Introduction of New and Underutilized Vaccines: Assuring Vaccine Supplies for the Americas

Immunization Unit
Family and Community Health
Objectives

- Review Regional Program Strategies
- Discuss PAHO’s Approach of Technical Assistance to Countries
- Highlight importance of sustaining vaccine supplies for new products
Regional Program Strategies

- Eliminate rubella and congenital rubella syndrome
- Sustain progress of measles elimination
- Sustain progress in polio eradication
- Strengthen information management
- Introduce new and underutilized vaccines
Framework for Policy Development

Components

Instruments
- Disease burden
- Cost-effectiveness data
- Economic impact
- Financial feasibility & sustainability

Results
- Political will

Management
- Post-marketing surveillance
- Accurate demand forecasting
- Logistical issues
- Partnerships

PAHO Involvement

Technical
- Surveillance, capacity development
- Risk evaluation
- Adverse events

Advocacy
- Advocacy, Directing Council

Managerial
- Revolving Fund
- Partnerships (ICCs, ADIPs, GAVI, IFFIm)
- Cold chain, schedule
PAHO’s Challenge: Promoting Equity

2005

Industrialized countries

Latin America and the Caribbean

Measles, DPT, Poliomyelitis, BCG

Influenza*

Pneumococcal *

Meningococcal*

Haemophilus Influenzae b

Rubella

Mumps

Hepatitis B**

*Estimated future use

**Used in ~ 50% of global birth cohort
Regional priorities for introduction of new and under-utilized vaccines

Definite priorities (very high disease burden)
- Pneumococcal vaccine
- Rotavirus vaccine
- Underutilized YF and influenza vaccines
- HPV vaccine

Less definite (very low perception of risk or low disease burden)
- Varicella vaccine
- Hepatitis A vaccine
- IPV
- Others (e.g. enteric)
Why Rotavirus?

- Global partnership
  - Country interest
  - GAVI, IFFIm, Gates, and Donor countries
  - WHO, PAHO, UNICEF, Banks
  - ADIP/RVP
  - Vaccine suppliers

- Hospital based surveillance studies underway in 13 countries (HON, VEN, ELS, PAR, TRT, GUY, SUR, STV, URU, ARG, CHI, COL, GUT & 3 others scheduled for late 2005, BOL, PER, BRA)

- Vaccine availability - 2006: GSK (Rotarix), Merck (Rota Teq)
Estimated Demand for RV Vaccine in the Americas, 2006

Potential Demand

Initial Forecast 2006

Calculation: DPT Covg * <1yr *2dose *5%wastage

+Priority Countries = GAVI countries

**Source: PAHO 173
PAHO Directing Council Panel with Ministers of Health & Finance
Sept 28th

- The Unfinished Agenda: Achieving the MDGs with Immunization
- Promoting & Strengthening Partnerships
- Policy Development: Creating Fiscal Space

- PAHO Representative
- Gates Foundation Rep.
- IMF Representative
Introduction of Influenza Vaccine

México - 1997
Bahamas - 1994
Bermuda - 1999
Cayman Islands - 1980
St. Vincent and the Grenadines - 2003
Argentina - 1993
Uruguay - 1996
Paraguay 2005
Cuba - 1999
Costa Rica - 2004
Brasil - 1999
Chile - 1975
Argentina - 1993

Source: EPI Managers survey
Lessons Learned

• Successful experiences introducing influenza vaccine exist. Target population varies by country.

• The better use of vaccines for seasonal epidemic will help to ensure that supply capacity meets demand in a future pandemic.

• International bidding and procurement
  – two annual bids (North vs Southern Hemisphere)
  – Identify additional sources of vaccine
Influenza: No. of doses purchased, price trend & countries participating thru EPI-RF

- Doses purchased
- Forecasted demand
- Countries
- No. Suppliers
Policy Framework for Influenza

• Assist countries in establishing and implementing strategies to increase routine vaccination coverage for people at high risk.
  • Goal: Vaccinate > 50% of the elderly by 2006 and >75% by 2010.

• Develop & implement national plans for preparedness plans for pandemic.

• Support research and development to improve influenza vaccines
Influenza Pandemic

- Global and Regional public health priority
- Vaccine supply challenge
  - Dialogue with suppliers to create a strategic alliance
  - Dialogue with countries to improve access to supply (Pan Americanism)
  - Support clinical trials e.g. use of adjuvant to decrease the antigen dose
  - Support technology transfer (Brazil, Mexico)
  - Promote strategic stockpile
- Demand Forecasting
  - Estimate country needs in the context of preparedness plan in advance of the next bid
  - Mobilize resources
Scenarios for Influenza Pandemic, Vaccine Requirements, & Costs

<table>
<thead>
<tr>
<th>Scenarios</th>
<th>Total Population (millions)</th>
<th>Physicians (millions)</th>
<th>Nurses (millions)</th>
<th>Nurse Aide (millions)</th>
<th>Total Health Personnel (millions)</th>
<th>Total doses (2 doses scheme) (millions)</th>
<th>Total Cost US$ millions</th>
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Assumptions: Vaccination of first responders (health workers and others)

Scenarios:

1. Latin America and the Caribbean
2. Excluding countries with production capacity: Brazil and Mexico
3. Excluding countries with purchasing power capacity: Brazil, Mexico, Colombia, Venezuela, Costa Rica, Chile, Argentina and Uruguay