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# Global Polio Eradication Initiative

# Estimated external financial resource requirements for 2002–2005

## as of 1 September 2001

Figures in this document were developed jointly by
WHO and UNICEF in collaboration with national ministries of health

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Data as of 1 September 2001.

Estimated resource requirements are updated on a six-monthly basis.

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# Executive summary

*This document outlines the estimated external financial resource requirements for implementation of the 2002–2005 programme of work outlined in the Global Polio Eradication Initiative Strategic Plan, 2001–2005 (WHO/Polio/00.05). Figures were developed as of September 2001.*

The Global Polio Eradication Initiative, the largest public health initiative in history, is on track to certify the world polio-free in 2005. Polio cases have declined by 99% since the Initiative's launch in 1988, from 350 000 estimated cases in 125 countries to 2880 reported cases in 20 countries in 2000. Today, polio cases are at the lowest levels in history.

The final 1% of the Polio Eradication Initiative poses the greatest challenge. The final eradication push requires accessing all children with polio vaccine, even in the most difficult areas, including those affected by conflict. It requires maintaining high political commitment in the face of a disappearing disease.

The single greatest threat to realizing the historic eradication goal is a US$ 400 million funding gap.

As of September 2001, WHO, ministries of health and UNICEF estimated that US$ 1 billion in external resources are required to implement polio eradication activities from 2002 up to the end of 2005. This amount reflects an increase from the previous budget estimate for this period, due to: an increase in the price and required supply of oral polio vaccine (OPV); the intensification of supplementary immunization activities with the adoption of a house-to-house strategy; and the increased costs of establishing and sustaining surveillance capacity in areas with particularly weak health infrastructure, especially in areas affected by conflict. Much of the increase in costs has been offset by new and projected contributions from core donors to the Initiative. A total of US$ 600 million in contributions for 2002–2005 have been pledged or are projected.

The funding gap of US$ 400 million must urgently be met if the world is to exploit the window of opportunity to eradicate this disease forever. Should wild poliovirus transmission continue into 2003, the 2002–2005 programme costs could increase by more than US$ 100 million.

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 save up to US$ 1.5 billion per year from the cessation of immunization and averted health care costs.

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. The polio eradication coalition also includes national governments, private foundations (e.g. United Nations Foundation, Bill & Melinda Gates Foundation); development banks (e.g. World Bank); donor governments (e.g. Australia, Austria, Belgium, Canada, Denmark, Ireland, Finland, Germany, Italy, Japan, Luxembourg, the Netherlands, Portugal, United Kingdom and the United States of America); nongovernmental humanitarian organizations (e.g. the International Red Cross and Red Crescent movement) and corporate partners (e.g. Aventis Pasteur, De Beers). Volunteers in developing countries play a central role, with 10 million participating in mass immunization campaigns during 2000 alone. ◆

# 1. Introduction

***Polio eradication – a global public good***

*Figure 1: Polio eradication: Progress 1988–2000*
*Historical costs and contributions*

*Figure 2: Donor contributions to polio eradication, 1985–2001*

*Table 1: Donor profile for received and pledged contributions, 1985–2001*

*Figure 3: Annual donor contributions received or projected to polio eradication, 1985–2001*

***Financial resource requirements:***
***underlying assumptions and data collection process***

## Polio eradication – a global public good

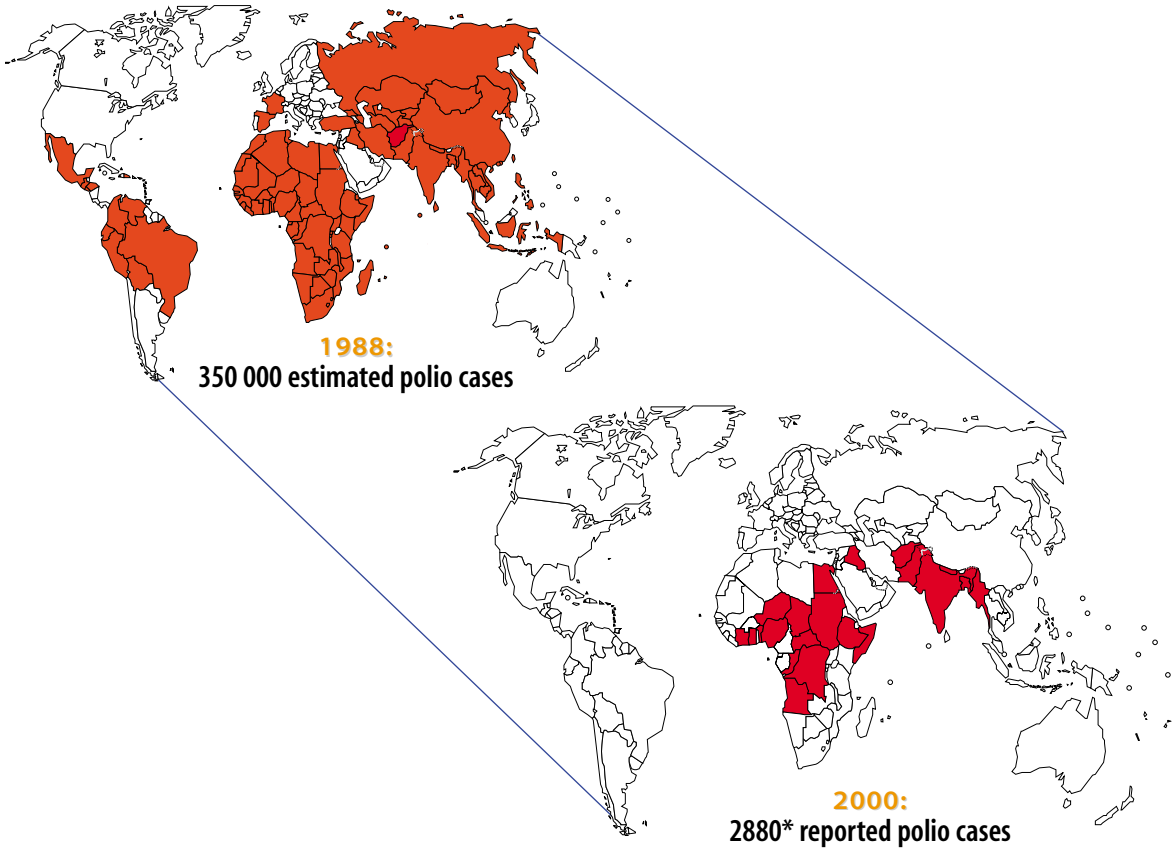
The Global Polio Eradication Initiative, spearheaded by WHO, Rotary International, the US CDC, and UNICEF, is nearing the goal of stopping circulation of the virus that causes polio. Due to the Initiative's permanent public health, economic and humanitarian benefits, polio eradication has been described as a "global public good".

Worldwide, the number of polio cases has declined by more than 99% from an estimated 350 000 cases in 1988 to 2880 reported cases in 2000.[1] Only 20 countries were polio-infected at the end of 2000, down from 30 countries in 1999 and 125 countries when the Initiative began in 1988. Polio cases are now at the lowest level in history, having been halved between 1999 and 2000, even with a substantial increase in surveillance sensitivity. Within the remaining endemic countries, ongoing polio transmission is limited to smaller geographic areas. Through the eradication initiative, no child will ever again be crippled by polio, no family will know the suffering of a crippled child, and the world could save up to US$ 1.5 billion per year from the cessation of immunization and averted health care costs.[2] In contrast, the total cost of the Initiative from 1985 up to the end of 2005 will be between US$ 2.5 billion and US$ 3 billion.

The Global Polio Eradication Initiative has had positive effects on the delivery of other health services, especially immunization, through improved health systems management, relations with communities, social mobilization and intersector collaboration. It has been used as a platform for the delivery of other health interventions such as vitamin A supplementation. The high profile of the Initiative globally has highlighted the need and commitment to strengthen routine immunization services. Advocacy and fundraising activities have resulted in a net increase in external and internal resources available for the control of vaccine-preventable

1 As at 1 September 2001
2 Bart KJ, Foulds J, Patriarca P. The global eradication of poliomyelitis: benefit-cost analysis. *Bulletin of the World Health Organization* 1996; 45:911-4.

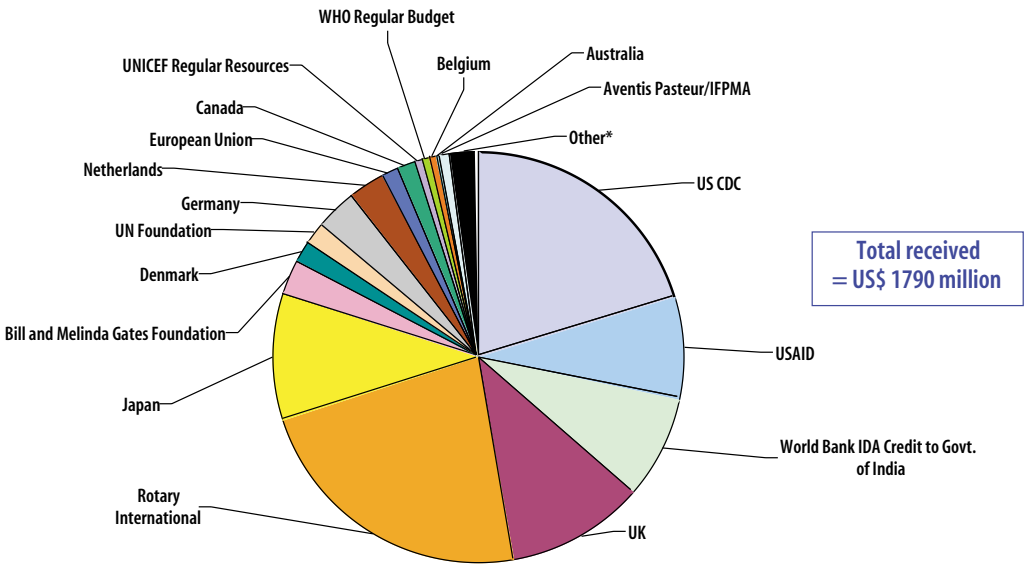
**Figure 1: Polio eradication: progress 1988–2000**






Data as of 1 September 2001

## Figure 2: Donor contributions to polio eradication, 1985–2001




* "Other" includes past contributions from the Agency for Cooperation in International Health, (Japan); American Association for World Health (USA); Austria; Custom Monoclonals International (USA); De Beers; European Community Humanitarian Office (ECHO); Finland; Ms Martina Hingis; Ireland; Italy; Japanese Committee for "Vaccines for the World's Children"; Malaysia; Millennium Fund; Norway; Portugal; Republic of Korea (GOK); SmithKline Biologicals (Belgium); Switzerland; United Arab Emirates; and UNICEF National Committee of Canada.

diseases.[3] The capacity for disease surveillance worldwide has been improved through a tremendous emphasis on health worker training and supervision, to ensure rapid recognition and immediate reporting of not only polio cases, but also other important epidemic-prone diseases.[4]

The Global Technical Consultative Group (TCG) for Poliomyelitis Eradication,[5] stated in may 2001 that all available data indicated that the polio eradication strategies, when appropriately implemented, will eradicate polio even in the most difficult circumstances. The four key strategies are: high routine infant immunization coverage with OPV; supplementary immunization activities in the form of national immunization days (NIDs); achieving and sustaining certification-standard surveillance for acute flaccid paralysis (AFP) combined with laboratory investigation; and mop-up campaigns to interrupt the final chains of poliovirus transmission. Global certification in 2005 can be achieved if high-quality intensified efforts are maintained in all endemic and high-risk countries.

[3] Levin, A Ram S. "The Impact of the Polio Eradication Campaign on the Financing of Routine EPI: Findings of Three Case Studies". Betheseda: Partnership for Health Reform, University Research Co.: 1999.

[4] Nsubuga P, McDonnell S, Otten M *et al.*; Impact of Accute Flaccid Paralysis Surveillance on the Surveillance of Other Infectious Diseases in Africa. 48th Annual Epidemic Intelligence Service Conference, CDC, Atlanta, USA

[5] The TCG is the technical oversight body of the Initiative.

There are three ongoing challenges to polio eradication. These are: sustaining political commitment to the programme in the face of a disappearing disease, gaining and sustaining access to all children, and closing the funding gap.

At present political commitment to the Initiative is strong. This is demonstrated by unprecedented cooperation among countries coordinating NIDs, particularly in west and central Africa in 2000 and 2001. Tremendous gains have also been made in accessing children never before reached for immunization. A major contribution has been the UN Secretary-General's calls for "Days of Tranquillity", most recently during the July, August and September 2001 synchronized NIDs in Angola, Congo, the Democratic Republic of the Congo and Gabon.

Closing the funding gap is the most critical challenge. The 2001 TCG stated that "given the rapid progress since 1999 in establishing the capacity to eradicate poliovirus virtually everywhere in the world, the highest priority of the Initiative at all levels must be to urgently close the funding gap".

## Table 1: Donor profile for received and pledged contributions, 1985–2001

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

### Historical costs and contributions

Funding provided through external sources (multilateral and bilateral donations) for country-level polio eradication activities from 1985 to 2001 totalled nearly US$ 1.8 billion.

Between 1985 and 2001, 24 private and public sector donors each contributed or pledged more than US$ 1 million to polio eradication. Of these donors, 19 made contributions of US$ 5 million or more (see Table 1). By 2005 Rotary International, the largest private sector donor, will have contributed US$ 500 million.

### Financial resource requirements: underlying assumptions and data collection process

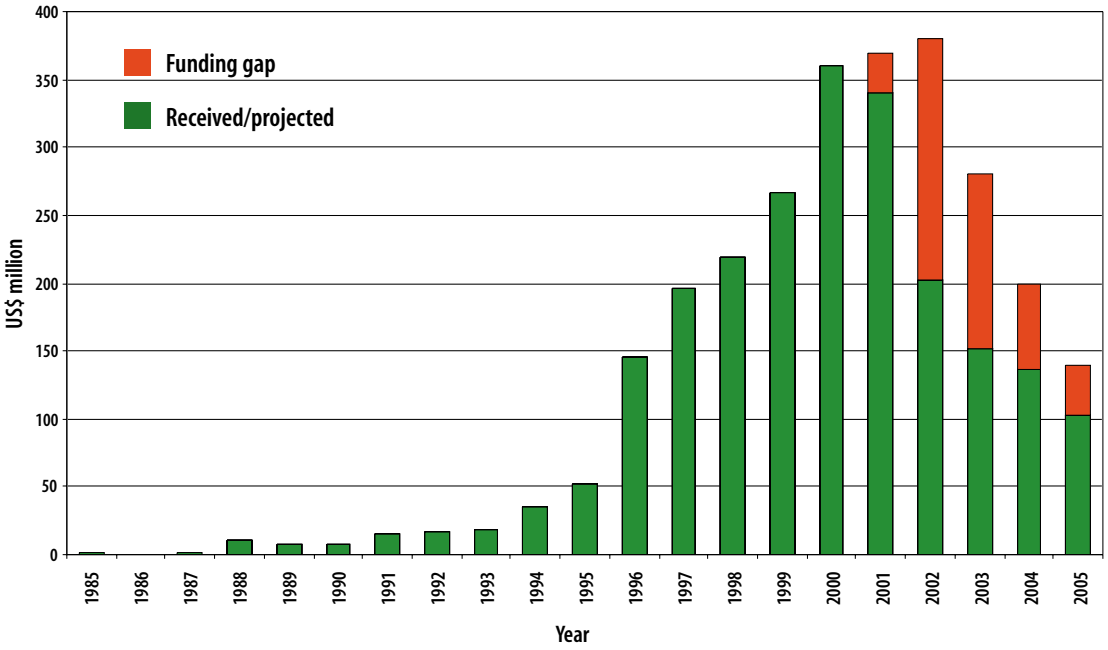
The estimates of external resource requirements for the Global Polio Eradication Initiative are based on the known costs of (1) implementing the eradication strategies at the country level and (2) managing the Initiative through the UN implementing agencies (WHO & UNICEF) at the regional and global levels. Since all countries in the world have now conducted several rounds of NIDs and introduced AFP surveillance, the external resource requirements for these activities can be accurately projected by country. Costs covered by national governments are not included in the requirements.

Funds received, pledged or projected are used to calculate the global shortfall only if they are intended for eradication activities in polio endemic countries. Therefore, funds used by donor countries for their own national immunization programmes, surveillance or laboratories are not included.

The figures in this report provide an indicative target for resource mobilization. Exact figures fluctuate depending upon the 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 global priority countries (Afghanistan, Angola, Bangladesh, Democratic Republic of the Congo, Ethiopia, India, Nigeria, Pakistan, Somalia, Sudan) in collaboration with national ministries of health. All other figures are developed by WHO HQ, regional and country offices in collaboration with national ministries of health. ◆

**Figure 3: Annual contributions received or projected to polio eradication, 1985–2005**



# 2. Global resource requirements, 2002–2005

### *External financial resource requirements*

*Figure 4: Planned costs by donor–supported activity, 2002–2005*

*Figure 5: Status of external financial resource requirements, 2002–2005*

*Figure 6: Contributions pledged or projected by major donors, 2002–2005*

## External financial resource requirements

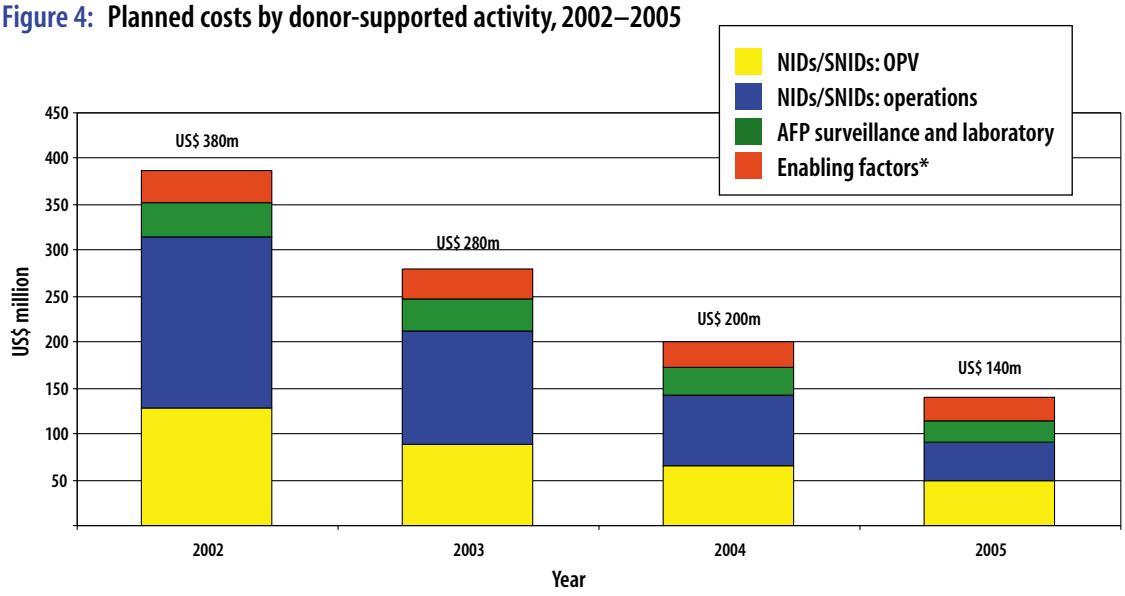
As of September 2001, WHO, ministries of health and UNICEF estimated that US$ 1 billion in external resources (distinct from resources provided by countries themselves) are required to implement polio eradication activities from 2002 until 2005. Of this, 43.3% is needed for the operational costs of supplementary immunization activities, 32.1% is required for OPV, 12.4% for AFP surveillance and the Global Polio Laboratory Network and 12.5% for enabling factors such as mop-up activities, advocacy, social mobilization, certification, laboratory containment and the development of a concensus on the the strategy for stopping polio immunization.

This amount reflects an increase from the previous budget estimate for this period, primarily due to three developments in 2000–2001:

- an increase in the price of OPV and in the amount of OPV required;
- the intensification of supplementary immunization activities with the adoption of a house-to-house strategy in endemic countries; and,
- increased costs of establishing and sustaining surveillance capacity in those areas with particularly weak health infrastructure, especially those areas affected by conflict.

Much of the increase in costs has been offset by new and projected contributions from core donors to the Initiative. A total of US$ 600 million in contributions for 2002–2005 have been pledged or are projected to be received, leaving a US$ 400 million funding gap. ◆

**Figure 4: Planned costs by donor-supported activity, 2002–2005**

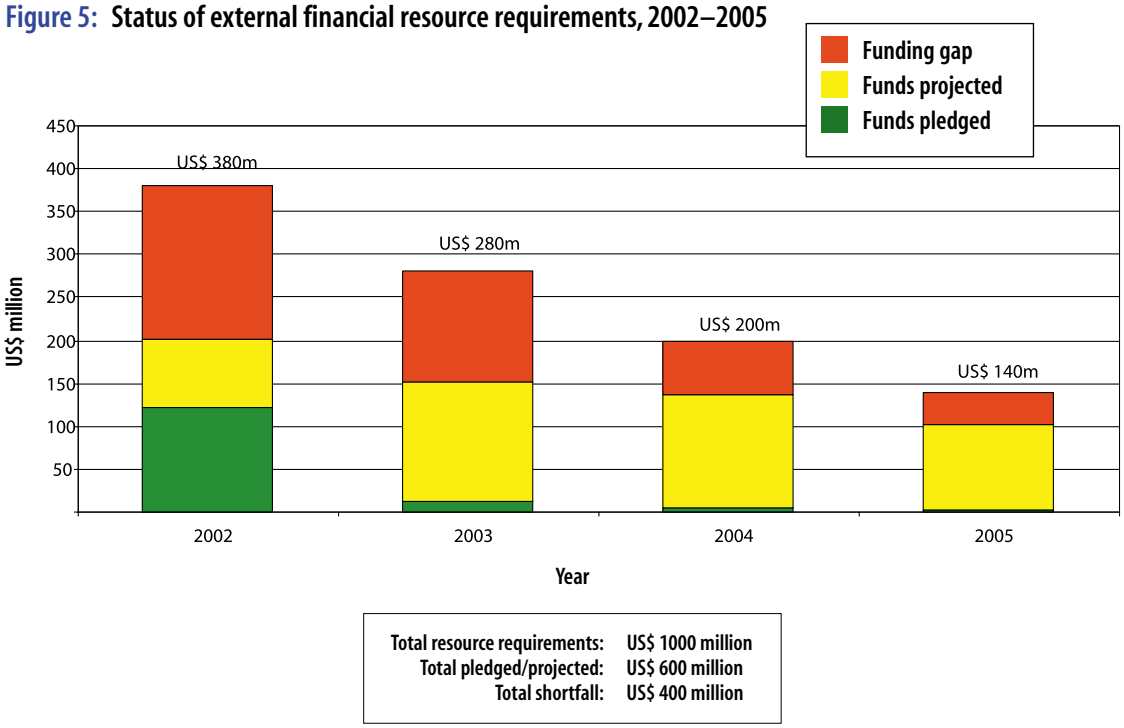



* As outlined in *Global Polio Eradication Initiative: Strategic Plan, 2001–2005* enabling factors are activities required to:
(i) conduct mop-ups as required
(ii) carry out advocacy, communication and social mobilization
(iii) certify polio eradication
(iv) contain laboratory stocks of wild poliovirus
(v) develop a consensus strategy for stopping polio immunization
(vi) strengthen management and administration
(vii) train and deploy human resources



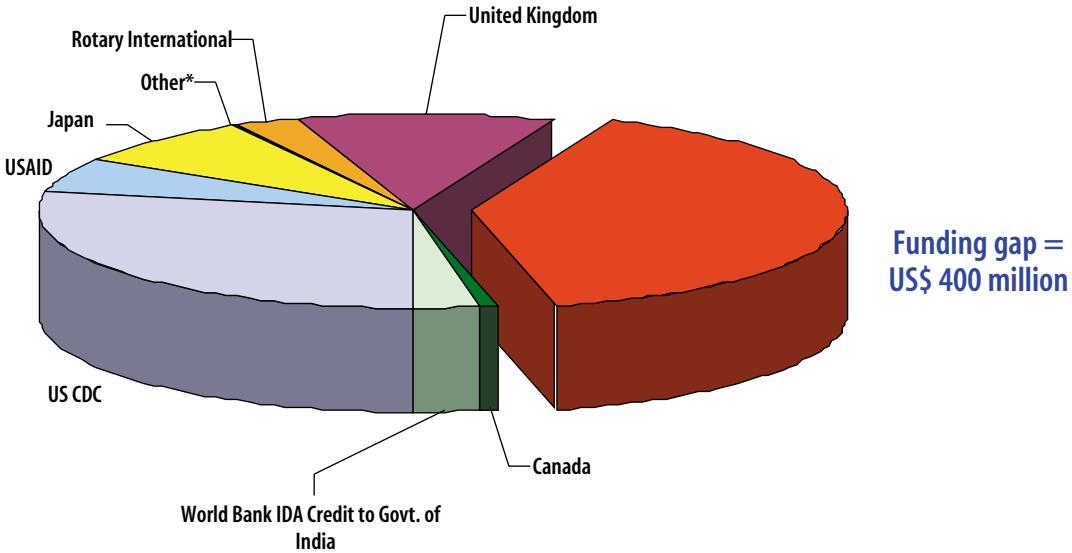
Data as of 1 September 2001

## Figure 5: Status of external financial resource requirements, 2002–2005




| | |
|---|---|
| Total resource requirements: | US$ 1000 million |
| Total pledged/projected: | US$ 600 million |
| Total shortfall: | US$ 400 million |

## Figure 6: Contributions pledged or projected by major donors, 2002–2005




External resources required = US$ 1000 million
Pledged/projected = US$ 600 million

* Aventis Pasteur, Ireland and Portugal

# 3. Country-level costs, 2002–2005

***Definition of endemic status***

*Figure 7: Map: Distribution of countries by endemic status, as of 31 December 2000*

*Table 2: List of countries by endemic status, as of 31 December 2000*

***Global priority countries: Current status and 2002–2003 activities***

*Figure 8: Comparison of planned costs in 10 global priority countries 2002–2003*

*Table 3: Details of planned costs in endemic and high-risk countries, 2002–2003*

## Definition of endemic status

### Endemic countries

***Definition:*** countries with virological evidence of endemic poliovirus circulation during the past 12 months.
***Number:*** *20 countries in 2000.*

### 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:*** *25 countries in 2000.*

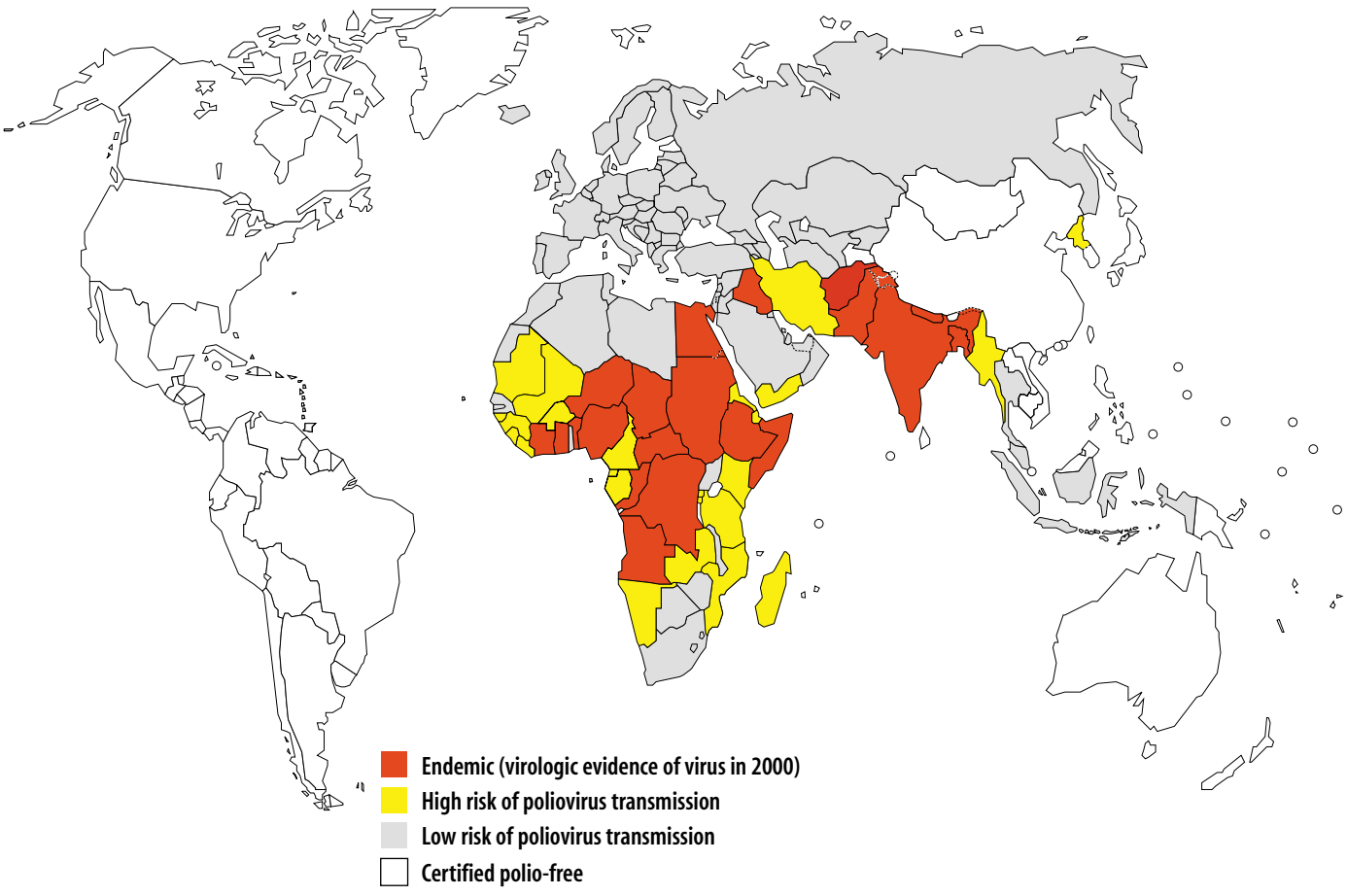
### Low-risk countries

***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:*** *84 countries in 2000.*

### Countries certified polio-free

***Definition:*** countries certified polio-free by a Regional Certification Commission (all countries in the WHO Region of the the Americas and Western Pacific Region).
***Number:*** *62 countries in 2000.*

**Figure 7: Distribution of countries by endemic status, as of 31 December 2000**






Data as of 1 September 2001

## Table 2: List of countries by endemic status, as of 31 December 2000

### Endemic (20 countries)

| | | | | |
|---|---|---|---|---|
| Afghanistan | Central African Republic | DR Congo | India | Nigeria |
| Angola | Chad | Egypt | Iraq | Pakistan |
| Bangladesh | Congo | Ethiopia | Nepal | Somalia |
| Benin | Côte d'Ivoire | Ghana | Niger | Sudan |

### Recently endemic/high-risk (25 countries)

| | | | | |
|---|---|---|---|---|
| Burkina Faso | Equatorial Guinea | Iran (Islamic Republic of) | Mauritania | Sierra Leone |
| Burundi | Eritrea | Kenya | Mozambique | Tajikistan |
| Cameroon | Gabon | Liberia | Myanmar | United Rep of Tanzania |
| Dem. People's Rep. of Korea | Guinea | Madagascar | Namibia | Yemen |
| Djibouti | Guinea-Bissau | Mali | Rwanda | Zambia |

### Low-risk (84 countries)

| | | | | |
|---|---|---|---|---|
| Albania | Czech Republic | Kuwait | Norway | Swaziland |
| Algeria | Denmark | Kyrgyztan | Oman | Sweden |
| Andorra | Estonia | Latvia | Poland | Switzerland |
| Armenia | Finland | Lebanon | Portugal | Syrian Arab Republic |
| Austria | France | Lesotho | Qatar | Thailand |
| Azerbaijan | Gambia | Libyan Arab Jamahiriya | Romania | Togo |
| Bahrain | Georgia | Lithuania | Russian Federation | Tunisia |
| Belarus | Germany | Luxembourg | San Marino | Turkey |
| Belgium | Greece | FYR of Macedonia | Sao Tome and Principe | Turkmenistan |
| Bhutan | Hungary | Malawi | Saudi Arabia | Uganda |
| Bosnia and Herzegovina | Iceland | Maldives | Senegal | Ukraine |
| Botswana | Indonesia | Malta | Seychelles | United Arab Emirates |
| Bulgaria | Ireland | Mauritius | Slovakia | United Kingdom |
| Cape Verde | Israel | Republic of Moldova | Slovenia | Uzbekistan |
| Comoros | Italy | Monaco | South Africa | Yugoslavia |
| Croatia | Jordan | Morocco | Spain | Zimbabwe |
| Cyprus | Kazakhstan | Netherlands | Sri Lanka | |

### Certified (62 countries)

| | | | | |
|---|---|---|---|---|
| Antigua and Barbuda | Colombia | Haiti | Niuie | Solomon Islands |
| Argentina | Cook Islands | Honduras | Palau | Suriname |
| Australia | Costa Rica | Jamaica | Panama | Tonga |
| Bahamas | Cuba | Japan | Papua New Guinea | Trinidad and Tobago |
| Barbados | Dominica | Kiribati | Paraguay | Tuvalu |
| Belize | Dominican Republic | Lao People's Dem. Rep. | Peru | United States of America |
| Bolivia | Ecuador | Malaysia | Philippines | Uruguay |
| Brazil | El Salvador | Marshall Islands | Republic of Korea | Vanuatu |
| Brunei Darussalam | Fed. States of Micronesia | Mexico | Saint Kitts and Nevis | Venezuela |
| Cambodia | Fiji | Mongolia | Saint Lucia | Viet Nam |
| Canada | Grenada | Nauru | Saint Vincent/Grenadines | |
| Chile | Guatemala | New Zealand | Samoa | |
| China | Guyana | Nicaragua | Singapore | |

## Global priority countries: current status and 2002–2003 activities

Among the 20 polio-endemic countries at the end of 2000, 10 are noted in the *Strategic Plan 2001–2005* as global polio priority countries because they face unique challenges that place them at high risk of sustaining polio transmission beyond the target. These countries, representing 26% of the world's population, are either affected by conflict or are global reservoirs of poliovirus. They are Afghanistan, Angola, Bangladesh, Democratic Republic of the Congo, Ethiopia, India, Nigeria, Pakistan, Somalia and Sudan. These 10 countries account for 75% of the programme budget over the next four years (see figure 8).

### Reservoir countries:

These countries are characterized by high population density, high birth rates, low immunization coverage in large areas of the country, and suboptimal sanitation. Either currently or in the recent past, these countries have served as reservoirs of the virus, exporting poliovirus to other countries.

➢ ***Bangladesh*** (*target pop: 24.6 m*)* 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 a potential reservoir given its history of high transmission. By the end of 2001 two rounds of NIDs targeting 23.8 million children under five will have been conducted. The same level of activities must be maintained in 2002 and 2003.

➢ ***Ethiopia*** (*target pop: 14.8 m*) is the major poliovirus reservoir in the Horn of Africa as it has continued to report cases in 2000 and 2001 and surveillance quality remains suboptimal. NIDs coverage has been greater than 80% since 1997, but additional rounds of NIDs combined with extensive mop-up campaigns in areas of known ongoing transmission are needed up to the end of 2003. By the end of 2001, two rounds of NIDs and two rounds of subnational immunization days (SNIDs) will have been conducted. Two rounds of NIDs and two rounds of SNIDs are planned for 2002. Two rounds of NIDs will be conducted in 2003. Surveillance must be strengthened at provincial level so that ongoing poliovirus transmission is rapidly detected to properly target immunization activities.

* Target populations are all children under five for 2002–2003.

➢ ***India*** (*target pop: 161.3 m*) The most populous remaining endemic country, India has made substantial progress towards eradication and at 1 September 2001, had reported only 43 polio cases. In 2000, a series of large scale mop-up campaigns was conducted in areas with limited poliovirus transmission and these have continued in 2001. By the end of 2001, two rounds of NIDs and SNIDs will have been conducted. During 2002 and 2003, two rounds of NIDs are planned each year, with additional SNIDs in the northern states of Bihar and Uttar Pradesh where most polio cases occur. Surveillance throughout the country is of very good quality.

➢ ***Nigeria*** (*target pop: 40.2 m*) The most populous country in Africa, Nigeria is firmly committed to polio eradication and has strong political leadership from the Head of State. Nigeria is the principal poliovirus reservoir for West Africa. By the end of 2001, five rounds of NIDs will have been conducted. Four NIDs rounds are planned for 2002 and two in 2003. In addition, two rounds of SNIDs will target 50% of the population under five in 2003. Certification-level surveillance needs to be achieved and maintained so that poliovirus can be rapidly detected throughout the country and extensive mop-up activities properly targeted.

➢ ***Pakistan*** (*target pop: 31.9 m*) has engaged in polio eradication activities since 1996. However, good surveillance indicates that poliovirus transmission continued throughout the country in 2001, though substantially less intensely than in previous years. By the end of 2001, five rounds of NIDs and two rounds of SNIDs targeting 50% of the population under five will have been conducted. Four NIDs rounds are planned for 2002 and three in 2003, with the addition of extensive mop-up activities in 2002.

### Conflict-affected countries:

The ongoing conflict in these countries makes implementation of vaccination and surveillance activities particularly challenging. There is considerable population movement, the security of staff is threatened and the infrastructure is weakened or destroyed by conflict.

➢ ***Afghanistan*** (*target pop: 5.9 m*) has conducted polio eradication activities since 1994 despite ongoing conflict. AFP surveillance is increasingly reliable and shows that transmission has decreased from 2000 but still continues particularly in the southern area of Kandahar. Afghanistan forms an epidemiological block with Pakistan and NIDs have been synchronized between the two countries. By the end of 2001, five rounds of NIDs and one round of SNIDs targeting 15% of the population under five will have been conducted. Four rounds of NIDs are planned in 2002 and two in 2003. One round of SNIDs targeting 50% of the population will be conducted in 2003.

➢ ***Angola*** (*target pop: 3.6 m*) At war for more than a generation, Angola has suffered serious damage to its health infrastructure, with less than one third of infants receiving routine immunizations. This low coverage, particularly among displaced groups, contributed to the largest ever reported African polio outbreak during 1999 (more than 1100 cases and 89 deaths reported). NIDs have been conducted since 1996, reaching more than 80% of children under five in accessible areas. Major challenges during 2001 and 2002 include ensuring annual NIDs reach the 3.6 million target children in all areas of the country and that surveillance reaches certification standard. Three rounds of NIDs and two rounds of SNIDs targeting 40% of the population under five are planned for 2001. The same level of activities are planned for 2002 and 2003.

➢ ***Democratic Republic of Congo*** (*target pop: 12.4 m*) is a particular challenge due to its size, weakened infrastructure and ongoing conflict. Poliovirus from this country has reseeded transmission into neighbouring countries. In 1999, UN Secretary-General Kofi Annan called for "Days of Tranquillity", facilitating the first full NIDs. By the end of 2001, three rounds of NIDs will have been conducted. Three annual NIDs rounds are planned for 2002 and 2003, in addition to two rounds of SNIDs targeting between 30 and 40% of the population under five. Since late 2000, surveillance has been established throughout the country and is rapidly approaching certification standard. The surveillance priority at present is to ensure adequate specimen collection.

➢ ***Somalia*** (*target pop: 1.5 m*) Shaken by factional fighting, Somalia has been in a state of complex emergency since the early 1990s. The first NIDs were conducted in late 1998, and have since occurred annually. Demand for immunization during NIDs has been so strong that rebel leaders banned carrying of arms and de-mined roads to permit access for immunization teams. However, poliovirus transmission continues during 2001. By the end of 2001, four rounds of NIDs will have been conducted. Four rounds of NIDs are planned for 2002 and two for 2003. Surveillance has been extended to cover all of Somalia but the quality needs to be improved in the south and central areas.

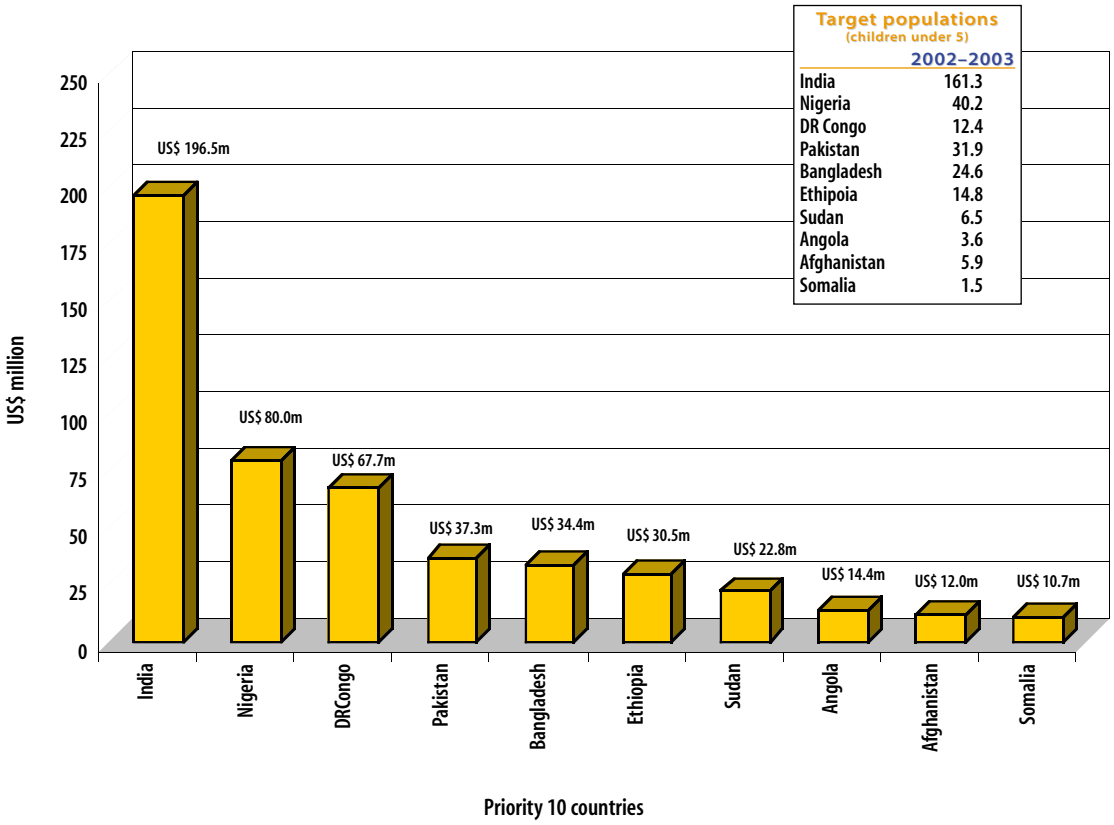
➢ In ***Sudan*** (*target pop: 6.5m*) a generation-long civil war has hampered the delivery of routine immunization services in the southern states for more than 20 years. In the southern governates, three full rounds of NIDs and two rounds of SNIDs reaching 50% of the target population are being conducted in 2001. A similar level of activity will be repeated in 2002. Two rounds of NIDs are planned for 2003. In the northern governates four rounds of NIDs are being conducted in 2001. Four rounds of NIDs and two rounds of SNIDs aiming for 50% of the target population are planned for 2002, followed by two rounds of NIDs in 2003. Surveillance is reasonable but varies across the country and has not yet reached certification standard.

## Strategic priorities

In addition to these 10 global priority countries, the Initiative regularly identifies other strategic priorities which require particular attention and resources.

➢ ***Egypt*** (*target pop: 8 m*) is such 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 supplementary immunization activities for polio eradication in 1993. Despite rapidly reducing poliovirus transmission to very low levels, certification-standard AFP surveillance and environmental sampling have continued to detect indigenous wild poliovirus in the governates of upper Egypt. By the end of 2001, five rounds of NIDs will have been conducted as well as extensive mop-up campaigns. Four rounds of NIDs are planned in 2002 and two in 2003. ◆

## Figure 8: Comparison of planned costs in 10 global priority countries 2002–2003






Data as of 1 September 2001

## Table 3: Details of planned costs in endemic and high-risk countries, 2002–2003

| 2002 (US$ millions) | | | | |
|---|---|---|---|---|
| **Country** | *NIDs/SNIDs: OPV* | *NIDs/SNIDs: operations* | *AFP surveillance and laboratory* | *Total costs 2002* |
| **Endemic countries** | *US$* | *US$* | *US$* | *US$* |
| **Priority 10:** | | | | |
| **Afghanistan** | **2.88** | **3.75** | **0.39** | **7.02** |
| **Angola** | **1.48** | **5.28** | **0.98** | **7.74** |
| **Bangladesh** | **8.25** | **10.23** | **1.76** | **20.24** |
| **DR Congo** | **5.54** | **28.33** | **3.34** | **37.21** |
| **Ethiopia** | **4.40** | **17.35** | **1.10** | **22.84** |
| **India** | **45.13** | **46.29** | **10.17** | **101.59** |
| **Nigeria** | **17.36** | **30.45** | **1.95** | **49.76** |
| **Pakistan** | **14.93** | **5.54** | **1.07** | **21.54** |
| **Somalia** | **0.68** | **3.42** | **1.95** | **6.05** |
| **Sudan*** | **4.09** | **7.45** | **2.69** | **14.23** |
| Benin | 0.49 | 1.11 | 0.08 | 1.68 |
| Central African Republic | 0.15 | 0.62 | 0.11 | 0.88 |
| Chad | 0.57 | 0.91 | 0.16 | 1.65 |
| Congo | 0.23 | 0.62 | 0.10 | 0.94 |
| Côte d'Ivoire | 0.79 | 0.60 | 0.09 | 1.48 |
| Ghana | 1.24 | 1.44 | 0.23 | 2.92 |
| Iraq** | 0.00 | 1.52 | 0.27 | 1.78 |
| Nepal | 2.31 | 2.47 | 1.41 | 6.19 |
| Niger | 0.71 | 1.19 | 0.20 | 2.11 |
| **High-risk countries** | | | | |
| Burkina Faso | 0.60 | 0.93 | 0.10 | 1.63 |
| Burundi | 0.22 | 0.31 | 0.05 | 0.57 |
| Cameroon | 0.78 | 1.85 | 0.11 | 2.75 |
| Dem. People's Rep. Of Korea | 0.28 | 0.74 | 0.63 | 1.64 |
| Equatorial Guinea | 0.02 | 0.10 | 0.01 | 0.14 |
| Eritrea | 0.08 | 0.04 | 0.05 | 0.18 |
| Gabon | 0.06 | 0.10 | 0.06 | 0.22 |
| Guinea | 0.08 | 0.13 | 0.08 | 0.30 |
| Guinea-Bissau | 0.05 | 0.24 | 0.02 | 0.31 |
| Kenya | 0.21 | 1.03 | 0.13 | 1.37 |
| Liberia | 0.24 | 0.91 | 0.08 | 1.22 |
| Madagascar | 0.45 | 0.00 | 0.22 | 0.67 |
| Mali | 0.67 | 1.10 | 0.10 | 1.86 |
| Mauritania | 0.13 | 0.16 | 0.03 | 0.32 |
| Mozambique | 0.78 | 0.00 | 0.13 | 0.91 |
| Myanmar | 1.37 | 1.55 | 0.62 | 3.54 |
| Namibia | 0.10 | 0.08 | 0.04 | 0.22 |
| Rwanda | 0.15 | 0.21 | 0.05 | 0.41 |
| Sierra Leone | 0.34 | 1.32 | 0.10 | 1.75 |
| Tadjikistan | 0.25 | 0.03 | 0.08 | 0.35 |
| United Republic of Tanzania | 0.77 | 1.18 | 0.25 | 2.20 |
| Yemen | 0.62 | 1.00 | 0.30 | 1.92 |
| Zambia | 0.26 | 0.41 | 0.21 | 0.88 |

* Individual budgets exist for the Northern Governates and Southern Governates of Sudan and are available on request

** It is assumed that OPV costs for Iraq will be met by the Oil For Food Programme (OFFP)

| 2003 | | | | |
|---|---|---|---|---|
| **Country** | *NIDs/SNIDs: OPV* | *NIDs/SNIDs: operations* | *AFP surveillance and laboratory* | *Total Costs 2003* |
| **Endemic countries** | *US$* | *US$* | *US$* | *US$* |
| **Priority 10:** | | | | |
| **Afghanistan** | **1.80** | **2.59** | **0.56** | **4.95** |
| **Angola** | **1.24** | **4.29** | **1.12** | **6.65** |
| **Bangladesh** | **5.51** | **6.64** | **1.96** | **14.11** |
| **DR Congo** | **3.80** | **22.67** | **4.01** | **30.48** |
| **Ethiopia** | **1.33** | **5.11** | **1.20** | **7.64** |
| **India** | **42.24** | **42.11** | **10.57** | **94.92** |
| **Nigeria** | **10.47** | **17.86** | **1.95** | **30.28** |
| **Pakistan** | **10.80** | **3.90** | **1.07** | **15.77** |
| **Somalia** | **0.49** | **2.56** | **1.58** | **4.63** |
| **Sudan*** | **1.61** | **4.27** | **2.69** | **8.57** |
| Benin | 0.28 | 0.60 | 0.08 | 0.96 |
| Central African Republic | 0.08 | 0.32 | 0.12 | 0.52 |
| Chad | 0.56 | 0.87 | 0.16 | 1.59 |
| Congo | 0.24 | 0.64 | 0.10 | 0.97 |
| Côte d'Ivoire | 0.49 | 0.36 | 0.21 | 1.06 |
| Ghana | 0.55 | 1.10 | 0.23 | 1.88 |
| Iraq** | 0.00 | 1.52 | 0.27 | 1.79 |
| Nepal | 1.25 | 2.08 | 1.41 | 4.75 |
| Niger | 0.38 | 0.62 | 0.20 | 1.20 |
| **High-risk countries** | | | | |
| Burkina Faso | 0.32 | 0.48 | 0.19 | 0.98 |
| Burundi | 0.11 | 0.16 | 0.05 | 0.32 |
| Cameroon | 0.41 | 0.95 | 0.16 | 1.53 |
| Dem. People's Rep. Of Korea | 0.28 | 0.74 | 0.63 | 1.64 |
| Equatorial Guinea | 0.02 | 0.07 | 0.01 | 0.10 |
| Eritrea | 0.10 | 0.05 | 0.05 | 0.19 |
| Gabon | 0.06 | 0.11 | 0.06 | 0.22 |
| Guinea | 0.23 | 0.35 | 0.08 | 0.65 |
| Guinea-Bissau | 0.03 | 0.12 | 0.02 | 0.17 |
| Kenya | 0.22 | 1.07 | 0.13 | 1.42 |
| Liberia | 0.10 | 0.45 | 0.08 | 0.63 |
| Madagascar | 0.00 | 0.00 | 0.14 | 0.14 |
| Mali | 0.35 | 0.56 | 0.12 | 1.04 |
| Mauritania | 0.07 | 0.08 | 0.03 | 0.18 |
| Mozambique | 0.00 | 0.00 | 0.13 | 0.13 |
| Myanmar | 1.39 | 1.52 | 0.62 | 3.52 |
| Namibia | 0.05 | 0.04 | 0.04 | 0.13 |
| Rwanda | 0.16 | 0.21 | 0.05 | 0.42 |
| Sierra Leone | 0.12 | 0.45 | 0.10 | 0.66 |
| Tadjikistan | 0.08 | 0.01 | 0.04 | 0.12 |
| United Republic of Tanzania | 0.82 | 1.22 | 0.25 | 2.29 |
| Yemen | 0.68 | 0.52 | 0.30 | 1.50 |
| Zambia | 0.28 | 0.42 | 0.21 | 0.91 |

* Individual budgets exist for the Northern Governates and Southern Governates of Sudan and are available on request

** It is assumed that OPV costs for Iraq will be met by the Oil For Food Programme (OFFP)



Data as of 1 September 2001

| Total 2002–2003 | | | | |
|---|---|---|---|---|
| **Country** | *NIDs/SNIDs: OPV* | *NIDs/SNIDs: operations* | *AFP surveillance and laboratory* | *Total Costs 2002-2003* |
| **Endemic countries** | *US$* | *US$* | *US$* | *US$* |
| **Priority 10:** | | | | |
| **Afghanistan** | **4.68** | **6.34** | **0.95** | **11.97** |
| **Angola** | **2.72** | **9.57** | **2.10** | **14.39** |
| **Bangladesh** | **13.76** | **16.87** | **3.72** | **34.35** |
| **DR Congo** | **9.34** | **51.00** | **7.35** | **67.69** |
| **Ethiopia** | **5.73** | **22.45** | **2.30** | **30.48** |
| **India** | **87.37** | **88.40** | **20.74** | **196.51** |
| **Nigeria** | **27.83** | **48.31** | **3.90** | **80.04** |
| **Pakistan** | **25.74** | **9.44** | **2.14** | **37.31** |
| **Somalia** | **1.17** | **5.98** | **3.53** | **10.68** |
| **Sudan*** | **5.70** | **11.72** | **5.37** | **22.79** |
| Benin | 0.77 | 1.70 | 0.16 | 2.63 |
| Central African Republic | 0.24 | 0.93 | 0.23 | 1.40 |
| Chad | 1.14 | 1.78 | 0.32 | 3.24 |
| Congo | 0.46 | 1.25 | 0.20 | 1.92 |
| Côte d'Ivoire | 1.28 | 0.96 | 0.30 | 2.54 |
| Ghana | 1.79 | 2.54 | 0.46 | 4.79 |
| Iraq** | 0.00 | 3.04 | 0.53 | 3.57 |
| Nepal | 3.56 | 4.55 | 2.83 | 10.94 |
| Niger | 1.09 | 1.81 | 0.40 | 3.30 |
| **High-risk countries** | | | | |
| Burkina Faso | 0.92 | 1.40 | 0.29 | 2.91 |
| Burundi | 0.33 | 0.47 | 0.09 | 0.89 |
| Cameroon | 1.20 | 2.81 | 0.27 | 4.27 |
| Dem. People's Rep. Of Korea | 0.55 | 1.47 | 1.26 | 3.28 |
| Equatorial Guinea | 0.04 | 0.18 | 0.02 | 0.24 |
| Eritrea | 0.18 | 0.09 | 0.09 | 0.36 |
| Gabon | 0.11 | 0.21 | 0.12 | 0.44 |
| Guinea | 0.31 | 0.48 | 0.16 | 0.95 |
| Guinea-Bissau | 0.08 | 0.37 | 0.04 | 0.48 |
| Kenya | 0.43 | 2.10 | 0.26 | 2.79 |
| Liberia | 0.34 | 1.36 | 0.15 | 1.85 |
| Madagascar | 0.45 | 0.00 | 0.36 | 0.81 |
| Mali | 1.02 | 1.66 | 0.22 | 2.90 |
| Mauritania | 0.20 | 0.24 | 0.06 | 0.50 |
| Mozambique | 0.78 | 0.00 | 0.25 | 1.03 |
| Myanmar | 2.76 | 3.07 | 1.24 | 7.06 |
| Namibia | 0.15 | 0.12 | 0.08 | 0.35 |
| Rwanda | 0.32 | 0.42 | 0.10 | 0.83 |
| Sierra Leone | 0.46 | 1.76 | 0.20 | 2.42 |
| Tadjikistan | 0.33 | 0.03 | 0.12 | 0.47 |
| United Republic of Tanzania | 1.58 | 2.41 | 0.50 | 4.49 |
| Yemen | 1.30 | 1.52 | 0.60 | 3.42 |
| Zambia | 0.54 | 0.83 | 0.42 | 1.79 |

* Individual budgets exist for the Northern Governates and Southern Governates of Sudan and are available on request

** It is assumed that OPV costs for Iraq will be met by the Oil For Food Programme (OFFP)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# 4. Looking ahead: stopping poliovirus transmission and OPV immunization

## *Stopping poliovirus transmission*

*Figure 9: Map: Estimated increase in 2002–2005 programme costs if polio transmission continues into 2003, by epidemiological block*

## *Stopping OPV immunization*

## Stopping poliovirus transmission

Ongoing polio transmission beyond the next 12–18 months could threaten the global target of certifying polio eradication by 2005.

Based on the rate of progress since 1999, at least one country in each of four epidemiological blocks are currently considered at high risk of ongoing polio transmission beyond the end of 2002.

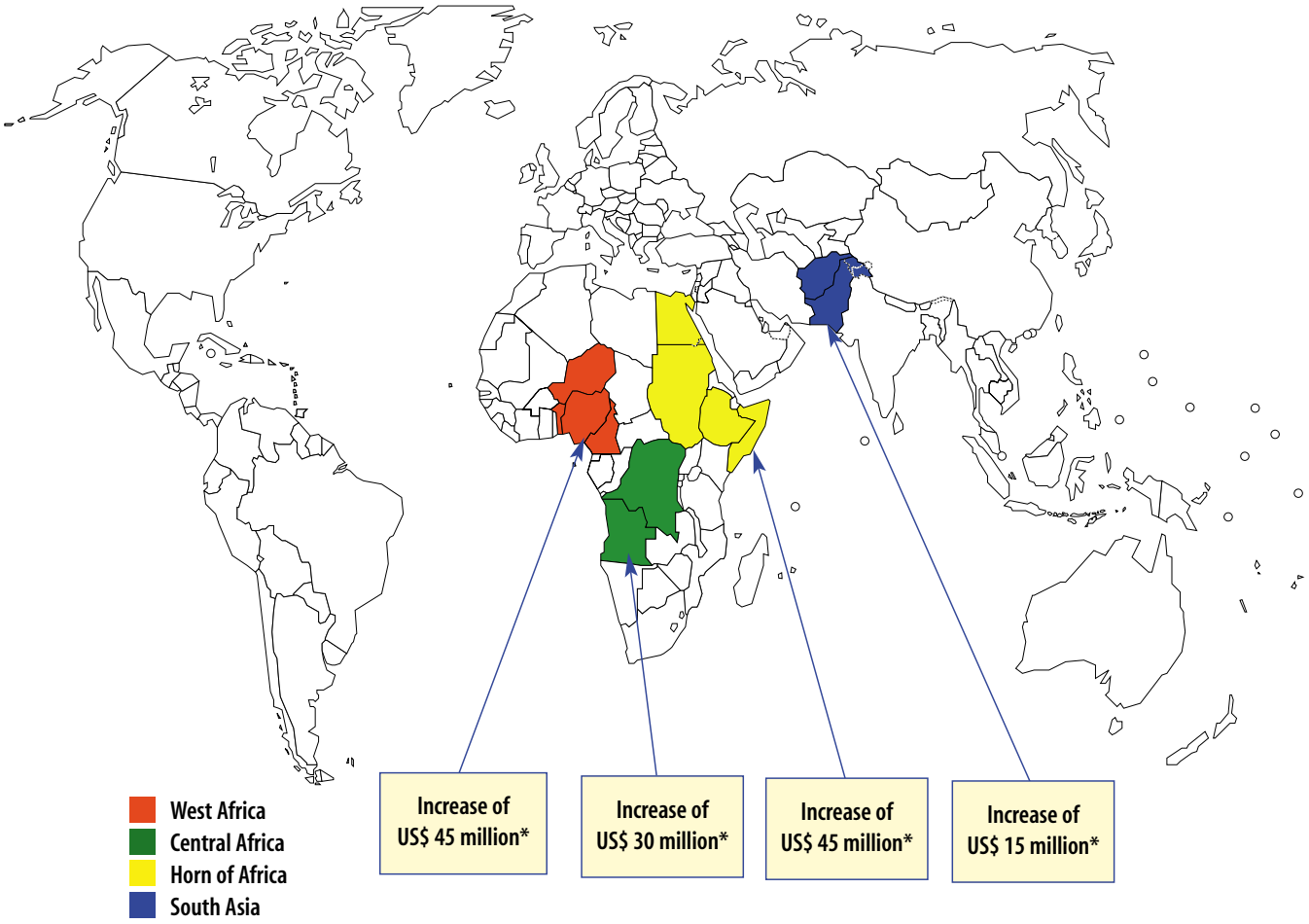
- *South Asia*
- *Central Africa*
- *West Africa*
- *Horn of Africa*

Ongoing poliovirus transmission in any one area would lead to increased programme costs. The financial implications are substantial, as neighbouring areas of countries with ongoing transmission would also need to extend supplementary immunization activities.

Figure 9 outlines the estimated 2002–2005 costs of extending intensified polio eradication activities in each of these four areas.

Should wild poliovirus transmission continue into 2003, the 2002–2005 programme costs could increase by more than US$ 100 million.

**Figure 9: Estimated increase in 2002–2005 programme costs if polio transmission continues into 2003, by epidemiological block**






Data as of 1 September 2001

## Stopping OPV immunization

The final phase of the Global Polio Eradication Initiative is commonly referred to as the polio "end-game" and consists of three key areas of work: containment of laboratory stocks, certification of polio eradication and cessation of immunization.

A detailed plan of action and processes have been developed for laboratory containment and certification. In addition, a research agenda has been developed to determine the safest and most efficient strategy for stopping polio immunization, involving an ambitious programme of work over the short- and medium-term. The budget for this research is estimated at US$ 1 million per year for the period 2001–2005. These costs are budgeted as part of the programme's "enabling factors".

As the world is rapidly approaching eradication, it is important to determine the resource requirements for the activities that will be needed beyond certification. These activities include continuing surveillance with adequate laboratory capacity, obtaining the necessary information to assure polio vaccination can be stopped safely, implementing strategies derived from that research, and establishing stockpiles of vaccine for the extremely unlikely event of an outbreak after immunization has been stopped. Because activities will be needed in the post-certification era, by end 2002 estimates will be developed of funding needs up to the end of 2010.

The highest and most immediate priority of the Initiative is to urgently close the funding gap of US$ 400 million for activities from 2001 up to the end of 2005. ◆

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