



Advanced Course on Epidemiological Analysis

4-15th September 2023

Pre-course material

Please allow around 7 hours prior to the first session in order to complete the pre-course material.

ACEA Lecture 0a: Parts 1-3

Revision of key concepts: Measures of disease & effect: Helen Weiss

Total viewing time: 48 minutes

ACEA Lecture 0b: Parts 1-2

Case control studies: logic, analysis and interpretation: Richard Hayes

Total viewing time: 58 minutes

Computer practical P0a: Stata revision

ACEA Lecture 0c: Parts 1-2

Likelihood: Simon Cousens

Total viewing time: 1hr 45 minutes

Computer practical P0b: Likelihood

Please note that the Likelihood material is conceptually more complex and provides useful background to the sessions on logistic regression. Please don't worry as we don't expect you to fully understand it. You may chose to revisit this session again after completing the first week of the course in order to consolidate your understanding.

ACEA Lecture 0d

Causal diagrams in Epidemiology: Ruth Keogh

Total viewing time: xxx minutes

Practical P0c: Causal diagrams (optional)

Timetable 4-15th September: Hybrid course delivery

Students will pre-register for in-house or online Zoom sessions.

Course material

Available to download from Moodle. Some lectures will be delivered live each day. Pre-recorded versions of all lectures, included those which will be delivered live, will be available on-line.

LSHTM in-house

All live sessions will take place in LG6/7. If you do not have a laptop, we can provide one (advance notice required).

Online

All live sessions will take place using same Zoom link.

Week 1: Logistic regression analysis using Stata

Date	Session	Duration	Time (BST)	Title
4 th Sep	Live	45 mins	10.15-11.00	Introduction Helen Weiss, Melissa Neuman & Clare Gilham
	Live (L1)	1h	11.00-12.00	Logistic regression I
		30 mins	12.00-12.30	Logistic regression I lecture Q&A
	Live (P1)	2 hours	1.00-3.00	Logistic regression practical
5 th Sep	Recorded (V2)	45 mins	10.00-11.00	Logistic regression II
	Live (L2)	45 mins	11.45-12.30	Logistic regression II Q&A
	Live (P2)	2 hours	1.00-3.00	Logistic regression II practical
6 th Sep	Live (L3)	1h	10.30-11.30	Logistic regression III
		30 mins	11.30-12.00	Logistic regression III Q&A
	Live (R2)	30 mins	12-12.30	Logistic regression recap
	Live (P3)	2 hours	1.00-3.00	Logistic regression III practical
7 th Sep	Recorded (V4b)	1h		Analysis of case-control studies
	Live (L4)	1h	11.00-12.00	Matching in case-control studies
		30 mins	12.00-12.30	Matching in case-control Q&A
	Live (P4)	2 hours	1.00-3.00	Logistic regression IV practical
8 th Sep	Live (L5)	2hr	10.30-12.30	Strategies of analysis I & II
	Live (P5)	2hr	1.00-3.00	Strategies practical
	Live	1h	3.00-4.00	Week 1 summary session <i>LSHTM: Clare Gilham</i>

* tutors will join LSHTM in-house STATA practicals after half an hour

Week 2: Analysis of longitudinal epidemiological studies using Stata

Day	Session	Duration	Time (BST)	Title
11 th Sep	Recorded (V6a)	30 mins		Crude and stratified rate ratios
	Live (L6)	1h	11.00-12.00	Stratifying on time for cohort studies
		30 mins	12.00-12.30	Rate ratio & stratified lecture Q& A
	Live (P6)	2h	1.00-3.00	Rate ratio & stratified analysis practical
12 th Sep	Live (L7)	1hr	11.00-12.00	Poisson analysis for cohort studies
		30 mins	12.00-12.30	Poisson analysis lecture Q& A
	Live (P7)	2h	1.00-3.00	Poisson analysis practical
13 th Sep	Recorded (V8b)	50 mins		Further issues in the analysis of cohort studies
	Live (R7)	30 mins	10.30-11.00	Cohort studies recap Q&A
	Live (L8)	1hr	11.00-12.00	Cox regression for cohort studies
		30 mins	12.00-12.30	Cox regression lecture Q&A
	Live (P8)	2h	1.00-3.00	Cox regression practical
14 th Sep	Live (L9)	1hr15	10.45-12.00	Analysis of correlated data
		30 mins	12.00-12.30	Correlated data lecture Q&A
	Live (P9)	2h	1.00-3.00	Correlated data practical
15 th Sep	Live	15 mins	10.00-12.00	Student clinics by appointment
	Live	1h	12.00-12.30	Final wrap-up session

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