

Global Immunization Vision and Strategy 2006-2015¹

Executive summary

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A NEW VISION FOR IMMUNIZATION

1. In response to the challenges of a rapidly changing and increasingly interdependent world, WHO and UNICEF have jointly drafted a global immunization vision and strategy for the years 2006-2015. Its goal is to protect more people against more diseases, by expanding the reach of immunization to every eligible person, including those in age groups beyond infancy, within a context in which immunization is high on every health agenda. It aims to sustain existing levels of vaccine coverage, extend immunization services to those who are currently unreached and to age groups beyond infancy, introduce new vaccines and technologies, and link immunization with the delivery of other health interventions and the overall development of the health sector (see box). It places immunization firmly within the context of the health system, highlighting the fact that immunization can both benefit from and contribute to the development of the health sector and to overcoming system-wide barriers. The strategy also underlines the crucial contribution of immunization to global preparedness for epidemics and complex emergencies. The realization of this vision of immunization will need strengthened surveillance, monitoring and evaluation, and the application of solid data for programme management.

VISION

- A world in 2015 in which:

- · immunization is highly valued
- every child, adolescent and adult has equal access to immunization as provided for in their national schedule
- more people are protected against more diseases
- immunization and related interventions are sustained in conditions of diverse social values, changing demographics and economies, and evolving diseases
- immunization is seen as crucial for the wider strengthening of health systems and a major element of efforts to attain the Millennium Development Goals
- vaccines are put to best use in improving health and security globally
- solidarity among the global community guarantees equitable access for all people to the vaccines they need.

¹ Document WHO/IVB/05.05.

GUIDING PRINCIPLES

2. The following guiding principles have inspired the formulation of the global strategy:

Equity and gender equality. All people – without distinction of race, religion, political belief, economic or social condition – should have a right to equal access to the needed vaccines and interventions.

Ownership, partnership and responsibility. Goals are commonly agreed and pursued by governments and their partners, joined by international solidarity, which engage in coordinated activities determined by national plans.

Accountability. Stakeholders and actors in immunization are publicly accountable for their policies and actions.

Assured quality and safe products and services. All products made available meet internationally recognized standards of quality and safety, and services are delivered according to best practices.

Strong district-based immunization systems. Interventions and their monitoring at district level ensure local commitment and ownership and the appropriate adaptation of the programme to local needs and circumstances.

Sustainability through technical and financial capacity building. Financial and technical self-reliance is a target for national governments and partners working collectively, with continuing, incremental infrastructure building.

Policies and strategies based on evidence and best practices. The choice of policies, strategies and practice is informed by data from operational research, surveillance, monitoring and evaluation, disease burden and impact assessments, and economic analyses, and by the sharing of lessons and experiences from countries in similar circumstances.

FOUR STRATEGIC AREAS

- 3. The global strategy comprises four main areas with 24 component strategies. The strategic approaches are: protecting more people in a changing world; introducing new vaccines and technologies; integrating immunization, other health interventions and surveillance in the context of health systems; and immunizing in the context of global interdependence. Immunization and the other linked interventions described will contribute significantly to achievement of the Millennium Development Goals, the immunization-related goals set by the United Nations General Assembly special session on children in 2002, and the goals set by the Global Alliance for Vaccines and Immunization and its financing arm, the Vaccine Fund. They will also help Member States, as urged in resolution WHA56.19, to increase vaccination coverage against influenza of all people at high risk. In today's increasingly interdependent world, acting together against vaccine-preventable diseases of public health importance and preparing for the possible emergence of diseases with pandemic potential will contribute significantly to improving global health and security.
- 4. The global strategy has been drawn up against a background of increasing demand for immunization, rapid progress in the development of new vaccines and technologies, continuing health-

sector development, increasing vulnerability to pandemics and other health emergencies, and expanding opportunities for partnerships.

GOALS

5. Between 2006 and 2015, all those working on immunization and related product development should strive to prevent morbidity and mortality by achieving the goals and targets set out below.

By 2010 or earlier:

- **increase coverage.** Countries will reach at least 90% national vaccination coverage¹ and at least 80% vaccination coverage in every district or equivalent administrative unit.
- **reduce measles mortality.** Globally, mortality due to measles will have been reduced by 90% compared to the 2000 level.²

By 2015 or earlier (as the case may be):

- sustain coverage. The vaccination coverage goal reached in 2010 will have been sustained.
- reduce morbidity and mortality. Global childhood morbidity and mortality due to vaccine-preventable diseases will have been reduced by at least two-thirds³ compared to 2000 levels.
- ensure access to vaccines of assured quality. Every person eligible for immunization included in national programmes will have been offered vaccination with vaccines of assured quality according to established national schedules.
- **introduce new vaccines.** Immunization with newly introduced vaccines will have been offered to the entire eligible population within five years of the introduction of these new vaccines in national programmes.
- ensure capacity for surveillance and monitoring. All countries will have developed the capacity at all levels to conduct case-based surveillance of vaccine-preventable diseases,

¹ Referring to vaccines containing all antigens given to children under one year of age, those containing measles antigen for children up to two years of age, and those given to women of child-bearing age, as provided for in national immunization schedules. In the case of newly introduced vaccines, these should have been incorporated in a country's national schedule for at least five years.

² This provisional goal has been proposed and will be finalized during 2005.

³ This goal correlates with Goal 4 of the Millennium Development Goals with its target of reducing the under-five mortality rate by two-thirds between 1990 and 2015. It is expected that the additional reduction in mortality will be achieved through effective case management. Assuming a rapid increase in access to vaccines, including the introduction of new vaccines and the greater use of underused vaccines, it is expected that the two-thirds reduction in mortality due to vaccine-preventable diseases will be achieved mainly through a 70% to 80% reduction in the number of deaths from diseases that are currently vaccine preventable (i.e. measles, pertussis, diphtheria, tetanus, illness due to *Haemophilus influenzae* type b infection) once coverage reaches 90%, and a 40% to 50% reduction in deaths from diseases that are expected to be prevented by new vaccines in the near future (i.e. against rotavirus and pneumococcal infection). This estimation will be revised over time, as better projections are developed and better data become available.

supported by laboratory confirmation where necessary, in order to measure vaccine coverage accurately and use these data appropriately.

- **strengthen systems.** All national immunization plans will have been formulated as an integral component of sector-wide plans for human resources, financing and logistics.
- **assure sustainability.** All national immunization plans will have been formulated, costed and implemented so as to ensure that human resources, funding and supplies are adequate.

THE CONTEXT

- 6. The establishment of strong national immunization services in many countries over recent years has ensured that today more than 70% of the world's targeted population is reached by those services. It is estimated that the vaccinations administered in 2003 alone will prevent more than two million deaths from vaccine-preventable diseases and an additional 600 000 deaths related to hepatitis B (from liver cirrhosis and hepatocellular carcinoma) that would otherwise have occurred in adulthood among the children immunized in that year.
- 7. Despite these achievements, commitment to immunization has not been sustained in all countries. Worldwide in 2003 an estimated 27 million infants and 40 million pregnant women remained in need of immunization. Moreover, beyond infancy, children, adolescents and adults do not yet fully benefit from the protection provided through immunization against diseases from which they are at risk.

Strength through partnerships

8. In response to immunization needs worldwide, global partnerships, such as the Global Alliance for Vaccines and Immunization, the Vaccine Fund, and the Measles Partnership, have been created in order to attain shared goals. Such partnerships bring together major stakeholders in immunization from the public and private sectors, including the vaccine industry. Initiatives for eradication of poliomyelitis, reduction of measles mortality and elimination of maternal and neonatal tetanus have shown that partnerships enable immunization services to be brought to even the most hard-to-reach communities. Through the Global Polio Eradication Initiative, for example, countries have clearly demonstrated the capacity to achieve high vaccination coverage rates and conduct high-performance disease surveillance, even in areas affected by political turmoil or other difficult circumstances. However, accessing hard-to-reach populations on a regular basis and those affected by outbreaks and emergency situations requires specially designed strategies.

New vaccines and technologies

9. Efforts are under way to develop new vaccines against major infectious diseases (including malaria, HIV/AIDS and tuberculosis). Meanwhile, many other new vaccines and technologies are already licensed or at an advanced stage of development (including rotavirus and pneumococcal vaccines) and other vaccines are readily available, but underused. Activities to ensure the safety of immunization are also being implemented (such as the use of auto-disable syringes), and the subject is becoming a top priority for countries. During the period 2006-2015, countries may be faced with an unprecedented array of new vaccines and technologies for introduction. To ensure that countries can make rational, evidence-based decisions about the choice of new vaccines and technologies, current gaps in knowledge (including disease burden, the cost-effectiveness of various strategies, and regulatory issues) will have to be filled.

Financing

- 10. Immunization is a highly cost-effective and relatively inexpensive health intervention. The overall cost of immunization, however, including the procurement of new vaccines, new vaccine formulations and technologies, is expected to rise sharply in the future. The expansion of vaccination schedules to include new vaccines has greatly increased the amount of resources that need to be mobilized. Although some relief may be obtained over time as the larger amounts of vaccine to be procured leads to greater competition among manufacturers and a reduction in price, experience has shown that it takes several years before increased demand for new vaccines is matched by lower prices. Meanwhile, the rising cost of immunization delivery needs to be added to the cost of vaccines; logistics and labour are becoming more expensive, and the extension of services to populations that are currently not being reached will need additional resources.
- 11. Securing the financing for introduction of new vaccines and increasing coverage with existing vaccines will test all countries and their partners. Ways need to be found to maximize the cost-effectiveness of contacts with immunization services (such as spreading the cost of these contacts across relevant health initiatives) and to strengthen national capability to project financial needs and obtain the required resources. Evidence-based policy decisions will have to be taken on the "affordability" of vaccines in relation to the reduction of disease burden.

Contribution to overcoming system-wide barriers

12. Increasingly, immunization will help to overcome barriers to equitable health-service delivery and sector-wide development, and will benefit from those efforts. The benefits include better public health and improved efficiency of public health services. Immunization services inevitably experience the constraints that affect the health system as a whole, but they can help significantly in overcoming system-wide barriers through the strengthening of district teams and their capacity to make optimal use of the resources and opportunities available locally. In turn, sector-wide approaches to strengthening cross-cutting areas such as human resources management, financing, logistics, public-private partnerships and information sharing can clearly benefit immunization.

Strong monitoring and surveillance capacity

13. Over the past decade, considerable progress has been made in establishing systems for monitoring and surveillance of coverage rates and trends of vaccination and its impact on vaccine-preventable diseases, and in using those data for guiding public policy, strategies and programmes. Through extensive and growing laboratory networks, surveillance for poliomyelitis and measles has not only generated crucial information for guiding the respective eradication and mortality reduction initiatives, but has also supported the prevention and control of epidemics of, for instance, meningitis, diphtheria, rubella and vector-borne diseases such as dengue and yellow fever. In countries vulnerable to such epidemics, the combination of effective national laboratories and regional reference centres where further laboratory investigations can be conducted has proved to be an important and effective public health tool. These systems have enormous potential to provide a platform for the development of mechanisms to detect both emerging infections and outbreaks of disease.

Links to other health interventions

14. Immunization services are often widely available and potentially can support, and be supported by, additional health interventions. The combined delivery, or integration, of linked health interventions is a more effective way of achieving common health goals. For example, the benefits of combining immunization with two other interventions, namely vitamin A supplementation and the

distribution of insecticide-treated bednets for malaria prevention, are increasingly being seen. Such integration will require an evidence base to guide policies, strategies and investments, and methods for evaluating the impact of linked interventions. Access to integrated services needs to be systematized in order to maximize the benefits to mothers and children attending health facilities.

Preparedness for global epidemics and emergencies

15. Countries at risk of epidemics need preparedness plans that are firmly rooted in their overall immunization plan and services. Similarly, capacity is required at country and global levels to prepare for a rapid and appropriate response to emergencies and natural disasters since that response may involve the rational use of vaccines. In the case of influenza, a global laboratory network monitors the circulating virus strains and all countries need up-to-date preparedness plans for coping with a pandemic. Many national preparedness plans, however, are nonexistant, out of date, or impractical. Governments, WHO, UNICEF, vaccine manufacturers and research institutes are currently involved in efforts to support the development of national preparedness plans and to expand capacity for production of influenza vaccines worldwide, including work on the development of a new vaccine against virus strains with pandemic potential.

COMPONENT STRATEGIES

- 16. Strategic area 1: Protecting more people in a changing world covers the key strategies needed to reach more people with immunization services, especially those who are hard to reach and those who are eligible for newly introduced vaccines. The aims are to ensure that every infant has at least four contacts with immunization services, to expand immunization to other age groups in an effort to maximize the impact of existing vaccines, and to improve vaccine-management systems in order to ensure immunization safety, including the availability of safe and effective vaccines at all times. The strategies in this area seek to prioritize underserved populations and areas and will use the "reach every district" approach.
- Strategy 1: Use a combination of approaches to reach everybody targeted for immunization
- Strategy 2: Increase community demand for immunization
- Strategy 3: Ensure that unreached people are reached in every district at least four times a year
- Strategy 4: Expand vaccination beyond the traditional target group
- Strategy 5: Improve vaccine, immunization and injection safety
- Strategy 6: Improve and strengthen vaccine management systems
- Strategy 7: Evaluate and strengthen national immunization programmes.
- 17. **Strategic area 2: Introducing new vaccines and technologies** focuses on the need to promote the development of high-priority new vaccines and technologies and to enable countries to decide on, and proceed with, their introduction. The strategies in this area aim to ensure that countries have the evidence base and capacity to evaluate the need, and establish priorities for, the introduction of new vaccines and technologies, and a supply of new vaccines and technologies adequate to meet their needs, with the necessary financial resources. They also aim to ensure that new vaccines will be offered to the entire eligible population within five years of their introduction in national programmes,

and that future vaccines against diseases of public health importance are researched, developed and made available, especially for disadvantaged populations with a high disease burden.

- Strategy 8: Strengthen country capacity to determine and set policies and priorities for new vaccines and technologies
- Strategy 9: Ensure effective and sustainable introduction of new vaccines and technologies
- Strategy 10: Promote research and development of vaccines against diseases of public health importance.
- 18. Strategic area 3: Integrating immunization, other linked health interventions and surveillance in the context of health systems emphasizes the role of immunization in strengthening health systems through the benefits that accrue to the whole system as a result of building human resource capacity, improving logistics and securing financial resources. The aim is to link immunization with other potentially life-saving interventions in order to accelerate reduction in child mortality. The component strategies also aim to improve disease surveillance and programme monitoring so as to strengthen not only immunization programmes but the health system as a whole, and to ensure that immunization is included in emergency preparedness plans and activities for complex humanitarian emergencies.
- Strategy 11: Strengthen immunization programmes within the context of health systems development
- Strategy 12: Improve management of human resources
- Strategy 13: Assess and develop appropriate interventions for integration
- Strategy 14: Maximize the synergy from integrating interventions
- Strategy 15: Sustain the benefits of integrated interventions
- Strategy 16: Strengthen monitoring of coverage and case-based surveillance
- Strategy 17: Strengthen laboratory capacity through the creation of laboratory networks
- Strategy 18: Strengthen the management, analysis, interpretation, use and exchange of data at all levels
- Strategy 19: Provide access to immunization services in complex humanitarian emergencies.
- 19. **Strategic area 4: Immunizing in the context of global interdependence** builds on the recognition that equity in access to vaccines and related financing and equal availability of information are in every country's interest. The component strategies in this area aim to increase awareness of, and respond to, the reality that every country is vulnerable to the impact of global issues and events on vaccine supply, financing, collaboration of partners, communication and epidemic preparedness.
- Strategy 20: Ensure reliable global supply of affordable vaccines of assured quality
- Strategy 21: Ensure adequate and sustainable financing of national immunization systems

- Strategy 22: Improve communication and dissemination of information
- Strategy 23: Define and recognize the roles, responsibilities and accountability of partners
- Strategy 24: Include vaccines in global epidemic preparedness plans and measures.

Framework for planning and collaboration

20. The global strategy offers a broad framework rather than a detailed plan of action in order to enable all stakeholders to direct or redirect their contribution to immunization worldwide. In view of the marked differences between countries' capacities, priorities and resources, it presents a range of strategies from which countries will be able to select those most suited to their individual needs. To support this national planning process, WHO, UNICEF, multilateral and bilateral partners, nongovernmental organizations and the private sector will intensify their coordination in order to collaborate effectively with countries. The strategy urges Member States, international organizations, nongovernmental organizations, the private sector, interest groups and other stakeholders to make an unprecedented commitment to immunization at global, national and local levels.

THE WAY FORWARD

- 21. The final section of the global strategy focuses on the actions needed to facilitate its implementation: consultations to ensure that countries apply the guiding principles to their own strategic planning through strategies tailored to individual needs, capacity and resources; securing the early engagement of immunization partners; concerted strengthening of the capacity of immunization services at district level, especially in low-performing countries; establishment of a knowledge base on successfully linked health interventions as a resource for their potential scaling up; development of an evaluation and review process to measure progress up to 2015; and production and dissemination of supportive documentation detailing plans and policies and providing further information on technical issues.
- 22. The strategic options outlined above are not exhaustive. The strategy should be seen not as a detailed blueprint but rather as an evolving plan. As the strategy and vision unfold over the next 10 years, new challenges will arise and new responses and innovations will be needed.

A VISION WITH BROAD STRATEGIC DIRECTIONS

- 23. The Global Immunization Vision and Strategy:
 - provides a vision of an expanded role for immunization in improving public health, with broad strategic directions for national policy and programme development, in the context of support to immunization programmes by all partners
 - extends the reach of immunization beyond infancy to other age groups and beyond the existing confines of immunization programmes into other settings, while maintaining the priority of vaccination in early childhood
 - encourages a package of interventions to reduce child mortality
 - contributes to global preparedness against the threat of emerging pandemics

- commits all stakeholders to unprecedented efforts to reach the "hard-to-reach"
- promotes data-driven ways of solving problems for improving programme effectiveness
- prepares the way for the introduction and widespread use of new and underused vaccines and technologies, all of which will require long-term financial planning
- promotes the development of case-based surveillance for all vaccine-preventable diseases, with expansion of laboratory networks for viral and bacterial diseases.