

# data cleaning principles

Karl Broman

Biostatistics & Medical Informatics, UW–Madison

@kwbroman

kbroman.org

github.com/kbroman

[kbroman.org/Talk\\_DataCleaning](https://kbroman.org/Talk_DataCleaning)

Tidy data are all alike,  
but every messy dataset  
is messy in its own way.

— Hadley Wickham

If I clean up [Medicare] data ...  
does any of the knowledge I gain ...  
apply to the processing of RNA-seq data?

– Roger Peng

# Data Mishaps Night

Join us for the first inaugural Data Mishaps Night!  
We will feature a lineup of data mistake stories with  
a focus on the human aspect of data work and  
lessons learned the hard way.



[dataMishapsNight.com](http://dataMishapsNight.com)

# Data cleaning

- ▶ tedious
- ▶ embarrassing
- ▶ needs context
- ▶ doesn't feel like progress
- ▶ requires creativity
- ▶ requires coding prowess
- ▶ source of most problems

verify

explore

confer

document

fundamentals

fundamentals

verify



explore

confer

document

Slides: [kbroman.org/Talk\\_DataCleaning](http://kbroman.org/Talk_DataCleaning)

[kbroman.org](http://kbroman.org)

[github.com/kbroman](https://github.com/kbroman)

@kwbroman