



# Advanced Epidemiological Data Analysis

**Duration:** 5 Days

**Language:** en

**Course Code:** IND5 - 149

## Objective

Upon completion of this course, participants will be able to:

- Understand advanced statistical methods used in epidemiological analysis.
- Develop proficiency in data management and preparation.
- Analyse epidemiological data using advanced statistical software.
- Interpret and communicate findings effectively.
- Apply data analysis techniques to real-world epidemiological research.

## Audience



This course is intended for:

- Epidemiologists
- Public health professionals
- Medical researchers
- Data analysts in health sciences
- Graduate students in public health and epidemiology

## Training Methodology

The course employs a blend of instructional methods, including:

- Interactive lectures
- Hands-on data analysis sessions
- Group discussions and case studies
- Expert-led Q&A sessions
- Comprehensive course materials and resources

## Summary

This advanced course provides a deep dive into epidemiological data analysis, equipping participants with the skills and knowledge to handle complex data sets and derive meaningful insights. Through theoretical instruction and practical application, participants will learn advanced statistical techniques, data management strategies, and interpretation methods essential for epidemiological research.

## Course Content & Outline

### Section 1: Introduction to Epidemiological Data Analysis

- Overview of Epidemiological Study Designs
- Types of epidemiological data
- Introduction to statistical software for data analysis

### Section 2: Data Management and Preparation

- Data cleaning and transformation
- Handling missing data
- Creating and managing data sets

### Section 3: Advanced Statistical Techniques

- Regression models: linear, logistic, and Cox proportional hazards
- Survival analysis techniques



- Multilevel modelling and repeated measures analysis

#### **Section 4: Interpretation and Communication of Results**

- Interpreting statistical outputs
- Visualising data and results
- Communicating findings to different audiences

#### **Section 5: Practical Applications and Case Studies**

- Hands-on data analysis practice with real-world datasets
- Developing research questions and analysis plans
- Case studies and collaborative problem-solving
- Course review and expert Q&A

### **Certificate Description**

Upon successful completion of this training course, delegates will be awarded a Holistique Training Certificate of Completion. For those who attend and complete the online training course, a Holistique Training e-Certificate will be provided.

Holistique Training Certificates are accredited by the British Assessment Council (BAC) and The CPD Certification Service (CPD), and are certified under ISO 9001, ISO 21001, and ISO 29993 standards.

CPD credits for this course are granted by our Certificates and will be reflected on the Holistique Training Certificate of Completion. In accordance with the standards of The CPD Certification Service, one CPD credit is awarded per hour of course attendance. A maximum of 50 CPD credits can be claimed for any single course we currently offer.

### **Categories**

Consultation & Services, Health, Safety & Environment HSE, Healthcare & Pharmaceutical

### **Tags**

Data Analysis , Epidemiology