>
<tr>
<td>Transmission chains (outbreaks) with sufficient samples <em>for virus detection</em></td>
<td>≥ 80%</td>
<td>100%</td>
<td>---</td>
<td>54%</td>
</tr>
<tr>
<td><strong>High Population Immunity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National MCV1</td>
<td>≥ 95%</td>
<td>94%</td>
<td>94%</td>
<td>---</td>
</tr>
<tr>
<td>National MCV2 coverage</td>
<td>≥ 95%</td>
<td>86%</td>
<td>92%</td>
<td>---</td>
</tr>
<tr>
<td>Percentage of outbreaks or transmission foci with &lt;10 cases</td>
<td>≥ 80%</td>
<td>52%</td>
<td>40%</td>
<td>36%</td>
</tr>
</tbody>
</table>
Rubella incidence per 1,000,000 population
WHO European Region, 1999-2008

Data source: WHO UNICEF JRF time series, 1999-2008
What got us here won’t get us there*

* Source: What Got You Here Won’t Get You There, Marshall Goldsmith
Challenges to meeting the goal-1

- **Value of immunization**
  - Victim of own success
  - Anti-vaccine movements
  - Religious and philosophical beliefs

- **Declining routine immunization coverage in the European Union Member States**
  - Austria, Germany, Italy, Switzerland, Spain, the UK [and Israel]: 92% of cases in 2008
Challenges to meet the goal-2

- Access to health services
  - Health systems reforms in central and eastern Europe
    - Weakened public health
  - Rural and hard-to-reach populations

- Financing and human resources

- Political commitment to goal
  - Competing priorities for resources

- Sufficient societal support
Recent articles published

Cluster of measles cases in the Roma/Sinti population, Italy, June-September 2006

Measles resurgence in France in 2008, a preliminary report

Measles is still a cause for concern in Europe: orthodox Jewish communities in Belgium and the UK, April 2008

MMR boycott blamed for soaring measles cases in the UK, August 2009
Feasibility of European Region eliminating measles in 2010

Criteria for evaluation

- Progress to date
  - Measles incidence
  - MCV1 and MCV2 coverage
- Surveillance system: status and quality
- Routine immunization programme
- Quality of SIA, susceptible populations
- Enabling factors
- Challenges
Feasibility of the European Region eliminating measles in 2010

Overall prospects for elimination in 2010

- **Green**: Feasible
- **Light Green**: Probable
- **Red**: Unlikely
What is needed to reach the goal?
Short-term activities

- Conduct advocacy
  - High-level political advocacy
    - With RC, Member States, EU Parliament
    - EIW 2010, IHR alerts
  - Partners, professional associations and public

- Consider further SIAs

- Strengthen surveillance: training & guidelines

- Improve ECDC and EURO data collection

- Define validation process and begin documentation
  - prototype tool was piloted in 2008-2009
  - consult with partners in the Region
Intermediate activities

- Strengthening routine immunization through optimized mix of service delivery strategies - reaching susceptibles

- Strengthening evidence-based decision making and communication through NITAGs

- Ensuring health care staff are trained with the right mix of skill sets and knowledge to deliver immunizations

- Increasing ability of countries to mobilize and efficiently use domestic and supplemental external resources
Great progress made towards measles elimination goal in the WHO European Region

However;

WHO European Region will not meet the 2010 goal

– ETAGE recognizes the goal will not be met but recommends elimination efforts must keep moving forward

Therefore;

Strengthen efforts to increase routine immunization with innovative approaches, political commitment, and societal support
Status of new vaccine introduction

Challenges and EURO strategy
Hib implementation status WHO European Region, 2009

Hib3 Coverage

Hib Implementation 2009
- Introduced (45)
- Introducing in 2009 (2)
- Not Introduced (6)

Pneumococcal Vaccine implementation status, WHO European Region, 2009

= Routine Immunization* (N=15)

*Nation-wide routine immunization (does not include vaccination of risk groups or limited geographical implementation)
**HPV Vaccine implementation status**

**WHO European Region, 2009**

<table>
<thead>
<tr>
<th>= Routine Immunization* (N=18)</th>
</tr>
</thead>
</table>

*Nation-wide routine immunization (does not include vaccination of risk groups or limited geographical implementation)

**Source:** WHO UNICEF JRF
Challenges and solutions in introduction of new vaccines in the WHO European Region

Political commitment

- Ability to sustain introduction
  - Resources
  - Policy guidance
  - National Immunization Technical Advisory Groups
- Need for evidence
  - Establish/strengthen rotavirus and invasive bacterial diseases surveillance
  - Economic analyses: cost-effectiveness and opportunity costs

Advocacy for reallocation of resources in MoH

- Strengthen awareness of diseases and vaccines among medical workers and decision makers
Rotavirus surveillance networks, WHO European Region, 2009
WHO European Regional Office strategy for priority setting and policy making

- Portfolio of public health interventions
  - Synergy and integration
- Gain clearer understanding of MOH landscape and priorities
- High level government involvement
- Multisectoral approach (MOH, MOF) and partnerships
- Economic component
- Ensure sufficient societal trust (anti-vaccine)
- Assist middle-income countries
Progress made in introduction of new vaccines in the European Region

However;

Political commitment and advocacy are needed

Therefore;

WHO has developed a comprehensive strategy with a integrated and multisectoral approach
Acknowledgements

- Member States of the WHO European Region
- WHO EURO Targeted Diseases and Immunization Team members
- European Technical Advisory Group of Experts on Immunization (ETAGE)
- WHO Geneva
Thank you
National Immunization Programme: high quality and trusted routine immunizations

- Value of vaccines
- Anti-vaccine movement
- Political commitment
- Health system changes
- Human & financial resources

Measles and Rubella elimination

Introduction of new vaccines
**Universal immunization:**
- Austria
- Belgium
- Luxemburg
- Finland

**Scientific society recommendations:**
- France
- Germany
- Spain
- Italy
- Poland
Age distribution of measles cases
WHO European Region, 2004-2008

Source: Monthly MR surveillance data reporting