

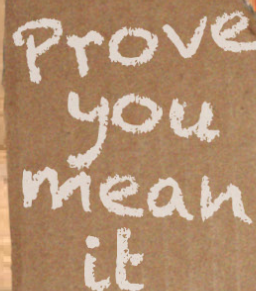
Independent Monitoring Board of the
Global Polio Eradication Initiative



Eighth Report – October 2013

THE 65TH WORLD HEALTH ASSEMBLY

**DECLARES THE COMPLETION
OF POLIO VIRUS ERADICATION
A PROGRAMMATIC EMERGENCY
FOR GLOBAL PUBLIC HEALTH**



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INDEPENDENT MONITORING BOARD OF THE GLOBAL POLIO ERADICATION INITIATIVE

October 2013

The Independent Monitoring Board provides an independent assessment of the progress being made by the Global Polio Eradication Initiative in the detection and interruption of polio transmission globally.

This eighth report follows our ninth meeting, held in London from 1 to 3 October 2013.

At our meetings, we benefit from the time and energy of many partners of the Global Polio Eradication Initiative. We value our open discussions with these many people, but the views presented here are our own. Independence remains at the heart of our role. Each of us sits on the board in a personal capacity. As always, this report presents our findings frankly, objectively, and without fear or favour.

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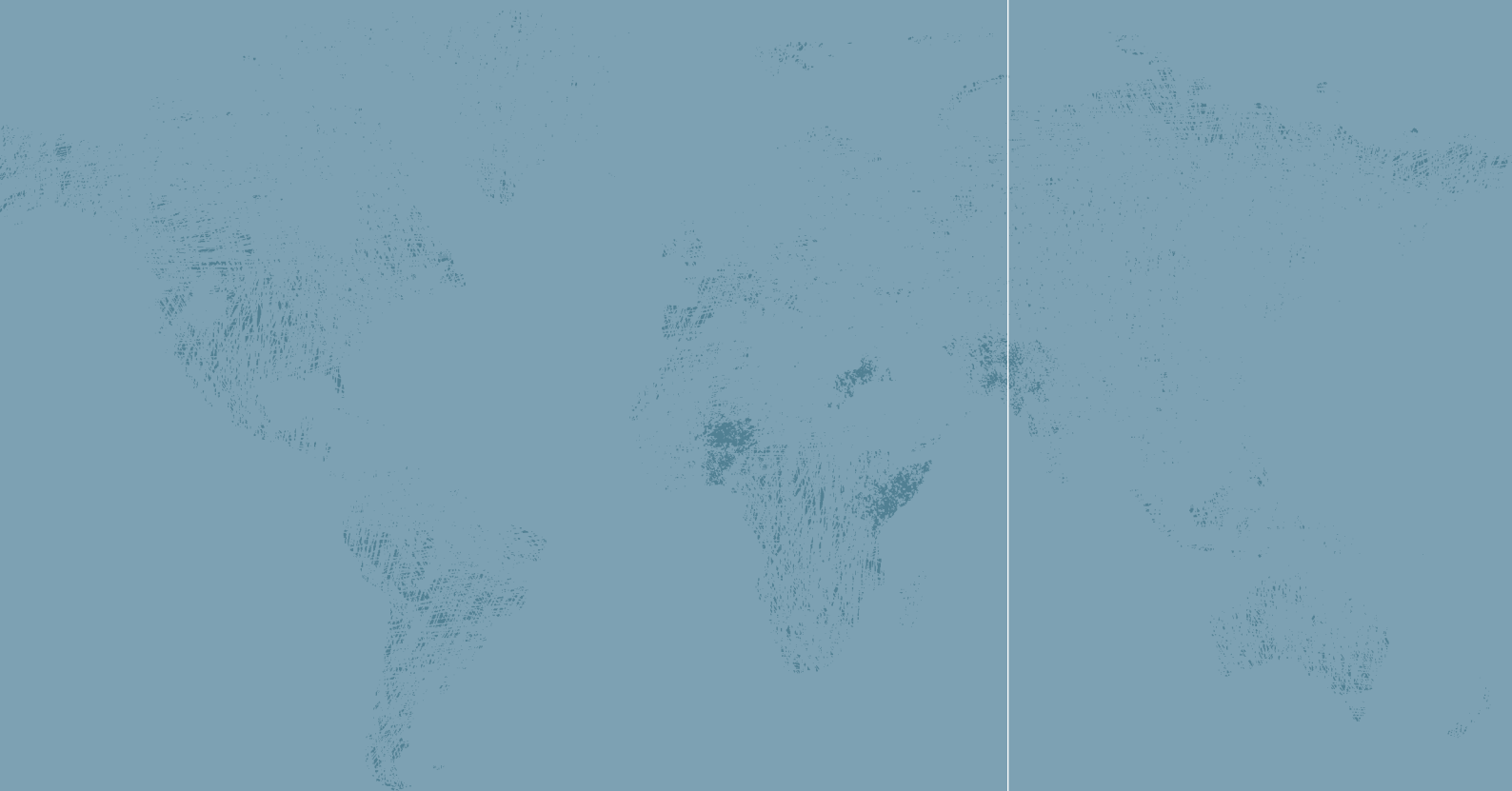
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Executive Summary

Last year, 2012, was a good year in the history of polio eradication. The virus was confined to just five countries – a record low. The global incidence of polio also hit an all-time low, with just 223 cases in the entire year (down from 650 in the previous year, and from 350,000 when the Program began in 1988).

Progress in 2013 has been far less positive.

Experience over the Program's 25-year history shows that stopping polio transmission demands excellence in three activities:

- Sustained reductions in polio circulation, and improvements in program performance, within endemic countries
- Rapidly extinguishing any outbreaks that occur
- Preventing outbreaks in countries that are clearly vulnerable to them

In 2013, the program has hit unprecedented challenges in delivering the first of these imperatives, and fallen short on both the second and third.

Endemic countries

Nigeria and Pakistan made solid improvements in vaccination campaign coverage in 2012, but the pace of progress has flattened worryingly since the start of 2013.

The programs in both countries have been beaten back by high levels of insecurity that have had a huge impact on accessibility. The loss of life of dedicated public health workers is a source of great sorrow. In addition, in Pakistan the program's access is being deliberately prevented by a Taliban ban on its activities in North and South Waziristan.

In both countries, other major and longstanding factors are also influencing program performance. Weak campaigns still allow polio to circulate in too many Local Government Areas of northern Nigeria. Performance in Kano particularly continues to disappoint. Likewise, both traditional and environmental surveillance in Pakistan reveal polio in areas where poor campaign management is at the heart of substandard performance. Enduring weaknesses in routine immunisation systems compound the challenge of adequately protecting children against polio.

Pakistan's new government has come to the problem of polio eradication afresh and has signaled its strong commitment. But time has been lost during the governmental transition. The need to achieve access in North and South Waziristan could not be more urgent – polio will not be eradicated without it. At the same time, the hard and unremitting task of tackling substandard campaigns must continue. Pakistan is not on track to interrupt transmission before the end of 2014.

Time is of the essence in Nigeria, where fast-approaching elections threaten to disrupt the program as they have done in the past. It is vital that Nigeria shows significantly more progress over the next six months.

In contrast, news from Afghanistan is more promising. Despite its insecurity, southern Afghanistan has not seen a case of wild polio since November 2012. But nothing is simple in the quest to eradicate polio. In place of the south, Afghanistan now has established polio transmission in the east. The attitude to polio in Afghanistan is important. Some have expressed the view that eliminating polio from the south should be a cause for celebration as "job done". This is dangerous thinking. Southern Afghanistan is a complex, difficult area; the East poses insecurity challenges; and the Southeast is vulnerable to infection. We congratulate the progress made, but there can be no let up in the pace of improvement and the impending elections must not derail progress.

Horn of Africa

In May 2013, the longstanding neglect of polio immunity in the Horn of Africa came home to roost. Virus was detected at first in Somalia, and soon afterwards in Kenya and Ethiopia. Vaccination campaigns were quickly conducted in response, though with major quality gaps. The greatest single concern is that virus continues to circulate amongst the one million children of Somalia who al-Shabab will not allow the program to vaccinate. Outside of the immediately affected areas, the response has lacked urgency, and coordination across the Horn has not been as it should have. Polio in the Horn of Africa needs to be treated as a public health emergency, with commensurate high-level political commitment, unambiguous and coordinated program leadership, plentiful support to the affected countries, and thoroughness of action.

Outbreaks waiting to happen

The outbreak in the Horn of Africa shows up the program's surprising disregard for the value of preventing outbreaks. The IMB's reports have repeatedly named polio-free countries on the 'at-risk' list. Technical Advisory Groups have recommended widespread immunisation activities, which in some crucial areas (such as Kenya and Uganda) have been ignored. The IMB was dismayed to discover that vaccination coverage in Somalia has been poor even among the children fully accessible to the program, one-fifth of whom had a 'zero-dose' vaccination history when the outbreak took hold. In failing to address a plethora of red flags, it is almost as if the program has operated in the belief that it would "remain lucky".

The countries on the 'Red List' of highest risk lie across the Horn of Africa and far beyond: Yemen, Central African Republic, Ukraine, Uganda, Syria, Lebanon, Jordan, South Sudan, Sudan, Iraq, Mali, Djibouti and Eritrea. Dealing with these is the cost of completing eradication properly, and avoiding the 'one step forward-two steps back' effect that huge outbreaks create.

The novel situation in Israel

In May 2013, polio was found in environmental samples across much of Israel. The virus originated in Pakistan and travelled to Israel via Egypt, possibly in the Bedouin community. Subsequent analysis showed that it has been circulating since February 2013, and circulation continues. The Israeli population is largely protected against polio paralysis through high levels of IPV vaccine coverage (use of OPV was phased out years ago). The risk to surrounding countries with poorer coverage is significant and has been worsened by the delays in initiating OPV campaigns in Israel.

This novel and unexpected occurrence has implications for all countries comforting themselves that IPV has secured for them a polio-free future.

Insecurity, targeted violence and bans

Just as a step-change in improved campaign performance began to place the global program on a trajectory towards eradication, the threefold challenge of insecurity, targeted violence and access bans has risen to prominence.

The program has past experience in working through insecurity in a low-key and successful way. But the intensity and nature of today's challenges is unprecedented. Polio workers have been killed, not as a result of being in the wrong place at the wrong time, but directly targeted because of the work that they are doing. Powerful figures have specifically banned the program from operating, leaving two million children unvaccinated.

The governments of the countries concerned are the prime movers in securing access for vaccination teams and protecting these teams, even in the most hostile circumstances. They know the terrain, the power bases, and the prospects for securing short- and long-term agreements. However, there are steps that can be taken in the field of international diplomacy and the program needs to develop its expertise further in this arena – by boosting its internal expertise, and by working with experts elsewhere in the United Nations system, the International Committee of the Red Cross, and in member states.

Previous experience will not be sufficient to meet the current challenges, but it offers important lessons: offering more than polio drops and engaging communities to create demand can truly help; mitigation measures such as transit vaccination posts are crucial; and the program needs to do everything possible to maintain its neutrality. Sadly these challenges are now the most daunting barrier to eradication, and it will need the resolve of affected governments, partners, and the wider global community to address them, if transmission is going to be stopped.

Management and oversight of the global program

Well-functioning organisations have a management structure that meets two key requirements. First, they have a clear strategic and operational delivery structure that

enables the organisation to achieve its goals in an efficient and effective manner. Yet a flip chart drawing of the program's delivery structure is bewildering in the extreme.

Second, they have an oversight structure that allows those with a valid stake in the organisation to gain sufficient assurance, have sufficient voice, and lend their support to its work. The Global Polio Eradication Initiative is falling short on this count too. Somewhat incredibly, few involved in the program can give a clear account of how decisions are made, where they are made, and who makes them. This in itself should mandate fundamental reform of the program's management. Some would say that there is no central board on which to place a basic responsibility of governance.

If a billion dollar global business missed its clear major goal several times, it would be inconceivable that it would not revisit and revise its organisational and decision-making structure.

We welcome the Polio Oversight Board's wish to provide leadership to ameliorate these governance and delivery problems. The IMB firmly reiterates its view that the global program remains seriously flawed whilst the organisational status quo prevails.

Communications and social mobilisation

The main theme of the May 2013 IMB report was that excellence in social mobilisation and communications is mission-critical. The response to our report, which highlighted the relatively weak past performance in this area, has been encouraging. However, the IMB is still not satisfied that the program has embraced the concept that communication is everybody's business. With UNICEF's social mobilisation network now comprising 19,000 individuals, achieving operational excellence is key. General principles and good practice are important, but the lessons from the front line are that solutions often need to be very context-specific to small localities. A skilled local mobiliser who uses her creativity to persuade a reluctant mother that the anti-vaccine propaganda that she has been subjected to is not in the interests of her child is worth her weight in gold.

Insecurity, targeted violence and bans; communications and social mobilisation; management and oversight of the global program – these are make or break issues for global polio eradication.

A policy muddle: IPV to help interrupt transmission?

The final report chapter returns to a recommendation of our May 2013 report that has not been properly addressed. The program plans, in 2015, to introduce the injectable Inactivated Polio Vaccine (IPV) to the polio-affected countries (and 130 others) as part of its endgame strategy. The question has been asked – why not bring this plan forward in the polio-affected countries, to gain the additional benefit of it helping to interrupt transmission? Our May 2013 report examined this issue, and highlighted that discussion about this question has been circular for too long. We did not

recommend that IPV should be introduced, or that it should not. We recommended that the program should come to a clear answer on the questions of whether and how it should be introduced. The program's response has been muddled and incomplete. We revisit the issue and emphasise the need for a clear answer.

Recommendations

As in previous reports, the IMB makes a series of recommendations aimed at strengthening the program at global and country level. These flow from our analysis of the extent to which the program is on course to interrupt transmission of polio by the end of 2014, as it pledged to do. These cover areas where the IMB has previously recommended action but there has been no satisfactory response, as well as new areas.

Conclusion

Unprecedented challenges loom over the polio eradication program. There is shocking violence to which no public health program should ever be subjected. Bans prevent the program from vaccinating two million children against polio in Pakistan and Somalia. The program has dealt with insecurity before (and continues to do so) but these are different phenomena. All who support the eradication of the second ever disease for humankind should have no greater priority than seeking to resolve them.

The program has far from perfect control in such circumstances. Whilst we are sympathetic to the challenge that this creates, it is more important than ever that the program's performance be as eradication-ready – as worthy of a global public health emergency – as it can be in the many aspects that are within its control.

There are too many instances in which this is not the case. The performance issues to be addressed are illustrated by (but not limited to) the fact that the Horn of Africa was not better protected against an outbreak and that too many other countries remain vulnerable. They are illustrated too by the response in the Horn of Africa, which could not be described as a robust response to a public health emergency of global health importance. It is also important to realise that too many suboptimal campaigns continue in each of Afghanistan, Nigeria and Pakistan, even in areas where insecurity is not a major feature.

As the program enters what is supposed to be the last low season in which polio circulates, we ask ourselves (as should all within the program): is this a program that is eradication-ready? Does what we are seeing really look like a programmatic emergency for global public health? Is the leadership and chain of command properly aligned to the challenges of today? This report identifies too many ways in which this is not the case.

The goal of stopping polio transmission by the end of 2014 now stands at serious risk. This situation must be turned round with the greatest possible urgency.

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Introduction

The Independent Monitoring Board (IMB) assesses the progress being made towards detecting and interrupting all poliovirus transmission globally by the end of 2014. This is the first objective of the Global Polio Eradication Initiative's (GPEI) 2013-18 Strategic Plan.

At its meeting in October 2013, the IMB met representatives of the endemic countries (Afghanistan, Nigeria, Pakistan), as well as those from countries suffering major outbreaks (Somalia, Kenya). Representatives from Israel were also called to the meeting. Those from Ethiopia and West Bank and Gaza Strip were unable to attend. The IMB will be following up this last group.

The IMB watches closely three broad areas of the GPEI's performance:

- Whether there are sustained reductions in polio circulation, and improvements in program performance, in the three polio-endemic countries (Afghanistan, Nigeria and Pakistan)
- Whether there are outbreaks of polio and, when they do occur, if they are rapidly extinguished (the program's standard is to do so within six months)
- The extent to which outbreaks are prevented in countries vulnerable to polio

In 2013, the program has hit unprecedented challenges in delivering the first of these imperatives, and also fallen short on both the second and third.

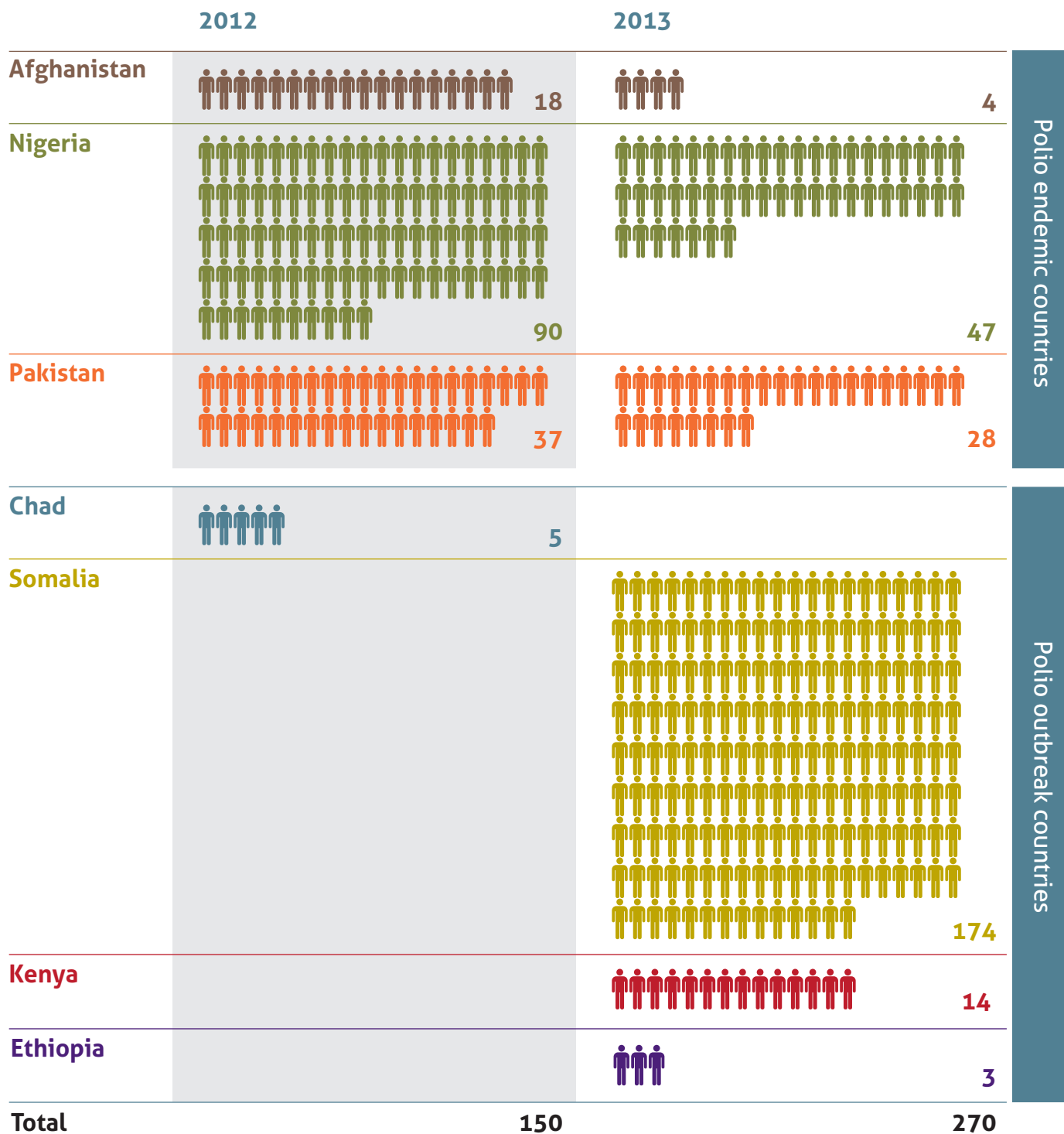
The report also addresses three topics of crucial importance across the global program:

- Insecurity, targeted violence, and impositions of vaccination campaign bans, the nature and intensity of which are unprecedented – and which now represent the single most difficult barrier to stopping transmission globally;
- Communications and social mobilisation – the major focus of the IMB's previous report, and an area in which performance still needs to be sharpened;
- Management and oversight of the global program at its headquarters (and regional office) level, which are creating impediments to the chances of stopping polio transmission that need urgent action.

Before concluding with an overall assessment of progress and with recommendations, the report revisits the extent to which the program has responded to its previous recommendation on the potential use of the injectable Inactivated Polio Vaccine (IPV) in interrupting polio transmission.

2013: endemic cases down, but major Horn of Africa outbreak puts global total up

Wild polio cases: Jan-Sept

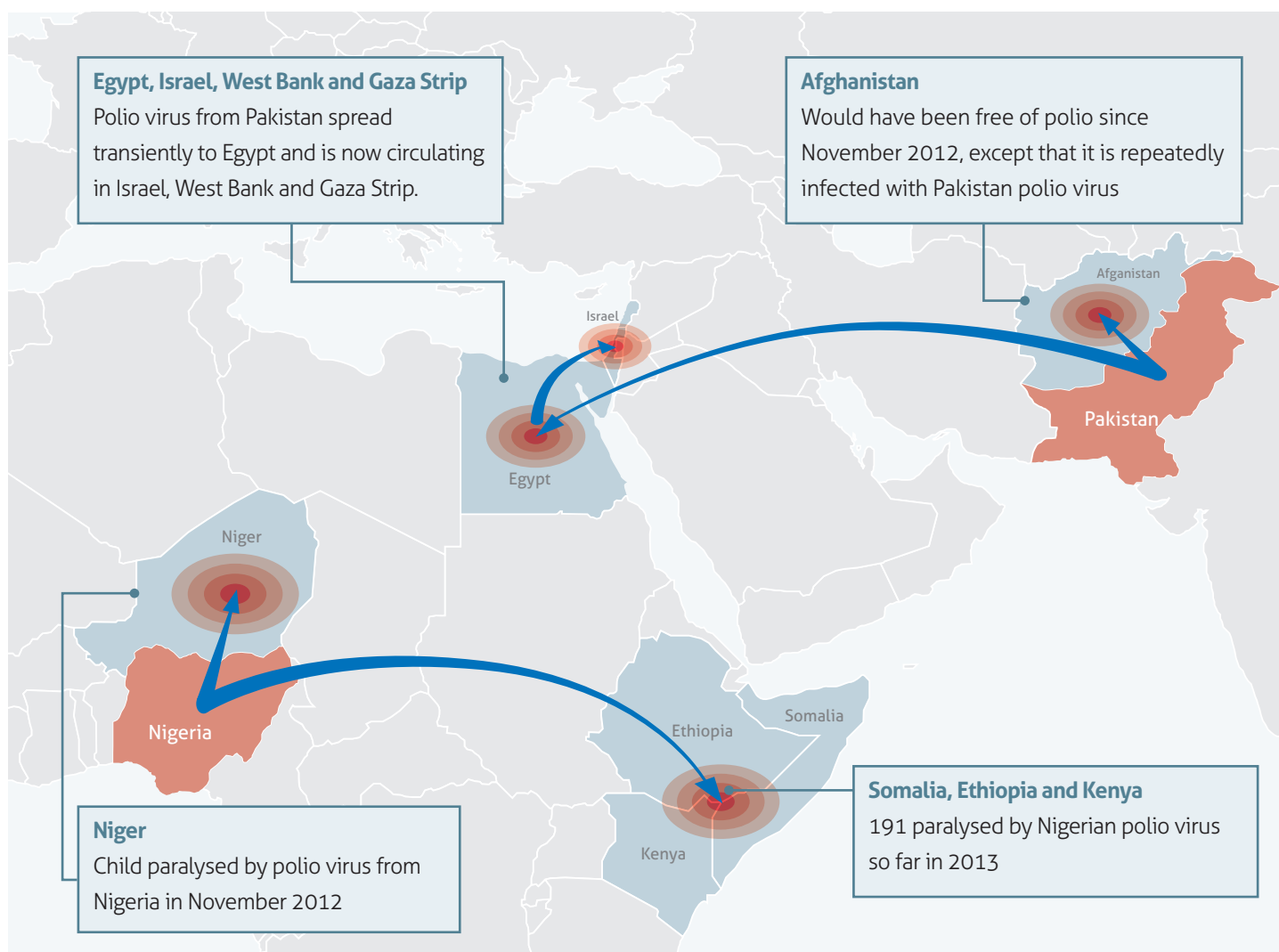


There is some good news for the global program to celebrate...

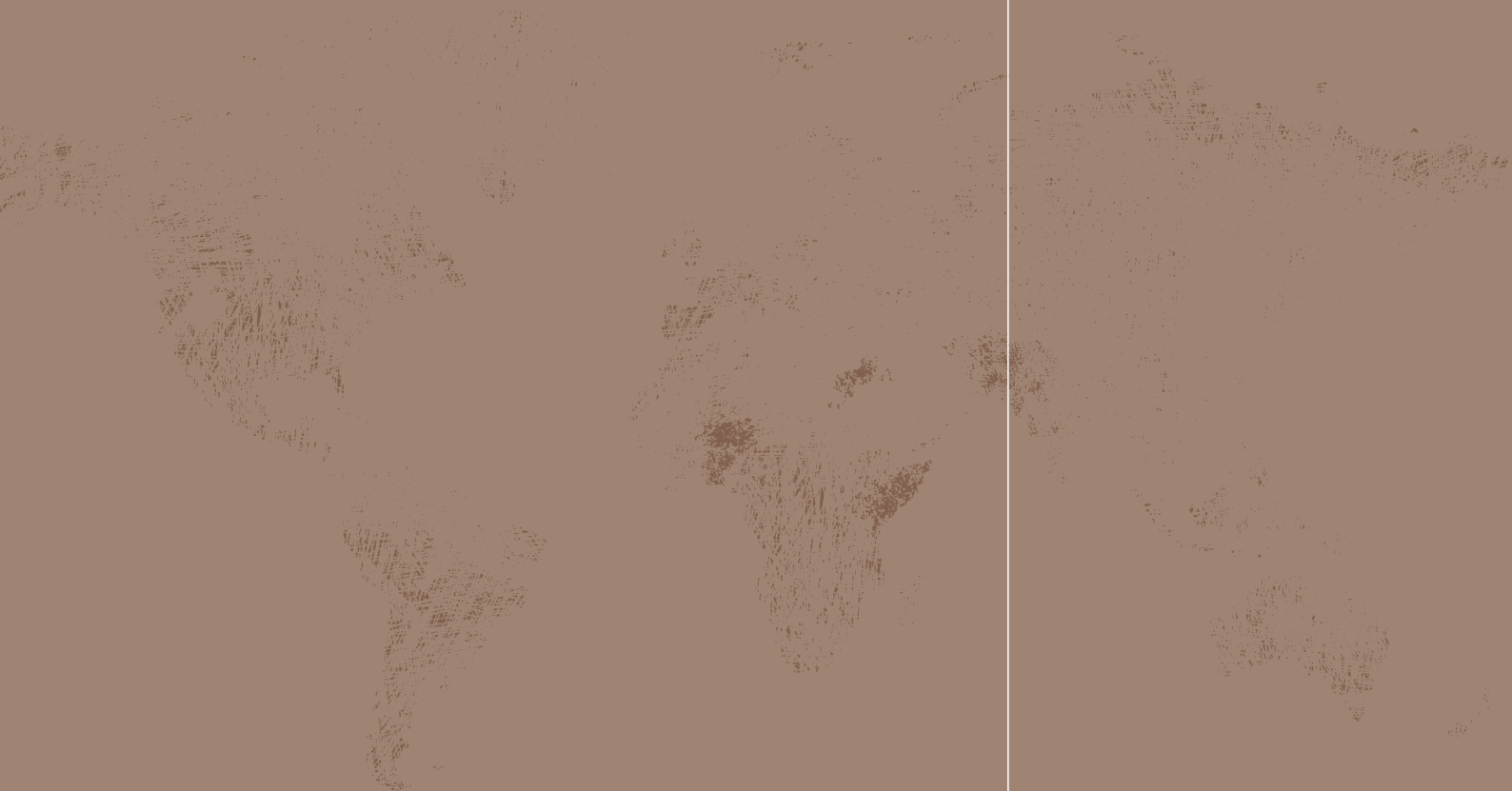
- 14 JUNE 2013** ONE YEAR FREE OF POLIO IN CHAD
- 10 NOVEMBER 2013** ONE YEAR FREE OF TYPE 3 WILD POLIO VIRUS GLOBALLY
- 19 NOVEMBER 2013** ONE YEAR FREE OF WILD POLIO IN SOUTHERN AFGHANISTAN

...but Nigeria and Pakistan continue to fuel the spread of type 1 wild polio virus

Exportations of polio virus from its endemic reservoirs (2012-13)



AFGHANISTAN



At a glance

Afghanistan

For years, the polio virus was assured of sanctuary in Hilmand and Kandahar. In November 2013, these southern provinces will reach the laudable landmark of a year apparently rid of wild polio virus. Whilst not an absolute victory over polio in Afghanistan, this demonstrates that the program has made strong progress. More importantly, it now offers a clear opportunity to stop polio transmission in Afghanistan forever.

There is no mystery about polio transmission in Kandahar and Hilmand. It continued whilst vaccinators were missing too many children – because of insecurity and inadequately managed campaigns. It stopped when the program's dedicated and skillful work significantly reduced the number of children being missed. There is clear objective evidence that immunity has improved, quarter by quarter. This happened as one initiative after another led to fewer and fewer children being missed in vaccination campaigns. The initiatives included extensive access negotiation (helped, in particular, by the International Committee of the Red Cross); district management teams; permanent polio teams; establishment of polio control rooms in Kabul and the highest risk provinces; transit, nomad and border teams; and a revisit strategy for absent children.

The south is not yet safe from polio. Circulating vaccine-derived poliovirus (cVDPV) demonstrates that immunity is still suboptimal. There are still problems with basic campaign management, which leave children vulnerable in the event of polio being re-imported. The IMB welcomes the use of environmental surveillance in Kandahar and strongly encourages that it be expanded, so that any re-importation can quickly be spotted and acted upon. Any sense of 'job done' in the south would be foolhardy – the situation here remains complex and challenging, and re-importation is a major risk.

The IMB has previously set out the lessons from India's success in stopping polio. Similarly, Afghanistan has much to teach. The program has taken a careful neutral stance amidst complex insecurity and politics. It has made the idea that 'stopping polio is everybody's business' more than just a strap line, but a guiding operational principle. There is real demand for polio drops, and communities have played a significant part in ensuring that polio vaccinators can access their children. There has been a steady stream of useful innovations. There is strong cross-border collaboration with Pakistan – not just through border vaccination posts and simultaneous campaigns, but also in the sharing of information and ideas.

Whilst polio has been absent from the south, it is now making its presence felt in the east of the country. For many years, children in the eastern provinces have suffered when virus is brought across the border from Pakistan. This year, two strains of Pakistan polio virus have caused cases in eastern Afghanistan. And whereas such importations have previously caused just isolated cases, in 2013 there has been sustained transmission of one of the strains. This clearly illustrates weakness in

Strong progress in Afghanistan

Success in the South reinforces the importance of excellent campaign management, achieved through multiple initiatives

No room for complacency – the South is not yet safe from polio

Afghanistan offers many lessons, including real skill in avoiding polio vaccine become politicised

Southern success marred by eastern establishment of transmission

At a glance

vaccination coverage. Inaccessibility in Kunar is of particular concern. The security situation in the east is more complex than the south because of the multiple anti-government elements that are heavily influenced by Pakistani militants. The program should anticipate anti-polio eradication propaganda of the type seen in Pakistan and plan how to counteract it. The southeast also needs attention – vulnerable because it adjoins North and South Waziristan.

The IMB is impressed by the Afghanistan program's clarity about what its remaining problems are, and its strategy to address them. This clarity is accompanied by zeal to see the job through. The program in Afghanistan benefits from the high-level leadership of both the Health Minister and the Prime Minister's Focal Person for Polio Eradication. That said, there is some ambiguity about how responsibilities are split between these two individuals and offices, which the program should seek to resolve.

Afghanistan is clearly moving in the right direction, and is on track to stop polio transmission by the end of 2014. But it has not reached the end of the road. Any complacency at this stage would be dangerous. With the March 2014 elections fast approaching, it is vital that there are solid plans to prevent electoral disruption from giving polio a chance to gain a further foothold.

Ambiguity and potential confusion of national leadership arrangements

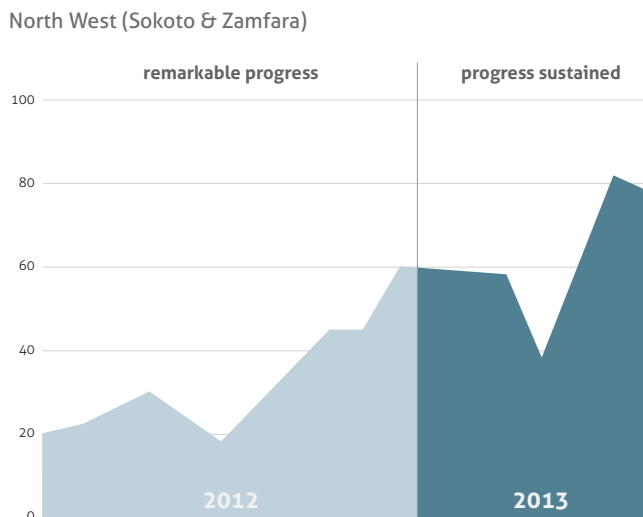
Watch out for the disruptive effect of March 2014 elections

NIGERIA

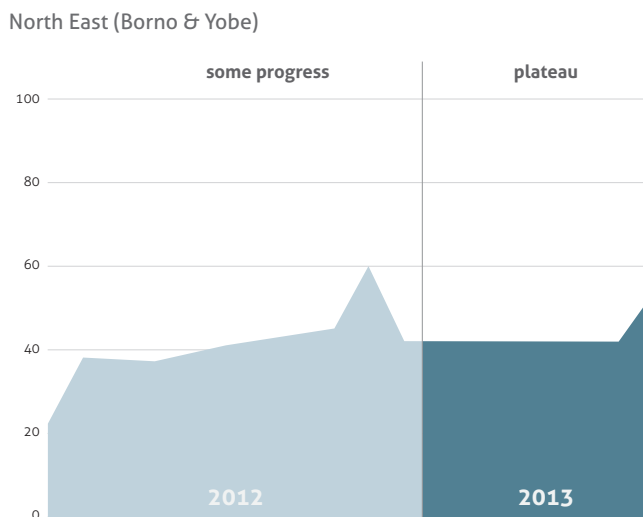
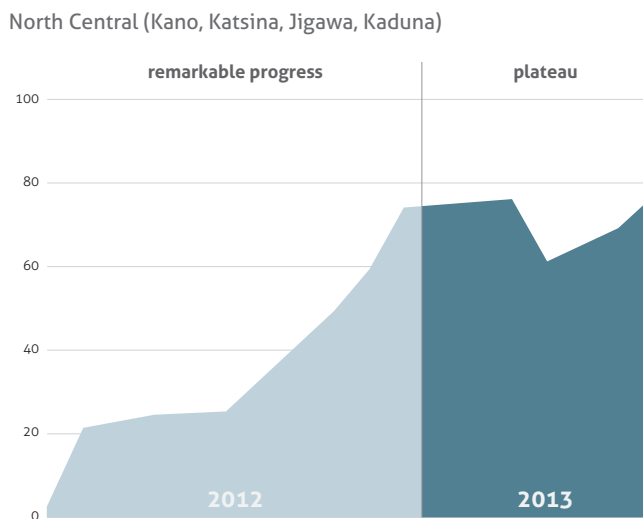


Percentage of Local Government Areas achieving adequate coverage (80%) in polio immunisation campaigns

The progress made in 2012 has continued in North West Nigeria...



...but not in the North East or North Central areas



At a glance

Nigeria

In 2012, the polio virus was put under real pressure in Nigeria. The program implemented a personnel surge and strengthened accountability standards. It established Emergency Operations Centers, noticeably increasing the capacity to analyse and act on performance data. It improved thousands of microplans, reconstituted vaccination teams, and brought nomads onto the map. The country's leadership made local government leaders plainly aware of what they needed to do. As they rose to the challenge, there were substantial improvements in the coverage of vaccination campaigns from one month to the next. Sure enough, the immunity boost achieved in 2012 has paid dividends so far in 2013, with a halving of case numbers, and a five-fold reduction in the number of viral strains in circulation compared to the same period last year.

With the dawn of 2013, the pace of these programmatic improvements flattened off considerably. In the early months of the year, campaign coverage actually worsened again. This was largely because of increasing insecurity, which affected the polio program profoundly. Campaigns were impeded across the north, particularly in Borno, Yobe and (to a lesser extent) Kano – and insecurity remains a substantial challenge.

In recent months, there has been some evidence to suggest that vaccination coverage is climbing again – though the trajectory of ascent is nothing in comparison to that achieved in 2012, and the pattern is inconsistent. Nigeria now needs to work out how to accelerate performance improvements back towards the 2012 pace. It is imperative that this should happen quickly. Preparations for the 2015 elections will begin in mid-2014, distracting the very politicians and officials whose time and energy is key to stopping polio transmission in Nigeria.

As always, the picture is far from uniform across the north. In 2013, the northwest states of Sokoto and Zamfara have managed to build on gains achieved in 2012, and have been rewarded with nine months free of polio (and counting). Meanwhile Kano, the historical epicenter of polio in Nigeria, continues to struggle. The IMB was pleased to see emerging data from the September vaccination campaigns, suggesting an increase in Kano's coverage levels. But the scale of this improvement was not great, and it comes on a background of poor performance. This really must be resolved. It is not entirely clear why performance in Kano has been so resistant to the quality improvement initiatives that have worked elsewhere.

Together with Kano, Borno and Yobe stand out as the states of greatest concern. They are affected by insecurity, and resolving this would be a major step towards stopping polio transmission.

2012 was a good year for Nigeria, with sharp rises in campaign coverage

Programmatic improvements slowed in the first part of 2013; insecurity was a big factor

Recent signs of improvement being restored – but slowly

Kano – the longstanding epicenter of polio in Nigeria – must be at the forefront of everyone's thinking

At a glance

State-level analysis of program performance is helpful but it is generally more useful to examine data at the Local Government Area (LGA) level. This shows that a hard core of LGAs continues to miss far too many children during vaccination campaigns. Some of these have security challenges, but in many the problem is more one of poor management.

Nigeria may now be in the final phase of its struggle against polio, but this is far from certain. It will only be the case if the program's work is not just top-notch, but also highly targeted. There needs to be a clear understanding of the problems in each of the individual key LGAs, and tailored solutions to match. The IMB was heartened to see evidence that the program's targeting of specific LGAs has seemed to work well, with jumps in campaign coverage evident in some places. At its meeting, the IMB was concerned to hear somewhat general descriptions and analyses of the issues and plans. The problem may simply be in how the program was presented to us, or it may represent a shortcoming in the approach that is being taken. This is no time for generalities.

The program is implementing a range of plausible solutions. Management support teams are being deployed to LGAs where quality remains a problem. The National STOP program has been expanded, providing additional capacity at the LGA level. Staggering of campaigns allows the program to focus more attention on the LGAs of greatest concern, starting the campaigns there several days early. An accompanying range of solutions is being employed in insecure areas: permanent health teams; health camps; and the 'hit and run' approach of using Short Interval Additional Doses to maximise immunity benefit during windows of accessibility.

These represent a sizeable package of interventions. The IMB is concerned, however, that both the issues and the responses have been on the table for many months now, and the improvements we are seeing are far from overwhelming.

The program has pursued a policy of conducting extremely frequent vaccination campaigns. A high frequency of suboptimal campaigns is only justified if there is real evidence of improvement from one campaign to the next. There needs to be concrete evidence that this is the case. If not, an alternative approach involving fewer campaigns (with more time spent on planning and preparation to improve quality) may be preferable.

Against the clock, the next six months represent a real test for the polio program in Nigeria. It has strong leadership, better data than ever before, and a range of credible interventions. Its approach needs to be LGA-specific (or even more local). Everything possible must be done to accelerate the process of studying problems, implementing solutions, and then refining the approach based on what works.

With the election approaching, the program also needs to capitalise on whatever

Poor management must be rooted out relentlessly

The clear focus and commitment to resolving poor performance in specific LGAs must continue

Credible context-specific innovations are in play – but without an overwhelming effect yet

The next six months is make-or-break time for Nigeria

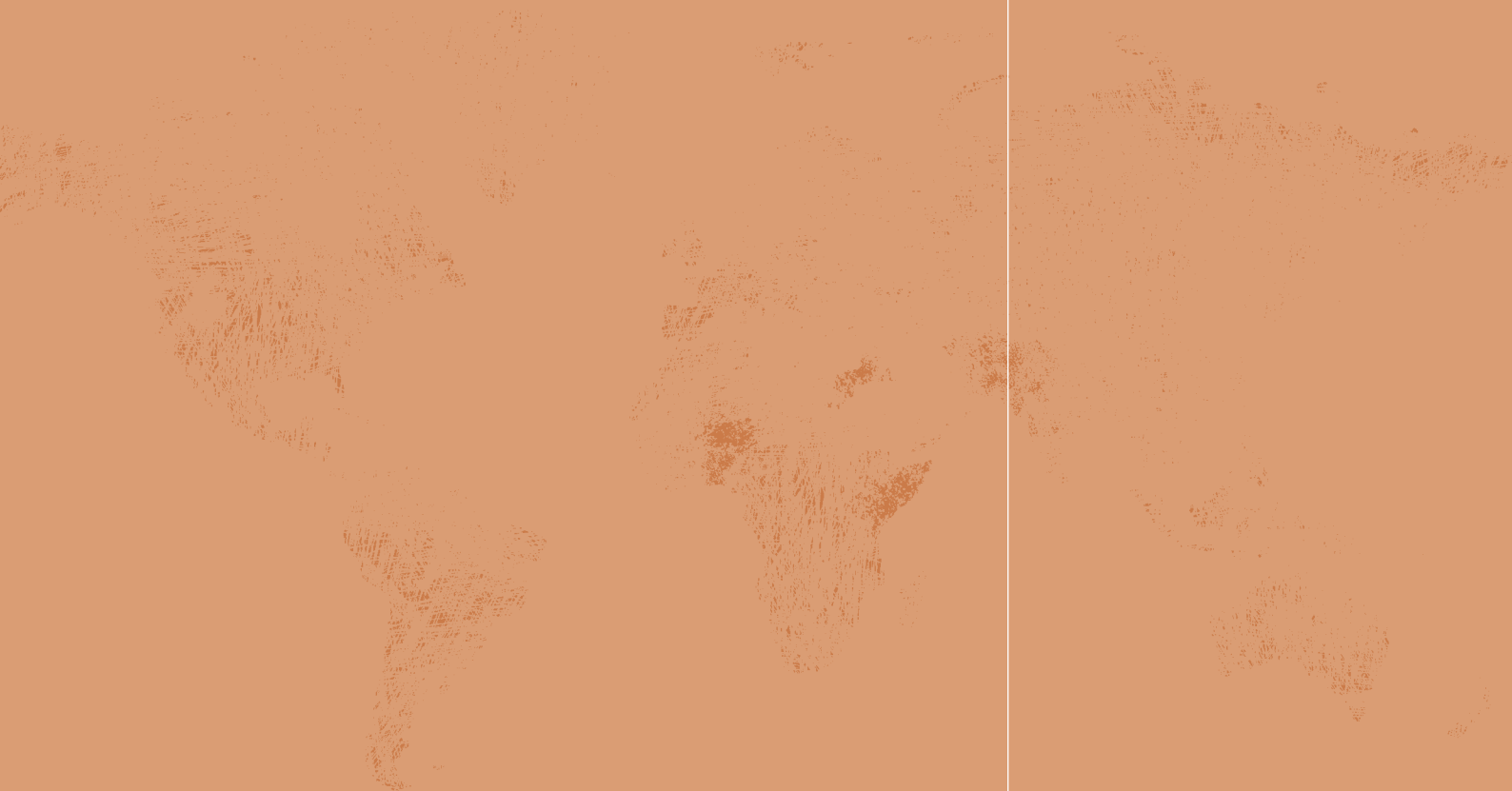
At a glance

advocacy opportunities may exist, and to have tight plans to mitigate the disruption.

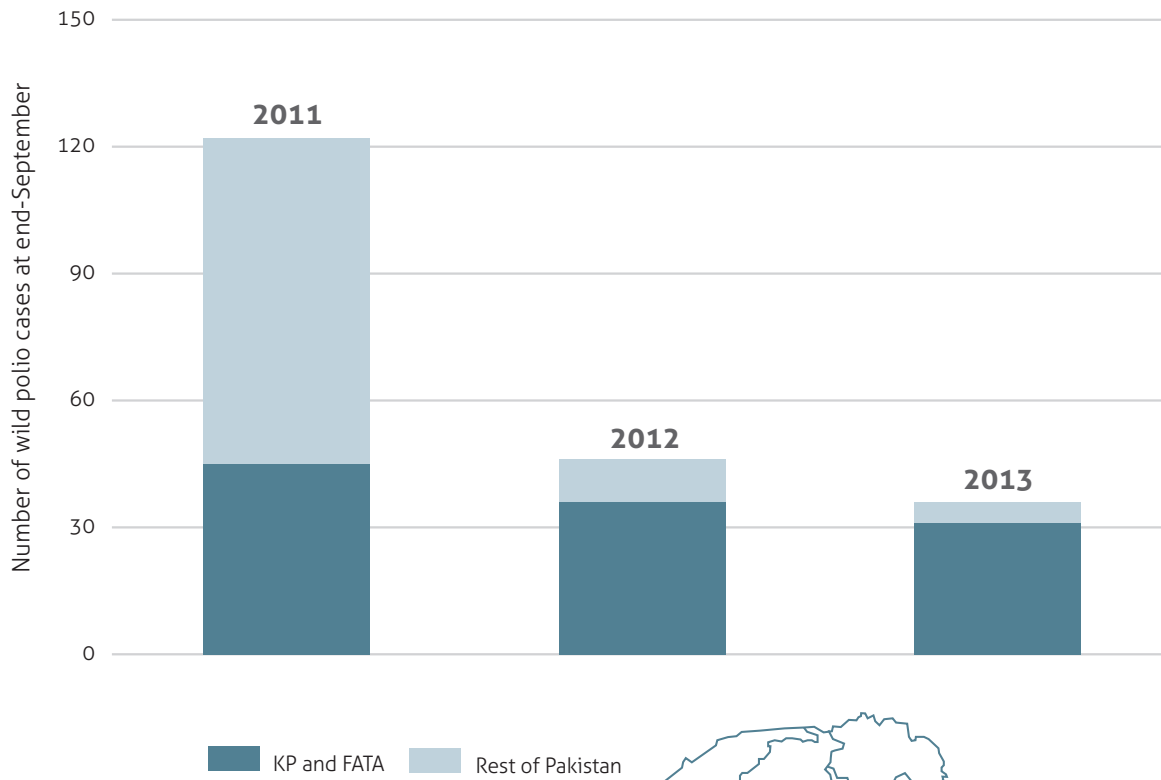
Work in 2012 secured clear gains and provided a strong base of performance to build from. But time before the next election's disruption is ticking away all too fast. So far in 2013, the program's progress has been weaker than last year. Breakthrough on the remaining issues is needed urgently.

WE RECOMMEND THAT THE NIGERIAN EXPERT REVIEW COMMITTEE ENSURES THAT DETAILED AREA-SPECIFIC PLANS ARE IN PLACE TO OVERCOME THE CHALLENGES IN EACH OF THE LOCAL GOVERNMENT AREAS (LGAs) THAT NEED PRIORITY FOCUS

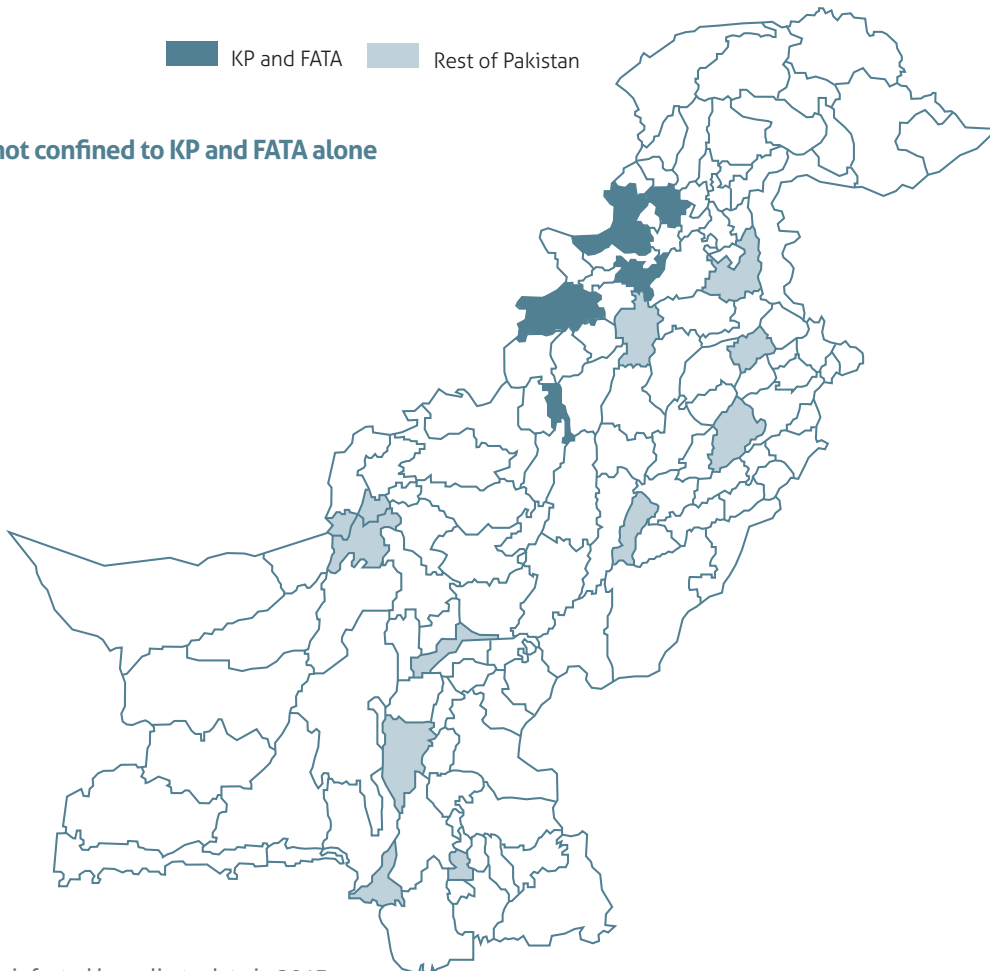
PAKISTAN



The hard core: Progress in Pakistan has hit a major block in KP and FATA



but polio is not confined to KP and FATA alone



Districts infected by polio to date in 2013

At a glance

Pakistan

In October 2011, the IMB termed Pakistan's polio program 'deeply dysfunctional'. It was riddled with disinterested vaccinators (many of them underage), supervised by some individuals whose motivation was not in line with the goal of polio eradication. The machinery of government had not gripped these debilitating problems. As a result, tens of thousands of children were not being vaccinated against the polio virus, which ran amok throughout the country.

The 2012 National Emergency Action Plan sought to resolve this. It placed influential District Commissioners in the driving seat of vaccination campaigns, and established committees at Union Council, district, provincial, and national level to ensure accountability. At the top of this chain sat the Prime Minister's Task Force. His Focal Person for Polio Eradication energetically toured the country, holding District Commissioners robustly to account. Vaccination teams were reconstituted. A direct disbursement mechanism was established, to ensure that vaccinators were paid on time and in full.

During 2012, progress soared. By October of that year, the proportion of vaccination campaigns achieving adequate coverage had doubled from 40% to 80% in the space of 12 months. It was no surprise to see case numbers tumble down in response – from 198 in 2011 to 58 in 2012.

But as campaign quality was finally being wrenched under control, different and grave impediments to wiping polio from Pakistan have come into prominence. Since December 2012, Pakistan's polio program has come under direct attack. In all, 22 people have now been killed while carrying out polio eradication duties. This violence has been worst in Karachi and Khyber Pakhtunkhwa. This is an unprecedented and immensely sad phenomenon.

Since June 2012, a different phenomenon – also unprecedented – has been at play in Pakistan too. Taliban commanders have banned polio vaccination activities in North and South Waziristan, within the Federally Administered Tribal Areas (FATA). At the time the ban was imposed, there was no virus circulating in this area. But virus has got in, and is now causing extensive harm – 27 have been paralysed in North Waziristan so far this year. Nowhere in any of the endemic countries has more polio than North Waziristan.

Finally under the banner of 'insecurity and inaccessibility', in Bara, Khyber agency, active fighting has impeded vaccinators' access. Despite this banner being often used to summarise the complex issues described here, each issue is distinct and demands a distinct response. All require absolute political will, within Pakistan and beyond.

The autumn of 2011 was a low point in the Pakistan program's performance

An impressive step up in performance followed in 2012

Just as campaign quality improved, security deteriorated

Deaths amongst polio workers – a source of great sorrow to the public health world

National and international efforts must prioritise measures to provide secure access for campaign staff

At a glance

The IMB welcomes the incoming Health Minister's clearly expressed view that these problems fall within the borders of Pakistan and are for the government to solve, and her determination to do so. She has repeatedly vowed that Pakistan is taking ownership of polio eradication. International help will also be required, and the recent pledge of support from the United Arab Emirates is most welcome. There are tough political issues involved, which reach far beyond polio.

The polio program is a life-saving humanitarian endeavour. It is vitally important that the ban in North and South Waziristan somehow be resolved, otherwise polio will not be eradicated from Pakistan. The politicization of the polio program creates the most intractable of all barriers to eradication.

When violence came to the fore in late 2012, campaign quality was on a steep trajectory of improvement, but had not yet reached peak performance. Virus continued to circulate in Punjab, for example, where campaign management, not insecurity, remains the primary issue. Environmental surveillance is proving very useful in Pakistan, and diminishes any idea that polio is tightly confined to a few small parts of the country. And even in places where the virus is not currently found, there are problems. In Balochistan, campaign coverage is far better than it was in 2011, and the virus has gone as a result. But campaign coverage is certainly not yet strong enough to say that the virus will not take hold once more.

In recent months, the drive to improve campaign quality has not just been impeded by security concerns. Following elections in May 2013, the caretaker government dismantled the Prime Minister's Polio Monitoring Cell, and national level oversight of the program drifted out of control. The new incumbent government is fixing this problem, but vital time has been lost. The new oversight arrangements need to be completed quickly, including appointing a Prime Minister's Focal Person for polio eradication, if this is the intention.

The phenomenal challenge for the government now is to address the localised security and access issues that otherwise doom Pakistan's chances of stopping polio transmission, whilst also continuing to improve the quality of campaign coverage nationwide. We welcome the growing political consensus in support of eradication, but the test is whether tangible progress can now be achieved.

Time is not on Pakistan's side. The strong work of 2012 has bought it a few months grace, but the performance improvements achieved across the country are fragile and cannot hold out indefinitely. Environmental surveillance shows that polio has reached back into key areas included Gurshan-e-Iqbal in Karachi, and Rawalpindi in Punjab. Ongoing evidence of cVDPV is a further ominous indicator that campaign coverage is not what it needs to be. If access cannot be achieved in North and South Waziristan,

Polio program must return to being a positive humanitarian endeavor, not a political pawn

It must not be forgotten that campaign quality, not security, is the problem in some areas

National grip on program quality was temporarily lost during government transition

New Pakistan government declares its ownership of polio eradication

There can be no sliding back

At a glance

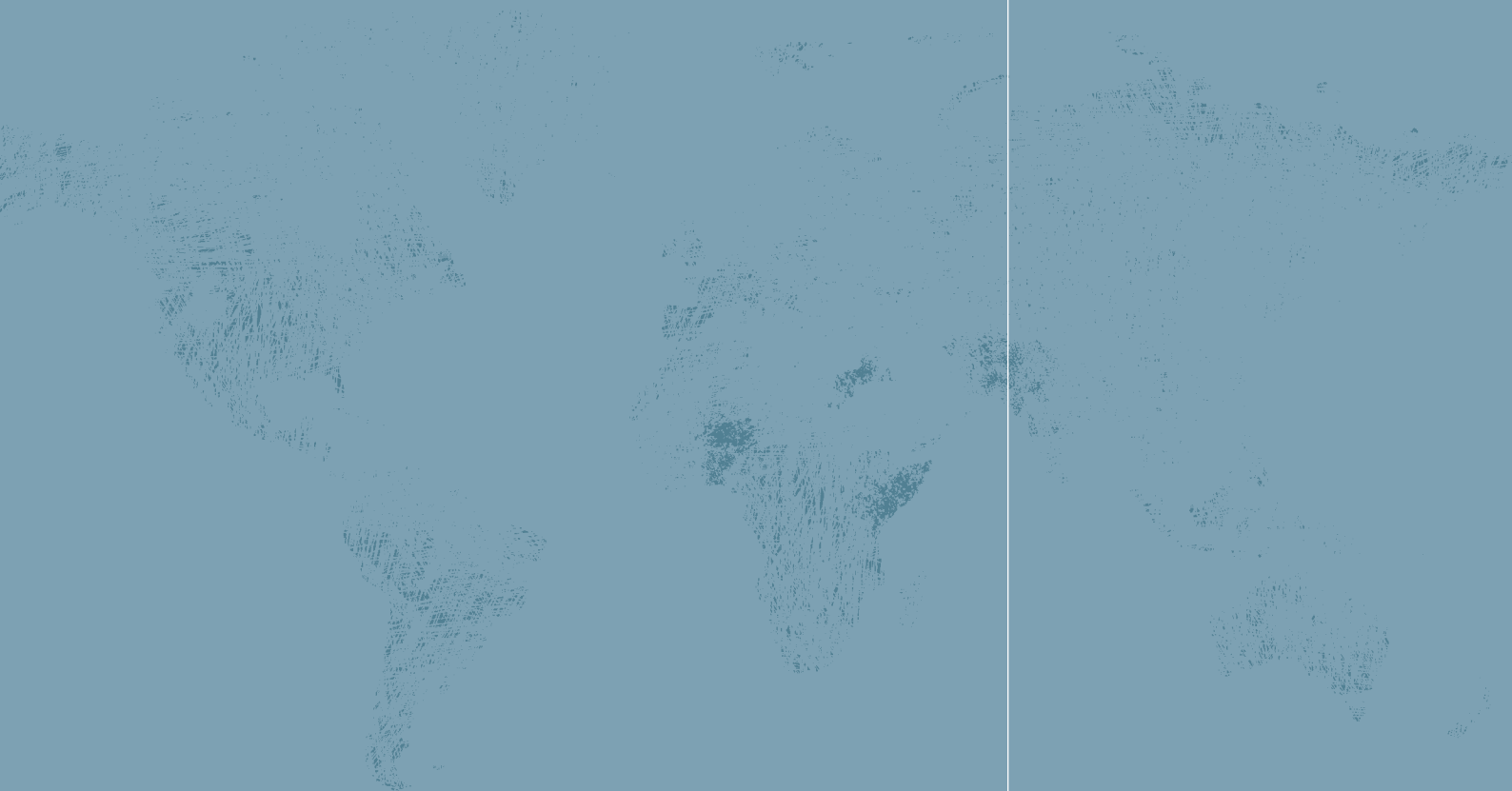
and insecurity more comprehensively managed in KP and Karachi, it is not just children there who will suffer – the virus is already seeding itself across the country, and it is only a matter of time before it spreads more widely again.

Having made good progress in 2012, 2013 has dealt a double blow of unprecedented security and access challenges and a stagnation of campaign quality improvement. There is no greater urgency in the global polio eradication program than the need to resolve these issues. The IMB is very clear that Pakistan's goal of stopping polio transmission in 2014 is far off track, but with real determination and successful problem solving it can be restored to a favourable trajectory.

WE RECOMMEND THAT ACHIEVING ACCESS IN FATA BE TOP PRIORITY FOR PAKISTAN'S POLIO PROGRAM AND ALL WHO SUPPORT IT, USING ALL DIPLOMATIC MEANS AVAILABLE

Excellence in leadership is required to put the prospect of interrupting transmission by 2014 back on track

HORN OF AFRICA



At a glance

Horn of Africa

The countries making up the Horn of Africa have long been on the worry list of experts in polio eradication. In the last six months this tinder box has ignited, providing a stark reminder of the folly of paying too little attention to countries sitting vulnerable to polio.

This section describes the detailed situation in Somalia and Kenya, and the response in the Horn of Africa as a whole. Later, the report chapter 'Outbreaks waiting to happen' turns to the remaining vulnerable countries in the Horn of Africa, as well as in other regions of the world.

Somalia

Somalia successfully stopped polio transmission in 2002, but has since been reinfected twice. Routine immunisation coverage over the last decade has barely been above 30%.

In May 2013, notification that a two-year-old girl had been paralysed by polio in the southeastern region of Banadir signaled the start of an explosive outbreak that has paralysed 174 people – mainly children – so far. The size of the outbreak is such that two-thirds of global polio cases in 2013 have been in Somalia.

Insecurity makes Somalia a challenging environment in which to work. In particular, the insurgent group al-Shabab effectively bans polio vaccination in the extensive areas that it controls. As a result, one million children sit unvaccinated since as far back as 2010.

The majority of cases have been in Banadir, where the local outbreak seems to have peaked. The virus also spread across the south and central zones of the country. It continues to circulate within areas that the program cannot vaccinate.

The program has a clear protocol in place for responding to outbreaks, and met the tight timeline that this sets out. A total of seven vaccination campaigns have now been conducted in the accessible areas of the country. Official monitoring data record these campaigns as achieving good coverage, but IMB sources suggest that significant additional work is needed to address the basics of microplanning and supervision, and also question the monitoring data.

Unable to access more than one-third of the population in their own homes, the program is establishing 300 transit vaccination points, to reach children moving between accessible and inaccessible areas. This is a key mitigation strategy, and high quality work at these posts needs to be ensured.

Long-standing tinder-boxes in the Horn of Africa have been explosively ignited by Nigerian polio virus

Somalia has had two-thirds of the entire world's polio cases in 2013

Al-Shabab now determines whether more children will be paralysed

Number of campaigns in line with outbreak protocol, but quality falls short

Transit vaccination posts – a key intervention

At a glance

There can be no certainty about how long the virus will continue to circulate within the inaccessible areas of Somalia. Besides hoping that al-Shabab will reconsider their stance, all that can be done is to optimise activities within the areas that are accessible to the program. It is vitally important that this is done well.

The IMB was deeply dismayed to see huge cracks in the advance protection that had been afforded to the children of Somalia. It has long been known that the country had the largest pool of polio-vulnerable children in the world, due to al-Shabab's refusal to allow vaccination campaigns. This should surely have led the country and its partners to strengthen every defence possible against the virus taking hold? Yet the program's data show, outrageously, that amongst children who are wholly accessible to vaccinators, 20% had never received a single dose of OPV. A full 60% of the cases so far have been children who are accessible to vaccinators.

Try as it might, the IMB was also at a loss to understand why the strategy of transit vaccination points was only implemented in response to this outbreak. It could have been running for many months already, nudging up immunity within the inaccessible areas. Was the reason that this would have been too demanding and too expensive? If so, this was a false economy because unbudgeted funds are now having to be deployed to address the situation. As the outbreak response progresses, there is no room for further misjudgments. The extreme challenge posed by widespread inaccessibility in Somalia must be met with the excellence of response that it deserves.

When polio was last re-introduced to Somalia in 2005, it started in the same way – from West Africa, into Banadir, and then across the south and central zones. The program should have a corporate memory and not allow history to repeat itself. On that occasion the outbreak took two years to stop. To allow this to happen again would be an unmitigated disaster for the program.

Kenya

Dadaab and Fafi districts, in the south-east corner of Kenya, have been the host to a sizeable polio outbreak over recent months. The first victim was paralysed on 30 April 2013, and 13 further children and young adults have been paralysed since. Half of those paralysed have been resident in refugee camps; the other half are young Kenyans living in the surrounding area.

With the global program's support, Kenya mounted a strong response in the immediate area of the outbreak. There have been five vaccination campaigns since May 2013, achieving good coverage levels. But it is absolutely clear – and deeply

Why was the problem not foreseen and acted upon given that the country had the largest pool of polio-vulnerable children in the world?

The failure to take proactive action in Somalia should ring warning bells in other vulnerable countries

The last major outbreak in Somalia took two years to control – this would be unacceptable to the present goal of the program

Fourteen paralysed in Kenyan polio outbreak

Strong local response not mirrored across the country

At a glance

concerning – that this high quality response has been a local phenomenon, not mirrored across Kenya as a whole. The reaction across the rest of the country has lacked any sense of urgency. Campaigns have been conducted, but their coverage has been nowhere near the level achieved in Dadaab. This is shortsighted, and may come at a great cost. Polio could easily infect any other part of Kenya.

In particular, Nairobi should be regarded as extremely high risk. Polio could all too readily take hold there, causing substantial damage in the country's capital and creating a high likelihood of further international spread. With this in mind, the IMB was disheartened to learn of the very poor quality vaccination campaigns conducted in Nairobi, with thousands of children missed, little social mobilisation despite refusals and adverse rumours being a problem, and no sense of the threat that polio poses.

The IMB learnt that talks are ongoing about declaring this polio outbreak a public health emergency. A decision on this is overdue. The current outbreak absolutely is a public health emergency. It needs to be declared and treated as such.

A three-month review of the outbreak response provides a strong and clear list of recommendations. It is crucial that these are implemented with haste. As well as declaring a public health emergency, the IMB strongly encourages the Kenyan government to expedite the inception of environmental surveillance in Nairobi.

WE RECOMMEND THAT ENVIRONMENTAL SURVEILLANCE BE URGENTLY ESTABLISHED IN NAIROBI

Horn of Africa response

Considered as a whole, there have been some positive aspects to the program's response in the Horn of Africa, but too many areas of shortfall.

Localised and then national campaigns were conducted quickly after the detection of cases. The program has been flexible in its approach, using a Short Interval Additional Dose approach where appropriate and raising the age of vaccination in some rounds. The IMB welcomes the three-month reviews conducted in both Kenya and Somalia. These appear to have been thorough. Rapid implementation of their findings is crucial.

The IMB has frequently expressed disapproval when personnel shortages impede the partners' ability to provide optimal technical support. With millions of dollars being spent on vaccination, it is a waste not to have sufficient technical personnel to optimise the way in which these resources are used. Between Kenya and Somalia, 12 rounds have been conducted, using 31 million doses of vaccine. Such precious drops could have been more optimally used if technical support had been stronger.

Nairobi a tinder box

No true emergency response

Full implementation of review recommendations now urgent and environmental surveillance in Nairobi imperative

Some strengths to the Horn of Africa response

But why the personnel shortages again?

At a glance

We heard several examples of personnel shortages in the Horn of Africa response. To provide some illustration – the leader of the crucial three-month review process in Somalia was only intermittently in the country during the period of the review, being called away to deal with non-polio business in Uganda; UNICEF has not had a full-time polio team leader in Somalia; and in Kenya, both WHO and UNICEF teams are over-stretched, with a number of those now drafted in to work on polio also continuing to work on other areas of work in parallel.

The IMB views such issues as simply inexcusable for a program declared by the World Health Assembly a 'programmatic emergency for global public health'. This simply does not look like a response worthy of an eradication program.

Another example of the weakness of focus in the Horn of Africa relates to the poor surveillance and immunisation indicators in the Ogaden region of Ethiopia. The border between the Ogaden and Somalia is highly porous, with constant movement between the two countries.

The IMB is also concerned about the response across the Horn of Africa as a whole. The Horn of Africa Technical Advisory Group has for many years been advocating that a coordinated Horn of Africa approach be taken, but this has largely fallen on deaf ears. A coordinated approach is essential because the Horn is a single epidemiological block, linked by trade routes, trucking movements, and the movement of nomads. The detection of a case in Somalia should have resulted in an emergency response across the whole Horn. Instead, the sense of emergency has barely extended beyond Somalia and a corner of Kenya. There was very strong leadership from the Regional Director of the WHO EMRO region, whose absolute commitment to polio eradication is impressive. But follow-through at the operational level fizzled out.

The organisational structure of partner agencies is impeding a coordinated approach. Responsibility for the Horn of Africa is split between two regional offices of both WHO and UNICEF. To make matters worse, the regional boundaries differ between the two organisations. The cart cannot be allowed to lead the horse in this way. A coordinated approach is needed. Either these offices need to coordinate much better, or the organisational structure needs to be changed. At its meeting, the IMB was told that UNICEF is moving to create a consolidated office for the Horn of Africa. This is welcome – although the whole program should have had such a structure in place six months ago, if not before. This is supposed to be a programmatic emergency.

The IMB has little sympathy with any idea that either personnel shortages or the lack of a coordinated Horn of Africa approach be allowed to drag on for any longer.

Having key staff absent and over-stretched is not compatible with the program's declared emergency status

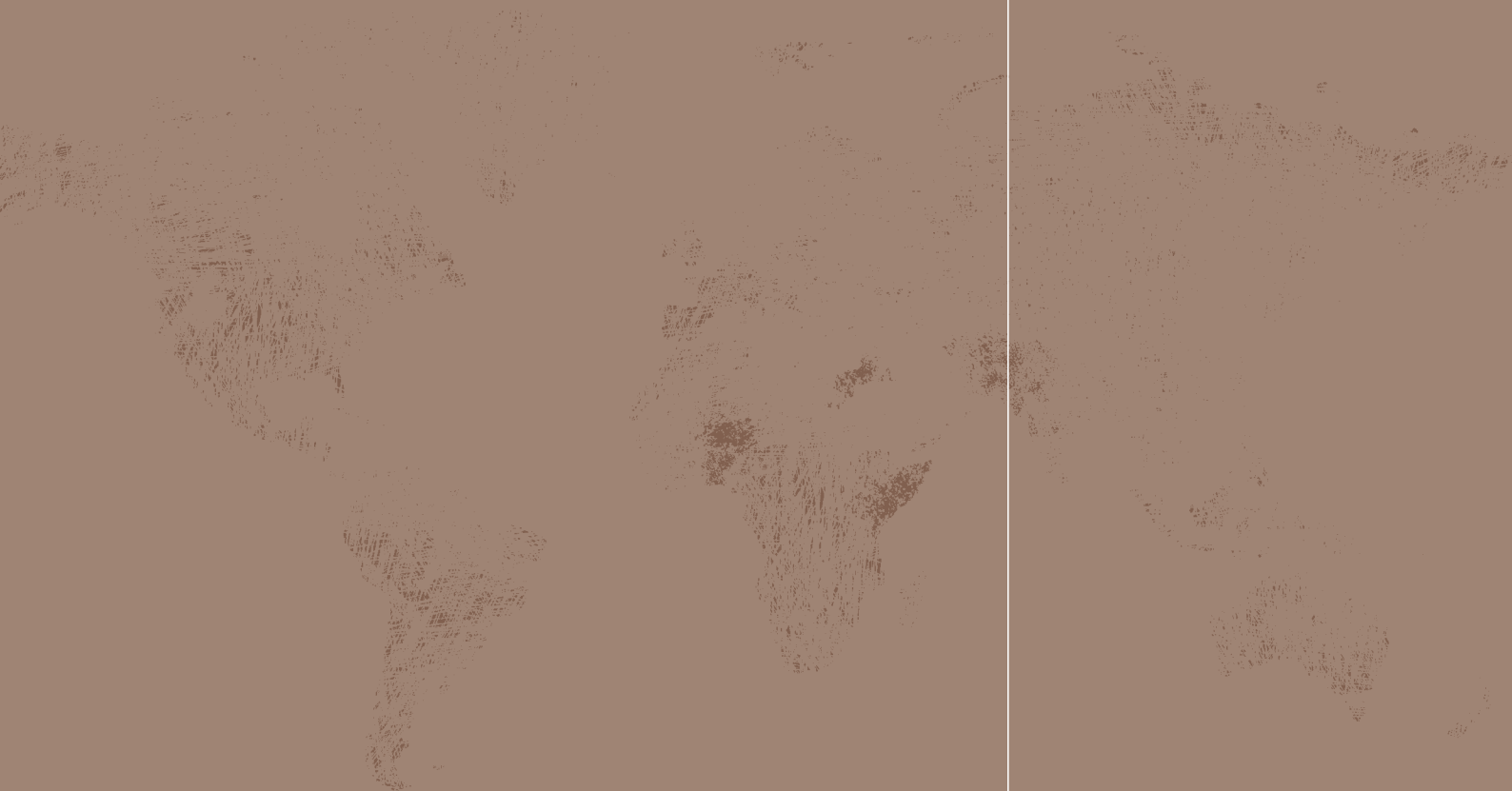
Horn of Africa response has been poorly coordinated, despite advice over many years that coordination in the Horn is essential

Coordination impeded by partner agencies structures – the cart leading the horse

At a glance

WE RECOMMEND THAT A JOINT WHO-UNICEF CENTRAL COMMAND UNIT IS ESTABLISHED FOR THE HORN OF AFRICA, LED BY A SINGLE SENIOR COMMANDER

WE RECOMMEND THAT THE POLIO OVERSIGHT BOARD IS IMMEDIATELY APPRAISED OF WHAT ADDITIONAL PARTNER STAFF ARE REQUIRED IN, AND IN SUPPORT OF, THE HORN OF AFRICA AND OVERSEES MEASURES TO GET THEM IN PLACE BY THE END OF NOVEMBER



At a glance

The novel situation in Israel

In May 2013, environmental surveillance samples from across Israel were found to contain substantial amounts of wild polio virus. In response, the country reviewed earlier samples that had been placed into storage. Testing these, it was determined that the virus has been circulating since February 2013. Genetic testing determined that the virus originated in Pakistan and travelled to Israel via Egypt, possibly in the Bedouin community.

Circulation was widespread, and has remained so. Between February and September, virus has been found in more than 100 samples from across the country. Despite this, nobody has yet been paralysed by polio. There is a scientific explanation for this. Israel vaccinates its children against polio using Inactivated Polio Vaccine (IPV) given by injection as part of the routine immunisation schedule, as many other countries do. Uptake is high – 95%. IPV stimulates strong humoral immunity but little mucosal immunity. In other words, it protects individuals against becoming ill with polio, but does not protect them against harbouring the virus in their bowels and passing it on to others. This is in contrast to the oral polio vaccine (OPV), which stimulates good mucosal immunity and so impedes onward transmission, not just individual illness.

This created an unprecedented dilemma in Israel. The virus was spreading but nobody was becoming unwell. Many asked: so what is the problem?

The problem is this: with every day virus circulates, those without full humoral immunity are at risk of being infected and paralysed by it. Since vaccination coverage is not 100%, this at-risk group includes a significant number of Israeli people. It also includes many thousands of people in the countries surrounding Israel that have lower coverage rates, where the virus could all too easily spread and take hold.

With this in mind, the discovery of circulating virus in Israel should have been met with an urgent and comprehensive response. As with any polio outbreak, the correct course of action is to vaccinate the population with OPV. This has been slow to happen in Israel. A first nationwide round of OPV vaccination is still underway, and there is not yet even a clear plan for a second round. The program is clear that the risk of international spread is high, and so the slow pace of this response is both surprising and worrying.

The way that the polio virus has taken hold in Israel should act as a reminder to the rest of the world – that even countries with strong routine immunisation systems cannot be guaranteed a polio-free future until the virus is eradicated entirely from the world. Polio eradication is truly a global public good.

The appearance of polio virus in the sewage in Israel was a shock

More than 100 samples across Israel, but no cases (because of high IPV coverage)

Most of the population of Israel is protected by IPV, but not all - and surrounding countries are vulnerable

The response to vaccinate with OPV has been slow to get off the ground

At a glance

The phenomenon observed in Israel is interesting to all observers of polio and its eradication, and its wider implications need to be worked through. But neither the program nor the government of Israel can be distracted by this. The most important thing is to clear the virus rapidly from the country, before it harms any children in Israel or a neighbouring country.

WE RECOMMEND THAT ISRAEL IMMEDIATELY SCHEDULES A SECOND NATIONAL OPV CAMPAIGN, TO BE COMPLETED AS QUICKLY AS POSSIBLE

WE RECOMMEND THAT THE WHO DIRECTOR GENERAL BRIEFS MEMBER STATES WHOSE POPULATIONS ARE CURRENTLY PROTECTED AGAINST POLIO BY IPV ONLY ON THE IMPLICATIONS OF CIRCULATING POLIOVIRUS IN ISRAEL

The global implications of the Israel incident should be rapidly explored

OUTBREAKS WAITING TO HAPPEN



At a glance

Outbreaks waiting to happen

The IMB has frequently expressed concern about the number of polio-free countries sitting at risk of importation and outbreak. Maintaining frequent and high quality campaigns in all vulnerable countries simultaneously is a major drain on resources. It is unreasonable to expect perfection. But for many months, everybody has known that Somalia was at great risk, with one million unvaccinated children. It should have been a priority for the program to at least attain high coverage in the areas that it was able to reach, to mitigate the risk of polio reaching the inaccessible children in the event of an importation. Yet the program's data show that 20% of children in the accessible areas have not had a single dose of vaccine. We accept that Somalia is not an easy place to work in – but no easier now that there is a major outbreak in an unreachable area.

In 2012, campaign cancellations in the Horn of Africa were so extensive that one-third of the planned doses were not given. In many cases, the reason given was 'lack of funds'. To the IMB, this does not look like eradication mode. Protecting these, and other vulnerable, countries is the cost of eradicating polio properly, and avoiding the 'one step forward-two steps back' effect that outbreaks otherwise create.

There is no way of knowing whether implementation of the IMB's strong recommendation to introduce vaccination as a travel requirement would have attenuated the outbreak in the Horn of Africa. However, the IMB considers that continuing indecision on this recommendation is delaying a potentially decisive risk reduction measure from having an impact on polio transmission.

At every IMB meeting, a map is presented of the at-risk countries; these maps are a virtual sea of red indicators of both surveillance and immunity. There is a range of other countries around the world where outbreaks are waiting to happen. This 'Red List' is extensive and each country is characterised by poor immunity and/or surveillance deficits and, often, poor commitment to protecting its population against polio. The Ukraine may seem a long way from the current polio epicentres but the weakness of public health programs there and the apparent lack of government commitment makes it vulnerable on a day-to-day basis. No one would be surprised to see children paralysed and dying in that country – and such an occurrence would also divert the core activities of the GPEI even more.

WE RECOMMEND THAT A GLOBAL ACTION PLAN BE DRAWN UP, IDENTIFYING A DEFINITIVE RED LIST OF THE WORLD'S MOST POLIO-VULNERABLE COUNTRIES AND ACTIONS TO PROTECT EACH OF THEM

WE RESTATE OUR EARLIER RECOMMENDATION THAT THE INTERNATIONAL HEALTH REGULATIONS BE USED TO ENSURE THAT ALL PEOPLE TRAVELLING FROM A POLIO-ENDEMIC COUNTRY BE REQUIRED TO HAVE VACCINATION PRIOR TO TRAVEL, AND ADD THAT THIS SHOULD BE EXTENDED TO ANY PERSISTENTLY AFFECTED COUNTRY

A 'Red List' of polio-vulnerable countries is staring the program in the face

Failure to act on warnings about Somalia and the wider Horn of Africa is a lesson that should be learned

The program is being too tender on the tinderboxes

Serious attention must now be given country-by-country to reducing their vulnerability to polio

The Red List: countries at highest risk of a polio outbreak

YEMEN	IRAQ	DJIBOUTI
UGANDA	CENTRAL AFRICAN	ERITREA
SYRIA	REPUBLIC	SUDAN
LEBANON	UKRAINE	SOUTH SUDAN
JORDAN	MALI	

The IMB considers these countries to be on the Red List. The program needs to establish a definitive Red List and act on it quickly.

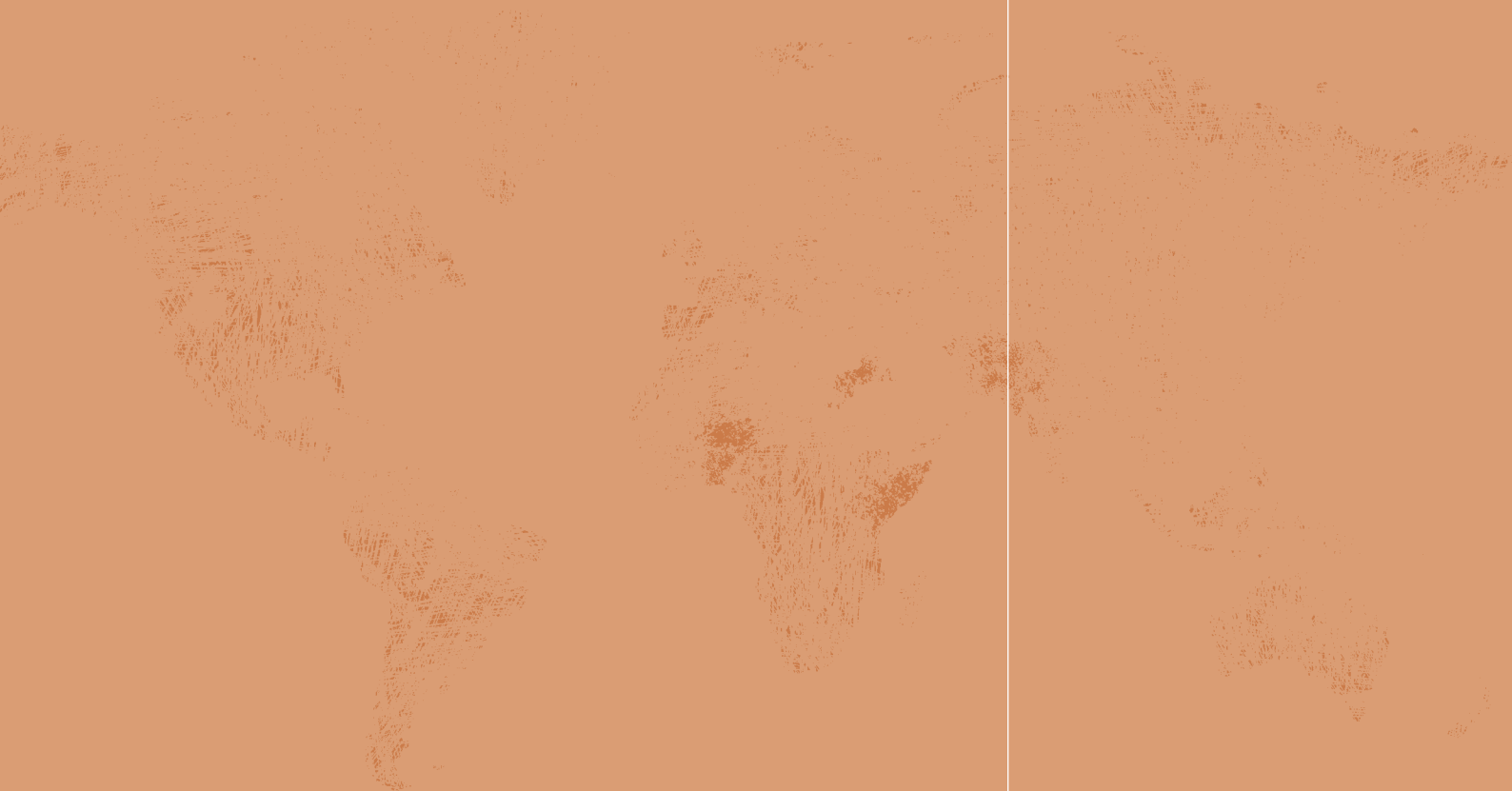
2012 vaccination campaigns in the Horn of Africa: 53 million missed opportunities

INITIAL CAMPAIGN PLAN:	148 MILLION DOSES
CAMPAIGNS CONDUCTED:	95 MILLION DOSES
CAMPAIGNS CANCELLED:	53 MILLION DOSES

Cancelled and scaled down campaigns

Country	Campaign	Plan amendment	Doses cancelled
Ethiopia	Sept SNID	Scaled down by 35%	1.3 million
	Oct SNID	Scaled down by 35%	1.3 million
Kenya	Jun NIDs	Cancelled	8.1 million
	Jul NIDs	Cancelled	8.1 million
	Apr SNIDs	Scaled down by 50%	2.6 million
	May SNIDs	Scaled down by 50%	2.6 million
	Nov CHD	Scaled down by 70%	1.8 million
Tanzania	Jun SNIDs	Cancelled	3.5 million
Uganda	Jun SNIDs	Cancelled	3.5 million
	Apr NID	Cancelled	7 million
	May NID	Cancelled	7 million
	Nov SNID	Cancelled	2.6 million
Sudan	Dec SNIDs	Scaled down by 50%	3.5 million
			53 million

**INSECURITY, TARGETED VIOLENCE
AND BANS**



At a glance

Insecurity, targeted violence and bans

The program is now in the exceptional, and greatly unwelcome, position of insecurity, targeted violence and bans that prevent it from conducting vaccination campaigns being top – likely the top – barriers to stopping polio transmission globally.

Insecurity is nothing new for the program. Polio transmission has been stopped despite active conflict or civil unrest on numerous occasions – including in El Salvador, Peru, Sri Lanka, Cambodia, and the Democratic Republic of Congo. Over the years, the impact of the polio eradication program has too often been eroded by forces that have reduced access to the vaccination program, intimidated those delivering campaigns and those seeking vaccine for their children, and created a climate of political unrest and uncertainty in which the humanitarian purpose of polio vaccination is no longer clear. The leadership of the GPEI, working closely with polio-affected countries, has had considerable success in finding ways to continue vaccination campaigns even in these difficult circumstances.

More recently, however, the problems of insecurity and denial of access to programs have greatly escalated, to the level that previously used strategies will not be enough. The intensity of the challenge facing the program is really something new. There are unprecedented aspects to today's challenges, which no public health program should ever have to face. Polio workers have been killed not as a result of being in the wrong place at the wrong time, but directly targeted because of the work that they are doing. Powerful figures have specifically banned the program from operating.

Such issues are far beyond a pure health realm. The governments of the countries concerned are the prime movers in securing access for vaccination teams and protecting these teams, even in the most hostile environments. They know the terrain, the power bases, and the prospects for securing short- and long-term access. Ultimately, it is the responsibility of each country's government to take ownership of problems within their borders, and to ensure that their citizens are not denied a life-protecting medicine that is almost universally available to children the world over. Polio eradication is a global good – but it is also in the best health interests of each country where polio persists.

Although governments must lead, there are steps that the program can take in the field of international diplomacy. There is also a need for the program to have a strong core of expertise in the issues that are common between countries. By our assessment, the program is considerably further along the learning curve than most public health programs would ever wish to be. But it is not yet at the top of the learning curve – and it needs to get there fast. The program is run by highly trained, professional people. But their training and professional skills are not in the areas of security or diplomacy. These are areas of considerable skill in their own right, and the program is light on this expertise. The program needs both to partner with agencies

Insecurity is now the most daunting barrier to eradication

The program has dealt with insecurity before, but the great challenges of today are new and unprecedented – targeted attacks and targeted bans

National governments must take the lead in tackling problems within their borders

More security and diplomacy expertise is required at global level to support countries

At a glance

that do have the required knowledge and skills, and to recruit experts to work within the program. It is moving towards both. Accelerating these processes is the most tangible way of increasing the program's capability, and should be given priority.

Whilst reasonable to consider the issues described here under one banner, each is very different. There are no 'one-size-fits-all' solutions. The approach required is – and will remain – highly area-specific. That said, some general themes are worth highlighting.

First is the value of offering the population more than polio drops. Arguably it is only right that when the program has opportunities to reach into areas that lack other health interventions, it should make a broader offering to the population. Doing so may well require the program to strengthen its links with other partners operating in the area – a practice that we have repeatedly emphasised the value of in any case.

Second is the fact that the program can learn from its recent experience in Afghanistan. There it saw the value of generating true demand amongst communities, who can then assist in achieving safe access. The International Committee of the Red Cross (ICRC) played an important role in Afghanistan in negotiating access to insecure areas and could potentially play this role elsewhere.

Third – the program has far from perfect control in these settings. This makes it all the more important that it optimises operations in areas where it does have control. It needs to ensure that risk mitigation efforts are maximised, such as using transit vaccination points outside inaccessible areas, to reduce the risk of virus spreading.

Fourth is the vital issue of neutrality. The goal of eradicating polio from the world should be an apolitical, humanitarian endeavor. This is not always how it comes across. The program needs to do everything possible to emphasise its neutrality, in word and in action.

The IMB's assessment is that these issues are gaining considerable focus within the program, but that dealing with them is not yet at the program's heart as it unfortunately needs to be.

WE RECOMMEND THAT THE POLIO OVERSIGHT BOARD ENSURES THAT ALL OF THE PLANNED SECURITY POSTS WITHIN THE PARTNER AGENCIES ARE FILLED BY THE END OF NOVEMBER, EVEN IF THIS REQUIRES EXTRAORDINARY MEASURES

WE RECOMMEND THAT THE PARTNERS CONSULT AND SEEK ADVICE FROM THE HIGHEST LEVELS OF THE UN SECURITY SYSTEM AND OTHER EXPERTS

WE RECOMMEND THAT ALL MEANS BE USED TO ENSURE THAT THE POLIO PROGRAM IN EVERY COUNTRY IS KNOWN TO BE POLITICALLY NEUTRAL

There is no 'one size fits all' solution

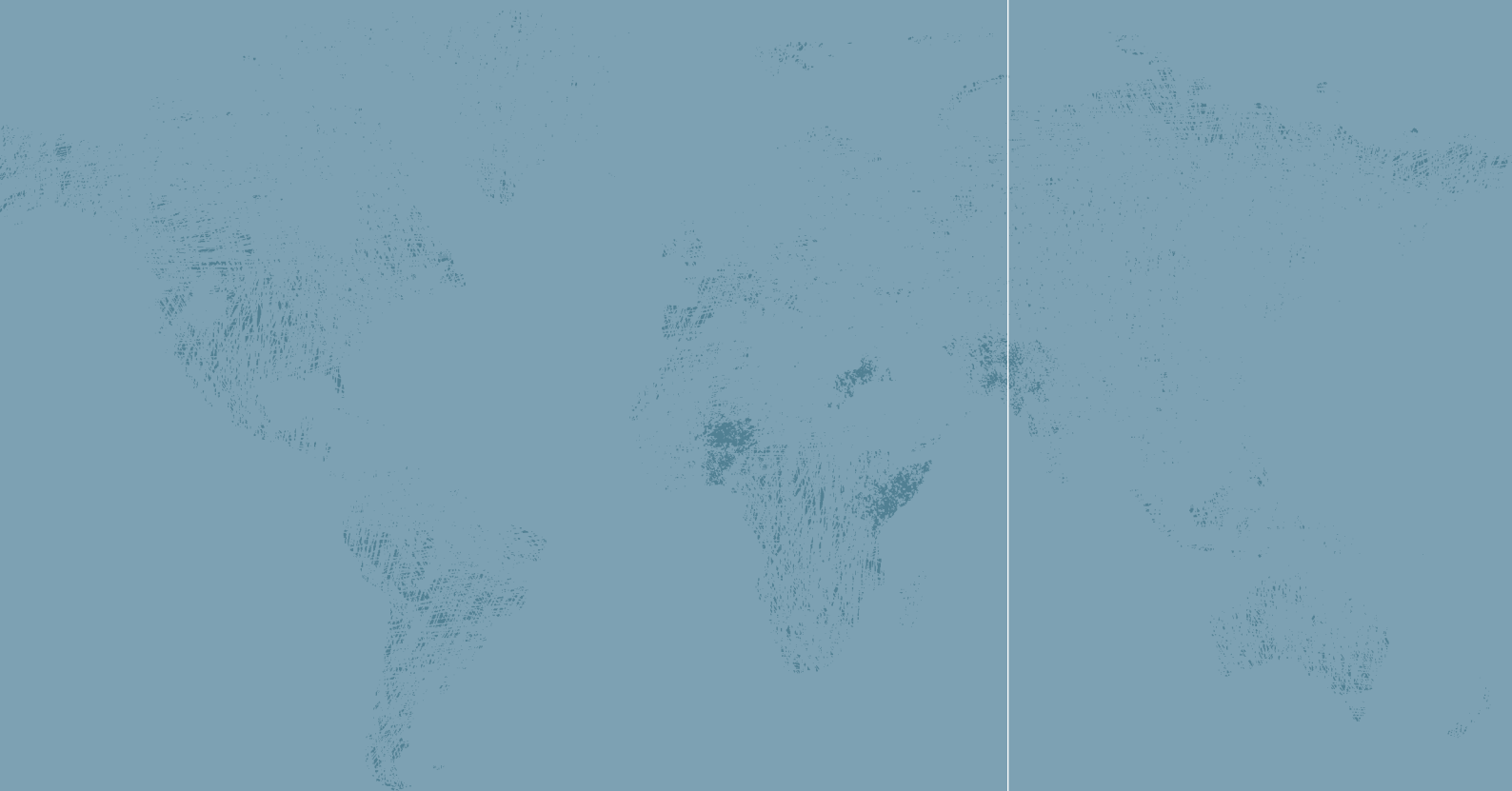
When access is achieved, populations should be rewarded with more than polio drops

Afghanistan offers lessons

When not all is controllable, optimise what can be controlled

Neutrality: constantly emphasising the humanitarian over the political must be the program's goal

**MANAGEMENT & OVERSIGHT OF
THE GLOBAL PROGRAM**



Management and oversight of the global program

Two related but distinct issues continue to cause big problems to the program.

Strategic and operational management

Over recent years, each of the endemic countries has enhanced its organisational arrangements. Afghanistan co-located WHO and UNICEF's polio offices in the capital and in high-risk provinces, as had been done in India. Nigeria established national and sub-national Emergency Operations Centers, bringing the government and its partners under a single roof. Whilst not perfect, the endemic countries have taken to heart the IMB's advice about the fundamental importance of accountability, oversight and management effectiveness.

The IMB remains concerned, however about the program's operation at the headquarters and regional level, and what it is hearing from its sources:

- Staff feel that coordination across the partnership is weaker than it should be. Yet they also say that they are 'under the cosh' to be ever-present at coordination meetings, sapping their time. Multiple meetings yet poor coordination – the worst of both worlds.
- Key decisions seem to emerge like rabbits out of a hat, or not emerge at all, rather than being arrived at through a clear process.
- There is too much jostling between partners and an unwillingness to share. Power struggles are common in many big projects, but the goal of eradication is too important for this petty-mindedness.
- An ongoing concern of the IMB – and a source of bafflement – is the fact that positions remain unfilled for too long. Is nobody getting a grip on this unacceptable issue? Although some processes have been expedited, the usual bureaucracy of recruitment is still being allowed to rule in too many cases.
- Headquarters and regional staff are torn between giving their time to the endemic countries and to outbreaks – perhaps because there are not enough people, or perhaps because of a lack of direction. They should not be having to choose. Transmission needs to be stopped in both. In a \$5.5 billion program, personnel capacity at headquarters cannot be allowed to be a bottleneck.

Management and partner coordination has improved in each of the endemic countries

Meanwhile, aspects of the global headquarters are very dysfunctional

Poor coordination despite many meetings

Territorialism

Posts still unfilled

Staff torn between priorities

At a glance

These problems are not new. It is now clear that the endemic country programs have run substantially ahead of the program's headquarters – their coordination between partners is smoother, they have a better grip on the data, and they react more nimbly to changing situations.

The Horn of Africa was not staffed on the ground to deal with the situation that emerged. As the outbreak began, a vibrant global headquarters would have stepped in to grip the issues. Instead, it is still not clear who is in charge; there has been poor coordination across the Horn; and the countries have suffered from inadequate technical support. The test of the resilience and effectiveness of any organisation is the way that it responds to an unexpected crisis. In this respect, the global program fell short in the Horn of Africa, and exposed its longstanding limitations.

The global and regional level of the program – effectively a collective mass of 'headquarters' – needs to resolve these issues, to improve the support that it can provide both to the endemic countries and to current and future outbreaks. We said the same in our May 2013 report, but little seems to have changed.

This is not simple. Unlike in each endemic country, the regional and headquarters level of the partnership is split across four continents and seven time zones. The UN system is famed for its bureaucracy. But if there was ever a reason to refuse to accept these as limitations, to cut through them and to find solutions, this is it.

Oversight

Any major enterprise spending \$1 billion a year with an important and clearly measurable outcome should have clear and rigorous 'board-like' arrangements to govern its work – including setting priorities, making considered judgments on policy (particularly those that are mission-critical), dealing swiftly with major crises and unexpected events, understanding who has overall responsibility for ensuring that delivery occurs, and securing important decisions that are widely owned and clearly communicated.

The IMB has constantly been struck by the lack of clarity in many of these aspects of accountability, governance and strategy formulation within the GPEI. Indeed, many of the comments made by senior IMB sources have a distinctly despairing and long-suffering tone on this issue.

The IMB is aware that a number of program funders are asking to have greater oversight of the program. As is very reasonable, they expect clear reporting on the program's budget and finances, an understanding of how efficient the program is being, sight of key operational metrics, and a voice in key decisions. The extent to which they currently get this is a point of debate.

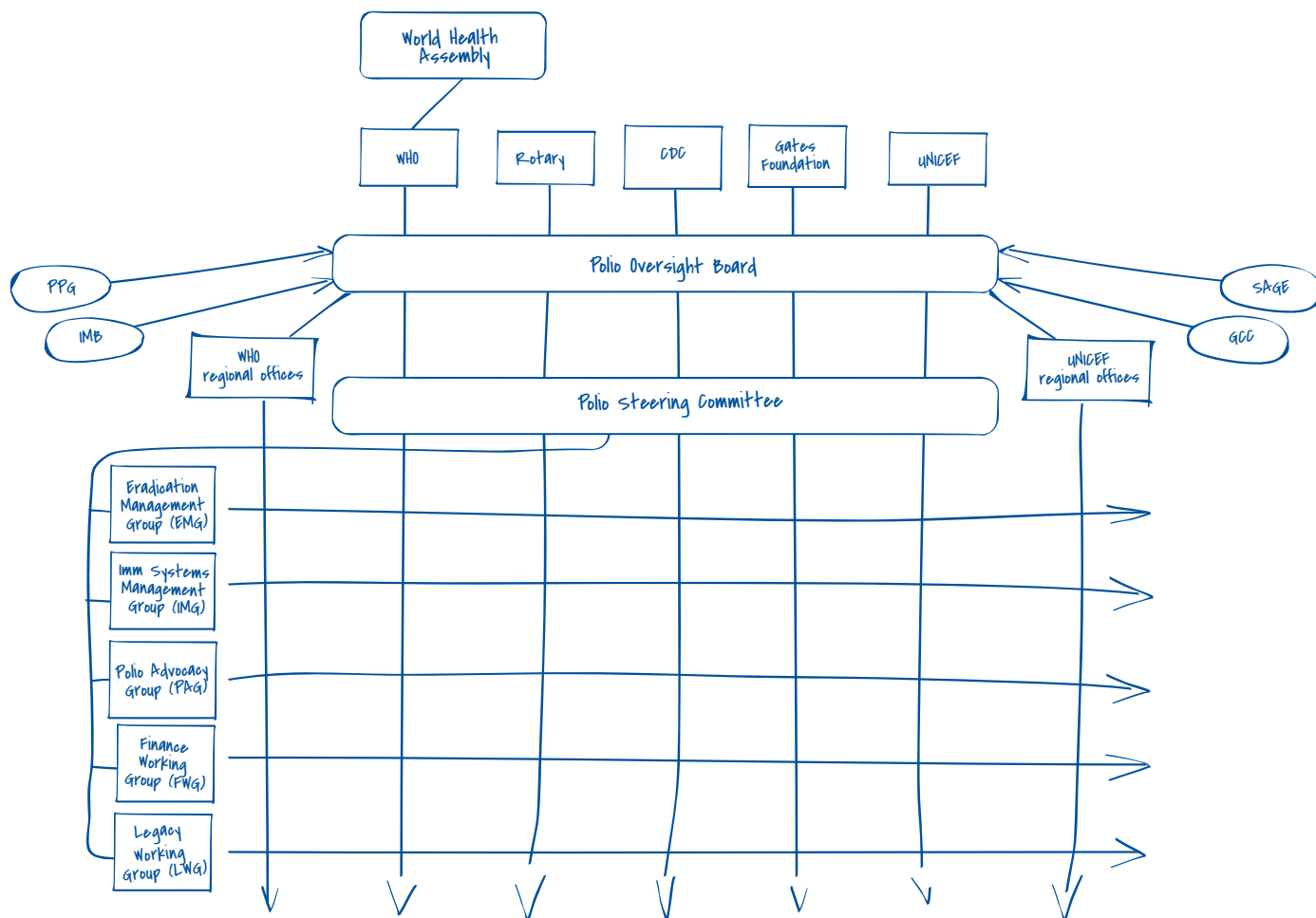
The test of any organisation is the way it responds to an unexpected crisis; the GPEI fell short in the Horn of Africa

Not simple problems to solve, but vital

A \$1 billion-a-year enterprise should have many features of governance currently lacking from the GPEI

Program funders need a proper voice

The difficult task of describing the Programme's structure



PPG = Polio Partners Group SAGE = Strategic Advisory Group of Experts on Immunisation GCC = Global Certification Commission

WARNING – The IMB has done its best to faithfully represent the structure, but there are multiple subcommittees and groups which, if added, would have made the diagram unintelligible

At a glance

There are three groups within this territory – the Polio Partners Group, the Independent Monitoring Board, and the Polio Oversight Board. The first and second of these do not have any decision-making power. The third is narrowly constituted. Many of the program's 'non-core' partners attend some combination of these three groups' meetings, and those that we have heard from do not feel that this meets their needs.

We would also highlight that the IMB's remit is limited to the program's first objective – interruption of transmission. The Strategic Advisory Group of Experts on Immunization (SAGE) provides input on the second objective, but this input is technical advice rather than independent oversight. We believe it important that the IMB continue to focus on the interruption of transmission. This leaves a gap in monitoring most of the objectives in the current strategic plan.

Resolving the issues

We have deliberately separated the global program's management issues into two parts, rather than describing them together as 'governance'. This is because we believe that there are two separate problems, and that focusing on just one of them may distract from the other.

Given our focus on seeing transmission stopped, we would be particularly concerned if the 'oversight' problem is addressed, at the expense of resolving the operational management problems.

The IMB greatly welcomes the close involvement of the core partner agency heads, now collectively termed the Polio Oversight Board. As this board continues to develop, it will be important to clarify whether it sits at the top of the operational management hierarchy or whether it is an oversight board. Many would argue that it cannot be a true oversight board with its current narrow membership. However in its current form the IMB believes that it can play a vital role in the program's operational management, since its members have the power and ability to cut through problems within the complex partnership beneath them.

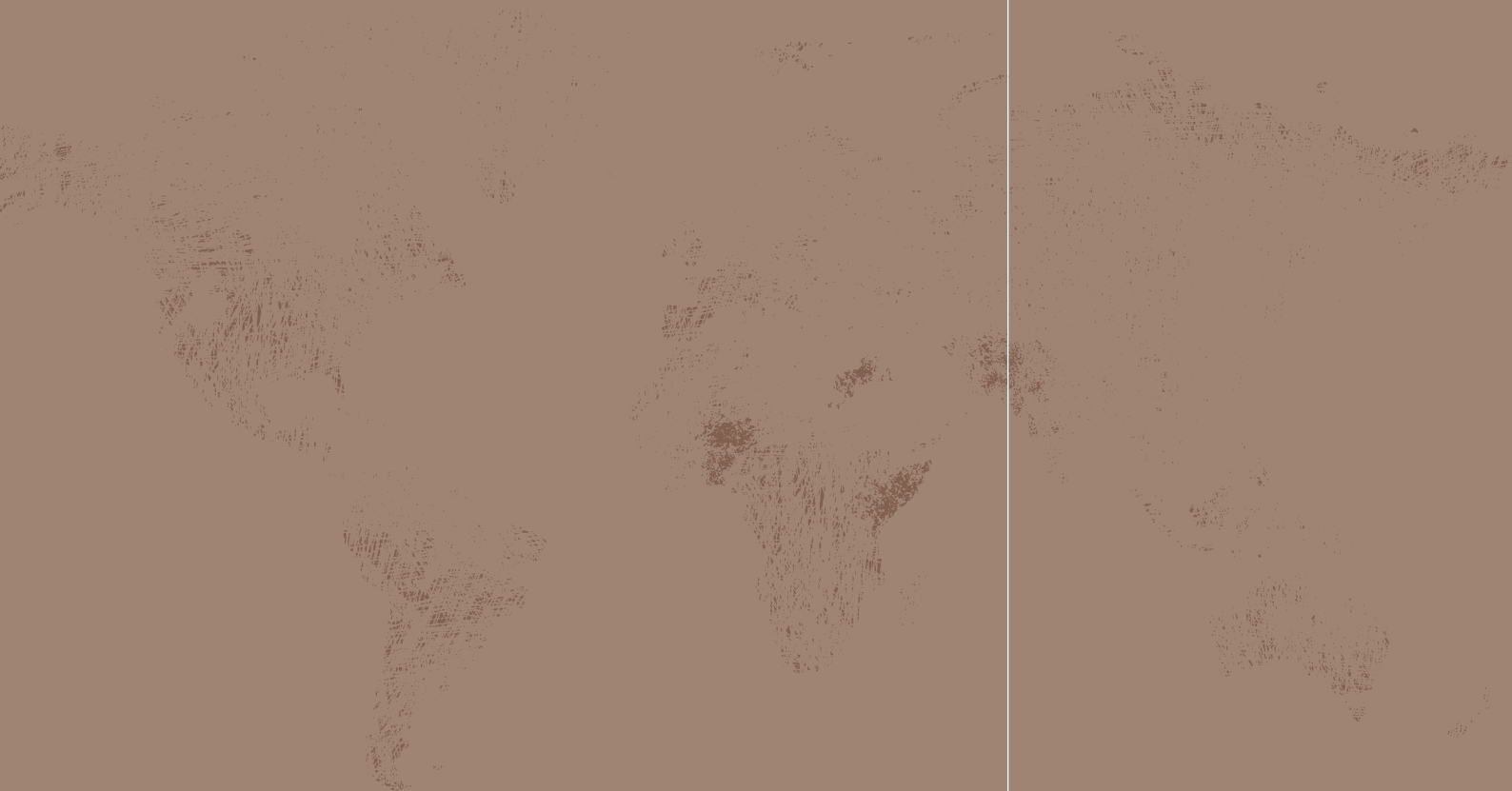
There is an important balance to be struck in resolving these issues. The program cannot be designed from scratch. On the other hand, these issues need more than a token response.

WE RECOMMEND THAT THE POLIO OVERSIGHT BOARD COMMISSION A COMPREHENSIVE REVIEW OF THE PROGRAM'S OVERSIGHT AND STRATEGIC AND OPERATIONAL MANAGEMENT, MAKING A DECISION NOW ABOUT HOW TO OPTIMALLY TIME THIS

The management and oversight issues are somewhat separate

Fixing one should not come at the expense of the other

Polio Oversight Board members' involvement is a great strength, but greater clarity of its role is needed – is it an oversight board or the top of the program's delivery hierarchy?



At a glance

Communications and social mobilisation

The program's front line involves tens of thousands of interactions between vaccinators and families on every day of a polio vaccination campaign. Families are not passive recipients of polio drops for their children. They may not open the door, may choose to hide their children away, refuse the drops point-blank, or make excuses. They can fall victim to rumours against the vaccine - or they can talk positively about it, and ensure that community leaders know that it is something they want. They can choose to stay at home on the day they know the vaccinators will call, to ensure that their children are not missed.

A community antagonistic to the polio program and its vaccine is a community at risk of polio. A community engaged with the wish to protect their children is a community that will eradicate polio.

The program has historically given far more emphasis to the 'supply' side of polio vaccination (the vaccine and the vaccinator) than it does to the 'demand' side (families and communities). Some argue that polio transmission has been interrupted in many countries whilst this imbalance existed, but we see three main reasons why correcting it is important:

- Adverse sentiment about the vaccine is a grave risk, because it is capable of stopping progress in its tracks. This happened in Nigeria in 2002, when anti-vaccine rumours became widespread and brought the program to a halt. The polio virus erupted across northern Nigeria and spread to 20 countries. Any repetition of this is unthinkable.
- In the polio virus' final sanctuaries on Earth, the population receives round after round of polio vaccine despite case numbers being low. This easily creates fatigue for communities and vaccination teams if not proactively managed.
- Insecurity and inaccessibility is now the major barrier to eradication in a number of the remaining endemic sanctuaries. Whether the vaccine continues to be a weapon of dissent and hostility will be an important determinant of success. In some sanctuaries, it is vital that the program is perceived as neutral. Here the most skilled and innovative communication methods are required. In other sanctuaries, community demand just needs to be tapped. Afghanistan is an excellent example of where goodwill towards the vaccine has created channels of access.

The IMB's May 2013 report explored the state of communications and social mobilisation within the program. We recommended that urgent action be taken to address the shortcomings identified.

The program's initial response to our critique was promising, but the work of ensuring operational excellence now needs to move forward at pace.

A multitude of individual decisions and interactions ultimately determine the size of the pool of polio-vulnerable children

Program historically based on supply rather than demand

Anti-vaccine sentiment can escalate with polio vaccine becoming an agent of protest and dissent

The IMB has prioritised social mobilisation and communication as a game-changer

The program's initial response is encouraging but the IMB continues to set a necessarily high bar

At a glance

UNICEF has filled many of its positions that sat empty. A diverse group of experts in fields such as communications, anthropology, security and the creative arts is coming together as a 'BrainTrust' to develop innovative communication solutions in Pakistan. The number of social mobilisers is being expanded considerably, to number 19,000 now between Afghanistan, Nigeria and Pakistan. More explicit focus is being given to building trust in the polio program and its vaccine.

The work of the Islamic Advisory Group is also most welcome. While not relevant everywhere, in many of the places polio still circulates evidence-based religious messaging through Islamic fatwas is a powerful tool against misinformation about the polio vaccine. And rather than solely defend polio vaccination, Muslim clerics have gone a step further in describing vaccination as a duty for Muslim parents.

A number of areas now merit greater focus:

- Achieving operational excellence with a cadre of 19,000 social mobilisers is no mean feat. 'Operational excellence' means helping each recruit become a professional social mobiliser – one who is able to engage all possible local actors in the community, to build trust and gain access. In persuading a reluctant parent that the vaccine is life-saving for their child, rather than a source of harm, a social mobiliser can be worth his or her weight in gold. The aim is to build a workforce of self-starters who use their own knowledge of local context to find creative ways to open doors, who can find ways to build demand, and who develop innovative solutions to seemingly intractable problems. The best of them instinctively know the value of listening as well as talking. Increasing the number of women in this workforce will inevitably increase their success.
- High quality data are crucial in the social mobilisation network – both to its national and international-level managers, and to those at the front-line. Social mobilisation activities need to be adaptive and nimble, responding to the evolving epidemiology of the polio virus and guided by emerging data. These data need to capture population and household sentiments as well as mobilisers' activities. They need to inform action, by being operationalised as macro- and microplans. Systems to gather and record data on attitudes and motivation of families and communities must be prioritised. So too must such data's incorporation into dashboards and surveillance tools, which give them equal prominence to epidemiological data. Assumptions about why children are missed are not useful in reaching every child, thus good qualitative data is important to ensure that demand creation fits well with community needs.
- The program needs to put more emphasis on proactively identifying and addressing early communications risks. It must be the norm for the positive messages about the polio vaccine to eclipse the voices of deception and ignorance.

Trusted, innovative social mobilisers are worth their weight in gold

Data on community attitudes and behaviour should have equal prominence to the epidemiology

Proactive communications can dissipate rumours before they take root

At a glance

- The content of communications will need continuing refinement and deep thinking. A particularly neglected area is the potential benefit of gender-based strategies. The impact of fostering the nurturing instincts of women and the protective instincts of men could do much to break down barriers that are currently impeding vaccination of many children. This is all part of the ongoing quest to find new solutions to longstanding and recurring problems in areas affected by polio, particularly if they shift the focus from providing information to generating demand.
- Communication is an essential ingredient in the motivation and support of front line polio workers. Carefully designed communications with these critical individuals may help provide the stimulus towards eradication.
- Evidence from successful campaigns is increasingly showing the value of offering families and communities more than just polio drops. This is not purely a communications issue, but in essence a way of converting negative attitudes into 'felt needs'. Polio vaccine, given alongside other health and public services, shifts from a negative and isolated vertical program to becoming part of a package of care which is valued and sought after by communities and their members. Aligning what communities need with what they want is the ultimate goal of this field of endeavor. It is best achieved by working with a diverse range of partners, especially those with sophisticated local knowledge matched with expertise and experience on a wider scale. This will be vitally important in many of the remaining polio sanctuaries. The program cannot afford long "in-discussion" lead-in times before scaling this up. There needs to be close working between those delivering the services and those communicating about them.
- A specific and important example of the potential for greater links between polio and other programs is the opportunity to work far more closely – in both delivery and communications – with the Measles and Rubella Initiative.

The IMB recognises that none of this is easy, but it is vitally important. The social mobilisation networks in particular are operating at significant scale. It makes sense for the program to prioritise by area, identifying which areas' social mobilisers need to be brought up to the gold standard first.

The IMB will relentlessly return to this area of the program until it is satisfied that it is at the centre of everyone's thinking. We will know if further progress has been made if the number of inspiring stories from the front line exceed our time to hear about them.

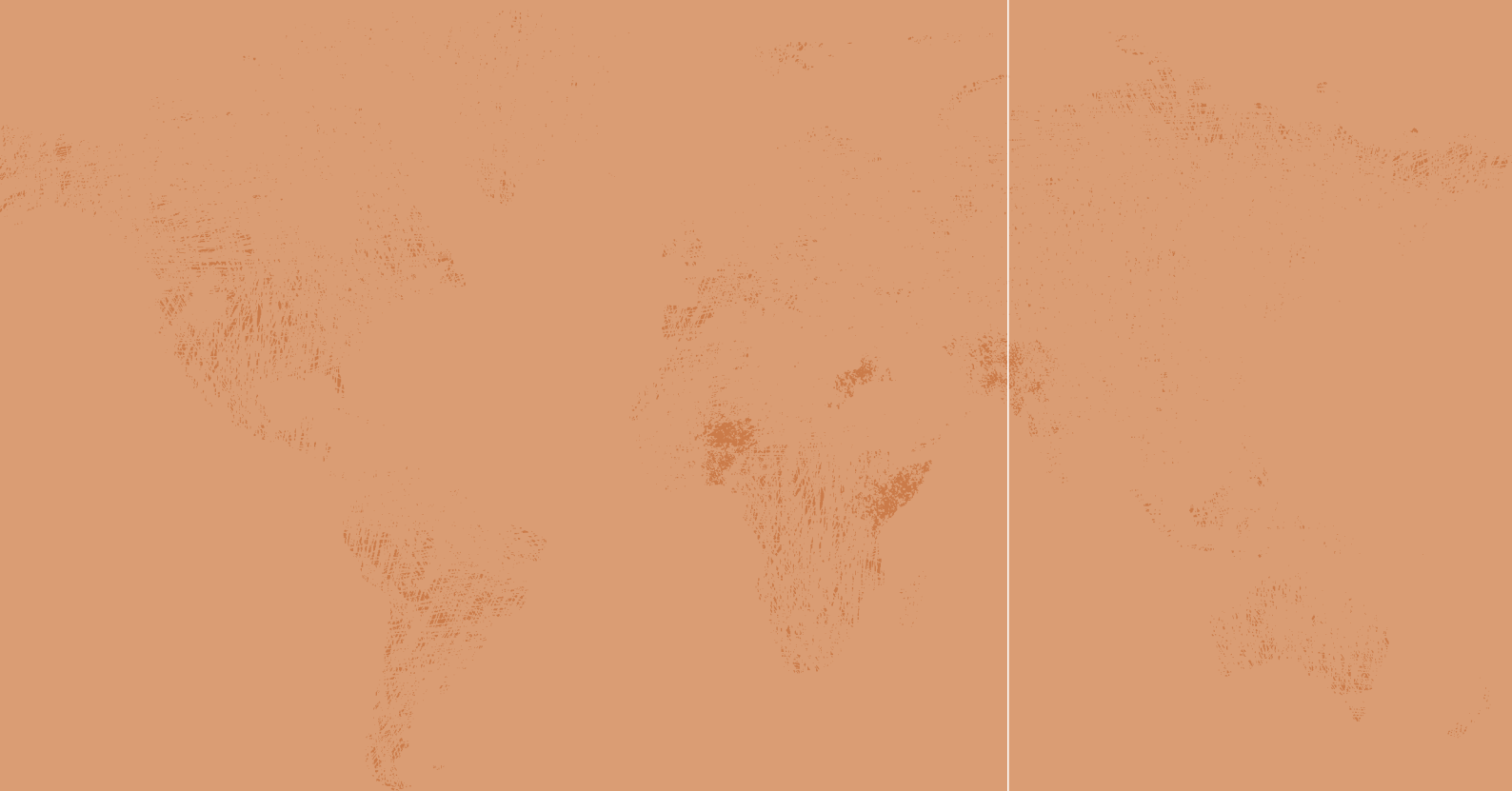
Gender-based approaches have been under-explored and under-used in gaining acceptance of the vaccine

Successful projects embed polio vaccine within wider health and public services have improved the perception of its value

Getting this right matters most in the hard core of polio sanctuaries that remain

The more inspiring stories we hear, the more confident we can be

**A POLICY MUDDLE: IPV TO HELP
INTERRUPT TRANSMISSION?**



At a glance

A policy muddle: IPV to help interrupt transmission?

Our previous IMB report, in May 2013, highlighted the need to break the policy deadlock about whether the injectable Inactivated Polio Vaccine (IPV) has a role to play in stopping polio transmission in endemic countries.

In 2015, the program plans to introduce IPV into the 140 countries not currently using it. This is part of the so-called Endgame Plan, and is primarily intended to reduce the risk of outbreaks (particularly of type 2 circulating vaccine-derived polio virus (cVDPV)) occurring when the trivalent oral polio vaccine (tOPV) is withdrawn from use and subsequently. The three endemic countries are included on this list of 140 countries.

Because IPV provides additional immunity, some argue that the vaccine could play an important role in helping to stop endemic transmission. Should it be introduced into one, two or all three of the endemic countries as soon as possible, rather than waiting for 2015?

The issue is made more complex in that there would be a number of different ways IPV could be used in a polio-affected setting. It could be part of the routine immunisation schedule, as is the plan for 2015. It could be used during house-to-house campaigns (although with substantial additional technical requirement). And/or it could be used at fixed sites, such as health camps and transit vaccination points. There are also options about how it could be introduced geographically – primarily, whether a uniform national policy would be required, or whether its use could vary between areas.

In its previous report, the IMB established that discussions about this issue have been going round in circles for two years. There is disagreement within the partnership. Some make the point that the field data are not yet available to make a well-founded policy decision. Others are anxious about the potentially destabilising effect of adding an injectable vaccine into a program where local communities have been accustomed to polio being prevented by an oral vaccine alone. A further line of argument is that the higher costs of such an approach have not been budgeted for and would not be justified. Others counter that, since IPV will need to be introduced across the world in 2015 anyway (in some cases alongside OPV), why not let affected countries and areas be in the vanguard of this new approach so that it might tip the balance against the polio virus?

When the previous IMB report was written, polio was confined to the three endemic countries. Now that there are outbreaks in other countries, it makes sense to extend the same questions to them.

A policy dilemma still hanging in the air

A global plan to introduce IPV swiftly in 140 countries

Could IPV alongside OPV in the remaining affected areas tip the balance favourably?

A complex issue met with tortuous debate

At a glance

Six months have passed since the previous IMB report, and conversation on this issue has remained confused. At the Polio Oversight Board meeting in New York, the issue was debated and the pros and cons of introducing IPV alongside OPV in polio-affected areas considered. No clear policy response was forthcoming from the program at that point.

In a written response to the IMB's May 2013 recommendation, the program did not address the question of whether IPV should be introduced to the endemic countries' routine immunisation systems early. It did report, however, that Kenya plans to use IPV in a November 2013 campaign. This will be the first instance of IPV being used in a mass vaccination campaign. It also reported that IPV is being considered as part of a package of services for children with limited or intermittent access in Pakistan (specifically, in FATA and in Gadaap, Karachi).

At the IMB's meeting, a senior program representative said that the program is "extremely clear" about where IPV fits into its plans. The IMB cannot endorse this assessment. The program's position on the issue remains muddled. It is as if the program is juggling with the issue rather than ensuring a process of wide-ranging consultation and scientific evaluation before formulating an approach. In particular, there has been no clear statement on whether to bring forward the introduction of IPV into the routine immunisation systems of endemic countries.

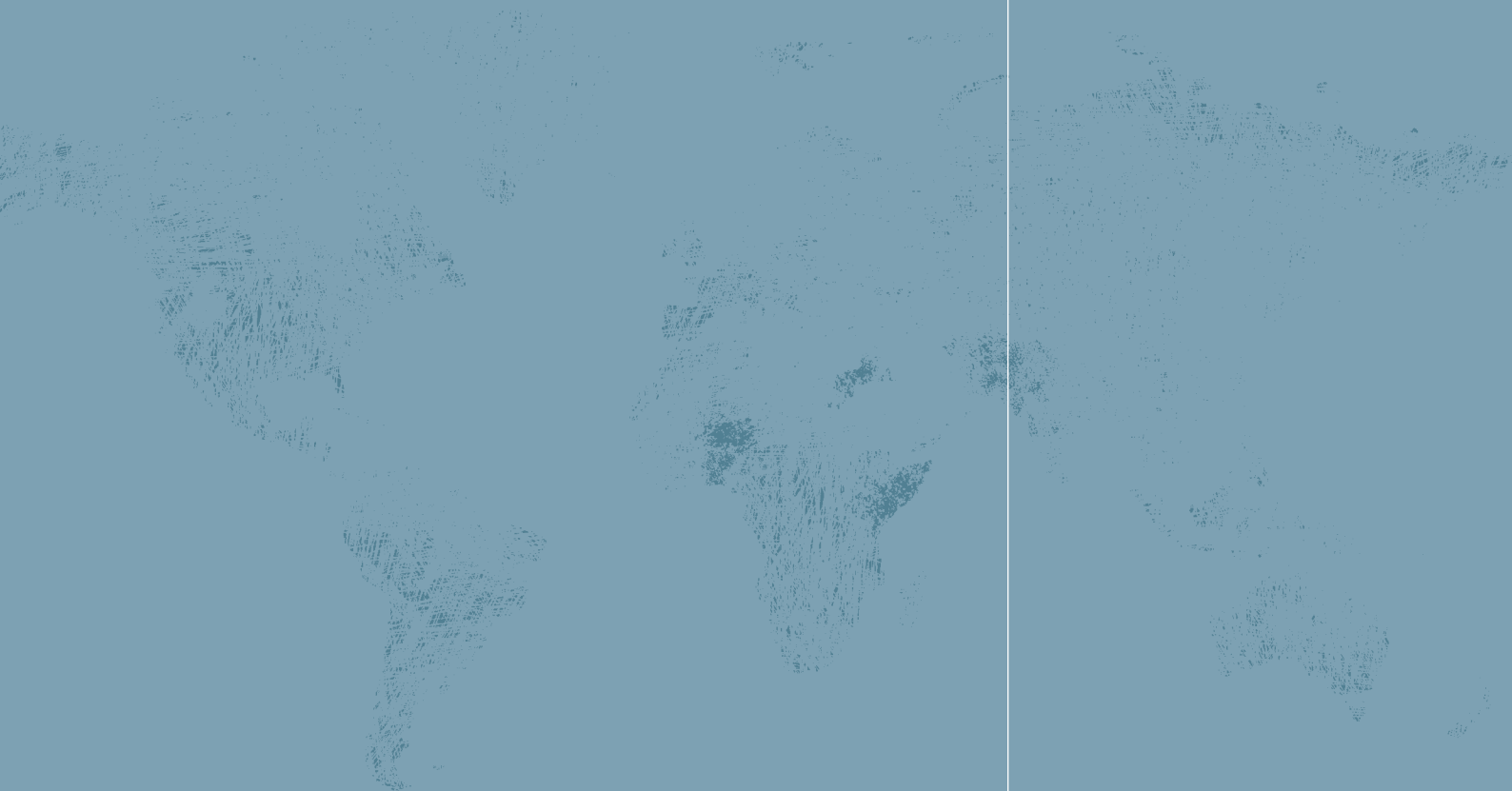
The IMB welcomes the program's willingness to innovate, making use of IPV in campaigns or other non-routine settings. But this dialogue exposes the unclear way in which policy is developed within the program, and this places the program at risk – both of failing to capitalise on the full potential of a technology such as IPV, and of introducing it into some settings without fully working through the implications (particularly in communications terms) and strategies to mitigate any risks. The IMB's previous recommendation was not that IPV should be introduced. It was that the program should come carefully to a clear answer on the question of whether and how it should be introduced. We welcome seeing movement on the issue, but clarity on this matter is now long overdue.

WE RECOMMEND THAT THE PROGRAM AGREES AND MAKES A CLEAR STATEMENT OF POLICY ON THE USE OF IPV IN STOPPING POLIO TRANSMISSION, ADDRESSING THE QUESTIONS RAISED BY THE IMB IN ITS MAY AND OCTOBER 2013 REPORTS

The program now appears to have warmed up to the idea but its full formal position on IPV with OPV is unclear

Ambiguity and delay in decision making is unhelpful to the eradication effort

CONCLUSIONS AND RECOMMENDATIONS



Conclusions and recommendations

Unprecedented challenges loom over today's polio eradication program. Levels of intimidation and violence – including horrific deaths of polio workers – have reached such a level that those giving or accepting the vaccine too often do so in harrowing and hazardous circumstances. The program is banned from accessing crucial areas, in which polio is paralysing and killing children - one million children in Somalia and another million in Pakistan cannot be vaccinated against polio because those in control of the territories are not allowing the program to operate there.

The program has dealt with insecurity before (and continues to do so), but these are different, unprecedented phenomena. All who support the eradication of the second ever disease for humankind should have no greater priority than finding ways to resolve these huge challenges. This is the greatest test of the World Health Assembly's declaration that global polio eradication is a "programmatically emergency for global public health".

Operationally, the program has far from perfect control in such circumstances. Whilst we are sympathetic to the challenge that this creates, it is more important than ever that the program's performance is as eradication-ready – as worthy of a global public health emergency – as it can be, in the many aspects that remain within its control. There are too many instances in which this is not the case. The performance issues to be addressed are illustrated by (but not limited to) the fact that the Horn of Africa

Program standards for 2013 show goal of interrupting transmission by end 2014 is at risk

Endemic countries

Program standard	Afghanistan	Nigeria	Pakistan
Paralysis detection	Met	Met	Met
Stool sample collection	Not fully met - 94%	Met	Not fully met - 86%
Vaccination coverage	Not met - 71%	Not met - 71%	Not met - 41%
IMB assessment			
Stopping transmission by end 2014	On track	At risk	At risk

Outbreaks

Program standard	Horn of Africa
Stop within six months	At risk

For details of each 2013 program standard, see GPEI Partners Report to the IMB, September 2013

was not better protected against an outbreak and that too many other countries remain vulnerable. They are illustrated too by the response in the Horn of Africa, which could not be described as a robust response to a public health emergency of global importance.

It is now fourteen months until the primary goal of the Strategic Plan (stopping global polio transmission) needs to be met. The list of problems to be resolved is formidable. The program needs to address insecurity and inaccessibility in each of the endemic countries, whilst continuing to tackle the campaigns that remain stubbornly suboptimal. It needs to regain lost ground in the Horn of Africa. It needs to pay attention to the considerable 'Red List' of vulnerable countries where neglect could enable the polio virus to run amok in parts of the world from which it has been thankfully absent for some time.

As the program enters what is supposed to be the last low season in which polio circulates, we ask ourselves (as should all within the program): is this a program that is eradication-ready? Does what we are seeing really look like a programmatic emergency for global public health? This report has identified too many ways in which this is not the case.

The goal of stopping polio transmission by the end of 2014 now stands at serious risk. This situation must be turned round with the greatest possible urgency.

This report has made 14 recommendations:

Pakistan

1. We recommend that achieving access in FATA be top priority for Pakistan's polio program and all who support it, using all diplomatic means available

Nigeria

2. We recommend that the Nigerian Expert Review Committee ensures that detailed area-specific plans are in place to overcome the challenges in each of the Local Government Areas (LGAs) that need priority focus

Horn of Africa outbreak

3. We recommend that a joint WHO-UNICEF central command unit is established for the Horn of Africa, led by a single senior commander
4. We recommend that the Polio Oversight Board is immediately appraised of what partner staff are required in, and in support of, the Horn of Africa and oversees measures to get them in place by the end of November
5. We recommend that environmental surveillance be urgently established in Nairobi, Kenya

The novel situation in Israel

6. We recommend that Israel immediately schedules a second national OPV campaign, to be completed as quickly as possible
7. We recommend that the WHO Director General briefs Member States whose populations are currently protected against polio by IPV only on the implications of circulating poliovirus in Israel

Outbreaks waiting to happen

8. We recommend that a global action plan be drawn up, identifying a definitive Red List of the world's most polio-vulnerable countries and actions to protect each of them
9. We restate our earlier recommendation that the International Health Regulations be used to ensure that all people travelling from a polio-endemic country be required to have vaccination prior to travel, and add that this should be extended to any persistently affected country

Insecurity and impositions of restrictions to access

10. We recommend that the Polio Oversight Board ensures that all of the planned security posts within the partner agencies are filled by the end of November, even if this requires extraordinary measures
11. We recommend that the partners consult and seek advice from the highest levels of the UN Security system and other experts
12. We recommend that all means be used to ensure that the polio program in every country is known to be politically neutral

Management and oversight of the global program

13. We recommend that the Polio Oversight Board commissions a comprehensive review of the program's oversight and strategic and operational management, making a decision now about how to optimally time this

Potential IPV use in interrupting transmission

14. We recommend that the program agrees and makes a clear statement of policy on the use of IPV in stopping polio transmission, addressing the questions raised by the IMB in its May and October 2013 reports

