Global Polio Eradication Initiative

Progress 2003

World Health Organization
Global Polio Eradication Initiative

Progress 2003
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The Global Polio Eradication Initiative achieved strong progress in 2003. By the end of 2003, only 6 countries in the world were still polio-endemic, the lowest number ever: Nigeria, India, Pakistan, Niger, Afghanistan and Egypt.

Of particular note is the progress achieved in Somalia, which was taken off the endemic country list, and in India, Egypt and Pakistan, which recorded lowest-ever levels of transmission during the second half of 2003, the traditional “high season” for transmission. At the end of 2003, the world had an unprecedented opportunity to finish the job in 2004.

Despite this progress, however, an acute cash shortage in early 2003 led to a major tactical shift, forcing the scaling back and reprioritization of activities for the year. As increased emphasis was placed on the remaining endemic countries and “high risk” areas, most polio-free countries ceased to conduct preventive immunization campaigns, leaving their populations vulnerable to potential poliovirus importations.

The risks due to this increasing vulnerability were underlined in 2003, when a new polio outbreak originating in northern Nigeria re-infected 8 previously polio-free countries across west and central Africa. The outbreak occurred following the suspension of immunization campaigns in northern states of Nigeria in August, due to concerns by some public figures regarding the safety of oral polio vaccine (OPV). For the first time ever, the number of countries suffering “importation” cases (9 countries) was greater than the number of actual endemic countries (6 countries).

In late 2003, the Global Polio Eradication Initiative launched the new Strategic Plan 2004–2008, outlining the revised activities required to interrupt wild poliovirus transmission, the new target date to achieve global certification, products required to stop OPV and activities to mainstream the Global Polio Eradication Initiative. Of particular note, the new Strategic Plan outlines activities required to stop the routine use of OPV as soon as possible after global eradication, a policy decision taken at a scientific meeting of experts at WHO in September.

To interrupt wild poliovirus transmission as quickly as possible, endemic countries must intensify polio immunization campaigns throughout 2004, and the international donor community must fill the global funding gap of US$ 130 million (as at January 2004) for activities through 2005.

The world is very close to becoming polio-free, as wild poliovirus transmission is now restricted geographically. Approximately 90% of all global cases were found in Nigeria, India and Pakistan in 2003. However, as 2003 ended, the polio outbreak in west and central Africa was continuing to spread to additional countries, in some of which the quality of polio activities had been compromised by the acute cash shortage earlier that year. It was increasingly evident that this outbreak could require a much larger, multi-country “emergency response” in 2004. It is time for the final push against polio, with the goal of interrupting transmission by the end of 2004.

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Highlights 2003

- Somalia passed a full calendar year without polio, reporting its last case in October 2002. Somalia’s success in eradicating polio is testimony to the soundness of the polio eradication strategies, which work even in the most challenging country-settings.

- By the end of 2003, only 6 countries in the world were still polio-endemic, the lowest-ever number: Nigeria, India, Pakistan, Niger, Afghanistan and Egypt. In 1988, the year the Global Polio Eradication Initiative was launched, more than 125 countries were endemic.

- In 2003, 784 polio cases were reported worldwide, a significant reduction over 2002, when 1,918 polio cases were reported. Of the 784 cases, approximately 90% were found in just three countries: Nigeria, India and Pakistan.

- Following an epidemic of 1,600 cases in 2002, India achieved the lowest number of cases ever in 2003, by dramatically accelerating immunization activities, increasing both the quality and quantity of immunization campaigns. The country launched the largest-ever health campaign in history, immunizing more than 165 million children in just six days in February 2003.

- Rotary International raised US$ 119 million from its membership in a 12-month campaign to help close the funding gap. Rotary’s total contribution to polio eradication has exceeded US$ 500 million, and by the time the world is certified polio-free, donations will reach US$ 600 million.

- The Organization of the Islamic Conference (OIC) and the African Union (AU) adopted resolutions to eradicate polio from their Member States. The G8 reaffirmed its commitment to eradicating polio at its Summit in Evian, France.

Challenges 2003

- An acute cash shortfall in early 2003, and a changing epidemiology, prompted a major, unprecedented tactical shift in the Global Polio Eradication Initiative, forcing a scaling back and reprioritization of activities for the year. Increased emphasis was placed on the remaining endemic countries and “high-risk” areas, but many countries were left increasingly vulnerable as preventive immunization campaigns could no longer be conducted (55 countries conducted preventive campaigns in 2003, compared to 93 countries in 2002).
In Nigeria, a number of northern states suspended polio immunization campaigns in August 2003, following concerns by some public figures regarding the safety of the polio vaccine. Subsequently, a new outbreak occurred, originating in the state of Kano, and reinfecting previously polio-free areas within Nigeria (including Lagos), as well as eight previously polio-free countries across west and central Africa.

For the first time ever, the number of countries suffering polio due to imported virus was greater than the number of countries actually endemic. Importations will continue to be a risk until wild poliovirus transmission is interrupted everywhere. 52 cases of polio following importations into previously polio-free countries were reported in 2003.

Despite an increase in programme costs of more than US$ 100 million between May 2003 and January 2004 due to the intensification of polio immunization activities in priority countries, the Global Polio Eradication Initiative received more than US$ 200 million in new funding over that period. However, a global funding gap of US$ 130 million (as at January 2004) for activities through 2005 continues to threaten the goal of a polio-free world.
By the end of 2003, indigenous wild poliovirus transmission had been interrupted in all but 6 countries in the world (Nigeria, India, Pakistan, Niger, Afghanistan and Egypt), the lowest number in history. Approximately 90% of the 784 polio cases reported worldwide in 2003 were confined to parts of Nigeria, India and Pakistan. In Nigeria, an outbreak in the north of the country resulted in 355 new cases, a dramatic increase over the 202 cases in 2002. In India, following a polio epidemic in 2002 which left 1 600 children paralysed, both the quantity and quality of immunization campaigns were increased, resulting in the lowest number of cases ever in that country (225 cases) in 2003. Pakistan had the third highest number of cases, with 103 reported, a slight increase over the 90 cases reported in the previous year. Niger saw a significant increase in new cases over 2002, with 40 cases (versus 3 in 2002). In Egypt, 1 case was reported, a marked decrease from 7 cases in 2002. Afghanistan reported 8 cases, compared to 10 in 2002.

Wild poliovirus cases in 2003

*Excludes viruses detected from environmental surveillance and vaccine derived polio viruses.

Data in WHO HQ as of 24 March 2004.
For the first time ever, the number of countries suffering importations was greater than the number of polio-endemic countries. In January, a child was paralysed by polio in Lebanon, the first case seen in that country since 1994. Genetic sequencing confirmed that the virus had been imported from India. A new outbreak originating in northern Nigeria (see text box) spread across west and central Africa, re-infecting previously polio-free areas within that country (including Lagos), and 8 previously polio-free countries (Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Côte d’Ivoire, Ghana and Togo). Additionally, in the first quarter of 2004, a case of polio originating in northern Nigeria was reported in Botswana.
India: Wild poliovirus 2002 vs. 2003

India 2002: 1600 polio cases

India 2003: 225 polio cases
Increasingly vulnerable world as cash shortage prompts cessation of preventive immunization campaigns

The world is increasingly vulnerable to polio importations, which will remain a risk until polio is eradicated everywhere. The acute cash shortage and changing epidemiology which prompted a major tactical shift as available resources were focused on endemic and high-risk areas, meant that preventive immunization campaigns ceased in most polio-free countries, leaving the populations increasingly vulnerable to poliovirus. Consequently, rapidly eradicating the final polio reservoirs in 2004 became an urgent international public health issue.

For 2004 – interrupt wild poliovirus transmission and fill the funding gap

On 15 January 2004, an emergency meeting of health ministers of the remaining polio-endemic countries was convened at the World Health Organization (WHO) in Geneva, Switzerland. Delegates presented data on the status of eradication activities in their countries, alongside plans to rapidly interrupt poliovirus transmission by the end of 2004. With polio transmission at the lowest-ever levels in key countries such as India, Pakistan and Egypt, the ministers concluded that the world has a rare opportunity in 2004 to halt the spread of the virus. The ministers unveiled bold new plans to immunize 250 million children multiple times in an accelerated polio immunization campaign schedule throughout 2004. Delegates at the meeting publicly committed to the plan by signing the *Geneva Declaration for the Eradication of Poliomyelitis*.

A global funding gap of US$ 130 million (as at January 2004) for activities in 2004 and 2005 continues to threaten the goal of a polio-free world, and must urgently be filled.
In early 2003, a combination of factors, primarily the increasing geographic restriction of wild poliovirus transmission and limited financial resources, led to a reprioritization of activities. There was an increased emphasis on “intensification” of activities in the remaining endemic areas and those polio-free areas considered at highest risk of importations. At the same time, most large-scale “preventive” campaigns were replaced with an emergency response strategy.

In 2003, polio supplementary immunization activities (SIAs) in the endemic regions reached 415 million children, during 157 SIAs in 55 countries, using 2.2 billion doses of oral polio vaccine (OPV).
### Supplementary Immunization Activities (SIAs) in 2003

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of SIAs in 2003</th>
<th>Polio case count 2003</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Endemic countries</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td>0 NIDs 5 SNIDs</td>
<td>355</td>
</tr>
<tr>
<td>India</td>
<td>2 NIDs 4 SNIDs</td>
<td>225</td>
</tr>
<tr>
<td>Pakistan</td>
<td>4 NIDs 4 SNIDs</td>
<td>103</td>
</tr>
<tr>
<td>Niger</td>
<td>2 NIDs 3 SNIDs</td>
<td>40</td>
</tr>
<tr>
<td>Egypt</td>
<td>4 NIDs 2 SNIDs</td>
<td>1</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>4 NIDs 4 SNIDs</td>
<td>8</td>
</tr>
<tr>
<td><strong>Importation countries</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benin</td>
<td>2 NIDs 0 SNIDs</td>
<td>3</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>2 NIDs 0 SNIDs</td>
<td>11</td>
</tr>
<tr>
<td>Cameroon</td>
<td>0 NIDs 2 SNIDs</td>
<td>2</td>
</tr>
<tr>
<td>Central African Republic</td>
<td>2 NIDs 0 SNIDs</td>
<td>1</td>
</tr>
<tr>
<td>Chad</td>
<td>1 NID 2 SNIDs</td>
<td>25</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>2 NIDs 0 SNIDs</td>
<td>1</td>
</tr>
<tr>
<td>Ghana</td>
<td>2 NIDs 0 SNIDs</td>
<td>8</td>
</tr>
<tr>
<td>Lebanon</td>
<td>4 NIDs 0 SNIDs</td>
<td>1</td>
</tr>
<tr>
<td>Togo</td>
<td>2 NIDs 0 SNIDs</td>
<td>1</td>
</tr>
<tr>
<td><strong>Recently-endemic countries</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Angola</td>
<td>2 NIDs 1 SNIDs</td>
<td>0</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>2 NIDs 0 SNIDs</td>
<td>0</td>
</tr>
<tr>
<td>Democratic Republic of the Congo</td>
<td>0 NIDs 2 SNIDs</td>
<td>0</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>0 NIDs 4 SNIDs</td>
<td>0</td>
</tr>
<tr>
<td>Nepal</td>
<td>2 NIDs 0 SNIDs</td>
<td>0</td>
</tr>
<tr>
<td>Somalia</td>
<td>2 NIDs 5 SNIDs</td>
<td>0</td>
</tr>
<tr>
<td>the Sudan</td>
<td>0 NIDs 5 SNIDs</td>
<td>0</td>
</tr>
</tbody>
</table>

*Photo: Nasir Mirza*

Polio immunization activity in Pakistan
**India – a model response to the 2002 epidemic**

In India, the number of polio cases decreased dramatically in 2003, with 225 cases reported for the year.

In 2002, India suffered an epidemic of polio cases which left 1 600 children paralysed. India instigated a model response to this epidemic, as it accelerated its immunization activities, dramatically increasing the number and quality of large-scale immunization campaigns – from 3 campaigns in 2002, to 6 campaigns in 2003.

Social mobilization and communication activities were enhanced, in efforts to reach all children under the age of 5 years, regardless of socio-economic background. A particular focus was placed on the remaining under- or un-immunized groups of children in the state of Uttar Pradesh. In close collaboration with the Government of India, UNICEF India deployed 4 000 individuals to assist national health workers with community mobilization activities to reach Muslim children – the group which represented a disproportionate 59% of new polio cases in 2002. As a result of this social mobilization effort, the proportion of Muslim children receiving three or more doses of oral polio vaccine (OPV) in India increased from 61% in 2002 to 85% in 2003.

As a result of this intensification of SIAs in 2003, India had both the lowest number of cases and the lowest ever levels of transmission during the late 2003 “high season”. In 2004, India has the greatest opportunity for success in stopping transmission of wild poliovirus.

**India National Immunization Day – not your typical week!**

Did you know what is involved in a 6-day immunization campaign in India? Here are just some of the basic facts...

- 640 000 vaccination booths
- 2.3 million vaccinators
- 1.1 million vaccination teams
- 137 000 supervisors, with 137 000 vehicles (cars, motorcycles, mopeds, bicycles, boats, whatever it takes)
- 200 million doses of polio vaccine, carried around the country in 2 million vaccine carrier bags
- 6.3 million ice-packs to keep all those doses of polio vaccine in the 2 million vaccine carrier bags cold
- 191 million homes visited
- 169 million children immunized in just 6 days!

And that’s just one for one, single NID! In 2004, India will conduct 5 such NIDs, and 1 Sub-National Immunization Day (SNID) targeting 100 million children.

After being immunized with OPV during a National Immunization Day campaign, a young child gets its fingers marked to ensure that every child under five has been vaccinated.

**Non-polio AFP cases (Muslim children age ≥6 months ≤5 years) by OPV status, Uttar Pradesh**

<table>
<thead>
<tr>
<th>Year</th>
<th>0 dose</th>
<th>1-3 doses</th>
<th>≥4 doses</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002 (N=450)</td>
<td>11%</td>
<td>28%</td>
<td>61%</td>
</tr>
<tr>
<td>2003 (N=336)</td>
<td>1%</td>
<td>14%</td>
<td>85%</td>
</tr>
</tbody>
</table>

Data as of 10 January 2004
Nigeria – suspension of campaigns in north of country leads to outbreak

In Nigeria, the number of polio cases increased significantly, with 355 cases reported in 2003 (the highest number worldwide), compared to 202 cases the year before.

The primary reason for this marked increase was the suspension of SIAs in key northern states of the country, particularly Kano. The suspension occurred as a result of concerns among some community leaders regarding the safety of oral polio vaccine (OPV).

Health authorities tried to counter the lack of nationwide activities by conducting up to 5 Sub-National Immunization Days (SNIDs) in areas which were participating. However, the intense transmission of poliovirus in the north of the country and inconsistent SNID coverage led to the re-infection of previously polio-free areas within Nigeria (including Lagos), as well as 8 previously polio-free countries across west and central Africa.

Pakistan and Afghanistan – strong progress in second half of the year

In Pakistan, although the number of polio cases increased to 103 in 2003, from 90 in the previous year, by the end of 2003 the level of poliovirus transmission during the “high season” was at its lowest ever.

The progress in late 2003 was due to the high number of SIAs conducted, with 4 NIDs and 4 SNIDs conducted during the year. As importantly, the quality of the SIAs continued to improve throughout the year, with 87% of non-polio acute flaccid paralysis (AFP) cases having received 3+ doses of OPV by the end of 2003.

Afghanistan – which shares a cross-border poliovirus reservoir area with Pakistan – reported 8 polio cases in 2003, compared to 10 in 2002. Afghanistan maintained its SIA schedule and synchronized its campaigns with Pakistan. Activities were intensified by increasing SIA quality, with 87% of non-polio AFP cases receiving at 3+ doses of OPV.

OPV safety: Ongoing controversy in Nigeria highlights the risks of “invalid” tests

In August 2003, as a result of concerns among some community leaders regarding the safety of the oral polio vaccine (OPV), polio immunization campaigns were suspended in several northern states, most notably Kano. Specifically, some leaders suggested that estrogen was introduced into OPV in an effort to depopulate Nigeria’s population.

Both state and federal authorities in Nigeria have been working tirelessly to resolve the ongoing controversy, repeatedly testing OPV to demonstrate its safety. All of the analyses that were conducted with “valid” tests demonstrated the absence of estrogen. Some analyses conducted with invalid tests have suggested “false-positive” signals of estrogen at the margins of the tests’ detectability. Regrettably, these “false-positive” signals have been misinterpreted widely in some national media outlets, and thereby added to the confusion.

To investigate these concerns, the Federal Government of Nigeria established the “Joint Committee on OPV Safety”, consisting of federal and state authorities, including two delegates from Kano state, under the chairmanship of the Shehu of Dikwa, Kyari Ibn Umar El-Kanemi. Although estrogens are not used in the production of OPV and are not present in the finished product, the Committee recommended “gold standard” testing in at least two independent laboratories to demonstrate the vaccine’s safety.

On 15 March 2004, the Committee filed its report with H. E. Eyitayo Lambo, the Minister of Health of Nigeria, who presented the findings to H. E. President Olusegun Obasanjo two days later. In its report, the Committee unanimously re-affirmed the safety of OPV.

Key to the rapid resolution of the ongoing controversy will be the engagement of all key stakeholders in Nigeria, and particularly Kano, in ensuring that full confidence in the safety of OPV is re-established among all communities.
Egypt – strong progress throughout the year

Egypt dramatically reduced the number of polio cases in 2003 compared to 2002, with just 1 case reported for the entire year, in June (compared to 7 cases in the previous year). Furthermore, the number of wild poliovirus positive environmental samples continued to decline markedly (from 55% in 2001, to just 4% in 2003 – the most recent positive environmental sample was reported on 6 January 2004).

The country intensified its immunization activities in 2003, as one additional NID was conducted over the previous year, for a total of 4 NIDs and 2 SNIDs. The quality of SIAs continued to improve throughout the year under the leadership of the new Minister of Health. By the end of 2003, 89% of non-polio AFP cases had received at least 5 doses of OPV, up from 74% in 2002.

As a result of this strong progress, Egypt is on track to eradicate polio in 2004.

Niger – higher quality campaigns required

Niger saw a marked increase in new cases in 2003, with 40 new cases reported (compared to 3 in 2002).

Although the country conducted 3 SNIDs and 2 NIDs in 2003, the quality of these activities must urgently improve, if wild poliovirus transmission is to be interrupted. Surveillance data suggested that as many as 82% of children were still under- and un-immunized (receiving less than 4 doses).

As a result of the suboptimal polio campaign quality in 2003, and compounded by the outbreak of new cases in the shared border reservoir with Nigeria, wild poliovirus transmission remains extensive throughout all parts of Niger.

West and central Africa – intensified synchronized SIAs in response to Nigeria outbreak

Throughout west and central Africa, 51 cases of polio were reported in 2003 in 8 previously polio-free countries: Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Côte d’Ivoire, Ghana and Togo. All cases were as a result of imported poliovirus which was genetically linked to Nigeria.

To respond to the ongoing threat caused by the Nigerian outbreak, emergency synchronized NIDs were conducted in late 2003, at an international cost of US$ 25 million.

The campaigns involved hundreds of thousands of volunteers and health workers, to reach 25 million children under the age of 5 years across the region. Particular effort was placed on enhancing technical support and social mobilization to engage traditional and religious leaders in every country to counter the rumours concerning OPV safety spreading out of Nigeria.

Children in these countries will continue to be at risk of permanent polio paralysis until the outbreak spreading from Nigeria is stopped. Emergency response campaigns will need to continue throughout 2004 and 2005.
Surveillance for poliomyelitis and poliovirus relies primarily on reporting and laboratory investigation of cases of acute flaccid paralysis (AFP), supplemented in specific circumstances by complementary systems, such as environmental and/or enterovirus surveillance. The quality of AFP surveillance – its ability to detect ongoing transmission of wild poliovirus in a country – is evaluated through three key indicators:

1) rate of reported AFP cases not due to wild poliovirus ("non-polio AFP rate") of at least 1 case of non-polio AFP per 100,000 population aged < 15 years;
2) collection of "adequate" stool specimens from at least 80% of reported AFP cases;
3) analysis of all AFP stool specimens (100%) in laboratories accredited by WHO.

The timeliness and completeness of AFP reporting and collection of adequate stool specimens continued to be at the level of quality required for polio-free certification in all WHO regions in 2003. The overall number of AFP cases reported globally decreased slightly from 2002 to 2003 (mainly as a result of the large polio outbreak in India in 2002); however, non-polio AFP rates remained at levels considerably above 1/100,000 globally (1.9) and in all WHO regions (ranging from 1.22 in the European Region to 2.60 in the African Region). The proportion of AFP cases with adequate specimens increased slightly, from 84% in 2002 to 86% in 2003, mainly as a result of improvements in specimen collection rates in two endemic WHO regions: the African Region (from 81% to 88%) and the Eastern Mediterranean Region (from 88% to 90%). All specimens (100%) were processed in WHO-accredited laboratories.

All countries endemic at mid-2003 maintained or achieved certification-quality surveillance, including Somalia. International AFP surveillance reviews continued to provide specific guidance to countries on how to further improve the quality of AFP surveillance. As recommended by the global technical oversight body, the Technical Consultative Group for the Global Eradication of Poliomyelitis (Global TCG), reviews were conducted in Afghanistan, Cameroon, Kenya, Madagascar, Mali and Mozambique. In an attempt to identify and close subnational gaps in surveillance sensitivity, several key endemic countries continued (Pakistan) or began (India) to conduct formal internal AFP reviews at provincial or state level.

Progress in AFP surveillance is also monitored by the number of countries in endemic regions not reaching certification-standard surveillance, which decreased from 19 in 2002 to 18 in 2003. Of these, 11 are in the African Region (including 9 countries with sample collection rates just below 80%), 5 are small countries or areas in the Eastern Mediterranean Region (Bahrain, Djibouti, Lebanon, West Bank and Gaza) and 2 are small countries in the South-East Asia Region (Bhutan, Maldives).

Surveillance gaps which persisted until late 2002 in southern and eastern Africa are beginning to close. Four of the seven recently polio-endemic countries in southern and eastern Africa which had lagged behind in AFP surveillance up to the end of 2002 have now reached certification-standard (Namibia, South Africa, Zambia and Zimbabwe), leaving Madagascar, Mozambique and Botswana where sample collection rates were just below the 80% target.

**Milestones 2003:**

- The Global Certification Commission (GCC) will have defined supplementary data that will be needed for global certification from all previously certified regions. 
  **Status:** Achieved (in progress)
- Supplemental surveillance will be initiated as recommended by the GCC. 
  **Status:** Ongoing
- Certification mechanisms will be established for all countries/areas lacking access to a national commission. 
  **Status:** Achieved
- All AFR countries will have a National Certification Committee. 
  **Status:** Achieved

Additional information:

- Progress 2003

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**Certification-standard surveillance**
There was also progress towards the 2003 milestones for certification. National Certification Committees (NCCs) have been established in all countries of the endemic regions, except Somalia, where preparations are being made to oversee certification activities by members of the WHO/UNICEF Secretariat and the National Technical Advisory Group for Polio Eradication in Somalia.

The Global Certification Commission (GCC) met in October 2003 and for the first time developed specific formats for reports on certification status from all regions. The GCC decided that decisions on when and where specific supplemental surveillance activities should be initiated would be taken when transmission of wild poliovirus has been interrupted globally. RCCs met in the 6 regions (except in the Region of the Americas and the South–East Asia Region). Two of these regions had already been certified as free of endemic wild poliovirus (Western Pacific and European regions). The RCCs reviewed progress towards interrupting transmission (in endemic regions) and towards sustaining polio-free status (in certified regions).

**Laboratory network**

A global network of 145 laboratories underpins surveillance activities in the polio eradication initiative by investigating faecal samples for the presence of polioviruses. The accuracy and reliability of results are assured through a laboratory quality assurance programme that includes annual proficiency testing and on-site evaluations undertaken as part of a formal accreditation programme. The network also possesses an effective communication infrastructure and works in full partnership with epidemiology and immunization personnel to focus activities on interrupting polio transmission.

In 2003 the laboratory network tested approximately 70 000 faecal samples from 34 300 AFP cases and isolated wild polioviruses from 784 cases. Genetic characterization of the viruses revealed that endemic polioviruses were transmitted in 6 countries (Nigeria, India, Pakistan, Niger, Egypt and Afghanistan), whereas polio cases in an additional 9 countries were due to imported virus. The virus from a single AFP case in Lebanon was linked to India, whereas all other importations (in Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Côte d’Ivoire, Ghana, Togo) were linked to a type 1 poliovirus reservoir that spans northern Nigeria and Niger.

**Countries not achieving one or more of the AFP performance indicators required for certification-standard surveillance in 2003 (based on data available as of May 2004)**

<table>
<thead>
<tr>
<th>Region</th>
<th>Country</th>
<th>AFP cases reported (2003)</th>
<th>Non-polio AFP rate</th>
<th>AFP cases with adequate specimens (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFR</td>
<td>Algeria</td>
<td>61</td>
<td>0.6</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>Botswana</td>
<td>16</td>
<td>2.3</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>Cameroon</td>
<td>142</td>
<td>1.7</td>
<td>77</td>
</tr>
<tr>
<td></td>
<td>Cape Verde*</td>
<td>4</td>
<td>2</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>Chad</td>
<td>93</td>
<td>1.8</td>
<td>73</td>
</tr>
<tr>
<td></td>
<td>Ethiopia</td>
<td>402</td>
<td>1.3</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>Ghana</td>
<td>187</td>
<td>2</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>Liberia</td>
<td>12</td>
<td>0.5</td>
<td>92</td>
</tr>
<tr>
<td></td>
<td>Madagascar</td>
<td>145</td>
<td>1.7</td>
<td>77</td>
</tr>
<tr>
<td></td>
<td>Mozambique</td>
<td>134</td>
<td>1.6</td>
<td>77</td>
</tr>
<tr>
<td></td>
<td>Niger</td>
<td>175</td>
<td>2.4</td>
<td>79</td>
</tr>
<tr>
<td>EMR</td>
<td>Bahrain*</td>
<td>2</td>
<td>97</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Djibouti*</td>
<td>2</td>
<td>40</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Lebanon</td>
<td>20</td>
<td>2.1</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>Somalia</td>
<td>85</td>
<td>3.0</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>West Bank and Gaza Strip</td>
<td>5</td>
<td>0.47</td>
<td>60</td>
</tr>
<tr>
<td>SEAR</td>
<td>Bhutan</td>
<td>6</td>
<td>1.37</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>Maldives*</td>
<td>1</td>
<td>0.62</td>
<td>100</td>
</tr>
</tbody>
</table>

*Comoros, Mauritius, Réunion, Saint Helena, Sao Tome and Principe, Seychelles and Timor-Leste did not report AFP cases in 2003 due to small populations.

Red indicates targets not achieved.

Green indicates targets achieved during 2003.

Total population < 1 million, unlikely to have sustained undetected indigenous transmission of wild polioviruses

Data as of May 2004

Non-polio acute flaccid paralysis (AFP) rates

January 2002–December 2002

January 2003–December 2003

Adequate stool specimen collection rates

January 2002–December 2002

January 2003–December 2003

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

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Progress towards laboratory containment of wild polioviruses continues worldwide. In WHO regions certified as polio-free (AMR, EUR, WPR), all countries have appointed a national task force responsible for overseeing the Phase I activities – laboratory survey and inventory. 95% of these countries (128/135) have started a national survey of laboratories and 70% (91/135) have completed the survey and compiled a national inventory of laboratories holding wild poliovirus materials.

Of considerable note was the completion of the Phase I activities in a number of industrialized countries of western Europe and North America, particularly as these countries have long histories of biomedical research and laboratory contacts worldwide. Belgium, Denmark, Germany, Ireland, Italy, Portugal and Sweden all reported completion of national surveys in 2003. France, Switzerland and the United Kingdom are in the final stages and expect to finish in 2004. In AMR, the United States of America reported completion of a national survey of over 100,000 laboratories, having identified 178 facilities with wild poliovirus materials.

In WHO regions not yet certified as polio-free (AFR, EMR, SEAR), non-endemic countries have also started containment activities. In EMR and SEAR, 12/28 (43%) polio-free countries have reported completion and compilation of a national inventory along with one country in AFR (Botswana).

As more than 100 countries in the world have now completed the survey and inventory activities, in 2003 the process of evaluating the quality of the process began with results from WPR, EUR and EMR expected in 2004. The final reports generated from the quality assessment of Phase I will serve as the basis for future containment activities after the interruption of poliovirus transmission.

The publication of the Global Polio Eradication Initiative Strategic Plan 2004-2008 and the policy to stop routine use of OPV as soon as possible provides new direction to future containment activities and alters the milestones previously set for 2003. Activities for Phase II containment and global certification will officially begin one year after the last documented episode of wild poliovirus transmission anywhere in the world. The revised timeline for interruption of transmission, as outlined in the new Strategic Plan, has shifted the milestone for implementing Phase II containment activities. Work continues to focus on completing Phase I in all WHO regions and preparing the containment plans for cessation of routine OPV use. A third edition of the Global Action Plan for the Laboratory Containment of Wild Polioviruses will be developed, outlining the strategy to minimize the risk of reintroducing polioviruses from a laboratory to a community after interruption of wild poliovirus circulation and cessation of OPV use. Containment of all live polioviruses will be considered in the plan, which will be available in 2005.
Progress with the “survey and inventory” phase of laboratory containment activities (Phase I)

<table>
<thead>
<tr>
<th>Member States in each region which have:</th>
<th>Appointed a national coordinator</th>
<th>Begun compiling list of biomedical facilities to be surveyed</th>
<th>Started conducting survey of laboratories</th>
<th>Submitted finalized national inventory of laboratories</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFR (48 countries)</td>
<td>27</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>AMR (47 countries)</td>
<td>47</td>
<td>40</td>
<td>40</td>
<td>9</td>
</tr>
<tr>
<td>EMR (22 countries)</td>
<td>17</td>
<td>15</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>EUR (52 countries)</td>
<td>52</td>
<td>52</td>
<td>52</td>
<td>49</td>
</tr>
<tr>
<td>SEAR (11 countries)</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>WPR (37 countries and areas)</td>
<td>36</td>
<td>36</td>
<td>36</td>
<td>34</td>
</tr>
</tbody>
</table>

Laboratory containment 2003 – Progress with the “survey and inventory”

- Polio endemic
- Survey not yet started
- Conducting survey
- Reporting completion of survey and inventory of laboratories with polio materials
Development of post-certification immunization policy

**Milestones 2003:**

**Data Generation**
- All scientific research data required for policy development is being collected.
  **Status:** Achieved

**Policy Development**
- At least one forum is held with key policymakers in each geopolitical block to receive comments on the risk framework and post-certification immunization policy options.
  **Status:** Achieved (EPI manager meetings)

In September 2003, a meeting of scientific experts was convened at WHO on immunization policies following the global eradication of wild poliovirus. As a result of this meeting and increasing scientific and programme data, the following 3 landmark policy decisions were taken:

1. **Cessation of oral polio vaccine (OPV):**
   Since 2000, polio outbreaks caused by vaccine-derived polioviruses (VDPVs) have conclusively demonstrated that the continued use of OPV for routine immunization could compromise the goal of eradicating all paralytic disease due to circulating polioviruses.

   To minimize the long-term risks associated with OPV, the decision was taken to stop the routine use of this vaccine as soon as possible after eradication, while surveillance sensitivity and population immunity are high.

2. **No universal introduction of inactivated polio vaccine (IPV):**
   Based on the increasingly understood risks of polio re-introduction following OPV cessation, and the plans of many OPV-using countries, WHO will not recommend universal introduction of IPV. This is a decision each country must make individually. Every country must plan for the cessation of OPV use, and decide whether or not to introduce IPV; countries deciding to introduce IPV must make arrangements for its procurement. WHO and its partners will continue to support individual countries in the decision-making process, and will provide technical assistance during OPV cessation, and, if requested, during the introduction of IPV.

3. **Strategies for the safe cessation of OPV:**
   A road map for the safe cessation of OPV has already been developed, and published in the Global Polio Eradication Initiative Strategic Plan 2004-2008. This roadmap outlines the specific activities which will need to be implemented, and include:
   - the interruption of wild poliovirus transmission globally;
   - the appropriate containment of all laboratory and vaccine manufacturing stocks of poliovirus, including Sabin strains;
   - licensing of monovalent OPV (mOPV) and manufacture of IPV from Sabin strains (S-IPV);
   - maintenance of surveillance and laboratory capacity to detect VDPVs that might circulate after cessation of OPV;
   - establishment of a global OPV stockpile, and management mechanisms thereof, in the event that it be required after routine use of OPV has been stopped.

   It is anticipated that in 2004, most research relevant to OPV cessation will be completed, including an analysis of stockpile options and strategies. Guidelines for national decision-making on OPV cessation will be completed, outlining:
   - a) rationale for OPV cessation;
   - b) risks of polio in the post-OPV era;
   - c) surveillance requirements;
   - d) post-OPV stockpile and response; and
   - e) implications of IPV introduction.

   A third edition of the Global Action Plan for the Laboratory Containment of Wild Polioviruses (GAP III) will be developed.
Strengthening of routine immunization services

The Global Polio Eradication Initiative was launched with the dual goals of interrupting wild poliovirus transmission globally and strengthening of health systems, particularly routine immunization services. The milestones of the programme for the years 2001–2004 were reviewed by the Technical Consultative Group for the Global Eradication of Poliomyelitis (Global TCG) and subsequently revised to focus on three activities:

1) strengthening routine immunization;
2) expanding surveillance; and
3) improving partnership management.

During 2003, the programme continued to focus on strengthening immunization services in the non-endemic and recently-endemic countries. Major progress in the development and implementation of the “Reaching Every District” (RED) approach was achieved, which has four elements for improving immunization services at the district level. These are:

a) re-establishment of outreach services;
b) supportive supervision;
c) establishing community links with service delivery; and
d) monitoring and use of data for planning and managing resources.

As the RED approach is based upon polio experiences and maximizes the use of the human and material resources of the Global Polio Eradication Initiative, it forms a strong foundation for strengthening routine immunization. The programme collaborated with the Global Alliance for Vaccines and Immunization (GAVI) and other partners which provided funds for immunization systems strengthening in Bangladesh, the Democratic Republic of the Congo, Ethiopia, Pakistan and the Sudan. In these countries, polio-funded staff were instrumental in the planning, implementation and monitoring of activities for immunization systems strengthening. All these activities were coordinated through the Interagency Coordinating Committee (ICC) mechanism that had been initially set up for polio eradication, but now coordinates all immunization activities. Key features included the adoption of multi-year Expanded Programme on Immunization (EPI) plans by the ICCs (Angola and Ethiopia), expansion of the Terms of Reference (TORs) and workplans of polio-funded staff, or recruitment of national staff to supervise and coordinate EPI activities at sub-national level (Bangladesh and Ethiopia), provision of supportive supervision during AFP surveillance visits, use of the polio surveillance network to channel monitoring data including district level coverage information, monitoring of reporting of priority disease surveillance data (the Sudan), and monitoring the use of immunization systems strengthening funds at the province or district levels.

Furthermore, countries which conducted supplementary immunization activities for measles control (Ethiopia) also used polio-funded AFP surveillance officers to plan, implement and evaluate the activities. In many instances, the planning was linked to that for polio supplementary immunization activities, thereby strengthening the link between the Global Polio Eradication Initiative and other disease control activities.

In late 2003, GAVI, in collaboration with WHO and UNICEF, initiated the “enhanced efforts in large population countries” of the GAVI framework, under which seven countries (Bangladesh, the Democratic Republic of the Congo, Ethiopia, India, Indonesia, Nigeria and Pakistan) are undertaking renewed efforts to strengthen routine immunization services. More than 35 million un-immunized children live in these countries, and in 2004, additional funding to support technical staff and immunization strengthening activities will be dispersed, to ensure the RED approach is implemented.

The activities in 2003 show progress in strengthening routine immunization programmes through use of the polio surveillance infrastructure and collaboration with other immunization partners. In 2004, polio eradication-recruited staff, especially provincial
and district level officers, will continue to play a major role in planning, supervising and monitoring activities for strengthening immunization systems. The expansion of their role has been achieved in the non-endemic and recently endemic countries without compromising their main functions of sustaining certification level AFP surveillance.

The new Global Polio Eradication Initiative Strategic Plan 2004-2008 addresses the need to mainstream the global polio eradication infrastructure. As part of the new strategic approach, the focus will be on enhancing the ongoing work to transition or integrate the substantial polio-funded human resources, physical infrastructure and institutional arrangements into other disease control, surveillance and response activities, and to sustain the broader benefits of the international investment in polio eradication. Additionally, the long-term work of polio eradication, particularly in the areas of containment, surveillance, OPV stockpiles and response, will be fully incorporated into existing, sustainable, national, WHO and UNICEF mechanisms and structures which have been established for other important pathogens.

### Polio funded human resources in selected countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-Endemic</strong></td>
<td></td>
</tr>
<tr>
<td>Angola</td>
<td>56</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>98</td>
</tr>
<tr>
<td>Democratic Republic of the Congo</td>
<td>166</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>62</td>
</tr>
<tr>
<td>Somalia</td>
<td>159</td>
</tr>
<tr>
<td>the Sudan</td>
<td>311</td>
</tr>
<tr>
<td><strong>Endemic</strong></td>
<td></td>
</tr>
<tr>
<td>Afghanistan</td>
<td>115</td>
</tr>
<tr>
<td>India</td>
<td>801</td>
</tr>
<tr>
<td>Nigeria</td>
<td>192</td>
</tr>
<tr>
<td>Pakistan</td>
<td>151</td>
</tr>
</tbody>
</table>

### Expansion and integration of AFP surveillance system

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of countries with AFP system</th>
<th>Number of countries with confirmed policy of integrating measles, neonatal tetanus and/or other diseases</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFR</td>
<td>46</td>
<td>28</td>
</tr>
<tr>
<td>EMR</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>SEAR</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>AMR</td>
<td>44</td>
<td>44</td>
</tr>
<tr>
<td>WPR</td>
<td>36</td>
<td>25</td>
</tr>
<tr>
<td>EUR</td>
<td>39</td>
<td>2</td>
</tr>
</tbody>
</table>
The Funding Gap

International community responds to funding gap

The global community responded to the acute funding crisis experienced by the Global Polio Eradication Initiative in early 2003, by providing additional resources of more than US$ 200 million between May 2003 and January 2004.

Despite this extremely encouraging international support, the Global Polio Eradication Initiative still faced a critical funding gap of US$ 130 million for 2004 and 2005 (as at January 2004), against projected costs of US$ 765 million for planned activities to interrupt transmission globally. The funding gap is a result of the increase in the programme costs for 2004–2005 by more than US$ 100 million to respond to poliovirus importations in west and central Africa and the intensification of immunization activities in the priority countries. At this time, flexible multi-year funding is essential to ensure that the funding gap of US$ 130 million can be met, and emerging programme needs can be responded to in a timely manner.

At the end of 2003, with the assistance of core donors and new fundraising initiatives, a total of US$ 635 million had been confirmed or projected to be received for activities in 2004–2005. Major contributions for 2003 came from Canada, the European Commission, France, Japan, Norway, the Russian Federation, Rotary International, the World Bank, the United Kingdom and the United States.

Funding Gap
US$ 3 billion budget, 1988–2005*  
* as at January 2004

2004-2005 Funding Gap for planned activities US$ 130 million

“Other” includes: the Governments of Australia, Belgium, Finland, Ireland, Italy, Luxembourg, Malaysia, New Zealand, Norway, Oman, Republic of Korea, Russian Federation, Switzerland, Saudi Arabia, the United Arab Emirates; Aventis, De Beers, Inter-American Development Bank, International Federation of Red Cross and Red Crescent Societies, Millennium Fund, Oil for Food Programme, OPEC Foundation, Smith Kline Biologicals, UNICEF National Committees, UNICEF Regular Resources, Saudi Arabian Red Crescent Society, United Arab Emirates Red Crescent Society, WHO Regular Budget and Riyadh.

**New fundraising initiatives**

*Rotary International polio eradication fundraising campaign*

Rotary International successfully concluded an extraordinary polio fundraising drive among its membership. The aim of the campaign was to raise US$ 80 million from 1.2 million Rotarians in 163 countries to help close the funding gap. Rotarians responded very generously once again and provided a truly remarkable amount of US$ 119 million. The results were announced at the Rotary International Convention in Brisbane, Australia in June. Since 1985, Rotary International has contributed more than US$ 500 million to global polio eradication. By the time the world is certified polio-free, Rotary’s contributions will reach US$ 600 million. Of even greater significance has been the huge volunteer army mobilized by Rotary. Hundreds of thousands of volunteers at the local level are providing support at clinics or mobilizing their communities for immunization or polio eradication activities.

*G8 Africa Action Plan*

At the June 2003 G8 Summit in Evian, France, G8 leaders reiterated their commitment, originally expressed at the Summit in Kananaskis, Canada in 2002, to provide the necessary funding to eradicate polio by 2005. As part of this pledge, France made a first-time commitment to the Polio Eradication Initiative of US$ 35.5 million for 2004–2005 and Russia committed US$ 4 million for 2003–2005.

*Organization of the Islamic Conference*

At the 10th Islamic Summit of the Organization of the Islamic Conference (OIC) in October 2003, OIC Member States adopted a landmark polio resolution that called on the international community, OIC Member States, and Islamic philanthropic institutions to provide financial assistance to eradicate polio. With the strong support of the OIC Secretariat, polio partners are now working to identify and engage all OIC Member States, especially the Gulf Cooperation Council countries.

**World Bank/Gates Foundation/Rotary – United Nations Foundation Investment Partnership for Polio**

The World Bank joined forces with the Bill and Melinda Gates Foundation, Rotary International and the United Nations Foundation (UNF) to create an innovative financing mechanism that has provided US$ 49 million to help fill the 2003-2005 funding gap for OPV in Nigeria and in Pakistan. The collaboration sees the Gates Foundation and Rotary International/UNF buying down to zero World Bank loans to governments for OPV, in effect turning the loans to countries into grants. Vaccines are being purchased through UNICEF.

**Donor support**

*Australia*

In 2003, Australia provided US$ 1.5 million in global funds to the Global Polio Eradication Initiative.

*Aventis Pasteur*

Aventis Pasteur is the Global Polio Eradication Initiative’s longest standing corporate partner with a total donation of 110 million doses of OPV. The company committed an additional US$ 1.41 million in OPV to the Global Polio Eradication Initiative.

*Bill and Melinda Gates Foundation*

The Foundation collaborated with Rotary International in a unique public/private sector partnership along with the World Bank and the UN Foundation, to provide OPV to Nigeria and Pakistan. The Gates Foundation had previously contributed US$ 50 million to the Global Polio Eradication Initiative.

*Canada*

In 2003, Canada provided additional support of US$ 32.88 million in response to the G8’s commitment to provide the resources necessary to
eradicate polio in Africa by 2005. Canada continues to be a strong supporter of the Global Polio Eradication Initiative and has contributed a total of more than US$ 65 million to the programme.

**US Centers for Disease Control and Prevention (CDC)**
In addition to its role as a core technical spearheading partner, CDC provided US$ 87.20 million for OPV, operational costs and programme support through its Atlanta-based headquarters. CDC supported the costs of more than 125 technical personnel to assist WHO and UNICEF in global polio eradication efforts, laboratory support to the 145 members of the global polio laboratory network, and scientific assistance on developing products for the cessation of OPV.

**Denmark**
Denmark provided US$ 1.75 million to India’s polio eradication effort in 2003 as it concluded its six-year US$ 30 million-plus commitment to polio eradication in India.

**European Commission (EC)**
The EC provided US$ 39 million for polio eradication activities in Nigeria and in India. Funds were used for operational costs of NIDs and vaccine procurement.

**Finland**
Finland provided US$ 80,000 for the Finnish Polio Reference Laboratory.

**France**
France, in support of the G8 commitment to provide financial resources to eradicate polio, made a commitment of US$ 35.5 million to the Global Polio Eradication Initiative for 2004–2006 activities in Africa.

**Germany**
Germany continued its commitment to the programme in India by providing US$ 8.8 million for OPV.

**Italy**
In addition to a US$ 1 million contribution to polio eradication in India, Italy provided US$ 300 000 in global funding, as well as supporting activities in the Sudan and Somalia.

**Ireland**
Ireland provided US$ 900 000 in unspecified funds for polio eradication.

**Japan**
A key, major long-term donor to the programme, Japan contributed over US$ 30 million for OPV, cold chain and logistics in several countries in 2003, bringing its total contribution to more than US$ 230 million. It also supported the polio eradication research agenda and containment and certification activities.

**The Netherlands**
In follow up to its US$ 110 million in global contributions in 2000–2001, the Netherlands provided support to the AFP surveillance system in Bangladesh.

**New Zealand**
New Zealand provided US$ 1 million in global funds to the Global Polio Eradication Initiative, through Rotary, WHO and UNICEF.

**Norway**
Norway continued its strong support to the global polio eradication effort with a US$ 7 million unspecified contribution in 2003.

**Rotary International**
Rotary International, the largest private sector donor to the Global Polio Eradication Initiative, continued its outstanding commitment by providing US$ 25 million in 2003 to countries in all the remaining endemic regions, and concluding a US$ 119 million fundraising campaign. Rotary International’s total contribution to the polio eradication effort since 1985 has exceeded US$ 500 million, and will reach US$ 600 million when the world is certified polio-free. Rotary International also joined forces with the World Bank, the Bill and Melinda Gates Foundation, and the UN Foundation in an innovative financing collaboration to help fill the 2003–2005 funding gap for OPV in Nigeria and in Pakistan.
Russian Federation
To support the G8’s pledge to fund polio eradication, the Russian Federation committed US$ 4 million over three years and provided the first instalment of US$ 1 million in 2003.

US Fund for UNICEF “Trick-or-Treat” campaign
The Trick-or-Treat for UNICEF campaign organized by the US Fund for UNICEF contributed US$ 3 million.

UNICEF National Committees
In 2003, the UNICEF National Committee in Canada provided US$ 50 000 for activities in Haiti.

United Arab Emirates
Through the Red Crescent Society, the UAE provided US$ 200 000 for polio eradication activities in Iraq.

United Kingdom’s Department of International Development (DFID)
DFID continued its strong commitment with 2003 funding of US$ 53.5 million. Funding was provided both at the global level, and bilaterally, to India, Nepal and Myanmar. The UK continued to play a critical role in encouraging other donors, including the G8, to fulfil their commitment and provide support to the Global Polio Eradication Initiative.

United Nations Foundation (UNF)
The UN Foundation continued its critical support to strengthen the Global Polio Eradication Initiative’s fundraising capacity. It also collaborated with the Rotary International Private Sector campaign, joined The World Bank/Gates/Rotary-UNF Investment Partnership for Polio.

The US Agency for International Development (USAID)
USAID continued its support for global polio eradication activities by providing US$ 27.5 million in 2003. USAID is the largest donor to the Global Polio Laboratory Network and supports the work of surveillance officers in Africa and South Asia. It also supported vaccine delivery in key countries, and helped raise awareness to increase community-level participation.

World Bank/Government of India
The World Bank and the Government of India signed a US$ 83 million credit agreement for polio eradication activities in India.

Wyeth Pharmaceuticals
The pharmaceutical company Wyeth entered into the second year of its second US$ 1 million commitment to the African Regional Polio Laboratory Network.
G8 pledges financial support
Following statements of support by G8 leaders at the 2002 Summit in Kananaskis, Canada, G8 leaders again re-affirmed their commitment to a polio-free world at the Summit in Evian, France, pledging to provide the necessary financial resources to eradicate polio from Africa. Canada, France, Japan, the Russian Federation, the United Kingdom and the United States are the G8 countries which have so far followed through on the collective pledge and provided funding.

African Union adopts resolution to eradicate polio
At the African Union Summit in Maputo, Mozambique in July, Member States unanimously adopted a resolution to do the necessary to eradicate polio and ensure that all African children are protected from the crippling disease forever.

Organization of Islamic Conference (OIC) pledges to do the necessary to stop polio
With 5 of 6 remaining endemic countries being Member States of the OIC, the importance of interrupting wild poliovirus transmission was recognized at the 10th Session of the Islamic Summit Conference in Malaysia in October, when Member States unanimously passed a resolution to eradicate polio from its Member States. 52 of the OIC’s 57 Member States are already polio-free.

Prince of Wales backs India’s fight against polio
On 31 October, HRH The Prince of Wales visited a north Indian village to meet children being immunized against polio as part of the targeted national campaign to eradicate the disease by the end of 2004. The Prince’s visit to Kutail Gamri in Haryana state raised awareness ahead of crucial immunization campaigns.
New WHO Director-General steps up global polio eradication effort

Immediately upon taking office, the new WHO Director-General Dr Lee Jong-wook announced plans to rapidly step up the global effort to eradicate polio, calling it a “top priority”. “I want to see this disease gone once and for all,” Dr Lee said, as he announced an immediate upgrade of WHO’s capacity to support the remaining endemic countries in their efforts to immunize every child against polio. Dr Lee’s office took direct oversight of polio eradication activities, and he appointed Dr David Heymann – who led the team which stopped the SARS outbreak – as his Representative for Polio Eradication.

Thousands of Rotary members volunteer time to protect children from polio

Rotary members worldwide continued to volunteer their time and personal resources toward a polio-free world. Thousands of Rotary club members, including those that traveled from the United States, Canada, Europe and Australia to join their counterparts in India and West Africa, helped to immunize more than 200 million children against polio.

Rotary member Dave Groner from Michigan, USA, led a team of almost 200 volunteers from the United States and Canada to various cities in the state of Uttar Pradesh, India. Groner said that connecting with the mothers of children receiving the vaccine was a moving experience. “The look in their eyes said the words ‘Thank you’. This tremendously exhilarating experience has let me know that my life is meaningful.” Jonathan Majiyagbe, President of Rotary International and resident of Kano, Nigeria said: “The dedication shown by Rotary members is not only inspiring, but it is also a fundamental component of our fight against polio.”

Pakistan President takes personal oversight of final push to eradicate polio in Pakistan

Pakistan’s President General Pervez Musharraf announced he would take personal oversight of
Progress 2003

the final push to eradicate polio from Pakistan, at a meeting with Dr Hussein A. Gezairy, Regional Director, WHO Regional Office for the Eastern Mediterranean. President Musharraf appealed to governors, chief ministers, district Nazims and civil servants across the country to ensure that the disease is eradicated from Pakistan and that every child is protected from polio once and for all.

India’s biggest film star Amitabh Bachchan fights polio as UNICEF Goodwill Ambassador

Amitabh Bachchan, India’s biggest film star, raised crucial awareness of polio eradication activities as UNICEF Goodwill Ambassador. Mr Bachchan has a tremendous appeal to people from all walks of life, and his support to polio eradication has been critical to the strong progress achieved throughout the year. “India is closer than ever to eradicating polio,” Mr Bachchan said. “Let’s finish the job and rid our country of this terrible disease forever.”

World-renowned photographer continues to highlight global fight against polio

Sebastião Salgado, the globally-acclaimed photographer, continued to advocate for a polio-free world throughout 2003. Salgado’s photographs were featured in a number of newspapers and magazines, as well as in public exhibits. Salgado also published The End of Polio: A Global Effort to End a Disease, an inspiring and poignant chronicle of the global initiative to eradicate polio.

Strong start into 2004: Ministers of health launch “final push” to eradicate polio within 12 months

At a high-level meeting at WHO in Geneva on 15 January 2004, ministers of health from the remaining endemic countries committed to eradicating polio by the end of 2004, and unveiled a bold new plan to immunize 250 million children multiple times during a series of massive, intensified polio immunization campaigns. The ministers publicly committed to do the necessary to finish the job in 2004, by the signing of the Geneva Declaration for the Eradication of Poliomyelitis.

Carol Bellamy, Executive Director, UNICEF

In 2003, UNICEF Executive Director Carol Bellamy continued to make polio eradication a priority for UNICEF. Polio was the key topic of her visits to endemic countries such as Nigeria and Pakistan, where she participated in NIDs and met with government representatives, religious leaders and traditional rulers to discuss the campaign’s progress. During her keynote address to Heads of State at the ECOWAS Summit in Ghana, she emphasized the urgency of stopping the spread of polio across Africa. She also urged other global leaders to become more actively involved in the fight to end polio, including Secretary-General Kofi Annan; the SG’s Special Adviser on Africa, Professor Ibrahim Gambari; and former Secretary-General Boutros Boutros Ghali.
A significant project in 2003 was the development of the new Global Polio Eradication Initiative Strategic Plan 2004–2008. The rationale for the development of the new Strategic Plan was the tactical shift in 2003 to focus resources on endemic and high-risk areas, the revised timeline for the target of global certification, and the increased knowledge base for development of polio vaccination policy following global eradication.

The new Strategic Plan focuses on the following four objectives:

1. interruption of poliovirus transmission;
2. achievement of certification of global polio eradication;
3. development of products for the cessation of OPV; and

The Global Polio Eradication Initiative Strategic Plan 2004–2008 replaces and updates the Strategic Plan 2001–2005, and therefore also replaces the previous milestones, initially set out for 2001 to 2005 (see following pages for the milestones of the new Strategic Plan, in relation to each of the Plan’s 4 objectives). The greatest risk to achieving the annual milestones is ongoing wild poliovirus transmission in any of the 6 remaining endemic countries, and an increased frequency of polio outbreaks due to vaccine-derived polioviruses.

Implementing the full activities of the Strategic Plan requires continued technical support from a strong polio eradication partnership, and ongoing generous financial support from the international donor community.
### Objective 1: Interrupt Poliovirus Transmission

#### Indicators and Milestones

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of endemic countries</td>
<td>≤5</td>
<td>1*</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Percentage of planned SIAs implemented in highest risk polio-free areas</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Percentage of countries achieving GAVI targets for DTP3/OPV3**</td>
<td>30%</td>
<td>40%</td>
<td>50%</td>
<td>60%</td>
<td>70%</td>
</tr>
<tr>
<td>Percentage of emergency mop-ups begun within 4 weeks of case confirmation</td>
<td>80%</td>
<td>90%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Percentage of non-certified countries with certification-standard surveillance</td>
<td>85%</td>
<td>90%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

* As of end-2003, one country is at particular risk of ongoing transmission into the first half of 2005.

** Based on the rate of progress which would be required to achieve the GAVI target: by 2010 or sooner, all countries will have routine immunization coverage at 90% nationally with at least 80% coverage in every district.

### Objective 2: Achieve Certification of Global Polio Eradication

#### Indicators and Milestones

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of non-certified countries with certification-standard surveillance</td>
<td>85%</td>
<td>90%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Percentage of AFP specimens processed in a WHO-accredited laboratory</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Percentage of countries completing each laboratory bioccontainment phase</td>
<td>50%</td>
<td>75%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>(phase I)</td>
<td></td>
<td></td>
<td>(phase I)</td>
<td></td>
<td>(phase II+)</td>
</tr>
<tr>
<td>Percentage of manufacturers producing wild-type IPV under BSL-3/polio</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>60%</td>
<td>100%</td>
</tr>
<tr>
<td>Percentage of countries submitting &quot;final&quot; certification documentation</td>
<td>60%</td>
<td>70%</td>
<td>85%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>(regional certification)</td>
<td></td>
<td></td>
<td>(regional certification)</td>
<td></td>
<td>(global certification)</td>
</tr>
</tbody>
</table>
**Objective 3:**
**Develop Products for Global OPV Cessation**

<table>
<thead>
<tr>
<th>Indicators</th>
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<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cessation of OPV for routine immunization</td>
<td>Guidelines and consultations on “post-OPV” options</td>
<td>Introduce local strategies to reduce VDPV risk</td>
<td>Consolidate OPV cessation strategy and national IPV decisions</td>
<td>Introduce protocols for cVDPV response in post-OPV era</td>
<td>Finalize introduction of long-term immunization policies</td>
</tr>
<tr>
<td>Detection and immediate notification of circulating polioviruses</td>
<td>Define strategies to rapidly detect circulating viruses</td>
<td>Assess feasibility of incorporation into IHR/GOARN*</td>
<td>Incorporate polio surveillance into IHR and GOARN</td>
<td>Begin environment sampling (if/where appropriate)</td>
<td>Finalize additional tools for surveillance (if applicable)</td>
</tr>
<tr>
<td>Polio vaccine stockpiles and emergency response</td>
<td>Align management with other stockpiles (yellow fever, meningitis, smallpox)</td>
<td>Define mOPV, IPV and trivalent OPV stockpile sizes for post-OPV era</td>
<td>Licensure of at least two mOPV suppliers</td>
<td>Establish contracts for mOPV stockpile</td>
<td>Begin assembly of mOPV stockpile</td>
</tr>
<tr>
<td>Long-term containment of poliovirus stocks</td>
<td>Research and consult on requirements for Global OPV Cessation Phase</td>
<td>Publication of third edition of Global Action Plan (GAP III)</td>
<td>Fully align with security processes for similar pathogens</td>
<td>Licensure of at least one IPV product from Sabin strains</td>
<td>Begin implementation and verification of GAP III</td>
</tr>
</tbody>
</table>

* IHR = International Health Regulations; GOARN = Global Outbreak and Alert Response Network.

**Objective 4:**
**Mainstream the Global Polio Eradication Initiative**

<table>
<thead>
<tr>
<th>Indicators</th>
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<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of joint GAVI/polio priority countries implementing integrated plans</td>
<td>25%</td>
<td>50%</td>
<td>75%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Percentage of countries with integrated or expanded AFP reporting, as appropriate (especially for measles and neonatal tetanus)</td>
<td>50%</td>
<td>75%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Percentage of countries with GAVI-supported ICC and, if appropriate, TAG</td>
<td>25%</td>
<td>50%</td>
<td>75%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Proportion of polio-funded “human resources” formally contributing to multi-disease programmes</td>
<td>25%</td>
<td>50%</td>
<td>75%</td>
<td>90%</td>
<td>100%</td>
</tr>
<tr>
<td>Percentage of countries where polio operations are fully integrated with those for measles</td>
<td>50%</td>
<td>75%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Abbreviations and acronyms

AFP    acute flaccid paralysis
AFR    WHO African Region
AMR    WHO Region of the Americas
CDC    US Centers for Disease Control and Prevention (USA)
DFID   Department for International Development (United Kingdom)
EC     European Commission
EMR    WHO Eastern Mediterranean Region
EUR    WHO European Region
EPI    Expanded Programme on Immunization
GAVI   Global Alliance for Vaccines and Immunization
GCC    Global Commission for the Certification of the Eradication of Poliomyelitis
ICCs   Interagency Coordinating Committees
IPV    inactivated polio vaccine
mOPV   monovalent OPV
NCCs   National Certification Committees
NIDs   National Immunization Days
OIC    Organization of the Islamic Conference
OPV    oral polio vaccine
RCCs   Regional Certification Commissions
SEAR   WHO South-East Asia Region
SIAs   Supplementary Immunization Activities
SNIDs  Subnational Immunization Days
TCG    Technical Consultative Group for the Global Eradication of Poliomyelitis
UN     United Nations
UNF    United Nations Foundation
UNICEF United Nations Children’s Fund
USAID  United States Agency for International Development
VDPVs  vaccine-derived polioviruses
WHO    World Health Organization
WPR    WHO Western Pacific Region
The spearheading partners of the Global Polio Eradication Initiative are:

WHO  ROTARY INTERNATIONAL  CDC  UNICEF

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