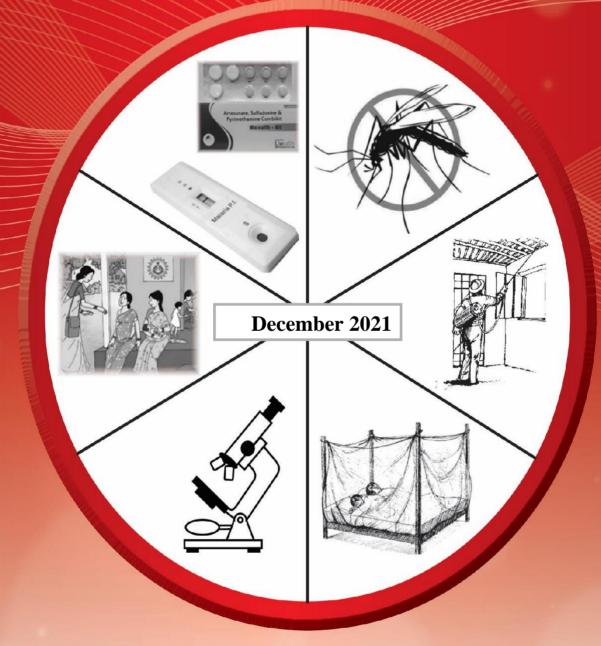




Monthly Malaria Situation of Category - 3 States/UTs



Monitoring and Evaluation Division
National Vector Borne Disease Control Programme
Dte. GHS, MOHFW, Govt. of India, New Delhi

INDEX

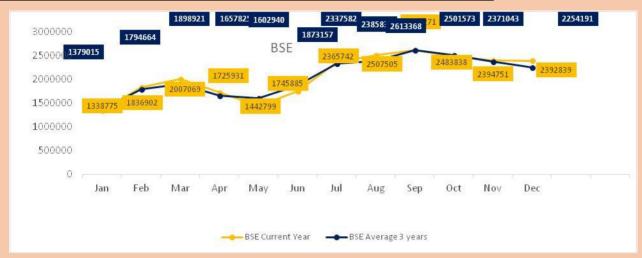
Situational Analysis, Trends and Action Points

Category 3 States	Page No
1) Summery Sheet- Category3 States/UT	2-4
2) Andaman and Nicobar Island	5-6
3) Dadar & Nagar Haveli	7-8
4) Jharkhand	9-10
5) Madhya Pradesh	11-12
6) Meghalaya	13-14
7) Mizoram	15-16
8) Odisha	17-18
9) Tripura	19-20
10)Arunachal Pradesh	21-22
11) Chhattisgarh	23-24
12) Epidemiological Indicators – Malaria	25

INTRODUCTION & SUMMARY SHEET

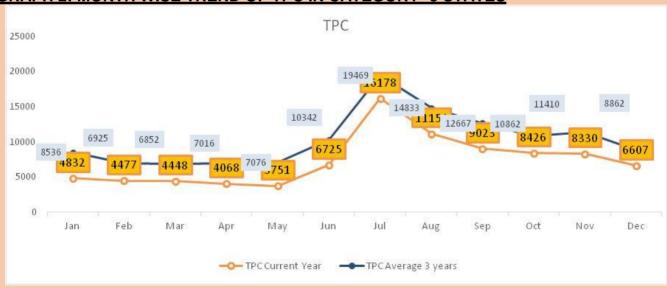
The surveillance information of Malaria of December 2021 in Category-3 states is enclosed in this Monthly Malaria Situation Information Report. The various indicators analyzed in this report are Blood Slide Examination (BSE¹), Total Positive Cases (TPC²), Total Positive Rate (TPR³) and Plasmodium Falciparum (PF⁴).

GRAPH 1: MONTH WISE TREND OF BSE IN CATEGORY-3 STATES



There is an increase of BSE by 1.2% upto December 2021 as compared to last three years average cumulative. There is also an increase of BSE by 13.9% upto December 2021vis-à-vis upto December 2020.

GRAPH 2: MONTH WISE TREND OF TPC IN CATEGORY- 3 STATES



There is 50.2% decline in TPC upto December2021 as compared to last three years average cumulative. There is 21.6% decrease in TPC upto December 2021 vis-à-vis upto December 2020.

¹BSE: No of blood slides examined

² TPC: No of total positive malaria cases

³ TPR: (TPC/100)*BSE

⁴ PF: No of Plasmodium Falciparum malaria cases

GRAPH 3: MONTH WISE TREND OF TPR IN CATEGORY- 3 STATES



The TPR was 0.35 Upto December 2021 as compared to 0.71 for last three years average and 0.51 upto December 2020.

GRAPH 4: MONTH WISE TREND OF PF IN CATEGORY-3 STATES



There is decline of PF by 43.6% upto December 2021 as compared to last three years average. There is also decline of PF by 23.4% upto December 2021 vis-à-vis upto December 2020.

List of Districts showing a decrease in Surveillance in the Category 3 States:

S. No.	States/Uts	Districts Showing a decrease in Surveillance
1	A & N Islands	North and Middle Andaman, South Andaman
2	Arunachal Pradesh	Anjaw, Tawang, West kameng, East Kameng, Kra Daadi, Kurung Kumey, Papum Pare, Upper Subansiri, Siang-Pangin, Upper Siang, Lower Siang- Basar, Lower Dibang Valley, Namsai, Lohit, Longding, Tirap
3	Chhattisgarh	Kanker, Balod, Dhamtari, Mahasamund, Raipur, Korba, Janjgir(Champa), Mungeli
4	D&N Haveli and DD	Diu
5	Jharkhand	Koderma, Dumka, Saraikela
6	Madhya Pradesh	Damoh, Ashok Nagar, Shivpuri, Morena, Gwalior, Rajgarh, Shajapur, Neemuch, Ujjain, Burhanpur, Khargone, Alirajpur
7	Meghalaya	North Garo Hills, Ri-Bhoi
8	Mizoram	Lawngtlai, Lunglei
9	Odisha	Balasore

Action points for all Category 3States/UTs:

- States/UTs need to focus on improving Malaria surveillance along with COVID19 activities, focusing on migratory workers.
- State /UTs need to share the detailed case reports regarding any COVID19-Malaria co- infections reported.
- States/UTs need to perform data analysis at sub district level to identify hotspots and implementing focal strategies.
- State /UT needs preparedness and response for any Malaria outbreak.
- States/UTs need to intensify monitoring & supervision activities
- States/UTs need to ensure >80% usage of LLIN by community.
- States need to intensify vector control measures by identifying potential vector breeding sites, environmental management, biological control and focus based adult vector intervention.

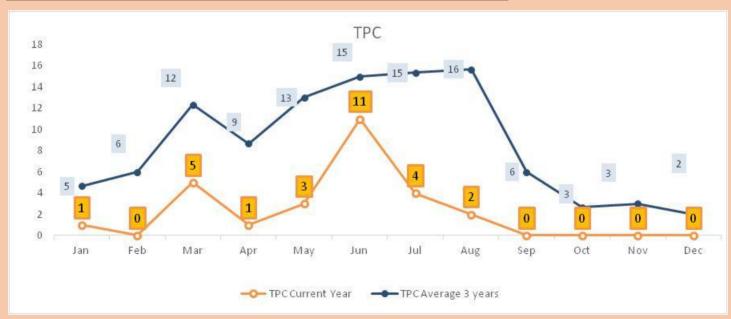
2) ANDAMAN & NICOBAR ISLANDS

GRAPH 1:MONTH WISE TREND OF BSE IN ANDAMAN &NICOBAR



There is decline of BSE by 25.7% upto December 2021 as compared to last three years average cumulative. There is also decline of BSE by 2.1% upto December 2021 vis-à- vis upto December 2020.

GRAPH 2:MONTH WISE TREND OF TPC IN ANDAMAN &NICOBAR



There is 85.1% decline in TPC upto December 2021 as compared to last three years average cumulative. There is 68.2% decrease in TPC upto December 2021 vis-à-vis upto December 2020.

GRAPH 3: MONTH WISE TREND OF TPR IN ANDAMAN &NICOBAR



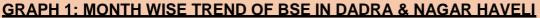
The TPR was 0.10 Upto December 2021 as compared to 0.50 for last three years average and 0.33 upto December 2020.

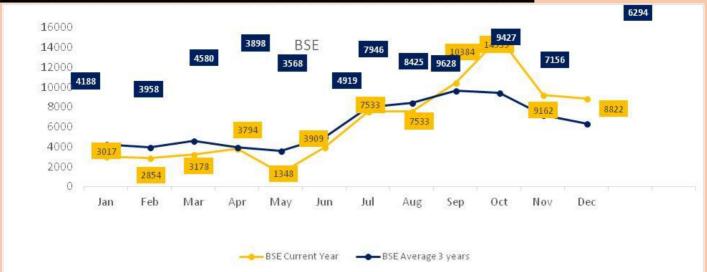
GRAPH 4:MONTH WISE TREND OF PF IN ANDAMAN &NICOBAR



There is decline of PF by 68.9% upto December 2021 as compared to last three years average. There is also decrease in PF cases by 60.7% upto December 2021 vis-à-vis upto December 2020.

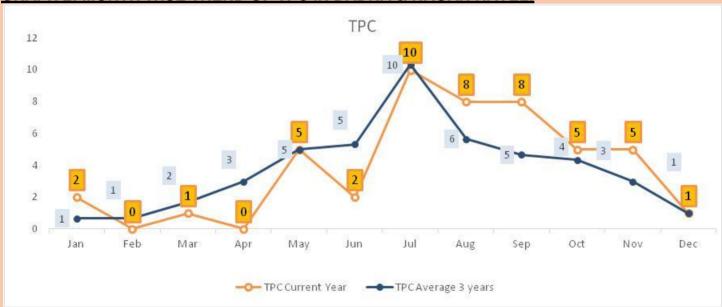
3) DADRA & NAGAR HAVELI





There is decline of BSE by 5.0% upto December 2021 as compared to last three years average cumulative. There is an increase of BSE by 31.6% upto December 2021 vis-à- vis upto December 2020.

GRAPH 2: MONTH WISE TREND OF TPC IN DADRA & NAGAR HAVELI



There is 46.2% decline in TPC upto December 2021 as compared to last three years average cumulative. There is 38.2% increase in TPC upto December 2021 vis-à-vis upto December 2020.

GRAPH 3: MONTH WISE TREND OF TPR IN DADRA & NAGAR HAVELI



The TPR was 0.06 Upto December 2021 as compared to 0.12 for last three years average and 0.06 upto December 2020.

GRAPH 4: MONTH WISE TREND OF PF IN DADRA & NAGAR HAVELI



There is 66.7% increase of PF by upto December 2021 as compared to last three years average. There is also increase in PF cases by 150.0% upto December 2021 vis-à-vis upto December 2020.

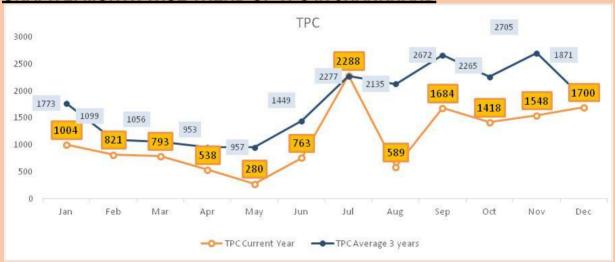
4) JHARKHAND





There is decline of BSE by 6.9% upto December 2021 as compared to last three years average cumulative. There is an increase of BSE by 46.7% upto December 2021 vis-à- vis upto December 2020.

GRAPH 2: MONTH WISE TREND OF TPC IN JHARKHAND

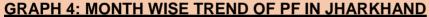


There is 61.3% decline in TPC upto December 2021 as compared to last three years average cumulative. There is 1.7% an increase in TPC upto December 2021 vis-à-vis upto December 2020.

GRAPH 3: MONTH WISE TREND OF TPR IN JHARKHAND



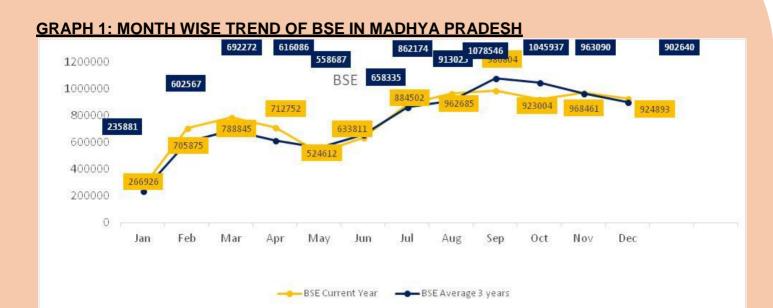
The TPR was 0.48 Upto December 2021 as compared to 1.11 for last three years average and 0.71 upto December 2020.





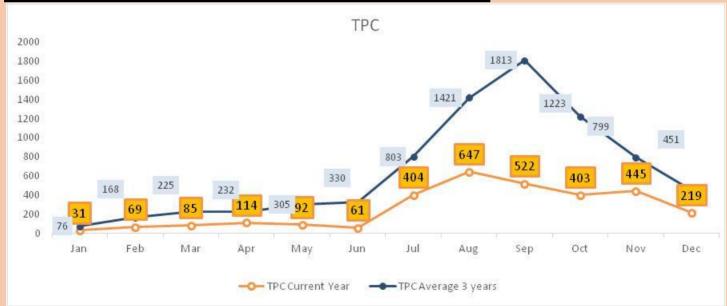
There is decline of PF by 43.2% upto December 2021 as compared to last three years average. There is decrease in PF cases by 7.2% upto December 2021 vis-à-vis upto December 2020.

5) MADHYA PRADESH



There is an increase of BSE by 1.3% upto December 2021 as compared to last three years average cumulative. There is also an increase of BSE by 7.9% upto December 2021 vis-à- vis upto December 2020.

GRAPH 2: MONTH WISE TREND OF TPC IN MADHYA PRADESH



There is 77.8% decline in TPC upto December 2021 as compared to last three years average cumulative. There is 53.8% decrease in TPC upto December 2021 vis-à-vis upto December 2020.

GRAPH 3: MONTH WISE TREND OF TPR IN MADHYA PRADESH



The TPR was 0.03 Upto December 2021 as compared to 0.15 for last three years average and 0.08 upto December 2020.

GRAPH 4: MONTH WISE TREND OF PF IN MADHYA PRADESH



There is decline of PF by 64.0% upto December 2021 as compared to last three years average. There is also decline of PF by 58.5% upto December 2021 vis-à-vis upto December 2020.

6) MEGHALAYA



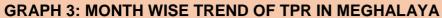


There is an increase of BSE by 8.0% upto December 2021 as compared to last three years average cumulative. There is also an increase of BSE by 18.4% upto December 2021 vis-à- vis upto December 2020.

GRAPH 2: MONTH WISE TREND OF TPC IN MEGHALAYA



There is 86.7% decline in TPC upto December 2021 as compared to last three years average cumulative. There is 74.3% decrease in TPC upto December 2021 vis-à-vis upto December 2020.





The TPR was 0.12 Upto December 2021 as compared to 1.05 for last three years average and 0.58 upto December 2020.

GRAPH 4: MONTH WISE TREND OF PF IN MEGHALAYA



There is decline of PF by 87.2% upto December 2021 as compared to last three years average. There is decline of PF by 73.7% upto December 2021 vis-à-vis upto December 2020.

7) MIZORAM





There is an increase of BSE by 16.9% upto December 2021 as compared to last three years average cumulative. There is also an increase of BSE by 2.0% upto December 2021 vis-à- vis upto December 2020.

GRAPH 2: MONTH WISE TREND OF TPC IN MIZORAM



There is 16.6% decline in TPC upto December 2021 as compared to last three years average cumulative. There is 30.3% decrease in TPC upto December 2021 vis-à-vis upto December 2020.





The TPR was 2.05 Upto December 2021 as compared to 2.85 for last three years average and 3.01 upto December 2020.

GRAPH 4: MONTH WISE TREND OF PF IN MIZORAM



There is decline of PF by 23.5% upto December 2021 as compared to last three years average. There is decline of PF by 30.7% upto December 2021 vis-à-vis upto December 2020.

8) ODISHA





There is an increase of BSE by 10.3% upto December 2021 as compared to last three years average cumulative. There is also an increase of BSE by 14.6% upto December 2021 vis-à- vis upto December 2020.

GRAPH 2: MONTH WISE TREND OF TPC IN ODISHA

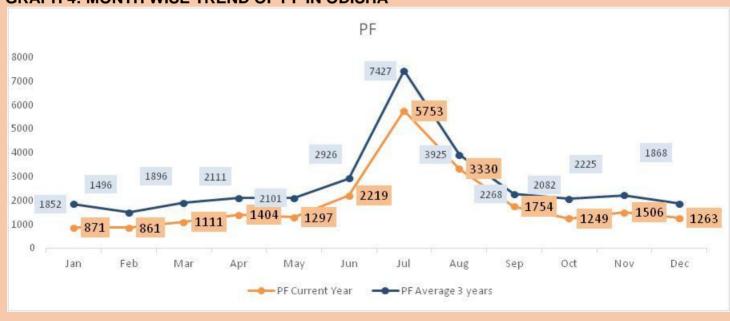


There is 48.1% decline in TPC upto December 2021 as compared to last three years average cumulative. There is 38.8% decrease in TPC upto December 2021 vis-à-vis upto December 2020.



GRAPH 3: MONTH WISE TREND OF TPR IN ODISHA

The TPR was 0.37 Upto December 2021 as compared to 0.79 for last three years average and 0.70 upto December 2020.



GRAPH 4: MONTH WISE TREND OF PF IN ODISHA

There is decline of PF by 47.0% upto December 2021 as compared to last three years average. There is decline of PF by 40.7% upto December 2021 vis-à-vis upto December 2020.

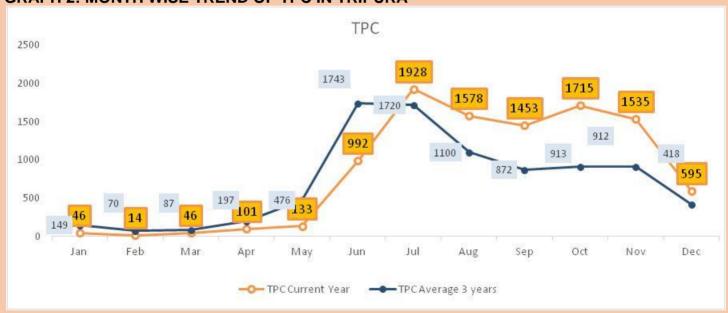
9) TRIPURA

GRAPH 1: MONTH WISE TREND OF BSE IN TRIPURA



There is an increase of BSE by 20.5% upto December 2021 as compared to last three years average cumulative. There is also an increase of BSE by 46.7% upto December 2021 vis-à- vis upto December 2020.

GRAPH 2: MONTH WISE TREND OF TPC IN TRIPURA



There is 5.2% decline in TPC upto December 2021 as compared to last three years average cumulative. There is 198.6% increase of TPC upto December 2021 vis-à-vis upto December 2020.



Jun

Jul

■ TPR Average 3 years

Aug

Sep

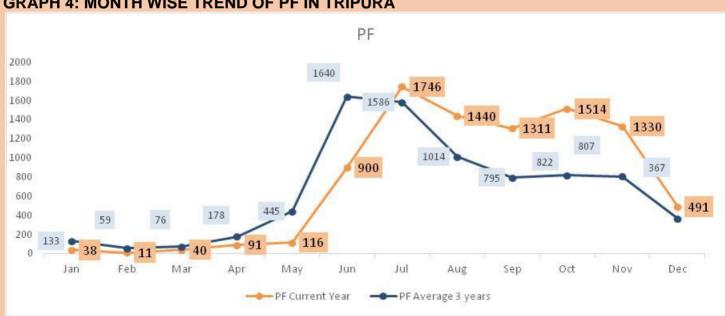
Oct

Nov

Dec

GRAPH 3: MONTH WISE TREND OF TPR IN TRIPURA

The TPR was 1.66 Upto December 2021 as compared to 1.85 for last three years average and 0.82 upto December 2020.



GRAPH 4: MONTH WISE TREND OF PF IN TRIPURA

Mar

Apr

May

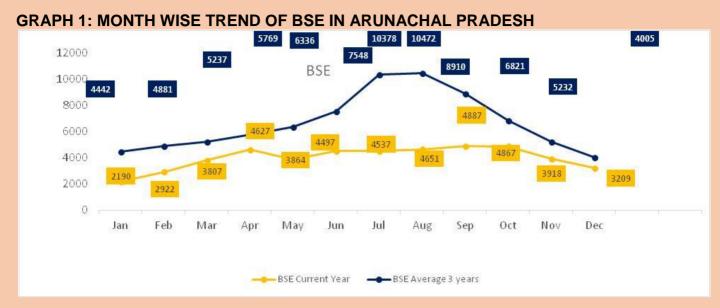
TPR Current Year

Jan

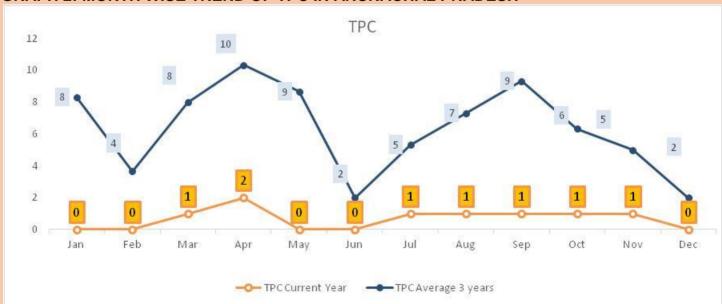
Feb

There is decline of PF by 0.9% upto December 2021 as compared to last three years average. There is an increase of PF by 191.2% upto December 2021 vis-à-vis upto December 2020...

10) ARUNACHAL PRADESH



There is decline of BSE by 57.4% upto December 2021 as compared to last three years average cumulative. There is also decline of BSE by 9.6% upto December 2021 vis-à- vis upto December 2020.



GRAPH 2: MONTH WISE TREND OF TPC IN ARUNACHAL PRADESH

There is 97.6% decline in TPC upto December 2021 as compared to last three years average cumulative. There is 74.2% decrease in TPC upto December 2021 vis-à-vis upto December 2020.



GRAPH 3: MONTH WISE TREND OF TPR IN ARUNACHAL PRADESH

The TPR was 0.02 Upto December 2021 as compared to 0.25 for last three years average and 0.06 upto December 2020.



GRAPH 4: MONTH WISE TREND OF PF IN ARUNACHAL PRADESH

There is decline of PF by 96.8% upto December 2021 as compared to last three years average. There is decline of PF by 71.4% upto December 2021 vis-à-vis upto December 2020.

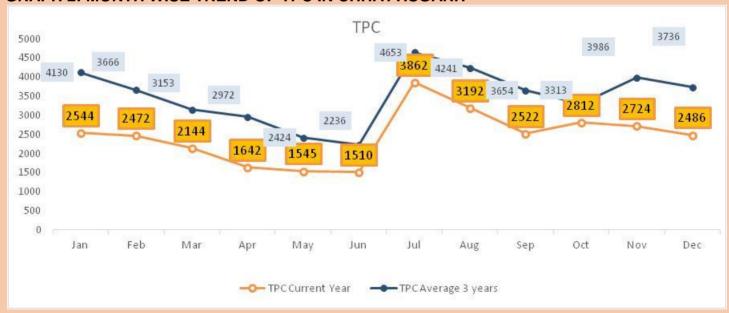
11) CHHATTISGARH





There is decline of BSE by 7.4% upto December 2021 as compared to last three years average cumulative. There is an increase of BSE by 7.4% upto December 2021 vis-à- vis upto December 2020.

GRAPH 2: MONTH WISE TREND OF TPC IN CHHATTISGARH



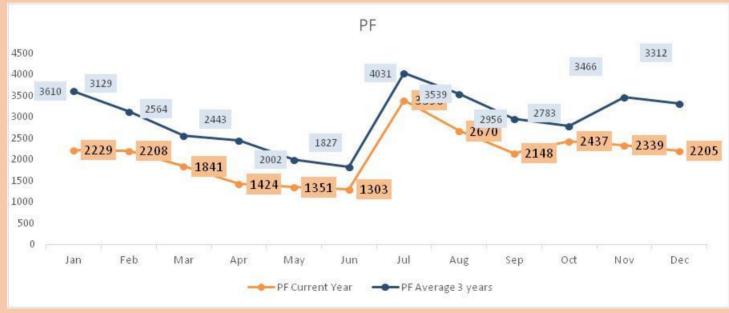
There is 49.3% decline in TPC upto December 2021 as compared to last three years average cumulative. There is 19.2% decrease in TPC upto December 2021 vis-à-vis upto December 2020.





The TPR was 0.66 upto December 2021 as compared to 1.21 for last three years average and 0.88 upto December 2020.

GRAPH 4: MONTH WISE TREND OF PF IN CHHATTISGARH



There is decline of PF by 46.3% upto December 2021 as compared to last three years average. There is decline of PF by 20.1% upto December 2021 vis-à-vis upto December 2020.

Epidemiological Indicators - Malaria

S. N.	Area	Indicator
1	Surveillance/ case finding	No. of Fever cases ,No. of Malaria cases, No, of Pf cases
2	Surveillance/ case finding	Monthly Blood Smear Examination Rate (ABER) (should be more than
		1%of population)
3	Surveillance/ case finding	Annual Blood Smear Examination Rate (ABER) (should be more than
		10%of population)
4	Disease burden & impact	Annual Parasite Incidence (API)
5	Disease burden & impact	Annual Falciparum Incidence (AFI)
6	Disease burden & impact	Slide Positivity rate (SPR):Is independent of surveillance activity,
		therefore a better indicator for impact assessment
7	Disease burden & impact	Slide falciparum Rate (SFR):It is independent of surveillance and
		indicates Pf preponderance
8	Disease burden & impact	Pf Percentage (Pf %):Indicates trends in proportion of cases due to Pf out
		of total cases
9	Input	Nos of RDTs & ACTs Planned versus Received & used
10	Input	% of spray Equipment in working condition
11	Input	% of Spray workers trained
12	Process	% of facilities (SC and PHC) / village level functionaries (ASHA, AWW)
		reporting stock-out of antimalarials lasting more than 15 days during the
		quarter
13	Process	% of MPHW/ASHA/other volunteers trained for use of RDT / ACT
14	Process	% of Diagnostic facilities functional with microscopy/RDT in the last
		reporting period
15	Output	Nets treated once/twice in a year
16	Output	% of Eligible Villages Covered by LLINs Should be 80% or more
17	Output	Insecticide use
18	Outcome	IRS Coverage – Population (%) Should be 80% or more
19	Outcome	IRS Coverage – Rooms %
20	Outcome	% of fever cases who were tested for malaria by microscopy/ RDT with a
		positive test result for RDT and were started on treatment no later than
		the next day with ACT
21	Outcome	% of households in which beneficiaries reported having slept under ITNs/
		LLINs previous night
22	Outcome	% of PHC sampled in which utilization of ITNs/ LLINs was more than 80%