

# State TOT on Dengue & Malaria Case Management

## **Introduction & Epidemiology**

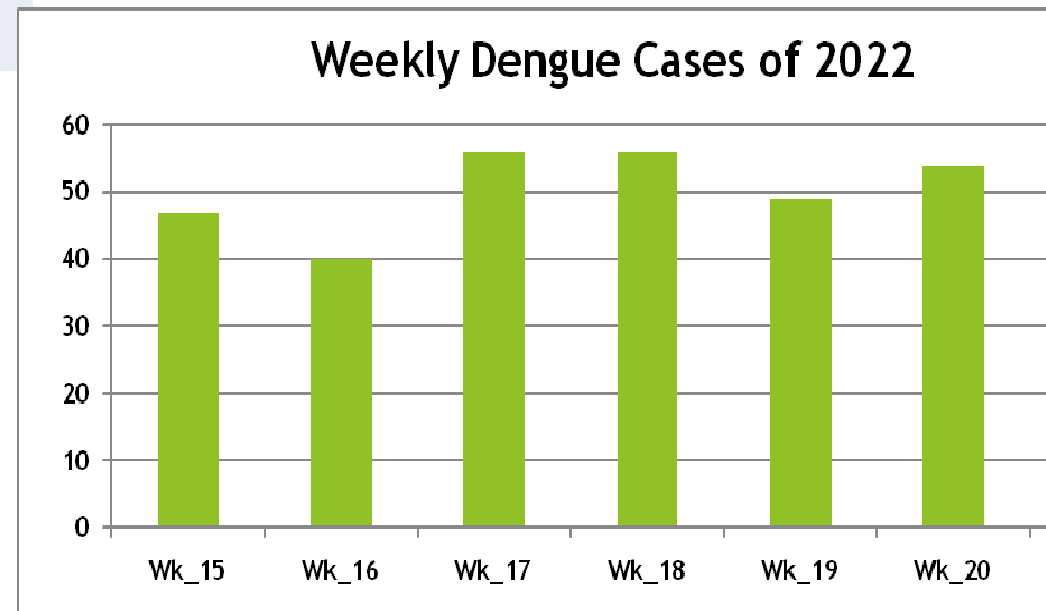
PH&CD Branch

Directorate of Health Services

May, 2022

# Dengue situation

Year	Number of cases	Number of Deaths
	<b>47,928</b>	<b>27</b>
	<b>5,166</b>	<b>10</b>
	<b>8,264</b>	<b>11</b>
<b>till week 21)</b>	<b>965</b>	<b>0</b>



# Dengue testing

No. of tests for dengue has increased.

Time period	No. of tests done
2021 (till Week 21)	39956
2022 (till Week 21)	58757*

*\* However, test positivity rate has increased this year.*

85 testing facilities are operational under State Health Dept.

- Also 15 testing centres in KMC and 1 in HMC.

Govt. labs enter the line list of test positives in DKPI Portal.

Private labs enter the same in CE Portal.

Dengue case master list prepared mainly from these two portals.

- 'Case' means a lab confirmed case.

# District-wise distribution of cases, 2022: till Week 21

Sl. No.	Name of the District	No. of cases in 2022
1	Jalpaiguri	192**
2	Alipurduar	13
3	Darjeeling*	11
4	Kalimpong	8
5	Coochbehar	12
6	Uttar Dinajpur	20
7	Dakhin Dinajpur	21
8	Malda	74
9	Bankura	5
10	Bishnupur HD	4
11	Birbhum	23
12	Rampurhat HD	5
13	Purba Burdwan	27
14	Paschim Burdwan	9

Sl. No.	Name of the District	No. of cases in 2022
15	Hooghly*	24
16	Howrah	66
17	Kolkata	99
18	Murshidabad*	29
19	PurbaMednipur	5
20	Nandigram HD	1
21	Paschim Mednipur	4
22	Jhargram	0
23	Nadia*	27
24	North 24 Parganas	128
25	Basirhat HD*	36
26	Purulia	1
27	South 24 Parganas	95
28	Diamond Harbour HD	26
<b>STATE TOTAL</b>		<b>965</b>

\* Cases not many this year; yet a known vulnerable district.

\*\*A focal outbreak going on in Jalpaiguri.

**Dengue Cases District wise at 21st week for West bengal from 2017 to 2022**

<b>Sl. No</b>	<b>Name of the District</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
1	Jalpaiguri	6	7	8	3	4	192
2	Alipurduar	3	2	5	10	3	13
3	Darjeeling	10	0	14	2	5	11
4	Kalimpong	0	0	0	1	0	8
5	Coochbehar	1	4	4	2	1	12
6	Uttar Dinajpur	3	6	14	3	2	20
7	Dakhin Dinajpur	2	0	2	4	5	21
8	Malda	70	16	18	16	12	74
9	Bankura	9	9	0	26	4	5
10	Bishnupur HD	0	0	0	4	0	4
11	Birbhum	1	13	1	3	0	23
12	Rampurhat HD	1	5	0	1	0	5
13	Purba Burdwan	3	63	5	9	0	27
14	Paschim Burdwan	2	3	7	15	1	9
15	Hooghly	7	9	25	52	34	24
16	Howrah	12	24	23	33	10	66
17	Kolkata	60	40	80	92	45	99
18	Murshidabad	48	32	26	32	3	29
19	Purba Mednipur	4	2	4	4	4	5
20	Nandigram HD	0	0	1	8	0	1
21	Paschim Mednipur	8	4	2	15	3	4
22	Jhargram	0	1	0	2	0	0
23	Nadia	27	82	19	42	4	27
24	North 24 Parganas	45	116	150	85	34	128
25	Basirhat HD	7	7	19	21	1	36
26	Purulia	0	0	1	2	2	1
27	South 24 Parganas	12	40	43	37	31	95
28	Diamond Harbour HD	6	6	12	22	6	26
<b>STATE TOTAL</b>		<b>347</b>	<b>491</b>	<b>483</b>	<b>546</b>	<b>214</b>	<b>965</b>

## Blocks & ULBs: $\geq 5$ cases

District	Block	# cases
Jalpaiguri	Mal	59
South 24 Pgs	Canning-I	15
Maldah	Kaliachak-I	11
Maldah	Englishbazar	10
North 24Pgs	Rajarhat	10
South 24 Pgs	Bhangore-I	10
Hooghly	Mogra	9
North 24Pgs	Barrackpore-II	9
South 24 Pgs	Basanti	9
Basirhat HD	Baduria	8
D Dinajpur	Harirampur	8
D Harbour HD	Mandirbazar	8
South 24 Pgs	Bishnupur-I	8
Darjeeling	Matigara	7
Maldah	Kaliachak-II	7
South 24 Pgs	Bhangore-II	7
South 24 Pgs	Canning-II	7
U Dinajpur	Raiganj	7
Jalpaiguri	Dhupguri	6
Maldah	Gazole	6
Maldah	Kaliachak-III	6
Murshidabad	Hariharpara	6
North 24Pgs	Habra-II	6

Sl. No.	District	ULB	# c
1	Kolkata	Kolkata Muni Corp	9
2	Howrah	Howrah Munic Corp	3
3	N 24 Pgs	Panihati Muni	2
4	Howrah	Bally Municipality	1
5	N 24 Pgs	Kamarhati Muni	1
6	N 24 Pgs	BMC	1
7	N 24 Pgs	Bhatpara Muni	
8	Maldah	English Bazar Municipality	
9	N 24 Pgs	Naihati Muni	
10	S 24Pgs	Rajpur Sonarpur M	

NB: This year, rural cases > urban cases so far.

### Distribution of Dengue cases as per feedback 2022

<b>Srl No.</b>	<b>District</b>	<b>Rural</b>	<b>Urban</b>
1	Alipurduar	12	0
2	Bankura	4	1
3	Basirhat HD	33	2
4	Birbhum	14	3
5	Bishnupur HD	0	0
6	Cooch Behar	10	0
7	D Dinajpur	18	3
8	D Harbour HD	25	0
9	Darjeeling	8	2
10	Hooghly	19	9
11	Howrah	8	51
12	Jalpaiguri	82	6
13	Jhargram	0	0
14	Kalimpong	0	0
15	Maldah	62	7
16	Murshidabad	38	0
17	Nadia	21	6
18	Nandigram HD	0	0
19	North 24Pgs	41	83
20	Paschim Bardhaman	0	0
21	Paschim Medinipore	4	0
22	Purba Bardhaman	23	2
23	Purba Medinipore	1	2
24	Purulia	0	0
25	Rampurhat HD	0	0
26	South 24 Pgs	77	7
27	U Dinajpur	19	2
28	Kol Corp	0	99
	<b>Total</b>	<b>519</b>	<b>285</b>

# Dengue serotypes

In 2021, predominant serotype: DEN-3.

	<b>DEN-1</b>	<b>DEN-2</b>	<b>DEN-3</b>	<b>DEN-4</b>	<b>Mixed</b>
<b>No.</b>	<b>22</b>	<b>100</b>	<b>437</b>	<b>46</b>	<b>8</b>
<b>%</b>	<b>2.4</b>	<b>11.0</b>	<b>48.3</b>	<b>5.1</b>	<b>0.9</b>

*(Courtesy: NICED and STM)*

In 2022, small no. of samples so far analysed. Almost all were DEN-2.

A very dynamic pattern is noticed over the years.

Secondary dengue and EDS are not uncommon.



## List of Labs with tagged districts/HDs for dengue Sero-Typing

Name of the Lab	Proposed tagged District					
North Bengal MCH	Alipurduar	Darjeeling	Kalimpong	Jalpaiguri	Coochbehar	
Tropical Medicine Kolkata	Purba Medinipur	Nandigram HD	Purba Bardhaman	Hooghly		
Midnapur MCH	Paschim Medinipur	Jhargram	Purulia	Bankura	Bishnupur HD	
IPGME&R	South 24 Parganas	Diamond Harbour HD	Howrah			
NICED	Kolkata	All Private Labs	Paschim Bardhaman	North 24 Parganas		
Murshidabad Medical College	Murshidabad	Dakshin Dinajpur	Malda	Birbhum	Rampurhat HD	
N.R.S. MCH	Nadia	Basirhat HD				

# Changing pattern in Malaria

Spread in non-endemic areas is predicted due to climate change.

Pf% is increasing in the country and our state as well.

Vivax infection presenting as severe malaria.

Malaria in a new area is a concern for case management too!

# Malaria situation in West Bengal

Deaths have significantly been reduced.

However, cases are increasing.

Incidence more in 2021 compared to 2020.

Test positivity rate was more in 2021 than that in 2019.

Noticeable increase of cases in Kolkata.

Other districts getting migrant cases and also some indigenous cases.

# Scrub Typhus

Another issue from which we should not take our eyes off.

Testing facility available in all districts.

Significantly high test positivity rate.