



Polio News

Issue 1 – October 1998



Partners in polio eradication...

Page 2

Calendar of Immunization

Page 3

Polio eradication in countries in conflict...

Page 6

A Newsletter for the Global Polio Eradication Initiative
Expanded Programme on Immunization
Global Programme for Vaccines and Immunization
World Health Organization

Polio eradication

So near, yet so far

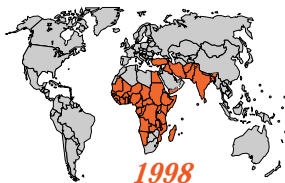
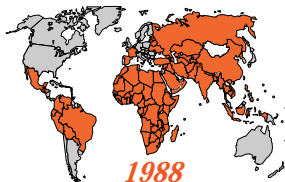
DURING 1997, 450 million children – two thirds of the world's children under five – were immunized against polio in mass immunization campaigns in 80 countries. By September 1998, only four polio-endemic countries – the Democratic Republic of Congo, Liberia, Sierra Leone, and Somalia – had failed to carry out national immunization days (NIDs). However, whereas renewed civil war has caused NIDs to be postponed in DR Congo, the other three will have carried out their first NIDs later this year.

In 1988, when the global polio eradication goal was set, over 35 000 cases of polio were reported to WHO. The number of cases reported in 1997 was 5160, an almost 90% decrease. The 1997 case count has gone up from 4074 cases reported in 1996 because of improved surveillance, especially in Pakistan and India.

Today, the standard of AFP surveillance is high in the WHO Region of the Americas, Western Pacific Region, European Region, and parts of the Eastern Mediterranean Region, and there has been a steady improvement in surveillance standards in the South-East Asia Region. However, major improvements are urgently needed in the African Region, where surveillance is not yet well established. Six African countries – Burundi, Equatorial Guinea, Eritrea, Gabon, Liberia, and Sierra Leone – have not even started AFP surveillance.

Beyond the dramatic fall in the number of polio cases reported since 1988, geographical mapping of the disease reveals that polio is disappearing from vast areas of the world (see maps). In 1988, poliovirus was circulating on every continent. By 1991, the virus had been eradicated throughout the Americas, and the last reported case in the Western Pacific Region occurred in March 1997, over a year ago. Polio is no

Cases of Wild Poliovirus



longer reported from most of the European Region and is disappearing from North and Southern Africa and the Middle East. Transmission of wild poliovirus is now concentrated in two major reservoirs in South Asia and sub-Saharan Africa. Infection rates are highest in the largest and most populous countries – Bangladesh, India, and Pakistan in Asia, and the Democratic Republic of Congo, Ethiopia, and Nigeria in Africa. But each of these countries, with the exception of the Democratic Republic of Congo, has now initiated NIDs and to some extent succeeded in lowering transmission rates.

Today, there is an urgent need to secure additional resources and focus efforts in several key areas:

- Increased funding is needed to ensure the rapid implementation of AFP surveillance throughout the African Region. Unless the quality of surveillance is improved, it will be impossible to measure the impact of recent NIDs and target remaining areas of virus transmission.
- Priority must be given to stopping the circulation of wild poliovirus in the remaining reservoirs in South Asia and sub-Saharan Africa, as well as in countries where conflict continues to hamper efforts to erad-

icate the disease. Unless circulation of the virus can be rapidly halted, the disease could re-seed itself in polio-free countries across the border or be carried further afield by long-distance travelers – thwarting global eradication efforts.

- Substantial additional resources are needed to ensure the accreditation by WHO of all laboratories in the global network and to support regional efforts to certify polio eradication.

Over the past decade, polio eradication efforts have produced a host of achievements: the certification of polio eradication in the Americas, the probable interruption of wild poliovirus transmission in the Western Pacific Region, the localization of poliovirus to a single focus in the European Region (South-Eastern Turkey), and the strengthening of national immunization programmes around the world. But global eradication of the disease can never be achieved until transmission of wild poliovirus has been halted everywhere. And that will depend on the availability of increased funding for eradication activities in the remaining polio-endemic countries as well as sustained political commitment in both polio-free and polio-endemic countries. ♦

Polio eradication partners

Rotary International

In March 1998, the Board of Trustees of Rotary International approved an additional US\$ 10.7 million for the polio eradication initiative.

Government of Canada/CIDA

Through the Canadian International Development Agency (CIDA), the Government of Canada has donated five million Canadian dollars over three years. The funds will be used to support polio eradication and accelerated measles control in the Democratic Republic of Congo, Burkina Faso, Mali, Niger, Somalia, and Djibouti, and to support cross-border coordination of polio eradication in Africa.

Government of Denmark/DANIDA

The Danish Government, through its development agency DANIDA, has given a US\$ eight million grant for the National Polio Surveillance Project in India. Included in this grant was the training and deployment of 60 additional AFP surveillance officers.

UK Government/DFID

The UK Department for International Development (DFID), formerly ODA, continues to make Government support available to the global polio eradication initiative. Through a one million grant to WHO, DFID is supporting the development of AFP surveillance

(laboratories, field surveillance, and logistics) in Africa. DFID supported the polio immunization campaign in southern Sudan with an emergency donation of £125 000 and has committed to another £1.38 million for polio vaccine for NIDs in Pakistan.

Kreditanstalt für Wiederaufbau/KfW

Through KfW, Germany is supporting India with a 49 million Deutschmark grant for the polio eradication program, over a three-year period. Funds will be used mainly for procurement of oral polio vaccine, as well as for improving the cold chain. ♦

Calendar: October to December 1998

National Immunization Days and other supplementary OPV immunization

This calendar reflects information known to WHO/HQ at the time of print. Some NID dates are preliminary and may change; please contact WHO/HQ for up-to-date information.

Month of 1st round	Country	Type of Activity	Date 1st round	Date 2nd round	Target Population
OCTOBER	Benin	NID	Oct-98	Nov-98	1 358 422
	Guinea	NID	23 Oct-98	Nov-98	1 389 371
	Lesotho	SNIDS	12-23 Oct-98	16-27 Nov	308 000
	Iraq	MopUp	5 Oct-98	5 Nov-98	400 000
	Iran	MopUp	5 Oct-98	5 Nov-98	NA
	Syria	MopUP	5 Oct-98	5 Nov-98	600 000
	Libya	NID	Oct-98	Nov-98	1 000 000
	Morocco	NID	Oct-98	Nov-98	3 500 000
	Tunisia	NID	Oct-98	Nov-98	1 030 000
	Yemen	NID	Oct-98	Nov-98	3 600 000
	Armenia	MopUp	Oct-98	Nov-98	22 600
	Russian Federation	MopUp	Oct-98	Nov-98	300 000
	Tajikistan	MopUp	Oct-98	Nov-98	282 000
	Turkey	MopUp	Oct-98	Nov-98	150 000
	Turkmenistan	MopUp	Oct-98	Nov-98	93 000
	Uzbekistan	MopUp	Oct-98	Nov-98	300 000
	Yugoslavia	SNID	Oct-98	Nov-98	125 000
	DPR Korea	NID	20 Oct-98	20 Nov-98	2 088 508
	Somalia	NID	25 Oct-98	29 Nov-98	500 000
	NOVEMBER	Algeria	SNIDS	Nov-98	Dec-98
Ghana		NID	Nov-98	Dec-98	3 717 055
Guinea-Bissau		NID	Nov-98	Dec-98	230 962
Niger		NID	Nov-98	Dec-98	2 181 292
Togo		NID	Nov-98	Dec-98	974 941
Sierra Leone		NID	14 Nov-98	18 Dec-98	800 000
Mali		NID	14-15 Nov-98	12-13 Dec-98	1 938 000
Egypt		NID	Nov-98	Dec-98	8 000 000
Kuwait		MopUp	Nov-98	Dec-98	92 500
Oman		MopUp	Nov-98	Dec-98	252 500
Qatar		MopUp	Nov-98	Dec-98	27 500
Nigeria		NID	4-5 Nov-98	9-10 Dec-98	21 932 343
Eritrea		NID	6 Nov-98	5 Dec-98	482 976
Ethiopia		NID	6-8 Nov-98	4-6 Dec-98	10 292 124
Chad		NID	9-13 Nov-98	13-17 Dec-98	1 296 268
Congo		NID	9-13 Nov-98	13-17 Dec-98	602 477
Equatorial Guinea		NID	9-13 Nov-98	13-17 Dec-98	78 440
Con. Afr. Rep.		NID	9-13 Nov-98	13-17 Dec-98	NA
Saudi Arabia		MopUp	9 Nov-98	Dec-98	1 715 000
Un. Arab Emirates		MopUp	9 Nov-98	Dec-98	102 500
Cameroon		NID	11-13 Nov-98	15-17 Dec-98	2 535 464
Burkina Faso		NID	21-23 Nov-98	21-23 Dec-98	2 105 280
DECEMBER		Bangladesh	NID	20 Dec-98	20 Jan-99
	Bhutan	SNID	7 Dec-98	18 Jan-99	37 107
	India	NID	7 Dec-98	18 Jan-99	124 630 000
	Pakistan	NID	16 Dec-98	27 Jan-99	28 090 000
	Myanmar	NID	12 Dec-98	17 Jan-99	6 592 000
	Nepal	NID	7 Dec-98	18 Jan-99	4 000 000
	Cambodia	SNID	Dec-98	Mar-99	1 500 000
	China	SNID	Dec-98	5 Jan-99	35 000 000
	Rwanda	NID	16-19 Dec	18-21 Jan-99	1 189 000
	Maldives	NID	7 Dec-98	18 Jan-99	40 000
	Thailand	NID	22 Dec-98	13 Jan-99	6 900 000

*NA: Information not available at the time of going to press.



Focus on Surveillance

South-East Asia Region

AFP surveillance in India

Rapid improvements in acute flaccid paralysis (AFP) surveillance in India followed the deployment of 60 additional AFP surveillance officers throughout the country during the second half of 1997 (see Polio Eradication Partners). As a result, AFP reporting is now much more complete. The number of cases reported tripled between 1996 and 1997, from just over 1000 to more than 3000, of which over 2000 were confirmed as polio. In 1997, India accounted for more than half of all confirmed polio cases globally – an indication of vastly improved surveillance rather than a real increase in the number of polio cases.

Eastern Mediterranean Region

AFP surveillance in Pakistan

In Pakistan, the second most important country for polio eradication on the Indian subcontinent, the number of AFP cases reported showed a similar increase to that in India – more than tripling from over 500 in 1996 to 1600 in 1997. About two thirds of AFP cases were confirmed as polio in both years. Although wild poliovirus is still circulating widely in Pakistan, it is expected that transmission will be greatly reduced following successful NIDs in December 1997 and January 1998.

African Region

AFP surveillance in Nigeria

The success of polio eradication efforts in Nigeria will be critical in eliminating the last remaining reservoir of wild poliovirus in West Africa. Although NIDs in 1997 and 1998 were reported to be successful, AFP surveillance has only recently been initiated in Nigeria. Urgent efforts are now under way to improve the quality of surveillance and assess progress towards eradication. AFP surveillance was introduced nationwide in early 1998, following a series of advocacy and training activities in late 1997. Four full-time zonal (sub-national) AFP surveillance officers are now in post and about 70 AFP cases have been reported over the past three months. Stool specimens are being collected and sent to the national laboratory.

European Region

Surveillance reviews

Since February 1998, international reviews of AFP surveillance have been carried out in Albania, Bulgaria, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Turkey, Turkmenistan, Ukraine, and the Federal Republic of Yugoslavia. The review in Tajikistan was postponed until September 1998 due to renewed civil unrest. The reviews showed an improvement in the quality of AFP surveillance in most countries and also helped to highlight problems which need to be resolved to ensure the certification of the eradication of polio.

Western Pacific Region

No polio cases involving wild poliovirus for over a year

The last case of polio paralysis in this region involving wild poliovirus occurred in March 1997 near Pnomh Penh in Cambodia. Despite high quality surveillance, wild poliovirus has not been found in the region since then. ♦



Photo © WHO/DP/WPR

Last known case of polio in the Western Pacific Region (WPR)

NIDs and Mopping-up Immunization

National immunization days (NIDs)

NIDs are mass immunization campaigns designed to stop the circulation of wild poliovirus by immunizing every child under five in as short a time as possible. During NIDs, two doses of oral polio vaccine (OPV) are administered, approximately one month apart. NIDs target every child – regardless of their prior immunization status. This is done because not every child is reached through the routine immunization system. And of those who are vaccinated during routine immunization, not all are fully protected by the three doses of OPV most of them receive.

NIDs can be highly effective in interrupting the transmission of wild polioviruses – mainly through rapidly increasing immunity against poliovirus both in the intestines and in the blood. Boosting intestinal immunity in previously immunized children provides an additional barrier to the circulation of polioviruses.

Because the vaccine is given orally and does not require a needle and syringe, volunteers with minimal training can serve as vaccinators during NIDs – vastly increasing the number of vaccinators available beyond the existing health workers employed in the country. In many countries, NIDs for polio eradication have become the largest public health activity ever held. During a recent NID in India, for example, two million volunteers were deployed to immunize 130 million children on a single day.

Three to five years of NIDs are usually required to eradicate polio. But in some countries – especially those with low levels of routine immunization coverage – it can take longer. NIDs are usually conducted during the cool, dry season when the transmission of wild poliovirus is less intense, the immunological response to OPV is improved, and logistics are simplified. The recent introduction of heat-sensitive moni-

tors on every vial of OPV has greatly simplified vaccine use during NIDs and led to savings in the amount of vaccine used.

Mopping-up immunization

In the final stages of polio eradication, there will be a few remaining reservoirs of infection where poliovirus persists. These are likely to include urban slums, where population turnover is high and health services inadequate, and where overcrowding and poor sanitation provide fertile ground for transmission of disease. Among the most vulnerable groups are minority populations, illegal immigrants, and nomads, who have poor access to health services. Elsewhere, any areas or populations where immunization coverage is

known to be low are also considered to be high-risk.

Surveillance data are used to identify these geographical areas as well as the demographic characteristics of high-risk groups. Mopping-up immunization is then carried out in limited areas.

To ensure that every child is reached, OPV is carried from house to house instead of being administered at an immunization post. As with NIDs, two doses of vaccine are given, one month apart, and all children under five are immunized – regardless of prior immunization status. Wherever possible, mopping-up immunization is conducted during the cool, dry season.

In Colombia and Peru in 1990, extensive mopping-up immunization was conducted in the final stages of polio eradication in the Americas. More recently, in mid-1997 mopping-up immunization was carried out among the boat people along the Mekong River in Cambodia and southern Viet Nam, the last remaining focus of wild poliovirus transmission in WHO's Western Pacific Region. ♦



Photo ©WHO(21846)

Polio eradication in countries in conflict

Southern Sudan

IN war-torn southern Sudan, the first mass immunization campaign for polio eradication was held in two rounds earlier this year – targeting all children under five. Over 400 000 children were immunized during the first round and more than 600 000 were reached in the second round a month later. The national immunization days were orchestrated by Operation Lifeline Sudan (OLS) – a consortium of relief agencies including UNICEF, the World Food Programme, and many non-governmental organizations – in collaboration with national counterparts and with technical assistance from WHO.

The complex logistics, together with the lack of infrastructure within southern Sudan, posed major

challenges for the NID team. Throughout the campaign, all equipment, vaccines, and ice for the vaccine cold chain had to be flown in from the OLS logistics center in Lokichokio in northern Kenya. The new temperature-controlled vaccine vial monitors (VVMs) proved an invaluable asset in the field – ensuring that vaccine could be safely used, even beyond the cold chain. The teams of vaccinators used alternative methods, including water and wet cloths, to keep vaccine cool and relied on the VVMs to indicate when the vaccine could no longer be used. Many of the lessons learned during this campaign will benefit both future polio eradication activities and the delivery of routine immunization services. ♦

AFP and polio reporting, 1997 and 1998, by WHO Region, as of 7 September 1998

	1997			January - September 1998			
	Non-polio AFP rate	Confirmed polio cases	Wild poliovirus	Projected non-polio AFP rate	AFP cases with adequate specimens (%)	Confirmed polio cases	Wild poliovirus
African Region	0.16	1087	31	0.38	33%	13	21
Region of the Americas	1.01	0	0	0.67	78%	0	0
Eastern Mediterranean Region	0.97	1069	261	0.73	54%	131	134
European Region	1.12	7	6	1.02	74%	5	5
South East Asian Region	0.31	2988	435	0.45	51%	923	155
Western Pacific Region	1.35	9	9	1.12	86%	0	0
Global Total	0.72	5160	742	0.86	60%	1072	315

If you would like to continue receiving this publication, please complete this coupon and return to: Polio News, EPI/GPV Document Centre, WHO, CH-1211 Geneva 27, Switzerland.

I would like to receive this publication regularly.

Name:

Institution:

Address:

Please also send this publication to:

Name:

Institution:

Address:



Polio News

This document is not a formal publication of the World Health Organization (WHO). The document may, however, be freely reviewed, abstracted, reprinted or translated, in part or in whole, but not for sale or for use in conjunction with commercial purposes. The designations employed and the presentation of all material in this newsletter do not imply the expression of any opinion whatsoever on the part of the Secretariat of the WHO concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries. Polio News is published quarterly by EPI, WHO Headquarters, Geneva, Switzerland. Published data reflects information available at the time of print.

All comments and feedback on Polio News should be sent to:

EPI/GPV, WHO, Geneva

Tel.: +41 22 791 2111

Fax: +41 22 791 4041

e-mail: polioepi@who.ch

Please also visit our web site:

www.who.int/gpv-polio