

Winning the War on Polio in Pakistan

Asia Report N°273 | 23 October 2015

Table of Contents

Executive Summary.....	i
Recommendations.....	iii
I. Introduction	1
II. The War Against Polio.....	3
A. On the Front Lines.....	3
B. Militant Motives.....	5
C. Pakistan’s Polio Sanctuary.....	6
III. Stumbling Blocks.....	10
A. The Government Lead	10
B. The Weakest Links.....	11
C. Putting Polio Workers First	14
1. Challenges of women workers.....	14
2. Trying to convince the Islamists	16
3. Payment problems.....	17
IV. Making Pakistan Polio Free.....	19
A. Civil Society, Security and the State	19
B. Prioritising Public Health	20
V. Conclusion	23
APPENDICES	
A. Map of Pakistan	24
B. Map of Pakistan’s Polio-virus Reservoir Districts	25
C. Map of Polio’s International Spread from Pakistan.....	26
D. Glossary of Terms	27

Executive Summary

As the world marks Polio Day on 24 October, Pakistan remains the greatest impediment to a polio-free world. It has more cases than any other country, reflecting dual policy failures: to prioritise citizens' health and to curb violent extremism. Despite signs of impressive improvement, with cases declining fast, there is a real risk of another spike unless steps are taken to fully reverse years of neglect to public health services. The prevalence of the disease and conflict is closely interlinked. With militant opposition to immunisation and attacks on polio workers undermining eradication efforts in the volatile FATA (Federally Administered Tribal Areas) agencies, a coercive, military-led strategy should be replaced by a civilian-led approach that encourages community buy-in, respects rights and meets the needs of a marginalised population. Protecting and supporting polio workers and more closely involving communities in eradication efforts should be top priorities. The government should also remove misgivings about the vaccine, created by the anti-immunisation propaganda of Islamist parties and militant sympathisers.

With violent extremists attacking polio workers, particularly targeting women, in FATA, parts of Khyber Pakhtunkhwa (KPK) and Balochistan provinces and Karachi, hundreds of children contracted the disease in 2014. Despite the relative decline in extremist violence, attacks continue, underscoring the importance of protecting the polio workers. Many parents have refused to immunise their children, either fearing militant reprisal or misled by Islamist parties and some mullahs into believing that the vaccine is an un-Islamic Western plot to harm the children.

Having already spanned the porous border with Afghanistan, the only other country where it is endemic, polio could again become a global health risk if its spread is not halted in Pakistan.

While the decline in cases, from 328 in 2014 to 38 as of October 2015, can be partly attributed to increased vaccination coverage of populations fleeing military operations in FATA's North Waziristan, South Waziristan and Khyber agencies, these gains could prove fragile. Militant networks have yet to be dismantled, and, as demonstrated by the September attack on an airbase in Peshawar, their capacity to regroup, reorganise and resume strikes against the state and citizens remains intact.

The government has taken some steps after the 2014 wake-up call, when polio cases increased dramatically, stoking international concern about the disease's possible spread beyond Pakistan. By the end of the year, the government and its partners in the Global Polio Eradication Initiative (GPEI) – a public/private initiative launched in 1988 by national governments and spearheaded by the World Health Organisation (WHO) to eradicate polio – had initiated measures to overhaul the eradication program, including through more comprehensive security assessments, better planning and improved coordination and communication between all actors.

Innovative methods, such as reducing reliance on police protection, instead using communities to protect vaccinators and employing vaccinators from within those communities, are being tried on a limited scale but with considerable success in some cities, including Pashtun-majority areas in Karachi that host scores of FATA internally displaced persons (IDPs) and some FATA agencies. However, efforts to convince many mullahs and Islamist leaders to stop misleading communities by de-

picting the vaccine as un-Islamic and a health risk have had mixed results at best; many parents still refuse to allow their children to be vaccinated

It is essential to maintain momentum. The key test will come in May 2016, when, at the end of the current low-transmission, relatively cool season, the temperature begins to rise and with it the risk of the virus spreading. It will be possible then to judge whether vaccination teams are reaching every child under five. If Pakistan is to make a durable transition out of its current polio-endemic status, it should complement eradication successes with wider routine immunisation coverage, through the Expanded Program on Immunisation (EPI), and significantly improved basic health care and sanitation. In the conflict zones, such as FATA, this requires better governance and security. Success countrywide will also depend on the government's willingness to partner with civil society and local and international NGOs to protect children from contracting a disease that has been eradicated in most of the world.

Recommendations

To interrupt the transmission of the polio virus:

To the federal and provincial governments:

1. Commit to implementing the National Emergency Action Plan for Polio Eradication (NEAP) 2015-2016 by:
 - a) demonstrating continued commitment to the federal and provincial Emergency Operation Centres (EOC) structure that brings together program partners;
 - b) enhancing the coverage and quality of polio immunisation campaigns by ensuring oversight and accountability of district administrative heads and polio workers;
 - c) improving vaccine cold-chain and supply-management systems by training staff and replacing outdated and broken equipment down to the Union Council (UC) level;
 - d) strengthening and expanding surveillance mechanisms to monitor the presence and circulation of the virus and the onset of the disease; and
 - e) designing more comprehensive security assessments and plans.
2. Prioritise the safety and other requirements of polio workers by ensuring that:
 - a) threats and attacks on or harassment of vaccinators and health care workers are investigated and action taken against perpetrators;
 - b) salaries are provided in a timely fashion, including through the Direct Disbursement Mechanism that centralises all funding streams or any other payment mechanism; and
 - c) action is taken against any official who fails to provide timely information about workers involved in a campaign, thus delaying and at times preventing workers from being paid.
3. Foster greater community acceptance of polio eradication efforts by:
 - a) giving polio workers adequate tools, including educational and public information material and advocacy training, to engage mistrustful families and remove misconceptions;
 - b) minimising dependence on direct and visible police protection, and expanding the program of hiring polio workers from communities and ensuring that they are protected by those communities;
 - c) refraining from using coercive methods, such as arresting parents or guardians, introducing legislation that encourages such methods, or, in the Federally Administered Tribal Areas (FATA), invoking the Frontier Crimes Regulation's (FCR) collective responsibility clause; and
 - d) employing local NGOs with a track-record of working with vulnerable communities in polio-eradication programs.

4. Supplement executive accountability of bureaucrats and polio workers with parliamentary oversight by setting up permanent subcommittees on polio under the National Assembly and Senate standing committees on national health services, regulations and coordination, and similar committees in the provincial parliaments.
5. Counter efforts to limit international NGOs' (INGO) and local NGOs' operational space and take the lead, with civil society input, in forging any future law for regulating such organisations.

To durably transition out of polio-endemic status:

To the federal and provincial governments:

6. Raise routine immunisation coverage and overall population immunity levels by strengthening the Expanded Program on Immunisation (EPI).
7. Provide accessible, non-discriminatory, quality immunisation and health care services.
8. Enhance communication and cooperation with Afghanistan on public health surveillance and response to outbreaks of polio.

To the international community, particularly donor countries:

9. Build federal and provincial governments' capacity to provide citizens with accessible, non-discriminatory, high quality immunisation and health care services, including by persuading them to:
 - a) reject coercive measures in immunisation campaigns countrywide, and more specifically in the FATA context through the FCR; and ensure instead that there is community participation in donor-funded campaigns; and
 - b) ensure that NGOs, local and international, are not restricted in their ability to access vulnerable populations.

Islamabad/Brussels, 23 October 2015

Winning the War on Polio in Pakistan

I. Introduction

The spread of the polio virus in Pakistan reflects dual failures of policy: to prioritise citizens' health and to curb violent extremism.¹ When the World Health Assembly (WHA) launched the Global Polio Eradication Initiative (GPEI) in 1988, the virus was paralysing 1,000 children every day across 125 countries.² Today, as the world marks polio day, Pakistan and Afghanistan are the only countries where polio remains endemic. Two decades after it launched a national eradication program in 1994, supplementing routine vaccination with the "live" oral polio vaccine (OPV) to immunise children under five, Pakistan has the vast majority of cases worldwide.³

With no cases reported in previously polio-endemic countries such as India in 2012, GPEI partners' goal of eradicating polio by 2014 had seemed attainable. That optimism faded when Pakistani extremists started attacking vaccinators and imposed a "ban" on polio vaccination in parts of the Federally Administered Tribal Areas (FATA), bordering on Afghanistan. Fear that the virus would spread from Pakistan prompted the International Health Regulations' Emergency Committee in April 2014 to declare that "conditions for a Public Health Emergency of International Concern (PHEIC) [had] been met".⁴

This report analyses how conflict dynamics have impeded Pakistan's efforts to eradicate polio, particularly the failure to curb violent extremism and protect health workers and vulnerable communities. It underscores the importance of resolving such conflict, which, if left unaddressed, could potentially contribute to the spread of the disease to other countries. It also identifies policy gaps and recommends measures

¹ For Crisis Group analysis of violent extremism and the challenges of humanitarian assistance in Pakistan, see Asia Reports N°s 271, *Revisiting Counter-terrorism Strategies in Pakistan: Opportunities and Pitfalls*, 22 July 2015; 265, *Women, Violence and Conflict*, 8 April 2015; 255, *Policing Urban Violence in Pakistan*, 23 January 2014; 242, *Pakistan: Countering Militancy in PATA*, 15 January 2013; 237, *Pakistan: No End to Humanitarian Crises*, 9 October 2012; 227, *Aid and Conflict in Pakistan*, 27 June 2012; 178, *Pakistan: Countering Militancy in FATA*, 21 October 2009; and 125, *Pakistan's Tribal Areas: Appeasing the Militants*, 11 December 2006.

² This was the second global initiative to eradicate an infectious disease. The first eradicated smallpox in 1980. GPEI is implemented by national governments, UNICEF, the World Health Organisation (WHO), Rotary International and the U.S. Centers for Disease Control and Prevention and supported by partners such as the Bill and Melinda Gates Foundation. "History of polio", Global Polio Eradication Initiative (GPEI), at www.polioeradication.org; "Polio strategy overview", Bill and Melinda Gates Foundation. WHA, with 194 member states, is the WHO's decision-making body.

³ With no wild polio-virus case and no positive environmental sample in over a year, WHO removed Nigeria in September 2015 from the list of polio-endemic countries. "WHO removes Nigeria from polio-endemic list", media release, WHO, 25 September 2015. Pakistan and Afghanistan are the only countries where wild polio-virus cases have been reported in 2015, 38 in Pakistan, thirteen in Afghanistan. "Polio this week as of 14 October 2015", GPEI website.

⁴ The International Health Regulations (2005) is an agreement between 196 countries to strengthen global health security. "WHO statement on the meeting of the International Health Regulations Emergency Committee concerning the international spread of wild poliovirus", WHO, 5 May 2014. "Polio cases in provinces", End Polio Pakistan (government website, at www.endpolio.com.pk).

to bolster Islamabad's eradication efforts with international assistance. It is based on interviews with government officials, GPEI partners, health workers, including vaccinators and doctors, and civil society activists in Khyber Pakhtunkhwa (KPK), Islamabad, Karachi, Geneva and Paris.

II. The War Against Polio

A. *On the Front Lines*

In early 2015, Gregory L. Armstrong, the polio-eradication branch head of the U.S. Centers for Disease Control and Prevention (CDC), said, “we are closer to polio eradication than ever in human history [but] polio eradication now faces what may be its biggest hurdle yet, violence specifically directed against polio vaccinators”.⁵ This is particularly true of Pakistan. The number of polio victims has significantly declined, from 328 in 2014 to 38 thus far in 2015.⁶ To eliminate the disease, however, the government will need not just to prioritise immunisation and public health more generally, but also to protect and support vaccinators and local administrations in the twelve remaining “reservoir” areas where the virus is circulating: in FATA, some districts of Khyber Pakhtunkhwa (KPK) and Balochistan and some towns in Karachi. In 30 other districts, there is high risk of spillover from the reservoir areas.⁷

Attacks by extremist groups played a major role in undermining polio immunisation campaigns, as cases sharply increased from 74 in 2012 to 141 in 2013, and 328 in 2014.⁸ Central to militant hostility were accusations that a government-led health campaign had been used to identify and subsequently kill Osama bin Laden. While insecurity and the spread of extremist violence in FATA and KPK far predated the 2 May 2011 U.S. raid in Abbottabad that led to bin Laden’s killing, that episode was used by militants to justify attacks on polio vaccinators.⁹ Within days, the government arrested Dr Shakil Afridi for assisting the CIA in locating the al-Qaeda chief. He reportedly helped organise a door-to-door vaccination campaign against hepatitis B as a cover for obtaining DNA samples of children at bin Laden’s residence. For this, he used the district’s health department staff, which, as part of the government-led polio eradication program, had previously entered the compound to administer polio drops to the children.¹⁰

The doctor’s alleged links to UK’s Save the Children were used by government officials to curb the activities of international NGOs (INGOs) and their local partners

⁵ Gregory L. Armstrong, “Global Eradication: reaching every child conference, Atlanta, 17 February 2015, www.cdc.gov/cdcgrandrounds/archives/2015/february2015.htm?mobile=nocontent.

⁶ “Year’s first polio cases detected in Punjab, Karachi”, *Dawn*, 9 October 2015. The lowest figure, 28, was recorded in 2005. “Pakistan: Polio eradication initiative”, WHO website. Also, Zeeshan Salahuddin, “Pakistan’s crippled anti-polio program”, *The Friday Times*, 31 October 2014.

⁷ The giant city of Karachi is made up of eighteen towns. The reservoir districts are Quetta, Killa Abdullah and Pishin (Balochistan); Khyber, North and South Waziristan Agencies and Frontier Region Bannu (FATA); Peshawar, Bannu and Tank districts (KPK); and Gadap and Baldia towns (Karachi). “High risk areas”, End Polio Pakistan website.

⁸ “Polio cases in provinces”, End Polio Pakistan website and “Circulating vaccine-derived poliovirus cases 2000-2015”, GPEI website. In 2014, Pakistan registered 306 wild polio-virus cases and 22 circulating vaccine-derived (cVDPV) polio-virus cases. cVDPV cases occur in populations with low immunity, when the “live” poliovirus in the oral vaccine (OPV) genetically mutates. Wild and cVDPV polio viruses cause the same symptoms.

⁹ Crisis Group interviews, Peshawar, June 2015.

¹⁰ “CIA organised fake vaccination drive to get Osama bin Laden’s family DNA”, *The Guardian*, 11 July 2011; Alexander Mullaney and Syeda Amna Hassan, “He led the CIA to Bin Laden – and unwittingly fuelled a vaccine backlash”, *National Geographic*, 27 February 2015.

in KPK and FATA, implying they were a cover for Western intelligence gathering; religious extremists went much further, kidnapping and killing polio vaccinators.¹¹

On 16 June 2012, Hafiz Gul Bahadur, the North Waziristan commander of the Tehreek-e-Taliban Pakistan-Taliban Movement of Pakistan (TTP), a signatory to a peace deal with the military, declared a “ban” on polio vaccination in the agency until the U.S. ended drone attacks. “Polio campaigns are also used to spy for America against the mujahidin, one example of which is Dr Shakil Afridi”, read pamphlets distributed in North Waziristan’s administrative centre, Miramshah. Yet another signatory of a peace deal with the military, Maulvi Nazir Wazir’s TTP faction in South Waziristan, followed with its own “ban” ten days later.¹²

The impact was felt well beyond the tribal belt. On 17 July 2012, gunmen in Karachi fired at a World Health Organisation (WHO) vehicle, injuring a Ghanaian doctor and his driver. The doctor had been supporting eradication in Gadap town, where polio was endemic. On 21 July, gunmen killed a health worker who had participated in polio vaccination drives there. In December, during a three-day vaccination campaign, attacks in Karachi and KPK’s Peshawar, Nowshera and Charsadda districts killed eight vaccinators, six of them women. Dr Elias Durry, then WHO’s emergency coordinator for polio eradication said, “the polio campaign was not just caught in the crossfire; it was now at the forefront”.¹³

Between December 2012 and end-September 2015, attacks on personnel linked to polio eradication claimed 78 lives. While initially most victims were polio workers and facilitators, by 2014 they also included scores of police protecting vaccination teams.¹⁴ Many were targeted while conducting door-to-door immunisation drives. On 13 February 2015, a vaccination team was kidnapped in northern Balochistan’s Zhob district, bordering on KPK. The bodies of the vaccinator, a driver and two security personnel were found four days later. In March, two Lady Health Workers (LHWs)

¹¹ Save the Children said its links were limited to training Dr Afridi, with 50,000 other health workers, and receiving a 2009 job application. “Bigelow’s mistake in Zero Dark Thirty isn’t the torture; it’s giving ammunition to polio vaccine conspiracy theorists”, *The Telegraph*, 4 February 2013; “Polio team attacked in Pakistan”, *The New York Times*, 14 February 2015; “Save the Children Pakistan chief under pressure after fake CIA vaccination campaign”, *The Telegraph*, 3 May 2012.

¹² “N. Waziristan warlord bans polio vaccination”, *The Express Tribune*, 17 June 2012. “Polio vaccination banned in South Waziristan”, *The Express Tribune*, 26 June 2012. U.S. targeting policy shifted in 2010 from mainly foreign al-Qaeda operatives and Haqqani network operatives to Pakistani Taliban, including signatories of peace deals with the Pakistan army such as Gul Bahadur and Maulvi Nazir (the latter killed by a 2 January 2013 drone strike). Crisis Group Report N°247, *Drones: Myths and Reality in Pakistan*, 21 May 2013.

¹³ “Backlash?: UN polio doctor shot in Karachi”, *The Express Tribune*, 18 July 2012; “Polio campaigner slain in Gadap”, *The Express Tribune*, 21 July 2012; “Six polio workers shot dead in Pakistan”, *Dawn*, 19 December 2012; “Two killed as polio teams attacked in KP; WHO tells field staff to stop work”, *Dawn*, 19 December 2012. Crisis Group interview, Islamabad, June 2015.

¹⁴ The deaths of 37 were directly linked to participation in the polio eradication program (fifteen polio workers, the rest security personnel); 41 polio workers and security personnel were killed in attacks that may or may not have been directed at the program. Fourteen other polio workers were killed in attacks not linked to their work. Figures provided by GPEI partners, Islamabad, 1 October 2015. “Polio security team attacked in Charsadda; seven dead”, *Dawn*, 22 January 2014. Robin Reed, “Polio – program access and security”, UNICEF presentation to Pakistan Humanitarian Forum (PHF), 4 December 2014; and Crisis Group interviews, police officers, polio workers and polio program representatives, Islamabad, Karachi and KPK, June–October 2015.

administering polio drops and a policeman were shot dead in KPK's Mansehra district, and on 18 October, a polio worker was killed in FATA's Bajaur agency.¹⁵

B. *Militant Motives*

While government officials attribute such attacks to the TTP and other militant groups, claims of responsibility are rare. In April 2013, Ehsanullah Ehsan, then TTP's spokesperson, denied its involvement in attacks on vaccination teams and added: "If they can convince us that these polio drops are Islamic and the spy agencies are not using it to kill our fighters, we would have no opposition to any vaccination drive which is in the public interest". Yet, after joining a TTP splinter group, he claimed responsibility for the attack on a polio worker in KPK's Charsadda district, asserting unscientifically that the vaccine was not just anti-Islamic, but also a health risk.¹⁶

Violent extremists have multiple motives, which have little to do with objections on either religious or health grounds for their anti-vaccination drive. An officer associated with eradication efforts said:

We reached out to some religious leaders to help us with the bans because they have linkages with the militants, they share the same school of thought, but it soon became clear the issue wasn't ideological. The militants were using this as a bargaining chip: they said, "we are open to being convinced to allow [immunisation], but what will we get in exchange?"¹⁷

According to a health department official, "the militants know that attacking people involved with polio vaccination drives is an easy way to demonstrate their nuisance capacity – the campaign gets postponed and they get media attention". Moreover, many attacks are aimed at poorly-armed police who accompany the teams and are considered soft targets.¹⁸ The Federal Emergency Operation Centre (EOC) coordinator, Dr Rana Safdar, estimated that "about a third of the attacks actually target the program. The actual target is often the security personnel; there have even been instances when attackers shot policemen but didn't harm the polio workers".¹⁹ Yet another motive, as in many other militant activities, is extortion. In March 2013, members of Mangal Bagh's Deobandi extremist Lashkar-e-Islam (LI) reportedly

¹⁵ "Bodies of kidnapped polio workers, polio guards found in Zhob", *The Express Tribune*, 17 February 2015; "Gunmen kill two women polio workers, policeman in Mansehra", *The Express Tribune*, 17 March 2015; "Polio campaigner shot dead in Bajaur agency", *The Express Tribune*, 18 October 2015. The PPP government launched the LHW program in 1994 through the federal health ministry. LHWs, women community health workers trained to provide basic mother and child health care in their village or neighbourhood, are often involved in polio campaigns. "The Lady Health Workers Programme: January 2010-June 2015", National Programme for Family Planning and Primary Health Care, health ministry; "Country case study: Pakistan's Lady Health Worker Programme", WHO and Global Health Workforce Alliance, 2008.

¹⁶ "Taliban militants announce 'conditional support' for anti-polio drive", *Dawn*, 12 April 2013; "Taliban's change of heart on polio vaccination", *Dawn*, 22 January 2014; "TTP-Jamaat Ahrar claims responsibility for attack on polio team in Charsadda", *The Express Tribune*, 24 November 2014.

¹⁷ Crisis Group interview, Islamabad, July 2015.

¹⁸ Crisis Group interviews, Islamabad, June 2015; KPK and Karachi, June-September 2015. Also, Crisis Group Report, *Policing Urban Violence in Pakistan*, op. cit.

¹⁹ Crisis Group interview, Islamabad, July 2015.

seized twenty parents in Khyber Agency whose children had been vaccinated, releasing them only after they collectively paid a 20,000-rupee (almost \$200) “fine”.²⁰

The prevalence of the polio virus and conflict are closely interlinked. The virus thrives in militant-controlled regions. A polio program officer said, “in Pakistan, polio is a good indicator of conflict. Areas where polio is prevalent are also areas that are affected by violence and instability”.²¹ Well before the raid on bin Laden, Mullah Fazlullah, then the head of TTP’s Swat faction, had strongly opposed efforts to vaccinate children, characterising as un-Islamic the taking of medicine for a disease that has not been contracted.²² Military-backed peace deals enabled his faction to further expand its presence in Swat, while the polio virus spread in the region. In October 2009, health officials confirmed an outbreak in Swat: thirteen recorded cases in four months because vaccination teams had been unable to access the area for over a year.²³ Five years later, counter-insurgency operations may have weakened the militants’ hold over Swat, but continued peace deals or efforts to enter into such deals with militants in several FATA agencies have given the virus a sanctuary.²⁴

C. Pakistan’s Polio Sanctuary

When the TTP imposed a polio immunisation ban in June 2012, according to the GPEI, polio was globally “at its lowest since records began ... with fewer cases in fewer districts of fewer countries than at any previous time”.²⁵ “There was so much optimism then that polio would be eradicated in 2013-2014”, said WHO’s Dr Durry, but it dissipated when Pakistan’s program became “a good target for the militants”.²⁶

In its August-December 2012 progress report, the prime minister’s polio monitoring and coordination cell noted: “The FATA administration is pursuing negotiations with elements opposing the polio campaign through intermediaries and has initiated the political and local *jirga* (tribal council) processes to help reverse the [militant] ban”.²⁷ Yet, in December 2012, North Waziristan’s political agent, the senior bureaucrat, put the onus on the agency’s residents to immunise their children. Invoking his powers under the draconian colonial-era Frontier Crimes Regulations (FCR), he reportedly directed relevant government offices to stop issuing passports, national identity cards and certificates of domicile to members of two major North Waziristan-based tribes, the Wazir and Othmanzai Dawar, whose elders had refused

²⁰ “Fight against polio: tribesmen fined by militants for vaccinating their children”, *The Express Tribune*, 9 March 2013.

²¹ Crisis Group interview, Islamabad, July 2015.

²² Fazlullah became TTP’s head in November 2013. “Polio public enemy number one as Fazlullah returns”, *The News*, 8 November 2013.

²³ “Pakistan polio outbreak in Swat”, IRIN, 13 October 2009. For the military’s peace deals with and operations against the TTP in Swat, see Crisis Group Report, *Countering Militancy in PATA*, op. cit.

²⁴ Since 2004, the military’s counter-insurgency strategy has swung between peace deals with violent extremists and indiscriminate force. Since then, the military has also sidelined the civilian administration in FATA, and controls all access to the region. Crisis Group Reports N°262, *Resetting Pakistan’s Relations with Afghanistan*, 28 October 2014, and *Women and Conflict in Pakistan; Countering Militancy in FATA*; both op.cit.

²⁵ “Every missed child”, GPEI Independent Monitoring Board, June 2012, p. 5.

²⁶ Crisis Group interview, Islamabad, June 2015.

²⁷ “Progress report: August-December 2012”, Prime Minister’s Polio Monitoring and Coordination Cell, 2012, p. 11.

to guarantee the security of vaccinators. Among other punitive measures, the administration also reportedly halted development work in their areas.²⁸

Yet, immunisation activities in the agency ground to a halt, with the military refusing to counter allied TTP groups responsible for the ban, such as Gul Bahadur's, while North Waziristan's civil administration was incapable of opposing the militants.²⁹ The result was resurgence of polio in North Waziristan, putting an estimated 250,000 children at risk.³⁰ In the first nine months of 2013, the virus paralysed 27, with the GPEI's Independent Monitoring Board (IMB) noting: "Nowhere in any of the endemic countries [is there] more polio than North Waziristan", and warning: "The need to achieve access in North and South Waziristan could not be more urgent – polio will not be eradicated without it". By the end of 2013, FATA accounted for 70 per cent of all cases in Pakistan.³¹

In early 2014, as the federal government attempted a new round of peace talks with the TTP, the GPEI was assured that polio immunisation would be on the agenda. After the talks failed in mid-April 2014, health workers were optimistic that immunisation would resume, since the militants who had "banned" anti-polio campaigns would no longer hold sway in the area. A polio program officer said, "as military intervention appeared more imminent, we started seeing *imams* (clerics) softening their anti-polio stance". Yet, after the military launched an operation in North Waziristan in mid-June, followed by similar action in Khyber agency, and hundreds of thousands of conflict-displaced persons fled the region, the polio epidemic surged. 70 cases were reported in North Waziristan, 24 in South Waziristan and 76 in Khyber agency.³²

As an under-immunised population fled militant violence and military operations, the virus spread to KPK's capital, Peshawar, and as far south as Karachi, Sindh province's capital, now home to thousands of FATA displaced. In January 2014, WHO declared Peshawar the world's largest polio reservoir. "Because Peshawar and Karachi are such large cities to which people come and transit from, they act as amplifiers for the virus", said a program officer with a GPEI partner.³³

²⁸ "North Waziristan tribes lose perks for not supporting anti-polio drive", *Dawn*, 18 December 2012; "Battling militants' ban on polio vaccines in Pakistan's North Waziristan", IRIN, 28 March 2013. Under the FCR, a legal framework adopted in 1901 and retained after independence in 1947 to govern FATA, the centrally appointed political agent (PA) exercises extensive executive, judicial and financial powers in a tribal agency. For more on the FCR, see below and Crisis Group Reports, *Countering Militancy in FATA and Pakistan's Tribal Areas*, both op. cit.

²⁹ Crisis Group interviews, NGO workers, rights' activists, and GPEI partners, Islamabad and KPK, June-September 2015. Also, "Battling militants' ban", op. cit.

³⁰ "Polio's last stand?", GPEI Independent Monitoring Board (IMB), November 2012, p. 34; "Ninth report", GPEI IMB, May 2014, p. 16.

³¹ "Eighth report", GPEI IMB, October 2013, p. 26. "Weekly AFP surveillance update Pakistan week 49", National Surveillance Cell, Federal Extended Program on Immunisation, government and WHO, December 2014.

³² Crisis Group interviews, Islamabad, June 2015. By the end of 2014, 575,000 people had been displaced by that summer's military operation in North Waziristan, increasing the total of internally displaced persons (IDPs) from FATA to 1.67 million. "Pakistan: Humanitarian dashboard – NWA displacement 2014 (as of 31 December 2014)", UN Office for the Coordination of Humanitarian Affairs (OCHA), 31 January 2015, p. 1; "Polio cases district wise 2014", End Polio Pakistan website.

³³ There are no specific figures available for FATA IDPs in Karachi. Crisis Group interviews, GPEI partners, Islamabad, KPK, Karachi, June-August 2015. "WHO declares Peshawar world's 'largest reservoir' of polio", *Dawn*, 17 January 2014; and Zeeshan Salahuddin, "Pakistan's crippled anti-polio program", *The Friday Times*, 31 October 2014. Crisis Group interview, Islamabad, June 2015.

With civilian access, including that of humanitarian agencies, severely restricted in FATA's conflict zones, Islamabad and its polio eradication partners attempted to contain the virus by setting up transit points to administer drops to people entering and exiting North and South Waziristan and Khyber agencies.³⁴ By targeting the conflict-displaced, the program was able to reach a population that had been inaccessible for two years. By late June 2014, almost 96,500 children had received anti-polio drops at transit points.³⁵ In June and July, over 1.5 million OPV doses were administered to children under five in IDP host communities in KPK; in addition, 154,000 IDP and host-community children under five received them in Karachi; and the Punjab government vaccinated displaced children arriving from KPK by rail or road.³⁶

These efforts, however, proved insufficient, and polio surged in the tribal belt and countrywide. A polio country program manager explained: "The military operation happened at the height of the high-transmission season; it was like emptying the contents of an envelope in a stream". By the end of 2014, polio had paralysed 328 children (compared to 141 in 2013), of whom 179 were in FATA. EOC coordinator Dr Rana Safdar said, "we thought everyone had got out, that we had reached everyone [at the transit points], but we didn't realise that wasn't the case. Around 1,000 people went back [to North Waziristan] ten days after the operation started without our knowing, and that's where cases started appearing".³⁷

In November 2014, after the military allowed access, the polio eradication program finally launched an immunisation drive in North and South Waziristan.³⁸ The number of children in FATA inaccessible to immunisation teams was reduced from 300,000 in 2014 to 45,000 by mid-2015. Yet, continued military operations, militant violence and targeted killings still impede comprehensive outreach.³⁹ Parts of Khyber and North and South Waziristan agencies remain inaccessible, and the lives of polio vaccinators and security personnel protecting them are still at risk.

The porous border with Afghanistan complicates eradication efforts in both countries. In its May 2015 report, the IMB noted the "worrying stagnation" of Afghanistan's polio eradication program. Lack of government ownership, accountability and oversight threaten to reverse successes at limiting the spread of the virus and keeping cases low. Armed conflict and the territorial gains by diverse anti-state groups, including many from Pakistan, are making parts of the country increasingly inaccessible, while more parents than anywhere in the world – convinced that the vaccine is harmful or that polio is a curable disease – are refusing to vaccinate their children.⁴⁰

³⁴ Crisis Group interviews, GPEI partners, Islamabad, June-July 2015. Also, "Joining hands to defeat polio", Prime Minister's Polio Monitoring and Coordination Cell, 2012, p. 23.

³⁵ Crisis Group interviews, GPEI partners, June-July 2015. Also, "Steering committee on polio: over 96,000 displaced children vaccinated", *The Express Tribune*, 21 June 2014.

³⁶ "National polio eradication bulletin", government and WHO, June-July 2014; "Anti-polio campaign; polio drops for children travelling from Peshawar", *The Express Tribune*, 12 April 2014.

³⁷ Crisis Group interviews, Islamabad, June and July 2015. "Polio cases in provinces", End Polio Pakistan website.

³⁸ Crisis Group interviews, GPEI partners and informed observers, Islamabad, June-July 2015; London, June 2015. Also, "Govt launches polio drive in inaccessible tribal areas", *Dawn*, 25 November 2014; "Govt starts polio campaign in North Waziristan", *Dawn*, 27 November 2014.

³⁹ Figures provided to Crisis Group by the federal EOC, Islamabad, July 2015.

⁴⁰ "The rocky road to zero – Eleventh report", GPEI IMB, May 2015, pp. 5-6. For Afghanistan analysis, see Crisis Group Asia Reports N°s 268, *The Future of the Afghan Local Police*, 4 June 2015; 260,

In July 2015, representatives from Islamabad and Kabul agreed to more regular information sharing and synchronisation of cross-border eradication campaigns.⁴¹ Effective and sustainable implementation is, however, hampered by mutual mistrust, exacerbated by continued Pakistani support to Afghanistan-oriented jihadi proxies.⁴² The result is the cross-border circulation of polio-virus strains.

Two cases of infection by a polio-virus strain circulating in Afghanistan were reported in Pakistan's Balochistan and Sindh in 2015, prompting the International Health Regulations' Emergency Committee in August to call for "closer supervision and monitoring of the quality of vaccination at border transit points, as well as tracking of travellers identified as unvaccinated after they have crossed the border".⁴³ There were reports that a polio-virus strain that appeared in Egypt and then spread to other Middle Eastern countries was traced to Pakistan, possibly because of the movement of unvaccinated Pakistani workers and/or militants fighting alongside their Arab counterparts.⁴⁴ The polio-virus sanctuary in Pakistan thus threatens to expand far beyond the country's immediate neighbourhood.

Afghanistan's Political Transition, 16 October 2014; and 256, *Afghanistan's Insurgency after the Transition*, 12 May 2014.

⁴¹ Crisis Group interview, Rana Safdar, coordinator, federal EOC, Islamabad, July 2015. Also, "Coordinated action: Islamabad, Kabul vow polio-free border areas", *The Express Tribune*, 8 July 2015.

⁴² Crisis Group Report, *Resetting Pakistan's Relations with Afghanistan*, op. cit.

⁴³ "WHO statement on the meeting of the 6th IHR Emergency Committee regarding the international spread of wild poliovirus", WHO, 17 August 2015.

⁴⁴ The lineage and thus origin of the virus can be traced through its genotype. In late 2013, early 2014, cases started appearing in Iraq and Syria for the first time since 2000. Environment sewage samples tested positive in Egypt and Israel. Crisis Group interviews, polio immunisation specialists, Islamabad and Geneva, June-September 2015; and "Poliovirus detected from environmental samples in Egypt", GPEI website, 10 February 2013.

III. Stumbling Blocks

Polio eradication has been the victim of lack of political buy-in, chronic mismanagement and absence of accountability. Since 1994 and in line with the GPEI, Pakistan has conducted campaigns to vaccinate children under five with OPV, the “live” oral polio vaccine, instead of the inactivated vaccine (injectable IPV). The vaccine of choice in mass immunisation campaigns is trivalent OPV (tOPV) drops, which contain live attenuated strands of all three types of polio virus. In addition to protecting against the disease, it stops the virus from replicating in the intestines. IPV costs five times more, requires trained health workers and, in the event of infection, does not stop the virus from multiplying in the intestines, spreading through faeces and contaminating others. On the other hand, more than three doses of OPV are necessary to create sufficient immunity in children suffering from malnutrition, diarrhoea, fever or respiratory problems. In Pakistan, where more than half of all children are either of low height for age or low weight for height, immunity through OPV requires multiple administrations.⁴⁵

A. *The Government Lead*

Successive governments largely failed to prioritise efforts to eradicate polio until 2011, when the Pakistan Peoples Party (PPP)-led administration declared it a national emergency and developed an action plan (National Emergency Action Plan, NEAP 2011).⁴⁶ The senior bureaucrat of a district (in a FATA agency, the political agent) was charged with ensuring its territory became and remained polio free. The prime minister’s polio monitoring and coordination cell reviewed implementation monthly at the federal and provincial level; the inter-provincial ministerial committee on polio, headed by the federal health minister, met quarterly; and a taskforce on eradication, chaired by the prime minister, met every six months.⁴⁷ Cases dropped by 63 per cent, from 198 in 2011 to 74 in 2012, before increasing again, as discussed above.⁴⁸

The Pakistan Muslim League-Nawaz (PML-N) government was, however, slow in energising its polio eradication bodies.⁴⁹ It took the alarming 2014 increase in cases, international concerns about polio’s spread and the prospect of being the last country where it remained endemic to jolt it into action.⁵⁰ In May 2014, the WHO-convened Emergency Committee recommended that citizens from Pakistan, Syria and Cameroon be vaccinated against polio before travelling abroad.⁵¹

⁴⁵ Crisis Group interviews, public health specialists and epidemiologists, Islamabad, Nowshera, Karachi and Geneva, June-August 2015. For details on how the vaccines work, see, “Oral polio vaccine (OPV)” and “Monovalent oral polio vaccines (mOPV)”, GPEI website. “Global nutrition report 2015”, p. 25. The report’s secretariat is based at the Institute of Development Studies (UK) and the International Food Policy Research Institute (U.S.).

⁴⁶ NEAPs are the government’s polio eradication strategy documents. They are issued annually; the first was in 2011 when polio was declared a national emergency.

⁴⁷ “National emergency action plan 2011 for polio eradication (NEAP)”, federal health ministry, 2011, pp. 3-4. Pakistan’s provinces are divided into districts and further sub-divided into *tehsils* (administrative divisions) or towns. Union Councils (UC) are the smallest administrative division.

⁴⁸ “Polio cases in provinces”, End Polio Pakistan website; “Circulating vaccine-derived poliovirus cases 2000-2015”, GPEI website.

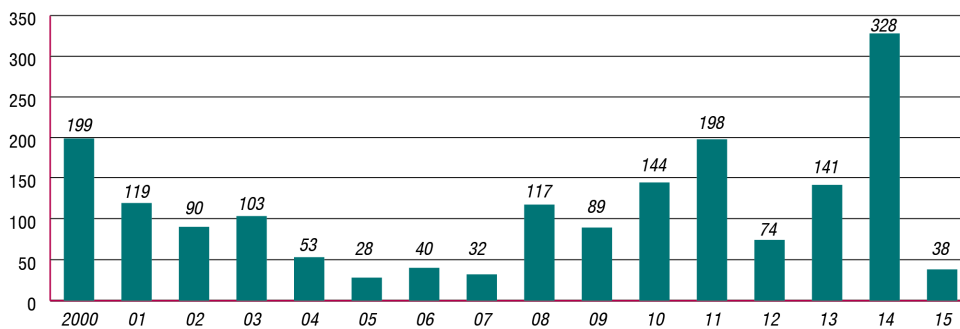
⁴⁹ Crisis Group interviews, GPEI partners, Islamabad, June-July 2015.

⁵⁰ “Pakistan’s polio program is a disaster”, “Tenth report”, GPEI IMB, October 2014, p. 3.

⁵¹ “WHO statement on the meeting of the International Health Regulations Emergency Committee concerning the international spread of wild poliovirus”, WHO, 5 May 2014.

Understanding that “business could no longer go on as usual”, an official with the program said, the government and its GPEI partners developed a new National Emergency Action Plan for eradication (NEAP 2015-2016) to overhaul the program, streamline communication and decision-making and improve coordination between and oversight and accountability of actors. “Now all parties are under one roof in the federal and provincial Emergency Operation Centres”, federal EOC coordinator Dr Safdar said, “and we’ve made ... an operational plan which will serve as an accountability framework”.⁵² The Bill and Melinda Gates Foundation’s senior polio program officer said, “we now have better security plans, emergency operation centres are state of the art, third-party monitoring is in place, and the planning is evidence based, all ... set up at the end of last year”. Recorded cases have indeed decreased significantly, from 224 in October 2014 to 38 a year later. The IMB’s May 2015 report noted: “The signs of improvement are early but clear. Crucial among these is that the government of Pakistan has taken hold of the reins of polio eradication”.⁵³

Polio cases in Pakistan 2000-2015, as of October 2015



B. The Weakest Links

In August 2015, as a first step toward transitioning out of polio endemic status, Pakistan introduced IPV to supplement OPV in its routine immunisation schedule, through the Expanded Program on Immunisation (EPI)⁵⁴ and in vaccination campaigns where transmission risks remained high.⁵⁵ While campaigns during the low transmission season (September 2015-May 2016) will show the extent to which this delivers results, there are indications that better communication between the federal and provincial EOCs and their partners could result in better planning. However, without greater accountability at district and Union Council (UC) levels, there are

⁵² Crisis Group interviews, Islamabad, July and September 2015.

⁵³ Crisis Group interview, Waqar Ajmal, Islamabad, June 2015. “Polio this week”, op. cit. “The rocky road to zero – Eleventh report”, GPEI IMB, May 2015, p. 10.

⁵⁴ EPI provides free vaccination against eight childhood preventable diseases: poliomyelitis, neo natal tetanus, measles, diphtheria, pertussis, tuberculosis, childhood pneumonia and meningitis and hepatitis B. “The Expanded Program on Immunisation (EPI), Pakistan”, national health services, regulations and coordination ministry, at www.epi.gov.pk.

⁵⁵ Crisis Group interviews, GPEI partners, June-August 2015; “Poliomyelitis – report by the Secretariat”, 2015, 68th World Health Assembly, WHO, 1 May 2015, p. 3. This was part of a WHA-endorsed “polio eradication and endgame strategic plan 2013-2018” under which countries are expected to introduce at least one dose of IPV and to gradually end OPV, possibly by 2019, to avoid reintroduction of the virus through vaccine-derived polio viruses. “Inactivated polio vaccine (IPV)”, GPEI website.

fewer chances of overall improvement. “The weakest link”, a polio country program adviser said, “is on the ground. Setting up good mechanisms [at the top] will not necessarily change things if this disconnect remains”.⁵⁶

The virus continues to thrive in areas with pockets of children who have been chronically missed in vaccination drives. “If we only reach 80 per cent in twenty campaigns, it’s not enough to interrupt transmission”, said an immunisation specialist. Numerous cases can be traced from houses that have already been covered, suggesting either that some children were not presented to the vaccinators or were away at the time. Imperfect data about households, unaccountable vaccinators or simple lack of perseverance are major causes for failing to include all children in a drive. An expert said, “before we aimed to reach a maximum number of children now we realise our focus needs to be on immunising the few we always missed”. Another added: “We’re telling our vaccinators ‘we need to reach every single child, but don’t fake your records to show 100 per cent coverage. Identify children we continue to miss, and we’ll help you ensure they’re immunised”.⁵⁷

To identify the children that vaccinators need to reach, micro-plans are prepared at the UC level. Ensuring that the data is accurate is difficult, particularly in urban areas. The last nationwide census was in 1998; fertility rates are very high (more than 4.6 million births a year), and population mobility is equally high. At a recent Peshawar EOC planning meeting, the majority of micro-plans were based on outdated information. Data on children vaccinated during a drive can also be inaccurate. With imperfect oversight and accountability of vaccinators, there are cases of “silent refusal”, teams agreeing not to administer the vaccine but identifying the child and household as covered. The opposite also occurs, when a child is vaccinated but, at parental insistence for fear of the security implications, the team does not identify the child or household.⁵⁸

Vaccines can also be ineffective due to conditions in which they are kept or because they have passed their expiry date. They are obtained from the nearest government facility and transported in cold boxes, but keeping them cool on the way to remote areas or while temperatures soar during immunisations on roads and at train stations and airports is a challenge.⁵⁹ After over a million doses of pentavalent vaccine (protecting against five diseases including tetanus and diphtheria, but not polio) were spoiled because of the poor cooling system in two warehouses at the National Institute of Health (NIH), the federal national health services, regulations and coordination ministry improved storage and stock management systems.

There is now an inventory management system to track and monitor vaccine supplies in all polio high-risk districts countrywide.⁶⁰ Yet, antiquated cold storage

⁵⁶ Crisis Group interview, Islamabad, September 2015.

⁵⁷ Crisis Group interviews, Islamabad, Karachi, KPK, June-August 2015.

⁵⁸ “Statistics: Annual no. of births (thousands) 2012”, UNICEF Pakistan. Crisis Group interview, KPK, June 2015. Identification is done by marking the house with chalk and inking the child’s finger. Crisis Group interviews, polio workers and GPEI partners, Islamabad and KPK, June 2015.

⁵⁹ Crisis Group interviews, polio workers, KPK and Karachi, June-August 2015.

⁶⁰ “Vaccine worth \$1.3m ‘goes bad’ in health ministry store”, *Dawn*, 11 March 2015; “Spoiled vaccines worth millions sealed in FIA raid”, *Dawn*, 28 April 2015. Crisis Group interview, Dr Muhammad Tariq, country director, John Snow Inc., U.S. Agency for International Development (USAID) Deliver Project, Islamabad, June 2015. “USAID DELIVER project supports Pakistan to reform vaccine-related storage in 40 days”, USAID, 30 April 2015. “EPI reform at the federal stores: optimising supply chain practices for better governance and accountability”, national health services, regulations and coordination ministry and USAID Deliver project, June 2015.

equipment, prolonged power outages, poor technical expertise and lack of accountability continue to compromise vaccine quality.⁶¹ OPV vials, for example, have an indicator that changes colour when the cold chain has been respected, but “there are a number of tricks to tamper with this indicator”, a district polio immunisation coordinator said: “Most of the time you don’t even need to bother: no one’s checking”.⁶²

Under the NEAP 2015-16, provincial EOCs are responsible for identifying and advising low-performing districts based on a number of indicators, including the percentage of UCs that have updated micro-plans or have vaccinated 90 per cent of children missed during the previous campaign.⁶³ Assessing vaccination coverage includes EOC staff visiting certain districts during campaigns, third-party monitoring and Lot Quality Assurance Sampling (LQAS), a rapid survey conducted on a small number of households. “The most straightforward indicator of failure”, an expert said, is “the continued circulation of the virus”.⁶⁴

Acute Flaccid Paralysis (AFP) surveillance, whereby any paralysis in a child under fifteen is reported and investigated, helps detect polio cases. “For every paralysed child, there are 200 potentially infected people”, an immunisation specialist said. Symptoms are not always apparent, but environmental surveillance, including by testing sewage samples, helps ensure the virus does not circulate unnoticed. “If environmental samples are testing positive but we’re not recording cases, it could mean we’re missing some”, a polio program coordinator said.⁶⁵ In the last two years, GPEI partners have increased environmental sampling sites from 22 to 38 in fifteen districts where the virus circulates or that are at risk of polio transmission, but have yet to cover a FATA agency. NEAP 2015-2016 also calls for improving AFP surveillance by engaging with private-sector facilities and traditional practitioners and training polio workers to identify suspected cases during campaigns. These tools are central to polio-free certification. After the last case of polio paralysis is registered, Pakistan must prove that the virus is no longer in the country for three consecutive years.⁶⁶

Successive NEAPs have stressed that a province’s chief secretary take disciplinary action against district administrative heads who consistently fail to deliver.⁶⁷ As yet, Sindh EOC provincial technical coordinator Shahnaz Wazir Ali said, “no district’s administrative head has ever been removed or suspended on the basis of their performance in eradicating polio although the Karachi city commissioner has said that this year it will be part of district commissioners’ evaluation in their annual confidential reports”. In KPK, the EOC and provincial health secretary have reportedly demonstrated greater involvement, contacting district heads before the first immunisation drive of the current low season to ensure that no district delays or shortens a campaign. An expert noted, however, that “ensuring civil servants actually work

⁶¹ Crisis Group interviews, immunisation experts, donor agency, Islamabad, September 2015.

⁶² Crisis Group interview, KPK, June 2015.

⁶³ “NEAP 2015-16”, *op. cit.*, p. 26.

⁶⁴ *Ibid.*, p. 28; Crisis Group interview, Islamabad, July 2015; “Assessing vaccination coverage levels using clustered lot quality assurance sampling: a field manual – version edited for the Global Polio Eradication Initiative (GPEI)”, 27 April 2012.

⁶⁵ Crisis Group interviews, Islamabad, July 2015. “Surveillance”, GPEI website. The Global Polio Lab Network was established in 1990 to detect the presence of wild and vaccine-derived polio.

⁶⁶ Crisis Group interview, Dr Rana Safdar, Islamabad, July 2015; email correspondence, Alina Visram, Polio Plus manager, Rotary International Pakistan, 29 September 2015. Also “NEAP 2015-16”, *op. cit.*, p. 11; and “Certification”, GPEI website.

⁶⁷ “NEAP 2015-16”, *op. cit.*, p. 20; “NEAP 2014”, January 2014, p. 20; and “NEAP 2011”, January 2011, p. 14.

toward improved service delivery and are held accountable for failing to do so will take years and goes much beyond the scope of polio eradication”.⁶⁸ Yet, with absent bureaucratic oversight, Pakistan is unlikely to eradicate the virus.

Parliamentary oversight should supplement bureaucratic accountability in polio eradication efforts. Parliamentarians should participate in district eradication committees that are tasked with leading and coordinating all actors involved, as envisaged by NEAPs since 2013. The National Assembly and Senate standing committees on national health services, regulations and coordination should set up permanent subcommittees on polio eradication, and provincial assemblies should do the same.⁶⁹ Polio workers must also be held accountable, but it is equally important that they have the protection they need to do their work safely.

C. *Putting Polio Workers First*

1. Challenges of women workers

80 per cent of all polio immunisation teams employ at least one woman, and she is often targeted by misogynist Islamic extremists. In 2002, when he headed the TTP-affiliated Tehreek-e-Nafaz-e-Shariat-e-Mohammadi (TNSM) in Swat, current TTP head Mullah Fazlullah called for the kidnapping and killing of Lady Health Workers through his illegal FM radio channels. Public beheadings and murders of the LHWs were widely reported, and scores were forced to leave their jobs. In April 2007, facing extremist threats, 70 resigned. Since 2012, militants have murdered fourteen women vaccinators. In December 2012, after six were killed in one week, 250 LHWs refused to participate in a Rawalpindi immunisation drive. The killings continue in 2015, including two in Mansehra in March.⁷⁰ “Since these attacks, I travel in an unmarked car and often have to work from home due to security concerns”, said a female district polio program supervisor in KPK.⁷¹

Even leaving aside militant threats and attacks, the working conditions of women involved in polio campaigns are very stressful. While spending long hours in public places and entering homes to administer vaccines, they are often subjected to verbal abuse and sexual harassment. A woman vaccinator manning a transit vaccination point at a railway station in Karachi said, “it’s a difficult job that no woman would want to do for a long time. We have to stand in the heat and people harass us”.⁷²

Where high risk of transmission combines with insecurity, police protection has become an integral part of polio immunisation drives; each door-to-door team usu-

⁶⁸ Crisis Group interviews, Islamabad, September 2015; telephone interviews, polio workers, KPK, September 2015. For analysis on Pakistan’s civil bureaucracy see Crisis Group Asia Report N°185, *Reforming Pakistan’s Civil Service*, 16 February 2010.

⁶⁹ For recommendations on strengthening parliamentary oversight, see Crisis Group Asia Report N°249, *Parliament’s Role in Pakistan’s Democratic Transition*, 18 September 2013. A parliamentary coordination committee on polio existed under the previous PPP-led government to review NEAP implementation. Crisis Group interview, Shanaz Wazir Ali, Sindh EOC provincial technical coordinator and the former PPP-led federal government’s focal person on polio eradication, Islamabad, September 2015.

⁷⁰ Figures provided to Crisis Group by GPEI partners, Islamabad, 1 October 2015; “70 lady health workers quit jobs”, *Dawn*, 28 April 2007; “Gunmen kill two women polio workers, policemen in Mansehra”, *The Express Tribune*, 17 March 2015. Also, Crisis Group Reports, *Women, Violence and Conflict*; and *Countering Militancy in PATA*, both op. cit.

⁷¹ Crisis Group interview, Peshawar, June 2015.

⁷² Crisis Group interview, Karachi, August 2015.

ally has two vaccinators and two policemen, though, as noted, being accompanied by police may put vaccinators at even greater risk of attack, and, some workers feel, also increases their risk of harassment by a force that is gender-insensitive.⁷³

While most LHWs belong to the community they serve, in urban or spread-out rural areas they may be from a neighbouring village or town. Some families are reluctant to open their homes to such outsiders, let alone allow them to administer to their children, and they are at greater risk because the community feels less inclined to assume responsibility for their protection.

Delegating personnel for each immunisation drive imposes additional burdens on overstretched police. Immunisation drives are frequently delayed, because not enough local police are available; this affects a campaign's quality, since it is important to reach the maximum number of children at the same time.⁷⁴ "The sheer number of police needed for every campaign and the frequency with which these are held – sometimes twice a month – make police-protected vaccination unsustainable", said a district-level immunisation drive coordinator in KPK.⁷⁵ A three-day campaign to vaccinate 7,000 children at fixed sites in four KPK Union Councils was cancelled in June, for instance, because the police could not mobilise the 500-600 officers demanded by eradication program partners.⁷⁶ A police official in Peshawar said, "our deployment during an immunisation drive is so huge that no police officer remains at the station to tend to other matters ... but we feel we have to [respond] because it would bring shame on us if an attack was conducted in our locality".⁷⁷

Some efforts are being made to improve security planning for vaccination campaigns, from the federal to the district level, including by enhancing communication and coordination with security forces. The federal cabinet committee on polio immunisation, formed in November 2014, includes the interior, defence and health ministers. Provincial EOCs have civil-military coordination cells and liaise with provincial police heads, as do district commissioners and police in district polio coordination cells. An army brigadier reportedly participates in the federal EOC's daily meetings, while the interior ministry's national crisis management cell is tasked with regularly providing intelligence on militant threats. Military support includes operational assistance, such as cordoning off a FATA area to allow vaccination teams to enter, and, in conjunction with the interior ministry, providing advance warning of threats so the polio program can adapt or delay a campaign.⁷⁸

More effective alternatives to police escorts have been used in a number of insecure Karachi neighbourhoods: the police ensure that an area is safe before vaccinators enter, cordon off the area during a campaign, stand by or are present in civilian clothes. Since 2014 and May 2015, respectively, Continuous Community Protected Vaccination (CCPV), in which no security personnel are deployed and the local com-

⁷³ Crisis Group interview, Islamabad, September 2015; and Report, *Women, Violence and Conflict*, op. cit.

⁷⁴ Crisis Group interviews, polio experts, Islamabad, KPK, Karachi, June-September 2015. "Summary report on the technical consultation on polio eradication in Pakistan – Islamabad, Pakistan, 14-15 February 2015", WHO, p. 4; "Three-day polio drive cancelled across 4 KP districts", *Dawn*, 13 April 2015; "Quetta anti-polio drive suspended due to lack of security", *Dawn*, 21 May 2015.

⁷⁵ Crisis Group interview, KPK, June 2015.

⁷⁶ Crisis Group interview, district health department director, KPK, June 2015.

⁷⁷ Crisis Group telephone interview, Peshawar, September 2015.

⁷⁸ Crisis Group interview, federal EOC coordinator Rana Safdar, Islamabad, July 2015; "Pakistan will be polio-free in six months: PM Nawaz", *The News*, 5 November 2014.

munity protects vaccinators, has been used in Karachi's most inaccessible neighbourhoods and some areas of Peshawar. A senior police official whose jurisdiction covers some high-risk Karachi neighbourhoods, said, "if a security operation was conducted shortly after a polio campaign, people would think we escort polio teams as a cover to conduct reconnaissance". Community protection is not utopian, the official argued, but "a brilliant idea that is working".⁷⁹

In such areas, the community recommends women serve as Female Community Volunteers (FCVs), who receive a monthly stipend from the polio eradication program. Each is charged with administering OPV in her immediate surroundings, usually some four streets. "When we started, we would just take whomever was available", said a program manager. "Now being an FCV is becoming a real job with future prospects. A selection committee, which includes a community member, usually a religious leader or tribal elder, and the government health officer in charge, examines applications". An expert associated with the initiative added: "We haven't had a single security incident since we started, and vaccination coverage has increased, because FCVs are basically vaccinating immediate surroundings – their relatives and friends". While communities guarantee security within the neighbourhood, police or other security forces are sometimes called in to cordon off the area and protect the vaccinators.⁸⁰

Despite these measures, GPEI partners acknowledge that the decline in attacks on personnel associated with the eradication program is largely due to the recent relative decline in terror attacks, especially in urban areas. "But how long are we safe for? We know militant networks have not been dismantled", said a GPEI adviser. Military operations have temporarily disrupted, but have yet to dismantle FATA's militant networks. Many FATA-based party workers, journalists and NGO activists are "on high alert" at the prospect of these networks regrouping and resuming attacks, repeating the pattern of earlier military operations. The TTP attack on Badaber airbase in Peshawar on 19 September, in which 42 persons, including fourteen attackers, died, showed continued militant ability to plan and conduct complex operations.⁸¹ Attacking poorly-protected polio teams would be far lesser of a challenge.

2. Trying to convince the Islamists

In an effort to reduce threats to and increase community acceptance of polio teams, the government and GPEI partners are engaging religious leaders, including those responsible for convincing communities that the vaccine is un-Islamic and/or a Western ploy to sterilise Muslim children. "It's not that religious leaders don't know OPV isn't harmful. Many get their children vaccinated, and all have to take the drops when they go on *hajj* in Saudi Arabia", said a rights' activist.⁸² In June 2014, at an international *ulama* (Islamic scholars) conference in Islamabad convened by the polio program, "the Ulema of ... Pakistan and the Muslim world along with interna-

⁷⁹ Crisis Group interviews, GPEI immunisation specialist, Islamabad, July 2015; polio program officers, Karachi, August 2015; telephone interview, senior police officer, Karachi, September 2015.

⁸⁰ Crisis Group interviews, Karachi, Islamabad, July-August 2015.

⁸¹ Crisis Group interviews, Islamabad, September 2015; KPK, June-September 2015. "Badaber attack: Five Pakistani 'terrorists' identified", *Dawn*, 20 September 2015.

⁸² Crisis Group interviews, Peshawar, Islamabad, June 2015. Travelers from polio-endemic countries require proof of immunisation before departure and receive an additional dose of OPV upon arrival in Saudi Arabia. "Saudi Arabia steps up Hajj polio vaccination requirements", 1 October 2010, GPEI website.

tional Islamic organisations” issued a *fatwa* (religious edict) declaring polio vaccination “fully admissible under Islamic Sharia [Islamic law] to protect individuals from polio”.⁸³ The heads of the four main madrasa federations and prominent madrasas, including Maulana Samiul Haq’s KPK-based Jamia Haqqania, which schooled Mullah Omar and many other Afghan Taliban leaders, have also pledged support.

The polio program has formed provincial taskforces of religious scholars from some 750 *ulama* to support immunisation and help address refusals. *Ulama* recommendations predictably focus on women polio workers, including having them dress in “Islamic fashion” and be accompanied by a *mahram* (a male member of the immediate family).⁸⁴

Despite this apparent support, Islamist political parties’ pamphlets and the sermons of many mullahs continue to oppose polio vaccination as un-Islamic and a health threat. In January 2015, 22 per cent of OPV refusals were on religious grounds and 21 per cent because of misconceptions, including about the vaccine’s impact on fertility and sexuality. An NGO worker in KPK said, “people have been told [by mullahs] that the polio vaccine contains elements that are not *halal*, which sterilise children, accelerate puberty in girls and make them more sexually active and make boys impotent as a part of the West’s [anti-Islamic] plan”.⁸⁵

More effective and sustainable than efforts to obtain religious leaders’ support, which have had mixed results at best, is ensuring that polio vaccinators and social mobilisers are better equipped to reverse such misconceptions, including with educational and public information material and advocacy training on how to engage mistrustful families. GPEI partners are paying greater attention to giving vaccinators and social mobilisers these tools, but high staff turnover is a major impediment.

3. Payment problems

Delayed salary payments are largely responsible for the high turnover within polio teams. A program trainer said, “we know that 30 to 40 per cent of the people we train won’t be there for the next training, and the main reason is delays in payments”. Vaccinators have on occasion threatened to boycott campaigns because they have not been paid on time. An LHW in KPK said, “I haven’t been paid for the past seventeen polio immunisation drives I’ve participated in”. In its May 2015 report, the IMB noted: “Pakistan’s program has ideas to boost the morale, engagement and status of its all-important vaccinators, but this will be wishful thinking unless the serious de-motivator – not being paid in full and on time – is properly done away with”.⁸⁶ Each national immunisation campaign mobilises 200,000 workers and 40,000 supervisors. 70 per cent are government employees from departments including health, revenue and education.⁸⁷ They are paid through a variety of sources: gov-

⁸³ “Islamabad declaration/*fatwa*”, International Ulema Conference on Polio Eradication, Islamabad, 15-16 June 2014.

⁸⁴ Crisis Group interview, GPEI employee working on the initiative, Islamabad, July 2015.

⁸⁵ “Communication update: Demystifying refusals”, EOC Pakistan, 6 February 2015. Crisis Group interview, KPK, June 2015. “The polio murders”, *Newsweek*, 28 December 2012.

⁸⁶ Crisis Group interviews, Islamabad, September 2015; KPK, June 2015. “Workers threaten to boycott polio campaign”, *Dawn*, 7 April 2015. “The rocky road to zero”, *op. cit.*, p. 10.

⁸⁷ Crisis Group interview, Rana Safdar, federal EOC coordinator, Islamabad, July 2015.

ernment salaries, top-ups from provincial governments and WHO, UNICEF and United Arab Emirates (UAE)-Pakistan Assistance Program funding.⁸⁸

“District health officials would receive cash ahead of an immunisation drive to pay polio workers. This was an open invitation to rent seeking”, said a senior government official involved in eradication efforts. To limit delays and counter corruption, the government decided in November 2013 to channel all payments to polio workers other than government salaries through a WHO-managed Direct Disbursement Mechanism (DDM).⁸⁹ By mid-2015, 95 per cent were paid through the DDM, but the remaining – mostly women – lack national identity cards or bank accounts. Moreover, according to polio workers and managers, delays are still caused by district administrations that often fail to provide timely information on campaign personnel.⁹⁰ The government must find ways of addressing these gaps, including by ensuring that appropriate documentation is easily provided to polio workers, and there is strong oversight and accountability (see above) of district-level bureaucrats.

⁸⁸ Crisis Group interviews, GPEI partners, polio workers and donor representatives, Islamabad and KPK, June-July 2015. UAE-PAP is the UAE government’s assistance program for Pakistan.

⁸⁹ Crisis Group interview, Islamabad, September 2015. “NEAP 2014”, *op. cit.*, p. 37.

⁹⁰ Crisis Group interviews, Islamabad, July-September 2015.

IV. Making Pakistan Polio Free

A. *Civil Society, Security and the State*

In mid-September 2015, the government and GPEI partners held the first of nine consecutive monthly National Immunisation Days (NID) during the current low transmission season (September-May), when the virus is least likely to spread. Until May 2015, GPEI partners had conducted as many as twice-monthly drives during the low season and one a month during the rest of the year. Increased numbers of vaccination campaigns were not likely to yield better results, acknowledged an Islamabad-based immunisation specialist. “For instance, there have been 37 immunisation drives over the past seventeen months in Rawalpindi. It becomes harder for us to communicate with parents on what we’re doing and why we keep coming back. It leads to suspicion of our motives and to vaccination fatigue”.⁹¹ The current reduction in the number of campaigns, from as many as eighteen a year to nine is based on GPEI partners’ recognition that, if every child is to be reached, there should be fewer and better-targeted campaigns, focussed particularly on communities where refusal rates are high.⁹²

Heavy-handed government response to refusals, however, has aggravated the problem. In August 2015, the Balochistan provincial government ordered security forces to help polio vaccinators persuade parents to vaccinate their children. In parts of FATA, soldiers have, as in restive parts of Khyber Agency, been used to administer OPV drops, putting parents at risk of militant reprisal. On 2 March 2015, the police arrested 471 people in Peshawar for refusing to vaccinate their children. Parents arrested a week earlier in Kohat and Nowshera were released only after they agreed.⁹³ “These are not good strategies, because they create further rejection and hate towards polio vaccination”, said a Peshawar civil society activist and NGO worker.⁹⁴

If coercion undermines implementation of a vital public health initiative, the failure to provide both security and justice to citizens further erodes trust in the state. In FATA, instead of elected representatives winning back that trust by reforming the FCR, which denies citizens fundamental constitutional rights and protections, the executive and parliament appear to have ceded all authority to the military, which by nature is inclined to coercive strategies. The military-devised “Social Contract for North Waziristan 2015” is the most recent evidence. Reaffirming some of the FCR’s most egregious rights violations, such as collective punishments, it requires residents, including returnees, to assume responsibility for security and prevent attacks on state/military targets. It also includes a clause requiring them to “support ... anti-polio schemes and public health programs” in their locality.⁹⁵ Linking health care to the military’s security objectives will likely prove detrimental to polio eradication.

⁹¹ Crisis Group interview, Islamabad, June 2015.

⁹² Crisis Group interviews, federal and provincial EOCs and GPEI partners, Islamabad and Karachi, June-September 2015.

⁹³ Crisis Group interview, polio program coordinator, Islamabad, July 2015; “Polio drops: Officials told to pursue 4,443 refusal cases”, *The Express Tribune*, 11 August 2015; “KP police arrest 471 parents for refusing polio vaccine”, *Dawn*, 2 March 2015.

⁹⁴ Crisis Group telephone interview, September 2015.

⁹⁵ Under the agreement, North Waziristan’s residents vow to remain loyal to the state, prevent “enemies of Pakistan” from using their land for “any ulterior motives” and support the government or risk arrest, dispossession of land and other punishment. “Social Contract North Waziristan 2015”. Text provided to Crisis Group.

The government's 2015-2016 FATA Sustainable Return and Rehabilitation Strategy, devised with UN Development Programme (UNDP) assistance, envisages unconditional cash grants to FATA returnees for six months, along with cash grants linked to immunisation of children aged two and younger, including for polio. It also calls for rehabilitating mobile health vehicles and improving sanitation to cut polio risks.⁹⁶ If FATA's unaccountable civil bureaucracy has the lead in implementation, the strategy is not likely to succeed. The polio program should engage local and international civil society organisations, preferably with links to FATA but at least with records of working with vulnerable populations. The head of a KPK-based NGO that works in FATA's bordering districts argued: "If we were given the [polio] drops, it would be so easy for us to ensure that every child is immunised in the communities we already work in".⁹⁷ These organisations are key to reaching communities in FATA and elsewhere that the eradication program has struggled to access. Should the military deny them access to returnees, there is grave risk of a rapid increase in polio in the tribal belt.

In January 2015, an immunisation drive in a KPK district was postponed because a local newspaper published an article alleging that it was primarily aimed at gathering information about "suspicious" people. Such irresponsible reports help spoilers who depict Western NGOs and their local partners, including those involved in polio eradication, as spies. Military-led efforts to limit the operational space of INGOs and their local partners also undermine their ability to fill gaps in service delivery, particularly to conflict-hit regions where polio is most prevalent.

Instead of impeding such essential work, the government and polio eradication partners should, as a prominent rights activist said, "expand the number of stakeholders involved, including human rights activists, journalists, parliamentarians and artists, to create a civil society coalition network and thus linkages with recipient communities that enhance their awareness and acceptance of immunisation".⁹⁸ Onerous bureaucratic restrictions should be replaced by official acknowledgement of and support for INGOs, local NGOs and civil society actors that have, despite grave risks, continued to work with and reach out to recipient communities.

B. *Prioritising Public Health*

Recognising that "the areas where we face the most resistance are those that are brutally underserved", GPEI gives women community volunteers an access facilitation package with medicine and supplements to meet basic mother and child health needs, inform parents on routine immunisation and health care and refer them to health facilities. Larger health camps are being set up in reservoir areas and high risk UCs countrywide on the premise that reaching every child is impossible unless the health care needs of an under-served population are met.⁹⁹ In early 2014, KPK introduced Sehat ka Insaf (Justice for Health), a program to establish one-day health camps to treat common ailments, in addition to immunising children. Renamed Sehat ka Ittehad (United for Health), it was extended in early 2015 to FATA, in collaboration

⁹⁶ Only six of 29 mobile health vehicles in FATA's seven agencies were functioning earlier this year. "FATA sustainable return and rehabilitation strategy", FATA Secretariat, March 2015.

⁹⁷ Crisis Group interview, Islamabad, June 2015.

⁹⁸ Crisis Group interview, Islamabad, September 2015.

⁹⁹ Crisis Group interviews, polio program officer; GPEI partners, Islamabad, Karachi, June-August 2015.

with the federal government.¹⁰⁰ By mid-2015, GPEI partners had set up larger health camps in 27 districts and agencies, twelve in KPK, seven in Sindh and four each in FATA and Punjab.¹⁰¹

Such initiatives (based on success in countries such as India and Nigeria) help extend polio immunisation campaigns' coverage but they cannot compensate for the state's failure to prioritise public health, particularly routine immunisation. Even a conflict-hit, fragile state like South Sudan has not restricted access of local and international humanitarian agencies involved in polio campaigns to vulnerable communities, in sharp contrast to Pakistan's entrenched civil and military bureaucracies.¹⁰²

Low population immunity – no more than 54 per cent of all children under two have received all vaccines on the routine immunisation schedule – has resulted in the spread of a vaccine-derived virus (cVDPV), caused by genetic mutation of the virus strain in OPV. Currently, Type 2 polio exists only as a cVDPV. There were 22 such cases in the country in 2014, and while there have been none in 2015, environmental surveillance samples tested positive for the strain in Karachi's Gulshan-e-Iqbal town in July.¹⁰³

In April 2015, to help expand vaccination coverage, Senator Ayesha Raza Farooq, the prime minister's focal person on polio eradication, introduced a bill to make it mandatory for parents to vaccinate their children against diseases in the routine immunisation schedule. Punishments included a fine and imprisonment. This could be counter-productive, since communities may resent an intrusive state measure and reject a vital public health initiative. The federal parliament should revise the bill to exclude fines and imprisonment for non-compliance and instead recognise that expanding routine immunisation depends on state ability and willingness to ensure, as the bill proposes, that health facilities are adequately equipped to preserve vaccines, vaccination is free, and health workers are protected and supported.¹⁰⁴

Such a bill could become a blueprint for provincial assemblies, which would be important, as the eighteenth constitutional amendment has devolved health responsibilities to the federal units. Yet, just as millions remain out of school despite the 2010 constitutional amendment making education compulsory for children between five and sixteen, merely enacting a law will not necessarily increase population immunity.¹⁰⁵

Ultimately, Pakistan's success in eradicating polio will depend on commitments to public health and to learn from best international practices. Explaining GPEI's success in eradicating polio in several countries, WHO's Dr Elias Durry said:

¹⁰⁰ "Sehat ka Insaf a complete health package for KP children", *Dawn*, 2 February 2014; "Sehat ka Ittehad program launched", *The News*, 14 February 2015.

¹⁰¹ Wasif Mehmood, "Health camps services reach the underserved children and women in Pakistan", 7 July 2015, End Polio Pakistan website.

¹⁰² Crisis Group interviews, GPEI partners and informed observers, Islamabad and Geneva, July 2015. WHO certified India polio-free in 2014; by early October 2015, Nigeria had not registered a wild polio-virus case in twelve months.

¹⁰³ "Pakistan: 2012-13 demographic and health survey – key findings", National Institute of Population Studies, 2013, p. 9; "Oral polio vaccine (OPV)", "Vaccine derived polio viruses (VDPV)", GPEI website. "Poliomyelitis – report by the Secretariat", 2015, op. cit., p. 5; "Polio this week", op. cit.

¹⁰⁴ "Islamabad Mandatory Vaccination and Protection of Health Workers Act", at www.senate.gov.pk/uploads/documents/1429077265_147.pdf.

¹⁰⁵ For analysis of Pakistan's education system, see Crisis Group Report N°257, *Education Reform in Pakistan*, 23 June 2014.

GPEI first started doing campaigns, using a “fixed-site strategy” in already select-ed areas such as schools or health centres, but we soon realised we were missing at least 30 per cent of our target population, so we changed our policy to door-to-door campaigns – going to every house and trying to reach every child. That led to a lot of countries becoming polio free.¹⁰⁶

He attributed failure to eradicate polio elsewhere largely to failure to deliver services to communities where there was already a “trust-deficit” toward central governments. “People start to ask, ‘when I go to the health centre, you don’t treat me but you come all the way to my house to give us these two drops – why?’”¹⁰⁷ This is true of Paki-stan, where the virus is concentrated in regions in which access to public health is marginal at best, such as FATA, some parts of KPK and Balochistan and Karachi’s slum settlements and towns, which host many FATA IDPs and where OPV refusal rates are highest.¹⁰⁸

Public health expenditure is 1 per cent of GDP.¹⁰⁹ Polio eradication is financed by grants and loans from donors such as Rotary International, the Bill and Melinda Gates Foundation, the CDC and the Japanese International Cooperation Agency (JICA). Since 2013, the government’s funding comes from a \$227 million loan from the Islamic Development Bank (IDB) on which JICA and the Gates Foundation pay interest, based on performance of a set of indicators.¹¹⁰

Children receive OPV drops as part of routine immunisation against eight diseases, but such coverage, through the Expanded Program on Immunisation (EPI) established in 1978, is insufficient to interrupt polio-virus transmission. To improve coverage and build provincial capacity to implement routine immunisation, the government plans to introduce a five-year, \$170 million National Immunisation Support Project funded by the World Bank and through a World Bank-managed multi-donor trust fund.¹¹¹ In the long run, only a strong EPI can keep Pakistan polio-free.

¹⁰⁶ Crisis Group interview, Islamabad, June 2015. By 2004, polio remained endemic in only six countries: Afghanistan, Egypt, India, Niger, Nigeria and Pakistan.

¹⁰⁷ Ibid.

¹⁰⁸ Crisis Group interviews, Karachi, June-August 2015; “The heroism of health workers”, GPEI website, 31 March 2015; “Communication update: Demystifying refusals”, op. cit.

¹⁰⁹ “Data – health expenditure, public (% of GDP)”, The World Bank website.

¹¹⁰ UNICEF and WHO receive funding from donors such as the UK’s Department for International Development (DFID), Rotary International and the Bill and Melinda Gates Foundation. “Pakistan financing”, GPEI website; Crisis Group interviews, donor representatives and senior government official, Islamabad, Geneva, July and September 2015. The \$227 million loan may be renewed after it expires at the end of 2015. Crisis Group interview, donor representative, Islamabad, July 2015; “Partners and donors”, End Polio Pakistan website; and “Activities in Pakistan: the polio eradication project”, JICA website. Formed in 1975, the Saudi Arabia-based IDB extends economic and development assistance to its 56 members.

¹¹¹ “Project information document”, World Bank, 2015, World Bank website.

V. Conclusion

With Africa closer than ever to becoming polio-free, Pakistan and Afghanistan are the last countries where polio is endemic. Many involved with eradication efforts in Pakistan are hopeful that the post-2014 overhaul of the program will eliminate polio by the end of the 2015- 2016 low season, leading to polio-free certification by 2018. Yet, the new EOC structure faces many challenges: from improving health facilities and hence preservation of the vaccine, to ensuring polio workers are given sufficient protection and support. If the eradication goal is to be met, the executive and legislature must institute and implement a robust accountability mechanism for polio workers and the local administrations that oversee immunisation drives.

Beyond technical, communication and security fixes, success in eradicating polio hinges on the state's willingness and ability to alter a troubled relationship with citizens, currently characterised by both weak public services and coercion. The government should rather partner with civil society and communities, which would go a long way toward convincing mistrustful families to vaccinate their children. Abolishing FRC and including FATA's citizens in the political, legal and administrative mainstream would promote the goal of eradicating the crippling virus, as would ending jihadi sanctuaries in which it thrives. In conflict-hit regions, children are at risk not only of polio paralysis, but also of militant violence, haphazard military operations and internal displacement. Efforts to counter violent extremism, combined with policies that prioritise the rights and needs of the most vulnerable segments of the population, would go far toward defeating polio and keeping the country's children safe.

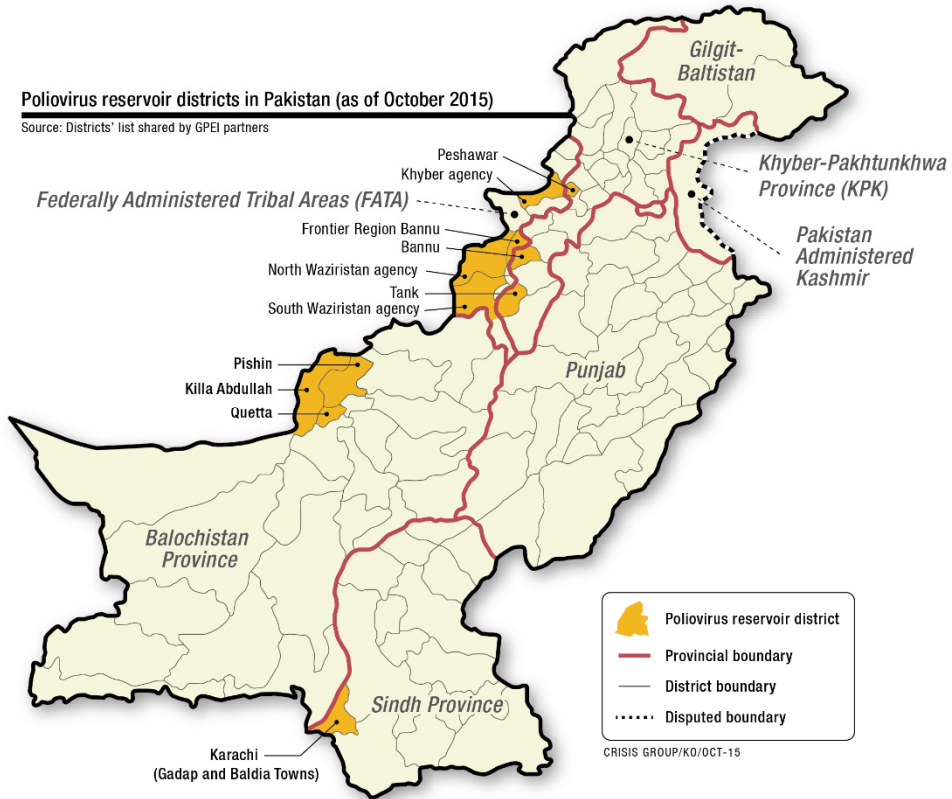
Islamabad/Brussels, 23 October 2015

Appendix A: Map of Pakistan

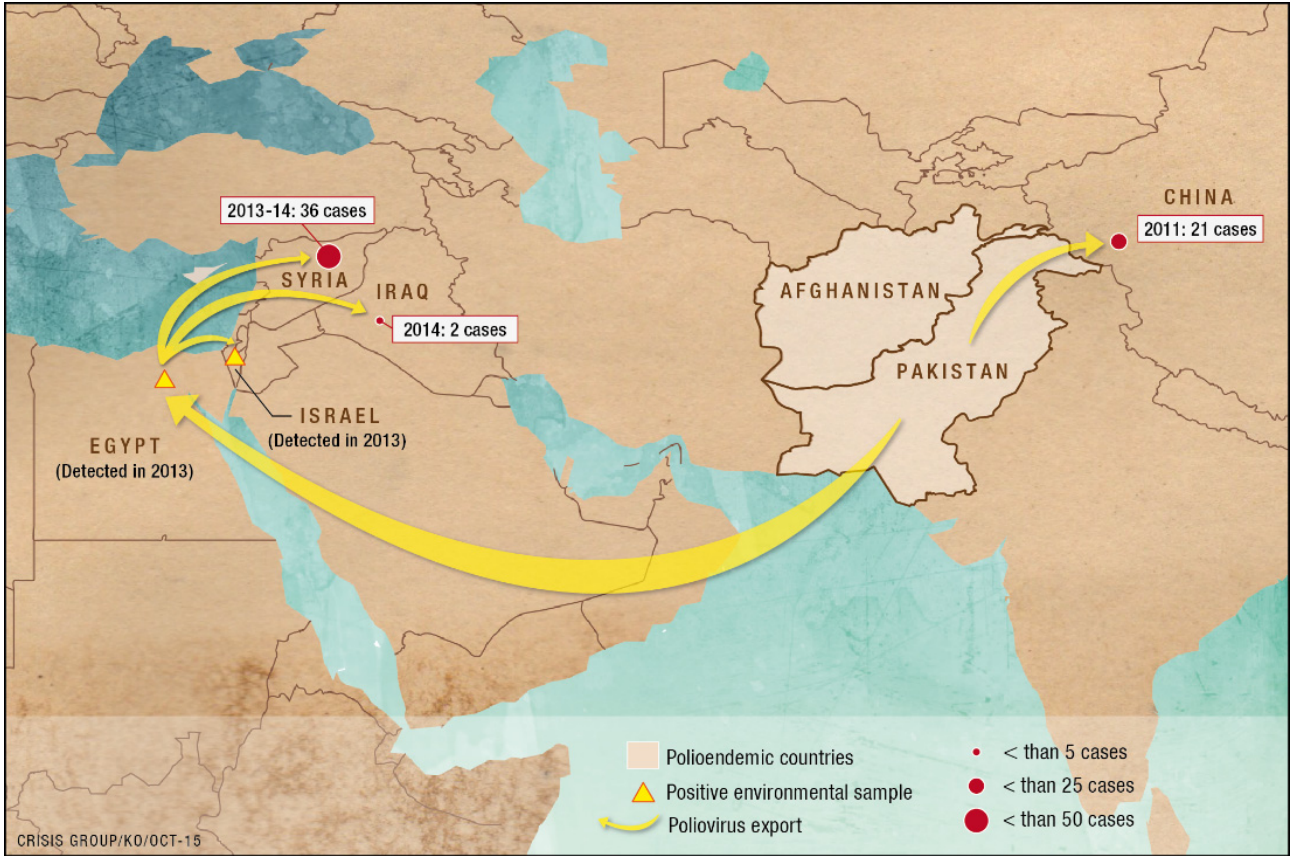


Based on UN Map No. 4181 Rev. 1 (January 2004), "North-West Frontier" has been changed to "Khyber Pakhtunkhwa".

Appendix B: Map of Pakistan's Polio-virus Reservoir Districts



Appendix C: Map of Polio's International Spread from Pakistan



Appendix D: Glossary of Terms

AFP – Acute Flaccid Paralysis surveillance, whereby any case of paralysis or muscle weakness in children under fifteen is reported and tested for polio.

CDC – Centers for Disease Control and Prevention (U.S.).

cVDPV – Circulating Vaccine-Derived Poliovirus cases occur in populations with low immunity when the “live” polio virus present in the oral vaccine (OPV) genetically mutates. Wild and cVDPV polio viruses cause the same symptoms.

DCO – District coordination officer, the senior bureaucrat in a district administration.

DFID – Department for International Development, the UK’s foreign aid agency.

EOC – Emergency Operation Centres established at the federal and provincial levels in late 2014 for all partners to operate under one roof.

FATA – Federally Administered Tribal Areas, comprising seven administrative districts or agencies and six Frontier Regions bordering on south-eastern Afghanistan.

FCR – Frontier Crimes Regulations, a draconian, colonial-era legal framework adopted in 1901 and retained after independence in 1947 to govern FATA.

FCV – Female Community Volunteers paid under the polio eradication program to immunise children in their immediate surroundings in communities where access is a challenge.

GPEI – Global Polio Eradication Initiative, launched in 1988, is implemented by national governments, the UN Children’s Fund (UNICEF), World Health Organisation (WHO), Rotary International, the U.S. Centers for Disease Control and Prevention and supported by key partners such as the Bill and Melinda Gates Foundation.

IDP – Internally displaced person.

IMB – GPEI’s Independent Monitoring Board formed in 2010 to assess the program’s progress on a quarterly basis.

IPV – Inactivated Polio Vaccine is administered through an intramuscular injection. Used in non-polio endemic countries, it was introduced into Pakistan’s routine immunisation schedule in 2015.

JICA – Japan International Cooperation Agency.

KPK – Khyber Pakhtunkhwa, formerly known as the Northwest Frontier Province (NWFP).

LHW – Lady Health Workers are women community health workers, trained to provide basic mother and child health care in their village or neighbourhood.

NEAP – National Emergency Action Plan for Polio Eradication (NEAP) established by the government every year since 2011.

NID – National Immunisation Days or SIAS (Supplementary Immunisation Activities) are polio vaccination drives that supplement routine immunisation.

OPV – Oral Polio Vaccine contains live attenuated polio virus and is administered as drops.

PML-N – Pakistan Muslim League-Nawaz, led by Prime Minister Nawaz Sharif, currently heading a majority government at the federal centre and in Punjab.

PPP – Pakistan Peoples Party, founded by Zulfikar Ali Bhutto in 1967. Since Benazir Bhutto’s December 2007 assassination, the party is headed by her widower, former President Asif Ali Zardari, and son, Bilawal Bhutto Zardari. It led the coalition government in the centre from 2008 to 2013 and is currently the largest opposition party in the National Assembly. It also heads the Sindh provincial government.

TTP – Tehreek-e-Taliban Pakistan (Taliban Movement of Pakistan), an umbrella organisation of predominantly Pashtun militant groups in FATA and KPK.

UC – Union Council, lowest tier of government.

UNICEF – UN Children’s Fund.

USAID – United States Agency for International Development.

WHA – World Health Assembly, with 194 member states, the decision-making body of the World Health Organisation (WHO).