

# India EIS Programme



In India, there is a dedicated cadre of public health professionals in some states, but the majority of states lack applied epidemiological capacity pointing to the need for an [Epidemic Intelligence Service \(EIS\)](#) Programme.

To address this need, the National Centre for Disease Control (NCDC) launched the India EIS Programme on October 4, 2012. The India EIS is a 2-year training in *applied epidemiology*, in which the trainee officers develop skills while working within Indian public health agencies/programmes.

It is imperative the India EIS Programme be of the highest quality, producing epidemiologists who can address the pressing public health needs of the nation. Therefore, the programme trains only extremely keen, enthusiastic medical doctors with an aptitude for public health and with at least two years of public health experience. Selection is through a highly competitive process by a committee of experts. The selected EIS officers are assigned to a single placement for the two years under the technical supervision of an experienced mentor.

The officers who complete the programme benefit in terms of career opportunities and playing a leadership role in public health operations in the country.

## Solicitation of candidates

1. A letter along with a brochure outlining the objectives of the India EIS Programme is distributed to all state health ministries, and relevant governmental institutions that sponsor potential candidates.
2. Meetings and briefings with state health administrators are held to encourage participation in the programme. Suitable advocacy brochures are available for these meetings.
3. Details of the programme, the application process and timelines for the selection process are mentioned on the websites of the MOHFW and NCDC.
4. Regular media advertisements and announcements are made at national public health meetings and through other means, including publications, and advertisements in medical and public health journals.

## Eligibility criteria

Regular employees of Central/State Health Service or equivalent (local autonomous bodies) as well as self-sponsored candidates can apply. The minimum essential qualifications include:

1. MBBS degree and MD (Public Health/Preventive and Social Medicine/Community Medicine)  
OR
2. MD degree (Clinical or Para-clinical) with 2 years' experience (Public Health)  
AND
3. Age 25–45 years at the time of application  
AND
4. Presently working in the Central/State Government/PSUs like ESI, railways/State or Municipal Corporations/local bodies/etc., or are self-sponsored.

If enough candidates satisfying the minimum essential qualifications listed above are not available, the following may also be considered:

- 5a. MBBS degree with Postgraduate Diploma in Clinical and Para-clinical field and 3 years of public health experience from any recognized institution.  
OR
- 5b. MBBS degree from any recognized institution with five years' minimum work experience in public health.

## The selection process

An independent selection committee (comprising NCDC reviewers, external reviewers and U.S. Centers for Disease Control and Prevention–Global Disease Detection India Centre (CDC–GDD IC) reviewers) oversees the selection process. The decision of the committee is subject to final approval of the Director NCDC. Desirable qualifications include but are not limited to:

- Strong commitment to a career in public health/epidemiology in India
- Applicable public health experience
- Prior publications of scientific work in reputed journals/interest in scientific writing and publication
- Research/project experience in the public health field
- Flexible and willing to work in various programmes, in various places, under various conditions (such as austere field conditions)
- Comfortable using a computer and modern techniques of information and communications technology
- Capacity to learn and work independently, respond to supervision

*Although the selection process is based on merit, reasonable efforts will be made to have equitable selection with representation of candidates from Empowered Action Group (EAG) states.*

## 2-Year Programme Schedule

The India EIS Programme trains through field experience that includes:

1. *Field assignments* where epidemiologic services are provided under supervision.
2. *Classroom instruction* through periodic short didactic sessions. This prepares the officers for their field duties. The sessions include exercises and case studies.
3. *Tuesday seminars* for presentations (by the officers themselves or invited lectures on epidemiologic or other public health topics, and/or a journal club) and to provide a forum for additional instructions, practice presentations, and team building.

The officers will be given a book allowance up to Rs 20,000 per officer per year for procuring text books, scientific journals and course material. They will also be provided laptops with internet connectivity.

All officers will be given a monthly allowance of Rs 20,000 for housing + Rs. 2000 for internet usage + Rs 5000 per month for local travel. Self-sponsored officers will be entitled to an additional allowance of Rs 45,000 per month to meet their living expenses during the training.

During the 2-year training, officers will be placed in field assignments suitable to fulfill prescribed “core activities of learning” (CALs). This will be under the supervision of the officer’s identified mentor with periodic classroom instruction at NCDC.

The classroom instruction includes:

- *introductory course* in month 1;
- *1-week workshop* in month 4 on surveillance; a scientific writing course; and mandatory participation in an annual EIS conference, with oral and poster presentations;
- *1-week leadership workshop* in month 13–15;
- *1-week workshop on an advanced topic* in month 15–17.

Each 2nd-year officer will submit an abstract to an international conference such as the U.S. EIS Conference, TEPHINET Conference, or other appropriate public health conference. Officers whose abstracts are accepted for presentation will be supported to attend that conference. In addition, the India EIS Programme will support 2nd-year EIS officers to attend the CDC EIS Conference in Atlanta, GA, USA, and possibly work with a specific CDC programme related directly to their ongoing assignment.

## Core activities of learning (CALs)

CALs provide opportunities for the officers to develop proficiency in important epidemiologic competencies needed for a practicing field epidemiologist. The required skill set includes the following:

1. Conduct or participate in a field investigation of a potentially serious public health problem that requires a timely response.
2. Design, conduct, and interpret an epidemiological analysis.
3. Analyze data from and evaluate a public health surveillance system.
4. Give a public health talk on the officer's original work or field of study to an audience of at least 30 members outside his/her normal place of work for at least 20 minutes which includes answering questions from the audience.
5. Give a 5–15 minute oral presentation to a scientific audience.
6. Create a visual/graphic aid to illustrate scientific findings.
7. Write and submit, as first author, a scientific manuscript for a peer-reviewed journal that is cleared for publication by NCDC.
8. Write and submit, as the primary author, a concise public health update communicating timely information.
9. Write and submit, as first author, an abstract.

10. Communicate complex scientific concepts to a lay audience including interactions with members of the media; and develop media brief, etc.
11. Provide service to the agency and/or the field of public health. This should not take more than 5% of the time of the officer, effectively utilizing the officer's service in times of emergency, training, disaster, outbreak or major public health event, rather than routine activities of the institutions which are part of normal portfolio of another person.

In addition to these CALs, the officer is expected to:

- Demonstrate proficiency in using computer applications commonly used by epidemiologists such as use of internet, databases like Microsoft Access and special epidemiology/biostatistics software systems.
- Be conversant with the role of the laboratory in epidemiology, including knowledge and skills for collection, transport, storage of clinical specimens, interpretation of laboratory reports, and use of laboratory information.
- Be able to identify a public health emergency of international concern and adhere to the requirements of the International Health Regulations (IHR).

**Criteria for successful completion of these CALs will be developed by the EIS Advisors and the India EIS Programme staff. Successful completion will be judged by the mentor/placement supervisors and the EIS Advisors.**

## Why mentorship?

The best way for officers to learn field epidemiologic skills is under the supervision of an experienced mentor while they conduct epidemiologic investigations and research in a public health setting. Each officer will have a mentor responsible for guiding him/her in completing CALs and a placement supervisor who is usually the chief of the programme/institute where the officer is placed. At times, the mentor and the placement supervisor will be the same person. EIS graduates will be used as much as possible in the role of mentor.

Ideally, the mentor is a person with EIS or equivalent training (MD PSM or Community Medicine) and practicing field epidemiology. The background of the mentor will be a key consideration in selection of appropriate placements. Eventually, many mentors will be graduates of the India EIS Programme.

The role of mentors is critical for the training of the officers. Mentors facilitate provision of a favorable environment for the officer to fulfill prescribed CALs and keep track of their progress. The mentor is responsible for providing overall direction and guidance to the officer. The placement supervisor is expected to provide logistical requirements necessary for training as per the CALs. Mentors and placement supervisors may also utilize the officer's service in times of emergency, disaster, outbreak or major public health event.

NCDC conducts mentorship development programmes for EIS mentors to update their education and skills in national/international conferences/workshops. Efforts will also be made to provide "successful mentorship" certificates to the mentors.

## Potential assignments/placements

Each officer will be placed in a public health programme or central project for their entire 2-years in the India EIS Programme. The officer will work closely with his/her mentor and placement supervisor to develop work and scientific plans, complete the CALs, and accomplish the objectives of the programme. Assignments can be in Central or State health programmes/projects. While the officer is placed in the assignment, he/she will remain affiliated with NCDC.

EIS Advisors, along with mentors, will determine the training plan for the officer to complete the CALs within the assignment. The officer may be shifted after consultation with the mentor, to another assignment (Central/State) for a suitable period of time, in the event the primary assignment is unable to provide an opportunity to fulfill one or more CAL requirements.

Potential assignments for placement are identified before each batch of officers is enrolled. Criteria for assignments include: (i) available resources for an officer to complete the CALs, (ii) access to surveillance and programme data, (iii) a mentor who has time and appropriate background and understands the goals of the India EIS Programme and the role of the officer, and (iv) an enabling environment with adequate administrative and other support for the officer. Assignments will be selected by the EIS Advisors, in consultation with the NCDC Director or designated NCDC staff.

Placements include national health programmes such as the Integrated Disease Surveillance Programme (IDSP) and other relevant divisions of NCDC, the Revised National Tuberculosis Control Programme (RNTCP), the National AIDS Control Programme (NACO), the National Polio Surveillance Programme (NPSP), National Vector Borne Disease Control Programme (NVBDCP), the Non-Communicable Disease Control Programme of the Government of India, the National Rural Health Mission (NRHM) and its sub missions, Indian Council of Medical Research (ICMR) and its centres, state health

directorates, other international organizations including International Clinical Epidemiology Network (INCLEN), International Union Against Tuberculosis and Lung Diseases (IUATLD), and partner institutions like the WHO and UNICEF.

The officer will not be placed in the state or programme from which he or she originates (i.e. to one's institution of sponsorship). NCDC will make institutional arrangements with programmes/placements in order to provide officers with the opportunities to meet the requirements of this programme. The officer will have an opportunity to participate in all major activities at his/her placement site.

While an officer may be assigned to a programme at NCDC or another central agency, the officer will also spend time in states investigating outbreaks, reviewing surveillance data, or conducting other EIS activities.

## Career opportunities

Since officers need to continue to hone their newly acquired epidemiological skills, appropriate career opportunities are provided, such as to serve as a mentor to future officers, and to play a leadership role in public health operations.

Sponsoring states or programmes will decide on the appropriate placement for the returning officer at the time the officer is selected, but flexibility is built into this process for the possibility of circumstances changing during the two years the officer is away. Once the officer completes his/her training, the officer is immediately placed in an appropriate position to utilize epidemiologic skills to the maximum and further him/her for a future public health lead role in the state/institution.

## Recognition for DNB (Epidemiology)

The National Board of Examination (NBE) has agreed to consider the India EIS Programme as an eligibility to DNB (Epidemiology) with additional training in other national or state specific programmes.