



IDSP ANNUAL REPORT 2017







REGARDING IDSP

Integrated Disease Surveillance Project (IDSP) was launched by Hon'ble Union Minister of Health & Family Welfare in November 2004 for a period up to March 2010. The project was restructured and extended up to March 2012. All activities under the project continued as Integrated Disease Surveillance Programme (IDSP) in the 12th FY Plan under NHM. IDSP continues beyond 12th Plan as a Centrally Sponsored Scheme of NHM under Flexi-pool for Communicable Diseases.

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

Main objective of IDSP is to strengthen & maintain decentralized laboratory based IT enabled disease surveillance system for epidemic prone diseases to monitor disease trends and to detect and respond to outbreaks in early rising phase through trained Rapid Response Team (RRTs).

Programme Components:

•Integration & 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 Co-ordination for zoonotic diseases

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BRIEF SUMMARY REPORTS

Outbreaks Reported In 2017

CSU, IDSP receives disease outbreak reports from the States/UTs on weekly basis. On an average 30-35 outbreaks are reported to CSU weekly. A total of 1562 outbreaks were reported in 2014, 1935 outbreaks in 2015, 2679 outbreaks reported in 2016 and 1714 outbreaks reported from 2nd January 2017 till 31st December 2017. Majority of outbreaks reported in 2017 were of Acute Diarrheal Disease (21%), Food Poisoning (15%), followed by Chickenpox & Measles (13% each).

Labs Strengthening

District laboratories are being strengthened for diagnosis of epidemic prone diseases in a phased manner. Till date 138 labs in 29 states have been made functional. These labs are being supported by trained manpower, funds for essential equipment and an annual grant of Rs 4 lakh per annum per lab for reagents and consumables.

A State based referral laboratory network has been established by utilizing the existing functional labs in the identified medical colleges and other major centers in the states and linking them with adjoining districts for providing diagnostic services for epidemic prone diseases during outbreaks. Presently this network is functional in 23 States/UTs involving 108 labs.

Media Scanning & Verification Cell

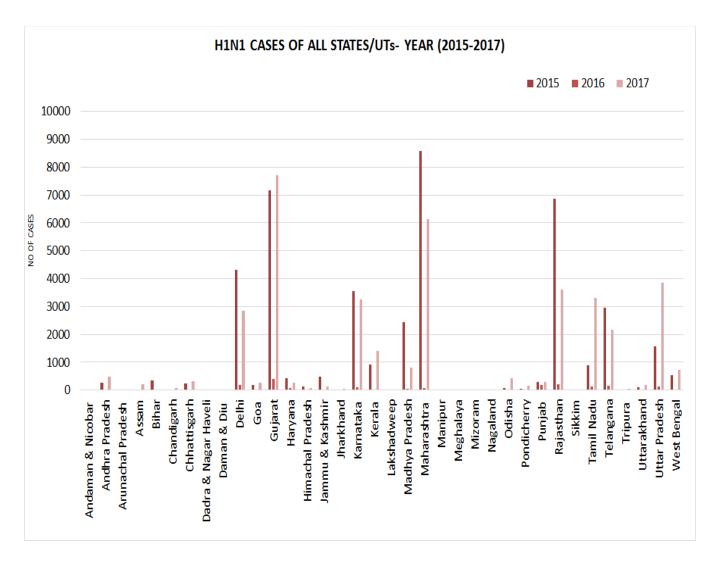
Media scanning is an important component of surveillance to detect the early warning signals. Media scanning and verification cell (MSVC) daily receives an average of 2-3 media alerts of unusual health events which are detected and verified. A total of 4157 health alerts have been detected since its establishment in July 2008. Majority of them were Acute Diarrheal Disease, Measles and Dengue. A total of 650 media alerts were scanned in 2017. Three most common conditions scanned in MSVC were Dengue, Food Poisoning & Fever.

The process of establishing Media Scanning and Verification Cells in all 29 States and 7 UTs is being undertaken right now.

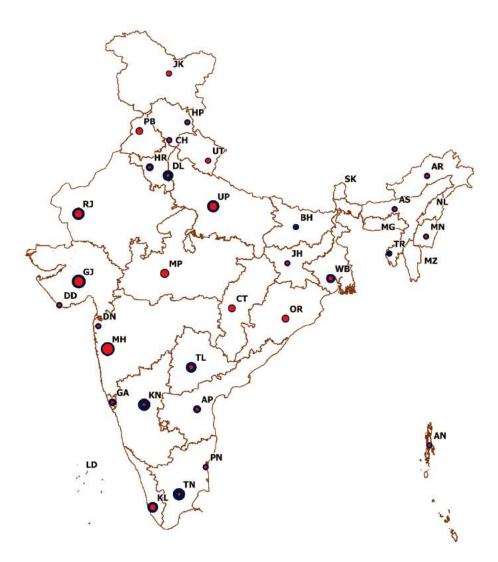
SITUATIONAL UPDATE OF SELECTED DISEASES

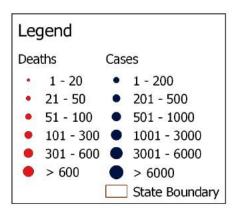
Seasonal Influenza (H1N1): IDSP compiles year-wise cases & deaths from Seasonal Influenza (H1N1) on behalf of MoHFW. This has become increasingly important in view of increase in number of cases which is seen from time to time. The compiled report is available on public domain at IDSP website under a separate tab for "Seasonal Influenza (H1N1)". The tab also has link to MoHFW website for Seasonal Influenza. MoHFW website has a wealth of information for public & professionals on this increasingly important condition including latest Technical Guidelines & IEC materials.

NCDC is also one of the nodal agencies (along with NIV, Pune) for Seasonal Influenza (H1N1) testing in the country.

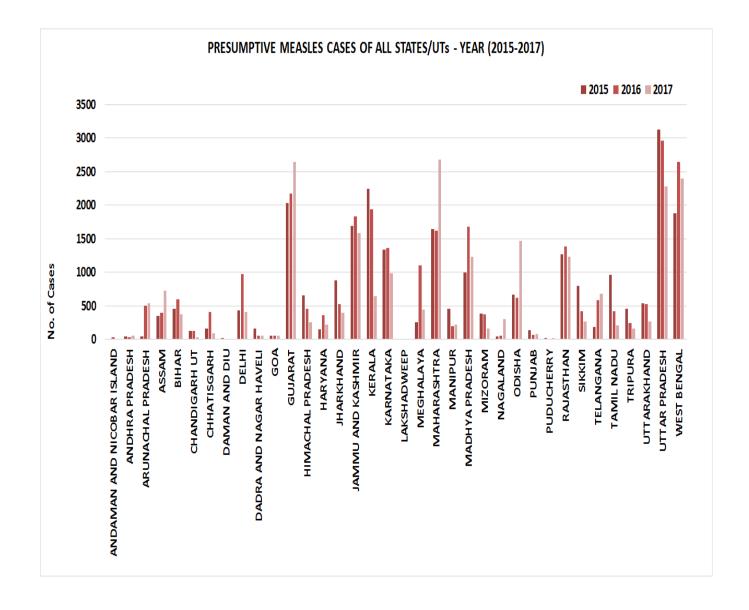


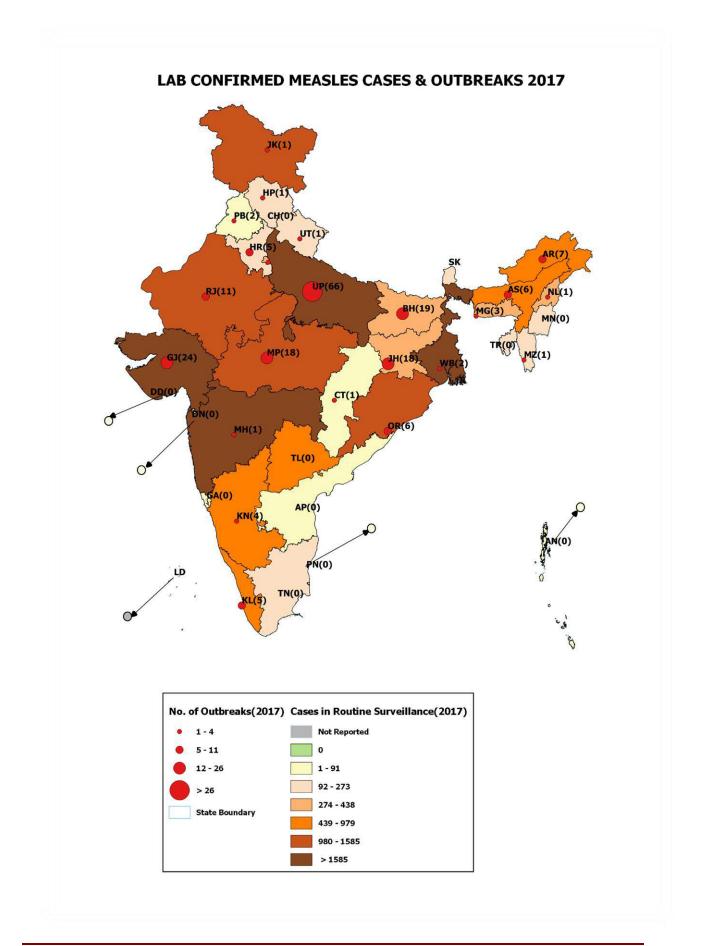
LAB CONFIRMED H1N1 CASES & DEATHS 2017



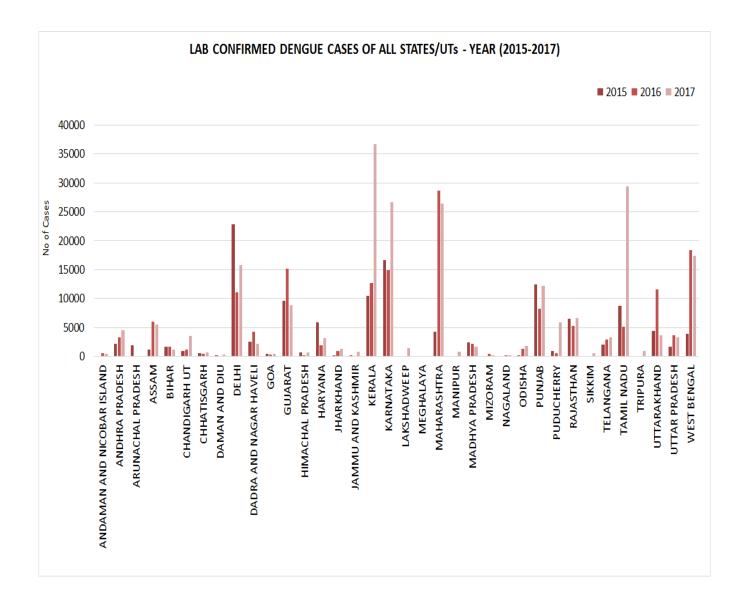


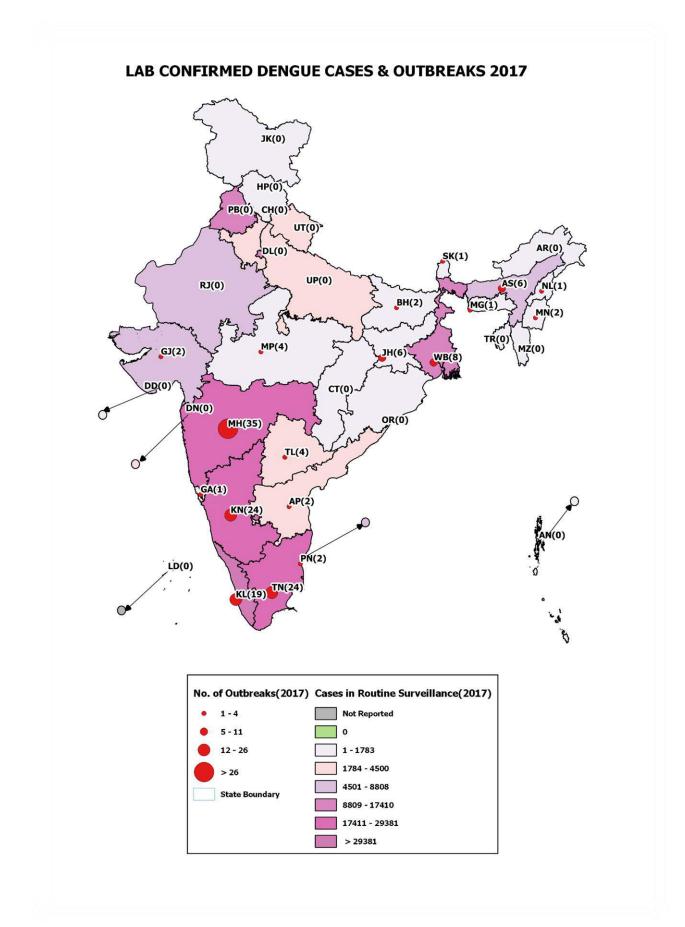
MEASLES: Measles is one of important Vaccine Preventable Disease (VPD) reported under IDSP. In 2015, 279 outbreaks of Measles were reported from all over the country which increased to 294 in 2016. However, in 2017, there was a decline in the number of outbreaks with total of 231 outbreaks in IDSP System. Using standardized case definitions, Measles is reported in P ('Probable') form by PHC/CHC Medical Officers & doctors in tertiary care institutes.





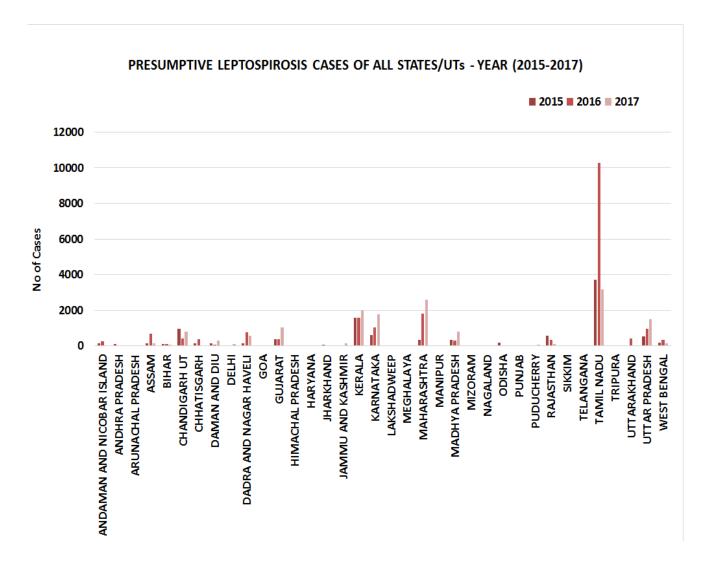
DENGUE: With rapid urbanization, Dengue has emerged as an important disease in recent years, causing outbreaks in many parts of the country. Under IDSP system, Dengue is reported in both P ('Probable') & L ('Lab Confirmed') forms. In 2015, 152 outbreaks of dengue were reported; while in 2016, there were 177 outbreaks. In 2017, 164 total outbreaks have been reported (including 10 mixed Dengue & Chikungunya outbreaks, and 2 Dengue & Leptospirosis outbreaks).

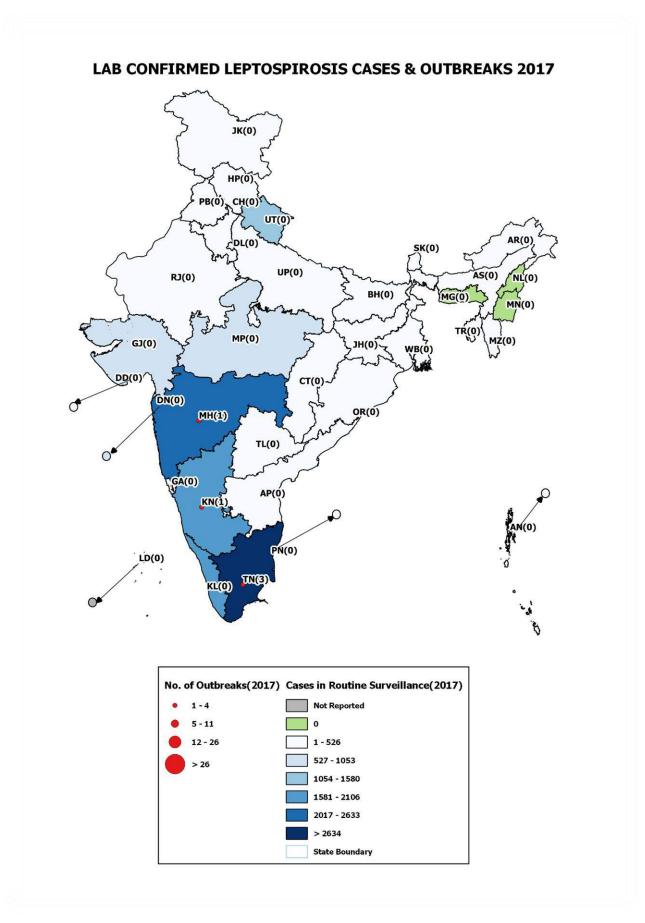




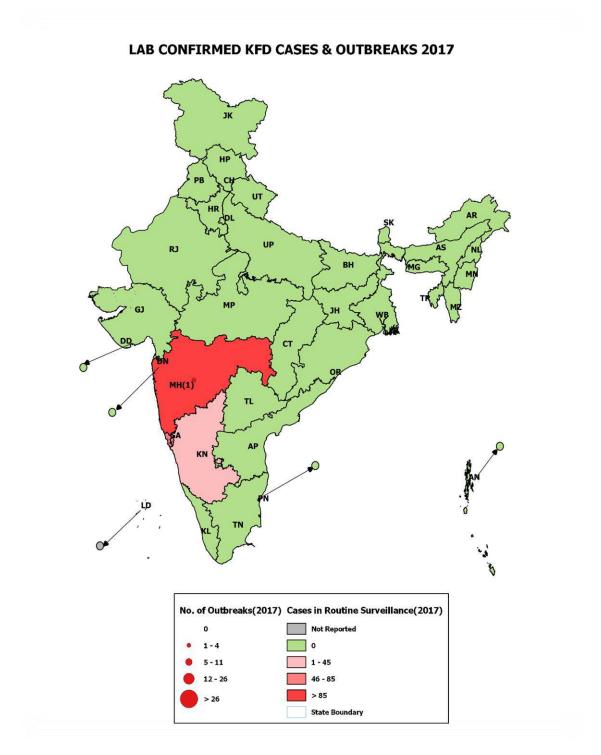
LEPTOSPIROSIS: Leptospirosis has emerged as an important emerging disease. Transmitted by urine of infected rats, humans become infected through contact with water or soil which has been seeded with infected urine. In India, Leptospirosis is predominantly seen in southern States like Tamil Nadu, Kerala and Karnataka. In addition, large number of cases are also increasingly reported from Maharashtra, Gujarat and Uttar Pradesh.

In IDSP System, Leptospirosis is reported in P ('Probable') form by PHC/CHC Medical Officers & doctors in tertiary care institutes AND 'L' (Lab Confirmed) forms.





KYASANUR FOREST DISEASE (KFD): A tick-borne viral fever, KFD is widely prevalent in States of Maharashtra, Goa & Karnataka. In addition to doing surveillance of this important emerging condition, IDSP also organizes regional meetings between States to facilitate data exchange & dissemination of latest guidelines. In IDSP, KFD outbreaks are reported.



ACHEIVEMENTS OF IDSP IN YEAR 2017

Influenza Surveillance: Integrated Disease Surveillance Programme (IDSP) (through its State Unit) undertakes surveillance for Influenza like Illness (ILI) and Severe Acute Respiratory Infections (SARI). The weekly status of seasonal Influenza H1N1 is collected, collated, analyzed and shared with senior officers of MoHFW and is also made available in the public domain in the IDSP website <u>www.idsp.nic.in</u>.

It was observed that in 2017, Seasonal Influenza (H1N1) previously called as Swine flu had a spurt from mid-June and started declining from Sept. 2017.

To combat the influenza spurt, IDSP played a pivotal role in surveillance & response. NCDC deputed senior level Public Health Teams to Maharashtra, Kerala, Telangana and Gujarat to assess the situation and assist the States in managing the spurt witnessed from May 2017. In addition, video conferencing was organized under chairmanship of Secretary (Health) HFW with the Principal Secretaries of the States/UTs of most affected States.

Strategic Health Operations Centre (SHOC): SHOC is established at NCDC under IDSP to strengthen the outbreak detection and response capacities of the States and districts by utilizing state-of-the-art information technology. An infectious disease outbreak plan has been prepared along with 47 standard operating procedures (SOPs) encompassing all the divisions and technical activities of NCDC that pertain to utilization of SHOC during a response to an infectious disease outbreak. In 2017, SHOC was activated to Level 1 for collection, compilation and analyzing the H1N1 data on daily basis from 36 states/UT in February 2017.

Revision of Reporting Formats: National Consultative Workshop on Revised Reporting Formats under Integrated Disease Surveillance Programme was organized on 2nd May 2017 in New Delhi to review and update the S, P and L data capturing tools of IDSP to ensure that minimum (essential) surveillance data for each disease is captured.

SELECTED REPORTS OF CENTRAL TEAMS DEPUTED IN 2017

Report of team deputed to Gujarat for Situational Review of H1N1 in August 2017:

Background:

The central team consisting of Dr. Dipak Bhattacharya, respiratory physician from Safdarjung Hospital, Dr. Lalit Dar, Professor Microbiology and In-charge Virology AIIMS and Dr. Sanket V Kulkarni, Deputy Director, NCDC Delhi were deputed to undertake situational review of Influenza-A (H1N1) in Gujarat in August'2017. This was in wake of high number of cases & deaths in the State [as on 21.08.2017 cases were 3220 with 278 deaths (CFR - 8.63%)].

Team met with Honorable Health Minister Shri Shankarbhai L. Chaudhari of Gujarat in which senior health officials were present. A presentation was made by Dr. Dinakar Raval, State nodal officer for H1N1 in which it was informed that the cases had started rising from 29th week with doubling in total number of cases in each week till 33rd week. Major cases & deaths reported from 4 major corporations viz. Ahmedabad, Rajkot, Vadodara and Surat. The current positions of logistics were also discussed including availability of drugs. There are 9 diagnostic facilities in the Government sector and 5 in the private sector of which 2 are only for sample collection and transport.

The team then visited civil hospital Asarva and met Medical Superintendent. A presentation of zone wise cases within Ahmedabad Municipal Corporation was discussed in which all HODs of the departments were present. Then team reviewed the infrastructural facilities for patient and diagnostic care.

Then the team conducted field visit to urban health centre Viratnagar along with home visits made to one death and one positive case.

Key findings of Central Team: The central team reached the following conclusions after considering the inputs provided by the local health authorities, field visits and interactions at various levels.

- a. The central team was of the opinion that surveillance for influenza is being carried out very efficiently and that there were no deficiencies on part of the state government machinery with regards to provision of infrastructure, deployment of human resources, supply chain of equipment and drugs.
- b. The currently circulating strain continues to be of the influenza A/H1N1 subtype and it is also susceptible to oseltamivir.
- c. The increase in the cases of seasonal influenza in Gujarat may be ascribed to a combination of the following reasons
 - Improved surveillance
 - Periods of excessive rainfall
 - During last year, the H3N2 and B subtypes of influenza virus were circulating, but not H1N1, leading to a build-up of the susceptible population
 - Within the influenza A/H1N1 subtype, a seasonal change in the circulating strain lineage from California to Michigan, as confirmed by National Institute of Virology, Pune (as also seen in other countries and other states of India)
- d. The overall deaths associated with influenza in Gujarat are within the expected range. The deaths in few districts were higher than expected, most likely due to delayed presentation of patients and initiation of oseltamivir therapy. Only 13 (4.6%) patients who had died in category C had been administered oseltamivir in less than 24 hours of onset of symptoms. Deaths have occurred in category C patients and were associated with underlying co-morbid conditions in majority of cases (159 (57%) patients who died had comorbid conditions).
- e. From 1st Jan to till 22nd Aug 2017, Gujarat has reported 3413 cases and 286 deaths due to Influenza A H1N1. Out of 278 deaths analyzed, 155 (55.76%) were belonging to Rural and 123 (44.24%) urban, 150 (53.9%) were Females and 128 (46%) were males. It was observed that the maximum number of cases and deaths are in the age group between 31-60 yrs.

Recommendations of the Central team: Based on their observations, the central team gave following recommendations to the State of Gujarat:

Immediate actions to be taken:

1. Vaccination policy should continue and be aligned with circulating influenza virus strains and National guidelines for seasonal influenza. All health care workers who handle high risk patient groups should continue to be actively encouraged to get immunized.

- 2. The overall responsibility of care and treatment of influenza cases should be assigned to a critical care team with specified faculty members, preferably from the departments of Medicine and/or Anesthesiology.
- 3. The door-to-door visits should also include educating patients and family members in hand hygiene (repeated hand washing) and maintaining a distance of at least 3 feet between infected and uninfected family members. Patients should be encouraged to stay indoors until complete recovery.
- 4. As seasonal flu is an infectious disease spread by droplet infection due consideration for adequate number of air changes in the ICUs/HDUs should be maintained. Air conditioning should be by window air conditioners which are set on fresh air mode (not recirculation mode) with a separate provision for exhaust in the room thereby preventing spread to health care providers.
- 5. As non invasive ventilation is also used for prolonged periods masks which avoid pressure to the nasal bridge (there by producing skin ulceration of nasal bridge) may also be considered.

Medium term actions for State:

- 1. Though full effort is made by all the functionaries, in tertiary care ICU/HDUs (High Dependency Units) there is always a scope for reemphasis and further training in care of critically ill patients. Similarly training for the staff of diagnostic facilities, with the support of NIV Pune would further improve the quality of diagnosis and interpretation of tests. The team also strongly believes that continuous education and training of all stakeholders involved with the clinical, diagnostic and therapeutic aspects related to this disease would go a long way in improving the outcomes.
- 2. The diagnostic laboratory at BJMC, Ahmedabad, would benefit from the provision of an automated nucleic extraction system to facilitate handling of the surge in testing.

Long term recommendations:

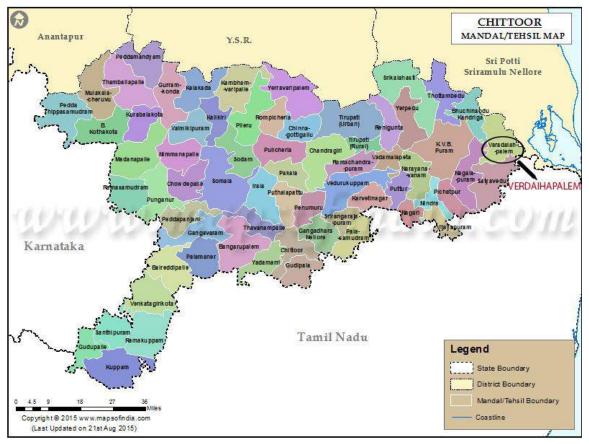
- 1. Observation was made that there is excessive and extended dependence on non-invasive ventilation and the switch to invasive ventilation is delayed in some cases. As there is such a extensive use of non-invasive ventilation, non-invasive ventilators (which can run continuously) instead of invasive ventilators for hospital use could be considered thereby saving on resources.
- 2. It is suggested that in future, in all IEC material, the words "swine flu" to be replaced by "seasonal flu" and all references to "H1N1" to be omitted.

<u>Report of Multi-disciplinary team deputed for investigation of Acute Febrile Illness in</u> <u>Verdaihapalem Mandal, Chittoor Dist., Andhra Pradesh in October' 2017</u>

As per the directives received from EMR division, a multidisciplinary central team was deputed to investigate outbreak of febrile illness in Varadaiahpalem Mandal, Ciittoor District, AP. It consisted of: Dr. Himanshu Chauhan, DADG (IH), Dte, GHS, MoHFW; Dr. Pranay Verma, Deputy Director, Epidemiologist, NCDC; Dr. Piyush Jain, Associate Professor, Dept of Medicine, Dr. RML Hospital; Dr. Chandrashekhar M Gedam, Assistant Director (Public Health Specialist), ROHFW, Hyderabad; deputed by Sr. Regional Director, ROHFW Hyderabad; Dr. Anukumar Balkrishnan, Scientist D, National Institute of Virology (Alleppy Unit), Alleppy, Kerala and Dr. Gavendra Singh, Consultant, NVBDCP, New Delhi

Background:

Chittoor District is divided in three divisions namely Chittoor, Madanapally and Tirupathi. It has total 65 mandals (blocks). Varadaiahpalem mandal is in Tirupati division and is in the easternmost corner of Chittoor district (as evidenced from map below). It is bordered on north by Nellore district, and is touching Tamil Nadu border on south.



Based on the preliminary information provided by the State and District officials, the Central Team decided to adopt the following methodology for conducting investigations in cause of febrile illnesses in the area:

- A. Interaction with the key stakeholders
- B. Analysis of the available data
- C. Visit to health facilities
- D. Visit to the family members of the deceased persons and interaction with their relatives
- E. Interview with patients suffering from febrile illness in the area
- F. Collection of blood samples from the active cases
- G. Testing of samples at NIV, Pune
- H. Entomological survey in affected area.

Epidemiological Methods Employed:

As per the epidemiological data provided by district administration; there were 18 deaths in the Mandal from 18th September 2017 till date (29th October 2017) in 6 villages. Maximum number of cases were in Karipakkam (6 deaths) followed by Rachkandriya (4 deaths).

Based on this data and interaction with key stakeholders; the team had decided to visit all the six villages where the deaths had been reported in last two months in this mandal. The team was divided in two groups. Their plan was to interview the relatives of deceased patient, thoroughly examine the available lab reports and medical records of deceased & active cases, collect blood sample from the active cases and to do entomological survey in the affected villages.

Apart from studying patient records, the team developed a questionnaire for interviewing active febrile patients. It has the following questions:

- A. History of Fever If Yes, then duration
- B. Associated Signs & Symptoms.
- C. Any history of Jaundice (clinically apparent or diagnosed in a health facility)

- D. Course of treatment Whom they first contacted; If they went to public health facility/if not, then why; how long did it take from them to contact health providers after onset of symptoms etc.
- E. Travel History or Contact with individuals of Foreign Origin
- F. Any other information as required

To understand the correct magnitude of problem prevailing in community, the Central Team randomly interviewed fever patients around the households where the above mentioned 19 deaths had occurred in the six villages falling under PHC Varadaiahpalem and PHC Chinnapanduru. The following were the main observations:

- 1. The most common complaints were Fever, Headache, Body Pain, Pain Abdomen & Vomiting.
- 2. Few patients also complained of distension of abdomen and breathlessness. There were no complaints of rash, bleeding manifestations, seizures, altered sensorium or jaundice. IgM & IgG against Dengue was also positive in few cases (done from private labs)
- 3. Other thing commonly noticed was many patients had S.typhi O/H antigens positive in the titer of 1:160 to 1:320 in the first week of fever itself. However, there were no cultures reports for typhoid.

Epidemiological Findings: The Central Team interviewed family members of 16 deceased patients. Key findings were:

- 1. The duration between onset of fever and death was 3-4 days in most cases
- 2. All deceased patients had history of fever
- 3. During interview of relatives of deceased patients at Karipakam village, it was found that most of them initially had with fever accompanied with bodyaches. It was found that they initially went to private practitioners at nearby town of Sullurpet (3 kms) in Nellore district. Here, some were apparently administered antibiotics & steroids. From Sullurpet some of them were referred to Chennai. On interviewing the relatives of deceased patients from Pulivallam also, a similar health seeking behavior during illness and pattern of referral was observed.
- 4. As per the available records, most patients had thrombocytopenia at some stage. It was found that many patients being treated at private setup were treated with steroids and transfusion of platelets was done in many cases
- 5. In almost all patients dying from febrile illness, there had been a reduction in platelet counts; although in many cases a diagnosis of Dengue was not clearly established. In many cases, the investigation for Dengue was not carried out despite symptoms suggestive of this disease

- 6. None of the deceased patients had a history of travel outside the country or contact with any persons of foreign origin
- 7. In records of these patients provided by State to the central team, there is a column on 'Cause of Death', but cause of febrile illness (like Dengue or Malaria) is not mentioned in the it for any of the record
- 8. Examination of records of deceased patients showed that many of them had hypotension or shock, and had multi-organ failure in their terminal stages.
- 9. The available laboratory investigations showed mainly leucopenia, thrombocytopenia with a few patients showing deranged KFT & LFT.

Interaction with the Oneness University: The team went to Oneness University to enquire regarding the country of origin of the foreign devotees coming to them and any signs & symptoms of febrile illness in them or in devotees from India. This was done in consideration with possibility that some of the devotees may have arrived from Yellow-Fever endemic countries, and the possibility of this condition had to be excluded.

The team asked for a list of devotees from foreign countries. In response, Oneness University provided list of batches of foreigners. They were analyzed for details of foreigners from Yellow Fever endemic countries.

According to the data submitted by Oneness University, it was found that 7 individuals had arrived from Yellow Fever endemic countries – 6 from Argentina and 1 from Ecuador. Following are their stay details:

Countries	Stay period 01.09.2017 to 11.09.2017	Stay period 26.10.2017 to 04.11.2017	
Argentina	3	3	
Ecuador	1	-	

According to Oneness University authorities, none of the individuals had any febrile illness during their stay at the facility and all mandatory travel documents including valid yellow fever certificates were available with the visitors.

Lab Investigation Results:

The team collected blood samples from 22 cases which were suffering from febrile illness. After separation of serum; all these samples were packed and were transported to NIV, Kerala and NIV, Pune for further assessment. The samples were tested for:

- Dengue, Chikungunya and Zika Virus At NIV, Kerala
- Yellow Fever Virus At NIV, Pune

Following is the summary of reports:

Conditions	PCR IgM ELISA		
Dengue	5	8	
Chikungunya & Zika	(All Negative)	3 (for Chikungunya only)	
Yellow Fever	All samples negative (tested by Realtime RT-PCR)		

Entomological Results:

The entomological survey was conducted at Vathalavallam and KPV Puram (Rachakandriga) where maximum fever cases were reported.

The field observations during survey are:

- Cleaning and covering of water storage containers were not seen during the visit.
- Stored water practice is seen in all the visited houses. The water stored containers were open where mosquito can breed easily.
- During larval survey *Aedes* larvae were found in stored water containers and *Culex* larval breeding also seen in dirty drain water.
- The IEC/BCC activities for VBDs were not seen during survey.

Date of Survey	Name of Village	Houses Checked	House Index (HI)	Container Index (CI)	Bretaeu Index (BI)
27.10.2017	Vathalavallam	44	11.3	12.7	10.95
28.10.2017	KPV Puram (Rachakandriga)	56	25	7.6	25

Suggestions/Recommendations from Entomological Team:

- Weekly entomological survey and source reduction activities should be done.
- For vector management activities like improved water supply and underground reservoirs should be done.
- For personnel protection house hold insecticides pyrethrum space spray should be used extensively for personnel protection against mosquitoes.
- To control *Aedes* larvae the Temephos should be used in water holding containers.

Interpretations of Central Team:

Based on field investigations, verbal autopsies, entomological surveys & field investigations, following interpretations can be made:

- The febrile disease in the Mandal are presenting like a viral illness with thrombocytopenia/leukopenia that is probably due to Dengue Virus
- Based on the epidemiological, clinical and laboratory data, Yellow Fever can be safely ruled out as the cause of the present febrile illness afflicting the residents of the villages visited by the team.

Recommendations of Central Team: In view of the above observations, the following recommendations are made:

- 1. Continued surveillance of the febrile illness situation is to be ascertained. Fever surveys to be continued and data to be analyzed for monitoring the trends.
- 2. As many patients are seeking treatment from private practitioners, there is need to sensitize them regarding the standard treatment guidelines for acute febrile illness
- 3. An awareness campaign should be undertaken in the community regarding reduction of mosquito breeding sites & use of personal protection measures against mosquito bites.
- 4. Send the blood samples of suspected cases to the nearest govt. facility (Medical College) for the confirmation of Dengue and Chikungunya by PCR or ELISA method
- 5. The entomological survey should be done regularly in the affected area, especially for the Aedes Mosquito. Continuous activities to remove the breeding places should be undertaken on urgent and priority basis

<u>Report of Rapid-Response team deputed for investigation of Mumps Outbreak in Bal-</u> <u>Ashram, Pinjura Block, Shopian, Jammu & Kashmir August'2017</u>

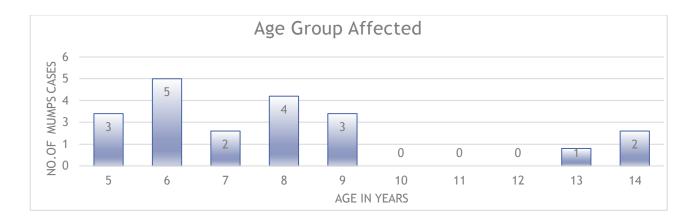
Background: On 15 August. 2017, District Surveillance Unit Shopian got information from medical officer NTPHC Pinjoora regarding occurrence of Mumps cases in Bal-Ashram Village Pinjoora of block Shopian, district Shopian. Consequently, a Rapid Response Team was constituted to investigate the outbreak. It was headed by Dr. Ab. Gani Raina BMO Shopian/ Incharge DHO Shopian. On preliminary enquiry, it was found that affected Institute (Bal-Ashram) is located in Block Shopian, 4 KMs away from District Head quarter (CMO's Office). The village Pinjoora is having a health facility in the form of NTPHC Pinjoora. The enrolment of the said Institution is 55.

Epidemiological Methods employed: RRT employed the following methods for investigation -

- 1. A standard case definition of Mumps including body-aches, low grade fever, fatigue, anorexia, nausea and enlargement of parotid glands and Orchitis where searched by door to door visit.
- 2. The current rate of cases were compared with the background
- 3. All the symptomatic patients were examined and diagnosed on the basis of case definition
- 4. RRT carried door to door search for the patients in the village and also in the schools.
- 5. Outbreak was described with respect to time place and person.

Results: Following were the key findings by RRT:

- a) Total of 20 cases of Mumps were identified using standard case definitions
- b) First case reported on 14th August' 2017, as the isolation of the case was not done the disease spread among close contacts (mode of spread was probably droplet infection)
- c) Clustering of cases occurred on 15th August'2017
- d) The current attack rate (36.36%) of cases was compared with the background (0%) by reviewing weekly IDSP data for the year 2016 and 2017.
- e) No patient was hospitalized
- f) No death or complication were reported
- g) None of the children developed Orchitis.
- h) The team observed unhygienic practices among the inhabitants



Actions taken: RRT recommended the following actions to authorities:

- a. Isolation of patients & suspects
- b. Standard case management to be provided to the patients
- c. The Bal-Ashram Management were advised to give plenty of fluids to their wards who are suffering from mumps in order to avoid dehydration due to fever
- d. They are also advised to give them proper food and the diet should be light
- e. Advised Management Staff of said Institution to use properly boiled water for drinking purposes
- f. Management Staff is also directed not send their children to school until five days after the symptoms start



OUTBREAKS INVESTIGATED BY CENTRAL TEAM OF IDSP & NCDC IN 2017

- Central Team assisted Kerala state in outbreak investigation of H1N1, Leptospirosis, and Dengue from 29 June 3 July 2017.
- Chickenpox outbreak investigation was conducted in Maharajganj district, UP from 17th-19th April 2017.
- Measles outbreak investigation was conducted in June 2017 in Longding District Arunachal Pradesh.
- Central team visit to review rising trends of cases and deaths related to H1N1 in the State of Maharashtra from 27th June 2017 to 4th July 2017.
- Central Team visit to Review rising trend of H1N1 cases and deaths in Gujarat State from 22nd 24th August 2017.
- NCDC Team visit to Noida, Uttar Pradesh to investigate Hand, Foot and Mouth disease on 29th August 2017
- Central team investigated dengue upsurge in Karnataka from 17th 20th August 2017.
- Central team investigated outbreak of Febrile Illness in Varadaiahpalem, Chittoor, Andhra Pradesh from 27th to 29th October' 2017.
- Outbreak investigation of glanders in horses in Delhi and advisory sent for Glanders to 5 States (Delhi, UP, Haryana, Rajasthan and Punjab) in December 2017.

WAY FORWARD (Integrated Health Information Platform [IHIP])

Background: MoHFW and WHO organized Joint monitoring mission (JMM) for appraisal of IDSP programme from 26th Nov – 8th Dec 2015 with the support from various developmental partners like WHO, CDC etc.

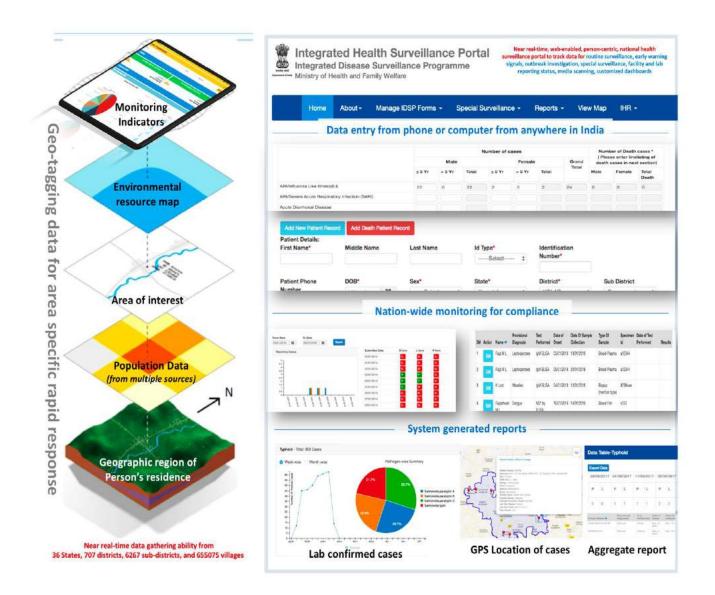
Two of the key recommendations of JMM were that Case Definitions & Reporting Formats need to be revised in light of changing scenario & emergence of new diseases, and WHO frameworks and standards to strengthen the Health Information System in ICT under IDSP should be adopted.

IDSP has taken important steps to address both these suggestions. Finalization of Case Definitions along with Reprioritization of diseases is already under process. To address the second aspect, a new portal called Integrated Health Information Platform (IHIP) is being developed with the support of WHO.

Key Features of IHIP Portal: IHIP conforms to all applicable Gol's e-Governance standards, IT, data & meta data standards incorporating various essential registries: such as health facility registry (up to village level), patient registry, essential medicines and commodities registry, health conditions registry, surveillance officer's registry, port registry (airports & seaports) population registry and user registry.

In essence, key features of IHIP include:

- Near Real time data reporting (through mobile application); accessible at all levels (from villages, states and central level)
- Advanced data modelling & analytical tools
- GIS enabled Graphical representation of data into integrated dashboard
- Role & hierarchy-based feedback & alert mechanisms.
- Geo-tagging of reporting health facilities
- Scope for data integration with other health programs



IHIP Rollout Plan: IHIP rollout proposed to be completed in 2018. Following are the proposed set of activities:-

- Soft launch in selected States.
- Training in the said States to develop State level Trainers and District Level Trainers through cascading training programme.

List of Contributors

- Situational Update of Diseases has been compiled by IDSP Data management Team (Dr. Pranay Verma, Mr. Prasun Sharma, Ms. Sujata Malhotra and Ms. Ritu Malik). The maps have been generated by Ms. Ritu Malik
- Achievements of IDSP has been compiled by Dr. Jyoti, Deputy Director, IDSP and Dr. Pranay Verma, Deputy Director, IDSP
- Report of team deputed to Gujarat for Situational Review of H1N1 in August 2017 has been contributed by Dr. Sanket Kulkarni, Deputy Director, IDSP
- Report of Multi-disciplinary team deputed for investigation of Acute Febrile Illness in Verdaihapalem Mandal, Chittoor Dist., Andhra Pradesh in October' 2017 has been contributed by Dr. Pranay Verma, Deputy Director, IDSP
- Report of Rapid-Response team deputed for investigation of Mumps Outbreak in Bal-Ashram, Pinjura Block, Shopian, Jammu & Kashmir August'2017 has been contributed by SSU, Kashmir; Dr. S. M. Kadri, EISO and Dr. Pradeep Khasnobis, Joint Director, IDSP
- WAY FORWARD (Integrated Health Information Platform [IHIP]) has been contributed by Dr. Suhas Dhandore, Deputy Director, IDSP
- 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; JharkhandJH; 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.

Disclaimer: Data shown in this report are provisional, based on weekly reports to IDSP by State Surveillance Unit. Inquiries, comments and feedback regarding the IDSP Surveillance Report, including material to be considered for publication, should be directed to: Director, NCDC 22, Sham Nath Marg, Delhi 110054. Email: dirnicd@nic.in & idsp-npo@nic.in

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