

## Additional Resources

### Other R Resources

#### Resources within RStudio

##### Help documentation

Search the RStudio “Help” tab for documentation on R packages and specific functions. This is within the pane that also contains Files, Plots, and Packages (typically in the lower-right pane). As a shortcut, you can also type the name of a package or function into the R console after a question-mark to open the relevant Help page. Do not include parentheses.

For example: `?filter` or `?diagrammeR`.

##### Interactive tutorials

There are several ways to learn R interactively *within* RStudio.

RStudio itself offers a Tutorial pane that is powered by the [learnr](#) R package. Simply install this package and open a tutorial via the new “Tutorial” tab in the upper-right RStudio pane (which also contains Environment and History tabs).

The R package [swirl](#) offers interactive courses in the R Console. Install and load this package, then run the command `swirl()` (empty parentheses) in the R console. You will see prompts appear in the Console. Respond by typing in the Console. It will guide you through a course of your choice.

##### Cheatsheets

There are many PDF “cheatsheets” available on the [RStudio website](#), for example:

- Factors with **forcats** package
- Dates and times with **lubridate** package
- Strings with **stringr** package
- iterative operations with **purrr** package
- Data import
- Data transformation cheatsheet with **dplyr** package

- R Markdown (to create documents like PDF, Word, Powerpoint...)
- Shiny (to build interactive web apps)
- Data visualization with **ggplot2** package
- Cartography (GIS)
- **leaflet** package (interactive maps)
- Python with R (**reticulate** package)

This is an online R resource specifically for [Excel users](#)

## Topic-Specific Resources

### RMarkdown and Quarto

- [The definitive R Markdown guide](#)

### Plotting

- [another plotting cheat sheet](#)
- [tidyverse ggplot basics page](#)
- [plotting continuous variables](#)
- R for Data Science pages on [data visualization](#)
- [graphics for communicaton](#)

### Table Visualization

- The full **flextable** book is here: <https://ardata-fr.github.io/flextable-book/>
- The Github site is [here](#)
- A manual of all the **flextable** functions can be found [here](#)
- A gallery of beautiful example **flextable** tables with code can be accessed [here](#)

## Data manipulation

- The Data Carpentry page on [dplyr](#)
- The **tidyverse** reference pages on [group\\_by\(\)](#) and [grouping](#)
- This page on [Data manipulation](#)
- [Summarize with conditions in dplyr](#)
- A helpful tutorial on pivoting [tutorial](#)
- The [tidyverse](#) page on joins
- The [R for Data Science](#) page on relational data

## Surveys

[UCLA stats page](#)

[Analyze survey data free](#)

[srvyr package](#)

[gtsummary package](#)

[EPIET survey case studies](#)

## Communities

\* Twitter

R has a vibrant twitter community where you can learn tips, shortcuts, and news - follow these accounts:

- EpiHandbook (makers of the textbook these materials are based on) [@epiRhandbook](#)
- R Function A Day [@rfuntionaday](#) is an *incredible* resource
- R for Data Science [@rstats4ds](#)
- RStudio [@RStudio](#)
- RStudio Tips [@rstudiotips](#)

- R-Bloggers [@Rbloggers](#)
- R-ladies [@RLadiesGlobal](#)
- Hadley Wickham [@hadleywickham](#)

Also:

**#epitwitter** and **#rstats**

\* Free online resources

A definitive text is the [R for Data Science](#) book by Garrett Golemund and Hadley Wickham

The [R4Epi](#) project website aims to “develop standardised data cleaning, analysis and reporting tools to cover common types of outbreaks and population-based surveys that would be conducted in an MSF emergency response setting.” You can find R basics training materials, templates for RMarkdown reports on outbreaks and surveys, and tutorials to help you set them up.

### **Languages other than English**

[Materiales de RStudio en Español](#)

[Introduction à R et au tidyverse \(Francais\)](#)