

# Eradication of poliomyelitis in countries affected by conflict

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The global initiative to eradicate poliomyelitis is focusing on a small number of countries in Africa (Angola, Democratic Republic of the Congo, Liberia, Sierra Leone, Somalia, Sudan) and Asia (Afghanistan, Tajikistan), where progress has been hindered by armed conflict. In these countries the disintegration of health systems and difficulties of access are major obstacles to the immunization and surveillance strategies necessary for polio eradication. In such circumstances, eradication requires special endeavours, such as the negotiation of ceasefires and truces and the winning of increased direct involvement by communities. Transmission of poliovirus was interrupted during conflicts in Cambodia, Colombia, El Salvador, Peru, the Philippines, and Sri Lanka. Efforts to achieve eradication in areas of conflict have led to extra health benefits: equity in access to immunization, brought about because every child has to be reached; the revitalization and strengthening of routine immunization services through additional externally provided resources; and the establishment of disease surveillance systems. The goal of polio eradication by the end of 2000 remains attainable if supplementary immunization and surveillance can be accelerated in countries affected by conflict.

**Keywords:** child welfare; delivery of health care; epidemiological surveillance; immunization programmes; poliomyelitis, prevention and control; war.

*Voir page 335 le résumé en français. En la página 336 figura un resumen en español.*

## Introduction

The global initiative for polio eradication has been extraordinarily successful in interrupting the transmission of the disease in many areas and countries (1), and work is continuing in all the countries where it is still endemic. The Region of the Americas was certified as polio-free in 1994 (2). Endemic wild poliovirus has not been reported since March 1997 from the Western Pacific Region, which includes China (3). The European Region (4) (including all the countries of the former Soviet Union), large parts of the Eastern Mediterranean Region (5) and increasing areas in northern and southern Africa (6) were polio-free by late 1999.

At the end of 1999 the eradication effort was focused on a limited number of countries on the Asian subcontinent and in sub-Saharan Africa in which polio was endemic. These countries were either major poliovirus reservoirs (Bangladesh, Democratic Republic of the Congo, India (7), Nigeria (8), Pakistan) or were affected by armed conflict (Fig. 1). Current or recent armed conflict in Afghanistan, Angola, the Democratic Republic of the Congo, Liberia, Sierra Leone, Somalia, Sudan, and

Tajikistan has become one of the greatest challenges to polio eradication (9). In addition, smaller conflicts in other parts of the world, as in the border areas between Iraq, Syrian Arab Republic, and Turkey (10), and between Eritrea and Ethiopia, continue making it difficult to reach and immunize populations at highest risk for polio and other vaccine-preventable diseases.

Since the end of the Second World War there have been more than 150 major conflicts, mostly civil wars, in developing countries. Civilians have been increasingly targeted and millions have become refugees and displaced persons, often in their own countries. Children are especially vulnerable in such situations, and thousands are killed or maimed every year by bombs, bullets and landmines (11). Many more children are victims of a war-related upsurge in malnutrition and vaccine-preventable diseases (12, 13). Infectious diseases increase nutritional demands and decrease the absorption of nutrients, thus aggravating underlying nutritional deficiencies, which in turn reduce the effectiveness of the immune system and consequently increase morbidity and mortality associated with these diseases.

In this situation, getting vaccines to children is an urgent priority. The global Polio Eradication Initiative presents an opportunity to mobilize countries and donors to carry out vaccination and provide basic health services for the children in greatest need. The present article provides an update on the current status of polio eradication in five countries where polio is still endemic and where conflict is taking place: Afghanistan, Angola, the Democratic Republic of the Congo, Somalia, and Sudan.

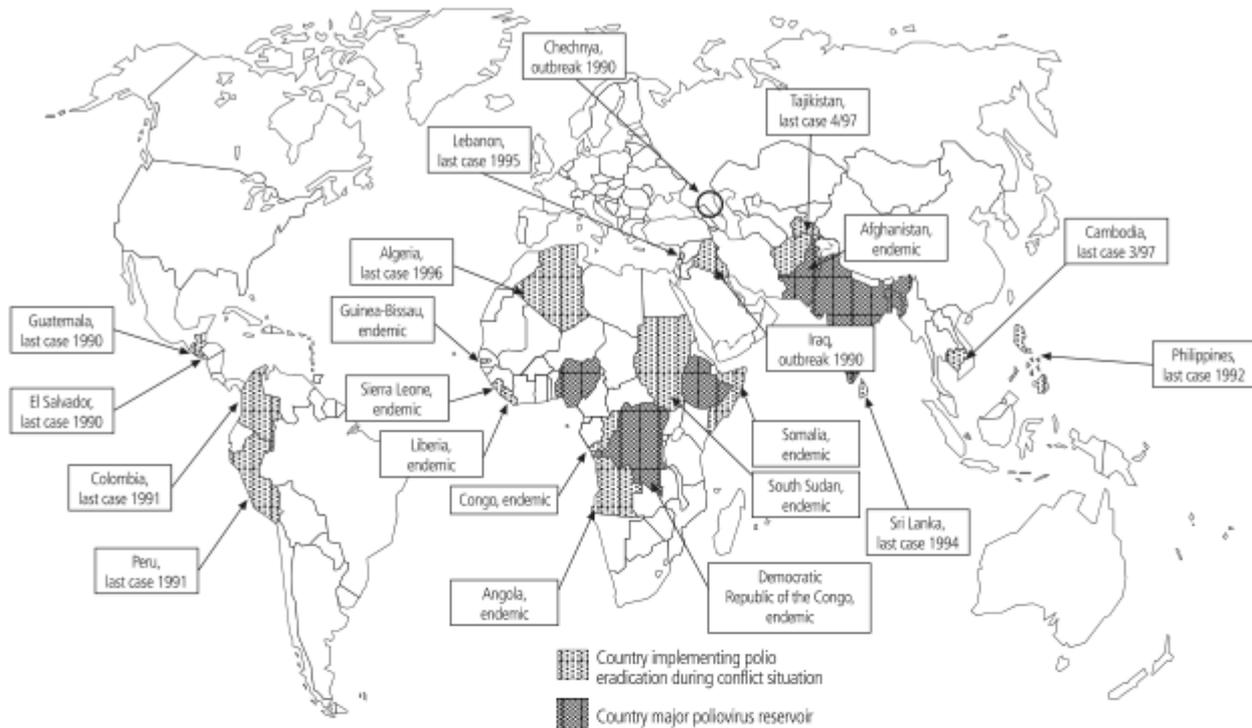
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Fig 1. Polio eradication status in countries affected by conflict, 1990–99, and countries that are major reservoirs of poliovirus



## Background

Since 1985, conflicts have presented special challenges, often delaying the final interruption of poliovirus transmission in particular countries. Following the negotiation of a formal ceasefire, children in both government-held and rebel-controlled parts of El Salvador were reached by polio immunization campaigns between 1985 and 1991 (14). Eradication efforts in Guatemala were conducted in the face of similar difficulties until the country's last case of polio was reported in 1990, and civil disorder complicated the picture in Colombia until the last case was reported there in 1991. In Peru (15) the last case of polio in the Americas occurred in 1991 in a three-year-old boy who was unable to complete his polio immunization after the local health centre had been destroyed as a result of conflict.

Paralytic polio is a major cause of long-term disability in countries affected by conflict. In 1996 a survey in Kandahar Province, one of the areas most heavily mined during the civil war in Afghanistan, revealed that the commonest cause of disability among children under 15 years of age was not landmines but residual paralysis associated with poliomyelitis (16, 17): 0.5% were affected in this way. Surveys conducted in 1998 found that under 15% of infants in Kandahar routinely received three doses of oral poliovirus vaccine (OPV) (18).

In a number of countries, war-related disruption of immunization services has triggered outbreaks of polio and other vaccine-preventable

diseases. In Chechnya in the Russian Federation there were 150 cases of polio in 1995 following a three-year disruption of immunization services (19). In Iraq there was an upsurge in polio cases in the aftermath of the Gulf War (20). A new polio outbreak that occurred in Iraq in 1999 (21) was linked to continuing conflict in the north of the country and to the long-term social and economic consequences of the Gulf War. In Albania the disintegration of health and social support services contributed to a large polio outbreak in 1996, which spread to neighbouring Kosovo and Greece (22). Large outbreaks of polio have been reported from certain countries affected by conflict, particularly in Africa (Angola (23) and Sudan (24)). Elsewhere, the mobility of refugee populations and internally displaced persons continues to hamper efforts to organize and follow up both routine immunization and national immunization days, leaving many children only partially immunized and therefore unprotected.

The delivery of health services, including the implementation of polio eradication activities, remains a problem in all conflict situations. However, the health impacts of conflicts and the opportunities that may arise to deliver health services during conflicts vary with the type of conflict situation. In this connection it is worth distinguishing the patterns of conflicts shown below.

- *Primarily international conflict between two countries.* This is not a principal pattern in any country where polio is endemic today, although several current conflicts are becoming increasingly international-

ized (e.g. in the Democratic Republic of the Congo).

- *Primarily internal conflict (civil war) involving two main factions (i.e. government versus main rebel force or rebel alliance).* This is the most prevalent conflict situation, found in Afghanistan, Angola, the Democratic Republic of the Congo, and Sudan.
- *Primarily internal conflict (civil war) but without a recognized central government and involving multiple factions and groups.* This type of situation, an example of which is the conflict in Somalia, presents the greatest obstacle to the delivery of health services because of relative anarchy.

Although most conflicts have elements of all three scenarios, the opportunities for implementing a health initiative such as polio eradication and of using it to re-establish and strengthen other primary health care services are greatest wherever negotiating and cooperating partners remain. However, even in the absence of any recognized central government or force, effective local partnerships have been formed and used effectively, for instance in Somalia.

The implementation of polio eradication activities has been particularly difficult in conflicts of comparatively recent origin, as in Angola and the Democratic Republic of the Congo. The situation is easier in long-standing, complex emergencies, such as that of Afghanistan, because often a relatively comprehensive system of alternative service provision through UN agencies and nongovernmental organizations has been put in place.

### Country scenarios

Described below is the current status of polio eradication in five countries affected by conflict.

Table 1 compares key polio eradication parameters for 1997, 1998 and 1999 in each country. The quality of acute flaccid paralysis (AFP) surveillance is indicated by the rates of non-polio AFP per 100 000 population under 15 years of age (the target is 1 case per 100 000).

### Afghanistan

Eradication activities in Afghanistan, although delayed by the complex emergency induced by civil war, have progressed further than in other countries affected by conflict (25). With support from UNICEF, WHO and nongovernmental organizations, basic immunization services in Afghanistan have been maintained at fixed sites in the majority of districts during more than 20 years of conflict. However, coverage of neonates does not exceed 30% overall and in many areas is much lower. Supplementary polio immunization was first conducted during annual multi-antigen campaigns from 1994 to 1996, although national coverage was relatively limited. In 1997 the first national immunization days (NIDs) only reached about 85% of children aged under 5 years with two doses of OPV. In 1998, NIDs could not be conducted in northern Afghanistan for political reasons, but coverage in the rest of the country was reportedly high. Over 4 million children were reached during each of four nationwide immunization rounds conducted in 1999 (Table 1). Special ceasefires and days of tranquillity for immunization, negotiated between UN agencies and all the parties in conflict, greatly helped the implementation of mass immunization campaigns.

AFP surveillance for polio eradication was established in Afghanistan in 1997 and its level of performance is already higher than in many countries free of conflict where the disease is endemic (Table 1). AFP surveillance relies on trained health

Table 1. Performance of national immunization days (NIDs) and results of acute flaccid paralysis (AFP) surveillance in five countries affected by conflict, 1997–99

		Afghanistan	Angola	Democratic Republic of the Congo	Somalia	Southern Sudan <sup>a</sup>
Children immunized during NIDs in millions (round 1 only)	1997	3.7	2.2	–	0.33	–
	1998	2.6	2.5	3.0	1.4	0.8
	1999	4.1	2.6	8.2	– <sup>b</sup>	1.2
Non-polio AFP rate in children aged under 15 years	1997	0.1	0.24	– <sup>c</sup>	– <sup>c</sup>	– <sup>c</sup>
	1998	0.66	0.1	0.1	– <sup>c</sup>	0.2
	1999 <sup>d</sup>	0.95	1.2	0.2	0.79	0.75
Confirmed polio cases (by wild virus isolation)	1997	19 (7)	15	82 (3)	1 (0)	–
	1998	59 (27)	7 (3)	10 (0)	12 (0)	6
	1999	141 (62)	1 103 (53)	45 (2)	16 (0)	11 (1)

<sup>a</sup> Estimated population: 5.4 million.

<sup>b</sup> NIDs held up to November 1999.

<sup>c</sup> AFP surveillance system not yet established.

<sup>d</sup> 1999 non-polio AFP rates are projected, based on data from January to November.

workers receiving small monthly incentives who make regular visits to large health facilities and other sites where cases of AFP are likely to occur. Stool specimens are shipped by UN plane to Islamabad, Pakistan, where they are analysed in WHO's regional poliovirus laboratory. Wild poliovirus has been identified in many parts of Afghanistan, and improved surveillance recently detected a polio outbreak in the underimmunized north of the country. Afghanistan is one of the first countries to include data on measles and neonatal tetanus in weekly reports from its 84 AFP surveillance sites.

Polio eradication activities have triggered new attempts to improve the coverage of routine immunization services in Afghanistan. Since 1997, annual supplemental campaigns have been conducted to accelerate overall EPI coverage using diphtheria-pertussis-tetanus vaccine and measles vaccine for children and tetanus toxoid for women of childbearing age. The 1999 EPI acceleration campaigns provided catch-up immunization to 82 000 children under 2 years of age and to 206 000 women of reproductive age in 14 urban areas.

### Southern Sudan

Much of southern Sudan, including large areas of the Bahr al-Ghazal, Upper Nile and Equatoria zones, is not under the control of the central Sudanese government. These areas have experienced conflict, periodic famine and population displacement for more than 15 years. Health services for the estimated population of 5.4 million are provided through the southern sector of Operation Lifeline Sudan, a consortium of UNICEF and several nongovernmental organizations, which delivers health supplies and personnel by air from Kenya.

In 1998, NIDs covering all parts of southern Sudan were organized for the first time (26), in coordination with NIDs in all government-controlled parts of the country. Local plans of action for NIDs were developed with the help of the network of nongovernmental organizations operating under Operation Lifeline Sudan and of trained, locally hired Sudanese health workers. Vaccines and other supplies were flown in from Kenya to more than 80 airstrips throughout southern Sudan. Vitamin A supplements were given to children aged 6–59 months during the second of the NID rounds organized in 1998.

In the training of over 5000 NID volunteers, emphasis was placed on the opportunities offered by vaccine vial monitors (VVMs). The full potential of VVMs to increase the period in which vaccine is handled and used outside refrigeration equipment was first achieved during NIDs in southern Sudan. This "fast cold chain" approach is now employed routinely during OPV campaigns around the world.

### Somalia

Somalia has been in the grip of civil war since 1991. There is no recognized central government and

society is highly fragmented by disputes between clans. The infrastructure has been largely destroyed. Health care for the estimated population of 6 million is delivered primarily through national and international nongovernmental organizations, supported and coordinated by WHO and UNICEF. Cluster surveys conducted in 1996 estimated routine OPV3 coverage among infants in northern Somalia to be under 30%, while coverage in the south of the country is likely to be even lower.

Since 1997, NIDs have been conducted in all parts of Somalia. The implementation of polio eradication strategies has depended on partnerships with local and international nongovernmental organizations and on the hiring of Somali nationals in all parts of the country. Negotiations for ceasefires were not possible at the national level. However, discussions on security were held with local community and religious leaders, when partners in each district developed plans of action for NIDs. NIDs in Somalia were the first nationwide health activity implemented jointly between nongovernmental organizations and Somali communities since the beginning of the civil war. Active AFP surveillance began at over 80 reporting sites in northern Somalia during 1998 and is now being introduced in the south.

### Angola

Except for brief interruptions, civil war has affected the health of children in Angola for many years. Limited routine immunization services continue in many parts of country, and NIDs for polio eradication have been conducted since 1996. However, both routine immunization and NIDs have given unsatisfactory coverage because of the conflict. Large numbers of people continue to migrate within the country and across borders to escape the conflict, thus becoming either internally displaced persons or refugees. Children in these groups are at high risk of remaining unimmunized.

Major movements of internally displaced persons, including thousands of children either not immunized or incompletely immunized with OPV, occurred early in 1999 from areas of conflict to the capital province of Luanda. A large outbreak of wild poliovirus type-3 poliomyelitis occurred in the Luanda area between April and June 1999, mainly affecting unimmunized infants and young children of internally displaced families (27). There were more than 1000 cases of polio and over 80 polio-related deaths. The outbreak focused attention on the need to accelerate polio eradication and AFP surveillance.

### Democratic Republic of the Congo

This country, formerly Zaire, has the third-largest population in Africa. Many years of economic decline have compromised the transportation, communication and health infrastructures. Immunization coverage is inadequate. In 1996, only 36% of infants were officially reported to be fully immunized against polio, and measles vaccine coverage was reported as

41%. A polio outbreak involving more than 700 cases occurred in 1995 (28) and several measles outbreaks with high fatality rates have been reported in recent years. The country is probably experiencing the most intense transmission of polio in the world. It is imperative to interrupt wild poliovirus transmission, not only to protect children in the Democratic Republic of the Congo but also to stop the spread of polioviruses to neighbouring countries.

Before 1999, supplementary immunization efforts did not cover the whole country. In 1997, subnational campaigns were held in 23 urban areas. Children living in areas along the eastern border of the country were immunized in early 1998. NIDs planned in August 1998 were postponed because of increased military activity. Subnational immunization days were held in five provinces under government control in the south and west of the country during December 1998 and January 1999, reaching 3 million children (about 30% of the target population).

In August 1999, the Democratic Republic of the Congo became the last country with endemic polio to conduct nationwide NIDs (29). To accelerate polio eradication, three NID rounds were conducted in August, September and October 1999. The Director-General of WHO and the Executive Director of UNICEF requested the assistance of the Secretary-General of the United Nations in negotiating days of tranquillity during which NIDs were organized. More than 8 million children were given OPV during each of the three rounds conducted in 1999. However, access to some districts was impossible because of renewed fighting. Access and coverage were greater during the second and third rounds.

Much remains to be done to eradicate polio in this country, including the establishment of AFP surveillance, which has only recently been initiated. However, the success of the 1999 NIDs demonstrates that accelerated action to eradicate polio is possible even under very adverse circumstances.

## Discussion

Mass immunization is not possible in zones of active combat. The concept of ceasefires for immunization was first enunciated in 1990 during the World Summit for Children, when 159 nations signed a declaration and plan of action endorsing the need for days of tranquillity and relief corridors (30). The World Declaration on the Survival, Protection and Development of Children states:

“The essential needs of children and families must be protected even in times of war and in violence-ridden areas. We ask that periods of tranquillity and special relief corridors be observed for the benefit of children where war and violence are still taking place.”

The need to protect children affected by armed conflict continues to be a major focus of activity of UNICEF (31, 32) and has been discussed repeatedly at meetings of the UN General Assembly (33, 34). The World Summit for Children emphasized that the provision of basic needs and health care, including immunization, should not be postponed until conflicts are resolved. Unfortunately, children in most countries affected by conflict are not receiving basic routine care and preventive services. In such countries, polio eradication activities may be the first health services offered during conflict. The negotiation of ceasefires or days of tranquillity may contribute to peace-building in war zones.

NIDs provide a rationale for negotiating truces or ceasefires by focusing the attention of warring factions on their children's health. The planning and conducting of NIDs may also open channels of communication for further negotiations between the parties on other issues of common interest. Working together on common goals encourages cooperation and helps to build the trust necessary for permanent solutions. The creation of days of tranquillity was an important step on the road to such solutions in El Salvador (35) and the Philippines (36). The re-establishment of immunization and other primary care services also promotes peace in the long term by rebuilding health infrastructures for entire populations and thus tackling the inequality that is a root cause of war.

Polio eradication activities in areas of conflict are the first, and often the only, contact between health services and the most underserved and vulnerable population groups in the world. These activities can serve as a platform for strengthening other immunization and preventive health services. Critical elements of the polio eradication strategies — political commitment, international partnerships, capacity for surveillance, and integration of preventive services — can be used to strengthen routine services. Vitamin A supplementation has now become part of most NIDs (37, 38). The experience gained in reaching remote and inaccessible populations during polio NIDs is now being used to develop alternative strategies for the delivery of routine immunization services to hard-to-reach populations in a sustainable way.

Experience in countries engaged in polio eradication, particularly those affected by conflict, shows that the immediate and long-term benefits of the effort far outweigh any possible short-term negative effects on health programmes (39). Polio eradication promotes equity in health care for children, the most vulnerable population group, particularly in war-affected countries.

Eradicating polio from countries affected by conflict removes the threat of virus reimportation into polio-free areas. Polioviruses are highly infectious, and infected persons can quickly transport

virus over long distances (40). Wild polioviruses found in the Islamic Republic of Iran, the Netherlands (41), and Albania (22) have been linked epidemiologically to Afghanistan, Pakistan, Turkey, and Iraq. Genetic analyses of polioviruses isolated in southern Africa (42) showed that they probably originated in what was then Zaire (now the Democratic Republic of the Congo). During the initial phase of polio eradication in the Region of the Americas, the cost of the initiative was largely borne by the countries themselves. External funds were required for only 20% of the cost of polio eradication in Latin America, and for only 10% in China. However, in countries affected by war almost the entire cost of polio eradication has to be borne by external donors. Eradication activities in conflict areas are much more expensive than in countries at peace. In Cambodia the cost per immunized child during NIDs and the resources required for AFP surveillance have been higher than in most other countries (43). In the absence of stable government in countries affected by conflict it has been relatively difficult to secure sufficient external funding for polio eradication. Nongovernmental organizations make a substantial contribution towards polio eradication activities in such circumstances.

Completely stopping disease transmission requires that interventions reach all targeted individuals, including the population at highest risk. Equity is thus achieved by delivering health interventions preferentially to those in greatest need rather than to only the children who can be most easily reached. Once global eradication is achieved, equity on an even broader and more enduring basis will result: polioviruses will no longer exist and it will be possible to stop immunization. Progress towards polio eradication in countries with civil unrest, insecurity and low routine coverage with OPV is critical for the success of the global polio eradication initiative. It is urgently necessary to optimize coverage in all NID rounds, as well as to achieve rapid development of AFP surveillance of high quality, eventually meeting the criteria for certification of polio eradication. Recent successes in reaching large proportions of target children during NIDs in Afghanistan, the Democratic Republic of the Congo, Liberia, Somalia, and southern Sudan, and the ability to establish functioning surveillance systems in these countries, demonstrate that global polio eradication is feasible, even in adverse circumstances.

## Conclusion

It is essential to give priority to polio eradication in countries affected by conflict in order to achieve global polio eradication by the target date. Poliovirus can be imported into polio-free areas from infected areas. Countries affected by war which are lagging behind in polio eradication therefore represent an increasing threat to those from which the disease has been eradicated.

Additional NID rounds, requiring considerable extra resources, are being conducted in most countries affected by conflict because routine immunization services are absent or insufficient. It is essential to intensify efforts in the remaining areas of endemicity as the goal of global eradication draws nearer. In this situation the cost per case prevented rises steeply, making other health interventions appear to be more cost-effective. Because polio is highly infectious and spreads insidiously, immunization must continue worldwide until eradication is achieved in every country.

Significant contributions towards achieving polio eradication in countries affected by conflict have been made by Rotary International, UNICEF, WHO, the Centers for Disease Control and Prevention and USAID in the USA, the United Kingdom's Department for International Development (DFID), the Danish International Development Agency, Australia's AusAID, Japan through JICA, and Norway through NORAID. It is vital to assure the continuing availability of sufficient funds for eradication activities in countries affected by conflict.

The eradication of polio in conflict situations is possible, as has been demonstrated in certain countries of Asia and Central America. However, the accelerated campaigns currently under way can lead to fulfilment of the goal of global eradication in 2000 only if all the partners, including governments and local leaders in countries where the disease is endemic, as well as international donors, give unconditional and unprecedented support. ■

## Acknowledgement

We dedicate this paper to the health workers who perished while trying to deliver vaccine to children in conflict situations in Ethiopia, Liberia, Peru, the Democratic Republic of the Congo, Sierra Leone, Somalia, and southern Sudan.

## Résumé

### Eradication de la poliomyélite dans les pays touchés par des conflits

L'initiative mondiale pour l'éradication de la poliomyélite est axée sur un petit nombre de pays qui représentent des réservoirs majeurs de poliovirus (Bangladesh, Inde, Nigéria, Pakistan et République démocratique du Congo) et/ou qui sont touchés par des conflits armés en Afrique (Angola, Libéria, République démocratique du Congo, Sierra Leone, Somalie et Soudan) et en Asie (Afghanistan

et Tadjikistan). Dans ce dernier groupe, les activités d'éradication ont été freinées par les conflits qui ont provoqué l'effondrement des systèmes de santé. De plus, des difficultés d'accès et des problèmes de sécurité entravent sérieusement la mise en œuvre des stratégies de vaccination et de surveillance qui s'imposent pour l'éradication de la poliomyélite. Dans les pays touchés

par un conflit, la poliomyélite paralytique reste une cause majeure d'incapacités à long terme. Une enquête conduite en 1996 dans la province de Kandahar, en Afghanistan, a montré que les causes les plus fréquentes d'incapacités chez les enfants n'étaient pas les mines terrestres mais des cas de paralysie résiduelle attribuables à la poliomyélite. Des poussées importantes de poliomyélite se sont produites dans des pays dont les services de vaccination avaient été détruits par la guerre, comme en Angola, en Tchétchénie, dans la Fédération de Russie, en Irak et au Soudan.

Il est impossible de procéder à des vaccinations de masse dans les zones de combats. L'organisation de journées nationales de vaccination offre l'occasion d'appeler l'attention des belligérants sur la santé de leurs enfants et de négocier des trêves ou des cessez-le-feu. La préparation et l'exécution de ces journées ouvrent aussi aux parties en présence des possibilités de négociations sur d'autres questions d'intérêt commun. Ainsi, dans les pays en proie à des conflits, l'éradication de la poliomyélite exige le recours à d'autres stratégies, comme la négociation de trêves ou de cessez-le-feu et un engagement direct accru de la communauté, ainsi que des ressources humaines et financières extérieures beaucoup plus considérables que dans les pays d'endémicité qui ne sont pas affectés par des conflits. Le but à atteindre étant l'éradication mondiale de la poliomyélite d'ici la fin de l'an 2000, des efforts particuliers sont faits dans tous les pays touchés par des conflits pour accélérer les progrès de l'éradication par la mise en place de séries supplémentaires de journées

nationales de vaccination et de systèmes de surveillance de la paralysie flasque aiguë.

La transmission du poliovirus a pu être interrompue en période de conflit au Cambodge, en Colombie, en El Salvador, au Liban, aux Philippines, à Sri Lanka et ailleurs, ce qui prouve que l'initiative en vue de l'éradication de la poliomyélite peut aboutir même dans des conditions extrêmement difficiles. Par ailleurs, dans les zones en proie à des conflits, les activités d'éradication ont apporté bien plus, dans le domaine de la santé, que la seule élimination d'une maladie : égalité d'accès aux vaccinations puisque chaque enfant doit pouvoir être atteint ; revitalisation et renforcement des services de vaccination grâce à l'apport de ressources extérieures ; introduction de la supplémentation en vitamine A ; enfin, mise en place de systèmes de surveillance des maladies. Les poliovirus sont hautement infectieux et les personnes contaminées peuvent les transporter rapidement sur de longues distances. L'éradication de la poliomyélite dans les pays en proie à des conflits ôte la menace d'une réimportation du virus dans des régions exemptes de poliomyélite.

Il est essentiel d'accorder une attention toute particulière à la lutte contre la poliomyélite dans les pays touchés par des conflits pour que soit réalisée dans les délais l'éradication mondiale de la maladie. Les campagnes accélérées en cours ne permettront d'atteindre l'objectif de l'éradication mondiale de la poliomyélite en l'an 2000 que si tous les partenaires, y compris les gouvernements et les responsables locaux des pays où la maladie est endémique, leur apportent un soutien incondicional et sans précédent.

## Resumen

### Erradicación de la poliomiélitis en los países afectados por conflictos

La iniciativa mundial de erradicación de la poliomiélitis se está centrando en un pequeño número de países que son importantes reservorios mundiales de poliovirus – Bangladesh, la República Democrática del Congo, la India, Nigeria y el Pakistán – y/o están afectados por conflictos armados en África – Angola, la República Democrática del Congo, Liberia, Sierra Leona, Somalia y el Sudán – y en Asia – el Afganistán y Tayikistán. En este último grupo de países, las actividades de erradicación han ido a la zaga porque los conflictos armados han desarticulado los sistemas de salud. Además, las dificultades de acceso y los problemas de seguridad representan obstáculos importantes para las estrategias de inmunización y vigilancia necesarias para erradicar la poliomiélitis. La poliomiélitis parálisis sigue siendo una de las principales causas de discapacidad de larga duración en los países afectados por conflictos. En 1996, una encuesta realizada en la provincia de Kandahar, en el Afganistán, mostró que la causa más frecuente de discapacidad entre los niños no eran las minas terrestres sino la parálisis residual atribuible a la poliomiélitis. Se han producido grandes brotes de la enfermedad en países cuyos servicios de inmunización se han visto perturbados por la guerra, como Angola, Chechenia en la Federación de Rusia, el Iraq y el Sudán.

No es posible llevar a cabo una inmunización masiva en las zonas de combate activo. Los días nacionales de inmunización brindan una buena ocasión para negociar treguas o un alto el fuego, pues centran la atención de los beligerantes en la salud de sus niños. Además, la planificación y la organización de los días nacionales de inmunización abre cauces de comunicación para nuevas negociaciones entre las partes sobre otros asuntos de interés común. La erradicación de la poliomiélitis en los países afectados por conflictos exige más estrategias, como la negociación de un alto el fuego y de treguas y más participación directa de la comunidad. Las tareas de erradicación en las zonas afectadas por conflictos requieren asimismo recursos humanos y financieros externos muy superiores a los que se necesitan en los países endémicos donde no hay conflictos. Con el fin de alcanzar la meta mundial de la erradicación de la poliomiélitis para finales de 2000, se están realizando grandes esfuerzos en todos los países afectados por conflictos para acelerar el ritmo de avance mediante la organización de rondas suplementarias de días nacionales de inmunización y la rápida implantación de sistemas de vigilancia de la parálisis flácida aguda.

En Camboya, Colombia, El Salvador, Filipinas, el Líbano, Sri Lanka y otros lugares, se ha interrumpido la

transmisión del poliovirus durante los conflictos, lo que demuestra que la iniciativa de erradicación puede tener éxito incluso en circunstancias muy difíciles. Las actividades de erradicación en las zonas de conflicto han aportado otros beneficios sanitarios, además de la eliminación de una enfermedad: la equidad en el acceso a la inmunización, ya que todos los niños deben ser vacunados; la revitalización y el reforzamiento de los servicios habituales de inmunización gracias a los recursos adicionales procedentes del exterior; la inclusión de suplementos de vitamina A; y el establecimiento de sistemas de vigilancia de las enfermedades. El poliovirus es altamente infeccioso y las personas contagiadas pueden transportarlo rápidamente a gran

distancia. La erradicación de la poliomiélitis en los países afectados por conflictos elimina la amenaza de que el virus sea reimportado en zonas exentas de la enfermedad.

Es vital prestar una atención especial a la erradicación de la poliomiélitis en los países afectados por conflictos para conseguir la erradicación mundial en el plazo previsto. La aceleración de las campañas emprendidas sólo puede conducir al logro de la erradicación mundial en 2000 si todos los asociados, en particular los gobiernos y los dirigentes locales en los países donde la enfermedad es endémica, así como los donantes internacionales, prestan un apoyo incondicional y sin precedentes.

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