This issue of the NCDC Newsletter includes topics of current interest including Ebola Virus Disease outbreak which has been covered comprehensively. It has other usual features such as disease outbreaks investigated by EIS Officers, NCDC highlights featuring work underway. The global news and events include information on draft National Health Policy 2015, Aircraft (Public Health) and Port Health Rules 2015, current status of dengue vaccine development, Global TB report, along with an update on forthcoming conferences/meetings. The section on monitoring disease trends features evolving situation of dengue in India.

I hope that you will find the current issue of Newsletter useful. I look forward to your feedback.

From the Desk of the Director

Dr. S. Venkatesh
Director, NCDC

Lead Story

Ebola: Evolving Global Situation and India’s preparedness

Ebola Virus Disease (EVD) is the deadliest epidemic in recent times. EVD which was formerly known as Ebola hemorrhagic fever is a viral disease caused by Ebola virus.

It is a severe, often fatal illness in humans and dreaded as one of the world’s most virulent disease. The disease takes its name from Ebola River in Democratic Republic of the Congo (DRC), it first appeared in 1976 in 2 simultaneous outbreaks - one in Nzara, Sudan, and another in Yambuku, DRC. Until December 2013, a total of 23 outbreaks were recorded with 2,388 human cases and 1,590 deaths.

The current outbreak, which is by far, the largest till date, began in Guinea in late 2013 and spread to neighboring countries of Liberia and Sierra Leone. As of 17 Dec 2014, the WHO reports that a total of 18,603 confirmed, probable, and suspected cases of EVD have been reported in 5 affected countries, including Guinea, Liberia, Mali, Sierra Leone, and the United States of America, and from 3 previously affected countries, which include Nigeria, Senegal, and Spain. A total of 6,915 deaths have been reported. The cumulative total number of cases from most affected countries is depicted in the graph.
long as their blood and secretions contain the virus. Ebola virus has been isolated from semen up to 82 days after onset of illness. High Risk Group includes those who are in close contact viz. relatives or Health Care Workers (HCWs) of an EVD patient, handlers of dead body of an EVD patient.

Clinical Presentation and Management
After an incubation period of 2-21 days (average 8-10 days) patient develops fever and symptoms such as severe headache, fatigue, muscle pain, vomiting, diarrhea, abdominal (stomach) pain, or unexplained hemorrhage (bleeding or bruising). Patient may rapidly progress to multi-organ involvement, hemorrhages and shock. There is no specific vaccine or treatment (e.g. specific anti-viral drug) available for EVD. Symptomatic treatment is given and complications are managed as they appear. Maintenance of hydration, electrolyte balance and managing infections remains the mainstay of the treatment. ZMapp (Mapp Biopharmaceutical Inc.), cocktail of three different monoclonal antibodies that bind to protein of Ebola virus and some investigational vaccines are being developed by NIH and Department of Defense (DoD), USA. NIH & DoD are also funding the development of potential drugs to treat EVD. Recovery from Ebola depends on good supportive clinical care and the patient’s immune response. Undoubtedly, EVD which has high risk of mortality and morbidity, rapid and high rate of human-to-human transmission and no approved vaccine or therapeutics, has heightened anxiety across the world. However, the strategies to control EVD are simple and time-tested epidemiological principles of early detection, prompt response and prevention of further spread. The importance of communicating clear and accurate information to all stakeholders including the general public is the need of the hour. The high-level commitment and preparatory activities being undertaken by the central and the state governments need to be highlighted in the mass media. The fact that only a symptomatic person can infect others should also be an important element of the risk communication strategy.

India’s Preparedness

Ministry of Health and Family Welfare (MoH&FW), Govt of India, have taken multiple steps to prevent EVD and promptly respond if a case is detected in the country. The control room in the office of Director, Emergency and Medical Relief (EMR) (011-23061469) is working 24X7 for providing information about EVD. The Joint Monitoring Group (JMG) of various stakeholders of different ministries under the chairpersonship of Director General of Health Services meets frequently to discuss the evolving situation of EVD, reviews and revises the preparedness activities. Guidelines for surveillance and contact tracing, health care providers, hospital infection control, environmental control, clinical case management, collection storage and transportation of samples have been prepared and uploaded on the websites (www.mohfw.gov.in, www.nicd.nic.in). Advisories have been issued to State Surveillance Officers of all the States/UTs, airlines, travelers visiting from/to affected countries and families staying in the affected countries. Briefly the preparedness measures are as follows: The country is ready
The epidemiological information reveals that incidence is fluctuating in Guinea, declining in Liberia, and may still be increasing in Sierra Leone. The case fatality rate across the 3 most-affected countries in all reported cases with a recorded definitive outcome is 70 percent, while in hospitalized patients; the case fatality rate is 60 percent in Guinea and Sierra Leone, and 58 percent in Liberia. The response activities in the 3 intense-transmission countries is progressing in line with the United Nations Mission for Ebola Emergency Response (UNMEER) aim to isolate and treat 100 percent of EVD cases and safely bury 100 percent of EVD-related deaths by 1 Jan 2015. According to WHO, there is now sufficient bed capacity in EVD treatment facilities to treat and isolate all reported EVD cases in each of the 3 intense-transmission countries, although the uneven distribution of beds and cases means there are serious shortfalls in some areas. The affected countries also have sufficient and widespread capacity to bury all reported EVD-related deaths; however, because not all EVD-related deaths are reported, and many reported burials are of non-EVD-related deaths, it is possible that some areas still have insufficient burial capacity.

Natural History

Ebola virus is 1 of 3 members of the Filoviridae family (filovirus), along with genus Marburg virus and genus Cueva virus. There are 5 distinct species of Ebola virus viz. Bundibugyo ebola virus (BDBV), Zaire ebola virus (EBOV), Reston ebola viru+s (RESTV), Sudan ebola virus (SUDV) and Tai Forest ebola virus (TAFV). While BDBV, EBOV, and SUDV have been associated with large EVD outbreaks in Africa, RESTV and TAFV have not yet been implicated in a human outbreak. The RESTV species, found in Philippines and the People’s Republic of China, can infect humans, but no illness or death in humans from this species has been reported till date. The natural reservoir of Ebola viruses has not yet been proven conclusively. In Africa, fruit bats, particularly species of the genera Hypsignathus monstrosus, Epomops franqueti and Myonycteris torquata, are considered possible natural hosts for the virus. As a result, the geographic distribution of ebola viruses may overlap with the range of the fruit bats. Human beings, as a result of close contact with these animals or their carcasses, become infected and initiate the human cycle. In Africa, infection has been documented through the handling of infected chimpanzees, gorillas, fruit bats, monkeys, forest antelope and porcupines found ill or dead or in the rainforest.

Transmission may also occur with objects like needles that have been contaminated with the virus, or infected animals. An important point regarding transmission is that a person infected with Ebola virus is not contagious until symptoms appear. Ebola is not spread through the air or by water or, in general, by food. There is no evidence that mosquitoes and other insects can transmit the virus. People are infectious as
ensured that standard infection control practices are followed. A category 1 person can later convert to category 3 when symptoms appear. In such a scenario, State Surveillance Officer/State Nodal Officer (for Ebola Virus Disease) will ensure immediate isolation of the passenger at the notified isolation facility and management as per category 3 protocol. Samples will be sent to designated laboratories for EVD testing. Contacts, list of all passengers including category 2 & 3 will be given to state by officer in charge at the point of entry.

When the alert system detects a suspected Ebola case (dead or alive) as per the case definition, Rapid Response Team (RRT) is sent to the site of the reported case immediately to begin investigation and take initial control measures as required that include transfer of the patient to a designated health facility, ensuring Inter Personal Communication (IPC) and ensure that designated/trained persons are available to handle the patient. Identification of all contacts of the suspect case and inform them of the medical follow up that will be initiated. At the designated hospital, blood sample is collected and shipped to the designated laboratory for Ebola tests. Sample taking is a high-risk procedure. All barrier and contact precautions must be ensured. The first sample is taken when the suspect/patient is first seen. If the sample was collected within first three days of the onset of symptoms and the results are negative, the patient must be retained in isolation and a repeat sample is taken 48 hrs later. If the second specimen is negative consider other possible causes of illness. Contact tracing can be stopped.

If the test is positive for Ebola, implement response strategies with daily follow up of the patient’s contacts for 30 days after exposure. Contact tracing is one of the interventions that have been used to effectively control EVD outbreaks in Nigeria. Persons in close contact with confirmed Ebola case (alive or dead) are at higher risk of infection. All potential contacts of Ebola cases should be identified within first 72 hrs of reporting a confirmed (dead or alive)/suspected case and closely observed for 30 days from the last day of exposure. Contacts that develop illness should be immediately isolated to prevent further transmission of infection. An effective system for contact tracing should be established at the onset of the outbreak. Early involvement and full cooperation of affected communities is critical for successful contact tracing. The elements of contact tracing include three basic elements, namely, contact identification, contact listing and contact follow-up.

Note: WHO recommends 21 days of observation from the last day that person came in contact with ebola patient however MoH&FW, GOI, recommends 30 days of observation Advisory for families staying and travelers visiting / returning after visiting West African countries affected with EVD highlighting ‘Dos and Don’ts” are also available on MoH&FW website (www.mohfw.gov.in).

Guidelines for hospital infection control and health care providers

Standard contact and droplet precautions are recommended for management of hospitalized patients with known or suspected EVD. Recommendations for PPE and environmental infection control measures have been updated with the evolving situation of EVD. As per international recommendations, as preparedness, the isolation facility with single patient room (containing a private bathroom) with the door closed has been identified at Dr Ram Manohar Lohia Hospital at Delhi and similarly at identified hospitals in other states. Facilities have been advised to maintain a log of all persons entering the patient’s room.

All the health care workers who come in contact with the suspect/confirmed case of EVD should wear complete PPE which includes double gloves, boot covers that are waterproof and go to at least mid-calf or leg covers, single-
with the surveillance plan with the vision of two epidemiological scenarios. The case definitions and response in each of the situation is different. The first case scenario, that is the current phase, is an “Alert or Pre-epidemic” phase when there is no confirmed case of Ebola in the country but can have a case in future. The second scenario is an epidemic phase if there is a confirmed case in the country or more than one case or clustering in the community. In the Alert or Pre-epidemic scenario, the surveillance system should be robust enough to report any suspect case at the earliest.

MoH&FW have issued advisory to the airlines for inbound flights to India from affected countries. Matter for in-flight announcement apprising the passengers about EVD, signs and symptoms, declaration of ill health at the point of entry (POE) and subsequent self-monitoring and reporting have been prepared and provided to the airlines.

All the airlines have been advised to keep first aid kits, universal precaution kits as per the International Civil Aviation Organization (ICAO) guidelines and a stock of triple layer masks (25 Nos.), disposable hand gloves (around 25), hand sanitizer and disposal bags. They have been issued guidelines for isolation and management of the suspect/patient on-board and aircraft disinfection. Dedicated crew member to assist the ill traveller should use the suitable personal protection equipment (PPE) for dealing with the traveler and for cleaning procedures on board as needed. On arrival, aircraft crew should help the Airport Health Officer (APHO) and health personnel in contact tracing. Health alerts (box-1) have also been displayed on airports at strategic locations.

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**Health Alert Display**

Health alert for Ebola Virus Disease (EVD) to all the travelers who have visited or transited from African countries primarily West African countries which are affected with EVD like Guinea, Liberia, Sierra Leone and Nigeria and are suffering from.

Symptoms compatible with EVD like fever, weakness, Muscle Pain, Headache, Sore Throat, Vomiting, Diarrhea & Bleeding

Or

Have been in direct contact with blood or with other body fluids of a person or animal infected with EVD should immediately report to Airport Health Officer on arrival.

In India, the entry screening is being carried out at the international airports; seaports and guidelines are issued to the airlines through Ministry of Civil Aviation/Ministry of Health. A standard operating procedure is followed for entry screening. A health declaration card needs to be filled up at Point of Entry PoE particularly for those arriving from affected countries (as notified by Government of India from time to time). Screening of incoming passengers from Ebola affected countries have been categorized as categories 1, 2 and 3 for initiating action as depicted in Table below.

**Categorization of incoming passengers.**

<table>
<thead>
<tr>
<th>Passenger coming from affected countries</th>
<th>Actions</th>
</tr>
</thead>
</table>
| Category 1: With no symptoms and with no contact history | 1. Self-monitoring for temperature  
2. In case of any EVD symptoms contact identified health facility |
| Category 1: With no symptoms but have contact history | 1. Report to Health Officer (HO) at PoE  
2. Prepare a line list with contact details for future ready reference  
3. Passengers are kept under surveillance through IDSP network  
4. Daily follow up by the District/State Surveillance units and reporting to Central Surveillance Unit (CSU) for 30 days |
| Category 1: With symptoms | 1. Report to HO at PoE  
2. Isolated, tested and followed up as per protocol  
3. Prepare a line list with contact details |

A person meeting the case definition under category 3 is being isolated at the identified isolation facility (e.g APHO in Delhi). It is
Measles Outbreak in Naugaon Block, Uttarkashi District, Uttarakhand, April-August, 2014

On 21st June, 2014 the Uttarakhand state issued early warning signal report indicating clustering of fever cases with rashes among the children suspected of measles with one death in Bhounti village, Naugaon block, Uttarkashi district. National Polio Surveillance Programme supported in laboratory diagnosis of measles. From 30th July to 6th August, two EIS officers travelled to Uttarakhand to investigate the outbreak with the objective to describe the epidemiological features and associated risk factors and to provide recommendations for control.

The investigation reports and details of the past measles outbreaks were reviewed. Discussions were held with health officials and with few measles patients/parents/guardians and thereafter a case of measles was defined as “Any person residing in Bhounti village from 1st April to 5th August, 2014 and had fever and onset of rashes and cough or coryza (running nose) or conjunctivitis (red eyes). Measles vaccination status was determined as vaccinated/ un-vaccinated/unknown. Blood serology to detect measles specific IgM antibodies, nasopharyngeal swabs and urine samples for virus isolation and identification of genotype were done. A case control study was done with sample size of 56 cases and 56 controls.

Overall, there were 65 measles cases including one death, M:F 1.09:1. Median age was 4 years (Range: 9 months - 21 years) Case fatality rate was 1.53%. Twenty two cases suffered from diarrhea. 17 cases were vaccinated, 28 unvaccinated and 20 unknown status. The outbreak peaked during 3rd week of June and 1st week of July and declined in 3rd week of July (Fig 1).

Highest age specific attack rate of 54% was seen in the age group 1-4 years followed by 42.8% in < 1 year and 24% in 5-9 years. 11/12 samples were found positive for measles specific IgM antibodies (6/7 samples were detected positive in Himalayan Institute of Medical Sciences, Dehradun and 5/5 positive in Sanjay Gandhi Post Graduate Institute, Lucknow, the designated lab of NPSP). Among < 5 years olds, vaccination coverage was 58.3%, age specific attack rate was 54.16%, attack rate among vaccinated (ARV) was 50%, attack rate among unvaccinated (ARU) was 60% & vaccine effectiveness was 16 %. A case control study showed that the chance of acquiring measles when cases sharing bed room with other children was five times more (odds ratio: 5.1, 95% CI: 1.1-35.9), not received measles vaccine were two times more (odds ratio: 2.4, 95% CI: 1.1-5.3) and contacts living in houses with cases is eight times more in comparison to control (odds ratio: 8.8, 95% CI: 3.8-21.1). Recommendations made included outbreak response immunization for all infants/children from 6 months up to 15 years with one dose of vitamin A, strengthening the surveillance system and to carry out further studies to ascertain the reasons for possible vaccine failure.

(Contributed by Drs. Kapil Goel and D. Somashekar, EIS officers, Umid Sharapova and James Goodson, CDC, Atlanta and Rajshree Pundir, District Epidemiologist, Uttarkashi)
use impermeable gown that extends to at least mid-calf, or coverall, respirators, including either N95 respirators or powered air purifying respirator (PAPR), face shield, surgical hoods to ensure complete coverage of the head and neck. Apron that is waterproof and covers the torso to the level of the mid-calf (and that covers the top of the boots or boot covers) should be used if Ebola patient has vomiting or diarrhea. The enhanced guidance is centered on the principle of “no skin exposure” when PPE is worn. Proper, step wise donning and doffing of PPE should be done with extreme care and under supervision. Perform hand washing before and after direct patient care, after any contact with potentially contaminated surfaces, and after removal of PPE. Neglecting to perform hand hygiene after removing PPE will reduce or negate any benefits of the protective equipment.

Guidelines for use of dedicated disposable patient care equipment, restricting use of needles and sharps, management of waste including sharps, management of laundry, use of appropriate disinfectants have been detailed and are available on the website. Guidelines for handling human remains have also been formulated. Postmortem should be best avoided. Cremation/burial should be performed with minimal handling and gathering.

For laboratory diagnosis, National Centre for Disease Control (NCDC), Delhi and National Institute of Virology (NIV), Pune have been currently designated to undertake diagnosis of EVD in high containment (BSL3 / 4) facility. ELISA test for antigen detection, PCR (Real time and conventional) are being undertaken for diagnosis, NIV, Pune in addition has ELISA test for antibody detection. Samples are received at these institutes only after prior intimation. Ebola virus is detected in blood only after onset of symptoms, most notably fever. It may take up to 3 days post-onset of symptoms for the virus to reach detectable levels. Specimens should be taken when a symptomatic patient is first seen; however, if symptom onset occurred less than 3 days before the patient seeks care, a subsequent specimen will be required to completely rule out EVD. To build capacity of health care workers, EMR DteGHS, MOH&FW have organized trainings for master trainers and RRTs of States/UTs which included lectures, demonstrations of donning and doffing of PPEs, collection, packaging and transportation of samples and mock drills.

**Way Forward**

The Ministry of Health & FW in collaboration with WHO, India Office is preparing a comprehensive contingency plan for EVD. In addition, IEC material (Tri-fold pamphlets) is being prepared for travelers and health care providers for ready reference. At least ten more ICMR laboratories are being strengthened to undertake diagnosis of EVD, if need arises.

The Government of India has taken a proactive stand to control EVD. India is among the top five financial contributors to the United Nations’ ebola response, with a contribution of $12.5 millions. (http://www.business-standard.com). WHO, on August 8th, 2014 has declared it as Public Health Emergency of International Concern (PHEIC). No one in the world is safe unless the epidemic is controlled in West Africa and that there are close to 45,000 Indians in the affected countries. Early recognition and immediate institution of infection control practices is therefore the most critical aspect.

(Contributed by Drs Mala Chabbra, Shashi Khare, Veena Mittal, Pradeep Khasnobis, Himanshu Chauhan, Jai P Narain- NCDC and Rajeev Sharma- CDC India)
wise and organism wise treatment guidelines. It is uploaded on NCDC website (http://www.nicdc.nic.in).

NCDC invites comments and corrections for the same which may be provided at the earliest. The valuable comments may be sent at amrsurveillance@gmail.com, so that the treatment guidelines are adopted as the National Treatment Guidelines of the country.

(Contributed by Dr. Shashi Khare, Microbiology Division, NCDC)

Graduation Ceremony- First India EIS Cohort

The graduation ceremony for the first cohort of the India Epidemic Intelligence Service (EIS) was held on 30 September, 2014 at NCDC, Delhi. The seven EIS officers who were successfully awarded with an India EIS certificate were as follows: Drs Kapil Goel, Mohan Kumar, Parvez Pathan, Rajesh Pandey, Satish Kumar, Tripurari Kumar, and Yogita Tulsian. The second India EIS cohort comprises seven EIS officers and the third cohort, which began on 15 September, 2014, comprises 13 officers. The present intake in the 3rd cohort is 13 EIS officers. Amongst these, 5 are state sponsored, 2 are WHO-sponsored, 1 is central government-sponsored and 5 are self-sponsored. The inception course was initiated on 15th September, 2014 and now all 13 are working at their placement sites.

(Contributed by Drs. Anil Kumar, NCDC & Kayla Laserson, CDC-India)

NCDC releases handbook on safe Injection Practices

The handbook on Safe Injection Practices was developed under the National programme on Prevention and Control of Viral Hepatitis in India and was released by Prof. Jagdish Prasad, DGHS, on Annual Day of NCDC on 30th July 2014.

Adherence to safe injection practices and related infection control is a part of the responsibility of medical treatment-it protects patients and healthcare workers. Unsafe injection practices are increasingly being recognized as a major source of infection with blood borne pathogens including transmission of HIV, Hepatitis B, C and D amongst others. The handbook also covers the rationale use of injections like unhygienic practices of inserting injections, wrong techniques and improper waste management of sharps and needles. The hand book is targeted for health care providers and would help in prevention of transmission of not only Hepatitis B, C and HIV but also other diseases like Ebola which are transmitted by blood and body fluids.

(Contributed by Dr. Shashi Khare, Microbiology Division, NCDC)

Measles, Rubella and CRS Training Workshop, 15-18 October, 2014

From 15-18 Oct, 2014, NCDC organized a Measles, Rubella and Congenital Rubella Syndrome (CRS) training workshop for all India EIS officers (both cohorts 2 and 3) and NCDC staff at NCDC. The CDC facilitated the activity with three trainers: from CDC’s Global Immunization Division-Drs. Umid Sharapov, Hardeek Sandhu, and David Sniadack. The training consisted of lectures, including from WHO Country and Regional office, case studies, interactive discussions and games. The participants learned about the basic epidemiology of these diseases, how to conduct outbreak investigations for these diseases, and challenges with surveillance, control and elimination. This course helped them gain a better understanding of these pathogens and acquire the skills that would also be applicable to all diseases and the practice of field epidemiology.

(Contributed by Dr. Kayla Laserson, CDC-India)
NCDC Highlights

2nd India EIS Conference, 11-13 September 2014

The Second India Epidemic Intelligence Service (EIS) Conference, 2014 in collaboration with GDD-IC and CDC, Atlanta was held from 11 to 13 September, 2014 at National Centre of Disease Control (NCDC), Delhi. The theme of the conference was “Emerging Public Health Challenges in India”

The main objectives of the conference was to share knowledge and best practices related to emerging public health challenges and to highlight the importance of public health security, disease detection, public health response and policies. The conference provided a good opportunity for the India EIS officers (Cohorts I & II) to present their epidemiological investigations and share their field experiences.

Dr. V.M.Katoch, Secretary DHR, & DG, ICMR, GOI inaugurated the Conference on the 11th September. He congratulated the first India EIS Programme cohort 2012-14 for their successful completion of the programme.

The conference comprised of informative presentations and healthy discussions which included topics on “Viral Hepatitis in India: Challenges, Opportunities and Way Forward” by Dr. Shiv Kumar Sarin, ILBS; “Integrated Disease Surveillance Programme: Challenges and Opportunities at State Level” by Dr.V Kolandaswamy, Director of Public Health & Medical, Tamil Nadu; “Eliminating Kala Azar and Filariasis from India” by Dr. A C Dhariwal, NVBDCP; “Global Experiences in Combating AES” by Dr. James Sejvar, CDC to name a few. Director, NCDC speaking at the closing ceremony, encouraged the EIS Officers to uphold the success of India EIS Programme in their future years.

(Contributed by: Ms. Neha Pandey, NCDC)

MPH-FE Scholars graduate

The 9th batch of MPH FE scholars (2012-14) of NCDC graduated successfully and have been placed at state and central level in various government & non government organizations. 10th batch of MPH FE scholars (2013-15) have successfully completed their dissertation. Course work for 11th batch of MPH FE Scholars (2014-16) has commenced in NCDC since July, 2015

(Contributed by Dr.Arti Bahl, Epidemiology Division, NCDC)

National Treatment Guidelines on Antimicrobial Resistance

Antimicrobial Resistance is a worldwide problem. This is a growing menace and the various contributing factors are

- Inappropriate use (overuse, underuse and misuse) of antimicrobials in
  - Clinical medicine
  - Veterinary medicine
  - Agronomic and industrial practices
- Poor infection prevention and control in hospitals
- Inadequate monitoring of antimicrobial usage
- Use /availability of poor quality drugs
- Lack of awareness among policymakers, practitioners, patients, pharmacists and public in general about AMR
- Lack of effective treatment for most of the diseases

National Centre for Disease Control has developed National Treatment Guidelines through Expert Working Group and the Steering Committee to counter this growing problem under National Programme on Containment of Antimicrobial Resistance under 12th Five Year Plan (2012-17). It gives syndrome wise, disease
far the National Health Policy of 1983 and the National Health Policy of 2002 have provided a framework in guiding the approach for the health sector in the Five-Year Plans and for different schemes. A draft National Health policy 2015 has been prepared and put in public domain at www.mohfw.nic.in. Suggestions, feedback and comments by health experts and public are invited on or before Feb 28, 2015 for finalization by the government.

Aircraft (Public Health) and Port Health rules 2015 under revision

In compliance with the revised International Health Regulations 2005, Aircraft (Public Health) and Port Health rules have been revised and placed in public domain for suggestions. The Aircraft (PH) and Port Health rules were last revised in 1954 and 1955. The draft Aircraft (Public Health) and Port Health rules 2015 take into account a need for strengthened public health security and transport in view of recent global pandemics such as SARS, H5N1 influenza and the more recent MERS-Corona virus infection. Other important areas covered under these rules are food hygiene and safety, vector control and provisions related to dead bodies. The Aircraft (Public Health) rule, 2015, draft has a total twelve parts which will cover various aspects. Objections or suggestions, if any, are required to be submitted either to the Director General of Health Services, Nirman Bhawan, New Delhi - 110011 or through email to sk.singh59@nic.in

Publications of Interest

NCDC marked Swachh Bharat Abhiyan with a cleanliness drive on Gandhi Jayanti. All Officers & staff members joined in cleaning their office premises and NCDC campus. A function was held in the office premises & an oath to maintain cleanliness was taken by the officers & staff of NCDC

Draft National Health Policy Placed in Public Domain for feedback

National health policies play an essential role in defining a country’s vision, priorities, budgetary decisions and course of action for improving and maintaining the health of its people. So
**IDSP completes a decade of disease surveillance in India**

Integrated Disease Surveillance Project (IDSP) was launched with World Bank assistance in November 2004 to detect and responds to disease outbreak quickly. It got converted into a National Programme during 12th Plan and functions under the umbrella of NRHM. In a short span of about 10 years IDSP has made significant achievements both structurally and functionally. Surveillance units have been established in all states / districts (SSU/DSU). Central Surveillance Unit (CSU) is established and integrated in the National Centre for Disease Control, Delhi.

IDSP has successfully completed 10 years of surveillance activities in India in 2014. A function to commemorate the 10 years of disease surveillance activities in India, was organized by NCDC on 26th November 2014. Prof. Jagdish Prasad, DGHS graced the occasion as the chief guest. The event was attended by Dr. B.D. Athani, Special DGHS, Dr. Dharma Rao Director (VBD & CCD), former Project Directors & National Project Officers of IDSP along with State Surveillance Officers, other dignitaries and staff and faculty of NCDC. A book describing the 10 years journey of IDSP was released by the Chief Guest on this occasion.

A three day review meeting of the programme followed the inaugural event. All the states except Andaman & Nicobar Islands, Daman & Diu, Jammu & Kashmir, Kerala, Mizoram, Nagaland, Lakshadweep & Chandigarh participated in the review. A detailed component-wise discussion was held on Information & Communication Technology, Laboratory Strengthening, Human Resources & Training, Data Management, Outbreak Reporting and the way forward in the 12th five year plan. The sessions were chaired by eminent experts. The action points emerging from the review meeting have been shared with all stakeholders.

*(Contributed by Dr. Pradeep Khasnobis, IDSP, NCDC)*

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**Epidemiologists from NCDC and GDDIC attend the Public Health Emergency Management Capacity Building Fellowship at CDC, Atlanta**

As a continued effort towards the commitment made in the Indo-US health initiative and the subsequent launch of Global Health Security Agenda (GHSA), the Ministry of Health & Family Welfare, Government of India nominated Dr. Himanshu Chauhan, Assistant Director in the Epidemiology Division of NCDC to attend a six month fellowship at CDC Atlanta starting March 1st 2014. Dr. Rajeev Sharma from the Global Disease Detection India Centre (GDD-IC) was nominated by the CDC Country office in India for the same fellowship.

The fellowship aimed to build the capacities of the participants through a series of trainings, workshops, educational visits and participation in exercises related to public health emergency preparedness in the United States. The fellowship was conducted by the Division of Emergency Operations (DEO) in the Office of Public Health Preparedness and Response (OPHR) of CDC.

The fellows were exposed to all levels of emergency preparedness plans and procedures in the United States ranging from the County, State, Regional & Federal level.

*(Contributed by Drs. Himanshu Chauhan, IDSP, NCDC & Rajeev Sharma, CDC-India)*
Monitoring Disease Trends

Status of Dengue in India 2011 to 2014

Dengue is the most common mosquito-borne viral disease of humans that in recent years has become a major public health concern. The past four years’ data from IDSP portal indicates a seasonal trend of dengue with peak in October. Occurrence of dengue cases in 2014 was lower as compared to previous year. The highest case load is in Maharashtra (17%), Rajasthan (13%), and Tamil Nadu (9%) as compared to Tamil Nadu (16%), Karnataka (13%), Kerala (11%), Maharashtra (8%) and Gujarat (8%) in the previous year. The National Vector Borne Disease Control Programme (NVBDCP) has reported 19,661 dengue cases and 43 deaths as of 27 October 2014 (provisional) and the case fatality rate has been consistently below 1%.

Contributed by Drs Pradeep Khashnobis, Chhavi Pant Joshi, & Prasun Sharma, IDSP, NCDC

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