

# Telangana *Anganwadi* and School-Based Mass Deworming Program

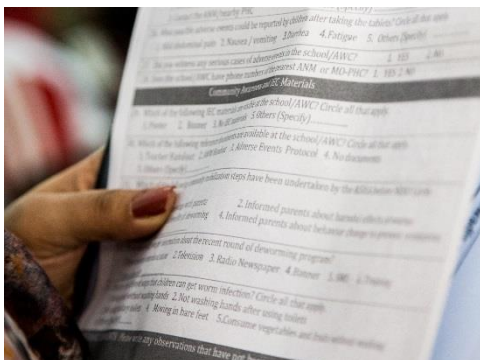


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National Deworming Day-February, 2016  
June 2016

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## ACRONYMS

|        |  |
|--------|--|
| ANM:   | Auxiliary Nurse Midwife                          |
| AWC:   | Anganwadi Centre                                 |
| ASHA:  | Accredited Social Health Activist                |
| AWW :  | Anganwadi Worker                                 |
| BEEO:  | Block Elementary Education Officer               |
| BRP:   | Block Resource Person                            |
| CS:    | Civil Surgeon                                    |
| CDPO:  | Child Development and Project Officer            |
| DEO:   | District Education Officer                       |
| DEO:   | Data Entry Operator                              |
| DOE:   | Directorate of Education                         |
| DWCD:  | Department of Women and Child Development        |
| DCCM:  | District Coordination committee meeting          |
| DHMFw: | Department of Health, Medical and Family Welfare |
| GoI:   | Government of India                              |
| GoTS:  | Government of Telangana State                    |
| ICDS:  | Integrated Child Development Services            |
| IEC:   | Information, Education and Communication         |
| NHM:   | National Health Mission                          |
| NDD:   | National Deworming Day                           |
| MOHFW: | Ministry of Health and Family Welfare            |
| MEO:   | Mandal Education Officer                         |
| PIP:   | Program Implementation Plan                      |
| PSA:   | Private School Association                       |
| PODTT: | Project Officer District Training Team           |
| PHC:   | Primary Health Centre                            |
| PD:    | Project Director                                 |
| SPIP:  | Supplementary Program Implementation Plan        |
| SCM:   | Steering Committee meeting                       |
| RBSK:  | Rashtriya Bal Swasthya Karyakarm                 |
| SPHO:  | Senior Public Health officer                     |
| WHO:   | World Health Organisation                        |

## Executive Summary

Under the ambit of National Deworming Day (NDD) 2016, Telangana implemented the first round of *anganwadi* and school -based mass deworming on February 10, followed by mop-up day on February 15, 2016. In this round, the State of Telangana dewormed 92,77,057 children between 1-19 years old, across 29,442 government and government-aided schools, 11,611 private schools and 33,443 *anganwadi* centres (AWCs). The state’s achievement is the outcome of exemplary leadership from the Department of Health, Medical & Family Welfare (DHMF), and effective coordination between Department of Education (DOE), Department of Women and Child Development (DWCD) and Evidence Action. Children’s Investment Fund Foundation (CIFF) provided funding for Evidence Action’s technical assistance to the deworming round.

### Key Achievements of National Deworming Day 2016

| Indicators  |   | Results          | % Coverage |
|---|---|------------------|------------|
| Total number of children targeted   |   | 99,68,994        | -          |
| No of enrolled children (classes 1-12) who were administered albendazole on NDD and MUD               | Government/<br>Government Aided Schools | 35,98,958        | 96         |
|   | Pvt Schools                             | 30,34,907        | 89         |
| Number of registered <i>anganwadi</i> children (1-5 years), administered albendazole on NDD and MUD   |   | 15,12,690        | 93         |
| Number of unregistered <i>anganwadi</i> children (1-5 years), administered albendazole on NDD and MUD |   | 2,72,447         | 87         |
| Number of out-of-school children (6-19 years) dewormed on NDD and MUD                                 |   | 8,58,055         | 99.9       |
| Total number of children dewormed (1-19 years)  |   | <b>92,77,057</b> | <b>93</b>  |

Source: Report submitted by National Health Mission (NHM) TS to GoI dated March 30, 2016 (Annexure A).

Building upon the successful first phase of NDD in February 2015 that covered 11 Indian states/union territories<sup>1</sup>, the GoI scaled up NDD in 2016 to target 27 crore children across 36 states and Union territories. Evidence Action worked in close association with the GoIs Child Health Division to plan and implement round two of NDD 2016. Learnings from this round, especially private school engagement and strategies to reach out-of-school children, will contribute to a sustainable deworming program that aims to reduce the prevalence and intensity of worm infections for all school-age and preschool-age children in the state.

## 1. Program Background

<sup>1</sup> Assam, Bihar, Chhattisgarh, Dadra and Nagar Haveli, Haryana, Karnataka, Maharashtra, Madhya Pradesh, Rajasthan, Tamil Nadu, and Tripura

In India, approximately 22 crore children between the ages of 1 and 14 are at risk of parasitic intestinal worms (known as soil-transmitted helminths or STH). The infected children represent approximately 68% of Indian children in this age group and 28% of all children at risk for STH infections globally, according to the World Health Organization (WHO). These parasitic infections result from poor sanitation and hygiene conditions, and are easily transmitted among children through contact with contaminated soil. Various studies have documented the widespread and debilitating consequence of chronic worm infections, which cause anaemia and malnutrition among children, affecting their physical and cognitive development. Worm infections contribute to absenteeism and poor performance at school, and in adulthood, diminished work capacity and productivity<sup>2</sup>.

## 1.1 A Cost-Effective Win for Education: Deworming through Schools

Evidence from across the globe shows that deworming leads to significant improvement in outcomes related to children's health, education, and long-term well-being. In 2008 and again in 2012, the Copenhagen Consensus Centre identified school-based deworming as one of the most efficient and cost-effective solutions to the current global challenges. School-based deworming is considered a development "best buy"<sup>3</sup> due to its impact on educational and economic outcomes. The benefits of using such platforms for deworming are immediate. Regular treatment can reduce school absenteeism by 25%, with the greatest participation gains among the youngest pupils<sup>4</sup>. Young siblings of those treated and other children who live nearby but were too young to be dewormed also showed significant gains in cognitive development from school-based deworming.<sup>5</sup> The existing and extensive infrastructure of schools provides the most efficient way to reach the highest number of children, and teachers, with support from the local health system, can administer treatment with minimal training. Preschool settings are often used to provide children with basic health, education, and nutrition services, making this a natural, sustainable, and inexpensive platform for deworming programs<sup>6</sup>.

## 1.2 Child Deworming in India Scenario

Deworming children is part of the GoI's school and preschool health programs, such as the Weekly Iron-Folic Acid Supplementation (WIFS) program, which provides a weekly dose of Iron Folic Acid (IFA) with biannual deworming for adolescents (10-19 years).<sup>7</sup> National Iron Plus Initiative (NIPI) is a national anaemia control program which offers IFA supplementation and deworming for a wider age group of 1-45 years, including preschool-age children who also receive Vitamin A. Until recently, only a few states ran effective school and preschool (*anganwadi*)-based deworming programs with good coverage. Many programs had sporadic deworming efforts and low coverage, while in other states no deworming programs existed. Considering this complex environment and the clear need to accelerate treatment for India's children, GoI renewed its focus on deworming by streamlining efforts through the *anganwadi* and school - based NDD launched in 2015.

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<sup>2</sup> Helminth control in school-age children- A guide for managers of control programmes: WHO, 2011

<sup>3</sup> <http://www.povertyactionlab.org/publication/deworming-best-buy-development>

<sup>4</sup> Miguel, Edward and Michael Kremer. "Worms: Identifying Impacts On Education And Health In The Presence Of Treatment Externalities," *Econometrica*, 2004, v72 (1,Jan), 159-217.

<sup>5</sup> Ozier, Owen. "Externalities to Estimate the Long-Term Effects of Early Childhood Deworming." Working Paper, Jun. 2011. [http://economics.ozier.com/owen/papers/ozier\\_early\\_deworming\\_20110606a.pdf](http://economics.ozier.com/owen/papers/ozier_early_deworming_20110606a.pdf)

<sup>6</sup> <http://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0000223#pntd-0000223-g003>

<sup>7</sup> <http://www.nrhmhp.gov.in/sites/default/files/files/Iron%20plus%20initiative%20for%206%20months%20-5%20years.pdf>

## 1.3 State Program History

A Memorandum of Understanding (MoU) was signed in October, 2015 between Commissioner of Health, Medical & Family Welfare - Government of Telangana and Evidence Action - Deworm the World Initiative for duration of Oct 2015 – Sept 2018, to implement the *anganwadi* and school - based mass deworming program in the state of Telangana for treatment of STH. Telangana is newly established state in mid of 2014, prior history of deworming comes from Joint State of Andhra Pradesh. The state was planning to cover deworming component under RBSK in 2015, and later adopted the fixed day strategy under GoI supported NDD. In Telangana which has five endemic district for Lymphatic Filariasis, where mass drug administration (MDA) under National Filariasis Control Program was conducted in December 2015, wherein Albendazole is administered in combination with diethylcarbamazine (DEC). Evidence Action conducted the prevalence survey of soil transmitted helminths (STH) in the state in December 2015 to assess the state wide prevalence. Based on Prevalence Survey findings<sup>8</sup>, which suggested treatment recommendation as per WHO<sup>9</sup> guidelines, the Government of Telangana decided to implement biannual state - wide deworming beginning 2016.

## 1.4 Prevalence Survey

To estimate the prevalence of soil transmitted helminths among school children in primary schools in Telangana, during December 9<sup>th</sup> to 22<sup>nd</sup> 2015, the National Institute of Epidemiology (NIE) (Indian Council of Medical Research), Chennai in coordination with Evidence Action, with approvals and support from Government of Telangana, designed a survey to estimate the prevalence and intensity of STH infection in Telangana. This survey was implemented with support from Government of Telangana, the National Institute for Cholera and Enteric Diseases – Indian Council of Medical Research, Kolkata (NICED), GfK Mode, and Evidence Action – Deworm the World Initiative. The sampling was based on sentinel sites across the three Agro climatic zones in Telangana, as recommended by the World Health Organization (WHO).

STH prevalence in government primary schools, with analyze stool samples from children from 45 schools in Telangana. Where infection with any STH was detected in children, for an overall weighted prevalence of 59.6%. In all the zones, roundworm was the most common STH infection with a weighted prevalence of 58.5%. Hookworm infection was detected in 3.3% children surveyed.

## 2. About National Deworming Day

Deworming in India reached a key milestone when the national government launched NDD on February 10, 2015. The first phase of NDD targeted all children aged 1-19 years in 11 states/union territories through the network of government and government-aided schools and AWCs, achieving national coverage of 8.9 crore children. After this unprecedented coverage, in November 2015 the Ministry of Health and Family Welfare (MoHFW) announced

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<sup>8</sup> STH prevalence across Telangana of 59.6% (as per preliminary report of National Institute of Epidemiology)

<sup>9</sup> “Helminth Control in School-age Children, A guide for managers of Control Programmes”. Second Edition, 2011, World Health Organization.

that NDD would be expanded across all 36 states and union territories (UTs) from February 2016.

In preparation for the February 2016 round, on October 27, 2015, the Child Health Division held a technical review meeting supported by Evidence Action in order to discuss the learnings from NDD 2015. The meeting highlighted lessons learned from participating states and included discussions on coverage data and state-level findings from Evidence Action's independent monitoring and coverage validation. Other key outcomes included standardization of target population, increased incentives for ASHAs, and consensus around expanding the program to target private schools. With a high enrolment of children in private schools (29% nationally as per Annual Status of Education Report 2014 data), the government is committed to ensuring that those students have access to deworming, and receive benefits for improved health and education outcomes.

A national level orientation was subsequently organized by MoHFW with support from Evidence Action. On December 1, 2015, with participation of 31 out of 36 states/UTs. The meeting was used for sharing objectives and strategies, and standardizing messages and plans under the revised NDD 2016 operational guidelines, for robust implementation in the second round. The MoHFW also held a coordination meeting with joint secretaries from the Ministry of Education, Women and Child Development, Panchayati Raj, and Drinking Water and Sanitation departments, focused on facilitating national-level convergence for effective implementation. Efforts at the national level further cascaded to state and districts via joint directives issued by the secretaries of the ministries of Health, Education, and Women and Child Development to the chief secretaries of all states and UTs emphasizing coordination between stakeholder departments to achieve NDD goals. In addition, the Child Health Division called a meeting of development partners working in child health to garner support for implementation of NDD 2016 in states where the partners have a presence. Evidence Action, UNICEF, and the Micronutrient Initiative attended the meeting and reiterated support for the government's NDD strategy.

As technical assistance partner for NDD, Evidence Action supported the MoHFW to update content and messaging for NDD materials including training and IEC, implementation and financial guidelines, monitoring and reporting forms and other reference materials included in the resource kit (available on NHM website). These materials enabled simplified, standardized messaging and laid out key information such as objectives, roles and responsibilities of stakeholders, and budgetary allocations for states to finance program implementation.

On February 9, 2016, the Union Minister of Health launched NDD 2016 in Hyderabad, Telangana. The State Minister of Health for Telangana and other senior officials from the national and state government participated in the launch event alongside representatives from development partners and the media. The event received extensive media coverage.

## 3. NDD in Telangana

### 3.1 Target Beneficiaries

The program targeted all children between 1-19 years, regardless of their enrollment status, at AWCs, government, and government aided schools in 10 districts. Out-of-school children were treated through AWCs. Children enrolled in private schools were also targeted in across all ten districts of the state during this round, bringing the overall total to 99,68,994 children targeted for deworming.

## 3.2 Key Stakeholders

**Department of Health, Medical & Family Welfare** being nodal agency, holding key responsibilities to lead the overall planning and implementation of the program along with stakeholders. National Health Mission - Telangana had finalized target for children (1-19 years) in coordination with Education and WCD, and ensuring procurement, transportation and distribution of albendazole at all levels. The Department also trained functionaries; disseminated adverse event management protocols; printed and distributed training and Information Education Communication (IEC) materials; distributed reporting and monitoring forms; and provided guidelines and budgetary allocations to districts to support efficient implementation and timely coverage reporting. The department also facilitated involvement of ASHAs in mobilizing out-of-school children and unregistered children.

**Department of Education and Department of Women and Child Development** were responsible for facilitating the program implementation through platform of schools and *anganwadis*. The departments were also responsible for ensuring that trainings on drug administration and adverse event management were attended by their respective functionaries, including headmasters, teachers, AWWs, and lady supervisors. The Education department coordinated for private schools engagement during the round. Further, these functionaries were oriented on timely submission of coverage reports to the Health Department in standardized formats.

**Evidence Action - Deworm the World Initiative:** funded by CIFF for technical support activities, worked closely with all stakeholders to ensure high quality planning and implementation of deworming. Evidence Action provided intensive support for program planning; facilitated information sharing; and worked to adapt NDD training materials, IEC products, and operational guidelines to the state context.

## 4. Program Implementation

### 4.1 Policy and Advocacy

The Department of Health actively participated in video conferencing and review calls organized by GoI to track the level of preparations for the NDD 2016 round at the state level. To effectively plan and prepare for the deworming program, a Steering Committee meeting was held on December 19, 2015, chaired by the Principal Secretary Health, with representatives from the Departments of Health, Education, WCD, private school association and Evidence Action, including other partners namely UNICEF, WHO, SERP, Rotary club, Telangana State Vaidya Vidhana Parishad, Directorate of Medical Education, Social Welfare department, Panchayati Raj & Rural Development and Indian Medical Association. The key decisions were taken as:

- Inclusion of private school in NDD target, as in Telangana there are significant number of children aged 6-19 years, who attend private schools. Also to make the program more inclusive even by targeting unrecognized schools, unregistered *Anganwadi* children, children out of schools, children attending junior colleges, children in Madrasa's.
- To focus on every child, need to reach to out-of-school children, through ASHA to mobilize these children and get dewormed using the platform of AWCs.



- Appointment of RBSK coordinator as Nodal officer from Health to lead and coordinate with Education and DWCD counterparts for planning and program implementation.

Evidence Action worked with the state to adapt operational guidelines, agreeing timelines, and clarify roles of concerned stakeholders for program implementation, which were disseminated to all stakeholders. To strengthen the inter-sectoral convergence among the stakeholder departments at the district level, Principal Secretary of Health, Education and Women and Child Development signed a joint directive on January 31, 2016, which were disseminated to all districts along with financial guidelines for effective program implementation (Annexure B). To ensure greater engagement with private school association's in implementation of the program in private schools, the Steering Committee meeting (SCM) on December 19, 2015 at State and District level private school associations meeting organized at Hyderabad on January 29, 2016 respectively. Additionally letters were released and orientation organized for private school association for observing NDD on February 10 and reiterating timely coverage reporting by schools. Evidence Action advocated with the Departments of Health, Education and DWCD to leverage existing resources for the Deworming program in order to maximize program impact. As a result, the department of Health supported initiatives such as uploading deworming-related information to the department's website.

Facilitating preparedness across all districts, Health department convened video conference calls held on January 20 and February 6, with district officials of the Departments of Health, Education and DWCD. Amongst other things during these coordination calls, review of overall preparations, including preparations for response systems for adverse event management, and adherence to timelines for coverage reporting were reinforced.

Increased engagement and ownership by district administration in the planning and implementation of the deworming program was demonstrated across all 10 districts as they organized District Coordination Committee meetings between January and February 2016, chaired by District Collector's. These meetings reviewed preparations for the program and clarified roles of stakeholders for improved inter-departmental coordination between Departments of Health, Education, DWCD, and others stakeholders. Key decisions for program implementation taken were disseminated with the issuance of minutes of the meetings that were circulated in 10 districts. Evidence Action's district coordinators facilitated and shared critical program updates in all the district meetings across program components and facilitated for follow up action for aligning coordination.

## 4.2 Program Management

Evidence Action's technical assistance was primarily provided by a four-member state-based team, including field-based regional coordinators and short-term hires such as district coordinators and tele-callers. Additional support and guidance was provided by the national team. Evidence Action's state team provided trainings to field-based and short-term hires on various program components, building a strong common understanding of the program strategy.

Regional and district coordinators participated in the aforementioned video conference meeting, along with district officials, and were part of review meetings for program preparations. They collaborated with district and block officials to plan for trainings and other logistics around program implementation.

**Regional Coordinators:** Evidence Action hired two regional coordinators for year-round engagement, with each responsible for five districts. They provided program management and

oversight to district coordinators, supported information sharing, led prompt remedial action in the field, guided advocacy with district officials, facilitated the training and distribution cascade, and ensured timely reporting of coverage data. After the first round of NDD completed, their efforts shifted towards exploring opportunities at the districts for synergies with existing work and possible platforms to integrate deworming. The regional coordinators will promote program institutionalization by working with district officials to include deworming in district action plans for the next financial year (2016-2017).

**District Coordinators:** 11 district coordinators, including one additional coordinators for private school, provided on-the-ground program coordination for three months around the deworming round. They were instrumental in ensuring timely delivery of training materials such as flipcharts, and distribution of NDD kits at the trainings for all functionaries. They participated in trainings at district and block levels and escalated any observed gaps to regional coordinators and the state team for appropriate follow-up at the state level. Their role was integral in ensuring high quality of the trainings where pre and post-tests were administered to participants. After the deworming round, they provided rigorous follow-up with *mandals* and district-level officials to support timely compilation of coverage reports.

**Tele-callers:** Two tele-callers were hired to support the deworming round. Each tele-caller was assigned to work closely with one regional coordinator, as well as the district coordinators within their region. Calls were made at districts, blocks, and schools to obtain updates on drug and IEC availability, training schedules, and status of reports after the deworming round. This dynamic flow of information allowed tele-callers to generate detailed, real-time program updates which were continuously shared with state level officials and enabled any necessary corrective measures to be taken (Figure 1).

With support and inputs provided by short-term hires, Evidence Action's state team held debrief sessions with officials at the state health department to share updates and information from deworming day monitoring visits to schools and *anganwadis*. These updates resulted in corrective actions around issues such as drug and IEC availability, ensuring adherence to program guidelines and ultimately supporting increased coverage

### 4.3 Drug Procurement, Storage, and Transportation

**Drug Procurement:** All preschool & school-age children were treated with albendazole tablet (400 mg) in NDD February 2016 round. Evidence Action worked in close coordination with the nodal officer of the deworming program in the health department and further with the state procurement cell to facilitate availability of deworming drugs across the state. Based on the State Drug Management Information System data, with the availability of 42,83,426 tablets, additionally 63,05,213 tablets were procured for NDD 2016. Evidence Action supported in estimation of drug requirements in coordination with Department of Health, DWCD and Education Department. The district wise overall drug requirement for the NDD was completed in December 2015, after assessing the available stock of albendazole (400 mg) in all 10 districts.

**Drug Logistics and Supply:** With the objective of aligning drug distribution with block-level trainings. Evidence Action worked closely with National Health Mission, which managed drugs logistics and supply in this round. Prior to the distribution, drugs were bundled for school-age and preschool-age children while factoring in a buffer to cater to out-of-school children. As per NDD operational guidelines, and established best practice, drug distribution was integrated with the training cascade (as detailed in the training section below), whereby NDD kits were

provided to health functionaries at the district level trainings for onward distribution to Education and WCD before the block level training. The kits included drugs, IEC materials, and training handout along with reporting forms.

**Adverse Event Management Preparedness:** To provide guidance on functionaries’ roles and responsibilities in minimizing adverse events, and to handle and report adverse events that did occur, Evidence Action assisted the state health department to prepare a detailed adverse event management protocol that included emergency contact numbers and a briefing on media handling (Annexure C). The Department of Health circulated detailed guidelines to all district and cluster-level medical officers on adverse event management protocols, with directives to establish emergency response teams.

Additionally, functionaries were trained on adverse event management. A network of ambulance vans was on alert on deworming day at each block to handle adverse events if reported. No major adverse events were reported in this round, while the few minor cases were handled by schools with support for the health teams.

#### 4.4 Public Awareness and Community Sensitization

Activities designed to increase community awareness of deworming were rolled out based on NDD operational guidelines. This was essential as sensitization of the community, including children and families, help build their trust on deworming, alleviate worries related to adverse events, and overall leads to greater program uptake.

The deworming and mop-up-day dates were highlighted in all IEC materials along with other key deworming messages to ensure maximum attendance of the children at the schools and AWCs. Evidence Action developed all IEC and community mobilization materials that were approved by the GoI and uploaded on the NHM website. Department of Health and Family Welfare and Evidence Action rolled out a media mix to generate community awareness and increase program visibility to improve coverage in the state as detailed in table below (table 1). Evidence Action supported the adaptation and contextualization of prototypes from the NDD IEC resource toolkit. For additional visibility of the program at the community level, state printed 95,000 posters, 10,000 flex banners and 10,00,000 Community Handbills. All of these were adapted and contextualized by Evidence Action (Annexure D)

Table 1: Detail of Mix-Medial community awareness activities

| S. No | Activities   | Timelines     | S. No | Activities       | Timelines     |
|-------|--------------|---------------|-------|------------------|---------------|
| 1     | TV Spots     | 5-15 Feb 2016 | 4     | Flash Ads        | 5-15 Feb 2016 |
| 2     | Radio Spot   | 5-15 Feb 2016 | 5     | Miking           | 5-15 Feb 2016 |
| 3     | Radio Jingle | 5-15 Feb 2016 | 6     | Dial NDD TC show | 8 Feb 2016    |

Other community mobilization activities are conducted by schools and led by students, to mobilize out-of-school children, raise awareness on program benefits, and inform about the dates of deworming. Additionally, mike announcements (Miking) were made at public places in clusters from February 5 to 15, closer to deworming day. The state engaged with ASHAs and ANMs to disseminate information on deworming and its benefits using the different platforms. One of the key strategies recommended under the NDD guidelines, incentivizing ASHA workers for mobilizing out-of-school children.

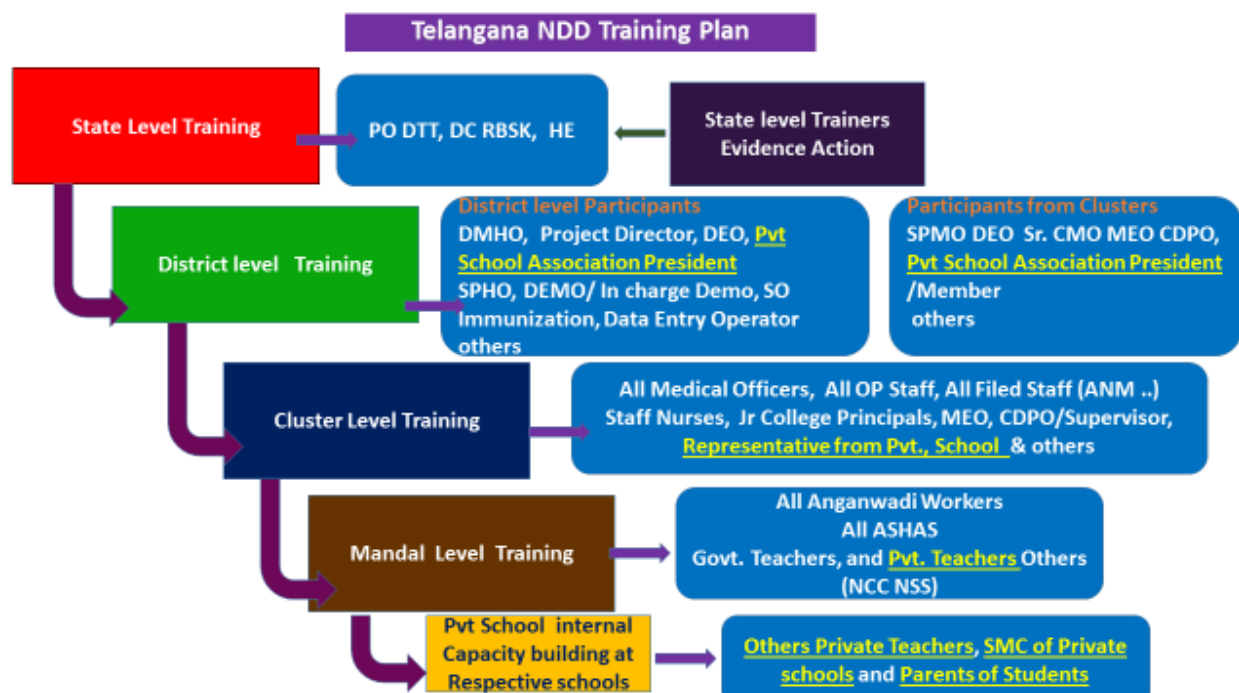
**National Level Launch:** Evidence Action supported the Department of Health Telangana, to organize a National level launch event on February 9, 2016 at Rangareddy district in the presence of Hon'ble Union Minister of Health – Shri J.P. Nadda, and other senior dignitaries, representatives from development partners, media and children. In addition, all 10 districts organized inaugural events in districts at schools, with support from Evidence Action's district coordinators in the presence of district-level officials from Departments of Health and Education. These events were covered by the local media.



National level launch, February 9, 2016.

### 4.5 Training Cascade:

As per NDD Operational Guidelines, and the state specific operational plan developed in collaboration between Evidence Action and the NHM. The trainings on deworming were conducted as per the cascade, with integrated distribution of kits comprising of drugs, reporting format, and handouts at the training.



Training cascade was implemented at State, 10 districts, 151 cluster & 675 PHC level between December 30, 2015 and February 5, 2016. Imparted NDD training to nearly 34,830 school teachers, 31,421 *Anganwadi* workers, 27,159 ASHA. The state level trainings were supported by Evidence Action – Deworming the World Initiative state team. The trainings for teachers and *Anganwadi* workers included integrated distribution of drugs, print and reporting material (training handouts and IEC material).

**Training Resources:** To assure quality and standardization of messages, NHM printed 1000 flipcharts as training aids to the trainers for use at the district, Cluster and PHC -level trainings. These flipcharts were developed and designed with approvals from the concerned government departments. Other training resources included 74,00,00 handouts for teachers & AWW and 30,000 reporting formats for schools & *anganwadi*. Evidence Action supported the bundling of the material as per requirement, which were then transported to all districts before the trainings commenced. Evidence Action districts coordinators played a vital role in ensuring the timely completion of tasks in order to distribute these kits at the trainings.

**Training Support and Monitoring:** Evidence Action’s district coordinators attended and provided supportive supervision in all 10 district trainings. The team monitored trainings across all 10 districts and conducted pre- and post-tests to assess the knowledge gained by participants in all 10 districts and 20 blocks<sup>10</sup>. Evidence Action also used a monitoring checklist to assess training quality, ensuring that all the components of deworming were covered as per NDD guidelines. Facilitating real-time corrective actions, Evidence Action’s state team engaged with the nodal officer and provided up-to-date findings from the field. Timely coordination and information from the field led enabled district officials to take remedial steps during implementation.

**Training Reinforcement:** To reinforce key training messages, Evidence Action sent out reinforcing text messages to various functionaries of all stakeholder department. The SMS contained reminders on dates of trainings and NDD, deworming and its benefits, reporting timelines, and instructions for adverse event management. Evidence Action also sent the 30-second voice recorded message as an Interactive Voice Response SMS during NDD and mop-up day 44,980 frontline functionaries to create awareness on dates for NDD and behavioral change messages on health and sanitation.

|                                      | Total SMS’s | Total IVR calls |
|--------------------------------------|-------------|-----------------|
| Health                               | 1,09,550    | 9,345           |
| Education                            | 2,73,985    | 14,380          |
| WD&CW                                | 3,33,300    | 21,255          |
| Private school Presidents to schools | 37,879      |                 |

**Website Uploads:** To access information on deworming, functionaries at state, district and block levels visited their respective departmental website to gather information including key training messages, guidelines, training materials, and reporting timelines to reinforce messages and strengthen program operationalization.

#### 4.6 Highlights of Deworming and Mop-Up Days

NDD was observed on February 10 in 10 districts followed by a mop-up day on February 15 to reach out to children who did not receive treatment on deworming day due to ill health or absenteeism

- ✓ With National launch in Telangana on February 9, the district level launch were held on February 10, 2016 in all 10 districts with political commitment and leadership. These contributed to the larger awareness about the program through media coverage.
- ✓ Consultants from MoHFW, GoI, state health department, and development partners including Evidence Action, conducted monitoring visits on NDD.

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<sup>10</sup> 2 blocks from each of the 8 selected districts were identified on the basis of preliminary finding from district level training monitoring and pre-post-test during NDD 2016 district level training

- ✓ The mild adverse events reported were managed well on the ground. No severe adverse events were reported.
- ✓ 162 visits were conducted by the field and regional teams on NDD and mop-up day to schools and *anganwadis*.
- ✓ Evidence Action hired and trained an independent agency to conduct independent monitoring.
- ✓ The state reported dewormed 92,77,057 children out of approximately 99,68,994 children in the target age group.

## 5. Monitoring and Evaluation

Evidence Action places great emphasis on understanding the extent to which schools, *anganwadis*, and the health system are prepared to implement mass deworming. This includes assessing the extent to which deworming processes are being followed, and the extent to which coverage has occurred as planned. Monitoring and evaluation of the Telangana NDD program occurs in three ways: (1) process monitoring, (2) coverage reporting and (3) coverage validation. For NDD, an independent monitoring exercise (process monitoring and coverage validation) was conducted on deworming day and mop-up-day, followed by coverage validation from February 20-26, 2016.

### 5.1 Process Monitoring:

**Process monitoring** assesses the preparedness of schools, *anganwadis*, and health systems to implement mass deworming and the extent to which they have followed correct processes. Evidence Action assesses the program preparedness during the pre-deworming phase and independent monitors observe the processes on deworming day and mop-up day.

**Field Monitoring Visits:** A total of 542 monitoring visits (158 visits by state government officials and 384 visits by Evidence Action’s state and field team) were conducted in randomly selected schools and *anganwadis*. As recommended under national guidelines, the team used the NDD monitoring checklist during their visit. Monitors visited 502 *anganwadis*, 498 government- government aided schools and 44 private schools.

**Telephone Monitoring and Cross Verification:** Evidence Action tele-callers placed phone calls to track the delivery and availability of training, drug, and IEC materials at the district, block, and school/*anganwadi* levels as deworming day approached.

Approximately 4,437 random calls were made during the period of Jan-March 2016. These calls were made to 443 *mandals* across 10 districts to assess preparedness on all program areas. Tele-callers used electronic tracking sheets to outline issues identified during calls and monitoring visits. These tracking sheets were shared with the state government to enable the government to take rapid corrective actions as necessary (Annexure E)

### Coverage Reporting

Coverage reporting, provides the numbers of program beneficiaries and is a crucial component to measure success. With close support from Evidence Action’s state and field teams, the Department of Health collected and compiled the coverage report for NDD in selected schools and *anganwadis*. School teachers/*anganwadi* workers had been trained on the recording and reporting protocols. These protocols, along with the reporting cascade and timelines, were shared with all districts through the state’s directives and intended to improve the accuracy of coverage reports submitted by schools/*anganwadis*. Every teacher/*anganwadi* worker was required to put a single tick mark (✓) next to a child’s name in the attendance register if he was administered albendazole on deworming day, and a double-tick mark (✓✓) next to a child’s

name if he was administered albendazole on mop-up day. Schools/*anganwadis* were supposed to derive the number of enrolled children dewormed by counting the single and double tick marks in attendance registers. School headmasters were then to compile the number of dewormed children as recorded in class registers, fill the school reporting form, and submit it to the designated person in the reporting cascade. Coverage reporting structure and timeline is shown below in Figure:

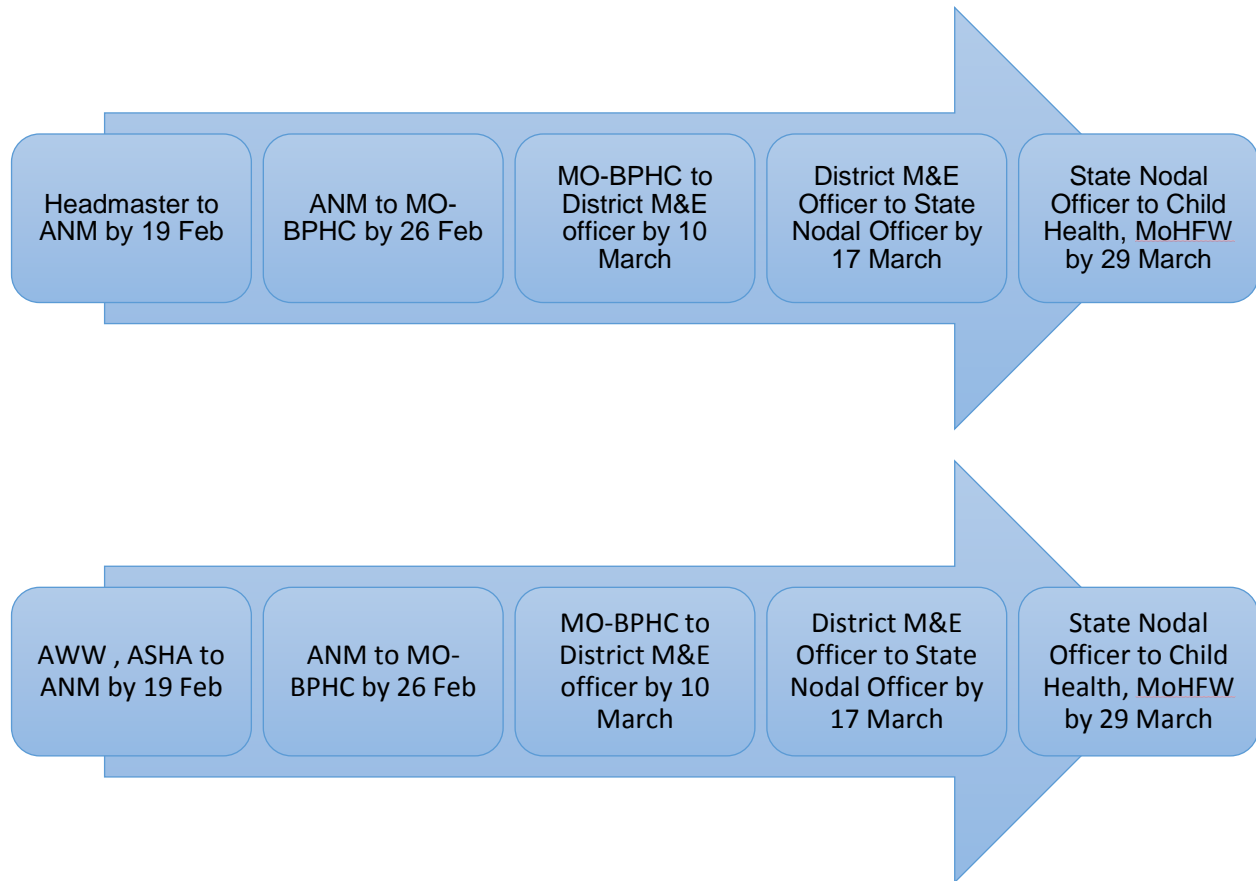


Figure: The reporting cascade for NDD

**Coverage validation** was done within 5-7 days of the mop-up day. During this exercise, monitors checked and verified deworming related data available in schools and *anganwadis* using their respective attendance registers and reporting forms. In each school, one teacher and three students were interviewed. In *anganwadis*, only *anganwadi* workers were interviewed. The surveys were conducted with the prior approval of the state government and a permission letter was issued by state Department of Health. Each monitor carried a copy of the authorization letter, produced to the schools and *anganwadis* on request.

## 5.2 Sampling and sample size

Two-stage probability sampling was used to select schools and *anganwadis* for coverage validation on deworming day and mop-up day. First, 100 blocks were selected from all 10

districts by probability proportional to size sampling<sup>11</sup>, followed by random sampling of schools to provide state-wide estimates of indicators. A total of 222 schools and 201 nearby *anganwadis* were visited on NDD and mop up day. For coverage validation, a total of 320 randomly selected schools and 301 randomly *anganwadis* were visited.

**Table 3: Target and Coverage of Schools and *Anganwadis* during NDD, February 2016 Independent Monitoring**

| Indicators  | Process monitoring |          | Coverage validation |          |
|---|--------------------|----------|---------------------|----------|
|   | Target             | Achieved | Target              | Achieved |
| Total number of districts                           | 10                 | 10       | 10                  | 10       |
| Total number of blocks                              | 100                | 100      | 100                 | 100      |
| Total number of schools                             | 220                | 222      | 330                 | 320      |
| Total number of government/government aided schools | 200                | 201      | 300                 | 297      |
| Total number of private schools                     | 20                 | 21       | 30                  | 23       |
| Total Number of children interviewed in schools*    | 222                | 191      | 990                 | 903      |
| Total number of <i>anganwadis</i>                   | 200                | 201      | 300                 | 301      |

\*Children were interviewed only where deworming has been conducted on the day of monitor's visit

### 5.3 Independent monitoring formats

To ensure comprehensive coverage and triangulation of data, four questionnaires were administered- one each for school and *anganwadi* process monitoring on NDD and mop-up-day, and one each for schools and *anganwadis* for the coverage validation. Questionnaires were designed by Evidence Action and finalized in consultation with the state Department of Health. The questionnaires were translated into regional language, and checked to ensure that the language was concise and easily understandable, before being scripted and loaded onto tablet PCs/mini-laptops for the monitor to administer.

### 5.4 Training of trainers and independent monitors

Through a competitive selection process, Evidence Action hired Karvy Insights to implement the independent monitoring in Telangana. Evidence Action provided a one-day training to 15 master trainers from Karvy Insights in Hyderabad on February 4, 2016. These master trainers conducted a two day training of 10 supervisors and 120 monitors from February 5-6, 2016 in batches of 50-55 monitors. After training, a test was administered to all participants to assess their comprehension and ability to work in the field.

### 5.6 Field Implementation

After training, the selected monitors were sent to their allotted districts. Each monitor was allotted two schools and two *anganwadis* for process monitoring. Subsequently, they were allotted three schools and three *anganwadis* to survey during coverage validation. Monitors were provided a tablet PC, charger, printed questionnaires, and albendazole tablets for demonstration. The details of their allotted schools were shared with them one day before fieldwork commenced to ensure that monitors did not inform local educational authorities ahead of the actual deworming, thus potentially affecting compliance.

<sup>11</sup> Probability proportional to size sampling (PPS) selected blocks in Telangana, according to the number of schools in that block. PPS corrects for unequal selection probabilities in random sampling of unequally sized blocks. Schools were then randomly selected from the selected blocks.



In case a school or *anganwadi* was closed on NDD or mop up day it was replaced by the nearest school/*anganwadi*. For coverage validation, however, this strategy was slightly modified: if a school or *anganwadi* was found closed, monitors were asked to cover the next school or *anganwadi* on their list, and return to the first school or *anganwadi* at another time on a subsequent day. If the school or *anganwadi* was non-traceable or closed consistently after making three attempts, a new school was substituted for the old one.

## 5.7 Quality control

Appropriate quality control measures were taken to ensure that data collected was accurate and comprehensive. School headmasters and *anganwadi* workers were asked to sign a participation form and provide an official stamp, verifying that the school or *anganwadi* was actually visited. The agency contacted approximately 15% of schools and *anganwadis* on phone the next day to confirm that they had participated in the monitoring and validation process. In addition, district coordinators visited sampled schools and *anganwadis* to spot check the processes and tele-callers contacted schools and *anganwadis* to verify monitoring visits.

## 5.8 Key Findings

Key findings from the independent monitoring emphasize the importance of strengthening the training cascade and the integrated distribution of drugs and IEC materials at the trainings to ensure all teachers and *anganwadi* workers are equipped to implement NDD effectively.

### Training

**Participation at trainings:** Independent monitoring data demonstrated that teachers/headmasters from 64% of schools and 91% of *anganwadis* workers had received training for the recent round of deworming. Amongst those who did not attend training, the majority of school teachers (49%) and *anganwadi* workers (59%) cited unawareness about the date or timing of training. Monitoring suggested that only 51% of headmasters and 53% of *anganwadi* workers had received any SMS related to the deworming program.

Key recommendations:

- As training is crucial to equip teachers and *anganwadi* workers with the necessary knowledge and drugs for implementing NDD, greater emphasis should be given to the lower level training cascade by strengthening block officials' communications to the schools and *anganwadis* regarding training schedule and venue information.
- The database of block level functionaries and teachers/schools needs to be regularly updated and strengthened to ensure that program information can be disseminated to key audiences in a timely manner. This would likely help ameliorate the problems of absenteeism at trainings due to poor communication about training dates, and limited reach of training reinforcement messages to teachers and *anganwadi* workers via SMSs.

### Quality of Training:

Findings show that only 69% of headmasters reported providing training to other teachers after they were trained on deworming. The headmasters/ principals and *anganwadis* also reported incomplete knowledge on the different ways that children can get worm infections; only 71% headmasters/ principals reported open defecation / not using sanitary latrine as a route of worm transmission.

Key recommendations:

- Improve training sessions with a stronger focus on the importance of sharing training messages at schools so that all teachers are equipped to deworm children in accordance with the protocols.
- Trainings should emphasize practices for controlling worm infection.

### Integrated Distribution of Deworming Materials including Drugs

Findings from independent monitoring data revealed that only 47% of schools and 53% of *anganwadis* received all the deworming materials including drugs, posters/banners, and handouts in training sessions. However, as reflected in the below table, individual components of the NDD kit were distributed on a large scale in training. In coverage validation 93% of schools and 94% *anganwadis* reported to have sufficient drugs for deworming. Moreover, 64% of the schools and 65% of the *anganwadis* had surplus drugs after deworming.

Availability of surplus drug at the schools and *anganwadis* after the deworming round is completed need to be assessed by the state government in terms of making use of available drugs along with following necessary drug safety protocols.

**Table: Integrated Distribution of Drugs and IEC material**

| Items Received in           | Schools  |          |                      | <i>Anganwadi</i> |          |                      |
|-----------------------------|----------|----------|----------------------|------------------|----------|----------------------|
|                             | Received | Verified | Received in training | Received         | Verified | Received in training |
| Tablets                     | 95.9     | 86.9     | 62.4                 | 96               | 88.1     | 69.4                 |
| Poster/Banner               | 80.6     | 85.5     | 63.7                 | 86.1             | 87.9     | 69.9                 |
| Handouts/<br>Reporting form | 83.3     | 84.9     | 63.2                 | 88.1             | 87       | 67.2                 |

Key recommendations:

- Findings suggest a need to strengthen integrated distribution of training, IEC materials, and drugs during block level trainings. While the state planned the bundling process far in advance of the NDD. Improvements can be made to ensure that bundling and proper distribution is done at all levels down to the blocks, where the ultimate implementers receive materials.

### Source of Information about recent Round of Deworming

Monitoring data revealed that during the recent round of deworming, departmental communication was the major source of information for 68% of schools and 67% *anganwadis*, followed by newspaper for schools (31%) and training for *anganwadi* (40%) School teachers

were the major source of information to students for deworming (98%). However, 4% of students interviewed were not aware that the medicine given to them was for deworming. With reference to children enrolled in private schools, 13 out of 15 interviewed children were aware that the tablet given to them was for deworming.

### Implementation of Deworming

Out of total 86% of schools and 97% of *anganwadis* that reported to conduct deworming on the day of visit, independent monitors observed ongoing deworming activity in 83% of schools and 90% of *anganwadis*. Coverage validation demonstrated that 94% of the schools and 97% of *anganwadis* had observed deworming during NDD or mop-up day. Out of all enrolled children interviewed on NDD and mop-up day, around 94% reported to have received a deworming tablet on one of these days. Altogether, these data suggest a high coverage rate for NDD 2016. However, only 16 of the 21 private schools observed during coverage validation reported deworming activities on NDD or mop-up-day.

### Adverse events- knowledge and management

Interviews with teachers and *anganwadi* workers during process monitoring demonstrated a lack of awareness regarding possible adverse events. Only 46% of teachers and 44% of *anganwadi* workers acknowledged the possibility of adverse events after ingesting albendazole. However, the majority of teachers and *anganwadi* workers were aware of how to manage adverse events, indicating the proper procedure of managing mild adverse events at the schools/ *anganwadis* and referring children to the nearest PHC in case of a more severe or continuing adverse event. During class observations, only 96% of teachers and 95% of *anganwadi* workers asked children whether they were sick before administering the drugs. However, more than 90% of teachers and of *anganwadi* workers ensured that drug administration was properly supervised, asking children to chew tablets before swallowing.

Key recommendation:

- Increased focus needs to be given at the trainings on the adverse events that can happen on mass scale program and more importantly, on being equipped to properly manage the adverse events as per the adverse event management protocols.

It was also seen during process monitoring that many schools and *anganwadis* were delaying drug administration to coincide with mid-day meals. As per WHO guidance, there is no need to consume food along with albendazole. Often, children leave school premises right after the mid-day meal, meaning that they do not remain with teachers for two hours post- deworming when any possible adverse events could be properly managed by the trained teacher/AWW. Thus, training and monitoring functions should provide greater focus on the correct drug administration protocols in future rounds.

### Recording protocol:

Coverage validation demonstrated that 65% of schools and 97% of *anganwadis* followed correct recording protocols, whereas around 35% percent of schools did not adhere to the protocols. Of these non-adhering schools, 20% did not follow any recording protocol.

During training, school teachers, headmasters, and *anganwadi* workers were instructed to retain a copy of their relevant reporting form at the school/*anganwadi*. However, 15% of headmasters and *anganwadi* workers interviewed during process monitoring were not aware of the need to retain a copy of the form. As per the NDD guidelines, ASHAs were required to prepare and submit a list of unregistered children to *anganwadis* to promote greater coverage of this demographic; however, findings suggest that 61% of *anganwadis* were equipped with a

list of unregistered children (aged 1-5 years) and only 45% of *anganwadis* were equipped with a list of out-of-school children (aged 6-19 years).

Key recommendation:

- Increased focus on the importance of correct recording, reporting protocols and maintaining correct and complete documentation at the trainings of frontline functionaries.

### Program Coverage

Telangana reported a total coverage of 92,77,057 children dewormed during NDD, including 74,91,920 school-age children and 17,85,137 preschool-age children. Against a target of 99,68,994 children, the program coverage is 93.06% according to government reported figures.

Disaggregated figures show that within government and government-aided schools, 95.87% of targeted children were treated, and within private schools, 88.90% of the targeted children were treated. In *anganwadis*, 92.90% of registered children were covered while 86.57% of unregistered children (1 to 5 years) and 99.93% of out-of-school children (6-19 years) were covered. Substantial district wise variation was observed in NDD coverage reporting. State submitted the coverage figures to GoI on March 30, 2016.

### Coverage validation

In the schools and *anganwadis* sampled for coverage validation, we calculated state-level verification factors, which are commonly calculated for Neglected Tropical Disease control programs around the world. The verification factor compares the number of ticks in school/*anganwadi* registers (where teachers/*anganwadi* workers recorded dewormed children) to the coverage figures in the reporting forms that schools/*anganwadis* submitted to the state. A verification factor of 1 means the schools reported the exact same figures that as recorded in registers on deworming day. A verification factor less than 1 indicates over-reporting, while a verification factor greater than 1 indicates under-reporting.

**Coverage verification factors are estimated on the basis of availability of a copy of reporting forms at schools and *anganwadis*.** In telangana only 49% of schools and *anganwadis* had copy of the reporting form available after deworming and mop up day. During trainings, school teachers/ headmasters and *anganwadi* workers were instructed to retain a copy of their respective reporting form; however, 15% of headmasters and *anganwadi* workers interviewed during process monitoring were not aware of retaining a copy of the form.

In Telangana, the state level verification factor for enrolled children was found to be 0.053, indicating that for every 5 enrolled children who were recorded as dewormed in the schools, the school reported that 100 enrolled children had been dewormed. This corresponds to an overall 85.5% inflation of reporting in the state, meaning that reported numbers appear to be approximately 85% higher than the numbers recorded in attendance registers. Similarly, the state level verification factors for *anganwadi* registered children, non-registered children (1-5 years), and out of school (6-19 years) children were 0.74, 0.78, and 0.69 respectively with corresponding inflation rates of 34%, 28% and 45%. Training was found to increase the accuracy of reporting; trained schools had only one percent inflation in reporting, while untrained schools had 137% inflation in reporting.

Further attempts were made to understand the maximum number of enrolled children that could have been dewormed according to attendance on deworming and mop-up day. Findings

showed that in Telangana around 92% of all enrolled children could have been dewormed during deworming and mop up day. Moreover, 98% of the children interviewed during coverage validation reported to have received deworming and 97% of them consumed the tablet under supervised administration in the school.

Key recommendations:

- Correct recording, reporting protocols and the importance of retaining a copy of reporting form for verification purposes, need to be further reinforced at future trainings.
- Additionally, greater emphasis need to be made for increasing coverage and accurate reporting of out-of-school children. This suggests the need to strengthen the role of ASHA in mobilising these children and correctly reporting their treatment.
- Coverage reports also reflect a need for greater emphasis on finalizing correct target figures, particularly for out-of-school children for whom coverage percentages have been low. This could be partially because of not setting up accurate target figures prior to NDD. Broadly the targets for all categories were revised after the NDD implementation as all the stakeholder departments agreed on revised figures received from the districts to be considered as final. In future rounds, in case target figures are not available at the state level, districts can be engaged well in advance to finalize their targets.

**Private school engagement:** Since this was the first round for the state to engage private schools in deworming, participation was low and can be increased in the future. In order to broaden the reach of the program, it is critical to include private schools in every aspect of future rounds.

Key recommendations:

- Comprehensive training for teachers and other staff, along with adequate and timely information about the program, may help generate awareness and interest from private schools.
- The continued engagement of District Magistrates will help strengthen the implementation of the program at ground, as reported by the state NDD nodal officers.
- Engaging with private schools has been a largely untapped area for school health programs. However the efforts made during NDD February 2016, and the experiences will guide future strategies for other such initiatives.

## Key Recommendations from NDD Feb 2016

### Training

- Regular updates and strengthening of the database across program functionaries for sending training reinforcement SMSs.
- Strengthen the communication channels from block to all schools and *anganwadis* on participation at trainings
- Strengthen training component of the program through focusing more on the following:
  - 1) Importance of sharing training messages by the trained teacher to all other teachers at school
  - 2) Practices for controlling worm infection
  - 3) Importance of correct recording, reporting protocols and maintaining correct and complete documentation form for verification purposes
  - 4) Knowledge on adverse events that can happen on mass scale program and more importantly, on being equipped to properly manage the adverse events as per the protocols

### Integrated distribution of NDD kits at trainings

- Strengthening integrated drug distribution through ensuring clear responsibilities are assigned for bundling at all levels, through state/ district released directive. Also, necessary supervision at all levels is required for ensuring adequate quantity gets bundled and distributed in a timely manner.

### Community mobilisation

- Greater emphasis need to be made for increasing coverage and accurate reporting of unregistered and out-of-school children. This suggests the need to strengthen the role of ASHAs in mobilizing these children and correctly reporting their treatment.

### Private school engagement

- Comprehensive training for teachers and other staff, along with adequate and timely information about the program, may help generate awareness and interest from private schools.
- The continued engagement of District Magistrates will help strengthen the implementation of the program at ground

## 6. Way Forward

The first round of deworming in the state demonstrated progress towards continuation of program to all 10 districts and in all age group children. A critical piece of learning derived from this round is the importance of strengthening the training cascade through adequate planning and monitoring, and maximizing its efficiency by using it to distribute all materials and drugs. This is also an established best practice recommended by WHO for all school-based deworming programs for effectiveness, not just in implementation, but also for cost-effectiveness of the program.

Looking to the future, maintaining the program's strong pace will require continued advocacy to ensure that the state commits resources for deworming under its annual Program Implementation Plans. Moving forward, the state should explore opportunities for further strengthening the coordination between relevant stakeholders, and ways to leverage existing platforms to enrich the deworming program. Potential opportunity to explore the greater community/ village-level community engagement through ASHAs.

## 7. Annexures

|            |  |
|------------|--|
| Annexure 1 | Details of Independent Monitoring  |
| Annexure A | NDD 2016 state coverage report   |
| Annexure B | NDD 2016 State Joint Directives  |
| Annexure C | Adverse event protocol   |
| Annexure D | Community sensitization and awareness  |
| Annexure E | Snapshot of compiled calls status in Telangana by Evidence Action team during NDD 2016 |

**Annexure 1: Analysis for Process Monitoring (School/Anganwadi)**

**Table: 1 Interview with headmaster/headmistress/principal and Anganwadi workers**

| Indicators  | School |       | Anganwadi |       |
|---|--------|-------|-----------|-------|
|   | %      | N=220 | %         | N=201 |
| <b>Type of School</b>   |        |       |           |       |
| Govt./Govt. Aided schools   | 89.6   | 199   | NA        | NA    |
| Private Schools   | 9.5    | 21    | NA        | NA    |
| <b>Respondent of the section</b>                                      |        |       |           |       |
| Headmaster/Principal  | 77.5   | 172   | NA        | NA    |
| Vice principal  | 11.7   | 26    | NA        | NA    |
| Nodal Teacher   | 1.8    | 4     | NA        | NA    |
| Any other teacher   | 9      | 20    | NA        | NA    |
| <b>Category of school</b>   |        |       |           |       |
| Primary(1 to 5)   | 55.4   | 123   | NA        | NA    |
| Primary with upper primary(1 to 8)                                    | 12.2   | 27    | NA        | NA    |
| Primary with upper primary and secondary(1 to 10)                     | 6.8    | 15    | NA        | NA    |
| Primary with upper primary secondary and higher secondary(1 to 12)    | 0      | 0     | NA        | NA    |
| Upper primary only(6 to 8)  | 0.5    | 1     | NA        | NA    |
| Upper primary with secondary and higher secondary(6 to 12)            | 1.8    | 4     | NA        | NA    |
| upper primary with secondary(6 to 10)                                 | 21.6   | 48    | NA        | NA    |
| Secondary only (9 to 10)  | 0.5    | 1     | NA        | NA    |
| Secondary with higher secondary(9 to 12)                              | 0      | 0     | NA        | NA    |
| Higher Secondary only or Jr. college(11 to 12)                        | 1.4    | 3     | NA        | NA    |
| <b>Did School/Anganwadi worker attended training in last 2 months</b> | 64.9   | 144   | 90.5      | 182   |
| <b>Did trained teacher provide training to other teachers</b>         |        |       |           |       |
| Yes, trained all other teachers                                       | 69.4   | 100   | NA        | NA    |
| Yes, trained some other teachers                                      | 16.7   | 24    | NA        | NA    |
| No, did not train other teachers                                      | 12.5   | 18    | NA        | NA    |
| Don't know /don't remember  | 1.4    | 2     | NA        | NA    |
| <b>Reason for not attending official training</b>                     |        |       |           |       |
| Location was too far away   | 2.9    | 2     | 11.8      | 2     |
| Did not know the date/timings   | 49.3   | 34    | 58.8      | 10    |
| Busy in other official work   | 15.9   | 11    | 11.8      | 2     |
| Attended deworming training in the past                               | 2.9    | 2     | 0         | 0     |
| Not Necessary   | 1.4    | 1     | 0         | 0     |
| <b>Source of information about recent round of deworming program</b>  |        |       |           |       |
| Departmental communication  | 68.5   | 152   | 67.2      | 135   |
| Television  | 21.2   | 47    | 18.9      | 38    |



|  |      |     |      |     |
|--|------|-----|------|-----|
| Radio  | 9.5  | 21  | 11.4 | 23  |
| Newspaper  | 30.6 | 68  | 21.4 | 43  |
| Banner   | 20.3 | 45  | 18.9 | 38  |
| SMS  | 25.7 | 57  | 22.4 | 45  |
| Training   | 21.2 | 47  | 40.3 | 81  |
| Other school/teacher   | 6.8  | 15  | 23.9 | 48  |
| Awareness about the ways a child can get worm infection  | 95.5 | 212 | 99.1 | 200 |
| <b>Different ways that children can get worm infected</b>  |      |     |      |     |
| Having foods without washing hands   | 98.6 | 209 | 98.5 | 198 |
| Not washing hands after using toilets  | 94.3 | 200 | 95   | 191 |
| Not using sanitary latrine   | 70.3 | 149 | 67.7 | 136 |
| Moving in bare feet  | 76.4 | 162 | 74.1 | 149 |
| Consume vegetables and fruits without washing  | 75.9 | 161 | 77.1 | 155 |
| Having long and dirty nails  | 72.6 | 154 | 65.2 | 131 |
| Receive SMS about the deworming program  | 59.5 | 132 | 58.7 | 118 |
| <b>Preference to receive the SMS</b>   |      |     |      |     |
| Morning  | 39.6 | 88  | 39.8 | 80  |
| Afternoon  | 18.5 | 41  | 15.4 | 31  |
| Evening  | 19.8 | 44  | 16.9 | 34  |
| Any time   | 47.3 | 105 | 47.8 | 96  |
| Do not prefer the SMS  | 2.3  | 5   | 2.5  | 5   |
| Having integrated distribution of Poster/Banner, handouts/reporting form in training                         | 46.8 | 103 | 53.2 | 106 |
| <b>Visibility over the Deworming Day Poster/Banner is posted</b>   |      |     |      |     |
| Clearly posted/ visible to all   | 78.8 | 141 | 79.8 | 138 |
| Hidden in a room/partially visible.  | 10.0 | 18  | 12.1 | 21  |
| Not posted/ not visible  | 11.7 | 21  | 8.1  | 14  |
| Has the ASHA submitted you a list of preschool non registered Children (1-5 years) in your community         | NA   | NA  | 66.1 | 133 |
| Has the ASHA submitted you a list of Out-Of-school Children(6-19 years) in your community                    | NA   | NA  | 54.7 | 110 |
| Are non-registered (1-5 years) children also getting deworming tablets in your <i>anganwadi</i> today        | NA   | NA  | 88   | 177 |
| Are Out-Of-school Children(6-19 years)children also getting deworming tablets in your <i>anganwadi</i> today | NA   | NA  | 96.5 | 194 |
| Prescribed dose of 1-2 years of children   | NA   | NA  | 60.7 | 122 |
| Prescribed dose of 2-19 years of children  | 98.2 | 218 | 96.5 | 194 |
| Awareness about to whom to submit the completed School/ <i>Anganwadi</i> Reporting                           | 79.7 | 177 | 90   | 181 |
| Retain a copy of the School/ <i>Anganwadi</i> Reporting Form at the school after submitting one copy         | 86.5 | 192 | 85.1 | 171 |

|  |      |     |      |     |
|--|------|-----|------|-----|
| Teachers/ <i>Anganwadi</i> who think any adverse event can occur after taking the deworming tablets                      | 51.4 | 114 | 43.8 | 88  |
| Possible adverse events could be reported by children after taking the tablets   |      |     |      |     |
| Mild abdominal pain  | 78.9 | 90  | 81.8 | 72  |
| Nausea   | 62.3 | 71  | 55.7 | 49  |
| Vomiting   | 86.8 | 99  | 61.4 | 54  |
| Diarrhea   | 29.8 | 34  | 14.8 | 13  |
| Fatigue  | 28.1 | 32  | 19.3 | 17  |
| Response in case a child complains of mild stomach ache, nausea, vomiting, and diarrhea after taking the tablets,        |      |     |      |     |
| Make the child lie down in open and shady place  | 80.6 | 179 | 82.6 | 166 |
| Give ORS/ water  | 55.4 | 123 | 60.2 | 121 |
| Observe the child at least for 2 hours in the school   | 57.7 | 128 | 54.7 | 110 |
| Response in case the child continues to report symptoms of stomach ache, vomiting, diarrhea, etc. even after a few hours |      |     |      |     |
| Call PHC or emergency number   | 81.1 | 180 | 79.6 | 160 |
| Take the child to the hospital /call doctor to school  | 70.3 | 156 | 74.1 | 149 |
| Don't know / don't remember  | 2.7  | 6   | 0    | 0   |
| Deworming activity going in your school/ <i>Anganwadi</i> today  |      |     |      |     |
| Yes, getting now   | 71.2 | 158 | 91   | 183 |
| Yes, after few hours   | 14.9 | 33  | 0    | 0   |
| No, will not administer today  | 14   | 31  | 9    | 18  |

**Table: 2 Integrated Distribution of Drugs and IEC material**

| Items Received in training | Schools  |           |                      | <i>Anganwadi</i> |           |                      |
|----------------------------|----------|-----------|----------------------|------------------|-----------|----------------------|
|                            | Received | Verified* | Received in training | Received         | Verified* | Received in training |
| Tablets                    | 95.9     | 86.9      | 62.4                 | 96               | 88.1      | 69.4                 |

|                             |      |      |      |      |      |      |
|-----------------------------|------|------|------|------|------|------|
| Poster/Banner               | 80.6 | 85.5 | 63.7 | 86.1 | 87.9 | 69.9 |
| Handouts/<br>Reporting form | 83.3 | 84.9 | 63.2 | 88.1 | 87   | 67.2 |

Note:-The sample size for items received in schools and *anganwadis* were 220 and 201 respectively

\*The denominator for verified is the number of particular item received to schools and *anganwadis*

**Table3: Observation of deworming activity in the class/Anganwadi**

| Indicators   | Schools(159)* |     | Anganwadi (184)* |     |
|--|---------------|-----|------------------|-----|
|  | %             | N   | %                | N   |
| Deworming activity is taking place in the class/Anganwadi  | 79.5          | 159 | 89.6             | 164 |
| Teachers/Anganwadi worker giving any health education related to deworming   |               |     |                  |     |
| Yes  | 92.5          | 147 | 88.4             | 145 |
| Could not observe as I reached late  | 4.4           | 7   | 2.4              | 4   |
| What are being included by the teacher/Anganwadi worker as a part of health education to children  |               |     |                  |     |
| Harmful effects of worms   | 90.5          | 133 | 86.2             | 125 |
| How worms get transmitted  | 83.0          | 122 | 81.4             | 118 |
| Benefits of deworming  | 77.6          | 114 | 78.6             | 114 |
| Methods of worm infection prevention   | 53.1          | 78  | 59.3             | 86  |
| Comprehensive health education to children   | 31.9          | 71  | 37.8             | 76  |
| Teacher/ Anganwadi worker were asking the children if they are sick/under medication before giving the tablet  | 96.2          | 152 | 94.5             | 155 |
| What teacher/ Anganwadi worker did ,If there was any sick child in the class room  |               |     |                  |     |
| Gave Albendazole tablet to the child   | 11.8          | 18  | 7.7              | 12  |
| Did not give the Albendazole tablet to the child   | 88.2          | 135 | 92.3             | 143 |
| Students/children are told to chew the tablet before swallowing it   | 95.6          | 151 | 92.7             | 152 |
| Deworming tablets were distributed by  |               |     |                  |     |
| Teacher/headmaster   | 75.3          | 119 | NA               | NA  |
| Anganwadi worker   | NA            | NA  | 87.2             | 143 |
| Asha/ANM   | 24.7          | 39  | 12.8             | 21  |
| Students   | 0.0           | 0   | 0.0              | 0   |
| Teacher/ Anganwadi worker asking students to take Albendazole tablets in the class/ Anganwadi only   | 100.0         | 159 | 95.7             | 157 |
| Teachers/ Anganwadi worker following the protocol of putting single tick ✓(deworming day) or double tick ✓✓ (mop-up day) on each child's name/roll no. in the attendance register after giving them the deworming tablet | 93.7          | 148 | 88.4             | 145 |
| Practice followed by teacher, if the ticking/double ticking protocol did not followed  |               |     |                  |     |
| Prepare the separate list for dewormed child   | 10.0          | 1   | 42.1             | 8   |

|   |      |     |      |     |
|---|------|-----|------|-----|
| Put different symbols   | 10.0 | 1   | 21.1 | 4   |
| Nothing was done  | 50.0 | 5   | 36.8 | 7   |
| <b>Any child not given the prescribed dose of Albendazole tablet</b>  |      |     |      |     |
| Yes, less than the prescribed dose  | 1.9  | 3   | 4.9  | 8   |
| Yes, more than the prescribed dose  | 2.5  | 4   | 1.2  | 2   |
| No, the prescribed dose is being given  | 95.6 | 151 | 93.9 | 154 |
| <b>Any adverse event observed (nausea, vomiting, stomach-pain diarrhoea, etc.) after taking the tablet</b>                    | 15.2 | 24  | 10.4 | 17  |
| <b>Is there a single tick (deworming day) in front of the children present on that day Anganwadi</b>                          |      |     |      |     |
| Yes to every children   | 78.8 | 82  | 69.1 | 67  |
| Yes, but in few children  | 14.4 | 15  | 21.7 | 21  |
| No  | 4.8  | 5   | 9.3  | 12  |
| <b>Are there names which do not have a single tick on deworming day AND they also do not have a double tick on mop-up day</b> | 59.8 | 52  | 60.0 | 39  |
| <b>Reason of not putting single tick or double tick in front of the name of all/some children</b>                             |      |     |      |     |
| They did not get deworming drugs as they were feeling unwell  | 59.5 | 44  | 69.2 | 27  |
| AWW did not follow the recording protocol correctly   | 14.9 | 11  | 15.4 | 6   |
| The parents of those children have refused to get their children dewormed   | 12.2 | 9   | 2.6  | 1   |
| Children refused to take the drug   | 14.9 | 11  | 2.6  | 1   |
| Others  | 29.7 | 22  | 0.0  | 0   |

\*Deworming activity was observed by monitors in 159 schools and 184 *anganwadis*

Table: 4 Interview with school teacher

| Indicators  | %    | N   |
|---|------|-----|
| Attended any official training for deworming program in the past 2 months | 52.3 | 116 |
| Received training for deworming   |      |     |
| At official level training  | 65.5 | 76  |
| By Headmaster/ teacher  | 31.9 | 37  |
| Others (specify)'   | 2.6  | 3   |
| Awareness about the ways a child can get worm infection                   | 93.2 | 207 |
| Different ways that children can get worm infected                        |      |     |

|  |      |     |
|--|------|-----|
| Having foods without washing hands   | 99.5 | 206 |
| Not washing hands after using toilets  | 94.2 | 195 |
| Not using sanitary latrine   | 70.5 | 146 |
| Moving in bare feet  | 74.4 | 154 |
| Consume vegetables and fruits without washing  | 81.6 | 169 |
| Having long and dirty nails  | 72.0 | 149 |
| <b>If child unwell, albendazole can't be given</b>   | 7.2  | 16  |
| <b>Awareness about prescribed dose of albendazole</b>  |      |     |
| One  | 98.6 | 219 |
| More than one  | 0.5  | 1   |
| Less than one  | 0.9  | 2   |
| <b>Teachers who think any adverse event can occur after taking the deworming tablets</b>   | 46.4 | 103 |
| <b>Possible adverse events could be reported by children after taking the tablets</b>  |      |     |
| Mild abdominal pain  | 86.4 | 89  |
| Nausea   | 70.9 | 73  |
| Vomiting   | 83.5 | 86  |
| Diarrhea   | 41.7 | 43  |
| Fatigue  | 38.8 | 40  |
| <b>In case a child complains of mild stomach ache ,nausea, vomiting, and diarrhea after taking the tablets, Your response should be</b>    |      |     |
| Make the child lie down in open and shady place  | 85.1 | 189 |
| Give ORS/ water  | 58.6 | 130 |
| Observe the child at least for 2 hours in the school   | 59.5 | 132 |
| Don't know / don't remember  | 4.5  | 10  |
| Other  | 4.5  | 10  |
| <b>If the child continues to report symptoms of stomach ache, vomiting, diarrhea, etc. even after a few hours, Your response should be</b> |      |     |
| Call PHC or emergency number   | 79.7 | 177 |
| Take the child to the hospital /call doctor to school  | 72.5 | 161 |

Note: - Interviews were conducted from 222 school teachers

**Table: 5 Interview with school child**

| Indicators  | %    | N   |
|---|------|-----|
| Child got a white tablet in school today                            | 94.2 | 180 |
| Child was feeling sick before taking the tablet in the school today | 11.7 | 21  |
| <b>Child got tablet by</b>  |      |     |
| By Teacher / headmaster   | 78.9 | 142 |
| By ASHA/ANM   | 21.1 | 38  |
| By Other student  | 0    | 0   |
| Other   | 0    | 0   |
| <b>Child consumed tablet</b>  | 98.9 | 178 |
| <b>Reason to not consume tablet</b>                                 |      |     |

|   |      |     |
|---|------|-----|
| Was feeling sick  | 100  | 2   |
| I'm afraid of taking the tablet                           | 0    | 0   |
| Parents told me not to have it                            | 0    | 0   |
| Don't have worms so don't need it                         | 0    | 0   |
| Did not like the taste                                    | 0    | 0   |
| Had difficulty swallowing                                 | 0    | 0   |
| Taking home   | 0    | 0   |
| Other, specify  | 0    | 0   |
| <b>Awareness of child that, how to consume the tablet</b> |      |     |
| Chewed tablet before swallowing                           | 88.9 | 160 |
| Swallowed tablet directly                                 | 11.1 | 20  |
| Other, specify  | 0    | 0   |
| <b>Awareness of child that, why tablet is provided</b>    |      |     |
| Deworming   | 96.1 | 173 |
| Any other answer(unrelated to deworming)                  | 0    | 0   |
| <b>Child was aware about deworming activity</b>           | 42.9 | 3   |
| <b>Source of information about deworming activity</b>     |      |     |
| Teacher / school  | 97.7 | 173 |
| Television  | 19.2 | 34  |
| Radio   | 6.8  | 12  |
| Newspaper   | 19.2 | 34  |
| Poster/Banner   | 31.1 | 55  |
| Parents/siblings  | 8.5  | 15  |
| Friends/Neighbors   | 6.2  | 11  |

Note: - Interviews were conducted from 181 school enrolled children

### Annexure 2: Analysis for Coverage Validation (School/Anganwadi)

**Table 1: Findings from School/Anganwadi Coverage Validation data**

| Table:1 Coverage Validation Indicators                                  | School<br>Number=301 |     | Anganwadi<br>Number=293 |     |
|---|----------------------|-----|-------------------------|-----|
|   | %                    | N   | %                       | N   |
| <b>Attended training for deworming program*</b>                         | 63.1                 | 202 | 89.4                    | 269 |
| <b>For schools/Anganwadi that didn't attend training, reasons were:</b> |                      |     |                         |     |
| Location of training was far away                                       | 1.9                  | 2   | 10.3                    | 3   |
| Was not aware of the date/ timing of training                           | 49.5                 | 51  | 51.7                    | 15  |
| Busy in other official work   | 5.8                  | 6   | 13.8                    | 4   |
| Attended deworming training in the past                                 | 6.8                  | 7   | 24.1                    | 7   |
| Not necessary   | 1.9                  | 2   | 0                       | 0   |
| Other reasons   | 45.6                 | 47  | 17.2                    | 5   |

|  |       |     |       |     |
|--|-------|-----|-------|-----|
| Schools/ <i>Anganwadis</i> observed deworming  | 94.1  | 301 | 97.3  | 293 |
| Schools/ <i>Anganwadis</i> received the followings   |       |     |       |     |
| Tablets  | 95    | 304 | 99.3  | 299 |
| Poster   | 80.9  | 259 | 89    | 268 |
| Handouts/Reporting form  | 79.4  | 254 | 88    | 265 |
| Received SMS about deworming program   | 50.9  | 163 | 53.3  | 162 |
| Schools/ <i>Anganwadis</i> had the sufficient drugs for deworming                            | 93.6  | 277 | 94.2  | 275 |
| Schools/ <i>Anganwadis</i> where copy of school reporting form was available                 | 44.8  | 135 | 49.6  | 128 |
| For schools/ <i>Anganwadis</i> that didn't have copy of school reporting form, reasons were: |       |     |       |     |
| Did not received   | 10.84 | 18  | 5.4   | 7   |
| Submitted to ANM   | 81.33 | 135 | 92.3  | 120 |
| Unable to locate   | 3.01  | 5   | 0.8   | 1   |
| <i>Anganwadis</i> having list of non-registered(1-5) children                                | NA    | NA  | 61.09 | 179 |
| <i>Anganwadis</i> having list of out of school(6-19) children                                | NA    | NA  | 45.39 | 133 |

\*This was asked to 320 and 301 *anganwadis* visited for coverage validation

Table: 2 School Coverage Validation Indicators

| Indicators   | %     |
|--|-------|
| Schools where all the classes followed the correct recording protocol  | 64.5  |
| Schools where one or more of the classes followed the correct recording protocol   | 69.7  |
| Schools where none of the classes followed the correct reporting protocol  | 30.2  |
| Schools where one or more of the classes followed the correct recording protocol   | 69.7  |
| Schools where one or more of the classes followed other recording protocol   | 12.9  |
| Schools where no reporting protocol was followed   | 19.6  |
| State level verification factor (in numbers)   | 0.053 |
| State inflation rate (which measures the extent to which the recording in school reporting forms exceeds records at schools) | 85.5  |
| Attendance on Deworming Day  | 83.9  |
| Attendance on Mop-up day   | 66    |
| Children who attended on both Deworming Day and Mop-up day   | 58    |

|   |       |
|---|-------|
| Maximum attendance of children on Deworming Day and Mop-Up Day  | 91.9  |
| Schools had surplus storage of drugs after deworming  | 63.5  |
| Schools had complete school reporting form  | 99.2  |
| Schools reported serious adverse event after taking the medicine  | 8     |
| Average number of adverse events reported per school  | 0.8   |
| State level inflation rate among trained schools (which measures how much the coverage reported in reporting forms exceeded school records in registers for schools that received training)   | 76.5  |
| State level inflation rate among untrained schools (which measures how much coverage reported in reporting forms exceeded school records in registers for schools that were not trained)  | 137.1 |
| School level inflation rate for schools that followed the correct recording protocol (measures how much coverage reported in reporting forms exceeded school records in registers, for schools that were following recording protocols, i.e., ticking). | 71.5  |

Table: 3 Interview of children during Coverage validation

| Indicators                                 | %    | N   |
|--|------|-----|
| Children received deworming tablets        | 98.7 | 892 |
| Supervised Administration of tablets       | 98   | 875 |
| Children consumed tablet                   | 98.6 | 883 |
| Children aware about the deworming tablets | 92.9 | 829 |
| Way children consumed the tablet           |      |     |
| Chewed tablet before swallowing            | 93.8 | 828 |
| Swallowed tablet directly                  | 6.2  | 55  |

Note:- Three children were interviewed from all those schools(301) who reported to observe deworming during NDD and mop-up day out of total 320 schools visited during coverage validation

Table: 4 *Anganwadi* Coverage Validation Indicators

| Indicators   | Values |
|--|--------|
| <b><i>Anganwadi</i> that followed recording protocol</b>               | 97.5   |
| State level verification factor for Registered children(1-5 years)     | 0.73   |
| State level verification factor for non-registered children(1-5 years) | 0.78   |
| State level verification factor for out of school children(6-19 years) | 0.69   |
| State inflation rate (1-5 years)                                       | 34.5   |
| State inflation rate for non-registered children (1-5 years)           | 27.8   |
| State inflation rate for out of school children(6-19 years)            | 44.7   |





## Annexure A - National Deworming Day 2016\_ Coverage

| NDD Report State Telangana 2016 as on 03-30-2016 03:58 PM  |              |   |         | Logout  |
|--|--------------|---|---------|---------|
| No. of Govt./Govt. aided schools   | 29442        | No. of Govt./Govt. aided schools reporting coverage | 28771   |         |
| No. of targeted private schools  | 11611        | No. of targeted private schools reporting coverage  | 10421   |         |
| No. of anganwadi centers (AWCs)  | 33443        | No. of AWCs reporting coverage                      | 33315   |         |
| No. of ASHAs oriented/trained on NDD   |              |   | 27159   |         |
| No. of Govt./Govt. aided schools who attended training NDD   |              |   | 26499   |         |
| No. of private schools who attended training on NDD  |              |   | 8331    |         |
| No. of anganwadi workers oriented/trained for NDD  |              |   | 31421   |         |
| <b>Coverage Details/ (TARGET)</b>  |              |   |         |         |
|  |              | Girls   | Boys    | Total   |
| Total children out-of school   |              | 430521  | 428050  | 858571  |
| Total children unregistered in anganwadis  |              | 154674  | 160025  | 314699  |
| Total children registered in anganwadis  |              | 800195  | 828101  | 1628296 |
| Total children enrolled in the schools   | Govt. school | 1897289   | 1856615 | 3753904 |
|  | Pvt. school  | 1671822   | 1741702 | 3413524 |
| Total number of children targeted  |              |   |         | 9968994 |
| No. of enrolled children (classes 1-5) who were administered albendazole on NDD and MUD            | Govt. school | 614506  | 610094  | 1224600 |
|  | Pvt. school  | 577683  | 615842  | 1193525 |
| No. of enrolled children (classes 6-12) who were administered albendazole on NDD and MUD           | Govt. school | 1202461   | 1171897 | 2374358 |
|  | Pvt. school  | 912962  | 928420  | 1841382 |
| No. of registered children in AWCCs (1-5 years) who were administered albendazole on NDD and MUD   |              | 731449  | 781241  | 1512690 |
| No. of unregistered children in AWCCs (1-5 years) who were administered albendazole on NDD and MUD |              | 137619  | 134828  | 272447  |
| No. of out of school children (6-10 years) who were administered albendazole on NDD and MUD        |              | 149914  | 148849  | 298763  |
| No. of out of school adolescent (10-19 years) who were administered albendazole on NDD and MUD     |              | 266730  | 292562  | 559292  |
| Grand Total Of number of children who were administered Albendazole (T = 1a+1b+2a+2b+3+4+5+6)      |              | 4593324   | 4683733 | 9277057 |
| Percent coverage   |              |   |         | 93.06   |
| No. of severe adverse events reported from schools and anganwadis                                  |              |   |         | 0       |
| <b>Logistic Details: Block/District/State (tick as applicable)</b>                                 |              |   |         |         |
| Total No. of albendazole tablets given   |              | 4137611   | 3427620 | 3041623 |
| Total No. of albendazole tablets administrated   |              | 3586506   | 3005743 | 2502962 |
| Stock of albendazole tablets left  |              | 346297  | 406658  | 304237  |

## Annexure B - Joint Directives



### Government of Telangana

D.O.Lr.No. 09/RBSK/TS/2015 Dt: /12/2015

**RAJESHWAR TIWARI**  
Principal Secretary  
Health Medical & Family Welfare

**RANJEEV.R.ACHARYA**  
Principal Secretary  
Education

**M.JAGADEESHWAR, IAS**  
Secretary,  
Women & Child Development

Dear All,

Soil Transmitted Helminthes (STH) are significant Public Health concern for India. Around 68% children of 1-14 years of age (241 million) are estimated to be at risk of parasitic intestinal worm infestation. Evidence has shown detrimental impact of STH infestation on physical growth, Anemia, under nutrition and cognitive development as well as school attendance. Periodic de-worming can reduce the transmission of STH infections. During 2015, mass de-worming was conducted across 11 States as a fixed day strategy to reduce the harm caused by STH on millions of children in India in a cost effective, simple and safe manner.

During 2016, Ministry of Health and Family Welfare in collaboration with Ministry of Women and Child Development, Department of School Education and Literacy under Ministry of Human Resource Development, Ministry of Drinking Water and Sanitation and Ministry of Panchayat Raj has decided to conduct Annual Mass De-Worming by observing National De-worming Day (NDD) on 10th February, 2016, across the Country through Schools and Anganwadi Centers along with intensive awareness generation activities focusing benefits of consuming Albendazole and adopting sanitation-hygiene practices.

We seek your support for the same through active participation of the Departments of Health, School Education and Women and Child Development in the upcoming NDD 2016. Concerted efforts from the three departments at the State, District and Block level are required to ensure effective implementation and increased coverage of the programme.

The following steps are suggested to strengthen the coordination amongst the three stakeholder Departments for the NDD programme:-

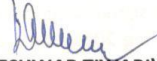
1. All the key stakeholder Departments must coordinate with the Department of Health in the effective rolling out of NDD.
2. Establishment of State and District level Coordination Committees to be chaired by the Principal Secretary Health and the District Collector respectively.
3. School Education and Women & Child Development departments to provide the Department of Health with the desired numbers of target age group to cover all children 1-19 years age group, so as to ensure adequate procurement and supply of Albendazole tablets is made available for conducting NDD.
4. All the Departments will put National De-worming Day as one of the agenda in their periodic meetings to reinforce key messages for the programme and facilitate high coverage.

5. Training of functionaries from Education and WCD Departments to be supported by Health Department at the State and District level, while Block-level training of Teachers and Anganwadi workers to be taken up by the respective Departments.
6. All stakeholder Departments to disseminate the IEC material provided by the Department of Health to the Schools, Anganwadis and Community as appropriate for increasing programme awareness and facilitate greater coverage.
7. Officials of all the stakeholder Departments are mandated to undertake field visits for monitoring and supportive supervision on the NDD and mop up day.
8. Reporting formats filled by the Schools and AWCs to be collected by ANMs from the Schools and Anganwadis within the specified timelines.


We are confident that with your support for the NDD programme, we will collectively be able to reach out to all the children in the age group 1-19 years and help improve their quality of life with improved health and educational outcomes.

Looking forward to your support in this regard.


Yours sincerely,

  
**(RAJESHWAR TIWARI)**  
 Principal Secretary,  
 H,M&FW Dept.

Yours sincerely,

  
**(RANJEEV. R. ACHARYA)**  
 Principal Secretary,  
 Education Department

Yours sincerely,

  
**(M.JAGDEESHWAR)**  
 Secretary (Women &  
 Child Development)

To

All the District collectors in the state  
 All the District Medical & Health Officers in the state  
 All the District Education Officers in the state  
 All the Project Directors Women & Child Development in the state  
 All the District Panchayat Officers  
 All CEO Zilla Parishads  
 All the MPDOs in the state  
 All the Mandal Education Officers in the state  
 All the CDPOs in the state  
 All the Gram Panchayats in the state  
 All the Private School Associations in the state  
 All the IMA Associations in the state

Copy to

The Commissioner of Health & Family Welfare, Telangana  
 The Commissioner & Director of School Education, Telangana  
 The Director, Women Development & Child Welfare, Telangana

## Annexure C – Adverse Event Protocol

OFFICE OF THE COMMISSIONER OF HEALTH & FAMILY AND MISSION DIRECTOR (NHM),  
TELANGANA, HYDERABAD

Lr. Rc.No. /NDD/JD(CH&I)/2016

Date: 03.02.2016

**Sub:** Adverse Event Management Protocol and Format for assuring drug safety during mass drug administration in NDD role out to establish coordination between Health, Education and WCD(ICDS) Dep–communicating Role and Responsibilities - Reg.

< >

As you are aware that under Government of Telangana has planned to implement the mass school and *anganwadi* based deworming program (National Deworming Day – February 10th 2016& Mop Up day on February 15<sup>th</sup> 2016).

For successful implementation of the same you are requested to ensure Adverse even management protocol in NDD roll out for assuring drug safety during mass drug administration in NDD role out to intend to protect the programme and those who administer the program by providing clear instructions on the management of adverse events. Although rare adverse events can and do occur in programmes on a large scale in mass drug administration.

Hence all the stockholders should be well fared to ensure safety of all children participating in the NDD Programme.

Severe adverse evets (SAE) is fatal, life –threatening, disabling, or incapacitating or that results in hospitalization after drug intake. Choking hazard/asphyxia is caused a severe adverse event which needs to be responded to immediately and ANM should inform the Medical officer who should complete an incident report form(Annexure 1) and submit it to the Civil Surgeon within the same day.

All Districts are here with instructed to deal effectively with any AE or SAE on Deworming, with establishing coordinated approach between Health, Education and WCD Dept.,

Yours faithfully

For Commissioner of Health & Family Welfare and  
Mission Director (NHM)

List of Enclosures

1. Adverse Event Reporting Format
2. Adverse Event Protocol.

# Adverse Event Protocol

NDD – At schools and Anganwadi Centers

Adverse Event Protocol

## 1. PURPOSE:

This document is primarily based on the World Health Organization (WHO) guidelines<sup>13</sup> for assuring drug safety during mass drug administration (MDA). The deworming drug (Albendazole 400 mg) used in the Government of India's school and anganwadi center – based mass deworming program - NDD - is effective, very safe, and approved by the WHO and the MOHFW of India for treating soil-transmitted helminths in preschool and school-age children. Extensive experience of deworming millions of children worldwide confirms that this drug itself causes only rare, mild and transient side events or adverse drug reactions, and that these reactions are generally related to degeneration of the worms that have been killed. Most of the adverse events observed in school programs occur during initial rounds of implementation of the intervention – a time when children harbor more infections of high intensity. Mild abdominal pain, nausea, vomiting, diarrhoea and fatigue are the most commonly reported adverse events in some children with increased worm load, are not serious and do not normally require medical treatment.

An effective Adverse Event Protocol is intended to protect the program, and those who administer the program, by providing clear instructions on the management of adverse events. Although rare, adverse events can and do occur in programs on a large scale in mass drug administration, and all stakeholders should be well-prepared to ensure safety of all children participating in the program.

## 2. DEFINITIONS

An **Adverse Event (AE)** is a medical incident that takes place after a preventive chemotherapy intervention and is suspected to be but is not necessarily caused by the medicines used in the intervention. Some AE, after investigation, may be found to have been caused by the medicine. Such AE will also be referred to as adverse drug reactions or side effects.

A **Severe Adverse Event (SAE)** is fatal, life-threatening, disabling, or incapacitating or that results in hospitalization after drug intake.

**Severe adverse events** can be defined as those that:

- are life-threatening or fatal
- cause or prolong hospital admission
- cause persistent incapacity or disability; or
- concern misuse or dependence on the drug

There are a number of key types of SAEs:

- Those caused by the drugs themselves: e.g., an allergic reaction to the drugs
- Those caused by the parasites degeneration when they are killed: e.g., intestinal blockage
- Those caused by operational issues: e.g., choking
- Those which are coincidental but unrelated: e.g., malaria around the same time as drug administration.

## 3. Preparatory phase for managing adverse events

To effectively deal with any AE or SAE on Deworming Day, a coordinated approach should be established between the Health Department, the Education Department and WCD (ICDS) Department of the respective State Government. The roles and responsibilities of these three primary departments in adverse events management are detailed below.

### 3.1. Health Department:

| Health Department Roles and Responsibilities |  |
|--|--|
| WHO  | WHAT   |
| State Nodal Officer                          | <ol style="list-style-type: none"> <li>1. Designate official at state level for overall adverse event management</li> <li>2. Orient the District Civil Surgeon about the flow of information of any AE and SAE</li> <li>3. Adaptation of adverse event protocol in local language and further dissemination to districts and blocks</li> <li>4. Orient District Civil Surgeon about the flow of information of any Adverse Events and distribute reporting form to the District Civil Surgeon (Annexure 7)</li> </ol>  |
| District Civil Surgeon 1                     | <ol style="list-style-type: none"> <li>1. Inform and orient the Block Medical Officer about Deworming Day and Mop-Up Day.</li> <li>2. Prepare an Emergency Response Team engaging RBSK and AYUSH doctors and train them to handle any AE or SAE at the Block level</li> <li>3. Ensure that Ambulance Services other mobility support vehicles i.e RBSK are available at Block level</li> <li>4. Distribute the reporting forms and cascade of information diagram to the Block medical officer.</li> <li>5. Circulate list of important phone numbers of the District health officials to every Block Medical Officer (Annexure 7 Section II)</li> </ol>             |
| Block medical officer                        | <ol style="list-style-type: none"> <li>1. Inform and orient the PHC/CHC/ANMs about Deworming and Mop-Up Day</li> <li>2. Depute doctors to handle calls on the emergency helpline for Deworming Day and Mop Up Day</li> <li>3. Prepare PHCs/CHCs/ANMs to manage an increased number of children presenting with minor, non-specific symptoms</li> <li>4. Ensure ambulance services and other mobility support are on ALERT for handling any SAE cases</li> <li>5. Ensure phone numbers of the PHCs/ANMs are circulated to the Block education department for distribution to the school principals, ICDS-CDPO's Supervisors, anganwadi workers, and ASHAs.</li> </ol> |
| ANMs   | Should be prepared to accompany sick children to health facilities and ensure they receive appropriate medical   |

|  |  |
|--|--|
|  | attention and care. Visit assigned schools in advance if possible and collect information and phone numbers of the school principal. Provide their phone number to the school principal. Share the information collected with the Civil Surgeon. Also share the phone number of the helpline to all the assigned schools |
|--|--|

### 3.2 School Education and Literacy Department:

| Department Roles and Responsibilities of School Education & Literacy |   |
|--|---|
| WHO  | WHAT  |
| State Education nodal officer  | <ol style="list-style-type: none"> <li>1. Inform all District education officers about Deworming Day and Mop-Up Day.</li> <li>2. Distribute the reporting form to the District education officer (Annexure I)</li> <li>3. Distribute the locally adapted Adverse event protocol and reporting format to the District education department.</li> </ol>   |
| District Education Officer   | <ol style="list-style-type: none"> <li>1. Inform and orient the Block education officer about Deworming Day and Mop-Up Day.</li> <li>2. Distribute the reporting form to the District education officer or the “cascade” of information flow to the District Civil Surgeon (Annexure I)</li> </ol>  |
| Block Education Officer  | <ol style="list-style-type: none"> <li>1. Inform and orient the principal and school teachers about Deworming Day and Mop-Up Day.</li> <li>2. The flow of information or the “cascade” on SAE in the school is to be shared with the department officials and school principals.</li> <li>3. Ensure to circulate important phone numbers of the Block level health officials to the school principal and instruct schools to display the emergency contact numbers in schools before deworming day</li> </ol> |
| Principals and Teachers  | <ol style="list-style-type: none"> <li>1. Teachers should inform parents of the children through different forums such as school management committee meetings or parents teachers meeting as appropriate ahead of Deworming Day about the following : <ol style="list-style-type: none"> <li>a. Deworming and Mop-Up Day</li> <li>b. Benefits of deworming on children’s health and education</li> </ol> </li> </ol>   |



|  |   |
|--|---|
|  | <p>c. Mild side effects in children may be expected to only children with high worm load.<br/>The side effects are usually not serious and would pass by soon.</p> <p>d. Preparations undertaken by the Education and Health Department to manage any AE.</p> <p>e. Build confidence that the child will be taken under observation and care if they show any serious side effects. They will be immediately taken to the nearest health centre.</p> <p>2. Schools should prepare a shaded open area and keep safe drinking water available for children experiencing any side effects to rest until recovery</p> |
|--|---|

### 3.3 Women and Child Development

| Women and Child Development (ICDS) Department Roles and Responsibilities |  |
|--|--|
| WHO  | WHAT   |
| State Program Officer (ICDS) - Nodal Officer                             | <ol style="list-style-type: none"> <li>1. Inform all District ICDS officers about Deworming Day and Mop-Up Day.</li> <li>2. Distribute the reporting form to the District ICDS officer (annexure I)</li> <li>3. Distribute the Adverse Event Protocol and reporting format to the District ICDS Department.</li> </ol>   |
| District ICDS Officer  | <ol style="list-style-type: none"> <li>1. Inform and orient the Child Development Block Officer (ICDS- CDPOs) about Deworming Day and Mop-Up Day.</li> <li>2. Distribute the reporting form to the District education Officer or the “cascade” of information flow to the District civil surgeon (Annexure I)</li> </ol>   |
| Child Development Block Officer (CDPO) – ICDS                            | <ol style="list-style-type: none"> <li>1. Inform and orient the ICDS Supervisors and anganwadi workers about Deworming Day and Mop-Up Day.</li> <li>2. The flow of information or the “cascade” on SAE in the anganwadi centers is shared with the department officials and anganwadi workers. (Annexure I)</li> <li>3. Ensure to circulate important phone numbers of the Block level health officials to the ICDS Supervisors, anganwadi workers and instruct anganwadis to display the emergency contact numbers at anganwadi centers before deworming day</li> </ol> |
| Anganwadi Workers and ASHAs  | <ol style="list-style-type: none"> <li>1. AWWs and ASHA should inform parents of the children through different forums such as VHND, VHSNC meetings, Gram Panchayats, home visit etc. about the following : <ol style="list-style-type: none"> <li>a. Deworming and Mop-Up Day.</li> </ol> </li> </ol>   |

|                |  |
|----------------|--|
|                | <p>b. Benefits of deworming on children’s health and education.</p> <p>c. Mild side effects may be experienced in children with high worm load. The side effects are usually not serious and would subside soon.</p> <p>d. Preparations undertaken by the WCD (ICDS), Education and Health Department to manage any Adverse Event.</p> <p>e. Build confidence that the child will be taken under observation and care if they show any serious side effects. In case of a prolonged adversity the child would be taken immediately to the nearest hospital.</p> <p>2. AWCs should prepare a shady open area for children experiencing any side effects to rest until recovery.</p> |
| ANMs and ASHAs | <p>Should be prepared to accompany sick children to health facilities and ensure they receive appropriate medical attention and care. Visit assigned AWCs in advance if possible and collect information and phone numbers of the AWWs. Give own phone number to the AWWs. Share the information collected with the Civil Surgeon. Also share the phone number of the helpline with all the assigned AWWs.</p>   |

#### 4. MANAGING ADVERSE EVENTS ON DEWORMING DAY

On National Deworming Day, school principals, teachers and anganwadi workers should be prepared for any AE or SAE by having read through the Adverse Events Protocol/Guidelines in advance, and ensuring that the protocol and emergency numbers are on hand. All teachers and AWWs should clearly understand that children who are not well on deworming day should not be given the deworming drug.

The teacher and anganwadi workers MUST administer albendazole tablet under their direct supervision in Schools and Angawadi on Deworming and Mop-Up Day. The tablet must not be handed over to the child or their family member for consumption later at home.

##### 4.1 Mild Adverse Events

|  |
|--|
| <p>Women and Child Development (ICDS) Department Roles and Responsibilities</p> <p><b>WHAT ARE THEY?</b></p> <p>Events such as nausea, mild abdominal pain, vomiting, diarrhea and fatigue may occur among children especially those with high worm infestation. These side effects are transient and usually do not require hospitalization.</p> <p><b>WHAT SHOULD THE TEACHER/PRINCIPAL/AWWs DO WHEN MILD ADVERSE EVENT AT SCHOOL OR ANGANWADI CENTERS HAPPENS?</b></p> <ol style="list-style-type: none"> <li>1. Children with ANY side effects should be taken to an open and shaded place and allowed to lie down and rest. They should be provided with clean drinking water.</li> <li>2. Teachers, AWWs and parents should be prepared for these events and take immediate action in case that they occur.</li> </ol> |
|--|

3. Children should remain at school or anganwadi center for at least 2 hours after treatment.

DO NOT PANIC AND FOLLOW GUIDELINES

#### 4.2 Severe Adverse Events (SAE)

##### Women and Child Development (ICDS) Department Roles and Responsibilities

A Severe Adverse Event (SAE) is fatal, life-threatening, disabling, or incapacitating or that results in hospitalization after drug intake. Choking hazard/asphyxia causes a severe adverse event which needs to be responded to immediately.

1. Separate the affected child from other children and stop deworming activities.
2. Stay calm and communicate that the SAE is likely not due to the deworming drug.
3. School principal should immediately call the Helpline number as per shared details. The school principal should use the information cascade.
4. If ambulance services are available, immediate ALERT the ambulance should be given for transport of the child to the nearest PHC/CHC.
5. The child's parents should be informed immediately.
6. Immediate treatment should be provided to the child by medical/health personnel (See Annexure 7)

Section VI: Guidelines for Emergency Response Team). Medical treatment for adverse event should only be administered by medical/health personnel.

7. The ANM should inform the Medical officer who should complete an incident report form and submit it to the Civil Surgeon within the same day.
8. Once the reporting form is received, further notification to the next level must be made as per "cascade" of information flow.
9. The Mission Director (NHM) or the designated officer will sign/confirm the report(s), and determine if further investigation is needed and submit the report to the Mission Director immediately. The Mission Director or the designated officer will be the spokesperson to the media.

#### 5. MEDIA HANDLING

##### MEDIA HANDLING

The designated officer at state level will be the spokesperson to the media. In all cases, it is important to maintain calm messaging and indicate that the adverse event is very likely not due to deworming medicine.

Before any media contact it is vital to prepare:

- Key messages;
- Answers for the likely and awkward questions;
- List of issues not to respond to (e.g. blaming an individual or speculating on the cause before the investigation is complete) etc.

If the teacher or AWWs is unable to manage Deworming Day after a SAE they should do the following:

1. Principal / AWW should suspend deworming temporarily until the health officials reach the school/AWC and make a decision about how to proceed.
2. Immediately elevate the situation via the information cascade.

## 6. MANAGEMENT OF SAE AFTER DEWORMING DAY

It is possible that an adverse event may occur after deworming day and may still be attributed to the administration of deworming drugs. Teachers, AWWs, parents, health facilities and all health officials and providers, including ANMs must be vigilant for such incidents in their area and elevate immediately through the information cascade. By becoming involved early in any potential SAE, the principals and ANM will reduce the chances that SAEs are incorrectly attributed to deworming drugs and will be able to undertake good and accurate community sensitization ahead of any media coverage.

### RESPONSIBILITIES AFTER DEWORMING DAY

| WHO                     | WHAT  |
|-------------------------|---|
| Parents                 | Should be informed that though mild AEs are expected and severe events are likely to be unrelated to the drugs, they are encouraged to report the incident at the earliest to ANM, ASHA or school principal if they are very worried about the health of their child. |
| Teachers / AWWs / ASHAs | Should investigate absenteeism more carefully after deworming day and encourage any sick children to seek treatment or inform an ANM if they are worried.   |
| ANMs                    | To report any case brought into notice to the District Civil Surgeon or Chief Medical Officer through Block Medical Officer or directly as feasible   |

### 7. DO'S AND DON'TS FOR SCHOOL AND ANGANWADI TO AVOID ANY SAE:

| DO  | DON'T   |
|---|---|
| <ul style="list-style-type: none"> <li>• Keep telephone numbers for helpline and the nearest health center and / or provider such as ANM and MOIC handy</li> <li>• Always direct the children to CHEW the medicine to avoid choking.</li> <li>• Administer the tablet under your direct supervision.</li> <li>• For younger children at anganwadi, crush the table first and then administer</li> </ul> | <ul style="list-style-type: none"> <li>• Do not administer medicine to a sick child.</li> <li>• Do not instruct children to swallow the medicine without chewing first.</li> <li>• Do not hand over medicine to parents/children for consumption at home</li> </ul> |

## ఆరోగ్యవంతమైన పిల్లలకోసం సులిపురుగులను నిర్మూలిద్దాం

**మీకు తెలుసా! సులిపురుగులు ఉన్న పిల్లలు**

- పాపిజాదార లోపం, రక్తహీనతలతో ఎప్పుడూ అలసిపోతారు
- శారీరక, మానసిక అభివృద్ధిలో మందకొడిగా వుంటారు

**సులిపురుగుల నుండి విద్యుల్ని మీరు వారక్షించుకునేందుకు, గుర్తుంచుకోండి**

**మీ రోడ్డు శుభ్రంగానూ, చిక్కనిగానూ ఉంచుకోవండి**



**మీ పదిపలాలు శుభ్రంగా ఉంచుకోవండి**



**విద్యార్థులూ పదిశుభ్రమైన నీటితో త్రాగండి**



**బాటూ/ బాస్టూలను ప్రతి రుచి**



**అహారాన్ని శుభ్రం చేయండి**



**పంటలను సులియించు శాయంగా వలస శుభ్రమైన నీటితో కడుగుండి**



**భోజనం చేసే ముందు సులియించు మంచంబోక్కినీ ఉపయోగించిన తరువాత మీ చేతులను శుభ్రంగా పబ్బుతో శుభ్రం చేయండి**



**మీ పదిపలాలు శుభ్రంగా ఉంచుకోవండి**



**పంటలను సులియించు శాయంగా వలస శుభ్రమైన నీటితో కడుగుండి**



**భోజనం చేసే ముందు సులియించు మంచంబోక్కినీ ఉపయోగించిన తరువాత మీ చేతులను శుభ్రంగా పబ్బుతో శుభ్రం చేయండి**



### 10 ఫిబ్రవరి 2016 - జాతీయ సులిపురుగుల నిర్మూలన దినం

#### గుర్తుంచుకోండి

- 1-19 సం.ల పురుషుల గల పిల్లలందరికీ వలిపురుగుల నిర్మూలన మాత్రం అన్ని పాఠశాలలో మరయు అంగన్వాడీ కేంద్రాలలో ఉచితంగా ఇవ్వబడుతుంది.
- పరమారు చేయబడని మరయు పాఠశాలకు వెళ్లని పిల్లలకు కూడా సులిపురుగుల నిర్మూలన చేయబడుతుంది
- జాతీయ సులిపురుగుల నిర్మూలన దినం నాడు సులిపురుగుల నిర్మూలనం చేయబడని పిల్లలకు, సులిపురుగులను తిరిగి - 15 ఫిబ్రవరి 2016 నాడు మాత్రమే తప్పనిసరిగా ఇవ్వాలి
- మరొక సమాచారం కొరకు, మీ ఎమెంఎం/ఆహా/అంగన్వాడీ కార్యకర్తను సంప్రదించండి
- సులిపురుగులు నిర్మూలన మాత్రం పిల్లలకు మరయు పిల్లలకు కూడా సురక్షితమైనది
- ఆశ్వపవర పరిస్థితిలో, మీ పమిపంలోని ఆరోగ్య కేంద్రం/108 ము సందర్శించండి











## Annexure E – Snapshot of tele calling Summary

| Pre Deworming                            |                          |                   |  |            |                   |
|--|--------------------------|-------------------|--|------------|-------------------|
| Pre-deworming calls to schools/anganwadi |                          |                   | Pre-deworming calls to schools/anganwadi |            |                   |
| District Level                           |                          |                   | School and Anganwadi                     |            |                   |
| Operational timeline                     |                          |                   | Operational timeline                     |            |                   |
| 15th Jan to 8th February                 |                          |                   | Jan 10th -Feb 9th)                       |            |                   |
| Proposed timeline                        | District Level           |                   | School and Anganwadi                     |            |                   |
| Actual timeline                          | 15th Jan to 8th February |                   | Jan 10th -Feb 9th)                       |            |                   |
|  | Officials called         | Total no of calls | People called                            | Department | Total no of calls |
| Telangana                                | DMHO                     | 90                | Aww                                      | ICDS       | 1268              |
|  | JBAR                     | 120               | Teacher/HM-govt                          | Education  | 890               |
|  | DIO                      | 120               | Teacher/HM-private                       | Education  | 571               |
|  |                          |                   |  |            |                   |
|  |                          |                   |  |            |                   |
|  |                          |                   |  |            |                   |
|  |                          |                   |  |            |                   |

| During Deworming     |            |                   |                           |            |                   |                      |            |                   |
|----------------------|------------|-------------------|---------------------------|------------|-------------------|----------------------|------------|-------------------|
| Calls on NDD         |            |                   | Calls between NDD and MUD |            |                   | Calls on MUD         |            |                   |
| School and Anganwadi |            |                   | School and Anganwadi      |            |                   | School and Anganwadi |            |                   |
| 10th Jan             |            |                   | 11th - 14thJan            |            |                   | 11th - 14thJan       |            |                   |
| (Jan 10th)           |            |                   | 11th - 14thJan            |            |                   | 11th - 14thJan       |            |                   |
| People called        | Department | Total no of calls | People called             | Department | Total no of calls | People called        | Department | Total no of calls |
| Teachers/DCs         | Education  | 58                | Teachers/DC               | Education  | 42                | Teachers/DC          | Education  | 55                |
| AWW/DCs              | ICDS       | 67                | AWW/DC                    | ICDS       | 31                | AWW/DC               | ICDS       | 60                |
|                      |            |                   |                           |            |                   |                      |            |                   |
|                      |            |                   |                           |            |                   |                      |            |                   |
|                      |            |                   |                           |            |                   |                      |            |                   |
|                      |            |                   |                           |            |                   |                      |            |                   |
|                      |            |                   |                           |            |                   |                      |            |                   |

| After Deworming        |            |                   |                      |            |                   |                      |            |                   |
|------------------------|------------|-------------------|----------------------|------------|-------------------|----------------------|------------|-------------------|
| Coverage reporting     |            |                   |                      |            |                   |                      |            |                   |
| School/Anganwadi Level |            |                   | Cluster level        |            |                   | District Level       |            |                   |
| 15-19 Feb              |            |                   | Operational timeline |            |                   | Operational timeline |            |                   |
| 15-20 Feb              |            |                   | 20th-26th Feb        |            |                   | 26thfeb- 5th March   |            |                   |
| People called          | Department | Total no of calls | Officials called     | Department | Total no of calls | Officials called     | Department | Total no of calls |
| Aww                    | ICDS       | 250               | SPHO                 | MO         | 300               | SPHO                 | HEALTH     | 215               |
| Teacher/HM-govt        | Education  | 190               |                      |            |                   |                      |            |                   |
| Teacher/HM-private     | Education  | 110               |                      |            |                   |                      |            |                   |
|                        |            |                   |                      |            |                   |                      |            |                   |
|                        |            |                   |                      |            |                   |                      |            |                   |
|                        |            |                   |                      |            |                   |                      |            |                   |
|                        |            |                   |                      |            |                   |                      |            |                   |