



Elevating frontline epidemiology

Open-source analytics:
Tools, training, and support

A nonprofit organization

www.appliedepi.org

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WHO WE ARE

ELEVATING FRONTLINE EPIDEMIOLOGY

Applied Epi is a nonprofit organization helping the frontline public health workforce achieve advanced, versatile, and cost-effective analytics capabilities.

Our **Epidemiologist R Handbook** has helped 175,000 people learn R (including 40,000 in low- and middle-income countries).

FRONTLINE PRACTITIONERS AND R EXPERTS

Our team has 150 practitioner experts in 35 countries around the world. We know the challenges of ground-level public health practice, and can help you learn R.

HARNESSING THE POWER OF R

- Free to use
- Open-source and customizable
- Brilliant data visualization
- Reproducible analysis and collaboration
- Dashboards and automated reports
- Advances equity in public health

*"With R I can do anything.
What took 10 hours in Excel,
I do in less than 1 hour."*

- Haitian epidemiologist using
our Epi R Handbook

WHAT WE OFFER

A COMPREHENSIVE SUITE OF SERVICES



OPEN SOURCE TOOLS

- The Epidemiologist R Handbook
- R packages for public health
- Situation report templates



R TRAINING

- Live courses
- Self-paced tutorials
- Train-the-trainer

*"An absolutely fantastic course, tailored to the needs
of epidemiologists, with inspirational instructors.
I cannot recommend highly enough."*

- UK health agency epidemiologist



SUSTAINED SUPPORT

- Post-training follow-up / R help desk
- Community Q&A forum
- Mentorship program

INTRODUCTION TO R FOR APPLIED EPIDEMIOLOGY

COURSE OVERVIEW

Target audience: Public health practitioners, applied and field epidemiologists, data managers, researchers, and healthcare workers

Objectives: Participants learn to use R for applied epidemiology using outbreak investigation case studies

Duration: 35 hours (5 days)* of live instruction



Topics: Data import and cleaning, transforming and joining data, data visualization, epidemic curves, basic statistics, descriptive summary tables, GIS demonstration, reproducible automated reports (see curriculum details on page 5)

Activities: Live coding demonstration, facilitated coding exercises, lecture, case studies

Format:

- Remote and in-person options available
- Courses for organizations, or open to the public (individual seats)
- Delivered as
 - Condensed: 5 consecutive, full days OR
 - Part-time: 10 half days over 5-10 weeks, with support available between sessions

**Cohorts with experience using other code-based statistical software (e.g. SAS or Stata) may be eligible for a 4-day course at reduced price*

Sustained support (for organizations): Included in the price are 3 group follow-up sessions (1.5 hours each) after the classroom instruction to help the organization apply R in their work context

Online community: Participants register on our Applied Epi Community website, which is a venue for Q&A during the course, and provides a supportive network afterwards

"I have been trying to teach myself R for years now... this Applied Epi course put me lightyears ahead in only 5 days!"

- Epidemiologist at a global NGO

INTRODUCTION TO R FOR APPLIED EPIDEMIOLOGY

PRICING

We are a nonprofit organization committed to expanding access to high-quality training worldwide. If these prices are unaffordable for you, contact us to discuss eligibility for reduced prices. Listed prices are for remote courses, are in USD, and are not inclusive of local applicable tax.

Courses for organizations (priced by cohort size)

- Course dates/times that align with your team's schedule
- 35 hours* of live classroom instruction, either as 5 consecutive, full days (condensed), or as 10 half-days (part-time)
- 3 follow-up sessions (1.5 hours each)

Cohort size	1-6	7-12	13-18	19-24	25-30	31-36
Total price for condensed format <i>(\$990 per-person at cohort maximum)</i>	\$5940	\$11880	\$17820	\$23760	\$29700	\$35640
Total additional price for part-time format	\$675	\$1200	\$1725	\$2250	\$2775	\$3300

*Cohorts with experience using other code-based statistical software (e.g. SAS or Stata) may be eligible for a 4-day course at reduced price

Public courses (priced per person)

- See schedule of upcoming courses on our website
- 35 hours (condensed or part-time) of live synchronous classroom instruction

Public courses	Price per person
Total price	\$990

"I have tried a few online courses and had help from colleagues, but this course was really tailored exactly to what we require for our work."
- Field Epidemiologist

Compare us to others

Our courses are more affordable, taught by frontline practitioners, and equip participants for practice

	Applied Epi (organizational course with 12 participants)	UCL	LSHTM	Jumping Rivers (for profit)	Imperial Univ.	ThinkR (for profit)
Daily cost per person*	\$176	\$202	\$325	\$340	\$481	\$681
Principal Audience	Public health practitioners and applied epidemiologists	Research	Public health	General audiences	General audiences	General audiences

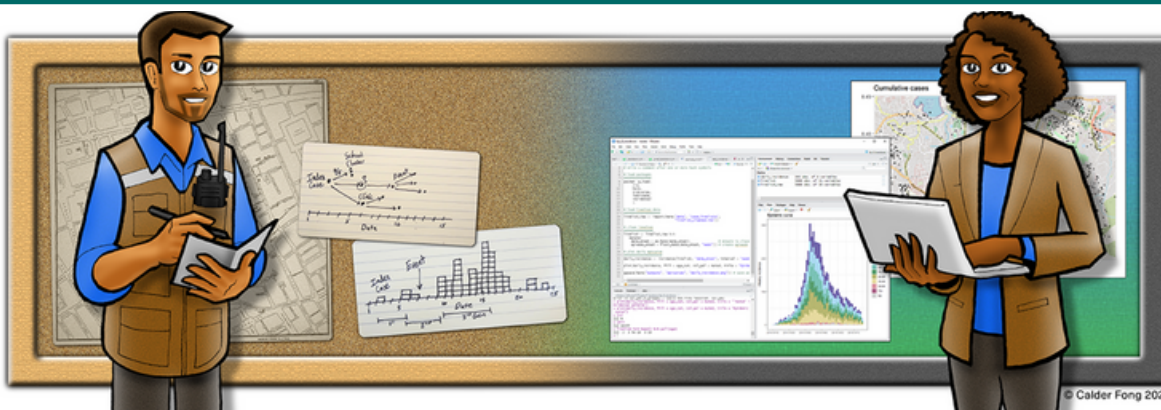
*7 hour days. Sourced from institution websites as of 01/2022. Contact institutions directly for official quotes.

INTRODUCTION TO R FOR APPLIED EPIDEMIOLOGY

CURRICULUM DETAILS

Participants learn R within outbreak investigation case studies. Modules are 3.5 hours. Contact us to discuss content customization. Curriculum below is subject to change.

Pre-course	Installation of R, RStudio, and R packages
Module 1	About R, RStudio projects, scripts, and basic R coding syntax
Module 2	File management, importing data, and exploratory analysis
Module 3	Tidy data in public health, core "tidyverse" R functions, and "piping" data
Module 4	Data cleaning (deduplication, filtering rows, selecting and creating new columns, handling dates)
Module 5	Grouping data, producing summary statistics, and making report-ready tables
Module 6	Data visualization, building plots with ggplot2 "grammar of graphics" syntax, histograms, scatter/bar/line/box plots, and dynamic plot labels
Module 7	Transforming data with pivots and joins, ordinal factors
Module 8	Public health data visualization: epidemic curves, heat plots, demographic pyramids; learning to "tinker" and read R documentation; GIS demonstration
Module 9	Automated reports with R markdown, incorporating routinely-updated data, finding your R user community, getting help
Module 10	Knowledge synthesis in new case study, R markdown, peer code review
Sustained support (for organizations)	3 follow-up sessions (1.5 hours each) to help the organization apply R in their specific work context



ADVANCED R WORKSHOPS

OVERVIEW

These 1-day workshops on advanced R techniques are currently offered only to organizations.

An advanced beginner or intermediate competency in R is a prerequisite. Most students who successfully complete our "Introduction to R for Applied Epidemiology" course are prepared to enroll in these workshops.

The following topics are available and are each covered in one 7-hour day:

- GIS mapping with R
- Collaboration and version control with R, Git, and GitHub
- Dashboards with R Markdown or with R Shiny
- R and databases
- Survey analysis with R
- Advanced data visualization with the ggplot2 package
- Advanced statistics and regression modeling in R
- Advanced automated reports with R Markdown
- Advanced data management and task iteration with R

"Full workflow integration, including maps. I couldn't have done this in SAS."

- US CDC epidemiologist

Other topics can be considered upon request.

Price by size of cohort (USD)

Cohort size	1-6	7-12	13-18	19-24	25-30	31-36
Total price for cohort <i>(\$450 per-person at cohort maximum)</i>	\$2700	\$5400	\$8100	\$10800	\$13500	\$16200


Compare us to others

Our courses are more affordable, taught by frontline practitioners, and equip participants for practice

	Applied Epi (12 participants)	LSHTM	Jumping Rivers (for profit)	RITME (for profit)
Daily price per person*	\$450	\$455	\$455	\$625


*7 hour day. Prices sourced from institution websites as of 01/2022. Contact institutions directly for official quotes.

CONTACT US:

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