

## AN OVERVIEW

The Indian Council of Medical Research (ICMR) continued to forge ahead in the field of medical and health research. Three of the ICMR institutes have been renamed. The Central JALMA Institute of Leprosy, Agra has been renamed as National JALMA Institute of Leprosy and Other Mycobacterial Diseases (CJILOMD), the Malaria Research Centre, Delhi has been renamed as National Malaria Research Institute (NMRI) and the Institute for Research in Medical Statistics also located in Delhi has been renamed as National Institute of Medical Statistics (NIMS). During the period under report, construction of new building of the National Malaria Research Institute was started at Dwarka, Delhi. A devastating fire destroyed a portion of CJILOMD, Agra resulting in loss of equipments, consumables and civil works worth Rs. 5 crores.

Under the Avahan India AIDS Initiative funded by Bill and Melinda Gates Foundation, the Council's National AIDS Research Institute, Pune is collecting behavioural and biological trend data in populations before and after interventions in six high prevalence states of India *i.e.* Andhra Pradesh, Karnataka, Maharashtra, Manipur, Nagaland and Tamil Nadu.

Studies were conducted by Tuberculosis Research Centre (TRC) on *Mycobacterium tuberculosis* for defining phylogentic link existing in the TB genome, for comparing global pattern of disease transmission and for elucidating evolutionary biology of tubercle bacillus.

A multi-centre site preparation activity to initiate an vaccine probe study to estimate preventable burden of *Haemophilus influenzae* B meningitis and pneumonia was launched.

The first year of surveillance for human influenza was completed. Almost half of the isolates belonged to H<sub>3</sub>N<sub>2</sub> and about a quarter each to H1N1

and type B. Avian influenza, due to H5N1 appeared in Navapura and Jalgaon, Maharashtra. The National Institute of Virology (NIV), Pune being the WHO's National Influenza Centre participated in screening of the individuals who had history of exposure. About 500 samples were tested using real time PCR system, nucleic acid sequence based amplification (NASBA) platform. None were found to be positive.

Chandipura virus encephalitis which had appeared in Andhra Pradesh in 2003 and Gujarat in 2004, re-appeared in Andhra Pradesh in 2005. The mystery of the Siliguri outbreak, which occurred in West Bengal in 2001 was finally solved. Investigations carried out in collaboration with CDC, Atlanta, revealed it to be due to Nipah virus. The Indian strain was related to the Bangladesh and Malaysian strain.

There was a major outbreak of Chikungunya in the Indian Ocean in the early 2006. In India cases were reported from Rajasthan, Gujarat, MP, Orissa, Maharashtra, A.P., Karnataka, Tamil Nadu and Kerala. The NIV provided the diagnostic kit (MAC ELISA) to all the States in India. The genotyping of the viral isolates from several states showed that they belong to the African genotype in contrast to the earlier outbreaks which were due to Asian genotype. The African strain had caused severe morbidity.

During the year under report, in the project for home based management of young infants, training was imparted and comparison made in services delivered by trained village health workers called *Shishu Rakshaks* and *Anganwadi* workers.

During the year under report, on application from Vector Control Research Centre (VCRC), Pondicherry patent has been granted to a process for preparation of mosquito larvicidal formulation from *Bacillus thuringiensis var. israelensis*. Besides, eight patent applications were filed, five in India and rest abroad.

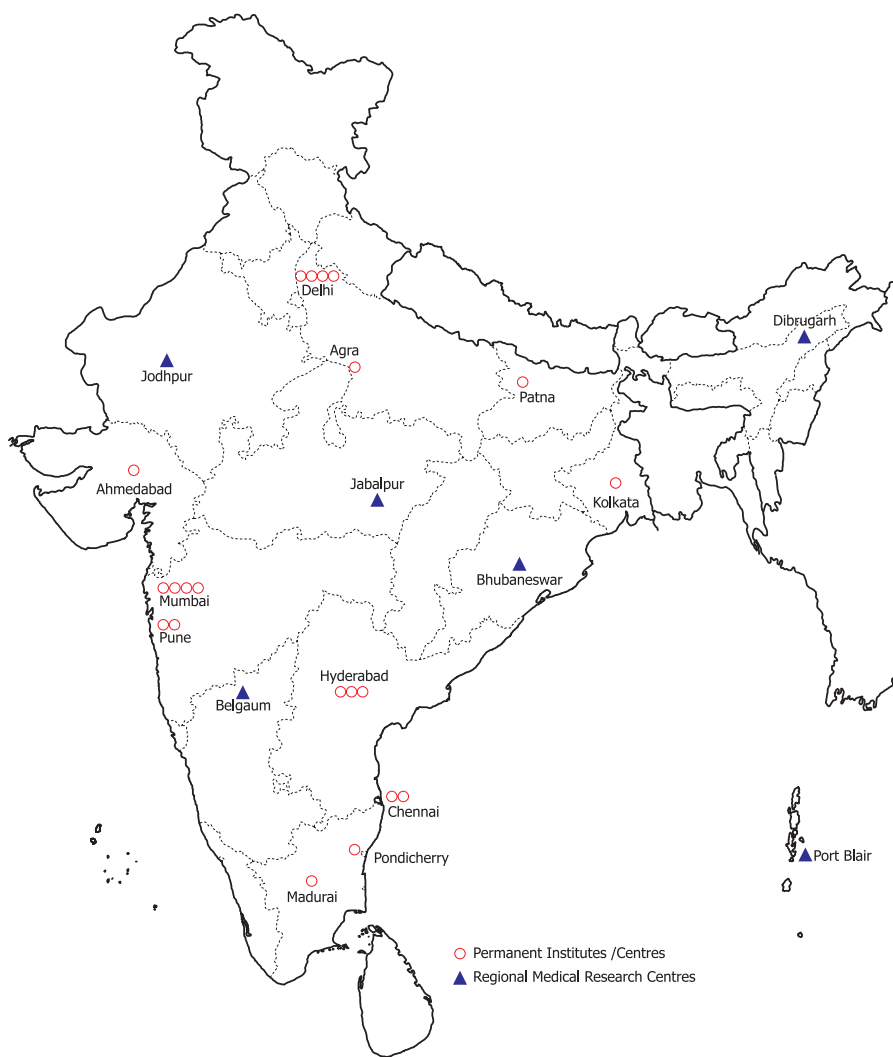
The Council's Regional Occupational Health Centre at Kolkata redesigned and developed a cycle rickshaw based on ergonomic principles for which a patent application had been made.

A Memorandum of Understanding (MOU) has been signed between ICMR and Merck for initiation of clinical trial of HPV vaccine in different regions of the Country. The Institute of Cytology and Preventive Oncology (ICPO) located in NOIDA has been designated as National Coordinating Centre for Indian HPV Vaccine Initiative.

The impact factor of Indian Journal of Medical Research increased to 0.869 in 2005 compared to 0.600 in the year 2004.

Around 450 research papers were published by scientists of ICMR during the year 2005. Overall 779 research projects and 372 fellowships were supported during 2005-2006.

Seventy exchange visits of scientists to and from India were arranged under international collaborative programme of the council. An MOU for South-South collaboration has been signed between the MRC (South Africa), FIOCRUZ (Brazil) and ICMR to work together on health issues of medical interest.



ICMR INSTITUTIONAL NETWORK