# Introductory Course in Epidemiology&MedicalStatistics (The Gambia)



# Background

Epidemiological research is an important tool to assess health effects in populations and can be used to optimise disease surveillance, facilitate outbreak investigation and provide vital evidence for the evaluation of changes in health policy.

This course will take place at the MRC Unit The Gambia at LSHTM. The Unit, which joined LSHTM in February 2018, is one of the largest scientific research centres in sub-Saharan Africa. It has developed and maintained an international reputation for ground-breaking research into some of the leading causes of morbidity and mortality in the region.

# Course overview

This short course is an intensive introduction to epidemiology and medical statistics. At the end of the three weeks, participants will understand the features, strengths and limitations of intervention and observational studies, learn statistical methods to analyse epidemiologic data and undertake basic statistical analysis using Stata software.

This course is offered at the LSHTM in London every June and was first offered at the MRC Unit in November 2019.

# Who should Apply?

The course is relevant to clinicians, nonclinicians, and other graduates who work in ministries of health, non-governmental organisations, universities, medical research units, and other health services.

# Course content

Teaching will consist of 1-hour lectures, 90-minute small-group practical sessions with facilitators, and seminars with guest lecturers. The course will cover topics including:

- Design of epidemiological studies, including sampling, study design (i.e. case-control, cohort, cross-sectional, intervention studies and clinical trials), infectious disease epidemiology with special emphasize on COVID-19 outbreak response.
- Statistical methods, including t-tests, chi-square tests, Mantel-Haenszel analysis, standardization, linear regression, logistic regression, survival analysis and sample size/power calculations.
- Research in context, including systematic reviews, and translating evidence to policy.
- Data analysis (using Stata software)

# Key information



## 🙀 Course organisers:

Annette Erhart, MD PhD Nuredin Mohammed, PhD Sujit Rathod, PhD



### Fees for 2025\*:

£3.537



### Contact:

shortcourses@lshtm.ac.uk



## Find out more and apply:

www.lshtm.ac.uk/study/short-courses/epidemiology-statistics-gambia

<sup>\*</sup>Fees include all teaching material, temporary Stata license, breakfast, lunch, tea breaks, weekly networking & social events. Childcare available by request. Excludes flights, visitor's visa, local transport, dinner and accommodation.