# Intro to R

Data Output

### **Data Output**

While its nice to be able to read in a variety of data formats, it's equally important to be able to output data somewhere.

The readr package provides data exporting functions which have the pattern write\_\*:

```
write_csv(),
```

write\_delim(), others.

From write\_csv() documentation:

```
write_csv(x, file,
    na = "NA", append = FALSE,
    col_names = !append, quote_escape = "double",
    eol = "\n", path = deprecated()
)

Rows: 9794 Columns: 31
    — Column specification
Delimiter: ","
chr (24): LocationAbbr, LocationDesc, TopicType, TopicDesc, MeasureDesc, Dat...
dbl (7): YEAR, Data_Value, Data_Value_Std_Err, Low_Confidence_Limit, High_C...
Use `spec()` to retrieve the full column specification for this data.
    Specify the column types or set `show_col_types = FALSE` to guiet this message.
```

## **Data Output**

x: data frame you want to write

file: file path where you want to R object written; it can be:

- · an absolute path,
- a relative path (relative to your working directory),
- a file name only (which writes the file to your working directory)

```
# Examples
write_csv(dat, file = "YouthTobacco_newNames.csv")
write_delim(dat, file = "YouthTobacco_newNames.csv", delim = ",")
```

# R binary file

.rds is an extension for R native file format.

write\_rds() and read\_rds() from readr package can be used to write/read a single R object to/from file.

Saving datasets in .rds format can save time if you have to read it back in later.

```
# write an object: a data frame "dat"
write_rds(dat, file = "yts_dataset.rds")

# write an object: vector "x"
x <- c(1, 3, 3)
write_rds(x, file = "my_vector.rds")

# read an object from file and assign to a new object named "y"
x2 <- read_rds(file = "my_vector.rds")
x2</pre>
```

[1] 1 3 3

# Summary

- Use write\_csv() and write\_delim() from the readr package to write your (modified) data
- · .rds files can be handy for saving intermediate work

**Class Website** 

Data Output Lab



Image by Gerd Altmann from Pixabay