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Estimated external financial resource requirements for 2003–2005

as of 1 September 2002

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World Health Organization 2002

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Data as of 1 September 2002. Estimated resource requirements are updated on a six-monthly basis.

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Photo: WHO/J.M. Giboux



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Abbreviations

| AFP | acute flaccid paralysis |
|--------|--|
| AFR | WHO African Region |
| AMR | WHO Region of the Americas |
| CDC | United States Centers for Disease Control and Prevention |
| EMR | WHO Eastern Mediterranean Region |
| EPI | Expanded Programme on Immunization |
| EUR | WHO European Region |
| GPEI | Global Polio Eradication Initiative |
| IPV | inactivated poliovirus vaccine |
| NGO | nongovernmental organization |
| NIDs | national immunization days |
| OPV | oral polio vaccine |
| PEI | Polio Eradication Initiative |
| SIA | supplementary immunization activity |
| SEAR | WHO South-East Asia Region |
| SNIDs | subnational immunization days |
| TCG | Technical Consultative Group for Poliomyelitis Eradication |
| UNF | United Nations Foundation |
| UNICEF | United Nations Children's Fund |
| WHA | World Health Assembly |
| WHO | World Health Organization |
| WPR S | WHO Western Pacific Region |
| oral | |
| | |



Photo: WHO/J.M. Giboux



Executive summary

This document outlines the estimated external financial resource requirements for implementation of the 2003–2005 programme of work detailed in the Global Polio Eradication Initiative Strategic Plan, 2001–2005 (WHO/Polio/00.05) and the Report of the seventh meeting of the Global Technical Consultative Group (TCG) on Poliomyelitis Eradication (WHO/V&B/02.12). Figures were developed as of September 2002.

he Global Polio Eradication Initiative is the largest public health initiative in history. Thanks to the efforts of a broad coalition of partners, polio cases have declined by 99.8% since the Initiative's launch in 1988, from 350 000 estimated cases in 125 countries to 483 reported cases in 2001,¹ with only 10 countries considered polio-endemic at the end of that year. In 2001, polio cases were at the lowest levels in history, clearly demonstrating that the combination of proven strategies and development aid is effective.

This final stage of the Global Polio Eradication Initiative poses the greatest challenge. Eradicating polio requires accessing all children under five years of age with polio vaccine, especially those isolated by conflict, geography or by minority status. It requires maintaining high political commitment in the face of a disappearing disease. It requires implementation of containment and certification activities, and the development of post-certification immunization policy – crucial now that the interruption of transmission is imminent. Yet a major threat to realizing the historic eradication goal is a US\$ 275 million funding gap.

In total, WHO, ministries of health and UNICEF estimate that US\$ 725 million in external resources are required to implement polio eradication activities from 2003 up to the end of 2005. This amount reflects a US\$ 100 million increase from the 2001 budget estimate for this same period. This is due to an increase in the number of planned supplementary immunization activities (SIAs) from 2003–2005, given the high probability that transmission will continue into 2003. This increase in costs has been offset by new contributions from core donors to the Initiative. Of the US\$ 725 million, a total of US\$ 450 million in contributions for 2003–2005 have been pledged or are projected. The remaining funding gap of US\$ 275 million must urgently be met if the world is to exploit the window of opportunity to eradicate polio forever.

Given the need for flexibility to plan and achieve strategic goals, donors can ensure maximum impact by donating funds which are 'unspecified'. This allows a quick response to any emerging needs in the regions – exactly when and where needed. A multi-year commitment of funding also greatly facilitates vital long-term planning.

Contributing to polio eradication today is a lasting investment that goes beyond the protection of today's children to those of future generations, in perpetuity. By achieving this global public good, no child will ever again be crippled by polio, no family will know the suffering of a crippled child, and the world could potentially save as much as US\$ 1.5 billion per year from cessation of immunization and averted health care costs – funds that could be used to address other public health priorities.

The success of the Global Polio Eradication Initiative has been due to the combined efforts of a strong public/private sector partnership, spearheaded by WHO, Rotary International, the US Centers for Disease Control and Prevention (CDC) and UNICEF. ◆

¹ As of 1 September 2002.



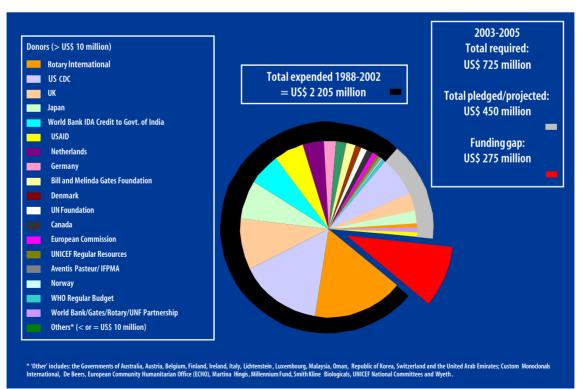
Photo: WHO/M. Crozet



1. Introduction

In 2001, the global incidence of polio fell to just 483 new cases,² bringing the disease to the brink of eradication. Wild poliovirus circulation was limited to just parts of 10 countries as the geographic spread and biodiversity of the virus dramatically declined. Intensified national immunization days (NIDs) continued in all endemic and high-risk countries. Surveillance improved markedly. Progress has also been steady in the development and implementation of the strategies for the postcertification era, and the polio physical and human infrastructure continues increasingly to strengthen routine immunization and disease surveillance services. As eradication of wild poliomyelitis progressed in 2001, several evaluations of the programme were undertaken, to review progress and lessons learned for future disease eradication and control initiatives. Among these, the United Kingdom's Department for International Development (DFID) commissioned an assessment of the impact of previous DFID contributions to help guide future involvement. The review commended the strong performance of the programme. Responding to the review's findings, DFID stated, "The success of the programme should not be constrained due to lack of financial resources, preferably provided as multiyear funding."

Figure 1: Donor contributions and pledges or projected, 1988–2005: US\$ 2655 million



| Contribution (US\$ million) | Public sector partners | Development banks | Private sector partners |
|-----------------------------|------------------------------|----------------------|-------------------------|
| >500 | USA | | Rotary International |
| 250-500 | United Kingdom | | |
| 100-249 | Japan, Netherlands | World Bank | |
| | | ("grant" element) | |
| 50-99 | Germany | | Bill & Melinda |
| | | | Gates Foundation |
| 25-49 | Canada, Denmark | | United Nations |
| | | | Foundation |
| 5-24 | Australia, Belgium, | | |
| | European Commission, Norway, | International | Aventis Pasteur |
| | UNICEF Regular Resources, | Development Bank | IFPMA |
| | WHO Regular Budget | | |
| 1-4 | ECHO, Ireland, | | De Beers |
| | Italy, Luxembourg, | | Wyeth |
| | Sweden, Switzerland | | |

Table 1: Donor profile for received and pledged donations, 1985-2002

While the Polio Eradication Initiative funding gap has been reduced from US\$ 400 million in 2001 to US\$ 275 million today, the seventh meeting of the Global Technical Consultative Group (TCG) on Poliomyelitis Eradication stressed that the gap represents a major risk to the Initiative. In 2002 alone, several immunization activities have been revised, postponed or cancelled due to lack of sufficient funding. The urgency in closing this funding gap is underscored by the fact that already an extra US\$ 100 million in funds is required to allow for additional activities in all endemic areas where transmission is expected to continue in 2003.

Historical costs and contributions

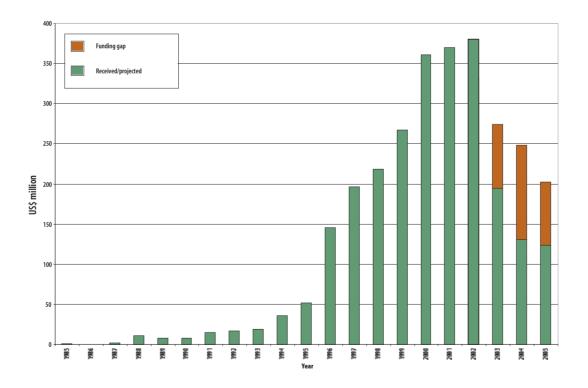
Funding provided through external sources (multilateral and bilateral donations) for countrylevel polio eradication activities from 1985 through 2002 totalled US\$ 2.2 billion. Between 1985 and 2002, 26 private and public sector donors each contributed or pledged more than US\$ 1 million to polio eradication. Of these donors, 18 made contributions of US\$ 5 million or more (see Table 1). By 2005 Rotary International, the largest private sector donor, will have contributed well over US\$ 500 million.

Financial resource requirements: underlying assumptions and data collection process

The estimates of external resource requirements for the Global Polio Eradication Initiative are based on the known costs of (1) implementing the eradication strategies at the country level and (2) managing the Initiative through the UN implementing agencies (WHO & UNICEF) at the country, regional and global levels. Since all countries in the world have now conducted several rounds of NIDs and introduced acute flaccid paralysis (AFP) surveillance, the external resource requirements for these activities can be reliably projected by country. Funds received, pledged or projected as outlined in this document are for external required resources only. Therefore, the substantial costs covered by national governments are not included in the requirements. Funds used by donor countries for their own national immunization programmes, surveillance or laboratories are also not included.

The figures in this report provide an indicative target for resource mobilization. Exact figures fluctuate depending upon the evolving epidemiological situation in the country, the impact of implementing polio eradication strategies and the results of resource mobilization efforts. WHO and UNICEF developed figures for the 10 polio endemic countries (Afghanistan, Angola, Egypt, Ethiopia, India, Niger, Nigeria, Pakistan, Somalia, Sudan) and two strategic priority countries (Bangladesh and the Democratic Republic of the Congo) in collaboration with national ministries of health. All other figures were developed by WHO HQ, regional and country offices in collaboration with national ministries of health. ◆

Figure 2: Annual contributions received or projected to polio eradication, 1985–2005



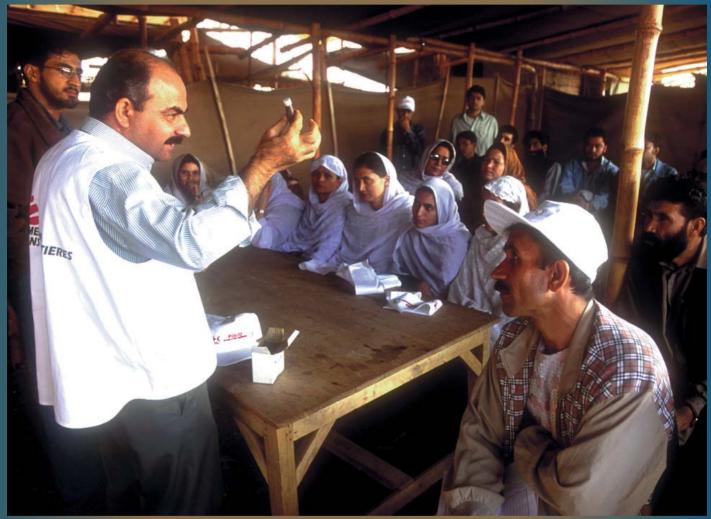


Photo: Rotary International/J.M. Giboux



2. Global resource requirements, 2003-2005

External financial resource requirements

As of September 2002, WHO, ministries of health and UNICEF estimated that US\$ 725 million in external resources (distinct from the considerable resources provided by countries themselves) are required to implement polio eradication activities from 2003 until 2005. Of this, 36% is needed for the operational costs of SIAs, 31% is required for oral polio vaccine (OPV), 16% for AFP surveillance and the Global Polio Laboratory Network and 17% for enabling factors such as mop-up activities, advocacy, certification, laboratory containment and the development of a consensus on post-certification polio immunization policy.

This amount reflects an increase from the previous budget estimate for this period, primarily due to an increase in the number of planned SIAs (i.e. NIDs and subnational immunization days [SNIDs]) from 2003–2005. Given the high probability that wild poliovirus transmission will continue in some countries into 2003, the TCG emphasized the need to maintain high polio immunization levels globally, including adequate SIAs to maintain high coverage in polio-endemic, high-risk and polio-free countries with under <90% OPV 3 coverage. To ensure transmission is stopped and to guide SIAs, all countries, polio-endemic and polio-free, must also maintain certification-standard surveillance.

The increase in costs has been offset by new contributions from core donors to the Initiative in 2002. A total of US\$ 450 million in contributions for 2003–2005 have been pledged or are projected to be received, leaving a US\$ 275 million funding gap.

Given the need for flexibility to plan and achieve strategic goals, donors can ensure maximum impact by donating funds which are "unspecified". This allows a quick response to any emerging needs in the regions – exactly when and where needed. A multiyear commitment of funding also greatly facilitates vital long-term planning.

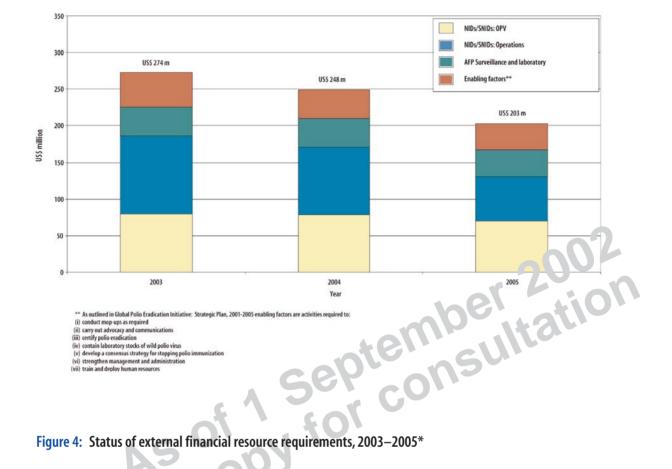
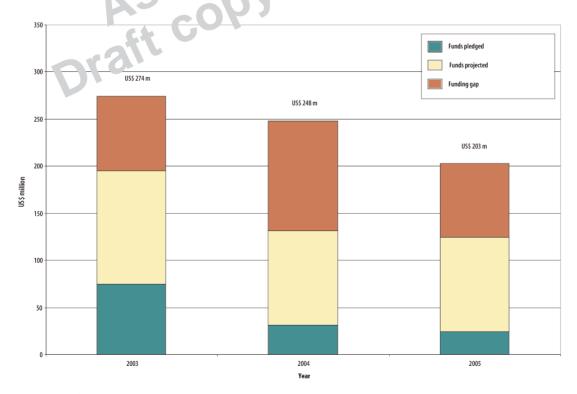


Figure 3: Planned costs by donor-supported activity, 2003–2005*

Figure 4: Status of external financial resource requirements, 2003–2005*



*Note that for India, US\$ 49.64 million that was required for Quarter 1 NIDs in 2003 was budgeted and secured in 2002, and is therefore not included in the Global Financial Resource Requirements for 2003-2005.

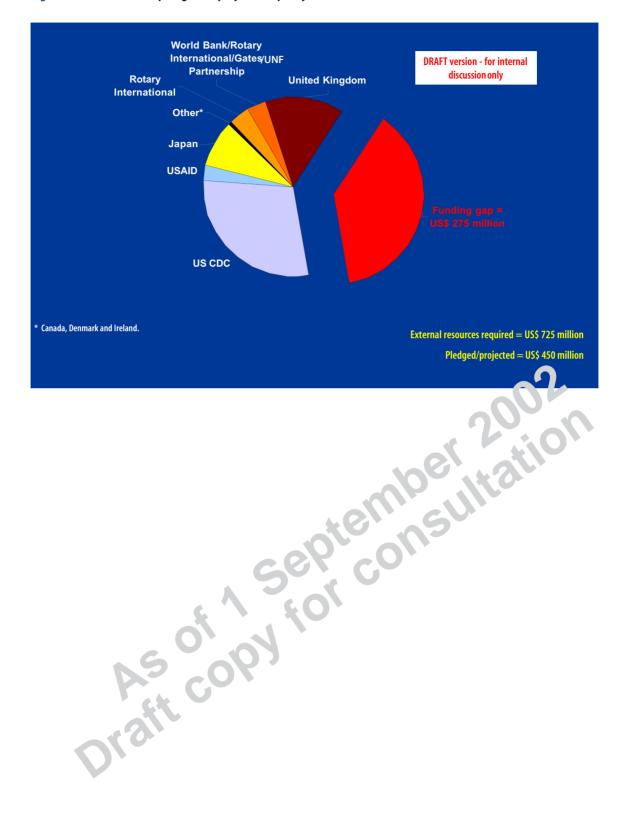
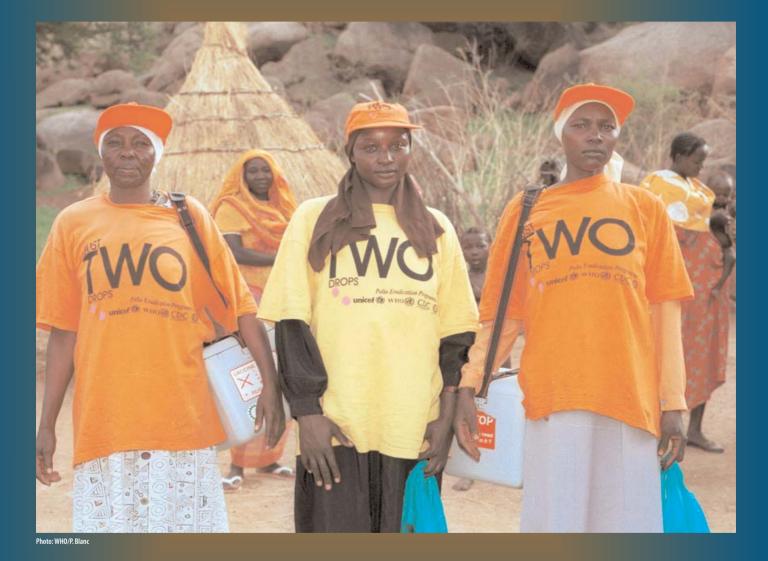


Figure 5: Contributions pledged or projected by major donors, 2003–2005





Country-level analysis and costs, 2003–2005

Definition of endemic status

Endemic countries

Definition: countries with virological evidence of indigenous poliovirus circulation during the past 12 months.

Number: 10 countries at the end of 2001.

Recently endemic/high-risk countries

Definition: countries with no indigenous polio detected for at least one year, but at high risk of ongoing low-level indigenous virus or sustained transmission of imported virus due to:

(1) geographic proximity to an endemic country;

(2) low routine immunization coverage; and/or

(3) inadequate surveillance.

Number: 17 countries at the end of 2001.

Low-risk countries

Definition: countries with no polio detected for at least one year but at low risk of indigenous virus or sustained transmission of imported virus due to: (1) high routine immunization coverage; (2) lack of proximity to endemic countries, and/or (3) maintenance of high quality surveillance. *Number: 51 countries by June 2002.*

2002

Countries certified polio-free

Definition: countries certified polio-free by a regional certification commission (all countries in the WHO Region of the Americas, European and Western Pacific regions). **Number:** 114 countries by June 2002.

Note: In June 2002, the WHO European Region was certified polio-free by the European Regional Certification Commission, bringing the number of countries certified polio-free to 114.

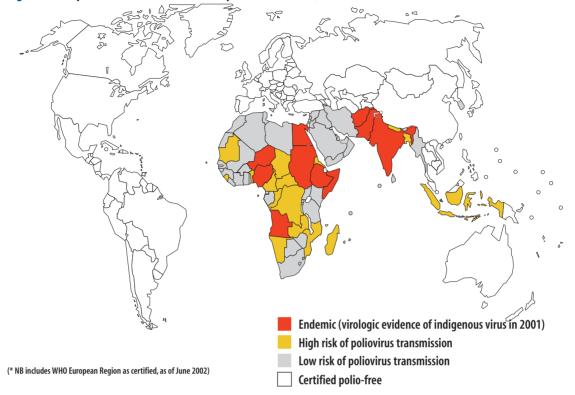


Figure 6: Map: Distribution of countries by endemic status, as of 31 December 2001*

Endemic countries: current status and 2003 activities

Only 10 countries were considered endemic at the end of 2001. These 10 polio-endemic countries are divided into two categories: areas with high-intensity transmission and areas with low-intensity transmission. Areas with high-intensity transmission Afghanistan/Pakistan – India, and Nigeria/Niger – accounted for more than 95% of the new polio caseload in 2001. Areas with low-intensity transmission were Angola, Egypt, Ethiopia, Somalia and Sudan. These 10 countries together account for 65% of the programme budget over the next three years.

High-intensity transmission areas

Three areas with high-intensity transmission are characterized by having areas with large populations and low routine immunization coverage, suboptimal sanitation and relatively wide geographical distribution of the wild poliovirus.

Area 1: India

> India (target population:² 164.4 m) The geographic extent of transmission and genetic diversity of the virus was significantly restricted in 2001, with the only endemic areas in Uttar Pradesh and Bihar. Surveillance throughout the country is of very good quality. Two rounds of high-risk response immunization (HRRI) were conducted in March and April 2002, plus many more rounds of mop-up immunizations. By mid-2002, there was a significant increase in polio cases in northern India, as a result of an epidemic of wild poliovirus in eastern/central Uttar Pradesh and high-intensity ongoing transmission in western Uttar Pradesh. Genetic studies indicate that wild poliovirus from western Uttar Pradesh is the source of many of the cases across northern India. Two rounds of NIDs3 and two rounds of SNIDs are planned in 2003, plus additional mopups, and two rounds of NIDs and two rounds of SNIDs are planned in 2004, plus additional mop-ups.

² The target populations for SIAs (ie. NIDs) are based on estimates of the number of children under five in each country in 2002 (rounded to the performance).

under five in each country in 2003 (rounded to the nearest hundred thousand). ³ India's 2003 NIDs were previously budgeted for in the last quarter of 2002, and are not included in the resource requirements for 2003–2005.

Area 2: Nigeria and Niger

Nigeria forms a single epidemiological block with Niger, with the primary foci of transmission in northern Nigeria.

➤ Nigeria (target population: 41.4 m) has made progress by largely limiting virus transmission to foci in the north. These transmission areas are being targeted for intense social mobilization and SIAs. Situated at the crossroads between west and central Africa, and the commercial hub of both regions, Nigeria is of primary strategic importance for interrupting virus transmission. SNIDs in April and May 2002 targeted five full states – Jigawa, Kano, Kebbi, Sokoto and Zamfara (all in the north) – and selected local governmental areas in eight others. These are being followed by two nationwide rounds in October and November 2002. Two rounds of NIDs and two rounds of SNIDs are planned for both 2003 and 2004.

> Niger (*target population: 3.4 m*) has intensified activities since 1999. By mid-2002, Niger had reported two polio cases: one on its south-western border with Burkina Faso, the other on the border adjacent to northern Nigeria's main foci of poliovirus transmission. Two rounds of NIDs and two rounds of SNIDs are planned in 2003 and two rounds of NIDs are planned in 2004.

Area 3: Afghanistan and Pakistan

Afghanistan and Pakistan form a single epidemiological block, and represent the second most important poliovirus reservoir in Asia after northern India. As a joint reservoir of wild poliovirus, all eradication activities are closely coordinated between the two countries.

> Afghanistan (target population: 5.9 m) has conducted polio eradication activities since 1994 despite ongoing conflict. Significant progress has been achieved in limiting virus circulation in Afghanistan, with wild virus found only in the southern and south-eastern regions in 2001. To date in 2002, only four viruses have been reported, all from the Kandahar area. Events in Afghanistan following 11 September did not have a significant negative impact on eradication activities in the country, though it has compromised surveillance quality in some areas. Four rounds of NIDs are planned in 2003; two rounds of NIDs and two rounds of SNIDs are planned in 2004.

> **Pakistan** (*target population: 30.8 m*) conducted its first NIDs in 1994 and has intensified activities since 1999. In 2001, progress was rapid, with only 119 reported wild poliovirus cases, compared with 199 in 2000. High quality surveillance and laboratory data demonstrates that areas of transmission have decreased dramatically and are limited to six groups of districts in four provinces. By mid-2002, a number of high quality SIAs were being undertaken to limit the spread of poliovirus in advance of the traditional polio 'high season'. Four rounds of NIDs and four rounds of SNIDs are planned in 2003 and two rounds of NIDs and two rounds of SNIDs in 2004.

In all high-intensity transmission areas, should wild poliovirus be found in 2003, massive mop-up campaigns (targeting more than one million children) will be conducted in response.

Low-intensity transmission areas

Areas with low-intensity transmission generally have lower population density and focal areas of wild poliovirus transmission.

> Angola (target population: 4.2 m) has suffered war for more than a generation, resulting in serious damage to its health care infrastructure. NIDs for polio eradication have been conducted since 1996. Despite the challenges, real progress has been made, with the virus now appearing to be present only in the east of the country. In 2001-2002, a poliovirus outbreak in Angolan refugee children living in Zambia highlighted the risk of Angola to nonendemic countries and the importance of immunizing in the east. While there was a marked improvement in AFP surveillance quality in 2001 and especially 2002 to date given the April ceasefire, AFP surveillance in "inaccessible areas" must still be improved. Three rounds of NIDs and two rounds of SNIDs are planned in 2003. Three rounds of NIDs are planned in 2004.

> Egypt (target population: 9 m) remains a priority, due to chronic low-level transmission in this heavily populated country. Egypt was one of the first Eastern Mediterranean Region countries to introduce SIAs for polio eradication in 1993. Despite rapidly reducing poliovirus transmission to very low levels, AFP surveillance and environmental sampling have continued to detect indigenous wild poliovirus in the governates of upper Egypt. Recently the quality of AFP surveillance and of SIAs has improved. By the end of 2002, two rounds of NIDs and two rounds of SNIDs will have been conducted, as well as extensive mop-up campaigns. Two rounds of NIDs and two rounds of SNIDs are planned in 2003 and two rounds of SNIDs are planned in 2004.

> Ethiopia (target population: 15 m) has reported no polio cases since January 2001, but there is still a risk of a) low-level undetected indigenous transmission because of inadequate surveillance, and b) the possible spread of imported poliovirus due to low routine immunization coverage. While the percentage of children immunized during NIDs since 1997 has been reported at >80%, limited access and insecurity in many of the border zones has compromised the quality of SIAs and has affected AFP surveillance in these areas. Two rounds of NIDs are scheduled in 2003 and two rounds of SNIDs are scheduled in 2004.

> Somalia (target population: 1m) has been without a central government since inter-clan fighting began in 1991. Fighting has led to devastation of the country and the absence of any infrastructure for basic health services. Despite this, progress has been made. After an agreement with all factions, the first nationwide NIDs for polio eradication were conducted across Somalia in late 1998, and have occurred annually since then. However, access to Mogadishu remains the most important issue, as it is the last remaining endemic focus of transmission in the Horn of Africa. Since April 2001, international staff have not had any access to the capital to monitor and supervise activities. Two rounds of NIDs and two rounds of SNIDs are planned in 2003 and 2004.

> Sudan (target population: 6.6 m)

>> Northern governates: since the early 1990s, routine immunization in the northern governates has fallen due to the contraction of donor funding and other factors. In 2001, the northern governates undertook four rounds of NIDs, and two rounds of SNIDs. Surveillance has improved tremendously in 2001 and 2002. In the northern governates, two rounds of NIDs and two rounds of SNIDs are planned in 2003, and two rounds of NIDs are planned in 2004.

>> Southern governates: this area has experienced a generation-long civil war hampering the delivery of routine immunization services for more than 20 years. In 2001, the southern governates undertook three rounds of NIDs and four rounds of SNIDs – including securing first-time access to areas previously isolated by conflict. Surveillance has improved tremendously in 2001 and 2002, though some areas remain difficult to access for surveillance and immunization. In the southern governates, two rounds of NIDs are planned in 2003 and 2004. Two rounds of SNIDs are also planned in 2003.

In all low-intensity transmission areas, should wild poliovirus be found in 2003, mop-up campaigns will be conducted in response.

Strategic priorities

In addition to these 10 remaining endemic countries, the Initiative has identified two other strategic priority countries which require particular attention and resources in 2003–2005. Both Bangladesh and the Democratic Republic of the Congo have made exceptional progress over the past two years, last recording wild poliovirus in 2000. However, due to their substantial populations and borders with polioendemic countries – and, in the case of the Democratic Republic of the Congo, low routine immunization levels – they remain high-risk areas.

> Democratic Republic of the Congo (target population: 12.6m) is a particular challenge due to its size, weakened infrastructure and ongoing conflict. Poliovirus from this country has previously recurrently reseeded transmission into neighbouring countries. In 1999, UN Secretary-General Kofi Annan called for "Days of Tranquillity", to facilitate the first full NIDs. Since late 2000, surveillance has been established throughout the country and is rapidly approaching certification standard. Two NIDs rounds are planned in 2003, with two rounds of SNIDs planned in 2004. **Bangladesh** (*target population: 21.4m*) has made steady progress towards polio eradication with no wild poliovirus having being detected since August 2000. Achieving and sustaining eradication in this heavily populated country is of great strategic importance to the Initiative. However, Bangladesh is still considered at high-risk given its history of high transmission and its border with India. By the end of 2002, two rounds of NIDs targeting 21.4 million children under five will have been conducted. Two NIDs rounds are planned in 2003, with two rounds of SNIDs planned in 2004. \blacklozenge

Table 2: Details of planned costs in endemic and high-risk countries, 2003

| 2003 (US\$ millions) | | | | | | |
|--|--------------------|---------------------------|------------------------------------|---------------------|--|--|
| Country | NIDs/SNIDs: OPV | NIDs/SNIDs: operations | AFP surveillance and laboratory | Total costs 2003 | | |
| Endemic countries (n=10) | US\$ | US\$ | US\$ | US\$ | | |
| Priority 10: | | | | | | |
| Afghanistan | 2.60 | 5.35 | 1.21 | 9.16 | | |
| Angola | 1.67 | 5.78 | 1.33 | 8.78 | | |
| Egypt | | 2.64 | 0.26 | 2.91 | | |
| Ethiopia | 3.34 | 7.11 | 1.40 | 11.85 | | |
| India [*] | 41.35 | 34.45 | 10.15 | 85.95 | | |
| Niger | 1.09 | 1.23 | 0.30 | 2.62 | | |
| Nigeria | 11.87 | 20.37 | 3.08 | 35.32 | | |
| Pakistan | 17.81 | 11.31 | 1.71 | 30.83 | | |
| Somalia | 0.71 | 2.27 | 1.64 | 4.62 | | |
| Sudan** | 2.87 | 6.04 | 2.83 | 11.74 | | |
| High-risk countries (n=17) Bangladesh | 4.72 | 1.83 | 1.20 | 7.75 | | |
| Benin | 4.72 0.42 | 1.03 | 0.10 | 1.66 | | |
| Central African Republic | 0.16 | 0.42 | 0.21 | 0.79 | | |
| Chad | 0.49 | 0.63 | 0.59 | 1.71 | | |
| Congo | 0.15 | 0.42 | 0.14 | 0.71 | | |
| Cameroon | 0.25 | 0.57 | 0.21 | 1.03 | | |
| Djibouti | 0.03 | 0.05 | 0.11 | 0.19 | | |
| DR Congo | 2.80 | 11.10 | 2.28 | 16.18 | | |
| Eritrea | 0.10 | 0.05 | 0.12 | 0.26 | | |
| Indonesia | | | 1.10 | 1.10 | | |
| Nepal | | | 0.90 | 0.90 | | |
| Madagascar | 0.76 | 1.37 | 0.26 | 2.39 | | |
| Mauritania | 0.11 | 0.64 | 0.18 | 0.93 | | |
| Mozambique | | | 0.25 | 0.25 | | |
| Namibia | 0.03 | 0.02 | 0.05 | 0.11 | | |
| | 0.04 | 0.77 | 0.25 | | | |
| Sierra Leone | 0.26 | 0.77 | 0.35 | 1.38 | | |
| Sierra Leone Zambia | 0.26 0.17 | 0.77 | 0.35 | 1.38 0.64 | | |

* Note that for India, US\$ 49.64 million that was required for quarter 1 NIDs in 2003 was budgeted and secured in 2002, and is therefore not included in the global financial resource requirements for 2003–2005.

** Individual budgets exist for the northern governates and southern governates of Sudan and are available on request.

| Endemic countries (n=10) Priority 10: Afghanistan Angola Egypt Ethiopia India Niger Nigeria Pakistan Somalia Sudan* High-risk countries (n=17) Bangladesh Benin Central African Republic Chad Congo Cameroon Djibouti DR Congo | U5\$ 2.09 1.50 41.85 0.79 12.88 9.61 0.71 1.90 | US\$ 4.52 5.10 0.85 2.11 34.88 0.85 20.97 7.33 2.26 4.31 | US\$ 0.95 1.33 0.23 1.40 10.56 0.30 3.03 1.55 1.64 2.86 | US\$ 7.56 7.93 1.08 4.51 87.29 1.93 36.89 18.49 4.61 9.07 |
|--|--|--|---|---|
| Afghanistan Angola Egypt Ethiopia India Niger Nigeria Pakistan Somalia Sudan* High-risk countries (n=17) Bangladesh Benin Central African Republic Chad Congo Cameroon Djibouti DR Congo | 1.50 1.00 41.85 0.79 12.88 9.61 0.71 1.90 | 5.10 0.85 2.11 34.88 0.85 20.97 7.33 2.26 | 1.33 0.23 1.40 10.56 0.30 3.03 1.55 1.64 | 7.93 1.08 4.51 87.29 1.93 36.89 18.49 4.61 |
| Afghanistan Angola Egypt Ethiopia India Niger Nigeria Pakistan Somalia Sudan* High-risk countries (n=17) Bangladesh Benin Central African Republic Chad Congo Cameroon Djibouti DR Congo | 1.50 1.00 41.85 0.79 12.88 9.61 0.71 1.90 | 5.10 0.85 2.11 34.88 0.85 20.97 7.33 2.26 | 1.33 0.23 1.40 10.56 0.30 3.03 1.55 1.64 | 7.93 1.08 4.51 87.29 1.93 36.89 18.49 4.61 |
| Angola Egypt Ethiopia India Niger Nigeria Pakistan Somalia Sudan* High-risk countries (n=17) Bangladesh Benin Central African Republic Chad Congo Cameroon Djibouti DR Congo | 1.50 1.00 41.85 0.79 12.88 9.61 0.71 1.90 | 5.10 0.85 2.11 34.88 0.85 20.97 7.33 2.26 | 1.33 0.23 1.40 10.56 0.30 3.03 1.55 1.64 | 7.93 1.08 4.51 87.29 1.93 36.89 18.49 4.61 |
| Egypt Ethiopia India Niger Nigeria Pakistan Somalia Sudan* High-risk countries (n=17) Bangladesh Benin Central African Republic Chad Congo Cameroon Djibouti DR Congo | 1.00 41.85 0.79 12.88 9.61 0.71 1.90 | 0.85 2.11 34.88 0.85 20.97 7.33 2.26 | 0.23 1.40 10.56 0.30 3.03 1.55 1.64 | 1.08 4.51 87.29 1.93 36.89 18.49 4.61 |
| Ethiopia India Niger Nigeria Pakistan Somalia Sudan* High-risk countries (n=17) Bangladesh Benin Central African Republic Chad Congo Cameroon Djibouti DR Congo | 41.85 0.79 12.88 9.61 0.71 1.90 | 2.11 34.88 0.85 20.97 7.33 2.26 | 1.40 10.56 0.30 3.03 1.55 1.64 | 4.51 87.29 1.93 36.89 18.49 4.61 |
| India Niger Nigeria Pakistan Somalia Sudan* High-risk countries (n=17) Bangladesh Benin Central African Republic Chad Congo Cameroon Djibouti DR Congo | 41.85 0.79 12.88 9.61 0.71 1.90 | 34.88 0.85 20.97 7.33 2.26 | 10.56 0.30 3.03 1.55 1.64 | 87.29 1.93 36.89 18.49 4.61 |
| Niger Nigeria Pakistan Somalia Sudan* High-risk countries (n=17) Bangladesh Benin Central African Republic Chad Congo Cameroon Djibouti DR Congo | 0.79 12.88 9.61 0.71 1.90 | 0.85 20.97 7.33 2.26 | 0.30 3.03 1.55 1.64 | 1.93 36.89 18.49 4.61 |
| Nigeria Pakistan Somalia Sudan* High-risk countries (n=17) Bangladesh Benin Central African Republic Chad Congo Cameroon Djibouti DR Congo | 12.88 9.61 0.71 1.90 | 20.97 7.33 2.26 | 3.03 1.55 1.64 | 36.89 18.49 4.61 |
| Pakistan Somalia Sudan* High-risk countries (n=17) Bangladesh Benin Central African Republic Chad Congo Cameroon Djibouti DR Congo | 9.61 0.71 1.90 | 7.33 2.26 | 1.55 1.64 | 18.49 4.61 |
| Somalia Sudan* High-risk countries (n=17) Bangladesh Benin Central African Republic Chad Congo Cameroon Djibouti DR Congo | 0.71 1.90 | 2.26 | 1.64 | 4.61 |
| Sudan* High-risk countries (n=17) Bangladesh Benin Central African Republic Chad Congo Cameroon Djibouti DR Congo | 1.90 | | | |
| High-risk countries (n=17) Bangladesh Benin Central African Republic Chad Congo Cameroon Djibouti DR Congo | | 4.31 | 2.86 | 9.07 |
| Bangladesh Benin Central African Republic Chad Congo Cameroon Djibouti DR Congo | 1.52 | | | |
| Benin Central African Republic Chad Congo Cameroon Djibouti DR Congo | | 0.56 | 1.29 | 3.37 |
| Central African Republic Chad Congo Cameroon Djibouti DR Congo | 0.46 | 1.17 | 0.10 | 1.73 |
| Chad Congo Cameroon Djibouti DR Congo | 0.10 | 1.17 | 0.10 | 0.21 |
| Congo Cameroon Djibouti DR Congo | | | 0.21 | 0.21 |
| Cameroon Djibouti DR Congo | 0.05 | 0.13 | 0.39 | 0.39 |
| Djibouti DR Congo | 0.05 | 0.15 | | |
| DR Congo | 0.01 | C (2) | 0.21 | 0.21 |
| - | 0.01 | 0.02 | 0.11 | 0.14 |
| | 1.52 | 6.06 | 2.28 | 9.86 |
| Eritrea | | | 0.12 | 0.12 |
| Indonesia | | | 1.20 | 1.20 |
| Nepal | | | 0.88 | 0.88 |
| Madagascar | 0.82 | 1.41 | 0.26 | 2.50 |
| Mauritania | | | 0.18 | 0.18 |
| Mozambique | 0.95 | 1.18 | 0.25 | 2.38 |
| Namibia | 0.11 | 0.05 | 0.05 | 0.21 |
| Sierra Leone | | | 0.35 | 0.35 |
| Zambia | | | 0.35 | 0.35 |
| dividual budgets exist for the northern governates and | l southern govern | nates of Sudan and are av | ailable on request. | 200 |
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Table 3: Details of planned costs in endemic and high-risk countries, 2004

| | Total | 2005 | | |
|---|------------------------|---------------------------|------------------------------------|---------------------|
| Country | NIDs/SNIDs: OPV | NIDs/SNIDs: operations | AFP surveillance and laboratory | Total costs 2005 |
| Endemic countries (n=10) | US\$ | US\$ | US\$ | US\$ |
| Priority 10: | | | | |
| Afghanistan | 0.74 | 1.54 | 0.97 | 3.25 |
| Angola | 0.27 | 1.05 | 1.33 | 2.65 |
| Egypt | | | 0.15 | 0.15 |
| Ethiopia India | 41.05 | 32.84 | 1.40 10.98 | 1.40 84.87 |
| Niger | 41.05 | 32.04 | 0.30 | 0.30 |
| Nigeria | 5.31 | 8.29 | 3.03 | 16.63 |
| Pakistan | 7.93 | 4.70 | 1.57 | 14.20 |
| Somalia | | 0.81 | | 0.81 |
| Sudan* | | | 2.79 | 2.79 |
| High-risk countries (n=17) | | | | |
| Bangladesh | | | 1.41 | 1.41 |
| Benin | | | 0.10 | 0.10 |
| Central African Republic | | | 0.21 | 0.21 |
| Chad | | | 0.59 | 0.59 |
| Congo | | | 0.14 | 0.14 |
| Cameroon | 0.96 | 1.21 | 0.21 | 2.38 |
| Djibouti DR Congo | | | 0.11 2.28 | 0.11 2.28 |
| Eritrea | | | 0.12 | 0.12 |
| Indonesia | 5.93 | 2.55 | 1.20 | 9.69 |
| Nepal | 1.14 | 1.33 | 0.92 | 3.40 |
| Madagascar | | | 0.26 | 0.26 |
| Mauritania | | | 0.18 | 0.18 |
| Mozambique | | | 0.25 | 0.25 |
| Namibia Sierra Leone | | | 0.05 0.35 | 0.05 0.35 |
| Zambia | | | 0.35 | 0.35 |
| dividual budgets exist for the northern governat | es and southern govern | ates of Sudan and are av | | 666 |
| ndividual budgets exist for the northern governat | Sep | con | sulta | atio |
| As of 1 aft copy | for | COU | 30.00 | |

Table 4: Details of planned costs in endemic and high-risk countries, 2005

| | Total 20 | 03-2005 | | |
|--------------------------|--------------------|---------------------------|------------------------------------|--------------------------|
| Country | NIDs/SNIDs: OPV | NIDs/SNIDs: operations | AFP surveillance and laboratory | Total costs 2003-2005 |
| Endemic countries (n=10) | US\$ | US\$ | US\$ | US\$ |
| Priority 10: | | | | |
| Afghanistan | 5.43 | 11.14 | 3.13 | 19.97 |
| Angola | 3.44 | 11.93 | 3.99 | 19.35 |
| Egypt | | 3.50 | 0.64 | 4.14 |
| Ethiopia | 4.34 | 9.22 | 4.20 | 17.76 |
| India* | 124.24 | 103.53 | 31.70 | 259.47 |
| Niger | 1.88 | 2.08 | 0.90 | 4.85 |
| Nigeria | 30.06 | 49.63 | 9.14 | 88.83 |
| Pakistan | 35.35 | 23.34 | 4.83 | 63.53 |
| Somalia | 1.42 | 5.34 | 3.28 | 10.04 |
| Sudan** | 4.77 | 10.35 | 8.48 | 23.61 |
| Bangladesh | 6.25 | 2.39 | 3.90 | 12.53 |
| Benin | 0.88 | 2.31 | 0.30 | 3.49 |
| Central African Republic | 0.16 | 0.42 | 0.64 | 1.22 |
| Chad | 0.49 | 0.63 | 1.78 | 2.89 |
| Congo | 0.20 | 0.55 | 0.42 | 1.18 |
| Cameroon | 1.20 | 1.78 | 0.64 | 3.63 |
| Djibouti | 0.03 | 0.07 | 0.34 | 0.44 |
| DR Congo | 4.32 | 17.16 | 6.83 | 28.32 |
| Eritrea | 0.10 | 0.05 | 0.36 | 0.50 |
| Indonesia | 5.93 | 2.55 | 3.50 | 11.99 |
| Nepal | 1.14 | 1.33 | 2.70 | 5.17 |
| Madagascar | 1.58 | 2.78 | 0.78 | 5.14 |
| Mauritania | 0.11 | 0.64 | 0.54 | 1.29 |
| Mozambique | 0.95 | 1.18 | 0.75 | 2.88 |
| Namibia | 0.14 | 0.08 | 0.15 | 0.37 |
| Sierra Leone | 0.26 | 0.77 | 1.05 | 2.08 |
| Zambia | 0.17 | 0.13 | 1.05 | 1.35 |
| | | | | |

Table 5: Summary of planned costs in endemic and high-risk countries, 2003–2005

* Note that for India, US\$ 49.64 million that was required for quarter 1 NIDs in 2003 was budgeted and secured in 2002, and is therefore not included in the global financial resource requirements for 2003-2005.

** Individual budgets exist for the northern governates and southern governates of Sudan and are available on request.



4. Looking beyond 2005

As the world is rapidly approaching polio eradication, it is important to determine the resource requirements for the activities that will be needed beyond certification. These activities include sustaining high-quality surveillance, maintaining high population immunity until consensus on post-certification immunization policy is reached (at least), and managing the risks of reintroduction and re-emergence of poliovirus post-certification. By September 2003 estimates will be developed of funding needs up to the end of 2010.

Maintaining the surveillance infrastructure

To maintain the current laboratory surveillance network and infrastructure (including surveillance officers) will require at least US\$50 million each year post-2005. Discussions are ongoing on how this will be integrated into the broader immunization and surveillance agenda. Direction on this aspect of resource requirements post-2005 will be in place by the end of 2003.

Developing and implementing post-certification immunization policy for polio

The sixth Global TCG reaffirmed that the ultimate goal of the Polio Eradication Initiative is to stop

polio vaccination and that this objective should be pursued⁴. To lay the groundwork for this possibility, WHO is coordinating a two-part agenda of work (data generation and policy development) to enable an evidence-based decision on the most appropriate immunization option(s) in the post-certification era, based on a framework that evaluates i) the risk of paralytic polio in the post-certification era and, possibly, post-immunization era, and ii) the options for managing that risk.

The budget for research for data generation is estimated at US\$ 1 million per year for the period 2003–2005. These costs are already budgeted as part of the programme's "enabling factors". The seventh Global TCG noted that work is being undertaken by different institutions on the economic and financial implications of the possible post-certification immunization scenarios, and will be consolidated by mid-2003 to provide a comprehensive view of potential resource requirements.

However, the highest and most immediate priority of the Initiative is to urgently close the funding gap of US\$ 275 million for activities from 2003 up to the end of 2005. \blacklozenge

⁴ Report of the sixth meeting of Global Technical Consultative Group for Poliomyelitis Eradication, Geneva, 7-10 May 2001 (WH0/V&B/01.32)

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