





National Institute of Preventive & Social Medicine (NIPSOM)

Ministry of Health & Family Welfare Mohakhali, Dhaka-1212, Bangladesh Website: www.nipsom.gov.bd

BACKGROUND

The National Institute of Preventive & Social Medicine (NIPSOM), the apex public health institute of the country, was established in 1974. The academic activities of NIPSOM began in 1978 with two postgraduate diploma courses, Diploma in Community Medicine (DCM) and Diploma in Public Health (DPH), which have gradually expanded into nine MPH programmes and one MPhil course. For conducting examinations and awarding academic degrees, the institute is affiliated with the Bangabandhu Sheikh Mujib Medical University (BSMMU) under the Faculty of Preventive and Social Medicine. The syllabus and course curriculum are approved by the Bangladesh Medical and Dental Council (BMDC).

Vision: To become a center of excellence in academic, research and resource body at international level and lend society towards good health through prevention.

Mission: To achieve and sustain excellence in every area of its teaching, training, research and consultancy, maintaining and developing its historical position as a world-class institute and enriching the international, regional, and national communities through the fruits of its expertise.

OBJECTIVES OF NIPSOM

1. Teaching:

• To conduct academic courses and programmes (MPhil and MPH) for awarding degrees in various disciplines of Public Health;

2. **Training**:

• To conduct various training programmes including in-service training of health workers at different levels of the country;

3. Research:

• To promote and undertake public health researches as an instrument of public health practice and development;

4. Consultancy:

• To provide consultancy and advocacy services in the field of public health.

CAPACITIES OF NIPSOM INFRASTRUCTURES

- Sixty-five (65) experienced faculties
- Four-storied academic cum administrative building
- Hostel building with accommodation facility for 200 students
- Examiner's lodge
- Staff quarters
- Department specific lecture and practical class rooms
- Three conference rooms
- One auditorium with capacities of around two hundred persons
- The institute has a computer laboratory with IT facilities useful for data processing and analysis.

ACADEMIC DEPARTMENTS

Sl. No.	Name of the Department
1	Behavioral Science
2	Biomedical Engineering
3	Bio-Statistics
4	Community Medicine
5	Entomology
6	Epidemiology
7	Health Education
8	Hospital Management
9	Maternal and Child Health
10	Microbiology and Mycology
11	Neuro Developmental Disorders
12	Non-Communicable Diseases
13	Nutrition, Biochemistry and Food Science
14	Occupational and Environmental Health
15	Parasitology
16	Population Dynamics
17	Public Health and Hospital Administration
18	Public Health Dentistry
19	Public Health Economics and Health Care Financing
20	Public Health Emergency
21	Public Health Informatics
22	Social Medicine

NIPSOM Hostel

Since the establishment of NIPSOM, the accommodation system for the students of this institution has been adjacent to the old building of the Directorate General of Health Services (DGHS), Mohakhali, Dhaka, now known as Shaheed Dr. Milan Bhavan. On 11th May 1999, the former Minister of Health and Family Welfare constructed a six-story hostel building on the campus of NIPSOM with a capacity of 150 students and a one-story building with a capacity of 20 students, known as NIPSOM Hostel at Dhamrai near Dhaka. Both the hostels are managed by a hostel committee following the instructions of the Director of NIPSOM. The students' hostel at the NIPSOM campus provides separate floors for male and female students. A spacious dining hall for meals and a spacious TV room is available for entertainment. A self-contained gymnasium has also been set up for indoor exercise by the students to maintain their good health. NIPSOM hostel at Dhamrai pertains to residential facilities and is used for field site training by students of NIPSOM and other medical institutes and colleges. It includes a hall room and a dining room. Both the hostels have fair accommodation for caretakers and relevant staff. The present director, Prof. Dr. Md. Ziaul Islam, PhD along with the assistance of the hostel committee takes care of the hostels through close supervision.



Figure: NIPSOM Hostel

RESIDENTIAL FIELD SITE TRAINING (RFST) CENTRE, DHAMRAI

To ensure real-life experience and community-based learning for the students in the field of public health, NIPSOM has a residential field site training centre in the premises of Dhamrai Upazila Health Complex, approximately 40 kilometers northwest of Dhaka. The residential training centre is 25 seated with all field training facilities. Students of all MPH programs and MPhil course are placed in this centre for residential field site training.

This is a single-story building surrounded by peaceful natural surroundings with the facilities of well-lit and comfortable eight rooms for students and two for faculty members. There are separate common lavatory facilities for males and females. This residential center has a commodious conference room for group discussions and meetings, as well as audio-visual amenities for academic sessions and presentations. A spacious and comfortable dining room is available inside the building and has a playground on its premises. Besides the uninterrupted generator and water supply facility, this training center has been well-secured by a permanent caretaker, appointed to serve the residents around the clock. Available vehicle services from the gate of this center and paved roads provide easy communication for reaching the rural communities for data collection.





LIBRARY FACILITIES

Library facilities typically involve various resources and services intended to facilitate study, research, and leisure activities. The NIPSOM library is situated on the first and second floors and has a collection of over 2700 books related to basic and clinical medical sciences, as well as public health concerns. The library preserves student theses and provides an extensive collection of national and international journals, publications, and periodicals from local and worldwide sources. It is well furnished with study areas with computers, complimentary Wi-Fi access, and

Health Inter-Network Access to Research Initiative (HINARI) browsing capabilities for students and teachers.



NIPSOM Library

LABORATORY FACILITIES

NIPSOM has dedicated Microbiology & Mycology and Parasitology, Biochemistry Entomology, and Occupational and environmental laboratories.

The Microbiology, Mycology, and Parasitology Laboratory of NIPSOM is committed to advancing public health through routine and specialized diagnostic services, research, and training. Comprehensive biochemical, microbiological, immunological, hematological, and clinical pathology testing is conducted regularly, ensuring high-quality, reliable data. Beyond these essential services, the laboratory also specializes in molecular diagnostics facilitating precise pathogen detection and contributing to both clinical and epidemiological research.

NIPSOM laboratory plays an instrumental role in national health initiatives by conducting large-scale surveys on infectious diseases and emerging public health threats. During any public health emergency like the COVID-19 pandemic and Dengue outbreak, the laboratory provides rapid diagnostic services and technical assistance. Through collaboration, the lab is producing baseline data and offering crucial insights that support DGHS's national disease prevention and control efforts.

In addition to routine diagnostics, the laboratory serves as a training facility, offering workshops and programs focused on laboratory quality assurance, infection prevention and control, antimicrobial resistance, molecular diagnostic techniques, and biosafety and biosacurity protocols. These programs are designed to enhance the skills and knowledge of health professionals, ensuring best practices in laboratory science and infectious disease management.









Microbiology & Mycology, Parasitology and Biochemistry Laboratory of NIPSOM

Entomology Laboratory

The Entomology laboratory assists diverse research activities by identifying vector species with an emphasis on observing morphological and behavioral changes in arthropods—particularly mosquitoes—in response to evolving environmental conditions. Current projects include the rearing of mosquito populations under controlled settings and the assessment of insecticide resistance patterns among vectors, aiming to better understand resistance mechanisms and improve vector control strategies.



Entomology Laboratory of NIPSOM

Environmental Laboratory

The Environmental laboratory plays a crucial role in addressing environmental health challenges across Bangladesh with a focus on testing, research, and capacity building to mitigate diverse public health risks. Its portable, cost-effective NIPSOM Arsenic Kit stands out as a vital tool for testing arsenic by identifying unsafe drinking water sources at the point of use, which is especially valuable in rural and remote areas lacking access to laboratory facilities.

The laboratory also conducts extensive training and awareness programs to educate local health practitioners, community health workers, and NGOs on persistent environmental health risks, including arsenic contamination, waterborne diseases, and air quality issues. Furthermore, the NIPSOM Environmental Laboratory prioritizes staff safety through the strict use of personal protective equipment (PPE) and adherence to safety protocols when handling hazardous materials, ensuring a safe work environment. Through direct laboratory testing, capacity building, and rigorous safety measures, the laboratory plays a vital role in promoting safer, healthier communities, enabling effective responses to environmental health threats, and fostering a culture of prevention and resilience essential to addressing current and future public health challenges.

ACTIVITIES OF NIPSOM

A. ACADEMIC ACTIVITIES

Course & Programmes Offered by NIPSOM

COURSE	Allotted Seats
Master of Philosophy (MPhil) in Preventive & Social	09
Medicine (PSM) for a duration of two years.	

PROGRAMME: Master of Public Health (MPH) NIPSOM conducts nine MPH programs and each program is of two years duration.	Allotted Seats
Community Medicine (CM)	20
Community Nutrition (CN)	06
Epidemiology (Epid)	22
Health Promotion & Health Education (HP&HE)	26
Hospital Management (HM)	26
Health Service Management and Policy (HSMP)	20
Non-Communicable Disease (NCD)	10
Occupational and Environmental Health (OEH)	20
Reproductive and Child Health (RCH)	26
TOTAL	185

Fifty Percent (50%) seats are allotted for government candidates and the rest 50% for private candidates.

CONTINUING PROFESSIONAL EDUCATION (CPE)

NIPSOM conduct CPE by the Faculties and Students through

- Seminar
- Workshop
- Scientific Dissemination

B. TRAINING ACTIVITIES

The institute conducts training programmes on

- Epidemiology
- Research Methodology
- Hospital Management
- Biostatistics
- Data Analysis
- Occupational & Environmental Health
- Leadership
- Financial Management
- Digital Nothi (D-Nothi) System
- Behavioral Change Communication
- Public Health Nutrition
- Community Health
- Hospital Preparedness for Emergencies
- Infection Prevention and Control
- Sexual and Reproductive Health

C. RESEARCH ACTIVITIES

NIPSOM plays a crucial role in conducting research on national and international health issues.

Researches are conducted in 3 categories:

- Faculties
- Students of NIPSOM
- Institution itself

INSTITUTIONAL REVIEW BOARD (IRB)

NIPSOM has an Institutional Review Board comprising public health experts, researchers, theologist, lawyers, relevant stakeholders, and women representative, which provides ethical clearance for research projects. Additionally, members of the board review and grant scientific approval for students' thesis protocols.

RECENT RESEARCHES CONDUCTED

- Comprehensive Assessment of Health Needs, Dynamics of Healthcare Seeking Behavior and Satisfaction Regarding Existing Health Services among Rural Elderly People in Bangladesh, 2024
- Sero-prevalence of Hepatitis B and Hepatitis C infection in key population of Forcibly

Displaced Myanmar Nationals in Bangladesh, 2023.

- Dynamics of COVID-19 Vaccination Programme in Bangladesh: Compliance with Universal Health Coverage, 2023.
- Rapid Situation and Response Assessment of HIV in Forcibly Displaced Myanmar Nationals, 2023.
- Healthcare-Associated Infections, Phenotypic and Genotypic Characterization of Drug Resistance of Isolated Pathogens in some Tertiary Care Hospitals of Bangladesh, 2023.
- Programmatic Implementation of WHO -endorsed Rapid Diagnostic tool Genotype MTBDR plus, for multidrug-resistant tuberculosis and pre- extended drug-resistant tuberculosis early diagnosis and treatment initiation in Bangladesh, 2023.
- Prevalence of Hepatitis B virus (HBV) vaccine immunity among Adolescent girls and women of reproductive age of Bangladesh, 2023.
- Post-traumatic stress disorders and coping strategies of health professionals during COVID-19 pandemic in Bangladesh, 2022.
- Clinical Laboratory Findings Corresponding with COVID-19 infection: A Comparison between Urban Slum and Non-Slum Dwellers, 2022.
- Nutrition surveillance in Bangladesh, 2022.
- Cognitive social capital and geriatric depression: a community-based case-control study in the rural elderly of Bangladesh, 2021.
- Interferon Gumma response assay for latent TB infection among health care worker & their contacts, 2021.
- Prevalence of Hepatitis B Virus (HBV) & Hepatitis C Virus (HCV) among adult population of Bangladesh, 2021.
- Need Assessment of Quality Public Health Professionals in Bangladesh, 2020.
- HIV Sero-Survey among tuberculosis patients of Bangladesh, 2020.
- Need assessment of quality public health professionals in Bangladesh, 2019.
- Climatic impact on dengue & chikungunya infection, 2019.
- STEPS survey for NCD risk factor among adult population of Bangladesh, 2018.
- Baseline survey assessing the knowledge and practice of the mass people in understanding and maintaining a healthy lifestyle, 2018.

JOURNAL OF PREVENTIVE AND SOCIAL MEDICINE (JOPSOM)

The institute publishes a biannual journal, the *Journal of Preventive and Social Medicine* (JOPSOM, ISSN 1012-8697), which features articles on contemporary health issues, research findings, study reports, and topics of educational and scientific interest in public health. JOPSOM is accessible online via DOI numbers. Students and faculty from various universities can access these publications and engage with NIPSOM by sharing ideas and insights on different research areas.

D. CONSULTANCY AND ADVOCACY ACTIVITIES

The institute is a leading source of multidisciplinary expertise in the public health sector, offering extensive knowledge and research that contribute to both academic and practical applications. In addition to its educational role, the institute provides vital consultancies and advisory services to the government on various public health matters.

Faculty members play an active role as resource persons, members of expert committees, and

technical advisors, contributing to public health policy development, strategic planning, and programme implementation at the national level. Their expertise is crucial in shaping public health initiatives, and also fostering collaboration with other academic institutions, key stakeholders, and international organizations such as WHO, UNICEF, and USAIDS to advance research and public health efforts.

E. COLLABORATIVE ACTIVITIES

- World Health Organization (WHO)
- Food and Agricultural Organization (FAO)
- United Nations Children's Fund (UNICEF)
- The Joint United Nations Programme on HIV/AIDS (UNAIDS)
- United States Agency for International Development (USAIDS)
- One Health Bangladesh
- Japan International Cooperation Agency (JICA)
- International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b)
- Asian Development Bank (ADB)
- Prince of Songkla University, Thailand
- South-East Asia Public Health Education Institutes Network (SEAPHEIN)

F. COMMUNITY BASED ACTIVITIES

NIPSOM performs different community based activities for building awareness on important public health issues like

- Public Awareness on Public Health Important Diseases
- Environmental Sanitation
- Climate Change
- Personal Hygiene
- Prevention of Communicable and Non-communicable Diseases
- Public Health Emergencies
- Health Promotion
- Food Safety