

## Polio eradication: 7 countries and US\$ 210 million to go

The World Health Organization launched a final push on 29 July to eradicate polio by 2005 with a call to donors for an additional US\$ 210 million to finally stamp out the incurable laming disease that mainly affects under-five-year-olds. WHO's Director-General Jong-Wook Lee has appointed David Heymann as his representative on polio eradication following the infectious diseases expert's success heading a WHO team that helped stop the spread of SARS earlier this year.

When WHO first launched its eradication drive in 1988, polio was present in over 125 countries. Since then, the number has been reduced to seven. The original target date of 2000 to eradicate polio was missed but WHO officials are confident that with sufficient funding and political leadership eradication can be achieved in the next 18 months. Between August and December of this year as many as 175 million children will be vaccinated in India, Nigeria and Pakistan which account for 99% of new cases, as well as in Afghanistan, Egypt, Niger and Somalia.

"Donors have already invested \$3 billion in the programme and we're now in the end game for stopping transmission globally," said Dr Heymann. "But money is not infinite, so we have to make sure it works before other priorities take over".

In addition to these seven countries, neighbouring ones at highest risk of imported cases, as well as others with low routine vaccination coverage, will carry out mass immunization campaigns.

In January, a child was paralysed by polio in Lebanon for the first time in ten years. Genetic sequencing showed that the virus had been imported from India. Polio campaigns to prevent or limit the spread of imported polioviruses since 2000 have cost well over US\$ 100 million.

Dr Heymann said that in the past 12 months, polioviruses had also spread from Nigeria to nearby coun-

tries, including Ghana and Burkina Faso, which had recently become polio-free.

"Efforts to completely stamp out the disease have been hampered by insufficient funding from the international community and insufficient government commitment at the sub-national level," he said. "Difficulty in reaching and engaging minority populations have also hindered efforts". For example, Moslem clerics in Nigeria's Kano State, where polio is most prevalent in that country, had been receiving false information that polio vaccines had birth-control and other untoward effects. This severely limited their ability to advocate the programme effectively in communities. By contrast, most conflict-affected countries, such as Angola which once had thousands of cases a year, are now polio-free.

The main vaccine used in the eradication programme, known as oral polio vaccine, is inexpensive at less than 10 US cents per dose, but substantial funds are still needed to finance distribution, disease surveillance and other activities such as vaccinator training and social mobilization. Following commitments by G8 leaders at their two most recent summits, in Kananaskis and Evian, to fill the polio funding gap, Canada, Japan, Russia

and the United Kingdom have pledged new funding.

Scientists say polio, like smallpox which was declared eradicated in 1980, is one of the few diseases that can be stamped out because the poliovirus only affects humans, has no animal reservoir and cannot survive long in the environment. Also, oral polio vaccine is effective, inexpensive and gives long-lasting immunity.

In theory, the poliovirus will become extinct if deprived of its human host through immunization. If all goes to plan, populations in vulnerable countries will be immunized with oral polio vaccine and receive additional doses during National Immunization Days and mop-up campaigns by the end of 2004.

At the same time, the Global Polio Eradication Initiative is minimizing the risk of re-occurrence by working with countries to identify and inventory all stocks of wild poliovirus so that they can, within one year of interruption of virus transmission, be placed under P3 biosecurity conditions, the second-to-top security level. Smallpox is now stored at P4 maximum security; decisions on the final level of biosecurity needed for polio viruses will be taken as decisions on long-term routine polio immunization are finalized.



Polio National Immunization Day near Torkhum, North West Frontier Province, Pakistan.

UNICEF/DHQ089/Shehzad Noorani

Dr Heymann said bio-terrorists were unlikely to resort to polio stocks for myriad reasons, including the fact that the disease only causes paralysis in 1 of 200 people infected. As the world prepares for the post-certification era (the period after global certification, which could occur as early as 2008) there will need to be an international consensus on whether to continue routine immunization with the oral poliovirus vaccine. Such decisions will be taken only after carefully balancing the risks associated with the options available. These must also bear in mind the small potential risk of an inadvertent release of wild poliovirus from labs that are storing the virus or from vaccine manufacturers who must produce their vaccines from live poliovirus strains. Ultimately, individual countries will decide their future immunization policy, based on such considerations. ■

Fiona Fleck, *Geneva*

## India remobilizes against polio

In the last five days of July, 1.79 million children received polio drops in the neighbouring states of Assam and Meghalaya in eastern India. A second five-day immunization campaign would start on 31 August, WHO officials said.

The drive was occasioned by the detection of a wild poliovirus in Goalpara in western Assam in June this year, in the course of routine surveillance.

Arun Thapa, WHO's adviser for polio in the South-East Asia Region, says that the virus probably reached Assam — where there had been no cases for two years — from neighbouring Bihar, where there were 121 cases last year.

One case of polio may not sound alarming. But health officials warn that even one case, if undetected, can infect hundreds of children, each one of whom can infect hundreds more.

"We are taking this threat of polio very seriously," says the Chief Minister of Assam, Bhumidhar Barman, "We are doing all that we can to ensure that the virus does not spread." This includes awareness campaigns on the need for immunization, conducted with the help of schoolchildren, teachers, village leaders and government health workers.

According to Sunil Bahl, WHO's Immunization Coordinator, the July-August immunization programme — in 7 districts in Assam and 5 in Meghalaya — has been successful so far in most areas, though still falling 7–9% short of the 100% coverage needed. "There were a few areas where the health infrastructure was found wanting," he says. "In some places, for

instance, there were not enough health care workers. Elsewhere, the workers were not proactive enough, which means that they couldn't mobilize every child in the neighbourhood for immunization."

India witnessed a serious outbreak last year, when over 80% of all polio cases in the world occurred in this country.

"Huge progress was made in 2000, when there were only 272 cases of polio in India," says Louise Baker, External Relations Officer for Immunization and Vaccine Development at WHO's Regional Office in New Delhi. "But just when the Indian Government thought that it had the virus under control, it made a comeback."

The government has now gone back to an earlier programme of setting aside two national days for immunization, as well as four subnational ones, which target the key northern states that remain heavily infected.

WHO officials report that there has been a drastic fall in the number of polio cases in India this year as a result of the epidemic and the increase in polio campaigns: as of 18 August it is down to 102 from 1600 in 2002. ■

Bishakha De Sarkar, *New Delhi*

## Obituary

### Nadia Younes 1946–2003

Nadia Younes, who died in the bomb attack on the United Nations headquarters in Baghdad on 19 August, was serving as Chief of Staff for Sergio Vieira de Mello, the United Nations Special Representative in Baghdad. She was seconded from WHO to this position in May 2003.

Prior to her appointment in Iraq, Nadia was WHO's Executive Director in charge of External Relations and Governing Bodies from August 2002. Her responsibilities included relations with WHO's Member States, and WHO's governing bodies — the Executive Board and the World Health Assembly.

Nadia worked as United Nations Chief of Protocol from 1998. From July 1999 to

January 2001, she worked in the United Nations field mission in Kosovo, where she was in charge of the information and communication office in the Cabinet of the Special Representative of the Secretary-General, Bernard Kouchner.

Nadia joined the United Nations secretariat in 1970, and worked with the Department of Information in various capacities. Later assignments included Information Officer for the World Conference of the Decade of Women, Deputy Spokeswoman for the Secretary-General (1988–93), Director of the United Nations Information Centre in Rome, and Director of the Media Division in the Department of Public Information in New York.

Born in Cairo, Egypt, in 1946, Nadia held a Master of Arts degree in political science and international relations from New York University, and a Bachelor of Arts degree in English literature from Cairo University.

"She was an amazing person — full of life, energetic and extremely resourceful. Nadia was with us at WHO for less than a year, but she immediately became known as one of the most charismatic people in the organization", said Dr Jong-Wook Lee, Director-General of WHO.

Nadia is survived by her brother and her sister. ■

