



Elevating frontline epidemiology

Training, tools, and support:
Analytics with R

A nonprofit organization

www.appliedepi.org

contact@appliedepi.org

A COMPLETE ECOSYSTEM OF R TRAINING AND SUPPORT

Practical training courses with epidemiologist instructors



Synchronous (virtual) with 1-on-1 tutoring and follow-up support
1,500 epis at **350** agencies have taken our 40-hour intro course, including at US CDC, WHO, MSF, national & local agencies, & FETPs

"I've taken several R trainings - this is the BEST!"
- US CDC, Epidemic Intelligence Service (EIS) officer

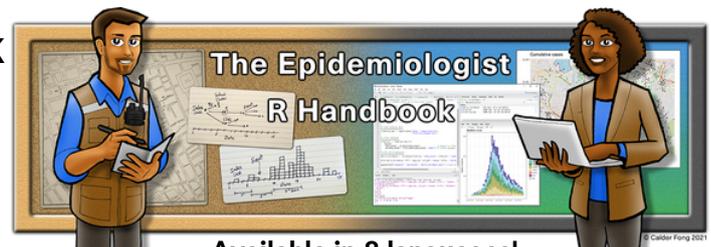
In English, French, Portuguese, Spanish, Swahili, Ukrainian & more...

Enroll in [private or public cohorts](#); or try our [free online tutorials](#)

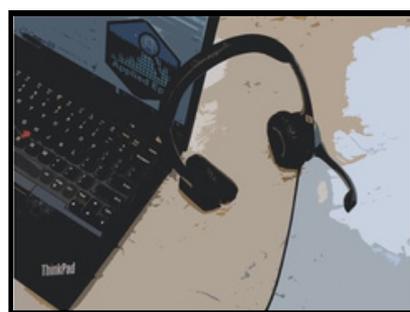
The gold standard reference book

For **750,000** users, our FREE [Epi R Handbook](#) is the "go-to" with **4,000** daily views

"A one-stop shop. The epidemiologist's greatest companion."
- Epidemiologist, Nigeria CDC



Available in 8 languages!



24/7 multilingual R Support Desk

Timely calls with epidemiologist R technicians - used by WHO, MSF, Uganda Ministry of Health for Ebola response, and hundreds more.

"Help that was fast and high quality - this was a life saver!"
- Epidemiologist, Doctors without Borders (MSF)

[Contact us](#) for details. Also, join thousands in our [FREE Q&A forum](#)!

The grassroots movement leading public health's transition to R

Meet [our team](#) of **175** applied epidemiologists with R expertise in **50** countries worldwide.

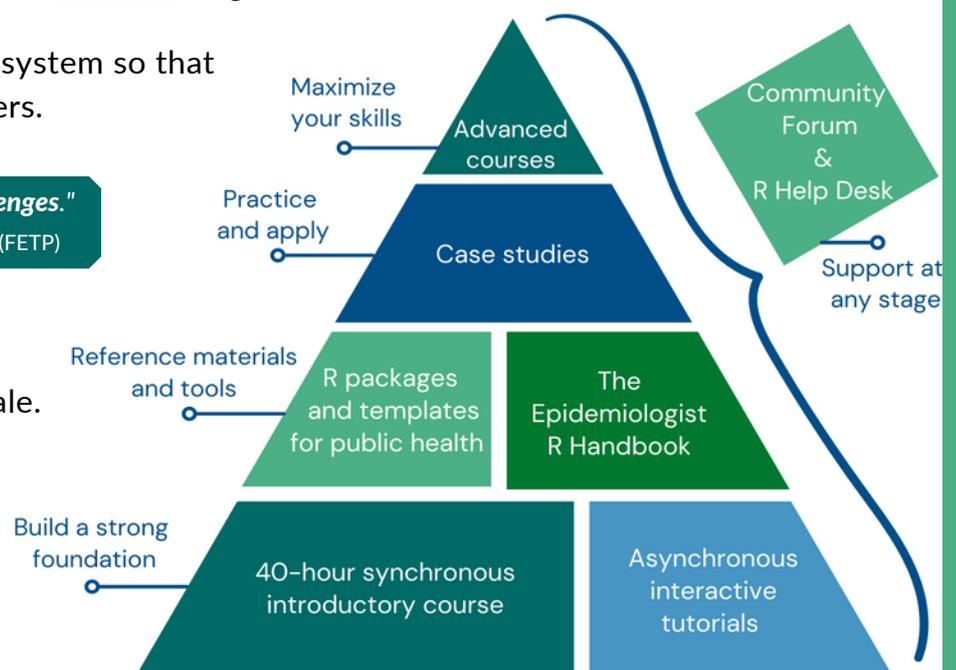
See our [job postings](#), join [our forum](#), or [email us](#) to get involved!

"By epis, for epis" - we built this ecosystem so that R adoption is led by ground-level users.

"Applied Epi addresses those day-to-day challenges."
- Mentor, Liberia Field Epidemiology Training Program (FETP)

We deliver training **every day**: High-impact, high-quality, and at-scale.

"I feel that I got a new superpower!"
- Field Epidemiologist, Nigeria CDC



COURSE: INTRODUCTION TO R FOR APPLIED EPIDEMIOLOGY

Practical R for day-to-day tasks, and **1-on-1** meetings with epidemiologist instructors

"The best online training I have ever had"

- UK health agency epidemiologist

"Having an epidemiologist who has experience in the field, who has passed through those challenges, sit down with you ...it makes learning R simple."

- Epidemiologist, African Field Epidemiology Network (AFENET)

CURRICULUM DETAILS

Duration: 40 hours

(21-hour version available with Modules 1-6)

Format: Synchronous, virtual or in-person
10 modules of 3.5 hours each

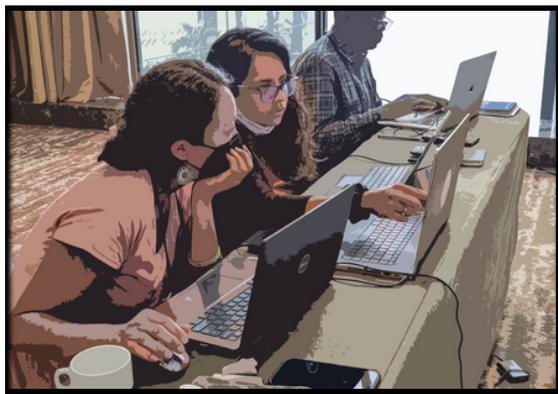
Languages: English, French, Spanish, Swahili, Ukrainian, Russian & others

Activities: Live lecture and coding demos, exercises using outbreak case studies, immediate feedback with 1-on-1 meetings

Post-course: 24/7 R Support Desk

Data used: Case linelists, lab, & hospital data

Eligibility: Comfort using Excel and exposure to software like SPSS or EpiInfo; coding experience helpful but not required



ENROLL

Book a **private cohort** for your team

- You decide the schedule
- 10 seat minimum
- US \$1175 per seat*
- Email contact@appliedepi.org to book

Join a **public cohort**

- See [our schedule](#) to book a seat
- Scholarships available
- US \$975 per seat*

*Contact us for discount eligibility. Fees apply if paying by card.

Pre-course - Installation support

1-on-1 calls to troubleshoot installation of R, RStudio, and R packages

Module 1 - Basic R syntax (3.5 hours)

R coding basics, use of RStudio projects, importing datasets

Module 2 - Data cleaning (3.5 hours)

Clean a case linelist with "tidyverse" functions using "pipes" to handle rows, columns, dates, duplicates, and to recode values

Module 3 - Data cleaning part 2 (3.5 hours)

More complex data cleaning: handle missing values, logical recoding, age categories, and applying changes across columns

Module 4 - Summary tables (3.5 hours)

Group and summarise with the janitor, dplyr, and gtsummary packages; add appealing formatting with flextable package.

Module 5 - Data visualisation (3.5 hours)

Use the ggplot2 package to make plots of all types; adjust colors, scales, themes, highlights, dynamic labels and captions

Module 6 - Troubleshooting errors & getting help (3.5 hours)

Identify common mistakes and solutions; learn to get help from a community forum by posting a "reproducible example"

Module 7 - Automated reports (3.5 hours)

Learn R markdown to generate Word, PDF, and HTML reports with figures and plots that update automatically

Module 8 - Transforming data (3.5 hours)

Join datasets together; pivot data structure; ordinal factors

Module 9 - Public health plots (3.5 hours)

The nuances of epi week calculations and producing epidemic curves, heat plots, demographic pyramids; a GIS demo

Module 10 - COVID-19 case study (3.5 hours)

Make an outbreak automated report on a new dataset

Post-course - 24/7 R Support Desk

Each participant receives a 1 hour coupon to book 1-on-1 calls with an instructor via our 24/7 R Support Desk, for help applying R to their work projects. Coupon valid for 12 months.

1-on-1 tutoring
Unlimited coaching on course material

"It's made a big impact... now R was adopted as the tool of choice by the Ministry... and all epidemiological reports are automated."

- Uganda Ministry of Health, data analytics & emergencies coordinator

Applied Epi is an independent, nonprofit organization dedicated to increasing access to world-class instruction. 100% of fees sustain our operations and provide discounts for lower-income epidemiologists.

TESTIMONIALS

"A few years back we did a training from a software company - this is an order of magnitude more useful because you're teaching what we actually do."

- Epidemiology Program Manager, UK

"The methodology is top notch and I learned more with this online course than with other face-to-face courses."

- Epidemiologist, Philippines Ministry of Health

"100 times better than what was offered during my MSc at a top-tier university!"

- Epidemiologist, US local public health agency

"In a world so inequitable, R is a great equaliser. I feel empowered by this training."

- Epidemiologist, NCDC, Country of Georgia

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

- Epidemiologist & GIS specialist, US CDC

"One of the most applicable, intense trainings I've done. I can use this!"

- Epidemiologist, Tribal Epidemiology Center - Southern Plains/Oklahoma Area

COLLABORATIONS

TEPHINET

Training Programs in Epidemiology and Public Health Interventions and Applied Epi deliver R training and support to dozens of Field Epidemiology Training Programs (FETPs) and their alumni.

MSF

Doctors without Borders / Médecins Sans Frontières

Applied Epi has trained epidemiologists across all of MSF's operational centres, and has provided emergency R Support Desk for outbreak response support.

WHO

The World Health Organization and Applied Epi train dozens of country and regional offices, and support emergencies in Ukraine, DRC, Somalia, and Uganda

CSTE

The Council of State and Territorial Epidemiologists (USA) and Applied Epi work together to train public health epidemiologists in R at the thousands of US state, local, tribal, and territorial public health agencies.

GOARN

The Global Outbreak Alert and Response Network is a WHO-affiliated network of institutions which respond to acute public health emergencies around the world. Applied Epi has been a member since July 2022.

Github

Github Social Impact empowers nonprofits and the greater social sector, and has supported Applied Epi's efforts to promote open-source software.

R Consortium

The R Consortium promotes the R language and develops the technical and social infrastructure required for the R ecosystem. They support Applied Epi's programs to build a community of public health R users.

WE HAVE TRAINED OVER 1,500 EPIDEMIOLOGISTS AT 350 AGENCIES

Multinational: The World Health Organization (WHO), Doctors without Borders (MSF), European CDC (ECDC), International Federation of the Red Cross (IFRC), Resolve to Save Lives (RSL), Vital Strategies, Save the Children, US CDC Central Asia Office, The CDC Foundation

National agencies: Albania, Algeria, Anguilla, Armenia, Austria, Belgium, Belize, Benin, Bermuda, Burundi, Cambodia, Cameroon, Canada, Cayman Islands, Congo, Democratic Republic, Croatia, Denmark, Djibouti, Dominican Republic, Ireland, Egypt, Ethiopia, Fiji, Finland, France, Gambia, Georgia, Germany, Ghana, Gibraltar, Guatemala, Guinea, Guyana, Honduras, Indonesia, Ireland, Italy, Kazakhstan, Kenya, Kosovo, Kyrgyzstan, Latvia, Lebanon, Liberia, Libya, Luxembourg, Macedonia, Malaysia, Malta, Mexico, Moldova, Montenegro, Montserrat, Mozambique, Myanmar, Namibia, Netherlands, Nigeria, North Macedonia, Norway, Pakistan, Palestine, Panama, Peru, Philippines, Poland, Portugal, Romania, Rwanda, Saint Helena, Ascension and Tristan da Cunha, Saudi Arabia, Serbia, Slovenia, South Africa, Spain, Sweden, Tajikistan, Thailand, Togo, Tunisia, Türkiye, Turks and Caicos Islands, Uganda, Ukraine, United Kingdom, United States (CDC), Uzbekistan, Viet Nam, Virgin Islands, British, Zambia

Field Epidemiology Training Programs (FETPs): The African Field Epidemiology Training Network (AFENET), United States Epidemic Intelligence Service (EIS), European CDC Fellowship Programme (EPIET/EUPHEM), The Mediterranean and Black Sea Programme for Intervention Epidemiology Training (MediPIET), Central Asia Field Epidemiology Training Program (FETP), Central America FETP, United Kingdom, Nigeria, Liberia, The Gambia, Zambia, Rwanda, Namibia, Peru, Philippines, Saudi Arabia

North America Subnational: California DPH, New York DOH, Colorado DPHE, Arizona DOH, Oregon Health Authority, Kentucky DPH, Maryland DOH, Alaska DHSS, Hawaii DOH, Illinois DPH, Indiana DPH, Kansas DHE, Massachusetts DPH, Michigan DHHS, New Jersey DOH, Pennsylvania DOH, Tennessee DOH, Virginia DOH, Wisconsin DHS, District of Columbia (D.C.) DOH, US Virgin Islands DOH, Fraser Health (BC), New York City DOHMH (NY), Los Angeles County (CA), Alameda County (CA), San Diego County (CA), Sonoma County (CA), Santa Cruz County (CA), Riverside County (CA), Calaveras County (CA), San Mateo County (CA), Merced County (CA), Pasadena County (CA), Solano County (CA), Long Beach (CA), Trinity County (CA), Salt Lake County (UT), Maricopa County (AZ), Seattle & King County (WA), Spokane Regional Health District (WA), Southern Nevada Health District (NV), St. Louis County (MO), Madison & Dane County (WI), Quin County (MN), Travis County (TX), Tarrant County (TX), Washington County (OR), East Shore District (MD), El Dorado County (CO), Genesee County (MI), Grand Traverse County (MI), Ottawa County (MI), Ingham County (MI), Barry-Eaton District (MI), Jackson County (MI), Gratiot County (MI), Fairfax County (VA), Jefferson County (OR), Johnson County (KS), Mexico City Public Health Services (Mexico), Island Health (Vancouver Island), Indigenous Services Canada, Navajo Area Indian Health Service, Southern Plains Tribal Epi Center (SPTHB)

Other Subnational: Including District Hospitals in Gisenyi, Nyanza, and Gihundwe (Rwanda), Kampala Capital City Authority (Uganda), Greater Accra (Ghana), Liberia counties of Lofa, Rivercess, and Nimba (Liberia), Ukrainian Oblasts of Kyiv, Zhytomyr, Khmelnytskyi, Odesa, Vinnytsia, Chernivtsi, Ivano-Frankivsk, Ternopil, Chernihiv (Ukraine), Northern Territories (Australia), Department of Health (Karakalpakstan, Uzbekistan), Andijan AIDS Center (Uzbekistan), Almaty City AIDS Center (Kazakhstan), Dushanbe City (Tajikistan), Osh (Kyrgyzstan), Batken (Kyrgyzstan), Sindh (Pakistan), Balochistan (Pakistan), Kala Azar MRC (Pakistan), Muzaffarpur (Pakistan), Bihar (Pakistan), Punjab (Pakistan), Rawalpindi (Pakistan), Lahore (Pakistan), Karachi (Pakistan), Faisalabad (Pakistan), Peshawar (Pakistan), Muzaffarabad (Pakistan), Hyderabad (Pakistan), Bais City (Philippines), Santa Marcela (Philippines), Metro Manila (Philippines) Bakan District (Pursat, Cambodia), Bantaeng Regency (Indonesia), Samarinda Health District (Indonesia), Yogyakarta City (Indonesia), Public Health Scotland (UK), Public Health Wales (UK), Ústecký kraj (Czechia), Bavaria (Germany), Stuttgart (Germany), Baden-Wuerttemberg (Germany), Hessian State (Germany), Bochum (Germany), Cuxhaven (Germany)

ADVANCED R COURSES

Contact us for the availability of these courses:

- Introduction to GIS with R
- Statistics and regression with R
- Advanced R Markdown: Looping reports and making dashboards and slides
- Task iteration and functional programming
- Git and GitHub with R: Collaboration and version control
- Relational database interactions with R
- Survey analysis
- Introduction to Shiny dashboards
- Time series analysis with R

Duration: Each workshop consists of 7 hours of instruction (two half-day sessions)

Format: Remote or in-person

Eligibility: Participants must have R skills at least equivalent to our intro course

"This course is superbly structured, focused, and delivered by experienced epidemiologists to provide context to the code."

- Epidemiologist, Public Health Wales

Bookings: Available for private cohorts (minimum 10 participants)
Cohorts for the general public are posted on our website.

Price per seat: US \$450 - [Contact us for discount eligibility*](#)

Compare us to others

Our advanced courses are **more affordable** and are **taught by frontline practitioners**.

	Applied Epi	LSHTM	Jumping Rivers (for profit)	RITME (for profit)
Daily price per person*	\$450	\$485	\$530	\$625

*7 hour day. Prices sourced from institution websites as of 11/2023. Contact institutions directly for official quotes.

CONTACT US:

 www.appliedepi.org

 [@appliedepi](https://twitter.com/appliedepi)



 contact@appliedepi.org

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