

MANDATE

The mandate of the Institute broadly cover three areas viz. referral service, training and research.

SERVICES

The Institute provides referral services and technical support to individual patients, community, medical colleges, research institutions and state health directorates.

These include diagnostic and clinical facilities, making available scientific research material, teaching aids, storage and supply of vaccines and quality control of biological. The different services available are given below:

A. Referral Services

Routine Diagnostic Services: The institute provides referral diagnostic services for various communicable diseases, some of which are ordinarily not available I hospitals and medical colleges. These include diagnosis of Malaria, TORCH group of organisms, Poliomyelitis, Measles, Coxsackie virus, other Enteroviruses, Serological markers for Viral Hepatitis, Meningitis, Diphtheria, Acute Respiratory Infections, Cholera and newer Entero-pathogens, Mycotic diseases, AIDS, Rabies, Kala-azar, Brucellosis, Rickettsioses, Leptospirosis, Hydatidosis, Arbo-viral infection, plague, Anthrax, Thyroid function tests etc.

B. Specialised services

1. Quality Control of Biologicals: The institute routinely provides quality control services for various vaccines like BCG, OPV and diagnostic test kits for AIDS, Hepatitis, Meningitis, etc.

2. Storage and supply of vaccines: The institute stores reagents, test kits and vaccines on behalf of the Directorate General of Health Services (DGHS) and distributes to various state health directorates and medical colleges on request.

3. Entomological services: Includes identification of arthropods of medical importance specially during disease out-break situations, provides larvivorous fishes for the biological control of mosquitoes to various public health agencies.

4. Quality Control of Insecticides: The institute undertakes laboratory and field evaluation of insecticides/biocides to meet the requirements of the registration committee of Central Insecticide Board.

5. Supply of research materials: Various bacterial and fungal isolates, cell lines, slides of malaria, filaria, kala-azar, rabies, diphtheria, meningococcus, live cultures and preserved materials of arthropods are provided to medical colleges and research institutions on request.

6. Outbreak investigations: The institute investigates and recommends control measures for the out-break of various communicable diseases to the States/UTs all over the country as well as to some foreign countries.

7. Investigation of Smallpox rumours: The institute provides diagnostic services to investigate Smallpox case rumours.

8. Supply of teaching material: The institute provides teaching material on various communicable diseases in the form of slides, charts, maps, procedure manuals, pamphlets, books etc.

TRAINING & MANPOWER DEVELOPMENT

Training: Special emphasis is given to trained health man-power development that is essential for the successful implementation of different health programmes in the country. Besides the regular training programmes, numerous short-term training activities are conducted every year. The course

curricula of these training programmes are designed to develop the necessary need-based skills. The participants to these courses come from different States/Union Territories of India. In addition, trainees from some of the neighbouring countries like Bangladesh, Bhutan, Sri Lanka, Myanmar and Nepal also participate in some of the training programmes. The institute also conducts separate training programmes specifically designed for international participants. Some of these courses are sponsored by international agencies like WHO, UNICEF, World Bank and USAID.

The institute has developed training modules on different communicable diseases based on its won field experiences, which are extensively used during training programmes at NICD. The trainees to various Epidemiology courses are exposed to the usage of computers in Epidemiology and disease surveillance.

Expert group meetings: The Institute organizes meetings for formulation of guidelines for surveillance, management, prevention and control of various communicable diseases. The meetings are attended by experts of the respective field, directors of health services of the states, programme managers from medical, veterinary, agriculture and animal husbandry.

Fellowships: In addition, scientists, research workers and health professionals, from India and abroad on WHO fellowships are placed in the institute for training and exchange of technical knowledge.

APPLIED RESEARCH

Applied integrated research in various aspects of communicable diseases has been one of the prime functions of the Institute. To achieve this, the institute is actively engaged in research in the following areas.

1. Applied research in the field of bacteriology, virology, mycology,

eepidemiology, immunology, parasitology and quality testing of vaccines and other biologicals with an aim of improving diagnostic capabilities of diseases of public health importance and giving laboratory support to the investigation and control of disease outbreaks. The important diseases include Cholera, Polio, Measles, Yaws, Diphtheria, Meningitis, Tetanus, Hepatitis, AIDS, Rubella, Rabies, Dengue, Japanese Encephalitis, Kala-azar, Guinea Worm, Malaria, Filaria, Plague Leptospirosis, Anthrax etc.

2. Applied field research through longitudinal surveillance studies of various epidemic prone diseases.
3. Laboratory and field oriented research in the bioecology and transmission dynamics of arthropod vectors with the ultimate objective of vector control.
4. Evaluation of new formulations of insecticides and biocides and screening of indigenous herbs to evaluate their insecticidal properties.
5. In- vitro cultures of organisms, development of reagents, rapid diagnostic tests including molecular techniques monoclonals using modern equipment with the latest technology.
6. Studies on biological hazards of pesticides.
7. Research on hormonal disorders, particularly thyroid disorders.