



NCDC Newsletter

Quarterly Newsletter from National Centre for Disease Control (NCDC)



From the Desk of the Director



Dr L.S. Chauhan
Director, NCDC

This issue of the NCDC newsletter highlights the remarkable success of the WHO South-East Asia Region, particularly India, in achieving polio free status. It also underlines the central role of surveillance in this achievement. The outbreak investigations carried out by Epidemic Intelligence Service (EIS) officers are showcased in the outbreak update section as are the initiatives undertaken by various departments. Other stories of interest include: diagnostic technologies developed by the

ICMR, India's success in eradication of yaws triggering the global eradication campaign by WHO, and update on new bird flu H7N9 virus infection. The MMWR piece is on the human papilloma virus vaccine.

I am pleased to share these stories and look forward to your feedback.

In This Issue

Lead Story	1
<i>Polio eradication in India</i>	
Outbreak Updates	4
<i>Acute gastroenteritis in Odisha</i>	
<i>Hepatitis E outbreak in Amritsar</i>	
NCDC Highlights	6
News and Events	8
Forthcoming Conferences/ Meetings	9
Use of Modern Technology in Public Health	10
MMWR Selected Coverage	11
Monitoring Disease Trends	12
<i>Enteric Fever in India, 2010 to 2013</i>	

Lead Story

Polio Eradication In India – A Public Health Triumph

Completing three full years without reporting any case of polio, India celebrated a landmark achievement in public health on 11th February 2014 – a milestone achievement in public health.

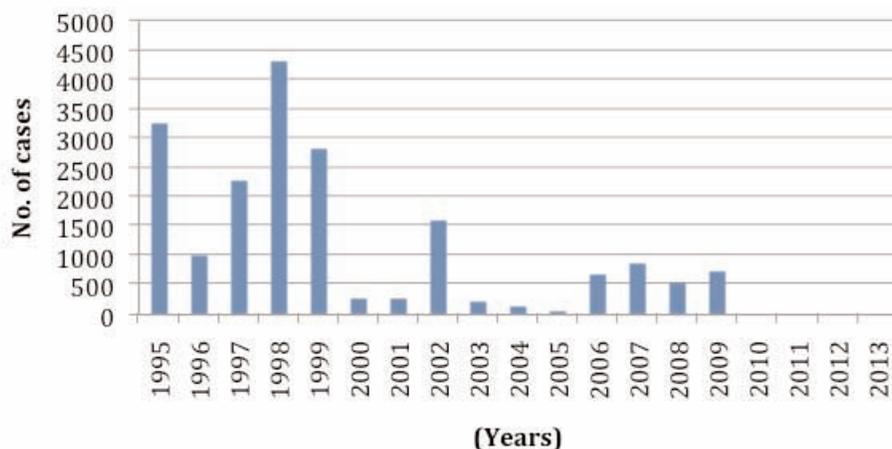
It took India nearly 16 years since it began its efforts to eradicate polio, to finally get rid of the wild polio viruses from the country. The success of polio eradication in India is a tribute to the strong commitment and leadership of the Government of India and the state governments. Aably supporting them were polio partners WHO, UNICEF and Rotary International. However, the fight against polio could not have been won without the dedication and hard work of the

frontline workers and volunteers and the unequivocal support of all sections of the society. India has not reported any case of polio since a two-year old girl got polio paralysis on 13th January 2011 in Howrah district of West Bengal. India's victory over polio paves the way for a polio-free certification of WHO's South-East Asia Region by the end of March.

This is an unprecedented progress for a country that reported more than half the global polio cases until 2009. Experts always predicted India would be the last to be polio-free as its endemic pockets in parts of Uttar Pradesh and Bihar were among the most difficult places in the world for polio eradication.

India overcame huge challenges with a strong commitment that matched a US\$ 2 billion allocation to stop polio. Implementing innovative strategies, the programme reached an incredible 99% coverage in polio campaigns, ensuring that every child, even in the remotest corner of the country was protected against polio.

Figure 1: Total number of wild polio virus cases in India from 1995 to 2013



India introduced the oral polio vaccine in 1985 in its Universal Immunization

Programme with the backdrop of over 200,000 cases of polio annually. In 1995, the first national polio immunization campaign was held. Since then two national and multiple sub-national campaigns are rolled out every year for children up to 5 years of age.

In each national polio campaign, 2.3 million vaccinators, led by 155,000 supervisors, visit 209 million households to immunize 170 million children up to the age of 5 years.

To immunize children on the move, transit vaccinators are positioned at bus stands, train stations, on trains, market places and important road intersections. Nearly 10 million children are immunized by the transit teams in each polio campaign, of which 100,000 are on trains.

The Programme focused on the migrant population – people on the move in search of livelihoods – who miss polio immunization because they are always in transit. The programme covered 70,000 brick kilns and 38,000 construction sites. Nearly 4.5 million children were immunized in the high-risk migrant settlements in each polio campaign.

Research and innovations have been an integral part of the programme – providing new direction to the eradication effort. Studies to assess population immunity and explore the best vaccines for boosting population immunity were behind major programmatic decisions. The more efficacious monovalent oral polio vaccine (mOPV)

was introduced in 2005 and the bivalent OPV in 2010 to break the last chains of the poliovirus.

Heightened surveillance for the poliovirus has been the backbone of the polio eradication initiative in India. The surveillance for poliovirus detection in humans was supplemented with environmental surveillance. Sewage sample testing was conducted in areas with large migratory populations (Mumbai, Delhi, Patna, Kolkata and Punjab) to detect polioviruses in the environment. The Programme consistently applied surveillance data to prioritize and guide immunization activities and future strategies.

More than 3,000 independent monitors were deployed to provide feedback on programme quality so that immediate corrective actions could be taken based on real time information generated through this system.

India remains at a risk of polio resurgence through distant or cross-border importation of the wild poliovirus from countries with ongoing transmission. India has, during previous years, exported wild polioviruses to other countries. It, therefore needs to ensure that high population immunity is maintained against the poliovirus. As a polio risk mitigation strategy, 102 vaccination posts have been identified along the bordering areas of Bangladesh, Bhutan, Myanmar, Nepal and Pakistan to ensure continuous vaccination of children under the age of 5 years crossing these borders. India announced that proof of vaccination against polio would be mandatory

after 15th March 2014 for everyone entering India from polio-endemic countries in order to safeguard the country's polio-free status.

India is already playing a critical role in the development of the polio end-game strategy, with support from WHO and other partners. The strategy involves a switch from trivalent oral polio vaccine to bivalent oral polio vaccine and a phased withdrawal of the oral polio vaccines from the Programme with the possible introduction of inactivated polio vaccine (IPV) in the routine immunization schedule.

India's polio eradication programme is a model of excellence for other public health initiatives in India and for global health interventions as a whole.

India is using the polio infrastructure, expertise and operational experience to strengthen routine immunization in the country and protect its children from other vaccine preventable diseases especially measles, as well as for health system strengthening. Social mobilizers from the polio Programme are counselling pregnant women on breastfeeding and providing newborns with routine immunizations. The polio surveillance system is helping build capacity for India's Universal Immunization Programme.

Lessons from India's success have informed the new *Polio eradication & endgame strategic plan 2013-2018* and is already showing progress in eradicating polio from the few remaining reservoirs where it remains.

Figure 2: A child receiving polio vaccine drops in Bhopal, Madhya Pradesh, January, 2014



While India's anniversary is a significant milestone and proof of what is possible, recent outbreaks in the Middle East and the Horn of Africa – both linked to the virus from endemic countries – point towards the fact that as long as polio exists anywhere, it is a threat everywhere. India must capitalize on its achievement to help end polio globally and protect the health of children everywhere for generations to come.

(Contributed by Dr Kapil Goel (EIS Officer) and Dr Ajay Khera (Deputy Commissioner – Child Health & Immunization)

EIS: Call for applicants

The National Centre for Disease Control (NCDC), in collaboration with the US Centers for Disease Control & Prevention (CDC), is currently hosting the India Epidemic Intelligence Service (EIS) Programme, modeled on the US EIS Programme. This is a joint venture between India and USA, aimed at preparing public health professionals for leadership positions at district, state and national levels. Applications are invited for the enrolment of the 3rd cohort of outstanding public health professionals for India EIS, commencing in September 2014 for a period of two years.

Eligibility: (1) MBBS plus MD (Public Health) OR MBBS plus MD (Clinical/Para-Clinical) with two years public health experience OR MBBS with PG Diploma in Clinical/Para-Clinical field from any recognized institution with three years of PH experience OR MBBS from any recognized institution with five years of PH experience, may also apply; (2) 25–45 years at the time of application; (3) Sponsored/nominated candidates should be regular/permanent employees of Central/State Health Service or equivalent viz. ESI, Railways, Municipal Corporations, Local Bodies, etc; self-sponsored candidates may also apply.

Applications shall be accepted in the prescribed application form, which must be e-mailed to eiscellncdc@gmail.com on or before June 7, 2014. Prospective applicants are urged to visit the NCDC website <http://ncdc.gov.in> for additional information and prescribed application form. The compendium explaining the India EIS Programme, detailed selection procedures, applicable stipend and allowances is also available at the NCDC website.

For any further query, please email at eiscellncdc@gmail.com

Acute gastroenteritis outbreak in Odisha

On 15th January 2014, the District Surveillance Unit at Kendrapara reported an acute gastroenteritis outbreak from five villages of Dangamal PHC. Cases had a common history of lunch in a community feast at village Khamarsahi on 13th January 2014. Five rectal swabs were sent for laboratory conformation, of which one sample was positive for cholera culture (O1 Ogawa). Our team of two EIS officers from NCDC reached on 9th February 2014 to further investigate the outbreak. The objectives were to describe the epidemiological characteristics and to determine the associated risk factors.

We conducted a house-to-house survey in the affected five villages to trace the persons who consumed food in the community feast as well as persons who became ill. We also conducted a retrospective cohort study to determine the associated risk factors. We defined a case as “any person of any age who is a resident of Khamarsahi, Dangamal, Nuagaon, Ragdapatia or Nalitapatia village, and had consumed food at the lunch community feast in village Khamarsahi on 13th January 2014, and developed acute diarrhoea or vomiting with or without

abdominal pain and fever.” Data collected were entered in MS Excel and analysed in SPSS.

Of the 140 people from the five villages who had lunch at the feast, 104 (74%) developed illness post feast and 36 (26%) had no acute gastroenteritis symptoms. While all age groups were affected, the most affected age group was 5–14 years (25%). The first case developed symptoms at 3 pm on 13th January and the last case developed symptoms at 10 am on 15th January.

The epicurve shows a point source outbreak that peaked on 14th January. The incubation period varied from 3 hours to 46 hours. No deaths were reported. 71% of cases were from Khamarsahi village. The attack rate of food item curd was 83% with a risk ratio of 1.62 (1.18–2.22); and paneer mix was 86% with a risk ratio of 2.88 (1.65–4.99). Other factors were not significant.

Food samples were not available for testing. Curd had been prepared locally at home but the paneer was bought a day before the feast and not stored properly. Descriptive findings and analytical study results indicate that this food-borne disease outbreak in Dangamal

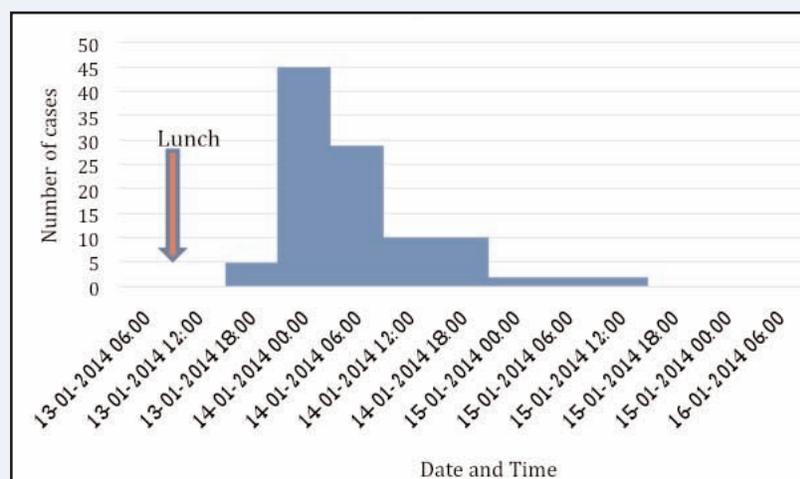
PHC, was associated with milk product based foods (curd and paneer mix) served at the community feast.

Recommendation:

Proper storage and cooking of all food items (especially milk products) and sampling of food items at appropriate intervals can help prevent future food-borne disease outbreaks.

(Contributed by Dr Rajesh Pandey and Dr Rajesh Yadav, EIS officers)

Figure: Epicurve of onset of symptoms of acute gastroenteritis cases in Dangamal PHC, January 2014



Hepatitis E outbreak in Amritsar

Viral hepatitis E (HEV) is an important public health problem in India, occurring both in epidemic form and sporadically. Hepatitis is endemic in Punjab and 12 outbreaks were reported during 2012 from different districts of the state.

On 4th April 2013, public officials of Labour Colony, Amritsar reported the occurrence of increased number of jaundice cases in their area. An investigation was carried out to describe the outbreak, identify the aetiological agent, source of infection, risk factors associated with it, and to recommend control measures.

During January–June 2013, 159 hepatitis cases including one death (attack rate (AR) = 3.6%) were identified in a population of 4,440. A case was defined as “a person residing in/around Labour Colony having jaundice and one or more of the following: anorexia, abdominal pain, dark urine or fever.” 56% of the cases were males. While cases occurred in all age groups, the most affected age group was 15–34 years (54.7%).

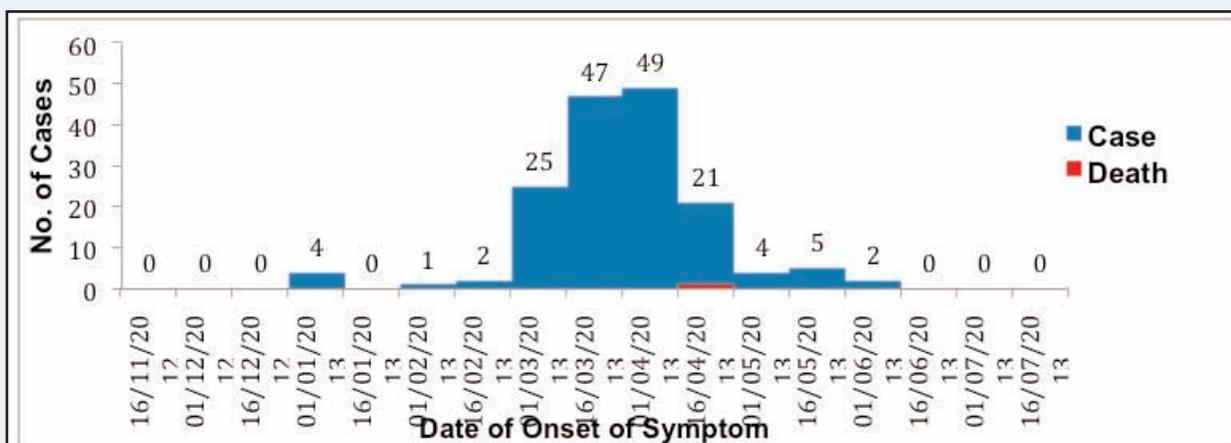
The index case’s date of onset was 1st January 2013. Subsequently, cases increased and peaked in April. The last case was reported on 3rd June 2013. Six colonies were affected. The majority of the cases were in Dhaka Colony (AR=6.3%) followed by Baba Jeevansingh Colony, Labour Colony, Vikas Nagar, Shakti Nagar and Sat-kartar Nagar (AR=1.8%).

A case–control study was carried out with one neighborhood control selected for each case (n=159) that did not have jaundice during the outbreak period. Socio-demographic and exposure information were collected using a semi-structured questionnaire. The study showed that cases were more likely to complain of foul smelling water (cases 67%; controls 41%; aOR 4.5) and used piped water for drinking (cases 90%; controls 65%; aOR 4.9). Those who drank water after boiling were less likely to become sick (cases 11%; controls 35%; aOR 0.09). All 14 serum samples sent to the Microbiology Department, Government Medical College in Amritsar were found positive for hepatitis E by ELISA method. Of 23 tap water samples obtained from households, 21 demonstrated fecal contamination by MPN method (median 44/100 ml).

Examination of the area where cases were clustered indicated that a new sewer line was being laid in the vicinity of the affected area. Digging had started on 12th October 2012 which damaged the sewage line on three occasions (28th October 2012, 15th January and 6th February 2013) resulting in contamination of drinking water. In all the three instances the company repaired the pipelines and continued water supply to households. The mixing of drinking water with the sewage line was most likely associated with this outbreak.

(Contributed by Dr Tripurari Kumar, EIS Officer)

Figure: Distribution of hepatitis E cases, Amritsar, January–June, 2014



Joint Orientation Workshop on Emerging and Re-emerging Zoonotic Diseases for Medical and Veterinary professionals

This Joint Orientation Workshop by NCDC, Delhi and Indian Veterinary Research Institute (IVRI), Izatnagar was organized at NCDC, Delhi from 10th to 14th February 2014. A total of 17 medical and veterinary professionals from 10 states – Andhra Pradesh, Mizoram, Haryana, Uttarakhand, Rajasthan, Himachal Pradesh, Tamil Nadu, Kerala, Madhya Pradesh and Delhi – participated in the workshop.

The main objective was to orient/sensitize the participants on zoonotic diseases of public health importance in the country and to develop intersectoral co-ordination for prevention and control.

The lectures/discussions focused on emerging and re-emerging zoonosis in India, Integrated Disease

Surveillance Programme (IDSP), National Animal Disease Referral Expert System (NADRES), mapping of the laboratory network, IHR-2005 intersectoral co-ordination, and modalities for interlinking IDSP and National Animal Disease Reporting System (NADRS).

Various aspects of important zoonotic diseases were also discussed in detail and participants were sensitized about three programmes being implemented in the 12th Five Year Plan: (1) National Rabies Control Programme (NRCP), (2) Prevention and Control of Leptospirosis, and (3) Strengthening Intersectoral Co-ordination.

(Contributed by Dr Veena Mittal, Additional Director, NCDC)

EIS Surveillance Workshop, 2014

The second annual surveillance workshop was conducted from 26th to 28th February with the second cohort of EIS officers. Seven EIS officers presented their surveillance evaluations, including evaluations on acute encephalitis syndrome and TB/HIV surveillance in Tamil Nadu, malaria surveillance in Odisha, IDSP surveillance in Gujarat, Karnataka and nationally, and the TB surveillance system NIKSHAY.

The evaluations and follow-up discussion led to very productive interactions and several recommendations were made for improvement of each of these systems. The officers and mentors/placement supervisors also discussed how these evaluations will lead to future epidemiological analyses. The mentors and placement supervisors also provided general feedback to the EIS Programme.

(Contributed by Dr Kayla Laserson, CDC, India)

Tabletop Exercise for Strategic Health Operations Centre (SHOC)

Strategic Health Operations Centre (SHOC) was established at NCDC, Delhi in 2013. As a part of continuing collaboration between NCDC and Global Disease Detection India Centre (GDD-IC) of the Centers for Disease Control and Prevention (CDC), India a training workshop and onsite consultation on SHOC and Emergency Response System by CDC experts was conducted at NCDC Delhi from 27th May to 31st May 2013. The training also helped in developing 47 Standard Operating Procedures (SOPs) to be utilized in the event of SHOC activation from June to August, 2013.

As a follow-up to the Infectious Disease Outbreak Plan (IDOP) and standard operating procedure (SOP) development which took place in 2013, a tabletop exercise was conducted to test and improve the Plan and SOPs developed at NCDC, SHOC during 24th–28th February 2014, by NCDC-GDD (IC). A team of experts lead by Dr Lise Martel, International Emergency Preparedness Lead, CDC conducted the workshop. The workshop was attended by the officers and staff that have been assigned/identified with roles in the Incident Response System (IRS) structure.

(Contributed by Dr Pradeep Khasnabis and Dr Amit B Karad, IDSP, NCDC)



Assessment of Public Health Laboratories Under IDSP

The Integrated Disease Surveillance Programme (IDSP), with technical support from the GDD-IC conducted a standardized assessment of public health laboratories and the laboratory system. Assessments were conducted by using the standardized WHO Laboratory Assessment Tools (LAT), adapted to the Indian context. The purpose of these laboratory assessments was to conduct a detailed gap analysis of the IDSP laboratories. The findings of this analysis will guide the strengthening of the IDSP laboratory capacity for disease detection, surveillance and outbreak response, and thereby support the implementation of International Health Regulations (IHR) 2005 in the country.

Eleven identified assessors (microbiologists from NCDC/other health programmes/state medical colleges/state government who have been actively involved in IDSP/public health related activities in the states) underwent training during 12th–13th November 2013 at NCDC conducted by experts from Integrated Quality Laboratory Services (IQLS) France and CDC.

Facility-based assessment was carried out in 19 IDSP district laboratories in 11 states. In addition,

an assessment of representative laboratories at each tier of the laboratory network was conducted in each of the two states. These included two state referral laboratories (medical colleges), district laboratories in two of the linked districts to each state referral laboratory, one CHC laboratory in each of the districts, and one PHC laboratory, under each CHC.

Facility assessments were carried out between 18th November and 6th December 2013 using the adapted LAT-F (Facility questionnaire). Laboratory systems assessment (overall strategic organization framework at the state level) using the LAT-S (System questionnaire) was carried out on 14th and 15th November 2013 in Tamil Nadu. This was presented to a group of key stakeholders from laboratory systems across programmes.

The gap analysis of these assessments is scheduled to be completed and shared by IQLS and CDC in April 2014. Based on the gap analysis, a plan for strengthening of IDSP laboratory capacity will be prepared and implemented.

(Contributed by Dr Lata Kapoor, IDSP, NCDC and Dr Padmini Srikantiah, CDC, India)

One Week Epidemiology Training for North Eastern States

NCDC in collaboration with GDD-IC and the Department of Health Services, State Government of Assam, organized a one-week epidemiology training course for public health officials serving either the health department, or medical education institutions, or any non-government institutions in the eight North Eastern States. The training was held during the first week of March 2014 at the State Institute of Health and Family Welfare, Guwahati. The training was inaugurated by the Commissioner cum Secretary (Health) to the Government of Assam in the presence of the Director Health Services, Assam and the Regional Director (Health), Government of India at Assam.

Senior faculty from the Epidemiology Division of NCDC and the EIS Programme trained over 30 participants in field epidemiology competencies and skills. The course consisted of didactic lectures, case studies and computer exercises that helped the trainees practice skills needed to analyse and interpret data usually collected during their routine public health service, and make them useful for action. The participants were also informed about the India Epidemic Intelligence Service Programme, and motivated to take up this full 2-year training at NCDC, Delhi.

(Contributed by Aakash Shrivastava Chief Medical Officer (Senior Grade))

Mark Your Calendar

World Health Day	7th April, 2014	World No Tobacco Day	31st May, 2014
World Immunization Week	24th–30th April, 2014	World Blood Donor Day	14th June, 2014
		World Malaria Day	25th April, 2014

ICMR launches three new diagnostic kits

The Indian Council of Medical Research (ICMR) released three indigenously developed diagnostic kits on 20th February 2014. These include a polymerase chain reaction (PCR) or PCR-based kit to detect pathogens in food and water, an ELISA-based kit to estimate iron in the blood, and a sample blood collection kit that can be used to test the levels of vitamin A in a person. All three have been developed by the National Institute of Nutrition (NIN), Hyderabad.

At the launch, the Union Minister of Health Ghulam Nabi Azad

congratulated ICMR for its fast tracking research to develop these much-needed technologies. Director-General of ICMR and Secretary of Department of Health Research, VM Katoch, informed that the kits would be available in the next 6–9 months and that the contracts would be allotted to the industry within the following couple of weeks. He also revealed that the kits would be made available to the laboratories of Food Safety and Standards Authority of India (FSSAI) and medical colleges. Even a private laboratory can use the kits as these reduce the cost of each test. Briefly these kits are:

PCR-based food/water-borne pathogen detection kits that can

detect common food-borne pathogens in India, i.e. *Salmonella*, *Staphylococcus aureus*, *Listeria*, *Vibrio parahaemolyticus*.

ELISA for ferritin estimation helps to diagnose iron deficiency.

Dried blood spot collection (kit) is a field-friendly method for blood sample collection for vitamin A analysis. Blood is collected on a special type of filter paper which can be stored for seven days at room temperature and for several days more under refrigeration. This allows for transport of blood samples from the community to the laboratory for mass screening.

Surveillance at the heart of India's polio success story



“The setting up of a surveillance system proved to be the most important milestone in the journey of polio eradication in India as it formed the backbone of the eradication drive by helping identify areas and populations that were at risk and the type of poliovirus circulating in different areas besides measuring progress,” said Dr Nata Menabde, WHO Representative to India.

“This information in turn led to the development of various strategies that helped to cover these populations and areas better,” she further elaborated.

Polio surveillance in India is a highly sensitive and high quality surveillance model. It is a laboratory-backed system that extends to all parts of the country and has enrolled more than 40,000 health facilities from the public, private and non-formal sectors to report paralytic cases. The surveillance system is instrumental in generating real time credible data that helps identify areas and populations at risk. Tailored strategies to ensure high coverage in these areas have been subsequently developed.

Physical activity saves lives

Physical inactivity is the fourth leading risk factor for global mortality resulting in 3.2 million deaths (6% of all deaths) worldwide. It is the main cause for 21–25% of breast and colon cancers; 27% of diabetes; and 30% of ischaemic heart disease.

Physical inactivity is on the rise in many countries, adding to the burden of noncommunicable diseases. People who are insufficiently active have a 20–30% increased risk of death compared to people who engage in at least 30 minutes of moderate intensity physical activity on most days of the week. WHO recommends for adults 150 minutes of moderate intensity activity per week.

Renewed yaws eradication mooted at global level

The WHO is providing technical support to 14 countries with either persistent transmission of yaws or where the disease has re-emerged. This effort for a global campaign is warranted by the experience from yaws elimination achieved in India, as announced in 2007. No cases have been reported since 2004

and surveys have repeatedly revealed absence of community transmission in the affected states.

Additional incentive for global eradication came from findings of a study published in January 2012 from Papua New Guinea which showed a single-dose of oral azithromycin to be as effective as a benzathine penicillin injection in curing yaws.

The roadmap on neglected tropical diseases, published in January 2012, targets the eradication of yaws by 2020.

Yaws is a disease of the poorest of the poor living in remote areas with limited access to health or developmental initiatives. In India, the saying goes “Where the road ends, yaws begins!”

Update on avian influenza A (H7N9) virus infection

Human infections with a new H7N9 virus were first reported in China in March 2013. These infections are believed to mostly result from exposure to infected poultry or contaminated environments, as H7N9 viruses have also been found in poultry in China. While some mild illnesses in human H7N9 cases have been seen, most patients have had severe respiratory illness. The first case outside of China was in Malaysia and was reported on 12th February 2014. The case was detected in a traveler from an H7N9-affected area of China. 133 cases occurred in the first wave (February–May, 2013) and over 200 in the second wave.

Laboratory-confirmed cases were reported from 13 provinces/ municipalities in eastern mainland China, Hong Kong, Special Administrative Region of China and the Taipei Centers for Disease Control (Taipei CDC). Most cases

are presumed to have contracted the infection directly from infected animals or their environment, particularly as a result of visiting live animal markets. Only a few small clusters with possible human-to-human transmission have occurred among family members, but there has been no evidence of sustained human-to-human transmission to date.

As of 28th January 2014, the case fatality rate of all confirmed cases was 22%, but many cases were still hospitalized. Of all cases, 67% were male. The median age of reported cases was 58 years and that of fatal cases was 66 years.

Currently, there is no vaccine to protect against this virus. Oseltamivir and Zanamivir are recommended for treatment. Avian influenza A H7N9 virus appears to be resistant to the adamantanes (amantadine and rimantadine).

India to be part of the newly launched GHSA

India along with 24 other countries (mostly low- and middle-income countries) participated in the Washington conference to discuss the Global Health Security Agenda (GHSA) on 13th February 2014. CDC is joining with other US government agencies and global partners (WHO, the World Organization for Animal Health (OIE), and the United Nations Food and Agriculture Organization) to advance the GHSA. The aim of this agenda is to accelerate progress towards a safe world and promote global health security as an international priority by strengthening capacities of low- and middle-income countries to prevent, detect and respond to outbreaks of infectious diseases, epidemics and bioterrorism.

[For more information, see <http://www.globalhealth.gov/global-health-topics/global-health-security/Overarching%20Target.pdf>]

National AIDS Control Programme – IV

The National AIDS Control Programme (NACP) was launched in 1992. With emerging priorities, NACP phase I (1992–1998), phase II (1999–2006) and phase III (2007–2012) were formulated to combat HIV/AIDS in India.

The Union Health and Family Welfare Minister, Shri Ghulam Nabi Azad on 12th February 2014 launched the NACP IV (2012–2017) with a budget of Rs 14.3 crores.

NACP IV aims to accelerate the process of reversal and further strengthen the epidemic response in India through a well-defined integration process over the next

five years. The key objectives of this phase are to: (i) reduce new infections by 50% (from 2007 Baseline of NACP III), and (ii) provide comprehensive care and support to all persons living with HIV/AIDS including treatment services for those who require it.

Five key strategies have been formulated to achieve the objectives:

1. Intensifying and consolidating prevention services with a focus on high-risk groups and vulnerable populations.
2. Increasing access and promoting comprehensive care, support and treatment.
3. Expanding IEC services for:
(i) the general population, and

- (ii) high-risk groups with a focus on behaviour change and informed consumer demand.
4. Building capacities at national, state, district and facility levels.
5. Strengthening strategic information management systems.

With seven guiding principles, ten key priority areas and several new initiatives including scaling up of services, NACP IV aims to cover 9 lakh female sex workers, 4.4 lakh men-who-have-sex-with-men and 1.6 lakh injecting drug users. The NACP will provide 1st- and 2nd-line antiretroviral treatment to 50,000 children and 50,000 adults.

[For further information, visit <http://www.naco.gov.in/NACO/NACP-IV2>]

Forthcoming Conferences / Meetings

14th World Congress on Public Health

Dates: February 11–15, 2015
Venue: All India Institute of Hygiene and Public Health, Kolkata
Organizer: Director-Professor Public Health & Head, Department Health Promotion & Education

Joint Conference of Indian Society of Malaria and other communicable Diseases (ISMOCDD) and Indian Association Epidemiologist (IAE)

Dates: October, 2014
Venue: Goa, India

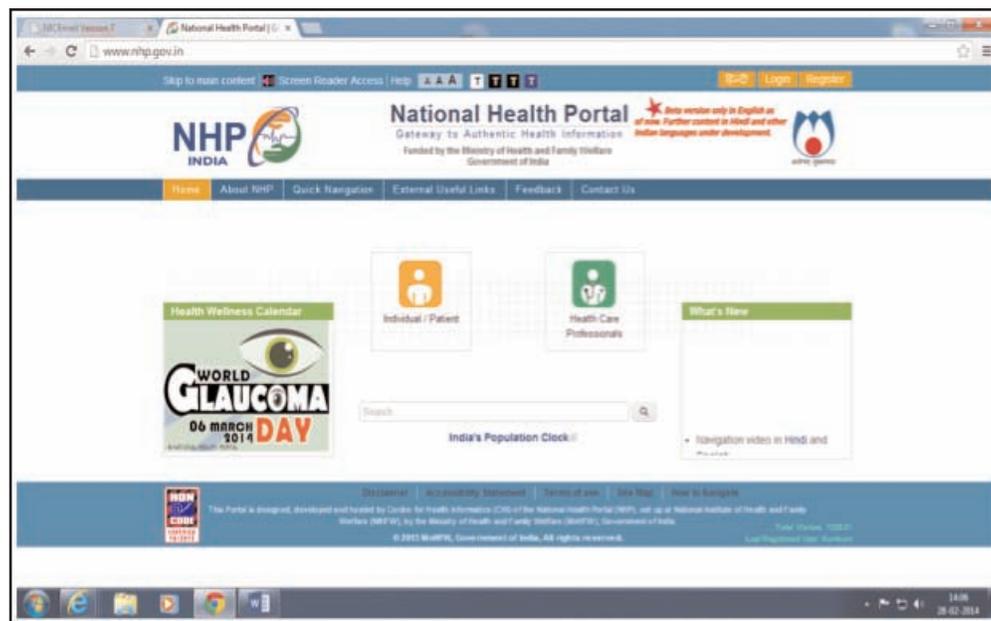
National Health Portal (NHP): <http://nhp.gov.in>

Introduction

The Ministry of Health and Family Welfare (MoHFW), Government of India has set up the National Health Portal (NHP) in pursuance to the decisions of the National Knowledge Commission to provide health care related information to the citizens of India and to serve as a single point of access for consolidated health information. The National Institute of Health and Family Welfare (NIHFW) has established a Centre for Health Informatics (CHI) to be the coordinating entity for managing the activities of the NHP, under the guidance of the Steering Committee of the NHP, constituted by the MoHFW. The goal is to create a gateway to authentic health information for all. The NHP aims to make this as a single point access for authenticated health information for citizens, students, health care professionals and researchers. The NHP will achieve the above vision by collecting, verifying and disseminating information related to health and health care delivery services for all citizens of India. The objectives are: to improve the health literacy of the masses in India; to improve access to health services across the nation; and to decrease the burden of disease by educating the people on the preventive aspects of disease.

The domains nhp.gov.in and nhp.org.in have been registered and the NHP has been live for beta testing since 15th November 2013. The hosting of NHP is being done through BSNL Cloud. HONcode certification from the HON secretariat, Switzerland has been obtained, and Cert-IN certified security audit of NHP has been completed. NHP is compliant with the Guidelines for Indian Government Websites (GIGW) and is accessible to disabled persons. Existing content (health and disease information, regulatory and statutory guidelines related to health) from various government health sites and international sources (such as NIH, CDC and WHO) have been collated for India specific hosting on NHP, including hyperlinks and references. Various authenticated databases of health care providers have been collated and hosted after verification. Translation of limited content to Hindi has been initiated. Recruitments are going on for some of the other sanctioned posts for the NHP. Currently, the portal is being advocated through Telemedicine 2013 (Jaipur), Public Health Conference at VMMC, New Delhi; workshop at NIHFW, New Delhi; and through Gyan Vaani Radio (FM). It is also being regularly advertised on various online social media.

(Contributed by Professor Supten Sarbadhikari, NIHFW, Delhi)



CDC Grand Rounds: Reducing the Burden of HPV-Associated Cancer and Disease

January 31, 2014 / 63(04);69-72

This is another in a series of occasional MMWR reports titled CDC Grand Rounds. These reports are based on grand rounds presentations at CDC on high-profile issues in public health science, practice, and policy. Information about CDC Grand Rounds is available at <http://www.cdc.gov/about/grand-rounds>.

Eileen F. Dunne, Lauri E. Markowitz, Mona Saraiya, Shannon Stokley, Amy Middleman, Elizabeth R. Unger, Alcia Williams, John Iskander

Magnitude of the Problem

Human papillomavirus (HPV) infection is the most common sexually transmitted infection in men and women in the United States. Most sexually active persons will acquire HPV in their lifetime. Recent data indicate that approximately 79 million persons are currently infected with HPV, and 14 million persons are newly infected each year in the United States.

Of the more than 150 different types of HPV, approximately 40 are transmitted through sexual contact and infect the anogenital region and other mucosal sites of the body. Mucosal HPV types are classified as either high-risk HPV (oncogenic) (e.g., types 16 and 18) or low-risk HPV (e.g., types 6 and 11). High-risk HPV causes many cancers of the cervix, vagina, vulva, penis, and anus. HPV16 is linked to many oropharyngeal cancers. Low-risk HPV causes anogenital warts and recurrent respiratory papillomatosis, a rare but important condition in which warts grow in the throat and airway. Most infections cause no symptoms and are not clinically significant, but persistent infection can lead to disease or cancer.

*If you would like to read the full article, please visit:
http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6304a1.htm?s_cid=mm6304a1_e*

WHO/TDR Call for Applications: 2014 Impact Grants

Research Capacity Strengthening and Knowledge Management to Improve Disease Control

Submission deadline 30 May 2014

The Special Programme for Research and Training in Tropical Diseases (TDR) invites applications from individuals and research teams based in low- and middle-income countries (LMICs) for grants to support research capacity strengthening and knowledge management. In 2014 it is anticipated that 20-30 new grants (up to a maximum US\$ 50,000 each) will be awarded.

For details, visit: http://www.who.int/tdr/grants/RCS_KM_Impact_call_April032014.pdf?ua=1

Monitoring Disease Trends

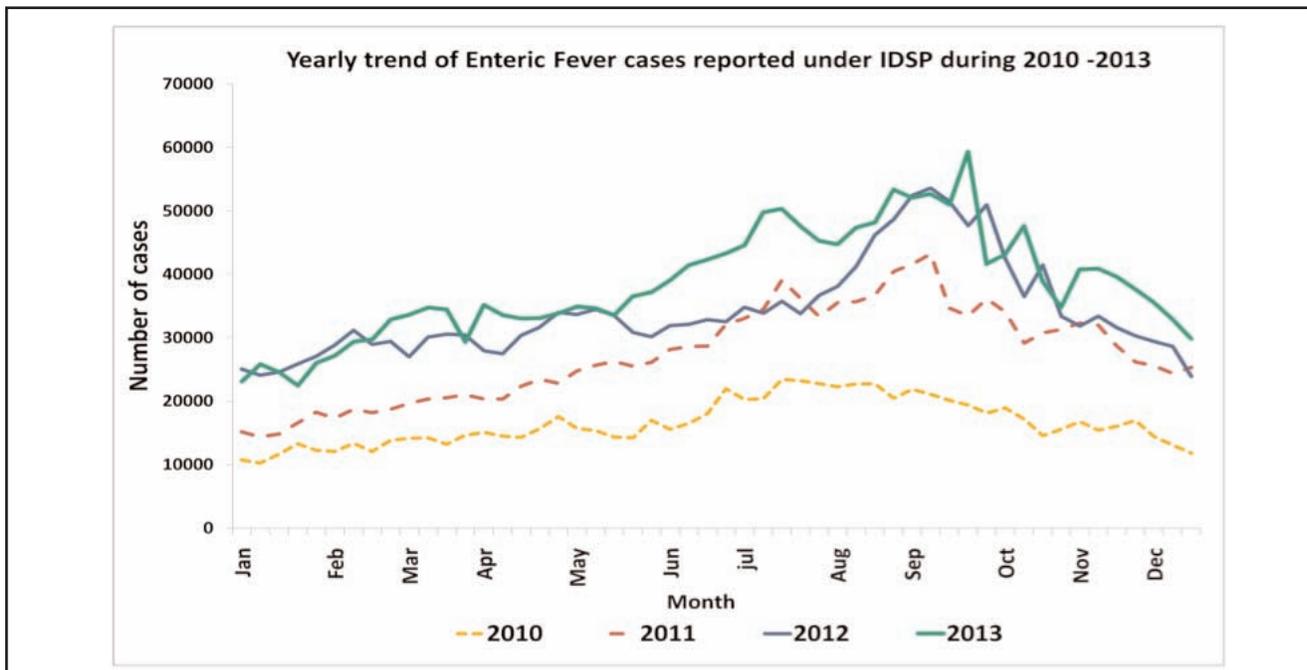
Enteric Fever in India, 2010 to 2013

Enteric fever is a disease of developing countries associated with poor public health and low socio-economic indices. An estimated 21 million cases of enteric fever and 200,000 deaths occur worldwide. Without therapy, the illness may last for 3 to 4 weeks and death rates range between 12% and 30%. Large

epidemics are most often related to fecal contamination of water supplies or street foods.

Under the Integrated Disease Surveillance Programme (IDSP), 31 outbreaks of enteric fever were reported from 2010 to 2013. Analysis of data reported in 'P' format shows the disease peaking from July to October, as

it coincides with the rainy season when the chances of water contamination are high. Of more than 6 million cases of enteric fever reported in India under IDSP ('P' form) from 2010 to 2013, the majority were reported from Uttar Pradesh (15.2%), Bihar (12.2%) and West Bengal (8.4%).



Source: Data as reported by districts/states under IDSP

(Contributed by Dr Pradeep Khasnobis, Officiating NPO & Chief Medical Officer (Senior Grade), IDSP, Dr Amit B. Karad, Assistant Director, IDSP, Mr Prasun Sharma, Statistician, IDSP)

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