

Leveraging data visualization techniques and surveillance data to tell a short(er) story

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Introduction

Health surveillance data from population-based surveys are an important source of information to track progress towards strategic goals and characterize the burden of health conditions and their associated risk factors. Although these surveys provide a rich source of data, finding ways to effectively communicate the main story of the results to a broad audience can be challenging. Typical approaches to disseminating data from these surveys include comprehensive reports that are lengthy and time consuming to read, compilations of detailed tables that can be hard to understand for broader audiences, and data briefs or fact sheets that are accessible but generally focus on a single aspect of the results.

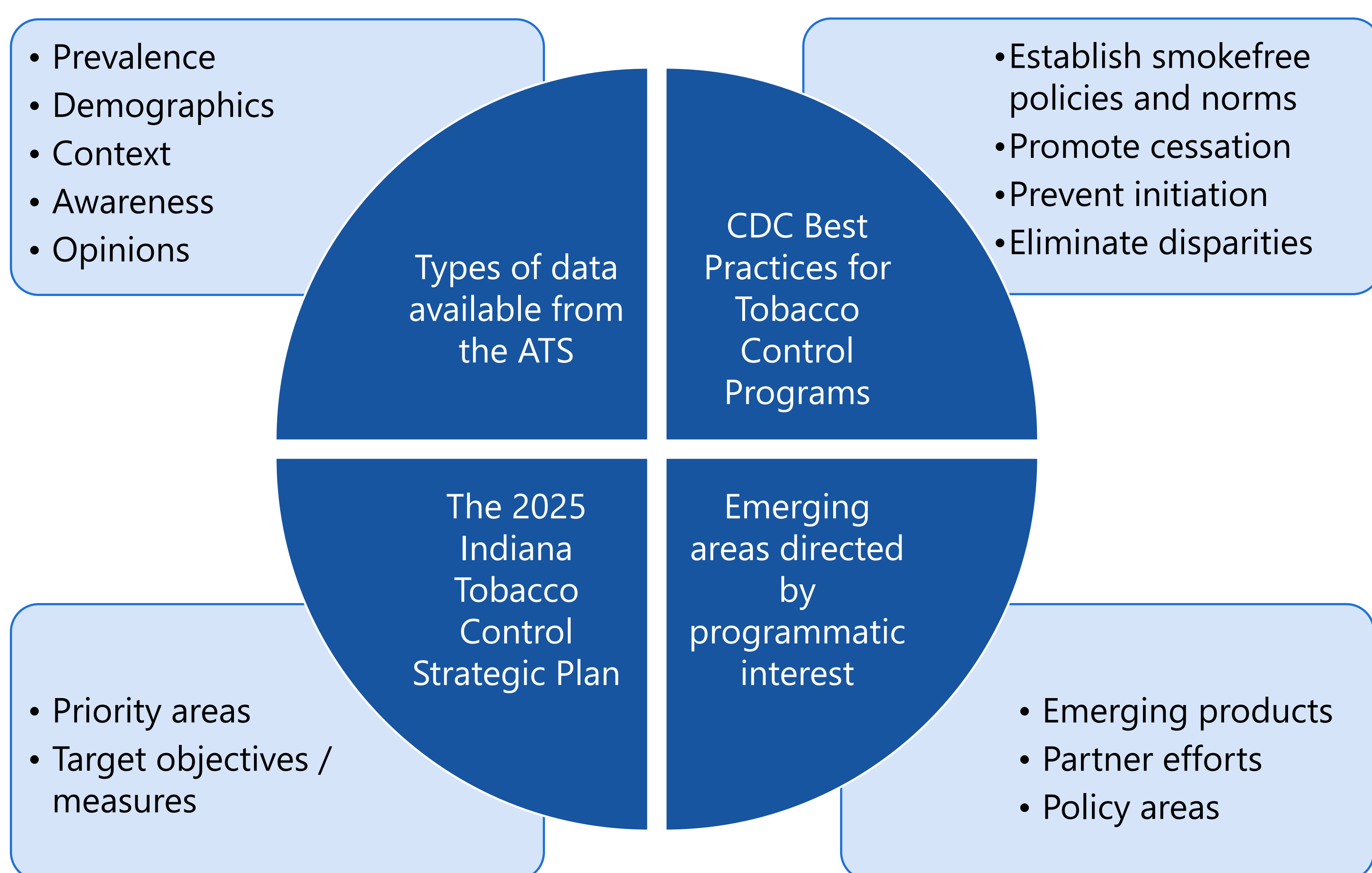
To tell the story of tobacco use and attitudes in Indiana, Professional Data Analysts (PDA) and Indiana Tobacco Prevention and Cessation (TPC) developed a 5-page visual summary that utilized data from the state's Adult Tobacco Survey (ATS). The summary was designed to be used as a stand-alone document as well as provide vignettes of data that could be extracted by TPC and its partners for use in other dissemination products and presentations.

Approach

When creating this summary, PDA and TPC had three primary objectives:

1. Identify the subset of data to include

The ATS was a 20-minute telephone survey that covered a broad range of topics. We considered the following factors to identify which information to include in the story:



2. Frame the social context and justice issues that lead to tobacco-related disparities

When discussing tobacco use disparities, we utilized suggestions from ChangeLab Solutions and the FrameWorks Institute to keep the focus on the cause of disparities and avoid placing blame on groups that are unfairly targeted by tobacco companies.

3. Utilize data visualization techniques to highlight key findings and enhance the document's approachability and use

We used a variety of data visualization techniques (graphs, icons) with considerations for how to best tell stories with the data.

Examples of the **framing** and **data visualization** methods we used in the report are highlighted to the right.

When discussing groups with higher tobacco use, the focus is on the causes that drive the disparities in use, like disproportionate targeting by tobacco companies

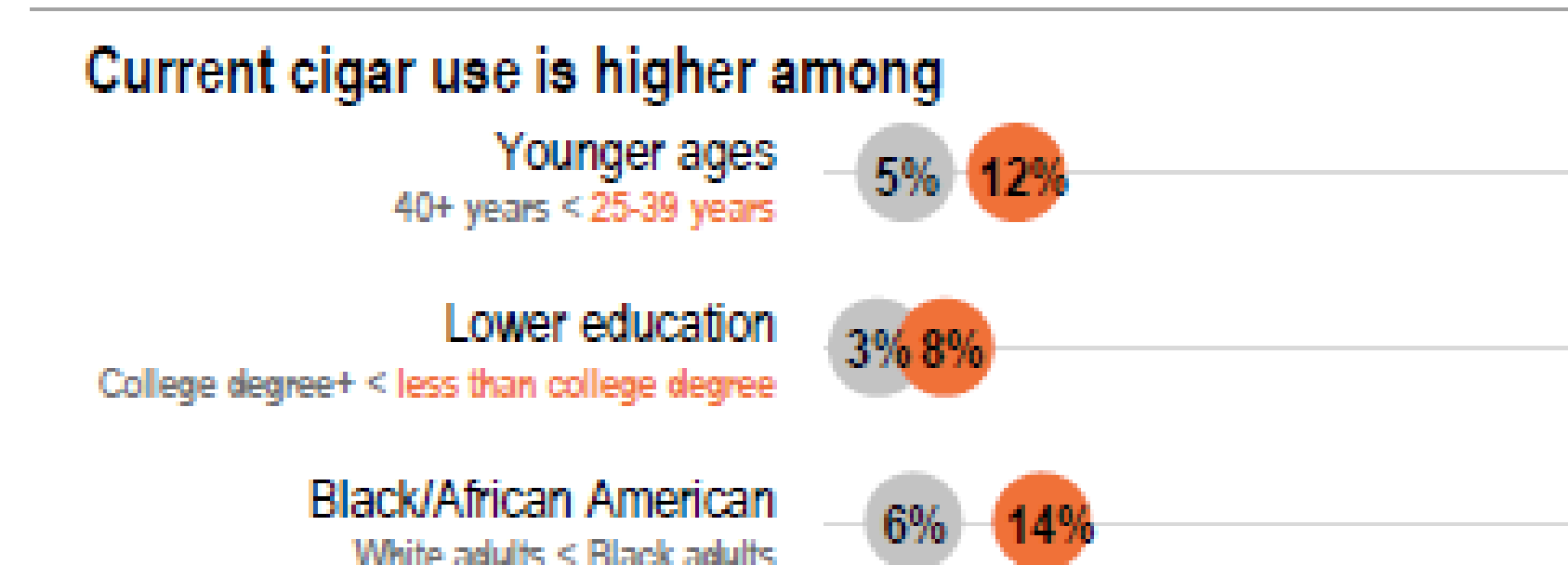
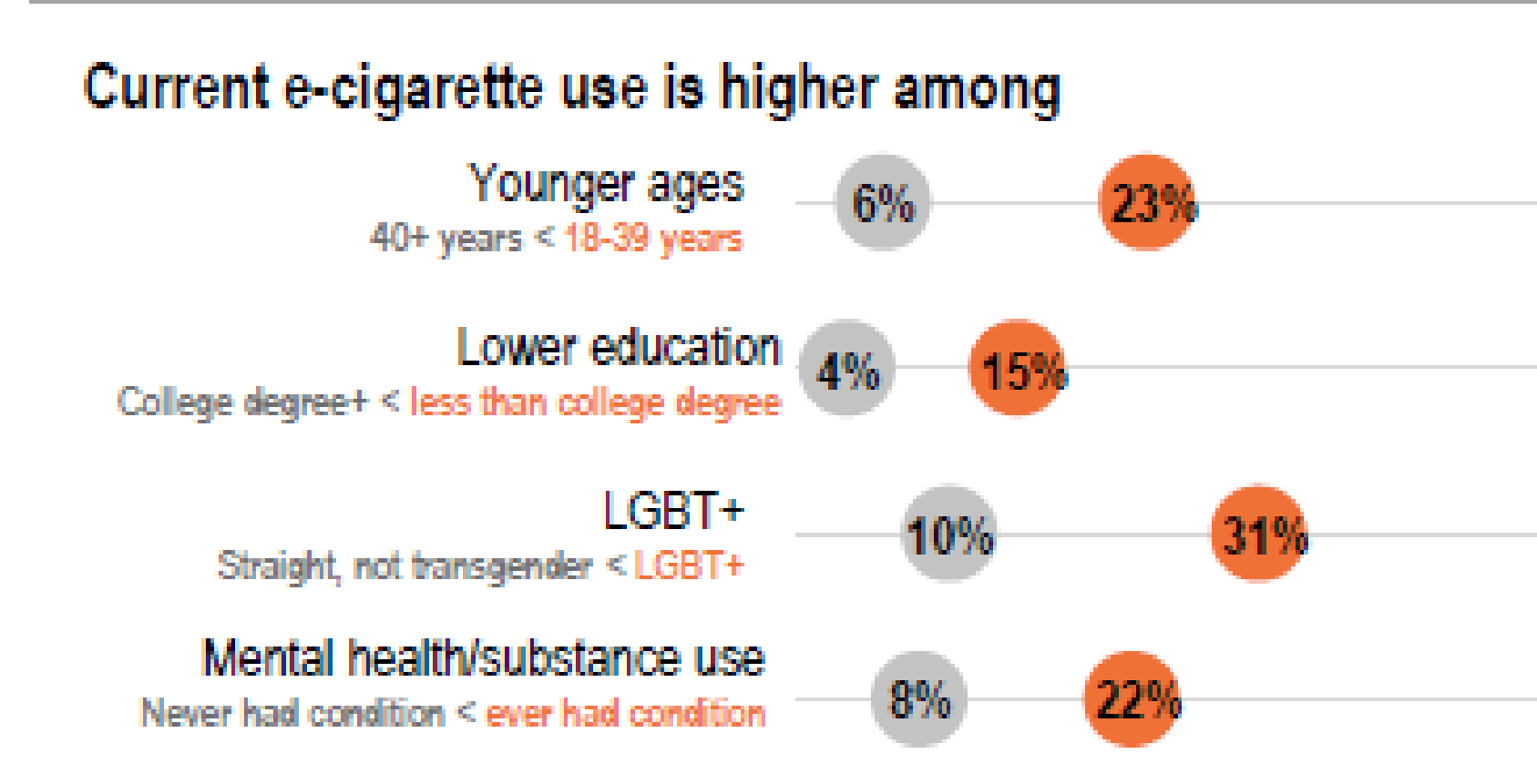
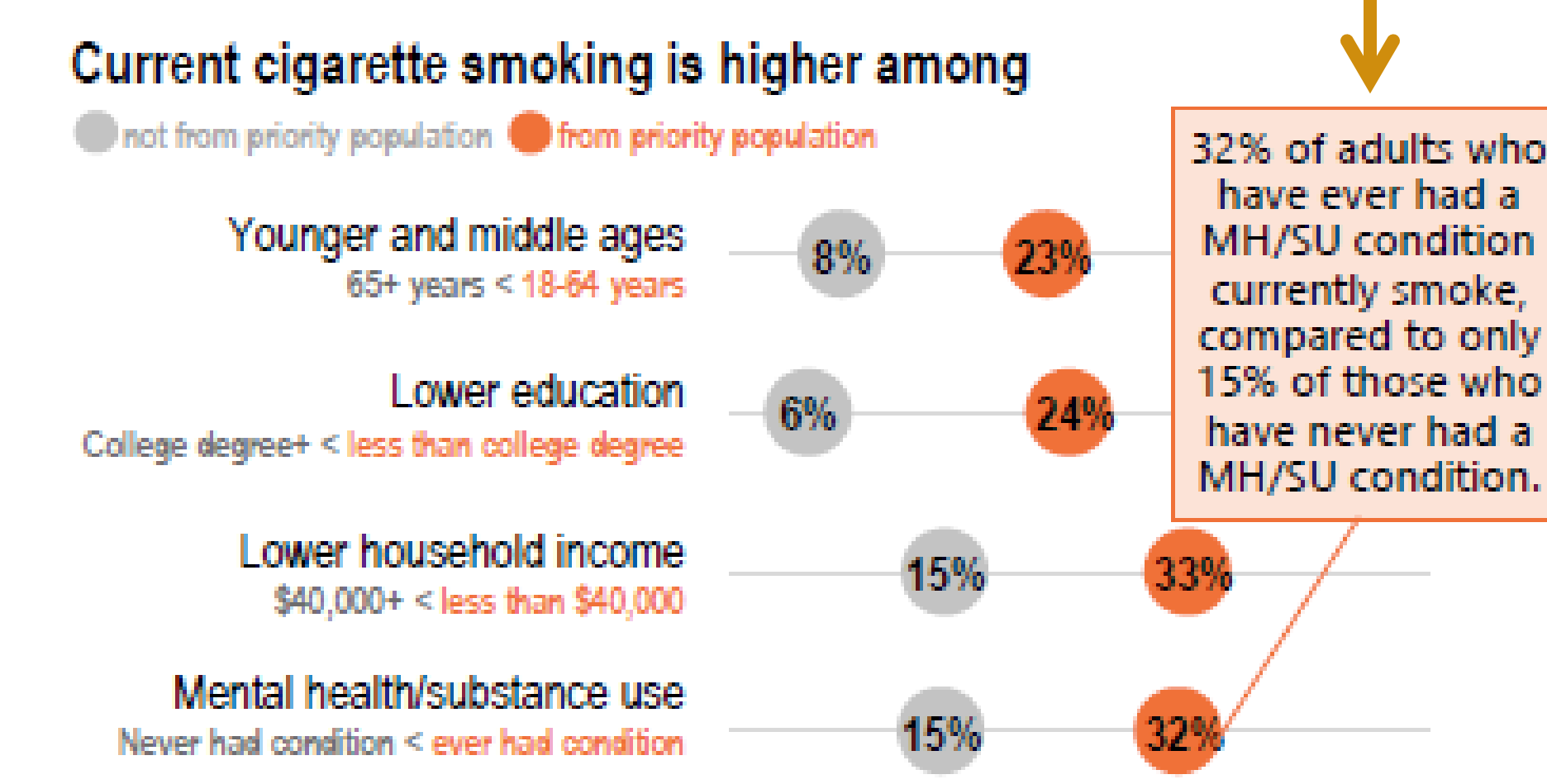
Disparities in who is impacted by tobacco

Although smoking has declined among Indiana adults, certain populations are still disproportionately impacted by tobacco.

The tobacco industry advertises, discounts, and displays tobacco products in some communities more than others. Historically, they have disproportionately targeted people of color and the LGBT+ community, among others, with tailored ads and flavored products. At the same time, societal stressors like discrimination, living in poverty, and stressful life events can make it more likely a person will start using tobacco and make it harder to quit. The resulting disparities in tobacco use and burden of tobacco-related diseases prevent some Hoosiers from having the opportunity to be as healthy as possible.

Among adults in Indiana, the use of cigarettes, e-cigarettes, and cigars is higher among priority populations, such as certain age groups and those with lower education. Specific disparities also exist for those who have ever been diagnosed with a mental health or substance use (MH/SU) condition, those with lower annual household incomes, and Black/African American adults.

80% of Black or African American adults who currently smoke or used to smoke report menthol cigarettes as their usual product (compared to 20-48% among other groups).



Person-first language

Color-coded sections

Stand-alone graphics with sufficient detail that partners can use the images in their reports

Summary statements used as headers to emphasize the main message

Strategic use of color in graphs to draw the eye to the important info

Marijuana

About 1 in 7 Indiana adults currently use marijuana; most use marijuana by smoking it and many use it in multiple ways.

Half of Indiana adults have tried marijuana and 15% currently use it. The most common method of using marijuana is by smoking it, but many adults who currently use marijuana consume it in multiple ways.

50% of Indiana adults have tried marijuana. **15%** of Indiana adults currently use marijuana.

Using marijuana in multiple ways is common among adults who currently use

"[T]he summary that you guys put out...absolutely beautiful. It's concise, it's easy to read. I love the infographics. Extremely helpful."
-TPC partner on the ATS highlights report

Scan here to see the full ATS report:



Scan here to see more posters and presentations from PDA:



Tobacco Prevention and Cessation



Professional Data Analysts

Minneapolis, MN | pdastats.com