

IDSP- Jalpaiguri Annual Report -2011-

**Report Produced by:
IDSP Unit,
CMOH Office, Jalpaiguri**



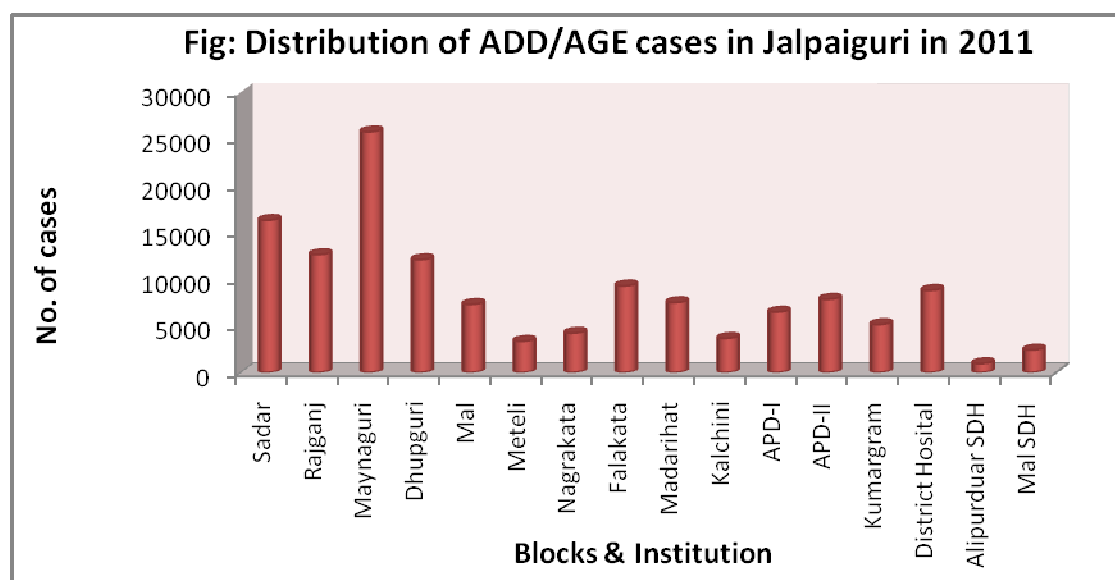
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1. Water Borne Diseases

A. Acute Diarrhoeal Disease including AGE in 2011

Sl. No.	Name of the Blocks/ Institutions	Acute Diarrhoeal Disease including AGE as reported in 'P' form		
		No. of cases	Case load (%)	Incidence
1.	Sadar	16302	12.19	51.01
2.	Rajganj	12629	9.44	39.09
3.	Maynaguri	25785	19.28	80.45
4.	Dhupguri	12089	9.04	25.39
5.	Mal	7300	5.46	24.18
6.	Meteli	3344	2.50	27.75
7.	Nagrakata	4221	3.16	32.01
8.	Falakata	9279	6.94	32.08
9.	Madarihat	7495	5.6	35.52
10.	Kalchini	3660	2.74	12.74
11.	APD-I	6471	4.84	28.84
12.	APD-II	7879	5.87	35.01
13.	Kumargram	5139	3.84	25.37
14.	District Hosital	8802	6.58	
15.	Alipurduar SDH	952	0.71	
16.	Mal SDH	2407	1.80	
TOTAL		133754	100.00	36.58



Analysis:

► Incidence:

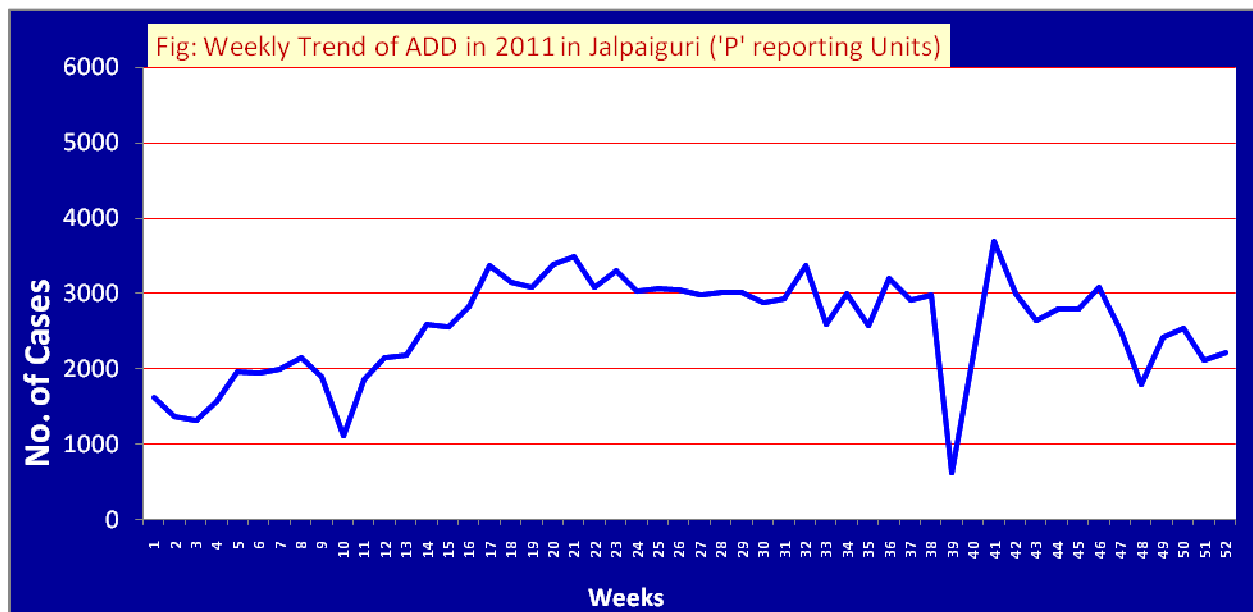
Incidence of Acute Diarrhoeal Diseases in Jalpaiguri is 36.58 during the period 1st week to 52nd week in 2011. Highest incidence of Acute Diarrhoeal diseases including AGE during 1st week to 52nd week in 2011 has been noticed in Maynaguri Block (80.45) followed by Sadar (51.01) and Rajganj (39.09), Madarihat (35.52), Alipurduar-II (35.01), Falakata (32.08), Nagrakata (32.01), Kumargram (25.37), Metali (27.75), Dhupguri (25.39), Mal (24.18) and Kalchini (12.74).

► Case load:

Highest cases load out of total diarrhoeal cases in the district was reported from Maynaguri (19.28%) followed by Sadar (12.19%), Rajganj (9.44) and Dhupguri (9.04%).

► Trend & Seasonality:

Weekly Trend of Acute Diarrhoeal diseases reveals an increasing trends since 12th week i.e. end of March to 38th week i.e. end of August. After 38th week a fluctuating trend has been noticed and it was influenced by the OPD data which has been incorporated after introduction of 'P' Tally sheet.



► Outbreak:

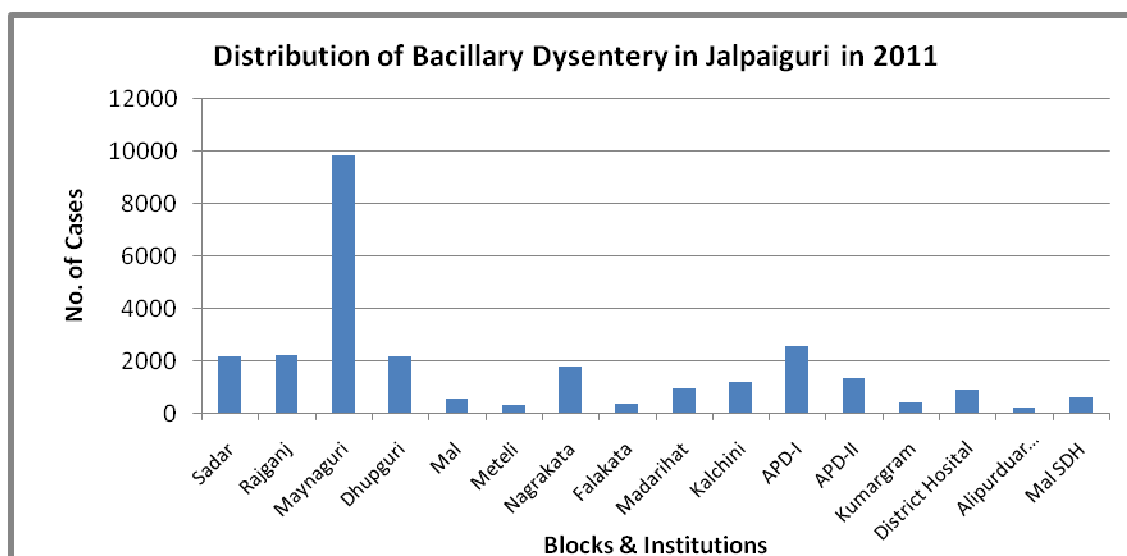
Out of five ADD outbreaks in 2011 three are in the month of May and one in February and another on in June.

► Case Fatality:

Three deaths have been reported due to diarrhoea in Jalpaiguri in 2011.

B. Bacillary Dysentery

Sl. No.	Name of the Blocks	Bacillary Dysentery		
		No. of cases	Case load (%)	Incidence
1.	Sadar	2176	7.95	6.81
2.	Rajganj	2186	7.98	6.77
3.	Maynaguri	9845	35.95	30.72
4.	Dhupguri	2179	7.96	4.58
5.	Mal	553	2.02	1.83
6.	Meteli	315	1.15	2.61
7.	Nagrakata	1758	6.42	13.33
8.	Falakata	343	1.25	1.19
9.	Madarihat	942	3.44	4.46
10.	Kalchini	1157	4.22	4.03
11.	APD-I	2543	9.29	11.33
12.	APD-II	1335	4.87	5.96
13.	Kumargram	399	1.46	1.97
14.	District Hosital	871	3.18	
15.	Alipurduar SDH	214	0.78	
16.	Mal SDH	571	2.08	
TOTAL		27387	100.00	7.49

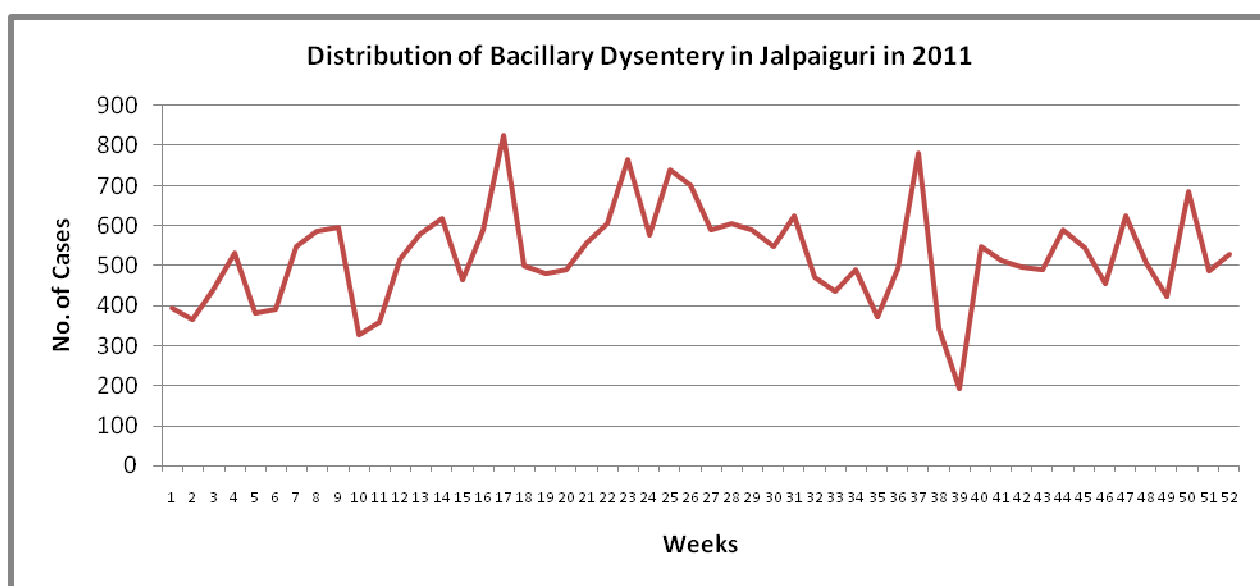


Analysis:

► **Incidence:** Incidence Rate of Bacillary Dysentery in Jalpaiguri was 7.49 during the period 1st week to 52nd week in 2011. Incidence of Bacillary Dysentery is highest in Maynaguri (30.72) followed by Nagrakata (13.33), Alipurduar-I (11.33), Sadar (6.81), Rajganj (6.77) and Alipurduar-II (5.96).

► **Case load:** In 2011 case load of Bacillary Dysentery was highest in Maynaguri (35.95) followed by Rajganj (7.98), Dhupguri (7.96) and Sadar (7.95).

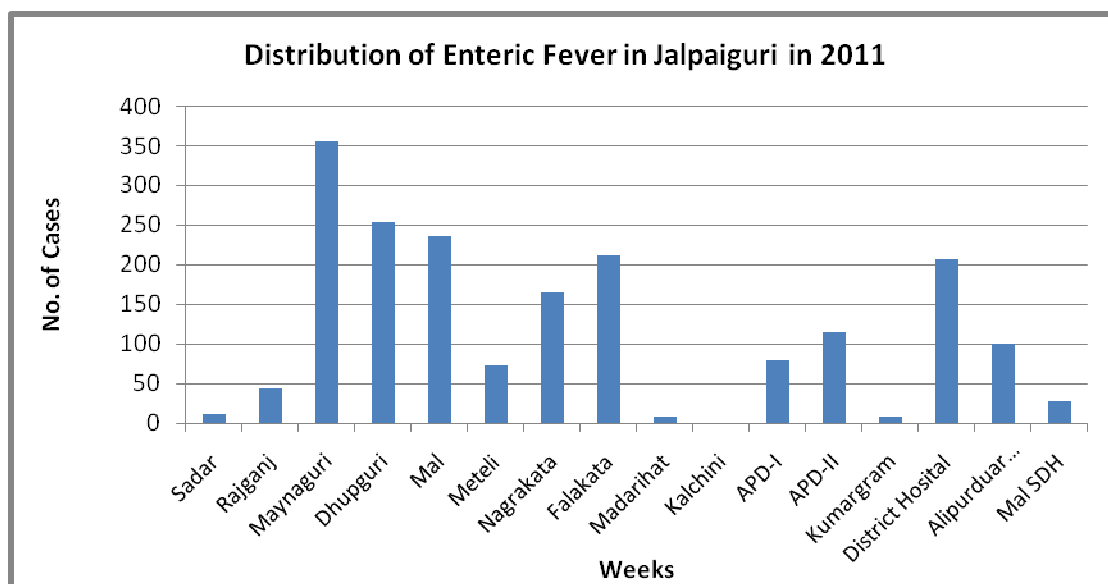
► Trend & Seasonality:



A fluctuating trend of Bacillary Dysentery has been noticed throughout the year however, increasing trend noticed since 12th week to 32nd week in 2011. After 38th week the trend is influenced by newly introduced OPD data.

C. Enteric Fever

Sl. No.	Name of the Blocks	Enteric Fever		
		No. of cases	Case load (%)	Incidence
1	Sadar	11	0.58	0.03
2	Rajganj	44	2.33	0.14
3	Maynaguri	355	18.76	1.11
4	Dhupguri	254	13.42	0.53
5	Mal	235	12.42	0.78
6	Meteli	73	3.86	0.61
7	Nagrakata	164	8.67	1.24
8	Falakata	212	11.21	0.73
9	Madarihat	8	0.42	0.04
10	Kalchini	0	0.00	0.00
11	APD-I	79	4.18	0.35
12	APD-II	114	6.03	0.51
13	Kumargram	8	0.42	0.04
14.	District Hosital	207	10.94	
15.	Alipurduar SDH	100	5.29	
16.	Mal SDH	28	1.48	
TOTAL		1892	100.00	0.52

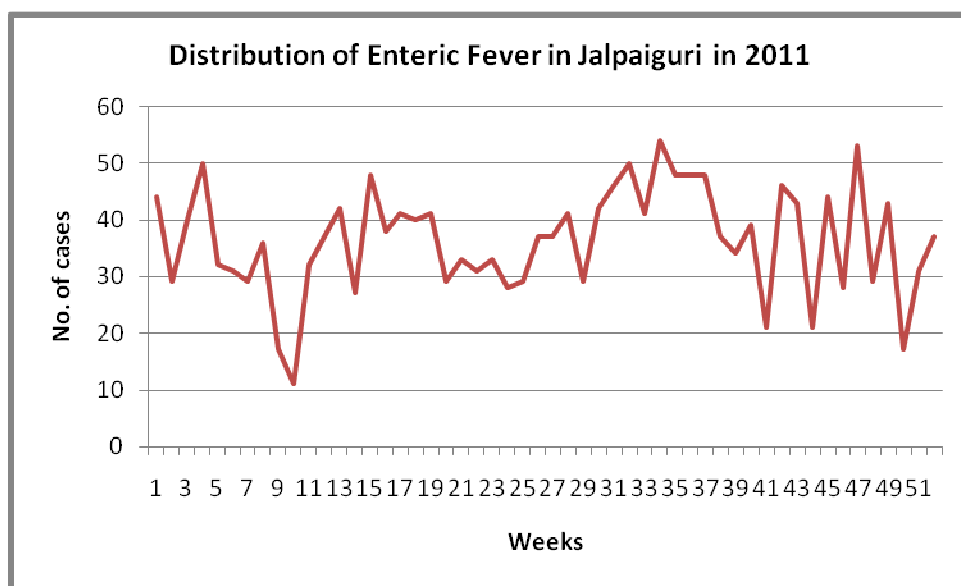


Analysis:

► **Incidence:** Incidence of Enteric Fever in Jalpaiguri is 0.52 during the period 1st week to 52nd week in 2011. Incidence of Enteric Fever is highest in Nagrakata (1.24) followed by Maynaguri (1.11), Mal (.78), Falakata (.73), Metali (.61) and Dhupguri (0.53)

► **Case load:** Highest case load of Enteric Fever was reported from Maynaguri (18.76%), Dhupguri (13.42%), Mal (12.42) & Falakata (11.21%). District Hospital contributed 10.94% to the total case of Enteric Fever in the district.

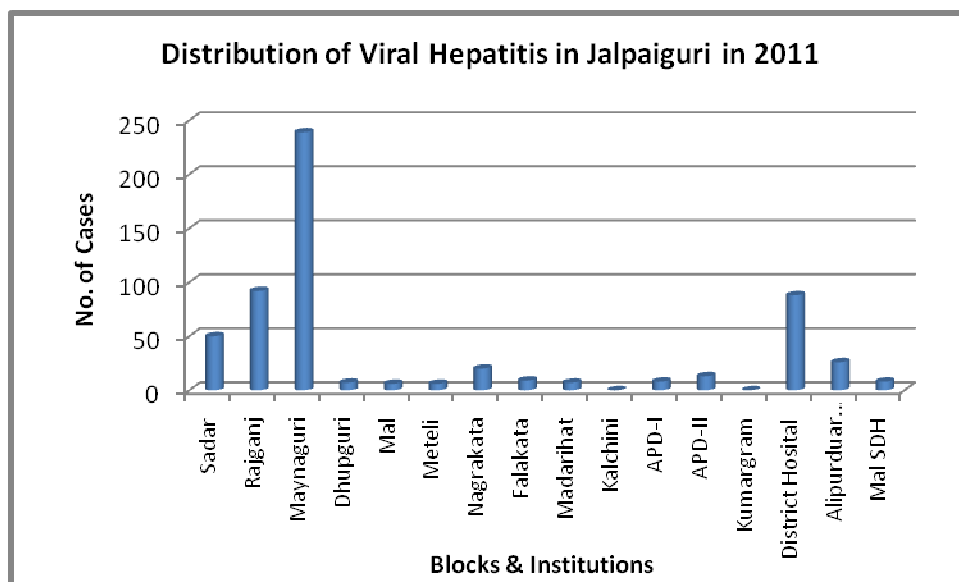
► **Trend & Seasonality:**



A fluctuating trend of Enteric Fever has been noticed in 2011 in Jalpaiguri. However, increasing trend observed since 32 week to 39 weeks i.e. in the month of July and August.

D. Viral Hepatitis

Sl. No.	Name of the Blocks	Viral Hepatitis		
		No. of cases	Case load (%)	Incidence
1.	Sadar	50	8.64	0.16
2.	Rajganj	92	15.89	0.28
3.	Maynaguri	239	41.28	0.75
4.	Dhupguri	7	1.21	0.01
5.	Mal	6	1.04	0.02
6.	Meteli	6	1.04	0.05
7.	Nagrakata	20	3.45	0.15
8.	Falakata	9	1.55	0.03
9.	Madarihat	7	1.21	0.03
10.	Kalchini	0	0.00	0.00
11.	APD-I	8	1.38	0.04
12.	APD-II	13	2.25	0.06
13.	Kumargram	0	0.00	0.00
14.	District Hosital	88	15.20	
15.	Alipurduar SDH	26	4.49	
16.	Mal SDH	8	1.38	
TOTAL		579	100.00	0.16



Analysis:

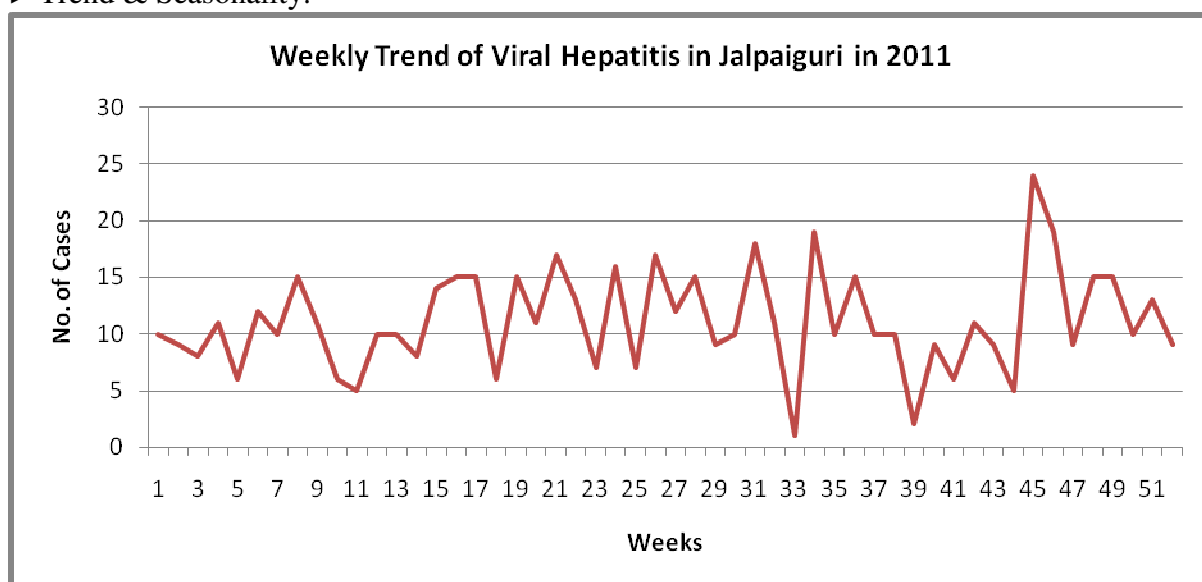
► Incidence:

Incidence of Viral Hepatitis in Jalpaiguri is 0.16 during the period 1st week to 52nd week in 2011. Highest incidence of Viral Hepatitis has been reported from Maynaguri (0.75) followed Rajganj (.28) and Sadar (.16).

► Case load:

Highest case load is from Maynaguri (41.28%) followed by Rajganj (15.89%), District Hospital (15.20%) and Sadar (8.64%).

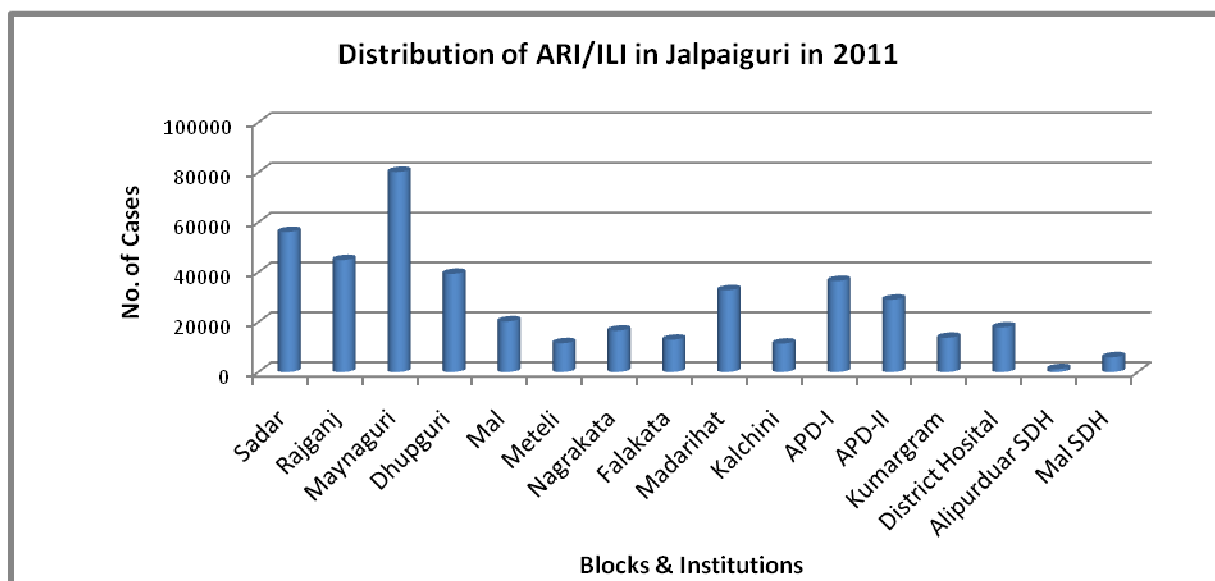
► Trend & Seasonality:



A fluctuating trend of Viral Hepatitis has been observed in Jalpaiguri in 2011. However, since 15th week increasing trend has been noticed till 38th week i.e. from April to August.

2. Acute Respiratory Infection (ARI)/ Influenza Like Illness (ILI)

Sl. No.	Name of the Blocks	ARI/ILI		
		No. of cases	Case load (%)	Incidence
1.	Sadar	56162	13.04	175.72
2.	Rajganj	44894	10.42	138.96
3.	Maynaguri	80222	18.62	250.31
4.	Dhupguri	39395	9.15	82.75
5.	Mal	20315	4.72	67.28
6.	Meteli	11565	2.68	95.98
7.	Nagrakata	16616	3.86	126.01
8.	Falakata	12973	3.01	44.84
9.	Madarihat	32801	7.61	155.45
10.	Kalchini	11421	2.65	39.75
11.	APD-I	36522	8.48	162.76
12.	APD-II	29014	6.74	129.46
13.	Kumargram	13766	3.20	67.96
14.	District Hosital	17924	4.16	
15.	Alipurduar SDH	1195	0.28	
16.	Mal SDH	5948	1.38	
TOTAL		430733	100.00	117.82

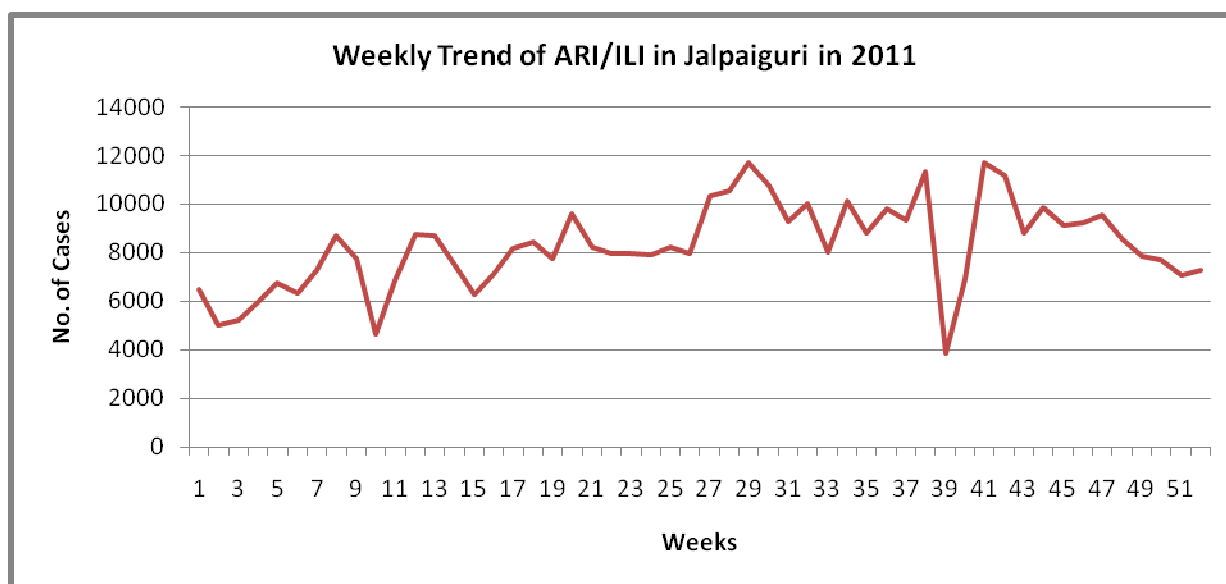


Analysis:

► **Incidence:** Incidence of ARI/ILI is 117.82 per 1000 population in Jalpaiguri in 2011. Highest incidence is reported from Maynaguri (250.31) followed by Sadar (175.72), APD-I (162.76), Madarihat (155.45), Rajganj (138.96), APD-II (129.46), Nagrakata (126.01).

► **Case load:** Case load was highest in Maynaguri (18.62%) followed by Sadar (13.04%), Rajganj(10.42%), Dhupguri (9.15%) and APD-I (8.48%).

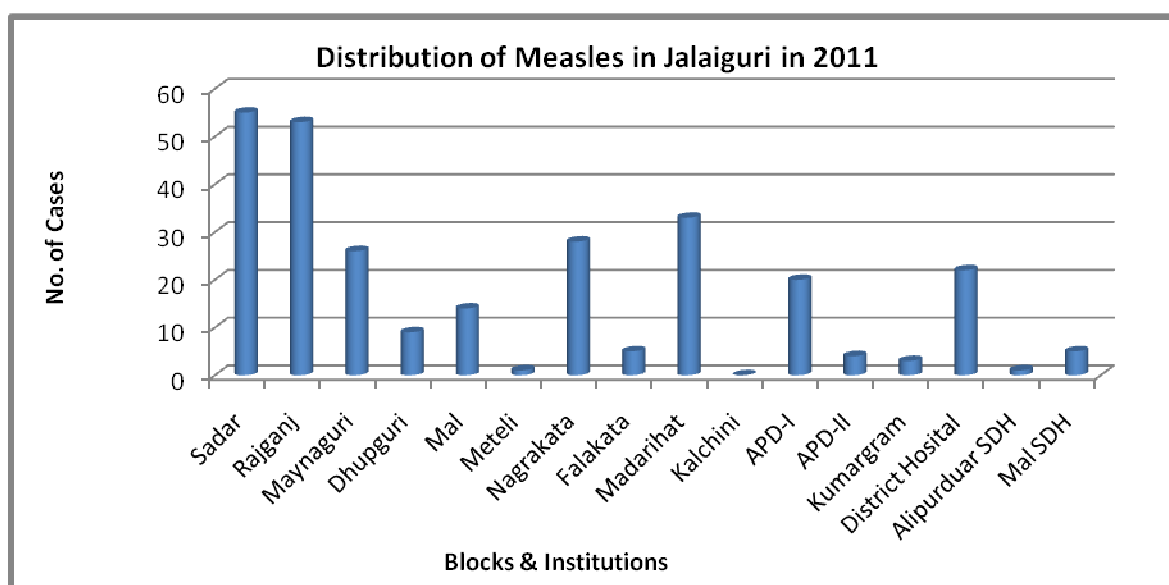
Trend & Seasonality:



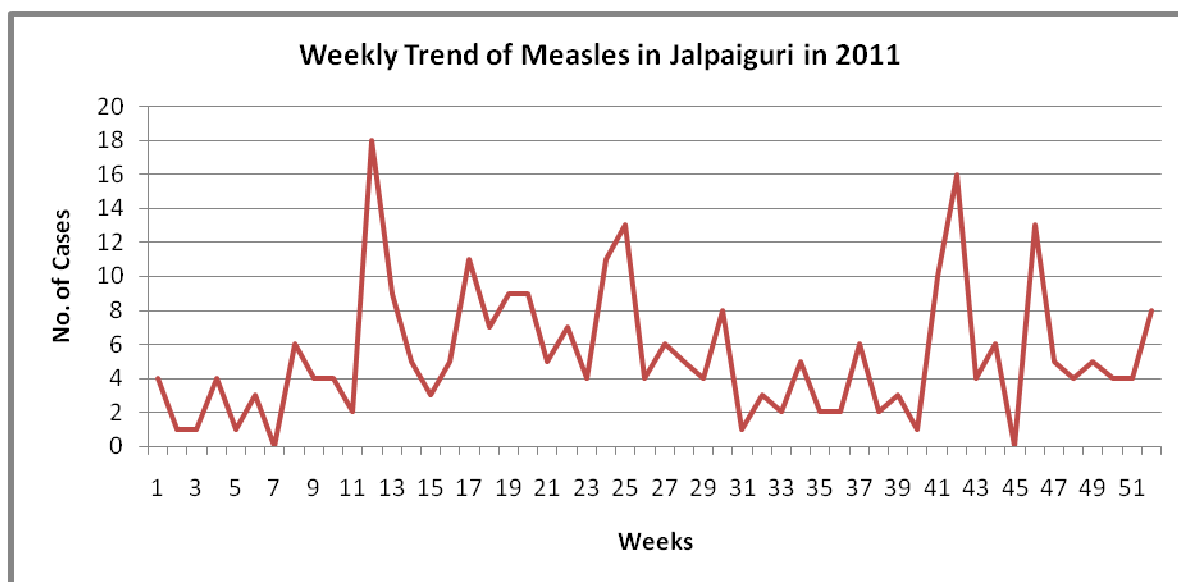
Increasing trend has been observed since 17th week to 38th week.

3. Measles and Chicken Pox

Sl. No.	Block	Measles		Chicken Pox	
		No. of cases	Case load (%)	No. of Cases	Case load (%)
1	Sadar	55	19.71	73	17.30
2	Rajganj	53	19.00	86	20.38
3	Maynaguri	26	9.32	47	11.14
4	Dhupguri	9	3.23	55	13.03
5	Mal	14	5.02	36	8.53
6	Meteli	1	0.36	8	1.90
7	Nagrakata	28	10.04	23	5.45
8	Falakata	5	1.79	3	0.71
9	Madarihat	33	11.83	12	2.84
10	Kalchini	0	0.00	0	0.00
11	APD-I	20	7.17	42	9.95
12	APD-II	4	1.43	14	3.32
13	Kumargram	3	1.08	2	0.47
14.	District Hosital	22	7.89	19	4.50
15.	Alipurduar SDH	1	0.36	0	0.00
16.	Mal SDH	5	1.79	2	0.47
TOTAL		279	100.00	422	100.00

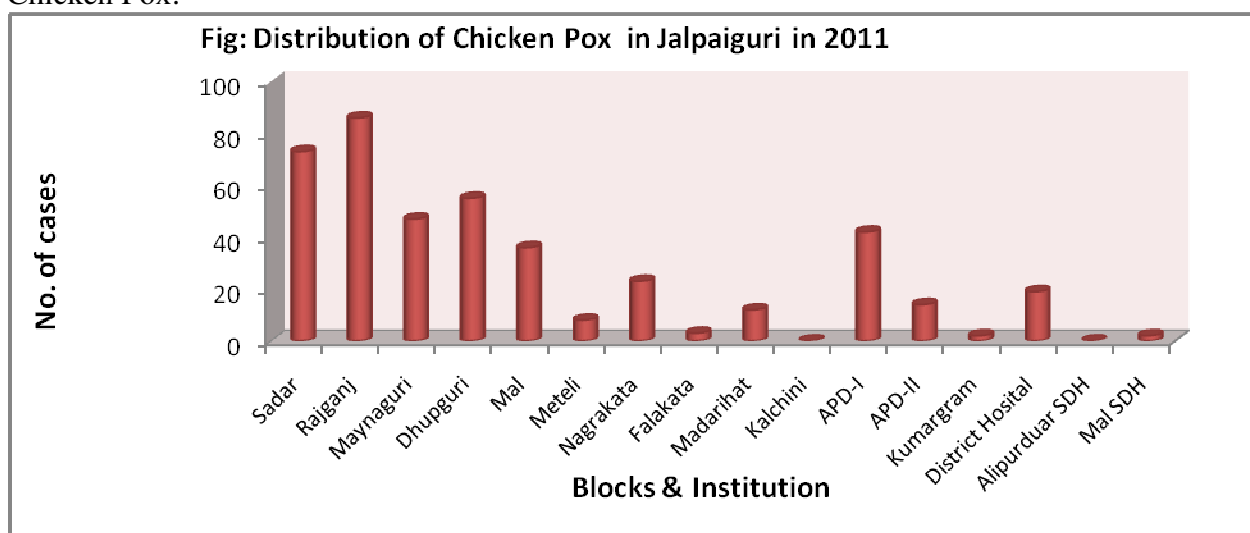


Highest case load of measles is reported from Sadar (19.71%) and Rajganj (19.00%) followed by Madarihat (11.83%), Nagrakata (10.04%), Maynaguri (9.32%) and APD-I (7.17%).

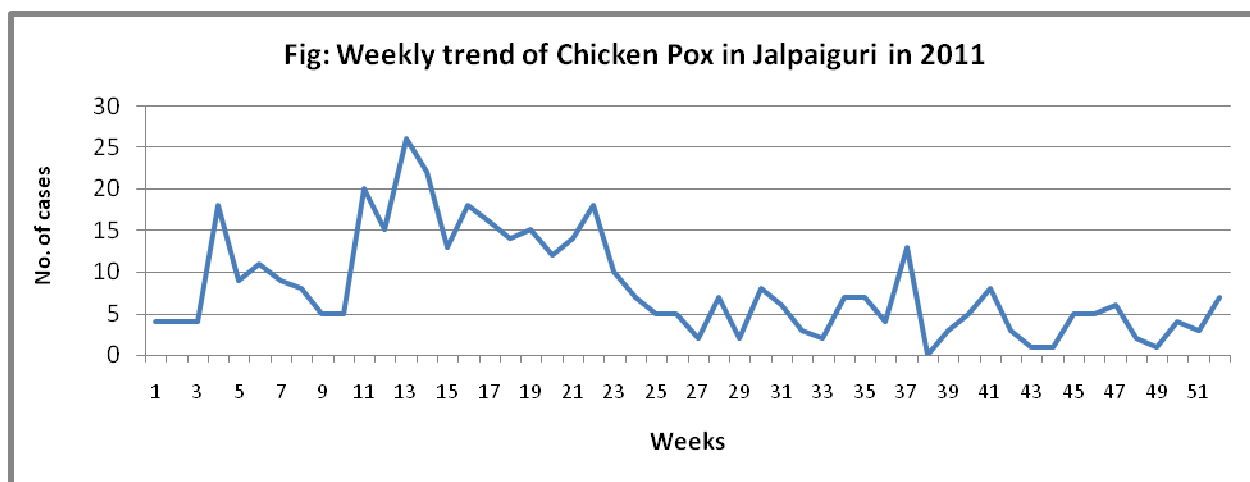


Measles cases were reported in almost all the weeks of the year except week no.7 and 45. Increasing trend has been noticed since 12th week to 30th week and 42nd week onwards.

Chicken Pox:



Highest case load is reported from Rajganj (20.38%) followed by Sadar (17.30%), Dhupguri (13.03%), Maynaguri (11.14%), APD-I (9.95%), Mal (8.53%) and Nagrakata (5.45%).



Chicken pox was reported in all the weeks of the year. Increasing trend has been noticed since 4th to 24th week i.e. in late winter to late summer.

4. Malaria

Analysis:

► Trend: Monthly trend of Malaria reveals that a slow increasing trend since August onwards and the peak was in the month of November in 2011.

► Blood Slide Examined: 714456

► Malaria positive cases: 2653

► Slide Positivity Rate (SPR): 0.37

► Slide falciparum Rate (SfR): 0.10

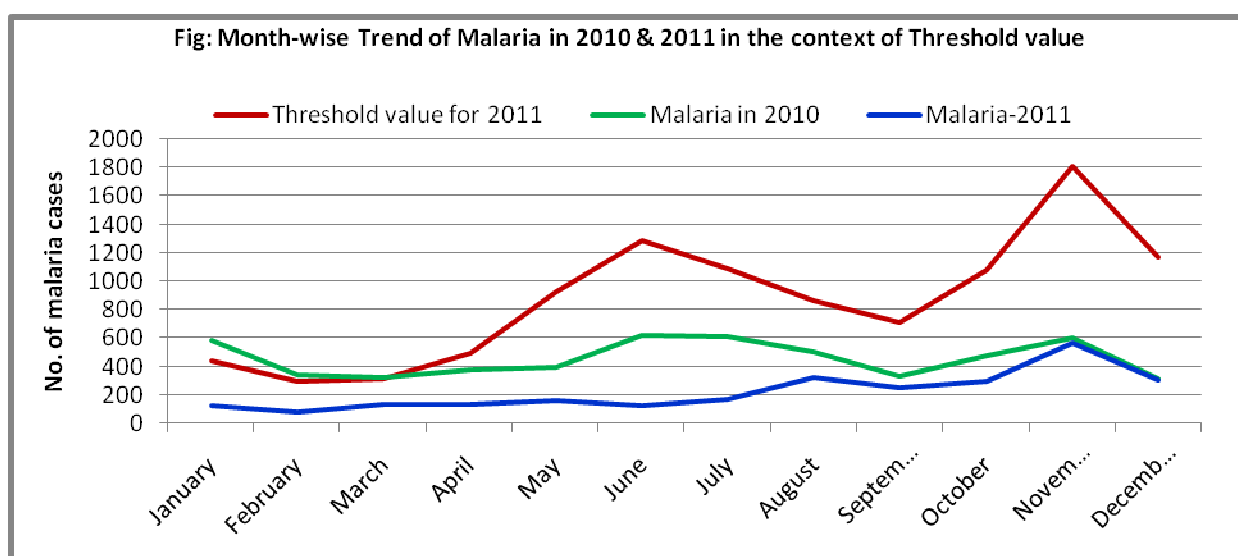
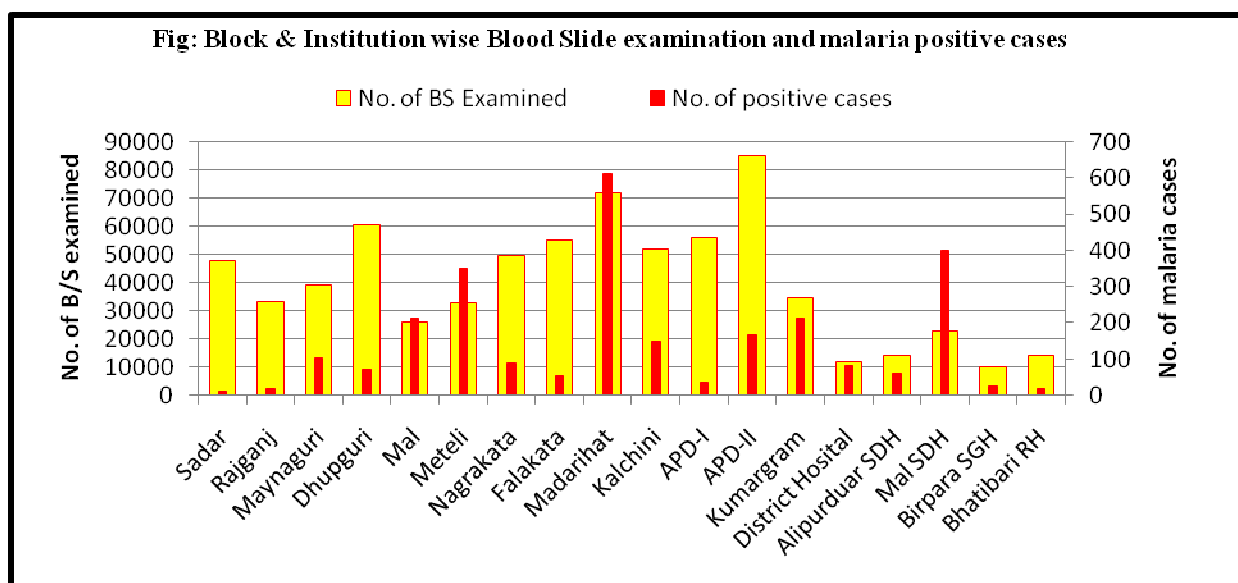
► P.falciparum Percentage (Pf%): 27.55%

► Annual Parasite Incidence (API): 0.73

Table-7: Block-wise distribution of Malaria positive cases in 2011

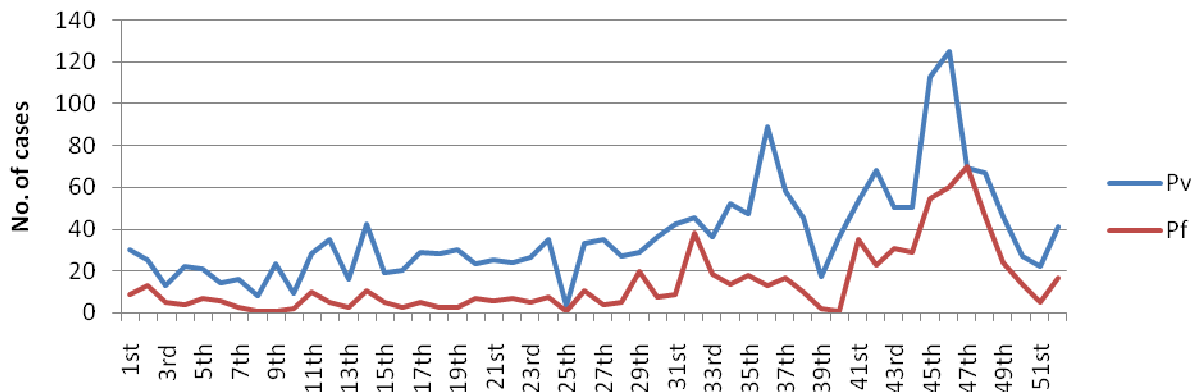
Sl. No.	Blocks	No. of BS Examined	No. of positive cases	Case load (%)	Slide Positivity Rate (SPR)	Annual Parasite Incidence
1	Sadar	47656	11	0.41	0.02	0.03
2	Rajganj	33353	17	0.64	0.05	0.05
3	Maynaguri	39305	101	3.81	0.26	0.32
4	Dhupguri	60535	72	2.71	0.12	0.15
5	Mal	25774	211	7.95	0.82	0.70
6	Meteli	32621	349	13.15	1.07	2.90
7	Nagrakata	49682	90	3.39	0.18	0.68
8	Falakata	54886	52	1.96	0.09	0.18
9	Madarihat	71664	613	23.11	0.86	2.91
10	Kalchini	51649	147	5.54	0.28	0.51
11	APD-I	55699	35	1.32	0.06	0.16
12	APD-II	84893	165	6.22	0.19	0.74
13	Kumargram	34510	212	7.99	0.61	1.05
14.	District Hosital	11758	80	3.02	0.68	
15.	Alipurduar SDH	13879	59	2.22	0.43	
16.	Mal SDH	22706	398	15.00	1.75	
17.	Birpara SGH	9843	24	0.90	0.24	
18.	Bhatibari RH	14043	17	0.64	0.12	
TOTAL		714456	2653 Pv-1922 Pf-731	100.00	0.37	0.73

Highest number of malaria cases was reported from Madarihat Block and it contributes 23.11% to the total cases load of the district in 2011. Matiali Block contributes 13.15%; Kumargram 7.99%; Mal 7.95%. Mal SDH contributes 15.00% cases to the total case load of malaria in 2011.

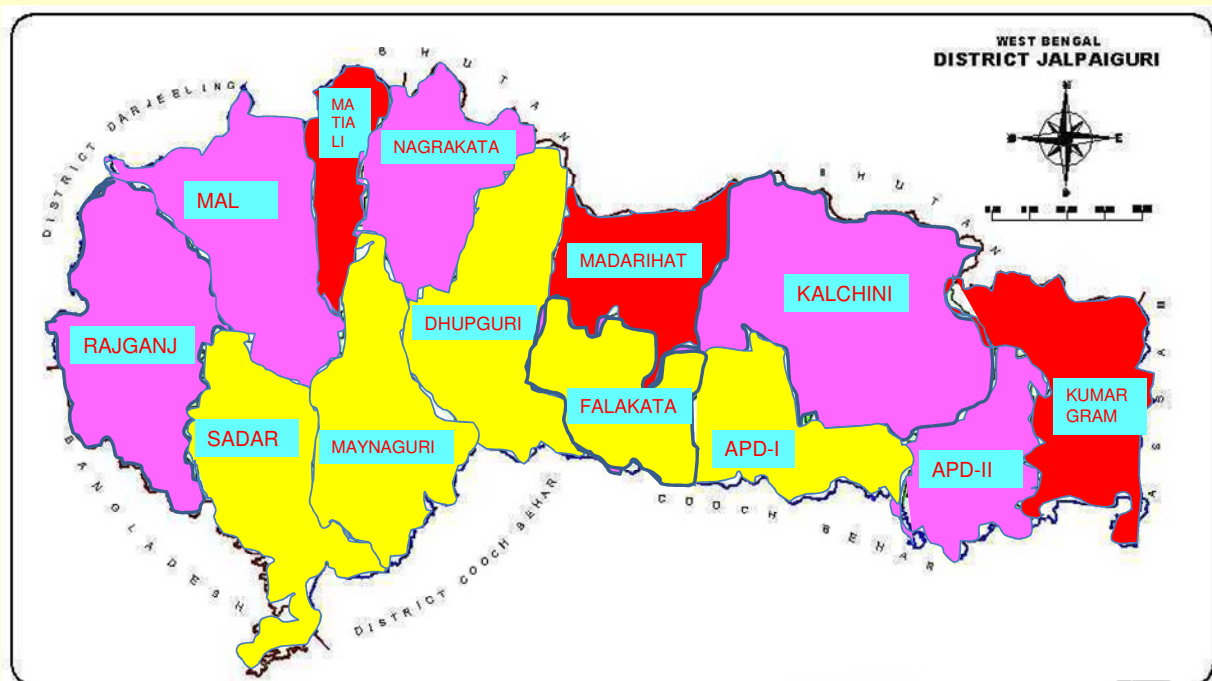


Month-wise trend of malaria reveals that increasing trend started since August and peak was noticed in the month of November. In Jalpaiguri, two peaks (1st peak in June-July and 2nd peak in November) were noticed in each year. But in 2011 only one peak was noticed. In 2011, the trend was much below the trend of 2010 and below the threshold value established for 2011. Species wise trend also reveals that the peaks were in November for both Pv and Pf malaria.

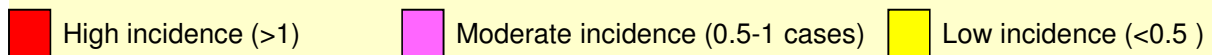
Fig: Week-wise trend of Pv & Pf in Jalpaiguri in 2011



Epi-Map of Jalpaiguri showing the incidence of Malaria in 2011



Legend:

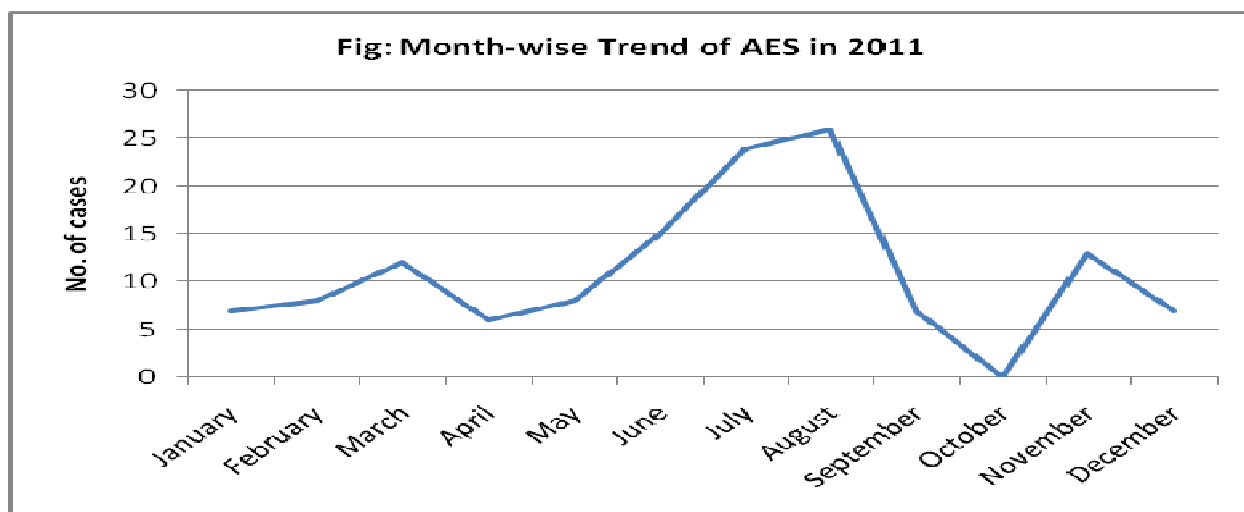
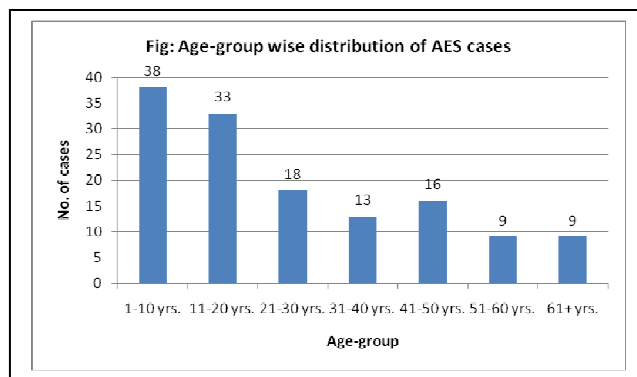
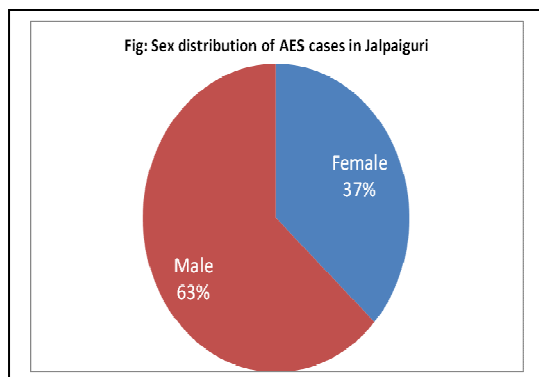


5. AES/JE Surveillance

In 2011, a number of 136 cases with Acute Encephalitis Syndrome (AES) have been reported in Jalpaiguri. Age-group-wise distribution of AES cases reveals that maximum number of cases are from 1-10 years (27.94%) and 11-20 years (24.26%) age group. Sex distribution of AES cases reveals that 63% are male and 37% are female. Monthly trend shows that the peak was in July and August. A number of 34 samples were sent for virology test for JE from DSU, Jalpaiguri.

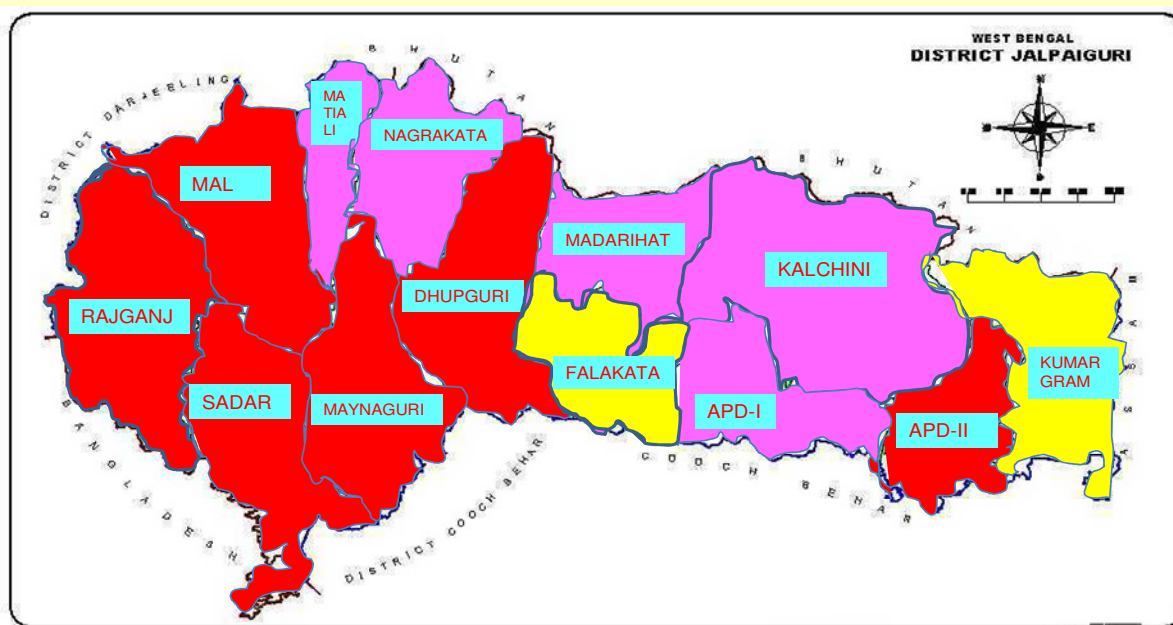
Table: Age-group wise distribution of AES cases in Jalpaiguri in 2011

Age Group	No. of AES cases	Percentage	No. of JE (lab positive) cases
1-10 yrs.	38	27.94	2
11-20 yrs.	33	24.26	6
21-30 yrs.	18	13.24	0
31-40 yrs.	13	9.56	1
41-50 yrs.	16	11.76	1
51-60 yrs.	9	6.62	1
61+ yrs.	9	6.62	2
TOTAL	136	100.00	13

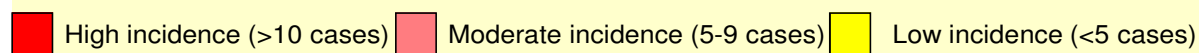


AES cases are reported from all the Blocks of Jalpaiguri. But higher number of cases are from Sadar, Rajganj, Maynaguri, Dhupguri, Mal and APD-II block.

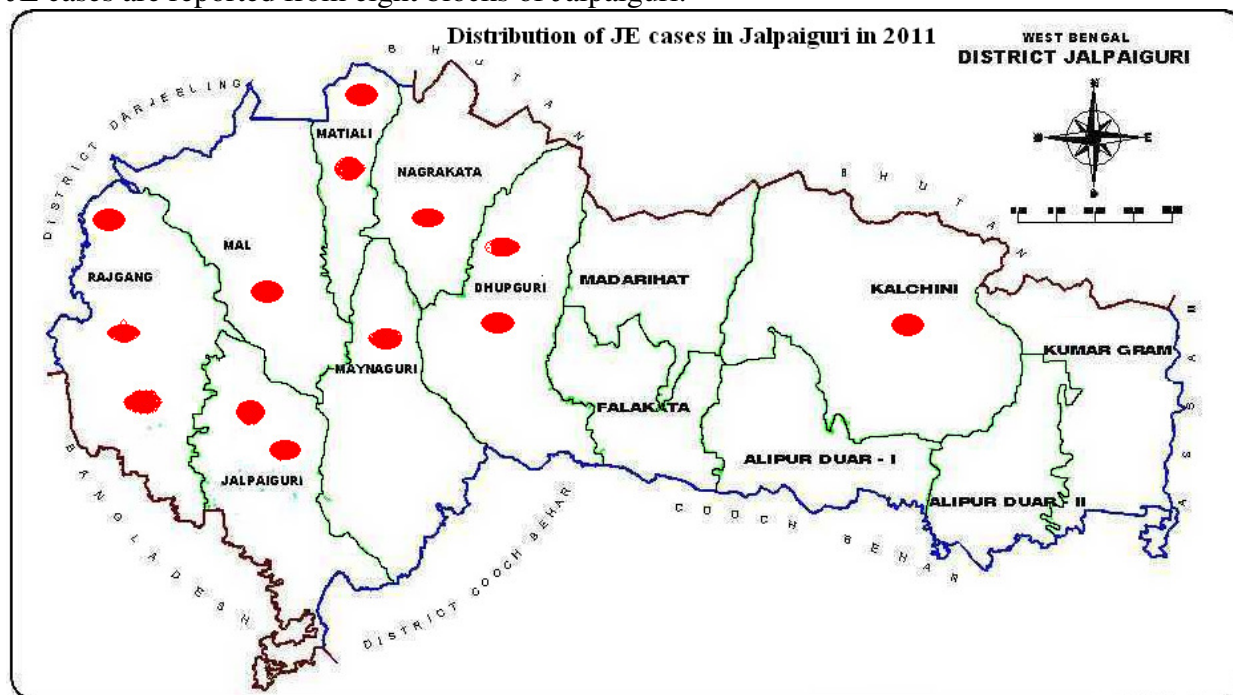
Map of Jalpaiguri showing the incidence of AES cases



Legend:



JE cases are reported from eight blocks of Jalpaiguri.

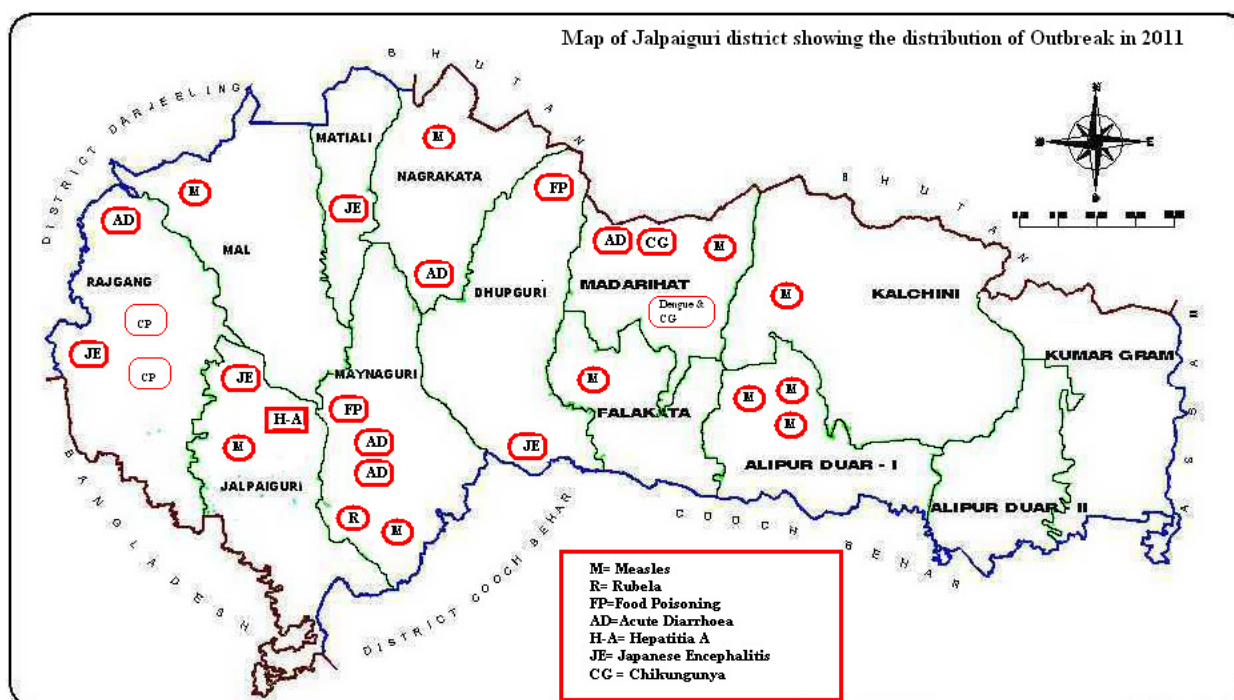


Outbreak

Table: Detection of outbreak and human sample tested

Type of Outbreak	No. of outbreak	Human Sample tested	Tested at	Sample found positive
Acute Diarrhoea	5	7	NBMCH	0
Measles & Rubella	10	26	Institute of Serology, Kolkata	25
Chicken Pox	3	NA	NA	NA
Hepatitis-A	1	4	STM	3
Food Poisoning	2	0	NA	0
JE	3	34 from DSU, Jal	NICED & NBMCH	13
Chikungunya	1	20	STM	10
Dengue & Chikungunya	1	10	STM	4
TOTAL	26			

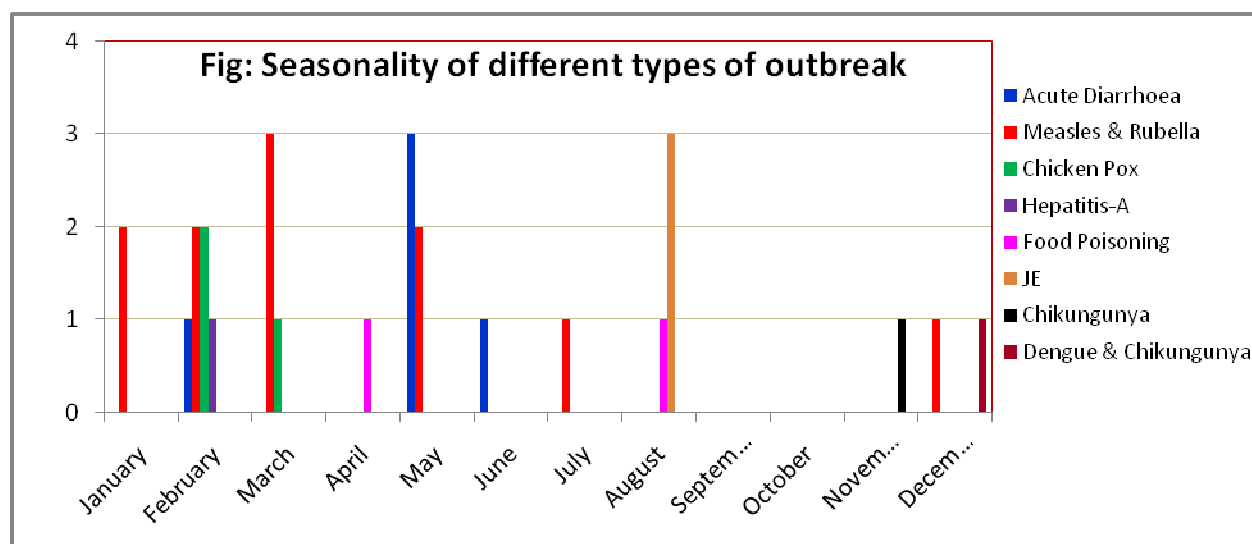
In 2011, a number of 26 outbreaks have been detected by the District Surveillance Unit, Jalpaiguri. Some of the outbreaks are case based and some are event based. Human sample tested in case of 13 outbreaks out of 26. Human sample tested in case of Hepatitis, Diarrhoea, Food poisoning, Measles, Japanese Encephalitis, Chikungunya and Dengue outbreak. Human sample was not tested in case of Chicken pox, some Food poisoning, some of the measles outbreak having smaller number of cases and some of Diarrhea outbreaks. However, physical sample (water) tested in all diarrhea outbreaks.



A network has been established with the referral Laboratories of NBMCH, Kolkata School of Tropical Medicine, NICED-Kolkata, WHO-NSP Siliguri and PHE, Jalpaiguri for testing of various types of samples during outbreak.

Seasonality of Outbreak:

Seasonality of different types of outbreak reveals that, measles and chicken pox outbreaks were reported in January, February, March, May and December i.e. the period from winter to summer season. Outbreak of Acute Diarrhoea found in February, May & June. Outbreak of Japanese Encephalitis detected in the month of August. Chikungunya and Dengue outbreak detected in the month of November and December.



Learning from the outbreaks:

In case of outbreak we always try to find out the cause and recommend measures to control it. During measles outbreak it has been observed that vaccine coverage is poor in most of the affected area and vaccine efficacy was low (as found in Buxa hill of Kalchini Block). Irregular supply of measles vaccine and Vitamin-A have been noticed. In case of diarrhea outbreak, water contamination was the main cause. Chikungunya and Dengue outbreak occurred in the month of November and December at Madarihat block. Large numbers of domestic containers played a conducive role as breeding ground for Aedes mosquito. And Pulse cleaning (once in a week on a particular day for four times) was the best preventive action to destroy breeding ground along with spray of Kerosine oil in the waste stagnant water. In future following action may be taken reduce the burden of morbidity during outbreak:

- (i) Special attention should be given to the forest villages, Tea Garden area and high altitude villages and cut off area for routine immunization/ vaccine coverage to prevent vaccine preventable diseases.
- (ii) Disinfection of water in these vulnerable areas should also be done on a regular basis.
- (iii) NGOs working in the 'hard to reach area' should submit report of disease surveillance weekly.

Training Status:

Table: IDSP Training Status in Jalpaiguri in 2011		
Participants	No. of Batches	No. of Participants
Medical Officers	02	34
Paramedical Staff	02	54
Data Entry Operator	01	28
TOTAL	05	116

In 2011, IDSP training was conducted for Medical Officers (2 batches), Paramedical Staff (2 batches) and Block Data Entry Operators (one batch). Altogether a number of 116 participants attended the training programme in five batches.

There are demand for training for newly appointed Medical Officers, Block paramedical staff like BSI and MI and peripheral staff like GP supervisors and ANMs.

Information sharing and Feedback:

Information to action is the ultimate goal of the disease surveillance system. Information is shared by the DSU by following means:

- (i) Weekly Feedback to the Block
- (ii) District MIES – monthly
- (iii)Block MIES – monthly
- (iv)Sharing of Annual report- yearly.
- (v) Over telephone as and when required

Consistency Report:

Reporting of 'P' Units: Total 'P' Reporting Units= 55

S.No	Block	Week : 1 TO 52 , 2011							
		PHC				Govt. Hospital/ID Hospitals/CHC/Medical College			
		Total no. of Rus	No. of units reported \geq 80% Time	No. of units reported between 50%-80% Time	No. of units reported <50% or Null Time	Total no. of Rus	No. of units reported \geq 80% Time	No. of units reported between 50%-80% Time	No. of units reported <50% or Null Time
1	SADAR BLOCK	6	6	0	0	1	1	0	0
2	RAJGANJ	3	3	0	0	1	1	0	0
3	MAYNAGURI	6	6	0	0	1	1	0	0
4	DHUPGURI	4	4	0	0	1	1	0	0
5	MAL	4	4	0	0	1	1	0	0
6	MATIALI	3	2	1	0	0	0	0	0
7	NAGRAKATA	3	3	0	0	0	0	0	0
8	FALAKATA	2	2	0	0	1	1	0	0
9	MADARIHAT	4	4	0	0	1	1	0	0
10	KALCHINI	2	2	0	0	0	0	0	0
11	APD-I	3	3	0	0	1	1	0	0
12	APD-II	3	3	0	0	1	1	0	0
13	KUMARGRAM	3	2	1	0	0	0	0	0
Total		46	44	2	0	9	9	0	0

Reporting of 'L' Units: Total 'L' Reporting Units= 43

	Block	Week : 1 TO 52 , 2011							
		PHC(Lab.)				Govt. Hospital(Lab.)/ID Hospitals(Lab.) /CHC(Lab.)/Medical College(Lab.)			
		Total no. of Rus	No. of units reported \geq 80% Time	No. of units reported between 50%-80% Time	No. of units reported <50% or Null Time	Total no. of Rus	No. of units reported \geq 80% Time	No. of units reported between 50%-80% Time	No. of units reported <50% or Null Time
1	SADAR BLOCK	4	4	0	0	1	1	0	0
2	RAJGANJ	1	1	0	0	1	1	0	0
3	MAYNAGURI	3	1	2	0	1	1	0	0
4	DHUPGURI	2	2	0	0	1	1	0	0
5	MAL	4	4	0	0	1	1	0	0
6	MATIALI	3	1	2	0	0	0	0	0
7	NAGRAKATA	3	3	0	0	0	0	0	0
8	FALAKATA	1	1	0	0	1	1	0	0
9	MADARIHAT	4	4	0	0	1	1	0	0
10	KALCHINI	1	1	0	0	0	0	0	0
11	APD-I	3	3	0	0	1	1	0	0
12	APD-II	3	3	0	0	1	1	0	0
13	KUMARGRAM	2	2	0	0	0	0	0	0
Total		34	30	4	0	9	9	0	0

In Jalpaiguri, 96.36% 'P' units and 90.70% 'L' units are consistent. 90% 'S' units are reporting regularly. Only five private units are reporting to the DSU regularly.