Improving Health Worldwide

Professional Certificate in Pharmacoepidemiology & Pharmacovigilance



Overview

The global health challenge of ensuring drug safety while maintaining public confidence has become increasingly complex. Pharmaceutical companies must employ dedicated pharmacovigilance professionals. NGOs need confidence that the medicines they supply are both effective and safe. Health authorities must deliver high-quality care while managing costs. Regulatory bodies must weigh the benefits of drugs against concerns about potential harms.

The course

This intensive, modular course addresses the growing demand for professionals trained in assessing drug safety and evaluating the risks and benefits of drug use. As an introductory-level course, it is designed to meet the needs of a wide range of individuals. The diverse backgrounds and expertise of our lecturers ensure a strong balance of theoretical insight and practical applications.

Course content

The curriculum will provide an introduction to epidemiology, statistics, pharmacoepidemiology, and health economics. It will also cover the historical and legal background to pharmacovigilance and pharmacoepidemiology, and pharmacological basis of adverse drug events (ADEs), addressing ADE concerns at individual and population levels, and practical applications of pharmacoepidemiological principles and methods.

Course delivery

This online course is organised into three Blocks during the following weeks:

- Block 1 (9 - 13 November 2026): Introduction to Pharmacoepidemiology
- Block 2 (1 - 5 February 2027): Introduction to Pharmacovigilance
- Block 3 (15 - 19 March 2027): Intermediate Pharmacoepidemiology & Pharmacovigilance

Students can sign up for one, two, or three Blocks. Students who would like to be assessed in order to obtain a Professional Certificate (30 credits) must attend all three Blocks in addition to preparing a project (submitted in April/May) and taking an exam (in May/June).

Each Block consists of approximately 28 hours of formal teaching and contact time (via online synchronous teaching/group work). The full assessed course leading to a Professional Certificate (three Blocks plus project and exam) comprises 300 total hours, which are spent as follows: ~80 hours formal teaching and contact time, ~120 hours self-directed study, and ~100 hours project work.

Already know the basics? Our Real-World Evidence in Pharmacoepidemiology short course (Block 4) provides hands-on experience analysing and overcoming common sources of error when using real-world data.

Teaching methods

Teaching for each Block will be delivered primarily via online synchronous teaching during each teaching week. This will include pre-recorded lectures from subject matter experts. Students and tutors will then interact in live Q&A sessions and workshops during the teaching week where students have the opportunity to apply and discuss concepts introduced in the pre-recorded content. Workshops will address topics such as designing a pharmacoepidemiological study, critical appraisal of published papers, developing risk management plans and responding to a drug safety alert. In addition to the prerecorded lectures, students will be provided with lists of helpful scientific papers, articles and other content to assist with learning.

For students who take the full assessed course leading to a Professional Certificate, there will also be self-directed learning in between the online synchronous teaching weeks to help prepare for the Project and Exam.

Assessment

For students who take the full assessed course leading to a Professional Certificate, the assessment consists of submission of a 4000-word written Project (40% of total grade) and a 2-hour written Exam (60% of total grade). You must be awarded a pass grade for both to be awarded the Professional Certificate.

Who should apply?

This course is ideal for those involved in drug development, licensing, surveillance, research, real-world evidence, and policy within the pharmaceutical industry, academic institutions, NGOs, regulatory bodies, health services, and policy-making agencies.

Prerequisites for this course include:

- An undergraduate degree in a subject appropriate to the course (e.g., epidemiology, statistics, pharmacy, biological sciences, chemistry, physics, medicine, dentistry, etc); or
- At least 6 months of relevant experience

Key information

Course delivery
Online

Programme Director
Christopher Rentsch

Course fees
Per block:

£1,630 (full fee)
£1,000 (students or charity status)
£570 (LMICs)

Full assessed course leading to Professional Certificate:

£5,390 (full fee)
£3,305 (students or charity status)
£1,885 (LMICs)

Contact email
shortcourses@lshtm.ac.uk

Find out more and apply
lshtm.ac.uk/study/short-courses/pharmacoepi-pharmacovigilance-london

The London School of Hygiene & Tropical Medicine (LSHTM) is one of the world's leading public health universities. We have an annual research income of more than £190 million, and provide outstanding specialist education for our 4,700 postgraduate students

Our mission is to improve health and health equity in the UK and worldwide; working in partnership to achieve excellence in public and global health research, education and translation of knowledge into policy and practice. We are committed to helping create a more healthy, sustainable and equitable world for everyone, because we believe our shared future depends on our shared health.

Our short, post-experience and specifically designed short courses provide the opportunity for intensive study in specialised topics. These courses are ideal if you want to refresh your skills and keep in touch with the latest research and knowledge in public and global health.



