

**DETAILED ANALYSIS OF INDEPENDENT MONITORING INDICATORS FOR THE STATE OF
MADHYA PRADESH**

Table 1: Sample Sizes During Independent Monitoring.	No. of Schools Visited	No. of Headmasters/Teachers Interviewed	No. of children Interviewed
Day of Visit			
Deworming Day	125	125	125 (1 child per school)
Mop-Up Day	125	125	125 (1 child per school)
Coverage Validation	750	750	2,250 (3 children per school)
Total	1,000	1,000	2,500

Table 2: Training Related Indicators (Deworming Day and Mop-Up Day Monitoring)	Deworming Day (125 Schools)	Mop-Up Day (125 Schools)	Aggregate (DD & MUD, N=250 Schools)
Indicators	Percentage	Percentage	Percentage
Responses from headmasters/headmasters interviewed:			
School representative attended training for deworming Program	44.8	47.2	46.0
For schools that didn't attend training, reasons were:			
Problem with the location of training	10.9	11.5	11.2
Problem with the timing of training	9.4	4.9	7.2
Weren't aware of the date of training	51.6	41.0	46.4
Problem due to monitory constraints	4.7	3.3	4.0
Other reasons*	25.0	39.3	32.0
*Among the other reason (Don't know/no information about training)	87.5	100	95.0
Responses from teachers interviewed:			
Training status of teachers who were conducting deworming:			
Teachers who were trained at Block level training	13.6	21.6	17.6
Teachers trained by Headmaster or other teachers	20.8	16.8	18.8
Teachers who did not receive training	64.0	60.8	62.4
Based on monitor's observation			
Deworming activities were taken place in the class	69.6	49.6	59.6
Type of health education about Deworming had given			
Harmful effects of worms	40.2	38.1	39.3
How worms get transmitted	41.4	42.9	42.0
Benefits of deworming	50.6	41.3	46.7
Methods of STH prevention	40.2	36.5	38.7
No Health education given	26.4	12.7	20.7
Percentage of teachers who identified sick children before administering the tablet	70.1	76.2	72.7

Schools where the drug was being given by teachers/headmasters	88.5	74.6	82.7
Teachers who told the children to chew the tablets before swallowing it	83.9	79.4	82.0
Teachers who followed the correct recording protocol of ticking (single tick on deworming day and double tick on mop-up day)	78.2	39.7	62.0
Schools where children were given less than one tablet	12.6	4.8	9.3
Schools where children were given more than one tablet	3.4	1.6	2.7

Table 3: Awareness Related Indicators (From Deworming Day and Mop-Up Day Monitoring)	Deworming Day (N=125 Schools)	Mop-Up Day (N=125 Schools)	Aggregate (DD & MUD, (N=250 Schools)
Indicators	Percentage	Percentage	Percentage
Poster visibility			
Schools in which the poster was clearly visible to all	48.0	43.2	45.6
Schools in which the poster was partially visible/ hidden in a room	3.2	8.8	6.0
Schools in which the poster was not visible	10.4	16.0	13.2
Schools which did not receive the poster	38.4	31.2	34.8
Received SMS about deworming program	35.2	40.8	38.0
Schools where handouts about deworming program was available	58.4	59.2	58.8
When teachers were asked. handouts was helpful for:			
Drug dosage and administration	11.2	14.4	12.8
Adverse event	12.0	14.4	13.2
Health information on STH and transmission	14.4	16.8	15.6
Prevention of worm infection	36.0	43.2	39.6
Schools where safe drinking water was available	88.5	85.7	87.3
Teachers aware that if child is unwell could not give her/him the deworming tablet	64.8	76.0	70.4
Teachers aware that one deworming tablet were to be given	87.2	93.6	90.4
Responses from the children interviewed:			
Children who knew what the medicine was for deworming	64.6	66.1	65.4
Children who knew about deworming, even though they did not know what the tablet was for	14.7	18.9	16.9
Children who had heard of deworming before Deworming Day/before Mop-up day	25.4	49.4	38.2
Children who had heard of deworming on Deworming Day/Mop-up Day	62.0	21.0	40.1
The following are the mediums through which children became aware of deworming-			
Teacher/School	71.8	81.5	77.0
Radio	7.0	6.2	6.6
TV	4.2	6.2	5.3

Newspaper	4.2	4.9	4.6
Posters	11.3	11.1	11.2
Street Theatre	1.4	4.9	3.3
Parents/Siblings	11.3	4.9	7.9
Friends/Relatives	1.4	1.2	1.3

Table 4: Reporting Indicators (From Deworming Day and Mop-Up Day Monitoring)	Deworming Day (N=125 Schools)	Mop-Up Day (N=125 Schools)	Aggregate (DD & MUD) (N=125 Schools)
Indicators	Percentage	Percentage	Percentage
Schools where school reporting form was available	55.2	58.4	56.8
Respondents who were aware of the last date of submission of school reporting form	20.8	24.0	22.4
Respondents who were aware of whom to submit the school reporting Form to	17.6	15.2	16.4
Respondents who were aware of one copy of school reporting form to be submitted	44.0	50.4	47.2
Respondents who were aware that a copy of school reporting form have to retain in the school	46.4	76.8	61.6

Table 5: Drug Availability and Storage Indicators	Deworming Day (N=125 Schools)	Mop-Up Day (N=125 Schools)	Aggregate (DD & MUD, N=250 Schools)
Indicators	Percentage	Percentage	Percentage
Respondents who got information about drug delivery at block level headmaster's training	41.6	38.4	40.0
Schools received deworming tablets	75.2	90.4	82.8
According to the drug packets, the expiration date was			
Before deworming day on deworming day schools/before mop-up day on deworming day schools	5.3	3.5	4.3
After deworming day on deworming day schools/before mop-up day on deworming day schools	94.7	90.4	92.3
Schools where the monitor observed spoilt tablets was			
Thrown away	25.3	22.2	24.0
Given to Children	3.4	-	2.0
Left on the floor	1.1	-	0.7
Kept in some other place	4.6	4.8	4.7
Schools that received deworming drug at cluster level training	31.9	26.3	28.8
Schools where children received deworming tablet on deworming day/ mop-up day	69.6	88.0	78.8
Schools where storage was away from the reach of children	88.3	92.1	90.4
The followings were available on the schools			
ORS	91.9	88.9	90.4

DOMPERIDONE	54.8	47.6	51.2
PARACETAMOL	79.0	76.2	77.6
CHLORPHENIRAMINE MALEATE/CETIRIZINE	58.1	38.1	48.0
Responses from children interviewed:			
Children who said they received a deworming tablet	70.4	84.0	77.2
Children who said they received medicine from the teacher/headmaster	79.2	82.6	81.0
Children chewed tablet before swallowing	76.0	78.0	77.1

Table 6: Adverse Events Related Indicators (from Deworming Day and Mop-Up Day Monitoring)	Deworming Day (N=125 Schools)	Mop-Up Day (N=125 Schools)	Aggregate (DD & MUD, N= 250 Schools)
Indicators	Percentage	Percentage	Percentage
Teachers aware that unwell children could not get the deworming tablet	64.8	76.0	70.4
Teachers who thought it was acceptable for sick children to be dewormed	8.8	5.6	7.2
Teachers who did not identify sick children before administering the tablet	29.9	19.0	25.3
Schools where the monitor observed types of adverse event			
Stomach ache	2.3	1.6	2.0
Nausea	5.7	1.6	4.0
Vomiting	8.0	3.2	6.0
Diarrhea	-	-	0.0
Teachers who did not think there could be adverse effects due to deworming	52.8	52.0	52.4
Children who felt healthy before taking the tablet	68.8	63.3	65.9
Teachers who believed the following to be the adverse effects of deworming			
Mild abdominal pain	49.2	60.0	54.6
Nausea/Vomiting	67.8	75.0	71.4
Diarrhea	25.4	36.7	31.1
Fatigue	16.9	28.3	22.7
When asked about their response in case a student suffers from adverse effects, the teachers answered:			
Make the child lie down in shade	36.8	42.4	39.6
Take the child to the hospital immediately	55.2	75.2	65.2
When asked about their response in case a student continues to suffer from adverse effects, the teachers answered :			
Administer ORS To the child	35.1	38.1	36.7
Call PHC or emergency number	38.1	39.8	39.0
Take the child to the hospital immediately	60.8	65.5	63.3

Table 7: Coverage Validation Indicators (N = 750 Schools)	
Indicators	Percentage
Responses from Headmaster Interviews	
Attended Training for Deworming Program	37.7
For schools that didn't attend training, reasons were:	
Problem with the location of training	2.4
Problem with the timing of training	4.1
Weren't aware of the date of training	31.6
Problem due to monitory constraints	2.7
Other reasons*	56.2
*No information about training)	95.7
* No deworming event conducted	2.4
Percentage of schools received the followings	
Poster	64.7
Handouts	55.3
Others	1.6
Received SMS about deworming program	41.1
Schools had the sufficient drugs for deworming	79.2
Schools had extra storage of drugs after deworming	52.0
Schools where school reporting form was available after deworming and mop-up day	37.9
For schools that didn't have school reporting form, reasons were:	
Did not receive	32.0
Submitted to block resource persons (BRP)	28.1
Unable to locate	10.7
Others	25.5
Schools had complete school reporting form	38.7
Schools did deworming on deworming or mop-up day	88.7
Schools reported mild adverse event after taking the medicine	5.5
Schools reported serious adverse event after taking the medicine	0.1
The followings adverse event was happened after taking the medicine	
Mild abdominal pain	35.7
Nausea/Vomiting	66.7
Diarrhea	2.4
Fatigue	11.9
When asked about their response in case a student suffers from adverse effects, the headmaster answered:	
Make the child lie down in shade	73.8
Take the child to the hospital immediately	7.1
Schools said they had received an adverse event reporting form	45.3
If schools received adverse event reporting form, was the adverse event reporting form was available at the school	68.1
If the schools had an adverse event form available, was the adverse event reporting form filled out	25.8

Table 8: Coverage Validation Indicators (N=750 Schools, except where noted)	
Indicators	
State level verification factor (Coverage Reported in Reporting Form / Records in Attendance Register)	0.89250
School following the recording protocol	84.4%
State inflation rate (which measures the extent to which the recording in school reporting forms exceeds records at schools)	12.0 %
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)	5.6%
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)	18.5 %
School level inflation rate for schools that followed the 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).	11.8 %
Children received deworming tablet (Children's response that includes children interviewed on Deworming Day and Mop-up Day)	81.8
Enrolment- Attendance Analysis	
Children present on Deworming day(based on Deworming Day Monitoring data, N= 125 Schools)	55.8%
Children present on Mop-up day (based on Mop-Up Day Monitoring data 125 Schools)	52.8%
Children present on Deworming day(based on Coverage Validation data)	66.3%
Average attendance of children on Deworming day and Mop-up day ((based on Deworming Day or Mop-Up Day & Coverage Validation data, N = 1000 schools)	63.8%

Indicators for Table 9	
I_1	Attended Training for deworming program
I_2	Received SMS about deworming program
I_3	Received poster about deworming program
I_4	Received handouts about deworming program
I_5	Had the sufficient drugs for deworming
I_6	Had school reporting form available
I_7	Deworming on Deworming or Mop-Up Day according to headmaster

Table 9 : District Wise Variation In Key Indicators (DD, MUD & CV)								
Districts	Indicators							N (schools)
	I_1	I_2	I_3	I_4	I_5	I_6	I_7	
ASHOK NAGAR	93.8	31.3	68.8	37.5	87.5	68.8	87.5	16
BHIND	45.8	25.0	70.8	66.7	37.5	37.5	66.7	24
CHHATARPUR	47.8	43.5	73.9	43.5	73.9	39.1	87.0	23
DATIA	68.8	18.8	56.3	50.0	93.8	31.3	100.0	16
GUNA	50.0	43.8	75.0	43.8	75.0	81.3	87.5	16
GWALIOR	12.5	68.8	25.0	12.5	37.5	18.8	56.3	16
MORENA	8.3	16.7	50.0	54.2	33.3	37.5	79.2	24
PANA	41.7	45.8	54.2	41.7	79.2	20.8	83.3	24
SHEOPUR	37.5	0.0	75.0	87.5	75.0	50.0	75.0	8
SHIVPURI	70.8	70.8	79.2	58.3	62.5	66.7	87.5	24
TIKAMGARH	12.5	0.0	31.3	37.5	43.8	6.3	56.3	16
ANUPPUR	12.5	0.0	62.5	37.5	75.0	25.0	75.0	8
BALAGAHAT	4.2	58.3	50.0	29.2	87.5	0.0	91.7	24
DINDORI	0.0	43.8	87.5	43.8	31.3	31.3	68.8	16
JABALPUR	12.5	29.2	50.0	66.7	79.2	54.2	91.7	24
KATNI	62.5	58.3	79.2	37.5	87.5	37.5	95.8	24
MANDLA	16.7	54.2	58.3	58.3	70.8	62.5	95.8	24
REWA	12.5	35.0	25.0	20.0	62.5	20.0	80.0	40
SATNA	34.4	37.5	59.4	56.3	81.3	56.3	81.3	32
SEONI	20.8	16.7	75.0	58.3	100.0	25.0	95.8	24
SHAHDOL	100.0	43.8	93.8	100.0	93.8	87.5	100.0	16
SIDHI	62.5	25.0	75.0	79.2	62.5	45.8	91.7	24
SINGRAULI	12.5	18.8	87.5	62.5	93.8	31.3	93.8	16

UMARIA	100.0	62.5	87.5	100.0	87.5	25.0	100.0	8
ALIRAJPUR	29.2	12.5	66.7	75.0	75.0	37.5	87.5	24
BARWANI	12.5	12.5	75.0	62.5	75.0	29.2	83.3	24
BURHANPUR	37.5	37.5	75.0	50.0	75.0	25.0	87.5	8
DEWAS	43.8	50.0	68.8	31.3	93.8	25.0	87.5	16
DHAR	20.0	40.0	75.0	55.0	80.0	47.5	92.5	40
INDORE	23.5	5.9	64.7	58.8	52.9	17.6	64.7	17
JHABUA	0.0	25.0	31.3	37.5	75.0	18.8	62.5	16
KHANDWA	12.5	37.5	75.0	50.0	62.5	0.0	75.0	8
KHARGONE	18.8	28.1	56.3	46.9	68.8	31.3	68.8	32
MANDSAUR	56.3	87.5	68.8	50.0	93.8	50.0	100.0	16
NEEMUCH	75.0	50.0	62.5	87.5	62.5	37.5	87.5	8
RATLAM	45.8	45.8	66.7	50.0	70.8	66.7	79.2	24
UJJAIN	66.7	70.8	83.3	54.2	95.8	62.5	100.0	24
BETUL	100.0	54.2	79.2	91.7	91.7	58.3	100.0	24
BHOPAL	62.5	37.5	50.0	50.0	62.5	12.5	87.5	8
CHHINDWARA	43.8	65.6	40.6	46.9	78.1	25.0	84.4	32
DAMOH	31.3	31.3	37.5	37.5	62.5	43.8	75.0	16
HARDA	62.5	37.5	100.0	100.0	75.0	100.0	100.0	8
HOSHANGABAD	31.3	37.5	56.3	68.8	100.0	37.5	100.0	16
NARSIMHAPUR	81.3	62.5	93.8	93.8	87.5	43.8	93.8	16
RAISEN	62.5	58.3	75.0	70.8	91.7	50.0	100.0	24
RAJGARH	18.8	25.0	68.8	62.5	81.3	50.0	75.0	16
SAGAR	33.3	58.3	83.3	70.8	87.5	87.5	100.0	24
SEHORE	66.7	16.7	95.8	83.3	95.8	70.8	100.0	24
SHAJAPUR	50.0	50.0	66.7	62.5	70.8	50.0	79.2	24
VIDISHA	58.3	75.0	41.7	62.5	62.5	54.2	95.8	24

District Name	Verification factor
ASHOK NAGAR	1
BHIND	0.524
CHHATARPUR	1.029
DATIA	0.823
GUNA	1
GWALIOR	0.840
MORENA	0.376
PANA	4.448
SHEOPUR	1.569
SHIVPURI	0.970
TIKAMGARH	0.639
ANUPPUR	1
BALAGAHAT	1.002

DINDORI	0.957
JABALPUR	0.732
KATNI	0.813
MANDLA	1.155
REWA	0.517
SATNA	0.825
SEONI	1.124
SHAHDOL	0.999
SIDHI	1.129
SINGRAULI	-
UMARIA	1
ALIRAJPUR	1.048
BARWANI	0.573
BURHANPUR	1.004
DEWAS	0.780
DHAR	0.666
INDORE	-
JHABUA	0.408
KHANDWA	0.882
KHARGONE	0.917
MANDSAUR	0.253
NEEMUCH	0.872
RATLAM	0.059
UJJAIN	0.786
BETUL	1.003
BHOPAL	0.780
CHHINDWARA	0.759
DAMOH	0.488
HARDA	1.039
HOSHANGABAD	1.053
NARSIMHAPUR	1.018
RAISEN	1.016
RAJGARH	1.328
SAGAR	0.778
SEHORE	1.170
SHAJAPUR	0.946
VIDISHA	0.623
- <i>Indicates that indicator could not be calculated due to missing data sets.</i>	

Table 11: Indicators by Trained and untrained schools	Deworming Day (N = 125 Schools)		Mop-Up Day (N= 125 Schools)		Aggregate (DD & MUD) (N=250 Schools)	
	Trained Schools	Untrained Schools	Trained Schools	Untrained Schools	Trained Schools	Untrained Schools
Indicators						
Teachers aware that if child is unwell could not give her/him the deworming tablet	76.8	56.3	84.7	68.9	80.8	62.6
Percentage of teachers who thought it was acceptable for sick children to be dewormed	5.4	10.9	3.4	8.2	4.4	9.6
Teachers who told the children to chew the tablets before swallowing it	88.6	79.5	80.6	76.7	85.3	78.3
Teachers who followed the correct recording protocol of ticking (single tick on deworming day and double tick on mop-up day)	88.6	66.7	48.4	30.0	71.7	51.3
Schools where children were given less than one tablet	13.6	12.8	6.5	3.3	10.6	8.8
Schools where children were given more than one tablet	4.5	2.6	0.0	3.3	2.6	2.9
Teachers aware that one deworming tablet were to be given	89.3	85.9	96.6	91.8	92.9	88.9
Percentage of teachers who did not think there could be adverse effects due to deworming	50.0	54.7	50.8	52.5	50.4	53.6
Teachers who believed the following to be the adverse effects of deworming						
Mild abdominal pain	53.6	48.3	69.0	51.7	61.3	50.0
Nausea/Vomiting	64.3	72.4	75.9	72.4	70.1	72.4
Diarrhea	32.1	20.7	37.9	34.5	35.1	27.6
Fatigue	28.6	6.9	27.6	31.0	28.1	19.1
When asked about their response in case a student suffers from adverse effects, the teachers answered:						
Make the child lie down in shade	33.9	37.5	47.5	36.1	40.7	36.8
Take the child to the hospital immediately	55.4	56.3	78.0	75.4	66.7	65.8
When asked about their response in case a student continues to suffer from adverse effects, the teachers answered :						
Administer ORS To the child	43.2	29.2	45.5	31.5	44.4	30.4
Call PHC or emergency number	40.9	37.5	47.3	33.3	44.3	35.3
Take the child to the hospital immediately	54.5	66.7	70.9	59.3	63.4	62.7
Respondents who were aware of the last date of submission of School reporting form	26.8	17.2	27.1	21.3	27.0	19.2

Respondents who were aware of whom to submit the School reporting Form to	23.2	12.5	16.9	14.8	20.1	13.6
Respondents who were aware of one copy of School reporting form to be submitted	62.5	29.7	66.1	37.7	64.3	33.7
Respondents who were aware that a copy of School reporting form have to retain in the school	51.8	39.1	83.1	70.5	67.4	54.8

Table 12: Aggregate level Analysis (N = 1000 Schools)		
	Indicators	Percentage
1	Attended Training for Deworming Program	39.8
2	For schools that didn't attend training, reasons were:	
	Problem with the location of training	4.6
	Problem with the timing of training	4.8
	Weren't aware of the date of training	35.4
	Problem due to monetary constraints	3.0
	Other reasons*	50.1
	*Don't know/no information about training	95.6
	* No deworming event conducted	2.0
3	Received SMS about deworming program	40.3
4	Received Poster about deworming program	64.7
5	Received Handouts about deworming program	56.2
6	Schools had sufficient drugs for deworming	75.0
7	Schools had extra storage of drugs after deworming	50.5
8	Schools where Children got deworming tablet on deworming day/ mop-up day	86.2
9	Schools where school reporting form was available	42.6
10	Children received deworming tablet (Children's response)	81.8