IIHMR UNIVERSITY

Management Development Programme

on

Epidemiological Methods & Biostatistical Applications in Public Health Research

February 1- 5, 2027



Background

Public health professionals are increasingly required to generate, analyse and interpret evidence for research, programme planning, monitoring and evaluation, healthcare management and policy decisions. Yet, translating a public health problem into a clear research question, selecting an appropriate study design and sampling strategy, choosing suitable statistical methods, and correctly interpreting research findings can be challenging.

This MDP provides an integrated, practical and application-oriented learning experience covering the complete journey from research questions and study design to data analysis, interpretation and evidence-based public health decisions.
The programme brings together epidemiological and biostatistical approaches through real-world examples, case studies, worked examples, practical exercises, health-related datasets and research problem-solving activities.

Conceptual understanding • Practical application • Research decision-making

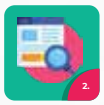
The emphasis is on understanding and application rather than mathematical derivations.

Objectives

By the end of the programme, participants will be able to:



Formulate clear and answerable public health research questions, objectives and hypotheses from defined public health problems and identify the key population, exposure and outcome variables.



Select and justify appropriate epidemiological study designs, sampling strategies and measures of disease frequency and association for given public health research questions.



Select and apply appropriate biostatistical methods to describe and analyse health data, based on the research question, type of variables and study design.



Interpret and critically appraise epidemiological and statistical results, including effect estimates, confidence intervals and p-values, while recognising the potential influence of bias and confounding.



Apply the epidemiological and biostatistical skills acquired during the programme to a relevant research or professional problem and formulate evidence-based public health conclusions and recommendations.

Contents

Research Foundations in Public Health: Formulation of public health research questions, aims and objectives, and identification of study populations, exposures, outcomes and variables.

Epidemiological Methods and Study Designs: Descriptive and analytical epidemiology, measures of disease frequency and association, epidemiological study designs, sampling, sample size, bias, confounding, validity and reliability.

Biostatistical Applications in Public Health Research: Organisation and presentation of health data, descriptive statistics, probability, estimation, confidence intervals, hypothesis testing, comparison of groups, correlation and regression.

Statistical Interpretation and Critical Appraisal: Interpretation of statistical findings, p-values, confidence intervals, statistical significance, errors in hypothesis testing, selection of appropriate statistical methods and critical appraisal of research studies.

Evidence-Based Decision-Making and Communication: Application and communication of epidemiological and statistical evidence for public health research, healthcare management, programme monitoring and evaluation, policy formulation and evidence-based decision-making.

Who Should Attend?

This MDP is intended for working professionals involved in healthcare, public health, health research, programme management, monitoring and evaluation, health analytics and evidence-based decision-making, including

- Public Health Professionals
- Medical Professionals
- Epidemiologists
- Health Programme Managers
- Healthcare Administrators and Hospital Managers
- Monitoring and Evaluation Professionals
- Health Data and Analytics Professionals
- Researchers and Research Scholars
- Faculty Members in Health and Public Health Institutions
- Nursing and Allied Health Professionals
- Health Policy and Programme Professionals
- Professionals working with NGOs and Development Organisations
- Professionals involved in Health Research and Programme Evaluation

Programme Coordinator



Dr. Jagajeet Prasad Singh
Professor
IIHMR University, Jaipur

The programme will be offered by a team of national and international subject experts.

Nominations/Registration

Please send your nominations/registrations to the following address:

Management Development Programme Office

IIHMR University
1, Prabhu Dayal Marg, Sanganer Airport
Jaipur - 302029, INDIA | Tel: +91-141-3924700
Mobile: +91 9116006536
E-mail: training@iihmr.edu.in

Pedagogy

The programme offers a multifaceted learning experience through lectures, group discussions, case studies, and hands-on experiential learning. Participants are immersed in a dynamic learning environment designed to foster theoretical understanding and actionable real-world insights.

Duration and Venue

The programme will start on Monday, February 1, 2027, and will conclude on Friday, February 5, 2027. The programme will be held at IIHMR University, 1, Prabhu Dayal Marg, Sanganer Airport, Jaipur – 302029. The University campus provides a conducive learning environment for participants, who are welcome to use the library and recreational facilities available on campus.

Programme fee

The programme fee for Indian participants is Rs. 50,000 plus GST (18% as applicable), and for international participants it is USD 525 plus GST (18% as applicable). The programme fee covers tuition, background reading material, lodging, and boarding.

Certificate

A certificate of participation on completion of the programme will be issued by IIHMR University, Jaipur.

Discounts on Fee

- **Early Bird Discount:** Nominations received with payment before four weeks of the commencement of the programme will be entitled to a 10% early bird discount.
- **Group Discount:** Any organization sponsoring four or more participants to the programme will be entitled to a 20% discount on the total fee payable, provided that at least four participants attend the programme.
- **Maximum Discount:** Organizations can avail themselves of both discounts, subject to a maximum discount of 20%.



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