A new meningitis A vaccine for Africa: how did we do?

Conference on Global Health and Vaccination Research

Oslo, July 14, 2011

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Meningitis belt in Sub-Saharan Africa

- Over 90 percent of global meningococcal disease occurs in the African meningitis belt.
- Group A Nm accounts for estimated 80-85% of all meningococcal cases.
- Focal epidemics occur every year.
- Major epidemics occur every 7-14 years.
Dec. 6, 2010 - Official launch day –
President of Burkina Faso
Burkina Faso campaign: 6-15 December

- **Target** population: 10,677,781 Burkinabes between 1 and 29 years of age

- **Duration** of the campaign: 10 days

- **Results**: 10.8 million persons immunized

*Very successful campaign with high acceptance!*
Meningitis cases by week – Burkina Faso

Cas par semaine / Cases by week Burkina Faso
Semaine / Week 01-2005 - 26-2011

Men A vaccination campaign
Reported meningitis in Burkina Faso: 2008 to 2011 (through week 14)
Meningitis cases with percent distribution of Group A meningococcal and pneumococcal isolates: Burkina Faso, 2005-2011

<table>
<thead>
<tr>
<th>Year</th>
<th>Cases</th>
<th>% Men A</th>
<th>% Pneumo</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>3,626</td>
<td>11.6</td>
<td>49.5</td>
</tr>
<tr>
<td>2006</td>
<td>19,134</td>
<td>84.6</td>
<td>9.4</td>
</tr>
<tr>
<td>2007</td>
<td>26,878</td>
<td>91.1</td>
<td>7.1</td>
</tr>
<tr>
<td>2008</td>
<td>10,401</td>
<td>79.2</td>
<td>19.3</td>
</tr>
<tr>
<td>2009</td>
<td>4,723</td>
<td>30.1</td>
<td>66.7</td>
</tr>
<tr>
<td>2010</td>
<td>6,732</td>
<td>24.9</td>
<td>47.5</td>
</tr>
</tbody>
</table>

Introduction of MenAfriVac in December 2010

<table>
<thead>
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<th>Cases</th>
<th>% Men A</th>
<th>% Pneumo</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>2,624</td>
<td>0.5</td>
<td>70.3</td>
</tr>
<tr>
<td>(wk 21)</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
CSF bacteriologic isolates 2011

Legend
1 Dot = 1
- NmA
- Nm W135
- Pneum
- NmX

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Early observations

- Disappearance of Group A Nm meningitis
- Stable fraction of non Group A meningococcal isolates

Consistent with vaccine derived herd immunity
How did we do?

- So far so good

but...

more epidemiologic and bacteriologic data are needed before firm conclusions can be made. Continued surveillance is imperative.