

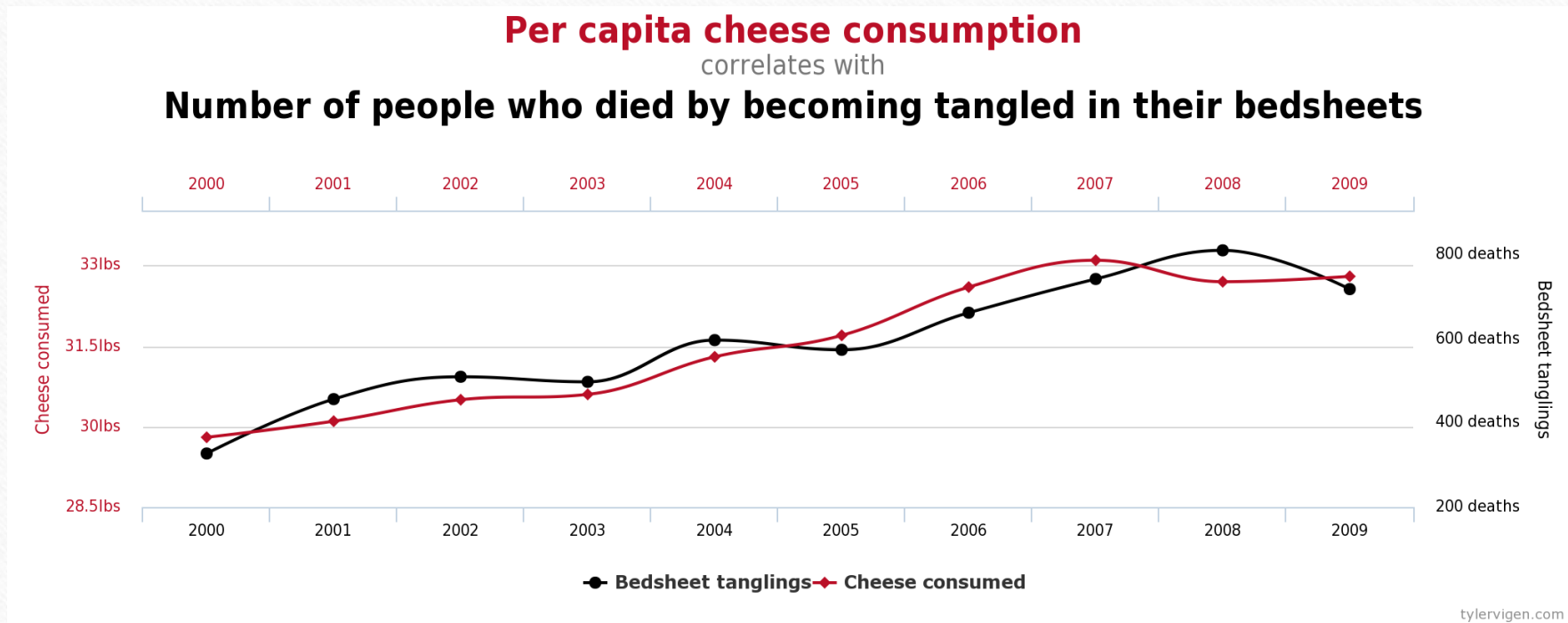
Logical Fallacies

Week 3: Calling Bullshit

Thoughts on Last Week's Reading?

- [TED talks](#) (video)
- Sagan, Carl. “[The Fine Art of Baloney Detection](#).” Chapter 12 in *The Demon-Haunted World*, 1996.
- Case studies: [Food stamp fraud](#) and [99% caffeine-free](#)
- Optional: [Rumor Cascades](#). Proceedings of the Eighth International AAAI Conference on Weblogs and Social Media, 2014.

Correlation without Causation



Thou Shalt Not Commit Logical Fallacies

Fallacies are flawed reasoning. They are often used by politicians, the media, and everyday people to make a point in a weak argument.

By learning to look for them, you can strengthen your ability to evaluate the arguments you make, read, and hear.

Image taken from *An Illustrated Book of Bad Arguments* by Ali Almosawi



Assigned Reading

- Robert Mathews. Storks deliver babies ($p=0.008$). *Teaching Statistics* 22:36-38, 2000.
- Case study: Traffic improvements
- Bring in an example of a logical fallacy that you see in the news and/or in a social media exchange next week.

Next Week: Statistical Traps and Trickery
