



Indian Institute of Public Health – Delhi Public Health Foundation of India



Training Venue: Plot 47, Sector 44, Institutional Area, Near HUDA City
Centre Metro Station, Gurugram-122002, Haryana, India

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Workshop Series 2022- 23

Introduction to Infectious Disease Modeling (*In-person*)

February 13-17, 2023

Last date of registration: 30th Jan 2023

Course Lead: Dr. Surabhi Pandey, Associate Professor, Indian Institute of Public Health-Delhi

Registration form: <http://tof.phfi.org/>

About the course

This workshop is useful for individuals who are interested in understanding the transmission dynamics of infectious disease at population level, assessing impact of intervention and implication to decision making. This workshop will introduce to epidemiological and mathematical concepts underlying infectious disease modelling. By the end of the workshop, participants will be able to understand basic principles of compartmental models and their mathematical equations. The participant will be able to understand the modelling studies and interpret its results. They will develop understanding on how to use evidence generated from modelling studies for decision-making.

Contents

- History of Mathematical Modelling (w.r.t Infectious Disease)
- Different Modelling Approaches
- Compartmental Models
- Interacting Population Model (SIR)
- Mortality Due to Infection/Disease
- Fatal Infections (SI Models)
- Infection/Disease without Immunity (SIS model)
- Formulating Models for different disease such as Bacterial, Vector-borne, carrier dependent etc.
- Simulating SIR model in Excel

About the Faculty

Dr. Surabhi Pandey, Associate Professor is PhD in Mathematics and specialized in Infectious Disease Modelling (IDM). She has 12 years of experience in teaching Maths, Programming and IDM in UG and Masters Course. Her research interest is in theoretical and computation modelling of infectious diseases and data analysis.

Who should attend? This workshop is suitable for anyone with background in public health or sciences who wants to develop an understanding of mathematical modelling of infectious diseases.

How to Apply?

Interested participants may [Apply Online](#) and submit online registration form or write an email to trainings@iiphd.org. The fee will be submitted by E-transfer, the **bank details for E-transfer will be shared upon applying for the workshop**.

Registration Fee:

Indian National: 10000 INR per participant	Foreign National: 20000 INR per participant
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*** We have limited seats available; registrations will be confirmed on a first come first serve basis.**

Disclaimer: In case of cancellation of the workshop due to any unforeseen circumstances like natural calamities, imposition of curfew declared by the government, any emergency situation at the institute, or any medical emergency of the workshop trainer, the full registration fee shall be refunded to the candidates. However, other costs like travel bookings and stay arrangements incurred by the participant shall not be borne by the institute.