EPI Update

4th Meeting of the RBM Working Group on Scalable Malaria Vector Control (WIN)

Tracey Goodman, EPI Team
Department of Immunization, Vaccines & Biologicals (IVB)
Global Immunization 1980-2006, DTP3 coverage

global coverage at 79% in 2006


DTP3 coverage 2006, African Region

regional coverage 73%

Date of slide: 16 August 2007
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| Total countries DTP3 <50% | 20 | 16 | 14 | 12 | 9 | 8 | 7 |

Date of slide: 22 August 2007
26 million infants not immunized (DTP3), 2006

- Sub-Saharan Africa (8.71)
- Latin America and Caribbean (1.02)
- East Asia and Pacific (4.64)
- South Asia (12.10)
- Industrialized (0.47)
- Central Europe, CIS (0.28)
- Mid-East and N Africa (0.98)

Countries with most unvaccinated infants DTP3, 2004-2006 (in millions)

- **India**: 11.8 million (2006), 11.5 million (2005), 11.3 million (2004)
- **Nigeria**: 2.9 million (2006), 2.8 million (2005), 2.7 million (2004)
- **China**: 1.8 million (2006), 1.7 million (2005), 1.6 million (2004)
- **Ethiopia**: 1.5 million (2006), 1.4 million (2005), 1.3 million (2004)
- **Pakistan**: 1.1 million (2006), 1.0 million (2005), 0.9 million (2004)
- **DR Congo**: 0.8 million (2006), 0.7 million (2005), 0.6 million (2004)
- **Bangladesh**: 0.5 million (2006), 0.4 million (2005), 0.3 million (2004)
- **Angola**: 0.2 million (2006), 0.2 million (2005), 0.1 million (2004)
- **Niger**: 0.1 million (2006), 0.1 million (2005), 0.05 million (2004)

Date of slide: 23 August 2007
GLOBAL
Annual surviving infants cohort = 128 million

79% DTP3 coverage
102 million children vaccinated

<table>
<thead>
<tr>
<th>Additional children to reach:</th>
<th>Children unvaccinated</th>
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<tbody>
<tr>
<td>79%</td>
<td>0</td>
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<tr>
<td>80%</td>
<td>0.7 million</td>
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<td>90%</td>
<td>12.8 million</td>
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<td>100%</td>
<td>26.3 million</td>
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Global Immunization 1980-2006, BCG coverage at birth

global coverage at 87% in 2006

Date of slide: 23 August 2007
Global Immunization 1980-2006, DTP1 coverage

Global coverage at 89% in 2006

% coverage

Measles vaccine coverage by WHO region, 1980-2006

Global coverage at 80% in 2006


193 WHO Member States. Date of slide: 16 August 2007
## Traditional Dichotomy

<table>
<thead>
<tr>
<th>Routine</th>
<th>Campaigns</th>
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<tr>
<td><strong>Objectives</strong></td>
<td><strong>Reduce transmission of selected disease(s)</strong></td>
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<tr>
<td>High coverage with all antigens</td>
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<tr>
<td><strong>Target groups</strong></td>
<td><strong>Expanded to other age groups</strong></td>
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<tr>
<td>Children &lt;1 and CBA women</td>
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<tr>
<td><strong>Frequency</strong></td>
<td><strong>Intermittent, defined by disease epidemiology</strong></td>
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<tr>
<td>Ongoing: Daily, weekly, monthly</td>
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<td><strong>Service Delivery strategy</strong></td>
<td><strong>Fixed, outreach, door-to-door, extra posts</strong></td>
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<tr>
<td>Fixed + outreach</td>
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<tr>
<td><strong>Recording/reporting</strong></td>
<td><strong>Supplementary, not recorded on child health card</strong></td>
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<tr>
<td>Routine, recorded on child health card</td>
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<tr>
<td><strong>Visibility</strong></td>
<td><strong>High</strong></td>
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<td>Limited</td>
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Actual Continuum of Immunization Strategies

**Routine**
- Fixed & outreach, immunization only
- Fixed & outreach, EPI + other interventions
- Pulse immunization

**Campaigns**
- Periodic campaigns to boost routine coverage
- Multi-intervention campaigns with SIAs as platform
- Single-antigen NIDs or SNIDs
Reaching Every District (RED Strategy): Operational components

1. Re-establishing outreach services
2. Supportive supervision
3. Linking services with communities
4. Monitoring and use of data for action
5. Planning and management of resources
Go for 100% coverage
“EPI Plus” of the Future?

Pregnant Woman Delivery Infant

ANC
- 1st ITN
- TT (3 doses)
- Iron folate
- IPT (2 doses)

BCG OPV [HepB]

10 weeks
- DPT2, OPV2, HepB, Hib
- IPTi (?)

6 weeks
- DPT1, OPV1, HepB, Hib
- Check TT status of mother
- Vit A to mother
- Screen for ITN

14 weeks
- DPT3, OPV3, HepB, Hib
- IPTi (?)

9 months
- Measles
- [Yellow fever]
- Vit A
- 2nd ITN
- IPTi (?)

15 months
- 2nd Measles
- Vit A
- Deworming
Projected vaccines pipeline

Available by > 2011

HIV/AIDS
Malaria
TB
Dengue
HPV
Mening (conj)
HIV/AIDS

The opportunities

Traditional EPI
Underutilized Vaccines
Future

Unfinished agenda

Available by > 2011

1960 1980 2000

Diphtheria
Pertussis
Tetanus
YF Influenza
Polio
Measles
JE Rubella HepB
Hib (conj)
Typhoid
Cholera
Rotavirus
Pneumo (conj)
HepB
Mening (conj)
Dengue
Typhoid
Hib (conj)
Malingra
Rotavirus
Pneumo (conj)
HPV
Mening (conj)
HIV/AIDS

The opportunities
EPI Coverage Data (2006) By Country

Available at:

http://www.who.int/vaccines/globalsummary/immunization/countryprofileselect.cfm