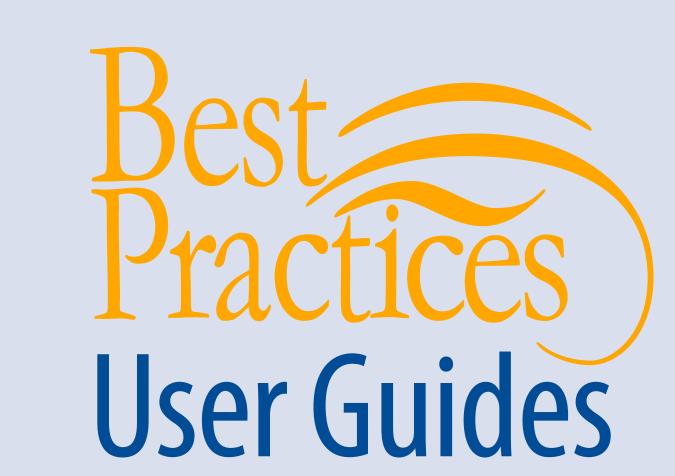
Brown School

CDC Best Practices User Guide **Tobacco Where You Live: Mapping Techniques**

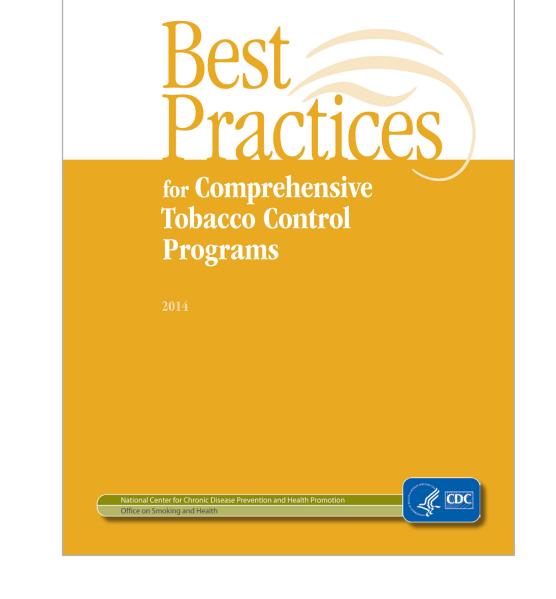
Center for Public Health Systems Science at the Brown School at Washington University in St. Louis

Zara Petković Stephanie Andersen Laura Brossart Rachel Hackett Doug Luke



BEST PRACTICES USER GUIDES

Since 2008, the Center for Public Health Systems Science at the Brown School at Washington University in St. Louis has collaborated with the Centers for Disease Control and Prevention's Office on Smoking and Health to develop a set of user guides to accompany the Best Practices for Comprehensive Tobacco Control Programs—2014. The guides expand on the evidence-based guidelines and funding recommendations in Best Practices to translate research into practical guidance for states and communities. Nine guides have been published to date:

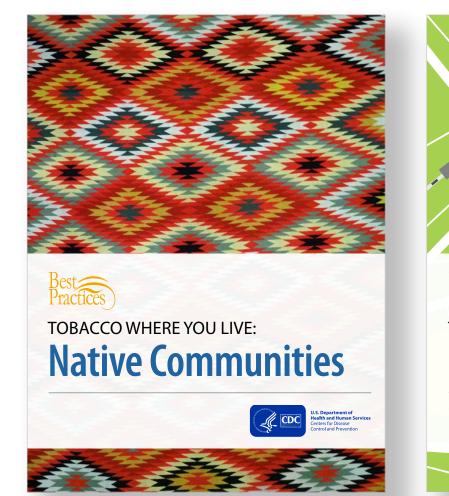


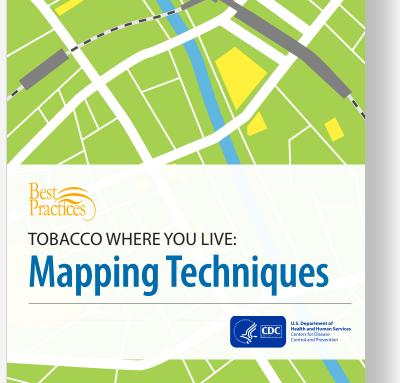
- Coalitions (2009)
- Youth Engagement (2010)
- Health Equity (2015)
- Program Infrastructure (2017)
- Health Communications (2018)
- An update to Youth Engagement (2019)
- Cessation (2020)
- Partnerships (2021)
- Putting Evidence into Practice (2021)

Tobacco Where You Live

Tobacco Where You Live is a Best Practices User Guides resource designed to empower tobacco control program managers, staff, and partners to understand how commercial tobacco use varies within their communities, overcome challenges, and reduce disparities. Each *Tobacco Where You Live* brief will cover a topic important to reduce commercial tobacco use in communities with the highest prevalence. Five supplements are in development:

- Mapping Techniques
- **Native Communities**
- Retail Strategies to Promote Health Equity
- LGBTQ+ Communities
- **Menthol and Other Flavors**











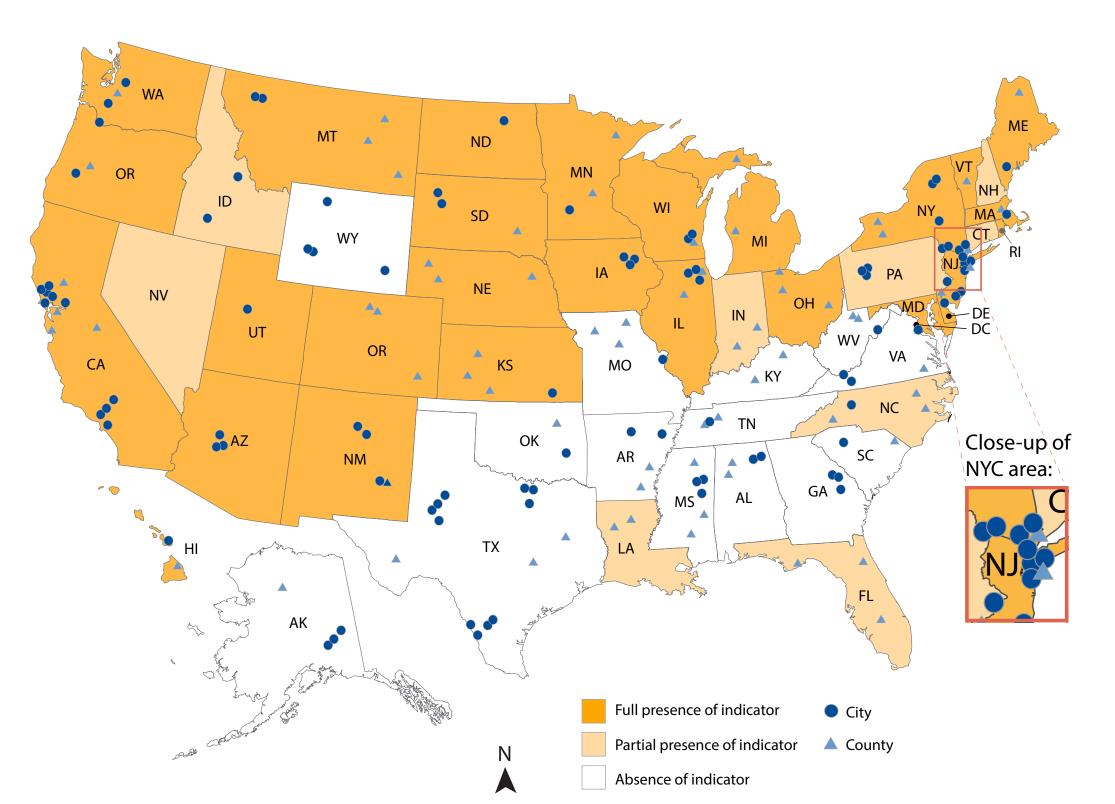
Upcoming Tobacco Where You Live supplements

MAPPING TECHNIQUES SUPPLEMENT

The Mapping Techniques focuses on how to create, share, and use commercial tobacco prevention and control maps. Maps can help you:

- Understand community trends and show disparities
- Find gaps in program and policy implementation
- Educate decision makers and the public
- Model potential strategies
- Evaluate interventions

Maps can show trends, patterns, and relationships over time. You can map data on smokefree air regulations, tobacco retailers, commercial tobacco cessation services, and other activities.



Data Viz Best Practices Demonstration Map (2021)

How to Build a Map

Six steps can help design user-friendly and impactful commercial tobacco control maps:

Step 1> Decide what to map

Explore commercial tobacco-related issues and prevention resources in your community and identify your audience. Work with partners to decide what you want to show, where, and to whom.

Step 2> Get data

Find existing data for your map or collect data about your community. Geospatial data define the physical features and political boundaries of an area. Social, economic, and other population data are added as layers on top of the base map.

Step 3> Choose software

Pick the right software to make your map based on cost, your purpose for the map, and the skill level needed to use the software.

Step 4> Design your map

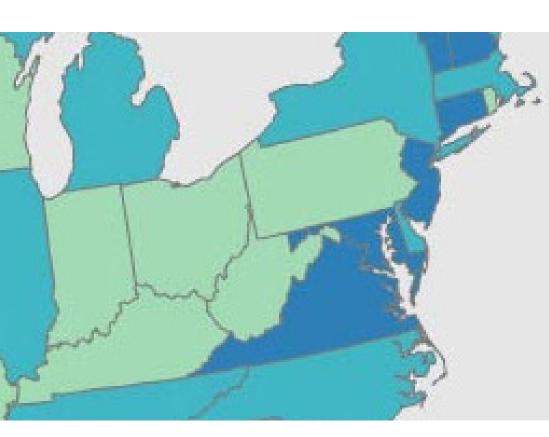
Choose a map design, add design elements, and use data viz best practices to create a clear and understandable map. You can use interactive elements to let users choose data or focus on specific locations.

Step 5> Test your map

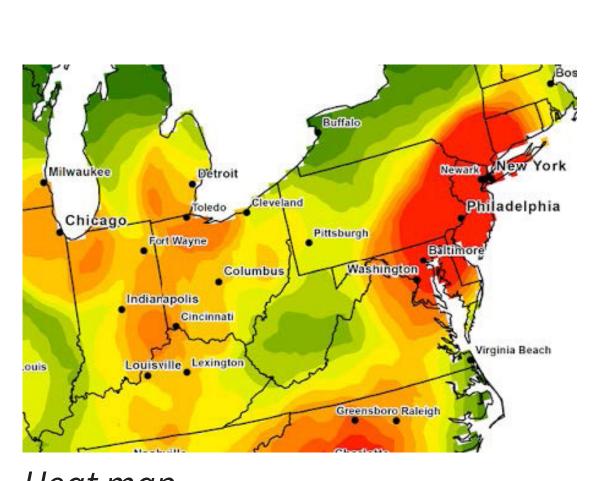
Ask a sample of your audience to review the map, and make improvements based on their input. Testers can help make sure your map is easily understandable and useful.

Step 6> Use your map

Use your map to make decisions and communicate with your audience. Share your map via multiple channels, like websites, social media, and email. Make your map accessible and regularly update it with new data.



Choropleth map



Symbol map

Where to Learn More

The Mapping Techniques supplement is expected to be published this summer. Find all the User Guides and the future supplement at https://www.cdc.gov/tobacco/stateandcommunity/guides.

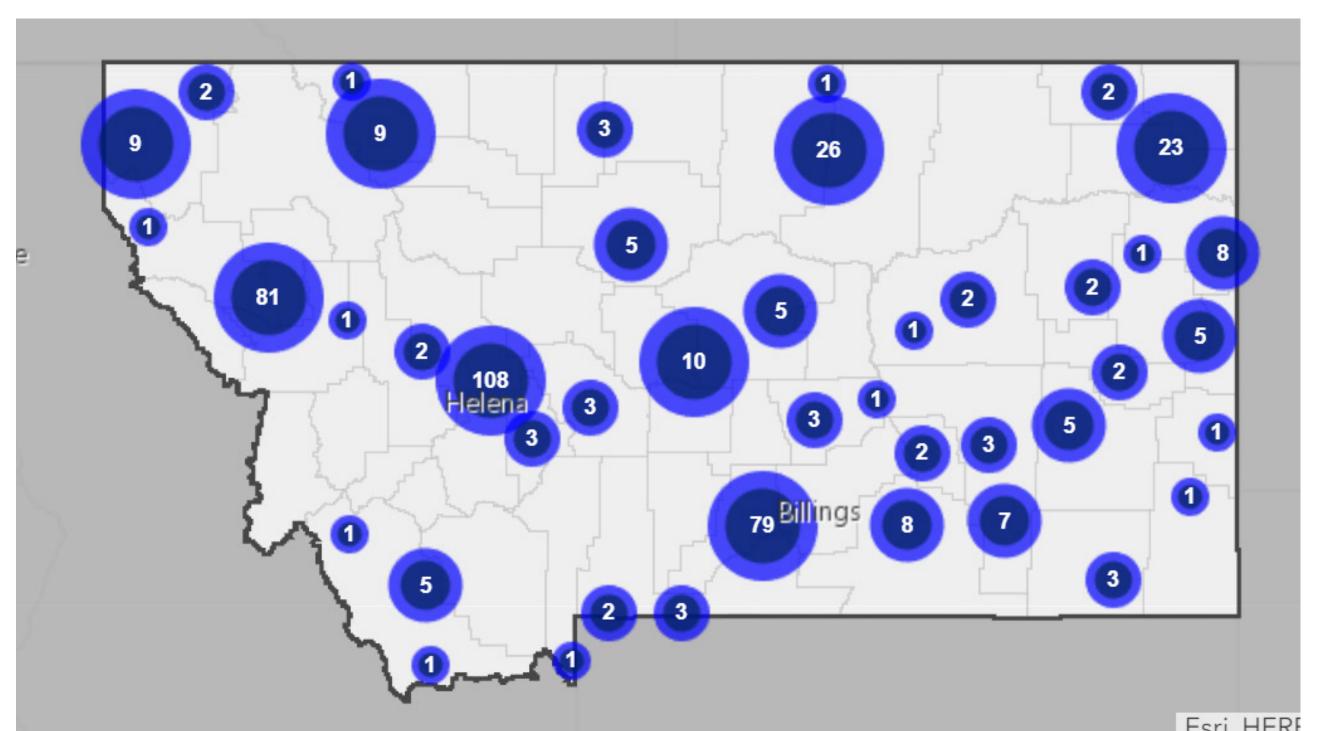
CASE STUDIES

Montana

The Montana Tobacco Use Prevention Program (MTUPP) knew that exposure to tobacco retail marketing causes youth to start smoking. After seeing retailer maps from other states, the program used ArcGIS® to create the Tobacco Retailer Mapper. The Mapper includes three city- and county-level maps:

- A youth access map
- A retailer density map
- A retailer compliance map

The Mapper also lets users make data reports for cities, counties, tribal reservations, or state legislative districts. MTUPP included local-level data to make sure

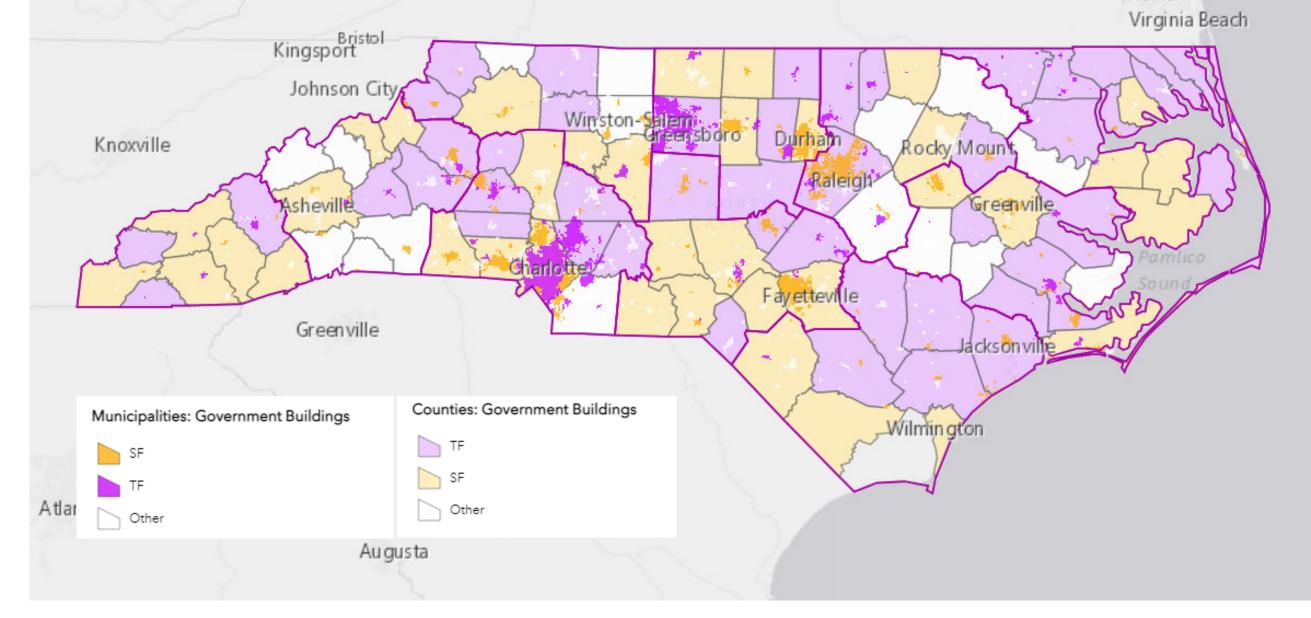


Screenshot from Montana Tobacco Retailer Mapper showing retailers near

the Mapper was useful to city- and county-level partners. Search bars and clickable icons help users find information about their community. The program regularly promotes the Mapper to partners. MTUPP hired consultants to create the map, but maintains it with internal staff.

North Carolina

North Carolina made restaurants and bars smokefree in 2010. Afterward, the state Tobacco Prevention and Control Branch wanted to track local policy efforts to further restrict smoking in public spaces and on government property. They asked the State Center for Health Statistics to develop maps showing city and county smokefree and tobacco-free policies across the state. The maps are available on North Carolina's Department of Health and Human Services website and include:



- Four static maps showing smokefree laws on government property and indoor public spaces
- Screenshot from North Carolina's interactive map of smokefree and tobacco-free local government policies
- An interactive map that allows users to select layers and view policies by clicking areas
- Two data dashboards displaying the regulations in tables by county and municipality

The state worked with the North Carolina Association of Local Health Directors to create the maps, and works with regional managers to update the maps on a quarterly basis. New team members are trained how to use the reporting system, review policies, and manage data.

CONTACT

Zara Petković, MA zara@wustl.edu cphss.wustl.edu 🔰 @cphsswustl



