



Disease Alert प्रकोप चेतावनी



A monthly Surveillance Report from Integrated Disease Surveillance Programme
National Health Mission

Issue: January 2016

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Messages

Shri B P Sharma
Secretary Health



I am pleased to know that Integrated Disease Surveillance Programme (IDSP), under Ministry of Health & Family Welfare is releasing its inaugural edition of "Monthly IDSP Surveillance Report (MISR)". This surveillance data will not only provide information for early outbreak detection and its control, but also, valuable inputs for planning and decision making to the policy makers, health administrators and researchers.

It will also give an insight into the work of CSU-IDSP and its collaboration with State and District Surveillance Units. This will further contribute to the improvement in health services in the country.

On this occasion, I congratulate IDSP team members for their commitment in compiling meticulously such information in an effective manner. This endeavour will help in timely dissemination of analysis of IDSP data.


Shri B P Sharma

Dr.(Prof.) Jagdish Prasad
DGHS,MoHFW



With this inaugural issue IDSP is launching its Monthly surveillance report. IDSP has been carrying out surveillance of epidemic prone diseases for more than a decade and it is apposite to disseminate data and analyses in a timely manner through this monthly report. The inaugural edition consists of reporting status and surveillance data of Enteric fever, ARI/H1N1 and Viral Hepatitis, action from the field, and an outbreak investigation.

This surveillance data will be useful for other National Health Programmes, State health departments, Medical Colleges and academia. Since, IDSP has an objective to strengthen disease surveillance system for epidemic-prone disease to monitor disease trends and to detect and respond to outbreaks early, this report will be very useful to make all stakeholders aware of prevailing situation and guide them. I commend CSU-IDSP team for this initiative and hope this will, in course of time, transform into a weekly report


Dr Jagdish Prasad

Shri C K Mishra
Addl. Secretary and MD (NHM)



It is indeed heartening to know that IDSP is launching its Monthly disease surveillance report. It is another milestone in the brief history since its launch in 2004. IDSP are continuously being supported by NHM with objective of strengthening disease surveillance system in the country. The surveillance data published by IDSP will add on to epidemiological database which will further help in controlling diseases.

I hope that the data from surveillance report will help in effective policy formulation for National Health Programme. I hope that the data from surveillance report will help in effective policy formulation for National Health Programme. I hope the surveillance data of IDSP will be utilized effectively and goal of NHM of preventing communicable disease is achieved.


Shri C K Mishra



Swachh Bharat
Clean India Mission

Introduction

The Integrated Disease Surveillance Project (IDSP) was launched by the Government of India In November 2004 and the project continues in the 12th Plan as the Integrated Disease Surveillance Programme under National Health Mission (NHM) for all States & UTs.

A Central Surveillance Unit (CSU) at Delhi, State Surveillance Unit (SSU) at all State/UT Headquarters and District Surveillance Units (DSU) at all Districts in the country, have been established.

Objectives of IDSP: To maintain a decentralized laboratory-based disease surveillance system, to monitor epidemic-prone diseases' trends, and to detect and respond to outbreaks early through trained Rapid Response Teams (RRTs).

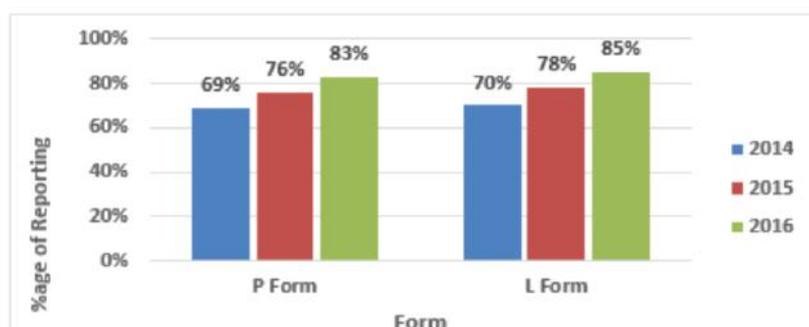
Programme Components

- ❖ Integration and decentralization of surveillance activities through establishment of surveillance units at Centre, State and District level.
- ❖ Human Resource Development – Training of State Surveillance Officers, District Surveillance Officers, Rapid Response Team and other Medical and Paramedical staff on principles of disease surveillance.
- ❖ Use of Information Communication Technology for collection, collation, compilation, analysis and dissemination of data.
- ❖ Strengthening of public health laboratories.
- ❖ Inter sectoral Coordination with Animal Health.

Under IDSP weekly data is collected on epidemic prone diseases on weekly basis (Monday – Sunday) by the Districts/Blocks. The information is collected in three specified format namely “S”(Suspected Cases), “P”(Presumptive Cases) and “L” (Laboratory confirmed cases). Weekly data gives information on the disease trends and seasonality of diseases. Whenever there is a rising trend of illness in any area, it is investigated by the Rapid Response Team (RRT) to diagnose and control the outbreak.

Enteric Fever, ARI / H1N1 and Viral Hepatitis A & E, 2014-2016

Fig 1: P and L form reporting status during January 2014, 2015 and 2016



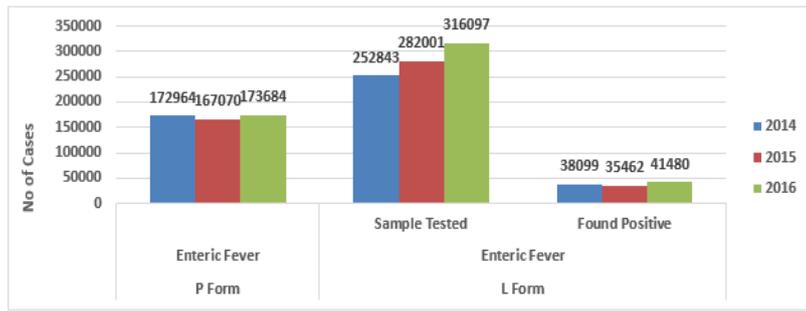
Source: IDSP Portal (www.idsp.nic.in)

As shown in fig 1, in January 2014, 2015 and 2016, the 'P' form reporting percentage (i.e. % reporting unit (RU) reporting out of total in P form) was 69 %, 76% and 83% respectively across India, for all disease conditions. Similarly, L form reporting percentage was 70%, 78% and 85% respectively across India for all disease conditions, during the same tenure. The completeness of reporting has significantly increased over the years in both P and L form,

thereby improving the quality of surveillance data.

Enteric Fever

Fig 2: Number of Enteric Fever cases reported under P & L form in the month of January 2014, 2015 and 2016



Source: IDSP Portal (www.idsp.nic.in)

As shown in fig 2, number of presumptive enteric fever cases, as reported by States/UTs in 'P' form was 1,72,964 in January 2014; 1,67,070 in January 2015 and 1,73,684 in January 2016. These presumptive cases are diagnosed on the basis of standard case definitions provided under IDSP.

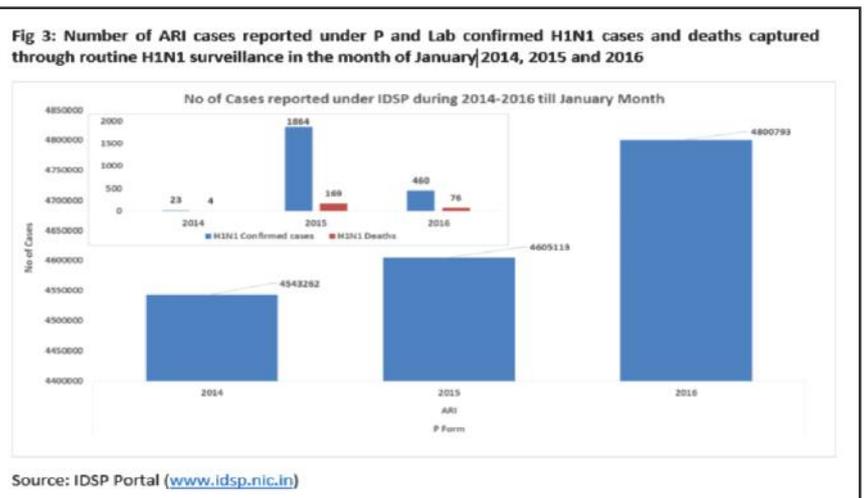
As reported in L form, in January 2014; 2,52,843 samples were tested for Enteric fever, out of which 38,099 were found positive (15.1% positivity). In January

2015; out of 2,82,001 samples, 35,462 were found to be positive (12.5% positivity) and in January 2016, out of 3,16,097 samples, 41,480 were found to be positive (13.1% positivity).

Limitation: The test by which above mentioned samples were tested could not be ascertained, as currently there is no such provision in L form.

As shown in fig 3, the number of presumptive ARI cases as reported by States/UTs was 4,543,262 in January 2014; 4,605,113 in January 2015 and 4,800,793 in January 2016. These presumptive cases were diagnosed on the basis of case definitions provided under IDSP.

23 cases were tested positive for H1N1 and 4 deaths were reported in routine H1N1 surveillance, in January 2014. In January 2015; 1864 cases were tested positive and 169 deaths were reported and in January 2016, 460 were positive for H1N1 and of these, 76 deaths were reported.



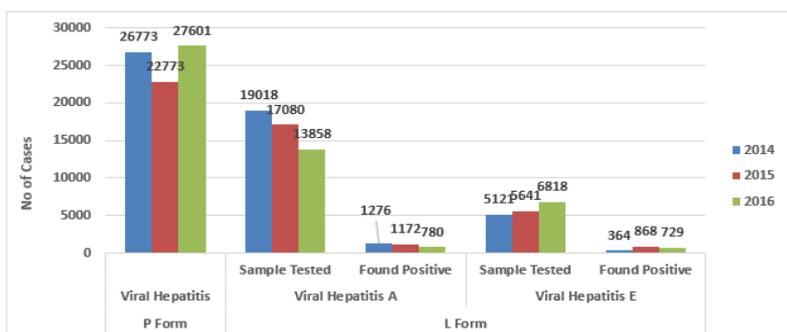
Source: IDSP Portal (www.idsp.nic.in)

As shown in fig 4, the number of presumptive viral hepatitis cases was 26,773 in January 2014, 22,773 in January 2015 and 27,601 in January 2016. These presumptive cases were diagnosed on the basis of case definitions provided under IDSP.

As reported in L form for viral hepatitis A, in January 2014; 19,018 samples were tested out of which 1,276 were found positive (6.7% positivity). In January 2015; out of 17,080 samples, 1,172 were found to be positive (6.8% positivity) and in January 2016, out of 13,858 samples, 780 were found to be positive (5.6% positivity).

As reported in L form for viral hepatitis E, in January 2014; 5,121 samples were tested out of which 364 were found positive (7.1% positivity). In January 2015; out of 5,641 samples, 868 were found to be positive (15.3% positivity) and in January 2016, out of 6,818 samples, 729 were found to be positive (10.6% positivity).

Fig 4: Number of Viral Hepatitis cases reported under P and Viral Hepatitis A & E cases reported under L form in the month of January 2014, 2015 and 2016



Source: IDSP Portal (www.idsp.nic.in)

Fig 5: State/UT wise P form completeness % for January 2016

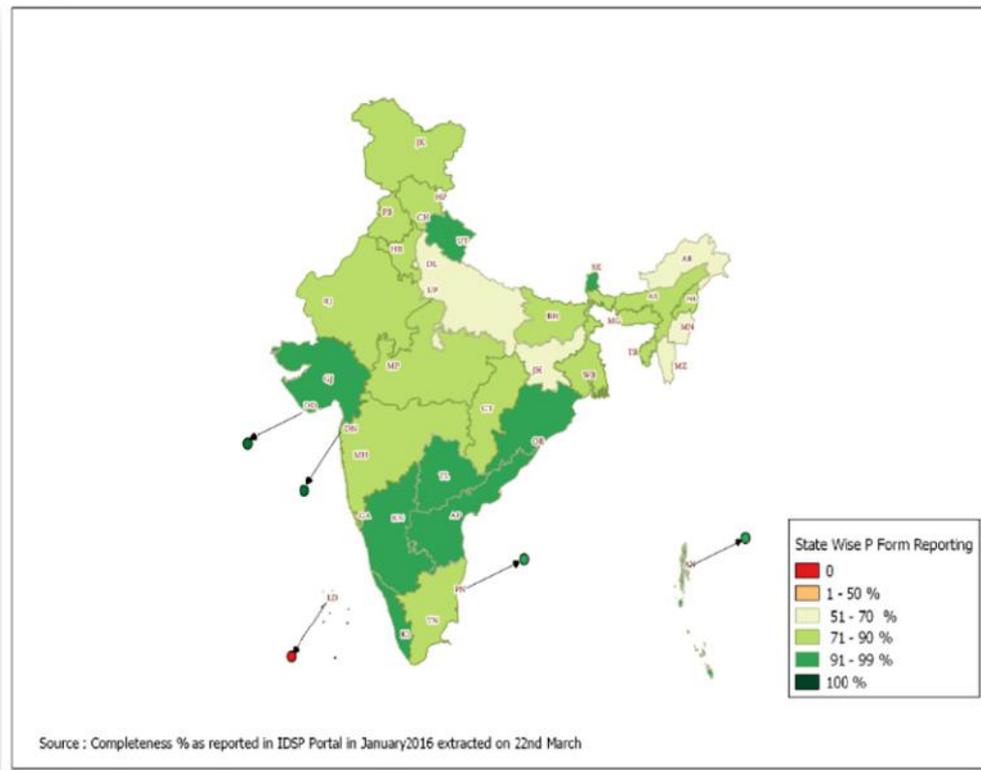


Fig 6: State/UT wise L form completeness % for January 2016

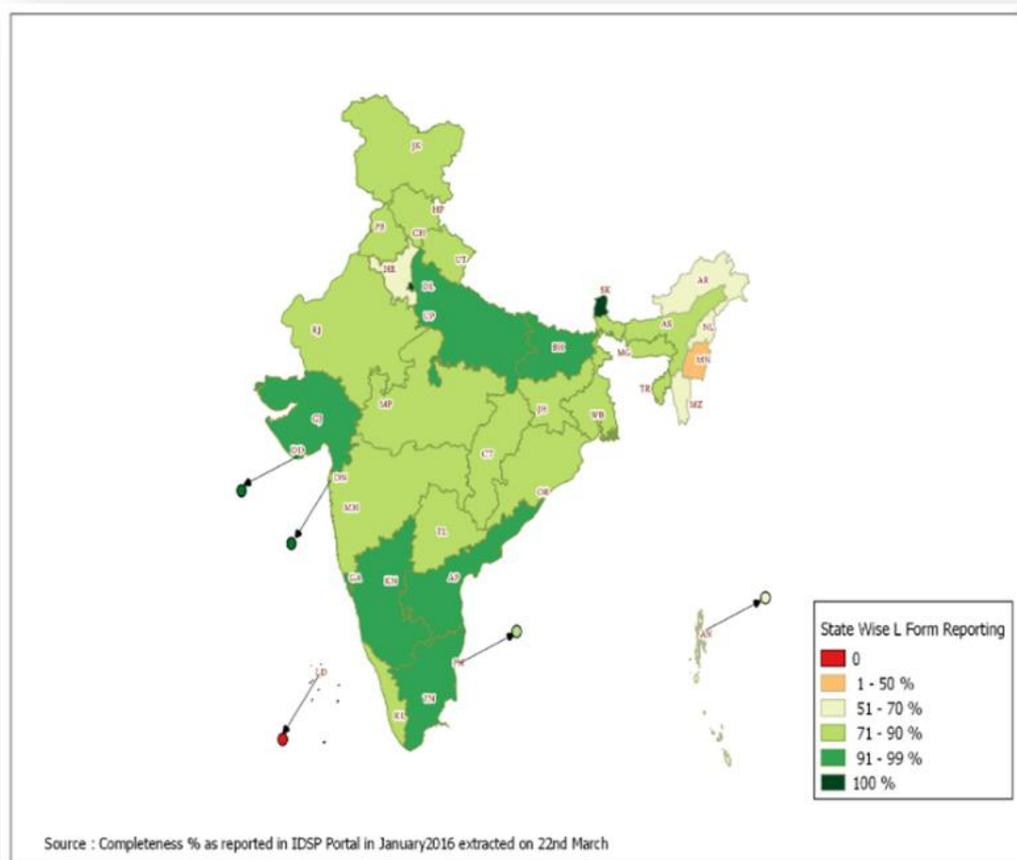


Fig 7: State/UT wise Presumptive Enteric fever cases and outbreaks for January 2016

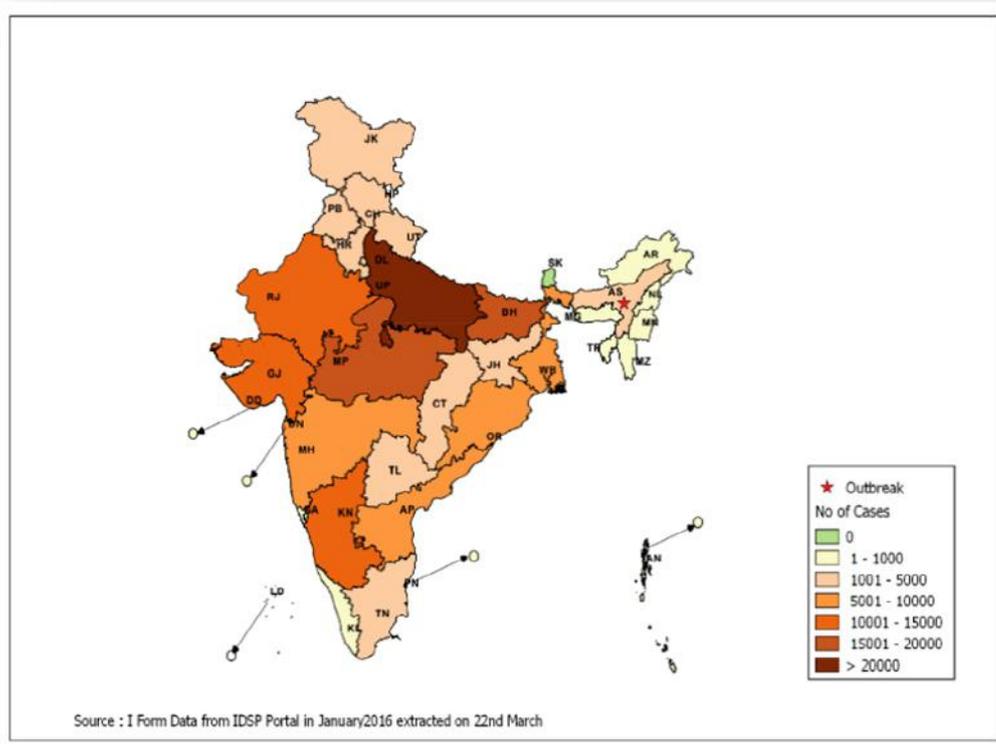


Fig 8: State/UT wise Lab confirmed Enteric fever cases and outbreaks for January 2016

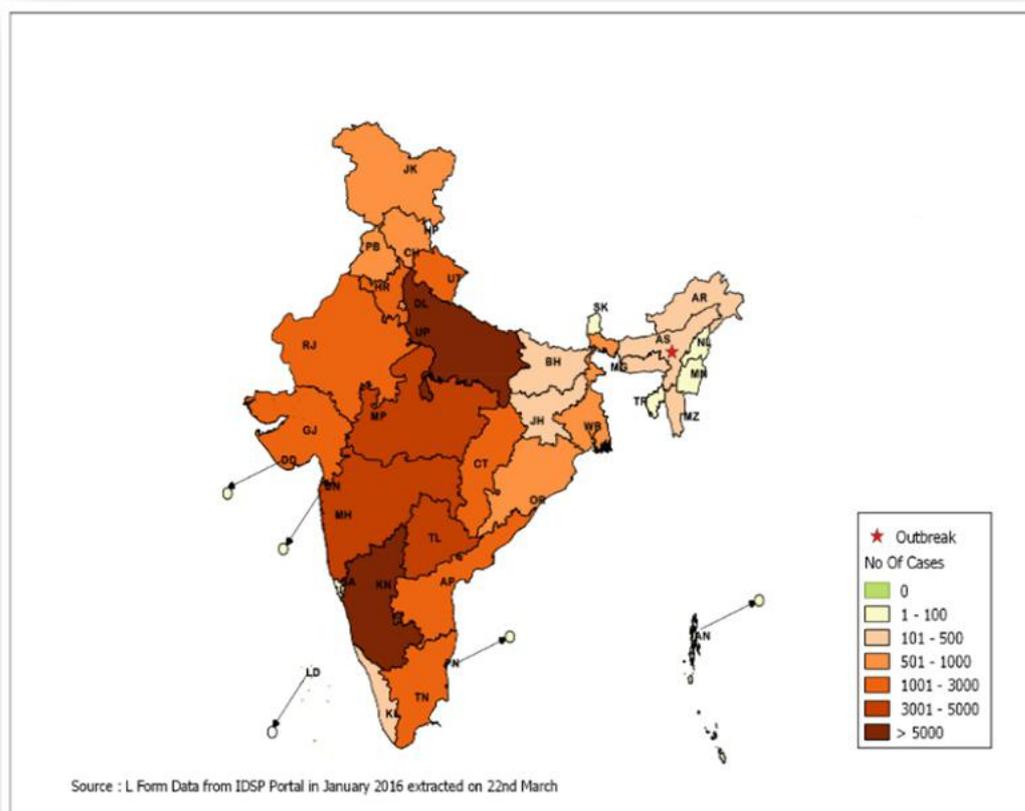


Fig 9: State/UT wise Presumptive ARI cases and outbreaks for January 2016

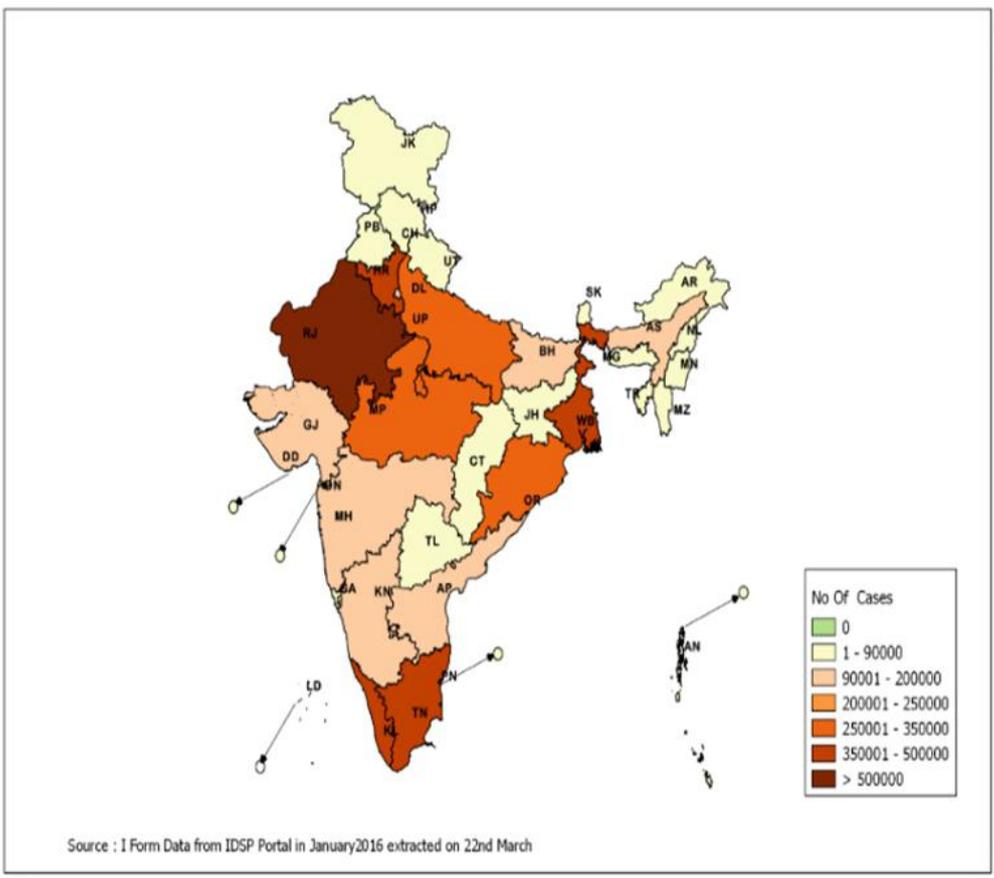


Fig 10: State/UT wise Presumptive Viral Hepatitis cases and outbreaks for January 2016

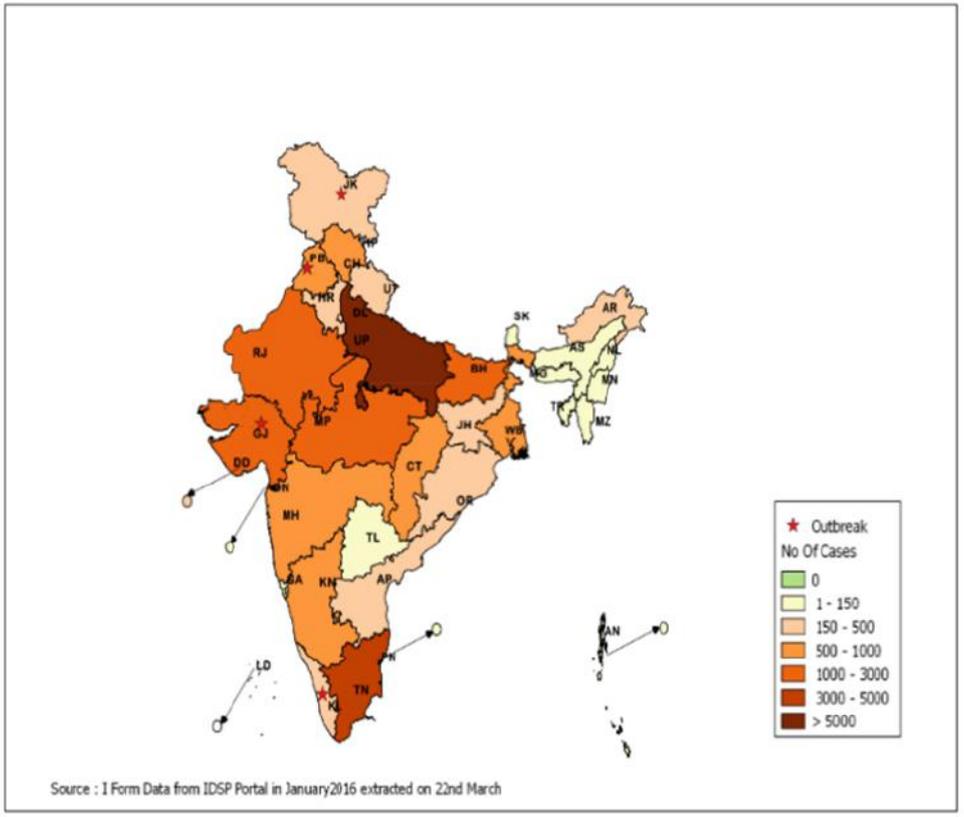


Fig 11: State/UT wise Lab confirmed Viral Hepatitis A cases for January 2016

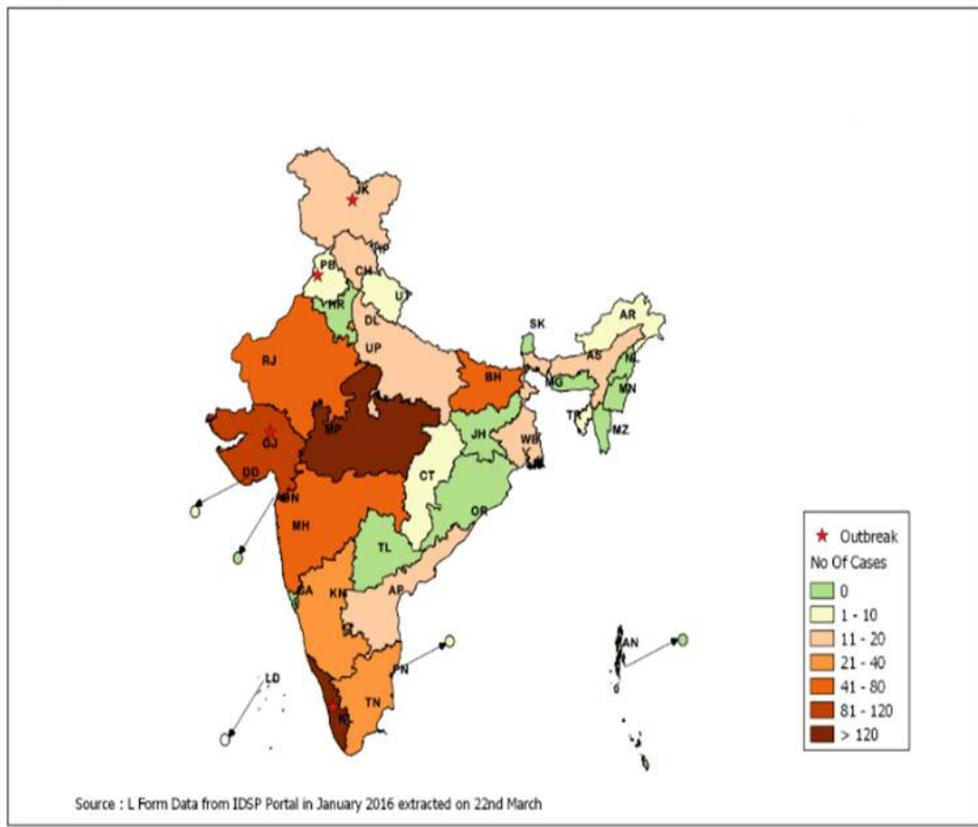
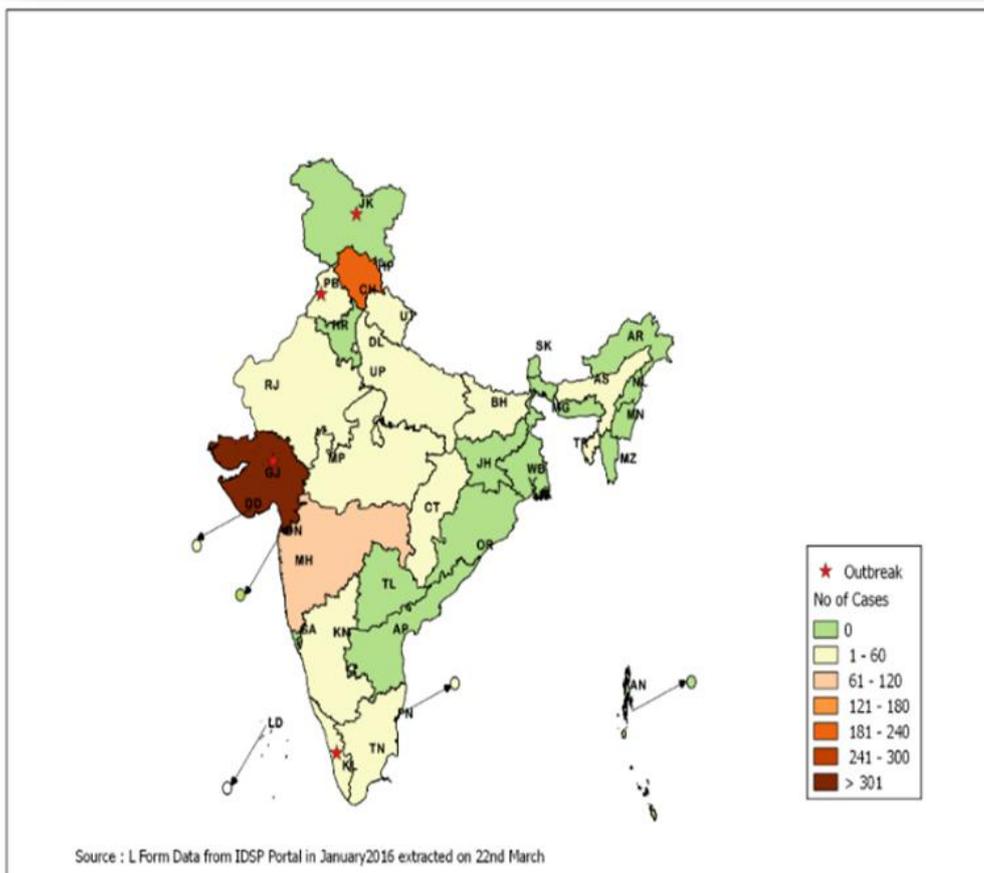


Fig 12: State/UT wise Lab confirmed Viral Hepatitis E cases for January 2016



Cholera Outbreak Investigation Report of Dilkhosh Tea Estate under Lakhipur BPHC, District Cachar, State Assam by Dr Ajit K Bhattacharjee, District Surveillance Officer, Cachar.

Background:-

- On 26th January' 2016, I/c Lakhipur BPHC informed of 2 deaths due to diarrhea with dehydration from Dilkhosh Tea Estate.
- On 27th Jan 2016, DSO and Rapid Response Team initiated the investigation.

Methodology:

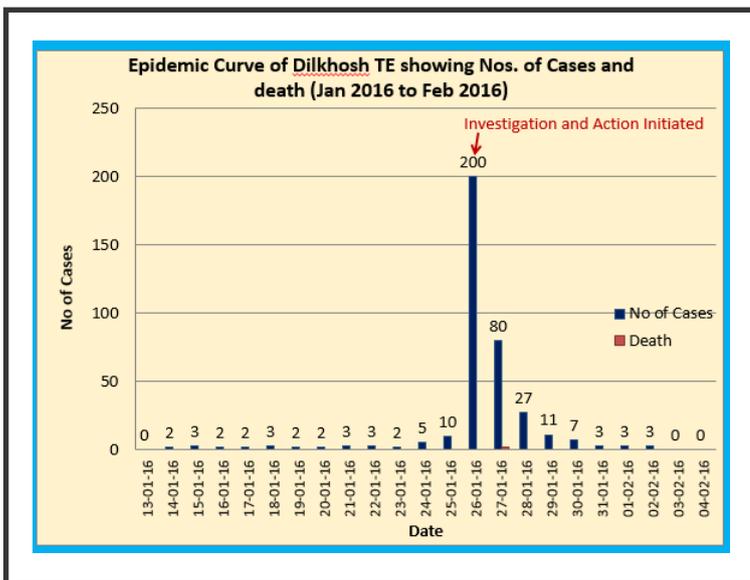
- WHO cholera case definition was used. *Standard case definition: A case of cholera should be suspected when: In an area where the disease is not known to be present, a patient aged 5 years or more develops severe dehydration or dies from acute watery diarrhoea;*
In an area where there is a cholera epidemic, a patient aged 5 years or more develops acute watery diarrhoea, with or without vomiting.
A case of cholera is confirmed when Vibrio cholerae O1 or O139 is isolated from any patient with diarrhoea.
- Active search of cases in the village and also in hospital indoor & outdoor cases.
- Comparison with the current rates to the baseline.
- Description of the outbreak by time, place and person

Laboratory Method:

- Randomly chosen 5 stool samples in Carry Blair Media for bacteriological examination sent to Silchar Medical College.
- 3 water samples from Barak River, PHE Supply Water and Household drinking water for bacteriological examination (Most Probable Number - MPN).

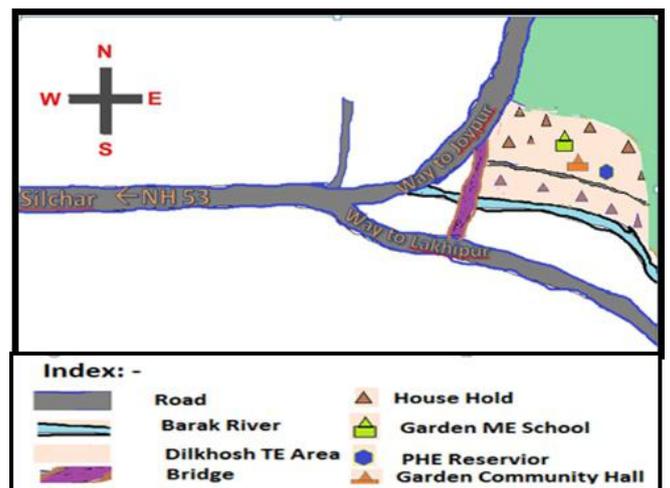
Result:- Epidemiology:

- As shown in epidemic curve, Acute Diarrhea cases were in clear excess of the baseline (2-3 cases per day) of Tea Garden.
- 373 cases and 2 deaths identified (attack rate 6.9%)
- Case fatality ratio was 0.53%.



- First case was reported in Lakhipur BPHC on 14th January 2016. Thereafter on 25th Jan 2016, 10 cases were reported and then sudden increase of cases was found and reached to the peak on 26-01-2016 and possible secondary spread. The last case occurred on 02-02-2016.
- Cases were clustered around the bank of river BARAK and then spread almost entire garden areas.

- Attack rate as higher among 0 – 4 yr (12.6%) and 45 – 59 yr
- age group (16.3%) and females (9.6%) were more affected
- then males (5.0%).



Laboratory Results:

- Out of 5, 1 stool culture was positive for Vibrio cholerae biotype Classical Serotype Ogawa.
- Water sample for MPN: For MPN, All 3 water sample collected from river, PHE supply water and household drinking water were found not fit for drinking purposes.

Environmental Investigation Method:

The outbreak investigation suggested that the cause of outbreak might be due to consumption of water from BARAK River without purification.

Conclusion:-

A **cholera outbreak** affected Dilkhosh Tea garden area. The most likely source was the river water (BARAK) which was contaminated and subsequently contamination occurred to the PHE reservoir Dilkhosh Tea garden.



Action from the field

Review meeting of District Surveillance Officers, Uttarakhand held at Nainital on 11.01.2016 under the Chairmanship of Addl. DGHS, Dr N. S. Dharmshaktu.



Review meeting of District Surveillance Officers Jharkhand held at Ranchi on 20.01.2016 under the Chairmanship of Addl DGHS, Dr N. S. Dharmshaktu.



Glossary:

- **P form:** Presumptive cases form, in which cases are diagnosed and reported based on typical history and clinical examination by Medical Officers.
- **Reporting units under P form:** Addl PHC/New PHC, CHC/Rural Hospitals, Infectious Disease Hospital (IDH), Govt. Hospital / Medical College*, Private Health Centre/ Private Practitioners, Private Hospitals*
- **L form:** Lab confirmed form, in which clinical diagnosis is confirmed by an appropriate laboratory tests.
- **Reporting units under L form:** Private Labs, Government Laboratories, Private Hospitals(Lab.), CHC/Rural Hospitals(Lab.),
- HC/Addl PHC/New PHC(Lab.), Infectious Disease Hospital (IDH)(Lab.), Govt. Hospital/Medical College(Lab.), Private Health Center/ Private Practitioners(Lab.)
- **Completeness %:** Completeness of reporting sites refers to the proportion of reporting sites that submitted the surveillance report (P & L Form) irrespective of the time when the report was submitted.
- **State Code:**
Andaman & Nicobar Islands AN; Andhra Pradesh AP; Arunachal Pradesh AR; Assam AS; Bihar BH; Chandigarh CH; Chhattisgarh CT; Dadra & Nagar Haveli DN; Daman & Diu DD; Delhi DL; Goa GA; Gujarat GJ; Haryana HR; Himachal Pradesh HP; Jammu & Kashmir JK; Jharkhand JH; Karnataka KN; Kerala KL;

Lakshadweep LD; Madhya Pradesh MP; Maharashtra MH; Manipur MN; Meghalaya MG; Mizoram MZ; Nagaland NL; Odisha OR; Puducherry PN; Punjab PB; Rajasthan RJ; Sikkim SK; Tamil Nadu TN; Telangana TL; Tripura TR; Uttar Pradesh UP; Uttarakhand UT; West Bengal WB.

• **Case definitions:**

Enteric Fever: Presumptive: Any patient with fever for more than one week and with any two of the following: Toxic look, Coated tongue, Relative bradycardia, Splenomegaly, Exposure to confirmed case, Clinical presentation with complications e.g. GI bleeding, perforation, etc. AND/OR Positive serodiagnosis (Widal Test)

Confirmed: A case compatible with the clinical description of typhoid fever with confirmed positive culture (blood, bone marrow, stool, urine) of *S. typhi*/*S. paratyphi*.

ARI/ ILI:-An acute respiratory infection with fever of more than or equal to 38°C and cough; with onset within the last 10 days.

SARI (Severe Acute Respiratory infection):-

An acute respiratory infection with:

- ✓ history of fever or measured fever of more than or equal to 38°C;
- ✓ and cough;
- ✓ with onset within the last 10 days;
- ✓ and requires hospitalization.

Viral Hepatitis:

Presumptive: Acute illness typically including acute jaundice, dark urine, anorexia, malaise, extreme fatigue, and right upper quadrant tenderness.

Confirmed: Hepatitis A: A case compatible with the clinical description of acute hepatitis with demonstration of anti-HAV IgM in serum sample.

Confirmed: Hepatitis E: A case compatible with the clinical description of acute hepatitis with demonstration of anti-HEV IgM in serum sample.

The data shown in the IDSP Surveillance bulletin are provisional, based on weekly reports to IDSP by State Surveillance Unit. Inquiries regarding the IDSP Surveillance Report, including material to be considered for publication, should be directed to: **Director, NCDC 22, Sham Nath Marg, Delhi 110055**

Prepared by: Central Surveillance Unit, IDSP under the guidance of Director, NCDC