

TDU

# R FOR DATA VISUALIZATIONS

## Day 3

May 4, 2023



Public Health  
Agency of Canada

Agence de la santé  
publique du Canada

Canada

# WELCOME BACK!

Over the last two days we reviewed:

Day 1:

- Graphing using base R and ggplot
- Grammar of graphics
- Custom data visualizations

Day 2:

- Best practices in data visualization
- Application of graphic design practices in R
- Data visualization and potential for harm to small and vulnerable communities

# RULES TO VIZ BY!

- Summary of all the Jamboards from Day 2 'Rules to Viz by' activity
- Available in the course repository on Github
- Link posted in the chat



# OVERVIEW

Today we will:

- Test our knowledge on what was covered over the last two days
- Provide space for practice and support

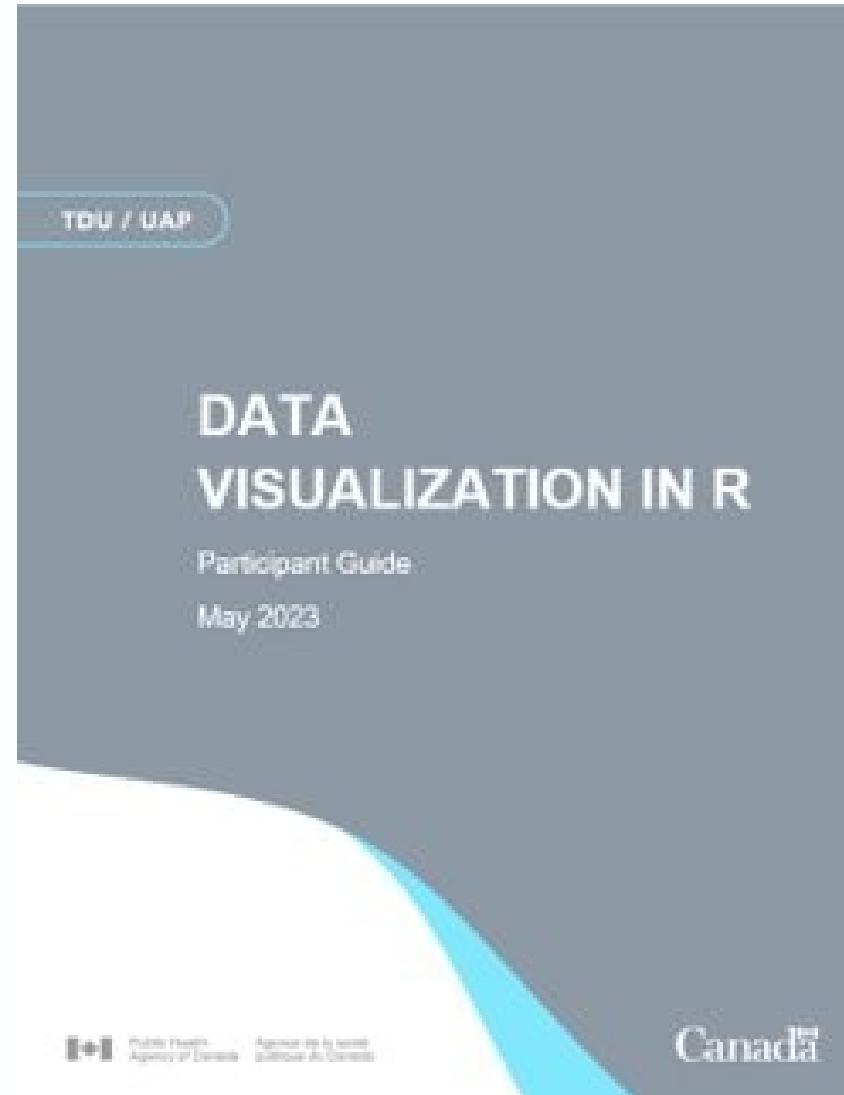


# PIE CHART OF FORTUNE!

A blurred background image showing two people, a man and a woman, smiling and laughing together. The man is on the left, looking down, while the woman is on the right, looking towards the camera.

# TIME FOR PRACTICE!

# INDEPENDENT ACTIVITIES 1 AND 2



A black and white photograph of a woman with curly hair smiling warmly at a small child she is holding. The woman is wearing a dark button-down shirt. The background is slightly blurred, showing what appears to be an indoor setting with shelves.

# WRAP-UP

# COURSE OVERVIEW

- By the end of this course, participants will be able to:
  - ✓ Discuss differences between base R and the grammar of graphics (ggplot) coding styles for data visualization.
  - ✓ Apply knowledge of R-coding to automate common graphics used in public health.
  - ✓ Connect elements of effective graphic design to R coding practices in data visualization.
  - ✓ Discuss considerations for data visualisation to avoid potential harms to small or vulnerable communities.

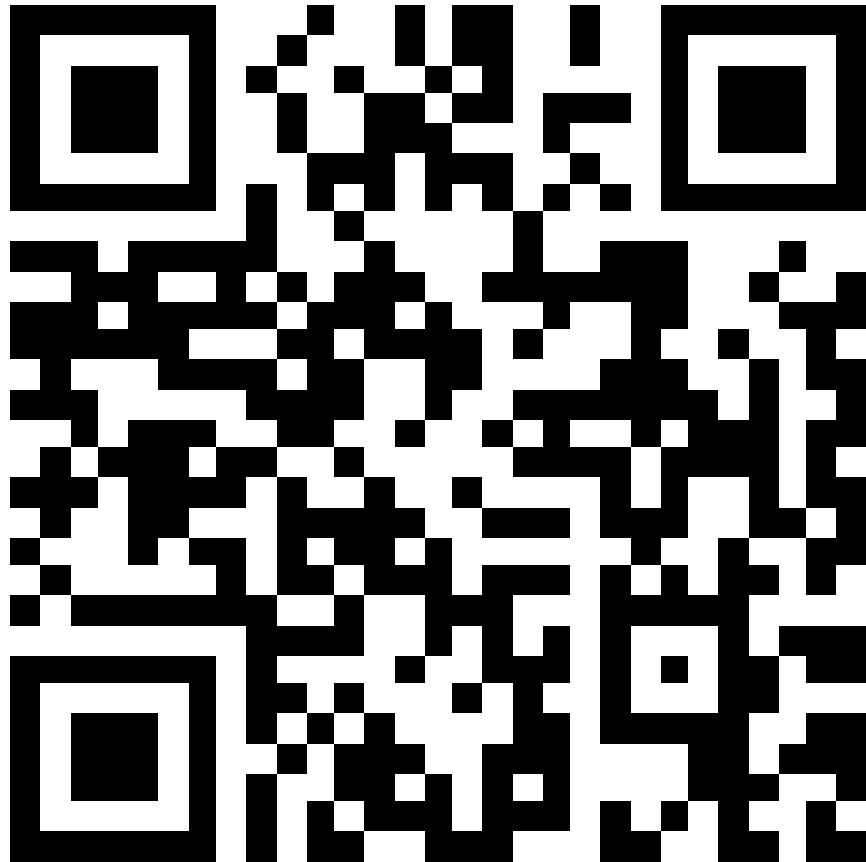
# SUMMARY AND WRAP-UP

- Knowing what you want to accomplish at the outset will help you decide what format your data should be in
- It is possible to make publication-worthy figures using only base R graphics
- Ggplot makes graphing easier as it uses an iterative, layered approach based on a specific grammar of independent components

# SUMMARY AND WRAP-UP

- The power of R for creating data visualizations does not include the intention and thoughtfulness required to produce meaningful graphics
- Careful thought must be taken to ensure that visualizations adhere to best practices
- Additional consideration is needed to ensure that our data visualizations do not tell stories that actively cause harm or perpetuate harm to small and vulnerable communities

# COURSE EVALUATION



<https://www.slido.com/>

Event code: **RDV2023**