Measles/Rubella Program in Poland

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Relation to recommended issues

Presented data:

- Vaccination
- Incidence rate for measles and rubella
- Number of samples from suspected of measles and rubella cases
- Number of samples referred to RRL
- Quality assessment of laboratory

Unpresented:

- Campaigns of vaccination
- Number of samples tested for rubella - Too many cases of rubella - financial problems.
Milestones of measles and rubella vaccination in Poland

**Rubella**
1. from 1988 - introducing of monovalent rubella vaccine - 13 y. girls
2. from November 2003 replacement the first dose of monovalent measles vaccine by MMR (measles, mumps, rubella). The second dose monovalent rubella vaccine - 13th y. (only girls).
3. from 2005 – the first dose of MMR (measles, mumps, rubella). The second dose MMR – 10 y. children

**Measles**
1. from 1975 - introducing monovalent measles vaccine in 12 – 14 month age (the first dose)
2. from 1994 – introducing the second dose of monovalent measles vaccine - 7 y. children
3. from November 2003 – replacement the first dose of monovalent measles vaccine by MMR (measles, mumps, rubella). The second dose – monovalent measles vaccine - 7y. children
4. from 2005 – the first dose of MMR (measles, mumps, rubella). The second dose MMR – 10y. children
Vaccination coverage in Poland
MMR [3y. age]
2008-2009y.
Registered Rubella cases in Poland 1996-2011
Measles in Poland

No of cases     Vaccination[1d]                   2 dose introduction

2001 2003
Registered Measles cases in Poland in 2000-2010

Measles Registered Measles cases in Poland in 2000-2010
Rubella- Male to Female ratio

Plot of Fitted Model

M_2004/W_2004 = 1.44631 - 0.0217411*Age group

Plot of Fitted Model

M_2010/W_2010 = 2.71412 - 0.0415215*Age group
Measles 2010

Measles 2010 (14 cases)
(months of registration)

[VI]
[X]
[III]
[VI]
[X]
Rubella in Poland 2010

No. of cases 4197

[Map showing the distribution of rubella cases across different regions of Poland, with numbers indicating the number of cases per region.]
**Laboratory activity 2008-2011**

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of sera tested for measles/rubella IgM</th>
<th>No of samples for isolation</th>
<th>No of samples for measles PCR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>156</td>
<td>41 [3 positive]</td>
<td>41 [7 positive]</td>
</tr>
<tr>
<td>2009</td>
<td>99</td>
<td>29 [5 positive]</td>
<td>44 [23 positive]</td>
</tr>
<tr>
<td>2010</td>
<td>23</td>
<td>8 [0 positive]</td>
<td>8 [0 positive]</td>
</tr>
<tr>
<td>2011</td>
<td>79</td>
<td>20 [0 positive]</td>
<td>25 [7 positive]</td>
</tr>
</tbody>
</table>
Accreditations

- Annually WHO proficiency test and retesting of selected samples in RRL
- The last audit 2010

- Annually audit by country authority
Annual WHO Accreditation
Results of proficiency tests and retesting in RRI (RKI)

<table>
<thead>
<tr>
<th>Year</th>
<th>Score on WHO proficiency test</th>
<th>Percent accuracy of measles and rubella IgM detection</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>100%-measles IgM 100%-rubella IgM</td>
<td>100%-measles IgM 100%-rubella IgM</td>
</tr>
<tr>
<td>2009</td>
<td>97.5%-measles IgM 100%-rubella IgM</td>
<td>100%-measles IgM 100%-rubella IgM</td>
</tr>
<tr>
<td>2010</td>
<td>100%-measles IgM 100%-rubella IgM</td>
<td>100%-measles IgM 100%-rubella IgM</td>
</tr>
<tr>
<td>2011</td>
<td>100%-measles IgM 100%-rubella IgM</td>
<td>95%-measles IgM 100%-rubella IgM</td>
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