Partnering with

Tore Godal
GAVI Executive Secretary
Email: tgodal@unicef.org
Website: www.vaccinealliance.org

Strengthening immunisation systems and introduction of hepatitis B vaccine in Central and Eastern Europe and the Newly Independent States, 3rd meeting, Kiev, Ukraine

26 May 2004
Immunization saves millions of lives each year, all over the world.
ANNUAL DEATHS FROM INFECTIOUS DISEASES

- Tuberculosis: 1.6
- HIV/AIDS: 2.9
- Malaria: 1.1
- Respiratory illness (not incl. Hib): 3
- Diarrhoea: 2.2
- Vaccine preventable: 2.7
- Measles
- Hepatitis B
- Haemophilus influenzae b
- Pertussis
- Neonatal Tetanus
- Yellow Fever
- Diptheria
- Poliomyelitis

including 2.7 million deaths that could be prevented from vaccines

14 million deaths per year
Childhood immunization is highly efficacious and cost-effective for reducing infant & childhood mortality (MDG #4) and potentially achieving other MDGs.

Causal link from childhood immunization to improved health outcomes (including reduced mortality) is well established.

Causal link from improved health to individual and societal economic benefits is strong. (There is also evidence for the reverse relationship)

Recent evidence shows that improved health results in increased attendance, and higher test scores. Also, educated mothers are more likely to have healthier children.

Link between educational outcomes and individual & societal economic improvement is well demonstrated. Relationship thought to work in both directions.
GOAL 1: REVERSE DOWNWARD COVERAGE TREND

- Increasing attention to immunization due to availability of effective vaccine
- Infrastructure build-up
- Initiation of national EPI programs

• Aging infrastructure and limited investments
• Mobility and HIV remove workers
• Lack of attention because of invisible effect of immunization
• Focus on campaigns (Polio)

30 million children miss out on immunization every year

*Percent basic immunization coverage worldwide

*DTP, polio, measles, BCG
GOAL 2: REDUCE TIME LAG IN INTRODUCTION OF NEW VACCINES IN POOR COUNTRIES

Achievement with combination vaccines

The Vaccine Fund established

Hep B licensed

HepB combos licensed

HepB -- all developing countries

HepB containing combination vaccines

GAVI forecasts*
GOAL 3: SAVE LIVES BY ACCELERATING DEVELOPMENT OF NEW VACCINES

If tomorrow’s vaccines were available today, an estimated

1 million lives would be saved from pneumococcal infection

Half million lives would be saved from rotavirus infection
APPROACH: STRENGTHEN COLLABORATION

Increase harmony

Governments-
industrialized
countries
Canada
France
Sweden

Governments-
developing
countries
Bangladesh
Mozambique
Mongolia

Vaccine industry-
developing
country
Serum Institute
of India

Vaccine industry-
industrialized
country
Chiron, UK

Technical
health institute
Currently Vacant

Research
institutes
Gothenburg University,
Sweden

NGOs
Sierra Leone
Red Cross

Bill & Melinda
Gates
Foundation

The
Vaccine
Fund

World Health
Organization (WHO)

United Nations
Children’s Fund
(UNICEF)

The World Bank

GAVI
QUALITIES OF EFFECTIVE AID

- Scale up in the poorest countries and the poorest groups within countries
- Focus on the most cost-effective interventions and easy-to-use technologies
- Increase predictability
- Tie funding to performance
- Include a strong monitoring and evaluation component
- Build on country priorities and harmonize with other types of health funding and programs
- Promote sustainability
QUALITIES OF EFFECTIVE AID

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- Promote sustainability
Countries eligible for Vaccine Fund support

GNI/capita $1000

APPROACH: EVERY POOR COUNTRY MAY APPLY
APPROACH: SCIENTIFIC AND RIGOROUS

GAVI Board
overall oversight, policies and strategy setting, country proposal approvals

Independent Review Committee
review of country proposals, monitoring reports

The Vaccine Fund
fund raising, advocacy, additional resources to countries

Technical support:
• Partners
• Regional Working Groups
• Others

Proposals - Monitoring Reports

New vaccines
System funding
Safety supplies

National Health Systems -- ICCs
preparation of proposals, program management including capacity building and training, monitoring and evaluation, advocacy and social mobilization, resource mobilization and management
OUTCOME: RAPID SCALE UP

Number of countries approved for support

- End 2000: 21
- End 2001: 55
- End 2002: 64
- End 2003: 69
OUTCOME: RAPID SCALE UP

Countries receiving Vaccine Fund support

- Paid/delivered (65 countries)
- Not approved (6 countries)
- Action pending (4 countries)
THE EQUITY OF IMMUNIZATION

Source: World Bank staff calculations, Demographics and health survey 2003
APPROACH: BUILD INCENTIVE TO REACH THE POOREST

- The GAVI ‘Share’ system
- $20 per additional child
- Creates incentives to put money where it is most needed - low-coverage districts receive more funding
OUTCOME: REACHING THE POOREST

District level DTP3 coverage in West Africa, Dec 2001
- Green: > 80%
- Yellow: > 50% < 80%
- Red: < 50%
- White: Data not available

District level DTP3 coverage in West Africa, Dec 2003
- Green: > 80%
- Yellow: > 50% < 80%
- Red: < 50%
- White: Data not available
OUTCOME: COVERAGE CHANGE OVER BASELINE

Among supported countries with available data


Close to 8 million additional children reportedly reached with DTP3

* 2002 data from 62 countries (WHO/UNICEF Joint Reporting form)
QUALITIES OF EFFECTIVE AID

- Scale up in the poorest countries and the poorest groups within countries
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- Include a strong monitoring and evaluation component
- Build on country priorities and harmonize with other types of health funding and programs
- Promote sustainability
# THE EFFICIENCY OF IMMUNIZATION

<table>
<thead>
<tr>
<th>Intervention</th>
<th>#lives saved per $ million spent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Children</strong></td>
<td></td>
</tr>
<tr>
<td>EPI (standard 6 antigens)</td>
<td>1500 - 2500</td>
</tr>
<tr>
<td>Malaria control (various measures)</td>
<td>1200 - 1500</td>
</tr>
<tr>
<td>Cancer treatment</td>
<td>2 - 10</td>
</tr>
<tr>
<td>Use of ARVs to block MTCT of HIV</td>
<td>2500 - 5000</td>
</tr>
<tr>
<td><strong>Adults</strong></td>
<td></td>
</tr>
<tr>
<td>HepB immunization (adult deaths averted by childhood vaccination)</td>
<td>800 – 2000</td>
</tr>
<tr>
<td>DOTS for TB</td>
<td>400 - 1500</td>
</tr>
<tr>
<td>Medical mgmt of acute myocardial infarction</td>
<td>75 - 300</td>
</tr>
</tbody>
</table>
OUTCOME: INCREASING ACCESS TO VACCINES

Vaccination programs can scale up quickly because the technology is relatively easy to administer, highly effective, and greatly valued.

*based on estimated 2003 coverage
Non-sterilized syringes can spread viruses such as HIV and hepatitis B and C. Auto-disable (safety) syringes can only be used once, reducing this risk at a low cost of $0.063 per syringe. GAVI has so far provided 486 million syringes to 37 countries, for all of their childhood immunizations.
EASY-TO-USE TECHNOLOGIES

Countries that introduced pentavalent achieved DTP3 coverage quickly

RESULT: 12.8 million children not protected against hepB
QUALITIES OF EFFECTIVE AID

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APPROACH: INCREASE PREDICTABILITY

DTP3 coverage <50%
- Support for immunization infrastructure
- Injection safety supplies
- Yellow fever vaccine, where needed

DTP3 coverage 50% - 80%
- Support for immunization infrastructure
- Injection safety supplies
- Yellow fever vaccine, where needed
- Hepatitis B vaccine
- Haemophilus influenzae type b vaccine, where needed

DTP3 coverage >80%
- Injection safety supplies
- Yellow fever vaccine, where needed
- Hepatitis B vaccine
- Haemophilus influenzae type b vaccine, where needed

Basic conditions for support
- GNI/capita < US$ 1000
- ICC or equivalent
- Immunization assessment in last 3 years
- Multi-year plan for immunization
- Injection safety plan

Special programs for China, India, Indonesia
## RAISING NEW RESOURCES

### Cumulative commitments since 2000

<table>
<thead>
<tr>
<th>Organization</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bill &amp; Melinda Gates Foundation</td>
<td>$754 m</td>
</tr>
<tr>
<td>Canada</td>
<td>$30 m</td>
</tr>
<tr>
<td>Denmark</td>
<td>$1 m</td>
</tr>
<tr>
<td>European Union</td>
<td>$1 m</td>
</tr>
<tr>
<td>France</td>
<td>$19 m</td>
</tr>
<tr>
<td>Ireland</td>
<td>$1 m</td>
</tr>
<tr>
<td>Miscellaneous private</td>
<td>$5 m</td>
</tr>
<tr>
<td>Netherlands</td>
<td>$86 m</td>
</tr>
<tr>
<td>Norway</td>
<td>$121 m</td>
</tr>
<tr>
<td>Sweden</td>
<td>$5 m</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>$62 m</td>
</tr>
<tr>
<td>United States</td>
<td>$219 m</td>
</tr>
</tbody>
</table>

**Total** $1.3 billion

**$1.1 billion committed to countries**
QUALITIES OF EFFECTIVE AID

- Scale up in the poorest countries and the poorest groups within countries
- Focus on the most cost-effective interventions and easy-to-use technologies
- Increase predictability
- Tie funding to performance
- Include a strong monitoring and evaluation component
- Build on country priorities and harmonize with other types of health funding and programs
- Promote sustainability
OUTCOME: MORE FUNDING FOR DISTRICTS

Distribution of immunization services funds in 26 countries
APPROACH: PAYING MORE FOR RESULTS

Countries that began receiving investment payments in 2001

<table>
<thead>
<tr>
<th>Country</th>
<th>1st Investment</th>
<th>2nd Investment</th>
<th>3rd Investment</th>
<th>Performance Payment</th>
<th>Holdover for Low-Performing Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Azerbaijan</td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Ghana</td>
<td></td>
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<tr>
<td>Mali</td>
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<tr>
<td>Pakistan</td>
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<tr>
<td>Rwanda</td>
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<td>Tajikistan</td>
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<tr>
<td>Tanzania</td>
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<tr>
<td>Sao Tomé</td>
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<tr>
<td>Armenia</td>
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<tr>
<td>Burkina Faso</td>
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<tr>
<td>Cameroon</td>
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<tr>
<td>Côte d’Ivoire</td>
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<td></td>
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<tr>
<td>Haiti</td>
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<tr>
<td>Kenya</td>
<td></td>
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<td></td>
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<tr>
<td>Liberia</td>
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<tr>
<td>Madagascar</td>
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<tr>
<td>Mozambique</td>
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</tr>
</tbody>
</table>

MILLIONS OF US$
QUALITIES OF EFFECTIVE AID

- Scale up in the poorest countries and the poorest groups within countries
- Focus on the most cost-effective interventions and easy-to-use technologies
- Increase predictability
- Tie funding to performance
- Include a strong monitoring and evaluation component
- Build on country priorities and harmonize with other types of health funding and programs
- Promote sustainability
## OUTCOME: IMPROVING HEALTH DATA QUALITY

### Data Quality Audit (DQA) Results

<table>
<thead>
<tr>
<th>Year</th>
<th>Pass Rate</th>
<th>Passed</th>
<th>Failed</th>
<th>Passed:</th>
<th>Failed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>54%</td>
<td>Ethiopia (0.80)</td>
<td>Burkina Faso (0.58)</td>
<td>Afghanistan (0.91)</td>
<td>Lao PDR (0.60)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ghana (0.87)</td>
<td>Cameroon (0.54)</td>
<td>Bangladesh (0.88)</td>
<td>Madagascar (0.62)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mali (0.77)</td>
<td>Côte d’Ivoire (0.53)</td>
<td>Cambodia (0.98)</td>
<td>Yemen (0.73)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rwanda (0.89)</td>
<td>Haiti (0.40)</td>
<td>Nepal (0.83)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tajikistan (1.06)</td>
<td>Kenya (0.49)</td>
<td>Niger (0.93)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tanzania (0.90)</td>
<td>Mozambique (0.55)</td>
<td>Pakistan (0.99)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Uganda (0.79)</td>
<td></td>
<td>Senegal (0.78)</td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>73%</td>
<td></td>
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</tr>
</tbody>
</table>

- Passed: Countries with a pass rate of 70% or above.
- Failed: Countries with a pass rate below 70%.
QUALITIES OF EFFECTIVE AID

- Scale up in the poorest countries and the poorest groups within countries
- Focus on the most cost-effective interventions and easy-to-use technologies
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- Tie funding to performance
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- Build on country priorities and harmonize with other types of health funding and programs
- Promote sustainability
Countries receive three years of investment payments

No global rules about how money is used

Government and technical partners in countries decide how to use money, based on local needs

For example:

- training
- social mobilization
- vehicles
- basket funding
ADDRESSING SYSTEM BARRIERS AND LOW-PERFORMING COUNTRIES

- System barriers can be classified as
  - Political and financial commitment
  - Health infrastructure
  - Information systems
  - Management and human resources
  - Social mobilization

- Large population countries
QUALITIES OF EFFECTIVE AID

- Scale up in the poorest countries and the poorest groups within countries
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- Increase predictability
- Tie funding to performance
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Sustainability is *shared* responsibility between developing countries and donor partners. Poorest countries not expected to become self-sufficient until economies improve. GAVI partners developed the financial sustainability planning tools to aid national governments. 12 countries have submitted FSPs, additional 22 will be reviewed soon.

Continuing challenges are:
- Increased government funding for health
- Firm long-term commitments from donor partners
- Reduced program costs by increasing efficiency by:
  - timely delivery & improved management of resources within health system
  - improving program efficiency
OUTCOME: CATALYST FOR FUNDING
The case of Ghana

GAVI / Vaccine Fund contribution: US$ 41.5 million

End of GAVI/ VF support, if no phasing out

Budget Contributions (National and International)
APPROACH: SPEED PRODUCT MATURATION

Offers of monovalent hepB vaccine to UNICEF

- GlaxoSmithKline, Belgium
- Cheil Jedang
- Serum Inst of India
- Bhutan
- LGLS, South Korea
- Heber Biotec, Cuba
- Bharat Biotec, India
- Shantha Biotech, India
- Berna Biotech, Switzerland
- Biological E., India
- Wockhardt, India

Weighted average price

- MILLIONS OF DOSES
- PRICE PER DOSE

APPROACH: SPEED PRODUCT MATURATION

Offers of combination DTP-hep B vaccine to UNICEF

- GlaxoSmithKline, Belgium
- Heber Biotec, Cuba
- Berna Biotech, Switzerland
- LGLS, South Korea
- Serum Institute of India
- Shantha Biotech, India
- Bio Farma, Indonesia
- Biological E., India
- Wockhardt, India
- Bio Farma, Indonesia
- Biological E., India
- Wockhardt, India

Weighted average price

PRICE PER DOSE

MILLIONS OF DOSES

$0 $0.20 $0.40 $0.60 $0.80 $1.00 $1.20

2000 2001 2002 2003 2004 2005 2006

$0 $10 $20 $30 $40 $50 $60
Approach: Speed Product Maturation

Offers of combination DTP-hepB+Hib vaccine to UNICEF

- GlaxoSmithKline, Belgium
- Heber Biotec, Cuba
- Berna Biotech, Switzerland
- Panacea, India

Weighted average price

<table>
<thead>
<tr>
<th>Year</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price per Dose</td>
<td>$0.00</td>
<td>$0.50</td>
<td>$1.00</td>
<td>$1.50</td>
<td>$2.00</td>
<td>$2.50</td>
<td>$3.00</td>
</tr>
</tbody>
</table>

MILLIONS OF DOSES

0 5 10 15 20 25 30 35 40
LOOKING FORWARD: 2004-05 STRATEGY

GAVI Added Value

Support from the Vaccine Fund

Innovation

Advocacy & communications

Priority areas
- Health information and monitoring systems for action
- Contributing to alleviation of system-wide barriers
- Enhanced efforts in large population countries
- Procurement / Supply of existing products
- Development and introduction of new, near-term products
- Managing the process for country support from The Vaccine Fund
- Financial sustainability
- Recapitalization of The Vaccine Fund
- Setting priorities
- Monitoring progress

Work Plan components
- Strengthening service delivery
- Ensuring access to vaccines and related products
- Securing long-term financing
- Strategic planning
LOOKING FORWARD:
LONG-TERM INVESTMENT CONTEXT

The GAVI mission:

“to save children's lives and protect people's health through the widespread use of vaccines”.

Do we need a new **GAVI milestone** to better measure our progress against our mission?

*For example:*
*To reduce vaccine preventable mortality (and morbidity?) by 90% from 2000 baseline* not later than 2015.

*in the 75 GAVI/The Vaccine Fund eligible countries*
LOOKING FORWARD: 
LONG-TERM INVESTMENT CONTEXT

GAVI added value investment qualities

1. Time-limited -- catalytic funding for innovative approaches

2. Front-loaded -- early targeted investments leading to reduced costs over time

3. Performance-based -- stressing health outcomes
LOOKING FORWARD:
LONG-TERM INVESTMENT AREAS

- Improving immunization services
- Completing introduction of current vaccines (hepB, Hib, yellow fever)
- Improved strategies for currently available vaccines (measles, tetanus, rubella)
- Introduction of new, near-term vaccines (rotavirus, pneumococcal, meningitis) and long-term vaccines (AIDS, malaria, TB)
- Order of magnitude of investment through 2015: $4 billion?
For him
only the best
will
do

Latest vaccines • Safest Injections • Best quality care

Immunization
more protection than ever before