

TDU

R FOR DATA VISUALIZATIONS

Day 3



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 Google documents from Day 2 'Rules to Viz by' activity
- 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

A black and white photograph of a diverse group of people, including men and women of various ethnicities, smiling and laughing together. They appear to be in a casual, indoor setting like a bar or restaurant.

PIE CHART OF FORTUNE!

A blurred background image of two people laughing together. On the left, a person with long dark hair is seen from the side, looking down. On the right, a person with curly hair is laughing heartily, showing their teeth. They are both wearing dark-colored clothing.

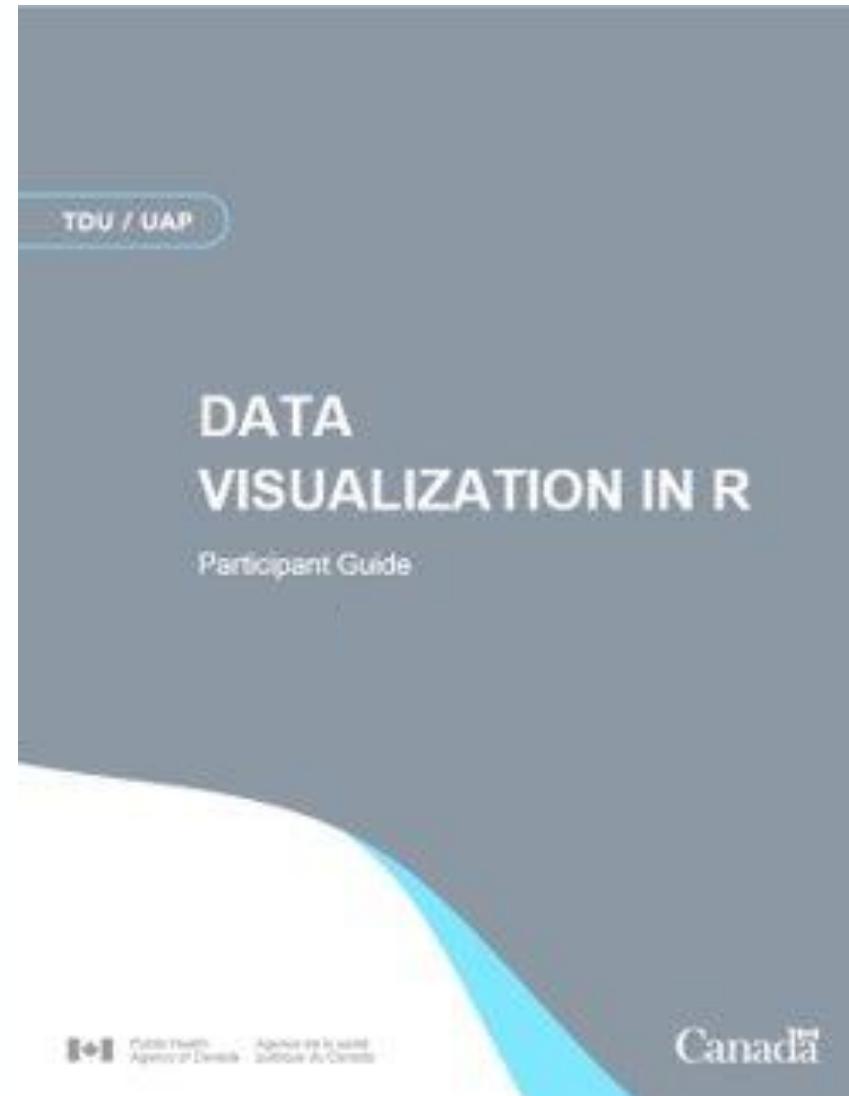
DEMO

TIME FOR PRACTICE!

Please return by:

12:00 Pacific / 13:00 Mountain / 14:00 Central / 15:00 Eastern /
16:00 Atlantic / 16:30 NFLD

INDEPENDENT ACTIVITIES 1 AND 2



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: **RDV2025**