

# ACS Inclusivity Style Guide

## TIP SHEET Data visualization

For more context, review the “[Data visualization](#)” section of the Inclusivity Style Guide. Use this tip sheet in combination with the “[General guidelines](#)” tip sheet.

### Identify biased data

Examine data for biases or gaps. Consider the data's context and the potential harm or erasure that may result from how they are presented. Use caution with topics such as crime and public safety.

### Design with empathy

Consider whether certain chart types or whether focusing on a smaller range of data might help people connect with the human element of the data.

### Disaggregate when possible

Disaggregate data when groups experience dissimilar effects, there isn't a shared history, or members of the community say analyzing these populations together is unreasonable ([Urban Institute, 2022](#)). If you lack data on specific subgroups, acknowledge that limitation. Also avoid using an "Other" category.

### Handling small data samples

If the sample size for a particular group is very small, avoid omitting the data entirely or noting “not statistically significant” without additional context.

#### Example

✓ **Use:** The C&EN article "[What US Chemists Made in 2022](#)" shows data for all identity groups surveyed, even those with low numbers. To ensure readers could make informed choices about how to interpret the data, the article includes the number of respondents for each group and the note “ACS considers data calculated from fewer than 50 responses unreliable. C&EN included small groups to help make all members visible.”

### Choosing color in data visualizations

Avoid choosing colors at random without considering their meaning or cultural associations. Recognize when certain colors may perpetuate stereotypes, and prevent introducing distortions in the data.

### Ordering groups in data visualizations

Carefully think about the order in which groups are presented and how it might imply a hierarchy. Consider starting with the particular group the study is focused on or sorting the groups alphabetically.

Like what you've read? See the full guide from the American Chemical Society.

[www.acs.org/inclusivityguide](http://www.acs.org/inclusivityguide)