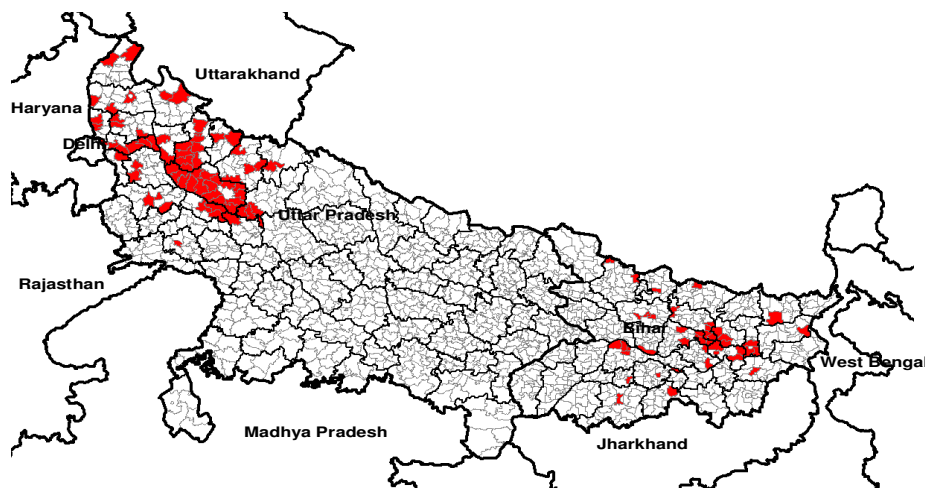


The 107 block plan

Completing polio eradication in the remaining 107 blocks



The 107 block plan

Completing polio eradication in the remaining 107 blocks

Introduction

The Government of India and its partners in polio eradication have successfully eliminated wild poliovirus type 2 (WPV2) from the country and wild polioviruses types 1 (WPV1) and 3 (WPV3) from 26 states and 7 Union territories. The two northern states of Bihar and Uttar Pradesh, where endemic poliovirus circulation persists, have successfully interrupted transmission of both WPV1 and WPV3 from the majority of districts. India is on the verge of success with polio eradication. Elimination of WPV1 in the remaining areas is the greatest remaining challenge to overcome. This document proposes an operational plan to focus the full strength of the Government of India, State Governments and its partners in Polio Eradication to overcome the remaining challenges in the 107 blocks of Uttar Pradesh and Bihar that form the epicentre of the virus, and successfully eliminate polio from India.

The plan has 5 objectives, to:

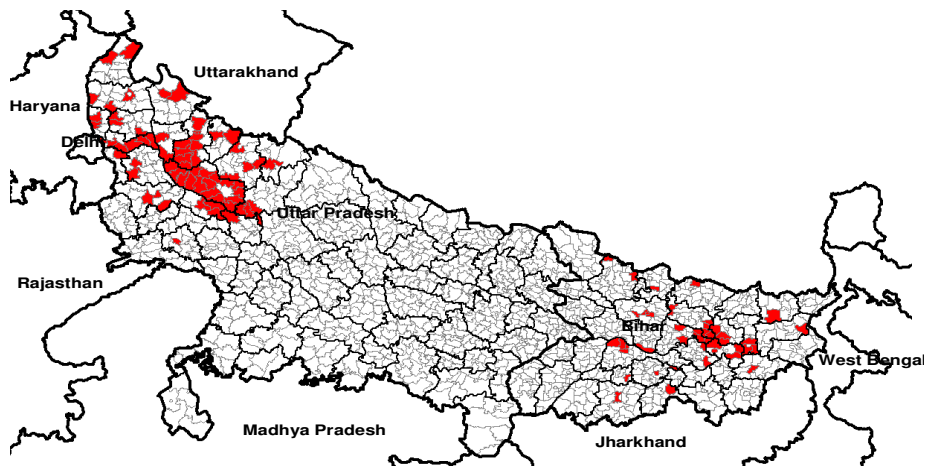
- 1. Ensure the full strength and leadership of the Government of India** is brought to bear on overcoming the remaining challenges in the 107 high-risk (HR) blocks
- 2. Launch new and/or strengthen ongoing initiatives to address factors contributing to poliovirus transmission.**
 - Interventions to improve water, hygiene and sanitation conditions
 - Enhanced village health and nutrition days, especially to deliver OPV to missed children and promote exclusive breastfeeding.
 - Reduce incidence of diarrhea through promotion of zinc/ORS
 - Strengthen routine immunization services.
- 3. Deliver the highest quality polio immunization activity** in the 107 blocks
 - Full staffing and accountability for SIA activities
 - Motivated and highly trained vaccinators and supervisors
 - Detailed and up to date microplans
 - Ensure immunization of mobile populations
 - Enhance identification, tracking and coverage of newborns
 - Maintain focus on hard to reach areas of the Kosi river basin
 - Targeted social mobilization and communication, particularly to underserved and mobile populations
- 4. Track performance and progress in HR blocks**
 - Identify a core set of indicators for each intervention area, set targets, and report regularly on progress
- 5. Conduct research to refine strategies and optimize use of vaccines**

Context

WPV1 has proven to be the most persistent of the poliovirus serotypes in India. It continues to circulate, even if at low levels, in the face of one of the most aggressive series of polio immunization campaigns ever conducted. WPV2 was easily eliminated from the country following the initial series of National Immunization Days (NIDs) using trivalent OPV (tOPV) in 1999. Continued improvements in tOPV campaigns over the following years resulted in rapid elimination of WPV3 throughout most of the country, including Bihar, with circulation continuing at only very low levels (only 4 cases) in UP by 2004. Gains were also made in reducing the extent of WPV1 circulation, though it was clear that progress was not as dramatic as that seen with WPV2 and WPV3. WPV1 outbreaks continued to occur in Bihar and Uttar Pradesh, resulting in infection of polio-free areas of India and even other countries, despite an expanding number of tOPV rounds with increasing quality. As a result, in 2005 monovalent type 1 oral polio vaccine (mOPV1) was introduced with the intention to generate even higher levels of immunity to WPV1 and eliminate this most problematic of poliovirus serotypes. The strategy produced results - UP eliminated endemic WPV1 and Bihar pushed it out of all but the Kosi river flood plain districts. However, the focus on type 1 also came at a cost - reduced control of WPV3 - and as a result outbreaks of WPV3 re-occurred in both Bihar and UP. By the end of 2009, the WPV3 outbreaks have been controlled and circulation continues in a declining trend.

With the onset of the low poliovirus transmission during January - June 2010, India is again in a position to complete type 1 polio eradication and set the stage for type 3 eradication in the country. This time coincides with a significant development for the prospects of success - the availability of a bivalent type 1 and type 3 OPV (bOPV) - a polio vaccine that is more immunogenic to type 1 and 3 than tOPV and equally immunogenic as mOPV1 and mOPV3. The availability of this new vaccine will allow greater control over WPV3 circulation while maintaining intense pressure on eliminating WPV1. Elimination of WPV1 and high level control of WPV3 in the 2010 low transmission season will position India for elimination of WPV3 during late 2010/early 2011 and thus ensure achievement of complete polio eradication.

Circulation of WPV1 has been limited to very focal areas of Bihar and Uttar Pradesh. Identification of these areas is key to ensuring the focus necessary to overcome the remaining obstacles. Analysis of WPV1 cases over the past 6 years* reveals that over 80% of type 1 cases have been reported from only 107 blocks (66 in UP and 41 in Bihar, see map below). These blocks represent only 2% of the administrative areas of the country and are responsible for generating multiple WPV1 cases, infecting other areas, and providing refuge for WPV1 persistence.



*2003-8, not including the outbreak months May-Oct 2006

These blocks also share a combination of factors that contribute to their role as the last refuge for WPV1 - high density populations, poor hygiene practices, nearly non-existent sanitation infrastructure, compromised drinking water supply, inadequate health and routine immunization services, high malnutrition rates, and poverty. The Union Government of India and state governments, particularly of Bihar and Uttar Pradesh, have already demonstrated that they can conduct world class quality immunization campaigns. These campaigns, however, are yet to achieve complete success, although they have brought the country tantalizingly close to polio eradication. The importance of completing polio eradication is too great to rely on a single approach. This plan therefore proposes the adoption of a multi-pronged strategy that includes cross-cutting activities to minimize the factors facilitating poliovirus transmission in these 107 blocks while at the same time ensuring the highest possible quality of polio immunization activities.

Strategies

The objective of this plan is to focus the strength of the Government of India and the Polio Eradication partners on overcoming the obstacles in the core 107 blocks responsible for persistent WPV1 transmission. The activities outlined below represent a multi-pronged approach for the 107 HR blocks not only focusing on delivering high quality OPV campaigns but also launching new and strengthening ongoing initiatives in the 107 blocks to address the underlying factors contributing to poliovirus circulation. These approaches are framed by continued high level oversight and leadership from the Government of India and established mechanisms to gauge progress in implementing the plan in the 107 HR blocks.

1. Ensuring full strength and leadership in the 107 blocks

The successes achieved to date in eliminating poliovirus in India are directly related to the high level of leadership and oversight provided by Union and State governments. There are numerous examples of interventions by senior Government of India (GOI)

and state health officials, district magistrates, and chief medical officers that have resulted in dramatic improvements in the performance of polio immunization activities and prevention of thousands of cases of poliomyelitis. The governments of Bihar and Uttar Pradesh in particular are to be commended for their commitment to polio activities. They have had the greatest burden of polio cases, the greatest burden of activities, and impressive successes in restricting polio to the final 2%.

Need: sustained oversight, leadership, and ensure consistency of approach across all 107 HR blocks

Proposed actions:

Government of India

- *Senior political and administrative level participation from the Ministry of Health and Family Welfare in critical state level polio meetings in Bihar and UP*
- *Senior political and administrative level visits to key HR blocks in Bihar and UP to reinforce leadership and confirm high quality of activities*
- *Engagement of other government Ministries that could contribute to overcoming the final obstacles to achieving polio eradication (Ministry of Rural Development (RD), Public Health Engineering Department (PHED), Department of Biotechnology, Ministry of Urban Development, Ministry of Panchayati Raj and Ministry of Women and Child Development)*

State Governments of Bihar and Uttar Pradesh

- *A state level meeting, led by the most senior state officials, and attended by Divisional Commissioners, District Magistrates, Chief Medical Officers, and officials from departments responsible for water and sanitation programs of districts with HR blocks to review activities for the low transmission season (through June 2010), clarify expectations and responsibilities, and commit to actions to be conducted during the 6 month period.*
- *Monthly District level meetings, chaired by District Magistrates and attended by medical officers of all HR blocks and officials from departments responsible for water and sanitation programs, to review activities for the low transmission season (through June 2010), clarify expectations and responsibilities, and commit to actions to be conducted during the 6 month period.*
- *Establishment of district performance indicators to measure and track progress by senior State officials*
- *State level video conferences led by senior state officials with DMs and CMOs of HR blocks before each round to discuss preparations and review district performance indicators*

District Governments of Bihar and Uttar Pradesh with HR blocks

- *District Magistrate assigns one district level official to oversee activities in each HR block*
- *District Magistrate chairs the District Task Force meeting before each immunization activity and at least two evening review meetings conducted during the polio campaigns between February and June 2010*
- *Chief Medical Officer monitors and reviews performance of HR blocks every day during the SLA*
- *Chief Medical Officer assigns Zonal medical officers to oversee activities in the HR blocks*

2. Launch new and strengthen ongoing initiatives to address factors contributing to poliovirus transmission

Gaps in the quality of immunization delivery have been documented in the HR blocks (basas in Kosi area, migrants, etc) and part of the focus of this plan is to ensure that these gaps are filled. However, wild poliovirus transmission is facilitated by a number of host and environmental factors including poor hygiene, sanitation, water quality and host health status. The areas of persistent WPV1 transmission in northern India are characterized by all of these factors. WPV transmission in these areas is therefore extremely efficient, facilitating continued transmission in all but the most immune populations.

Need: Improved hygiene, sanitation, and water quality in the 107 HR blocks

Poor hygiene practices and inadequate sanitation and water infrastructure are well documented problems in Uttar Pradesh and Bihar contributing to a number of public health problems, including polio. The improvement of sanitation and water infrastructure across Bihar and Uttar Pradesh is a large scale project requiring large investments of time and money that are beyond the scope of polio eradication. However, targeted interventions exist within the public health arsenal that can reduce the transmission of diseases associated with poor hygiene, sanitation and drinking water supplies and possibly tip the balance towards completing polio eradication. Such interventions include targeting activities in areas of highest risk associated with persistent or recurrent polio transmission or *hot spot villages or areas* - promotion of proper disposal of human excreta/building and use of toilets, cleaning gutters, and covering sewer drainage in urban areas, repair or sealing of contaminated hand pumps, point of use treatment (online chlorination), promotion of hygiene behaviours such as the use of toilets and hand washing, particularly among children, and distribution of soap. For rural areas, the Government of India already has in place 2 flagship programs (TSC and NRDWP) targeted towards these issues. In urban areas, the municipality providing city cleaning services provide the basis for key interventions. Engaging the teams working in these areas to identify focused interventions for the 107 HR blocks would bring real benefit to these communities, improve their health, and likely facilitate interruption of poliovirus transmission.

Proposed actions:

Government of India (National and State Governments of UP and Bihar)

- *A high level inter-governmental meeting at the national and state levels (Bihar and UP) between the Ministry of Health and Family Welfare and the ministries (PHED and RD) responsible for water and sanitation improvements to develop a plan to rapidly scale up activities in the hotspots of the 107 HR blocks. Five key activities proposed:*
 1. *Identification of rural and urban hotspots within the 107 blocks and development of plans of action for these hot-spots (identification of key actions, NGO's and Community Based Organizations, supply outlets, etc.) and secure and allocate funds from flagship and elsewhere.*

2. *Promotion of sanitation in hot spot areas – for rural areas promotion of latrines and use, for urban areas engagement with municipality services to ensure the hot spots and targeted lanes receive special attention and monitored cleaning drives.*
 3. *Promotion of key hygiene behaviours (use of toilet, safe disposal of child faeces, handwashing with soap and safe handling of drinking water) via Social Mobilization Network (SMNet) workers, anganwadi and ASHA front line worker, Strengthen behaviour change communication inputs with convergence of Total Sanitation Campaign (TSC), Sarva Shiksha Abhiyaan (SSA) and ICDS*
 4. *In hot spot areas involvement of youth and children through schools – special school package on hygiene, sanitation and polio: information, outreach drives to promote hygiene and sanitation*
 5. *Point source chlorination of all water sources in hot spots in Phase 1 and survey of all hand pumps to assess their water quality and sanitary conditions around the source and repair/replace those not meeting the standards.*
- *The government and its partners in polio eradication will use points of contact with the population to promote, critical hygiene practices (use of toilet, safe disposal of child faeces, handwashing with soap, point chlorination and safe handling of drinking water) via SM workers, anganwadi and ASHA front line worker in the hot-spot areas of the 107 blocks.*
 - *Allocate human resources for planning and monitoring of progress.*
 - *Monitor knowledge, attitudes and practices on hygiene and sanitation.*
 - *Maintain regular data collection, monitoring and reporting by state and district officials to ensure planned interventions take place.*

UNICEF

- *Train SMNet and prepare materials for the integration of hygiene into orientations for frontline workers on critical hygiene practices*
- *Support District Water and Sanitation Mission (DWSM), SMNet and frontline workers to promote total sanitation to all households in the hotspots of the 107 blocks and communities via technical and training materials, monitoring frameworks, training and IEC materials*
- *Develop a hygiene education module for focused interventions in schools and outreach to homes in the hot spots of the 107 blocks. Provide training support if/where required.*
- *Build the capacity of masons for quality construction of toilets*
- *Advocate for Total Sanitation Campaign resources to be used to speed up sanitation coverage in the 107 HR Blocks*
- *Monitor knowledge, attitudes and practices on hygiene and sanitation*

WHO/NPSP

- *Monitor and report back to district, state, and national Government officials on the progress with implementation of the hygiene, sanitation, and water strategies in the 107 blocks*

Need: Enhance Village Health and Nutrition Days to immunize missed children

Vaccinators are trained to immunize 'missed children' (those not at home at the time of the visit to the house) through periodic revisits on the same or subsequent days of the house to house activity. This strategy has proven to be the most effective method for immunizing missed children. However, there are always a small number of children that

remain missed at the end of the house to house activity and traditionally these have been covered through a 'B-team' activity. B-team requires an additional day of revisit after the house to house 'A-team' period and is fairly work intensive but provide limited benefits. As a result, the Government of India has proposed a novel way and likely more efficient approach to immunize missed children during *village health and nutrition days*:

Immunization of missed children during village health and nutrition days will allow the polio and village health and nutrition day systems to reinforce their efforts. Polio will provide lists of households with missed children along with training and monitoring. The village health and nutrition day system will provide a platform for delivering OPV to missed children along with other health interventions, including provision of zinc, ORS and simple messages on hygiene and nutrition.

Proposed actions:

Government of India, WHO/NPSP, UNICEF, CORE

- *GOI and its partners in polio eradication will work together to pilot immunization of missed children during village health and nutrition days and use the data to document lessons learned, improve the overall quality of VHND and expand the approach to other priority areas of UP and Bihar*
- *GOI will work with the Government of UP and Bihar to ensure that the package of services proposed for the VHND are available to ANMs, AWWs and ASHAs.*
- *NPSP, UNICEF and CORE will support monitoring of VHNDs and provide feedback to the state and district authorities on services being provided*
- *UNICEF and CORE will support the training of AWWs and ANMs in IPC for RI, exclusive breastfeeding, use of zinc and ORS.*

Need: Reduce prevalence of diarrhea through promotion of zinc/ORS

The well documented high prevalence of childhood diarrhea in Bihar and UP inhibits the efficacy of OPV, exacerbates poor nutrition and possibly facilitates the spread of wild polioviruses. The benefits of zinc supplementation, along with ORS, for treating and preventing childhood diarrhea are well documented (more than a dozen randomized controlled trials over the last 20 years) and supported by national policy from the Government of India and global policy from the World Health Organization and UNICEF. In 2006, the Government of India officially incorporated zinc supplementation in the national guidelines for treatment of acute diarrhea and is now in the process of ensuring supply and training Anganwadi centers through the National Rural Health Mission. However, the percentage of children who receive ORS during an episode of diarrhea is still only 12.5% in UP while the coverage of zinc is only at 0.5%. The intensified efforts of the Government of India and Polio partners in the 107 HR blocks could be used to communicate to public and private medical practitioners on the importance and benefits of zinc and ORS for the management of diarrhea, ensure adequate supplies of zinc are available in PHC's for distribution to communities, and focus communication efforts on generating community demand for ORS and Zinc. This could significantly reduce the burden of diarrhea, improve the health and micronutrient

status of the children in these HR areas, and facilitate interruption of poliovirus transmission.

Proposed actions:

Government of India, WHO/NPSP, UNICEF, CORE

- *A high level meeting within the Ministry of Health and Family Welfare including state government representatives to target zinc distribution to the 107 HR blocks. This will include a plan to ensure availability of zinc supply in PHCs, AWCs and for the VHNDs, training of anganwadi's, sensitization and advocacy with private practitioners with the support of LAP, and provision of promotion and educational materials to practitioners and community members.*
- *UNICEF to support GOI in providing zinc promotional and educational materials and to train all CMCs in the 107 HR blocks on the promotion and utilization of zinc. CMCs will provide data on incidence of childhood diarrhea and the number treated with zinc/ORS in CMC areas through periodic data.*
- *CORE to continue to communicate to families on diarrhea and zinc supplementation, and train CMCs in home based diarrhea management.*
- *NPSP will provide GOI with data on the availability of zinc in the 107 HR blocks and support GOI to train vaccinators in distributing zinc/ORS promotional materials once supply is ensured*

Need: Improve routine immunization services in the HR blocks

Routine immunization (RI) remains weak in much of Bihar and UP. The majority of the 107 high risk blocks are situated in those districts with the lowest survey assessed coverage rates (DLHS 2 and 3). The major barriers to immunization identified through systematic monitoring include lack of awareness of benefits of immunization and availability of local services and fear of AEFI – issues related to clear communication and IEC. Strengthening routine immunization services throughout Bihar and UP but in particular in the high risk blocks is important to achieving and sustaining the ultimate goal of polio eradication. To improve routine immunization performance in the near term, it is necessary to improve the quality of delivery and access to services through training, supportive supervision and regular monitoring of vaccination activities for corrective action. Streamlining training of medical officers and the NPSP SMO network on RI will also augment the quality of services and their ability to engage in RI strengthening. Proven effective strategies, such as the use of polio microplans to regularly update RI microplans to ensure the inclusion all geographic and hard to reach populations, would be instituted. Improving access to vaccination services by minimizing barriers, whether physical or attitudinal, will also be undertaken through equitable staffing of front-line positions (ANMs and anganwadi workers) and effective mobilisation and communication efforts.

With this in mind, the following actions are proposed:

State Governments of Bihar and Uttar Pradesh

- *With assistance from partners, develop locally relevant IEC materials and effective channels for communication with all communities.*

- *Hold coordination meetings of Health departments with ICDS followed by joint messages and evidence-based coordination for improving the VHNDs and Immunization sessions.*
- *Ensure the placement and training of medical officers, health workers, AWWs and ASHAs on RI in all 107 blocks on a priority basis.*
- *Ensure that District PIPs include all the additional requirements of HR blocks for funding under NRHM.*
- *Update RI micro-plans using polio microplans and include maps showing session sites and days.*
- *Ensure that polio micro-plans include information on the nearest RI session site for the area covered each day by each team.*
- *Modify Polio Vaccinators training to include key messages to be communicated to beneficiaries regarding where RI session sites are, when they are held and the name of the ANM.*
- *Newborns identified in the tracking booklets to be followed up for RI doses during subsequent SIA rounds.*
- *Incorporate the newborns identified during SIA rounds into the due-list of beneficiaries to be tracked for RI sessions.*
- *Review regularly the progress of RI during task force meetings at state, district and block level with time-lines for action.*
- *District and block medical officers conduct monitoring of RI sessions to ensure that all the planned sessions are held and all the vaccines and logistics are available.*
- *Ensure monitoring data is entered and analyzed at block and district level and used for decision making and follow-up*
- *Make special plans for reaching the unreached, particularly underserved, hard to reach, mobile communities that are not included in regular RI sessions*

WHO/NPSP

- *SMOs of all 107 HR blocks will be trained in RI.*
- *SMOs will coordinate with partner and government counterparts to develop RI session monitoring plans to ensure that sessions in high-risk areas are monitored at least once a quarter and that feedback is provided to block and district officers and discussed during District Task Force meetings.*
- *SMOs will facilitate updating and convergence of polio and RI microplans at the block level.*

UNICEF/CORE

- *Support state and district level official to develop special communication plans for RI messages*
- *SMNet workers in all 107 blocks will be given refresher training in RI*
- *CMCs and BMCs will facilitate RI sessions, particularly in underserved areas, and will support session and coverage monitoring, providing standardised information to NPSP for compilation and reporting*
- *BMCs tracking mobile communities will work with SMOs and district level officials to ensure high risk groups are incorporated into RI microplans*

3. Deliver the highest quality polio immunization activity

The quality of immunization activities in Bihar and Uttar Pradesh has already reached a very high standard. However, variation in quality certainly exists between blocks and

over time. The lack of consistent quality across the entire area of persistent transmission allows one area to reinfect the other, perpetuating poliovirus transmission. A major thrust of this plan is to ensure consistent high quality operations across all 107 HR blocks for all SIA rounds in the first half of 2010. Additional strategies also outlined in this plan are intended to address factors facilitating poliovirus transmission, but those efforts alone will not be effective without a solid base of consistent, multiple, high quality, vaccine delivery. Achievement of the required quality requires addressing a number of areas.

Need: Full staffing and accountability for quality of activities in the 107 blocks

High quality polio eradication activities are intimately dependent on sufficient number of accountable and well trained staff. This has been an ongoing challenge, not only for the state government of Bihar and Uttar Pradesh, but also for the polio eradication partners. There are simply not enough human resources to cover all areas. For this reason, this plan proposes priority and focused filling of key vacancies in the government and in the partner agencies in the 107 HR blocks.

Proposed actions:

State Government of Bihar and Uttar Pradesh

- *Analysis of vacancies for medical officers, auxiliary nurse midwives (ANM), and traditional birth attendants (anganwadi) will be conducted for all 107 blocks and vacant positions filled on a priority basis.*
- *A medical officer in charge will be assigned who will be responsible for each of the 107 HR blocks. These officers will be the most able and motivated medical officers of the district.*

WHO/NPSP

- *Each of the 107 HR blocks will have one experienced and motivated SMO who will be responsible for supporting government activities in the block (at least one SMO per 2 high-risk blocks) (ANNEX 1)*
- *Each of the 107 HR blocks will have one experienced and motivated field volunteer assigned by name to support polio activities (at least one FV per HR block)*
- *From the February NID to the June SNID, senior and experienced NPSP staff from polio-free States and areas will be assigned periodically for support to HR blocks.*
- *All SMOs assigned to HR blocks will have received or will be provided NPSP's management training within 6 months.*

UNICEF/CORE

- *Analysis will be conducted to determine the current strength of community mobilizers in the HR blocks along with indicators to determine the need for improved social mobilization in these blocks. HR blocks with social mobilization needs will be highlighted for increased community mobilizer presence and staff will be deployed by UNICEF/CORE.*
- *All UNICEF supported SMNet staff in HR Blocks will go through an enhanced training programme which will include intensive IPC skills on polio, RI, management of diarrhea, hygiene and sanitation messages, and breastfeeding,*

Need: Motivated and highly trained vaccinators and supervisors

Vaccinators and supervisors are the foundation for high quality polio immunization activities. Their hard work carrying vaccine, counselling parents, and administering drops to children is ultimately responsible for interrupting the final chains of poliovirus transmission. In the HR blocks, vaccination and supervisor teams should receive training of the highest quality. Teams should only be composed of trained vaccinators. Supervisors should also be trained on the most effective methods for supporting vaccination teams. Training status and performance of vaccinators and supervisors in these areas should be tracked with acknowledgement of high level performance. Mobile and transit teams offer vaccination in unique settings and these teams will receive training appropriate to their work.

Proposed actions:

State governments of Bihar and UP, NPSP/WHO and UNICEF:

- *100% of the vaccinators and supervisors in HR blocks will be trained by a district health official / SMO team at least once every 3 rounds*
- *A participatory training methodology will be used for all vaccinator trainings*
- *Training modules for transit and mobile teams will be further developed to address the specific challenges to their work*
- *A training module for supervisors will also be developed to ensure they are experts in the tasks of a vaccination team and know how to most effectively support their teams*
- *Training venues will be decentralized in HR blocks with difficult to reach areas, such as the Kosi river blocks, to ensure that all vaccinators can easily attend a training session.*
- *Rosters of training status of all vaccinators and supervisors will be maintained by the block medical officer and the supporting SMO.*
- *Enhanced communication module will be developed by UNICEF and WHO/NPSP for all vaccinators and supervisors*

Need: Detailed and up to date microplans

Microplans in the HR blocks need to be complete, up to date, and strategic. Team composition should be reviewed and appropriate for each area. At least one female should be on each team. Workload should be rational with no team covering more than 100 households. Microplans need to describe coverage of mobile populations by house to house teams or mobile teams. Transit sites should be identified with the responsible team noted in the microplan. Supervision plan for all teams should be clear. Vaccine distribution plan should be rational and ensure early and timely delivery of vaccine to the field. Detailed maps at the block, supervisor, and vaccinator levels should be included in the microplan as well.

Proposed actions:

- *New microplans will be created for all HR blocks before the March 2010 SNID.*

- *All supervisor areas in HR blocks will be field validated by the block medical officer and SMO before March 2010.*
- *Detailed maps for all aspects of the microplans will be available in all HR blocks.*

Need: Ensure immunization of mobile and other underserved populations

Mobile populations found at either transit sites or brick kilns, construction sites, basas (Kosi river area), or other temporary settlement sites play a critical role in poliovirus transmission. These populations are more likely to be missed during SIAs due to their movements and therefore identification and planning for their immunization is critical. The majority of the HR blocks are characterized by high out-migration of migrant labour (Kosi river area of Bihar and Badaun district of western UP). Effective immunization of these groups requires identification of migrants in the HR blocks of residence but also engagement from states and districts that are destinations for migrant labour from Bihar and Uttar Pradesh. Analysis of migration patterns and reporting of WPV1 cases occurring outside of Bihar and Uttar Pradesh over the years highlights greater Delhi (Delhi + parts of Haryana + bordering districts of Uttar Pradesh), greater Mumbai, and parts of Punjab, Gujarat, and West Bengal as important destinations for migrants which are epidemiologically linked to persistent poliovirus transmission in Bihar and Uttar Pradesh.

The strategy for covering migrant populations therefore needs to include actions not only in HR blocks but also actions in these destination areas. All HR blocks + migrant destination areas will carefully review the strategy for covering these populations. Key transit and migrant areas need to be verified before every round. "Mobile teams" should be formed to cover migrant areas that can not be easily covered by house to house teams - brick kilns, basas, etc. Mobile teams should be able to easily cover their daily areas taking into consideration their mode of transportation (i.e. walking teams should not be responsible for areas spread over many kilometers etc).

Similarly, transit teams should be placed at key transit areas, guided by the volume of traffic. At a minimum, this includes all train and bus stations, important markets, and important road crossings.

Both mobile and transit teams should have a supervisory structure that is separate from the house to house supervision and is developed with a series of supervisory checks to ensure teams achieve results.

The state and district governments, in collaboration with UNICEF, CORE and WHO-NPSP should continue to strengthen strategies for coverage of the Muslim populations during the polio campaigns and VHNDs in the 107 blocks. The partners should continue to provide monitoring feedback on the implementation of these strategies to the district authorities so that adequate focus is maintained on the coverage of underserved populations.

Proposed actions:

- *All HR blocks + destination areas (greater Delhi, greater Mumbai, Punjab, Gujarat, and West Bengal) will review the transit and migrant sites before every round. Particular vigilance will be paid to identifying any new settlements that have developed since the previous round.*
- *Building on their ongoing dialogue on polio eradication with religious and community leaders, District health officials and partners will include issues related to strengthening RI and other services to obtain their support and mobilize active community engagement and demand generation.*
- *Transit teams will be strategically placed at all key transit areas and supervised separately from house to house teams.*
- *House to house teams will be assigned migrant areas in close proximity to their daily work areas. This will be specifically noted as part of their responsibility in microplans and communicated to them by supervisors.*
- *Migrant sites that can not be covered by house to house teams will be covered by mobile teams. Areas for coverage should be of a reasonable size and teams should be instructed to be at each site during specified times in order to facilitate supervision and monitoring.*
- *Mobile and transit teams will be supervised separately from house to house teams*
- *Microplans will be updated to provide all the details on mobile and transit teams (supervision, placement, timings for each site, etc.).*
- *A specific training package will be developed for mobile / transit teams and used to train all teams in HR/RT blocks + destination states.*
- *NPSP will ensure a high level of monitoring of migrant sites (>50%)*
- *UNICEF will develop and deliver targeted communication messages for these groups, particularly in Uttar Pradesh and Bihar, and will support SMOs to list and track these groups in areas of high migration.*

Need: Maintaining focus on hard to reach areas of the Kosi river basin

The Kosi river blocks represent a unique operational challenge for polio activities that is already being addressed through the Kosi River Plan developed in 2008. This focus and intensification of logistical support to enhance monitoring and supervision should continue.

Need: Targeted Social Mobilization and Communication

The Communication Strategy for Polio Eradication in India has been implemented for 6 years by an increasing number of frontline communication workers who go door to door every month mobilizing parents of children under 5 to take OPV each time it is offered. The Social Mobilization Network (SMNet) - now a workforce of over 6,000 UNICEF and CORE-supported staff across the highest risk areas of Uttar Pradesh (U.P.) and Bihar – will continue to be critical for targeted social mobilization and communication in the 107 high risk blocks.

The communication strategy for the 107 high risk blocks will focus intensively on enhanced polio messages – through interpersonal communication, media, and advocacy -

to ensure parents are aware of the need for continuous OPV vaccination, and that this awareness is complemented by knowledge of other health behaviours that can enable the polio vaccine to work more effectively.

A comprehensive package of communication materials and messages will be rolled out to achieve 3 objectives:

- Sustain and increase high levels of community and political ownership_of the Polio Eradication Programme.
- Reduce the proportion of missed children in SMNet High risk areas, particularly those_from the highest risk groups of underserved minority Muslims, nomads, slum-dwellers, brick kiln and construction workers
- Facilitate interruption of transmission by promoting Routine Immunization, exclusive breastfeeding, sanitation, and the management of acute diarrhoea

The media will be engaged with a more structured and strategic approach to target editors, journalists, broadcasters and producers from key media outfits so the programme can leverage evidence based and positive media coverage where it can have the most impact.. A concerted effort will go into motivating and training CMCs and AWWs (in Bihar) to ensure the face of polio eradication in the field remains positive, consistent, and visible. Intensively focusing on high-risk groups will account for a significant proportion of the communication effort. These groups have been and remain the most marginalized group for OPV consumption and other service acquisition. We must work harder to reach these groups.

With clear objectives and measurable benchmarks for communication, there will be objective criteria to recognize progress in the communication effort, and identify areas where more work is required.

Proposed actions:

UNICEF/CORE

- *Additional SMNet deployment to high risk areas in 107 blocks of UP and Bihar*
- *Orientation training and periodic refresher trainings for CMCs and anganwadi workers (in Bihar) on key behaviour change messages, interpersonal communication and collection of monitoring data*
- *Comprehensive package of IEC materials developed for polio “plus” messages*
- *Focused strategy on identifying and reaching expanded underserved groups (migrants, nomads, brick kiln workers, minority muslims) with communication messages and health services*
- *Work with state and district officials to ensure underserved groups are included in RI microplanning and are reached with other health services, particularly through VHND*
- *Media and advocacy strategy to increase positive and neutral coverage on polio in the major metro cities, as well as high risk districts of UP and Bihar*
- *Collection and dissemination of block and district level data to drive communication planning and achievement of results*

- Systematically reassess community KAP results every 6 months.

Tracking performance and progress in the HR blocks

The low poliovirus transmission season from January - June 2010 is the best opportunity to interrupt WPV1 transmission and improvements need to be made in time to have an effect during this period. Therefore, progress in implementing the proposed actions in the HR blocks will be tracked by jointly identifying a series of core indicators for each intervention proposed in the plan, and monitoring progress against set targets. Actions to be conducted at all levels by the Government of India and by polio partners will be agreed and noted in February 2010 with a mid-term progress assessment to occur at the end of March 2010 and at the end of the low transmission season at the end of June 2010. Meetings at state and district level will be held as often as needed to ensure that activities are taking place at the required pace.

In addition to monitoring progress against targeted activities, the program will also monitor data from the 107 blocks generated during SIAs and AFP surveillance activities. Separate data analysis for the 107 blocks will be conducted after each SIA to track trends from round to round. Separate data reports from the 107 blocks will be generated and made available to district, state, and national level government officials and partners. These indicators will be analyzed to identify areas needing further improvement.

Proposed actions:

- Government of India and its polio partners at the national, state, and district levels will agree on targeted actions to be conducted and indicators to track progress towards achieving these goals at the end of March and end of June
- NPSP will develop a separate analysis of SIA and AFP surveillance data from the 107 blocks that will be used to track key indicators after each SIA round Jan-June 2010
- UNICEF will develop a block indicator sheet presenting the block profile on one sheet summarizing the key communication data from the block
- UNICEF will support GOI and polio partners to identify key process indicators for additional convergent areas: RI, Zinc and ORS, sanitation and breastfeeding. These indicators can be tracked each month in the communication block profiles and monitored for progress.

Conducting research to refine strategies and optimize use of vaccines

Regular seroprevalence surveillance will be carried out in the key transmission areas of the HR blocks in western UP and central Bihar at the end of the low transmission season, to provide information on immunity status and inform activities. The programme will conduct:

- Sero-survey among very young children in May/June to assess the impact of the bOPV, tOPV , mOPV3 and mOPV1 rounds conducted between Oct 2009 and April 2010, so as to guide vaccine decisions in advance of the high season.
- Specific studies on mucosal immunity will be initiated as quickly as possible, and will include assessment of the best mechanisms (mOPV, bOPV, IPV) to close any mucosal immunity gaps, if identified.
- Surveys and special surveillance activities will be undertaken to better understand poliovirus transmission dynamics within areas of persistent and recurrent poliovirus transmission.
- Case-control studies will be undertaken to better understand and quantify socio-demographic, host and environmental risk factors associated with persistent polio transmission.
- Systematically reassess community KAP results every 6 months.

Proposed Actions:

- A research working group will be convened that will have representation from ICMR, NCDC, WHO, UNICEF, and academic institutions such as AIIMS. The group will discuss and develop different study designs and protocols for the recommended research studies, obtain approvals from the relevant technical and ethical review committees and endorsement of MoHFW and initiate field activities.

Annex 1: The 107 High Risk Blocks

BIHAR		UTTAR PRADESH	
District	Block	District	Block
Araria	Raniganj	Aligarh	Akrabad
Begusarai	Bakhri		Aligarh Urban
	Balia		Lodha
Bhagalpur	Nathnagar	Badaun	Bilsi
Champan East	Dhaka		Binawar
	Raxaul		Bisauli
Darbhanga	Goraboram		Dataganj
	Kiratpur		Dehgawan
	Kusheshwar Asthan East		Gunnaur
	Kusheshwar Asthan West		Islamnagar
	Singhwara		Junawai
Gaya	Gaya Sadar		Miaon
Jehanabad	Ghosi		Quader Chowk
Khagaria	Alauli		Rajpura
	Beldaur		Sahaswan
	Gogari		Samrer
	Khagaria Urban		Ujhani
Madhepura	Alamnagar		Usawan
	Chausa		Wazeerganj
	Udakishunganj	Baghpat	Baghpat
Madhubani	Jainnagar		Baraut
Muzaffarpur	Marwan	Bareilly	Bhamora
	Musahri		Bithri Chainpur
Nalanda	Bihar Sharif		Dalel Nagar
	Sarmera		Shergarh
Nawada	Pakribarawan	Bijnor	Kiratpur
Patna	Danapur		Kotwali
	Maner	Bulandshahar	Bulandshahr
	Phulwarisharif		Khurja
	Patna Sadar	Farrukhabad	Kaiamganj
Purnia	Baisi	Ferozabad	Firozabad Urban
Saharsa	Mahishi	Gautam Budh Nagar	Dadri
	Salkhua	Ghaziabad	Dasna
	Simri Bakhtiarpur		Dhaulana
Samastipur	Bibhutipur		Garh Mukteshwar
	Bithan		Hapur
	Hasanpur		Loni
	Singhia		Simbhawali
	Warisnagar	Jyotiba Phule Nagar	Gajraula
Sitamarhi	Dumra		Rehra
Vaishali	Raghopur	Kanshiram Nagar	Ganj Dundwara
			Patiyali
			Sahawar
		Meerut	Machra
			Rohta
			Sarurpur Khurd
		Moradabad	Bahjoi

	Dilari
	Kunderki
	Manhota
	Moradabad Urban
	Naroli
	Panwasa
	Sambhal
	Tajpur
Muzaffarnagar	Budhana
	Kairana
	Meghakeri
Pilibhit	Barkhera
Rampur	Bilaspur
	Saidnagar
Saharanpur	Muzaffarabad
	Sarsawan
Shahjahanpur	Jalalabad
	Kalan
	Mirzapur