Strengthening Immunization Systems and Introduction of Hepatitis B Vaccine

- 1996 Siofok, Hungary
  - Getting hepatitis B vaccination on the agenda of CEE and NIS countries and partners
- 2001 St. Petersburg, Russia
  - Reviewing progress: The number of CEE and NIS countries with routine hepatitis B vaccination increased from 5 to 26
- 2004 Kiev, Ukraine
  - Evaluating hepatitis B vaccination programs, developing strategies for financial sustainability, reviewing progress

Issues and Themes

Workshop topics

- Evaluating immunization programs
- Addressing vaccine safety concerns
- Vaccine issues (birth dose, schedules, policies)
- Financial sustainability planning

Other recurring themes

- Gathering disease surveillance data
- Blood safety and injection safety
- Improving vaccine procurement and management

WHO Goal

Introduction of the hepatitis B vaccine into all countries by 2007 and 90% coverage with hep B-3 by 2015

The region of the CEE and NIS countries is one of the most successful in reaching this goal

Progress in Hepatitis B Vaccination in CEE and NIS

CEE and NIS countries have:

- Hepatitis B immunization programs (26/29 target newborns and infants)
- Immunization provided free of charge
- Well trained public health staff, capable and motivated
- Good collaborations between MOHs and partners
- 11 countries receive GAVI support

All CEE and NIS countries with high endemicity provide a universal hepatitis B vaccination program starting at birth

Country Experiences with Hepatitis B Vaccination

- **Presentations**
  - Turkey
  - Kazakhstan
  - Georgia
  - Russian Federation
  - Kyrgyzstan
- **Targeted cohorts**
  - Infants
  - Catch-up vaccination for older children and adolescents
- **Targeted groups**
  - Healthcare workers
  - Medical students

Country Experiences with Hepatitis B Vaccination

- **Reasons for success**
  - Political support
  - Infrastructure development
  - Collaborations/partnerships

- **Issues**
  - Vaccine costs
  - Difficulty in reaching newborns in some populations
  - Difficulty in achieving hepB-3
  - Concerns about vaccine safety
  - Decentralization and other management issues

Country Experiences with Hepatitis B Vaccination

Impact assessments (future objective for all countries)

- Use of sentinel surveillance data
  - Risk factor analysis
  - Program evaluation
  - Efficiency: low resources, high output

Integration of Prevention for Viral Hepatitis, HIV/AIDS, and STDs

Hepatitis B, Hepatitis C, HIV/AIDS, and STDS:

- Major public heath problems
- Routes of transmission and opportunities prevention overlap
- Lack of national programs for integrated surveillance and prevention activities lead to ongoing transmission

Model program:

- Linked sentinel surveillance sites that monitor HCV, HBV, and HIV in high-risk groups
- Integration of prevention counseling for viral hepatitis into programs for HIV/AIDS, STDs, drug abuse treatment, corrections health

Answers to Frequently Asked Questions About Hepatitis B Vaccine

- Hepatitis B vaccines are safe and effective, including those made in South Korea, Cuba, Belgium, USA, and India
- Few and minor AEFI
- No causal association with MS, ALL, autism
- Thiomersal-containing vaccines are safe and acceptable and can be used at birth
- The birth dose of hepatitis B vaccine may be given simultaneously with BCG

Public Trust and Concerns About Vaccine Safety

- Vaccines are one of public health's greatest but least celebrated successes
- Taken for granted by the majority and attacked by a vocal minority
- Today, rumors of vaccine-related illness are reported globally
- Public health authorities should

  - Respond promptly to address rumors and misinformation

  - Help ensure that the benefits of vaccination are described in news reports

Vaccine Safety

- **Storage, cold-chain and logistics**
  - Good vaccine management is essential
  - Hepatitis B vaccines must **NOT** be frozen!
  - WHO provides training and assessment of vaccine management
- **AEFI Surveillance and response**

Injection Safety

Recommendations

- Assess injection safety practices (risk to patients, providers, community)
- Encourage physicians to decrease the number of therapeutic injections
- Improve collection and disposal of sharps (technical issues)
- Incinerate contaminated material
- Provide information to doctors, nurses, students, and patients

Blood Safety

Recommendations

- Introduce system of quality assurance and quality control to Blood bank laboratories to reduce the risk of nosocomial infection
  - Blood donor screening
  - Serological testing
- Train staff in blood safety procedures
- Discourage blood donations from Blood Center Staff

Vaccine Security

Changes in the market that decrease vaccine supplies include:

- Shift from government to private sector manufacturing
- Fewer manufacturers
- Divergence in products

To help ensure stable vaccine supplies, UNICEF is:

- Shifting from buyer/trader to strategic partner
- Providing 12-month rolling forecasts to suppliers
- Establishing 3 year supply arrangements with multiple suppliers
- Offering procurement services to national governments

Group Procurement Initiative

- Idea raised at previous meetings:
  - St. Petersburg (2001) and Copenhagen (2002)
- Revolving fund model
- Report issued in 2003 by CVP/PATH
- 4 countries have expressed interest (3 Baltic nations and Bulgaria)

Reasons for limited interest by other countries:

- Legal issues
- Concern about loss of flexibility
- Adherence to current self-procurement systems

Financial Sustainability Planning

FSP is initiated in 2nd year of GAVI funding

Challenges

- Lack of experience with program budgeting
- Difficulties with data collection
- Lack of communication between MOH and MOF
- Disconnect between immunization supply and delivery
- Inadequate staff training

Benefits/Lessons Learned

- Acquisition of financial skills and planning skills
- Development of a multi-sector approach to problem solving
- Decisions taken should be put on paper
- FSP is not a one-time event: a reiterative process
- Budget projections should be prepared with participation of other donors

Workshop on Evaluation of Infant Hepatitis Immunization Programs

Evaluate your immunization program to:

- Demonstrate decreased morbidity and mortality
- Increase public confidence
- Advocate for sustainable immunization programs

The method you choose depends on what information you want to gather and available resources:

- Immunization Coverage Surveys
- Serologic Surveys
- Surveillance for acute hepatitis B
- Surveillance for HBV-related mortality

Workshop on Technical Vaccine Issues

- Waste management
- Vaccine preparations
  - Freezing, schedules, prevention of perinatal transmission, simultaneous administration of other vaccines
  - Hepatitis B vaccines are interchangeable
  - Monovalent hepatitis B vaccines should be used at birth
- Duration of protection
  - At least 15 years
- Vaccine boosters
  - Not recommended
- Pre- and post-vaccination testing
  - Neither is recommended
- Management of adult non-responders
  - Little public health benefit seen

Workshop on How to Manage a Vaccine Safety Crisis

- Ensure that staff are trained to deal with the media
- Investigate promptly to determine if the event is a coincidence, a program error, or a real vaccine safety issue
- Think twice before blaming the vaccine or stopping immunization!
- Keep on message -- identify a spokesperson
- Communicate with the medical community
- Involve professional organizations and global partners, such as WHO and UNICEF

Workshop on Financial Sustainability Planning

- Participate in the WHO Health Reform and FSP Workshop with a multi-sectoral planning team that includes representatives of the Ministries of Health and Finance
- Leave the WHO Workshop with a plan of action in which all team members have well defined roles and commitments
- Ensure that discussions of health reform include public health and immunization issues, as well as healthcare delivery
- Describe immunization costs together with benefits
- Emphasize to financial planners that financial sustainability is not synonymous with complete self-sufficiency, but may lead the way to decreased dependency on donors

Priorities for Future Action

- Advocacy to ensure political commitment and continued funding
- Technical support to sustain progress and improve implementation
- Building management capacity for monitoring performance at the local level
- Strengthening surveillance systems to improve the quality of data
- Program evaluation and impact assessment
- Communication and advocacy with all stakeholders

- Introduction of *Hemophilus influenzae* type b vaccine, where indicated
- Group procurement of vaccines
- Integration of surveillance and prevention activities for hepatitis B, hepatitis C, and HIV