

Identifying and Eliminating Tobacco-Related Disparities:

Key Outcome Indicators for Evaluating Comprehensive Tobacco Control Programs

OFFICE ON SMOKING AND HEALTH



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Disclaimer

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Brian Armour, PhD

Associate Director for Science
Office on Smoking and Health
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
Atlanta, Georgia

Natasha Buchanan-Lunsford, PhD

Associate Director for Health Equity
Office on Smoking and Health
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
Atlanta, Georgia

Frank Chaloupka, PhD

Distinguished Professor
Institute for Health Research and Policy
University of Illinois at Chicago

Kevin Collins, PhD

Deputy Branch Chief, Epidemiology Branch
Office on Smoking and Health
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
Atlanta, Georgia

Elizabeth Courtney-Long, MA, MSPH

Deputy Associate Director for Science
Office on Smoking and Health
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
Atlanta, Georgia

Tana Feiner

Training and Technical Assistance Coordinator
Tobacco Prevention and Control Program
Wisconsin Department of Health Services

Jean Forster, PhD

Professor Emerita
Division of Epidemiology and Community Health
School of Public Health
University of Minnesota

Erika Fulmer, PhD*

Health Scientist
Office on Smoking and Health
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
Atlanta, Georgia

Bridgette Garrett, PhD*

Associate Director for Health Equity
Office on Smoking and Health
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
Atlanta, Georgia

Corinne Graffunder, DrPH*

Division Director
Office on Smoking and Health
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
Atlanta, Georgia

Yessica Gomez, MPH*

Health Scientist
Office on Smoking and Health
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
Atlanta, Georgia

Nikki Hawkins, PhD

Evaluation Team Lead
Office on Smoking and Health
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
Atlanta, Georgia

Patricia Nez Henderson, MD

Vice President
Senior Scientist
Black Hills Center for American Indian Health

Sally Herndon, MPH

Branch Head
Tobacco Prevention and Control Branch
Division of Public Health
North Carolina Department of Health and Human Services

David Homa, PhD

Senior Science Officer, Epidemiology Branch
Office on Smoking and Health
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
Atlanta, Georgia

Delmonte Jefferson

Executive Director
National African American Tobacco Prevention Network
The Center for Black Health and Equity

Charlotte D. Kaboré, MPH

Public Health Analyst
Office on Smoking and Health
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
Atlanta, Georgia

Brian King, PhD

Deputy Director for Research Translation
Office on Smoking and Health
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
Atlanta, Georgia

Nicole Kuiper, MPH*

Health Scientist
Office on Smoking and Health
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
Atlanta, Georgia

Rene Lavinghouze, MA*

Evaluation Team Lead
Office on Smoking and Health
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
Atlanta, Georgia

Joseph G. L. Lee, PhD

Associate Professor
Department of Health Education and Promotion
College of Health and Human Performance
East Carolina University

Rod Lew, MPH

Founder and Executive Director
Asian Pacific Partners for Empowerment, Advocacy, and Leadership (APPEAL)

Chad Morris, PhD

Professor of Psychiatry
Director of Behavioral Health & Wellness Program
Department of Psychiatry
Anschutz Medical Campus
University of Colorado

Rebecca Murphy, PhD

Health Communications Specialist
Office on Smoking and Health
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
Atlanta, Georgia

Linda Neff, PhD

Branch Chief, Epidemiology Branch
Office on Smoking and Health
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
Atlanta, Georgia

Briana Oliver, MPH

ORISE Fellow
Office on Smoking and Health
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
Atlanta, Georgia

Elizabeth Reimels, JD*

Associate Director for Policy
Office on Smoking and Health
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
Atlanta, Georgia

Megan E. Roberts, PhD

Assistant Professor
College of Public Health
The Ohio State University

April Roeseler, MSPH

Branch Chief
California Tobacco Control Program
California Department of Health

Yolanda Savage-Narva, MEd.

Executive Director
Operation Understanding DC

Scout, PhD

Deputy Director
National LGBT Cancer Network

Karla Sneegas, MPH

Branch Chief, Program Services Branch
Office on Smoking and Health
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
Atlanta, Georgia

Sonia Tetlow, MPH*

Health Scientist
Office on Smoking and Health
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
Atlanta, Georgia

Dennis R. Trinidad, PhD

Associate Professor of Family Medicine and Public Health
Department of Family Medicine and Public Health
School of Medicine
University of California San Diego

Donna Vallone, PhD
Chief Research Officer
Truth Initiative

Teresa Wang, PhD*
Health Scientist
Office on Smoking and Health
National Center for Chronic Disease Prevention and Health Promotion
Centers for Disease Control and Prevention
Atlanta, Georgia

Monica Webb-Hooper, PhD
Professor of Oncology, Family Medicine & Community Health and Psychological Sciences
Associate Director for Cancer Disparities Research
Director of the Office of Cancer Disparities Research
Principal Investigator of the Tobacco Obesity and Oncology Laboratory
Case Comprehensive Cancer Center
Case Western Reserve University

* Affiliation at the time contributions were made may differ from current affiliation

PREFACE

The Centers for Disease Control and Prevention’s (CDC’s) Office on Smoking and Health (OSH) developed this publication to assist state and territorial commercial tobacco control programs evaluate efforts to reduce tobacco-related health disparities. The primary audiences for this publication consist of planners, managers, and evaluators of tobacco control programs.

This publication is the fourth in a series of key outcome indicator guides released by OSH and the first to specifically focus on tobacco-related disparities. This guide can be used in combination with outcome indicators from the three other guides: *Preventing Initiation of Tobacco Use: Outcome Indicators for Comprehensive Tobacco Control Programs—2014*, *Promoting Quitting Among Adults and Young People: Outcome Indicators for Comprehensive Tobacco Control Programs—2015*, and *Eliminating Exposure to Secondhand Smoke: Outcome Indicators for Comprehensive Tobacco Control Programs—2017*.¹⁻³ Many indicators in the present guide align closely with those in previously published guides with the addition of information specific to tobacco-related disparities. This indicator guide supports evaluation of the National Tobacco Control Program (NTCP), which aims to reduce tobacco-related disease, disability, and death. The NTCP seeks to achieve these goals by working in four areas:

1. Preventing initiation among youth and young adults.
2. Eliminating exposure to secondhand smoke.
3. Promoting quitting among adults and youth.
4. Identifying and eliminating tobacco-related disparities.

A logic model with corresponding indicators for Goal Area 4 of the NTCP (Identifying and Eliminating Tobacco-Related Disparities) is included in the present guide, which contains in-depth information on indicators that can be used to measure progress toward various outcomes. Consumer Reports®-type ratings are included to allow for tailored selection of indicators by state and territorial tobacco control programs. Moreover, this guidance document highlights how to use indicators to integrate program and evaluation planning.

This guide supports and complements broader monitoring and evaluation efforts to identify and eliminate tobacco-related disparities. It supports application of CDC’s Framework for Program Evaluation in Public Health Practice⁴ and may be used in coordination with CDC’s workbook, *Developing an Effective Evaluation Plan: Setting the Course for Effective Program Evaluation*,⁵ and other OSH surveillance and evaluation resources. Tobacco prevention and control program managers and evaluators can use the indicators in this document to focus their evaluations, inform the selection of indicators, link these to intended outcomes, and assist in gathering credible evidence.

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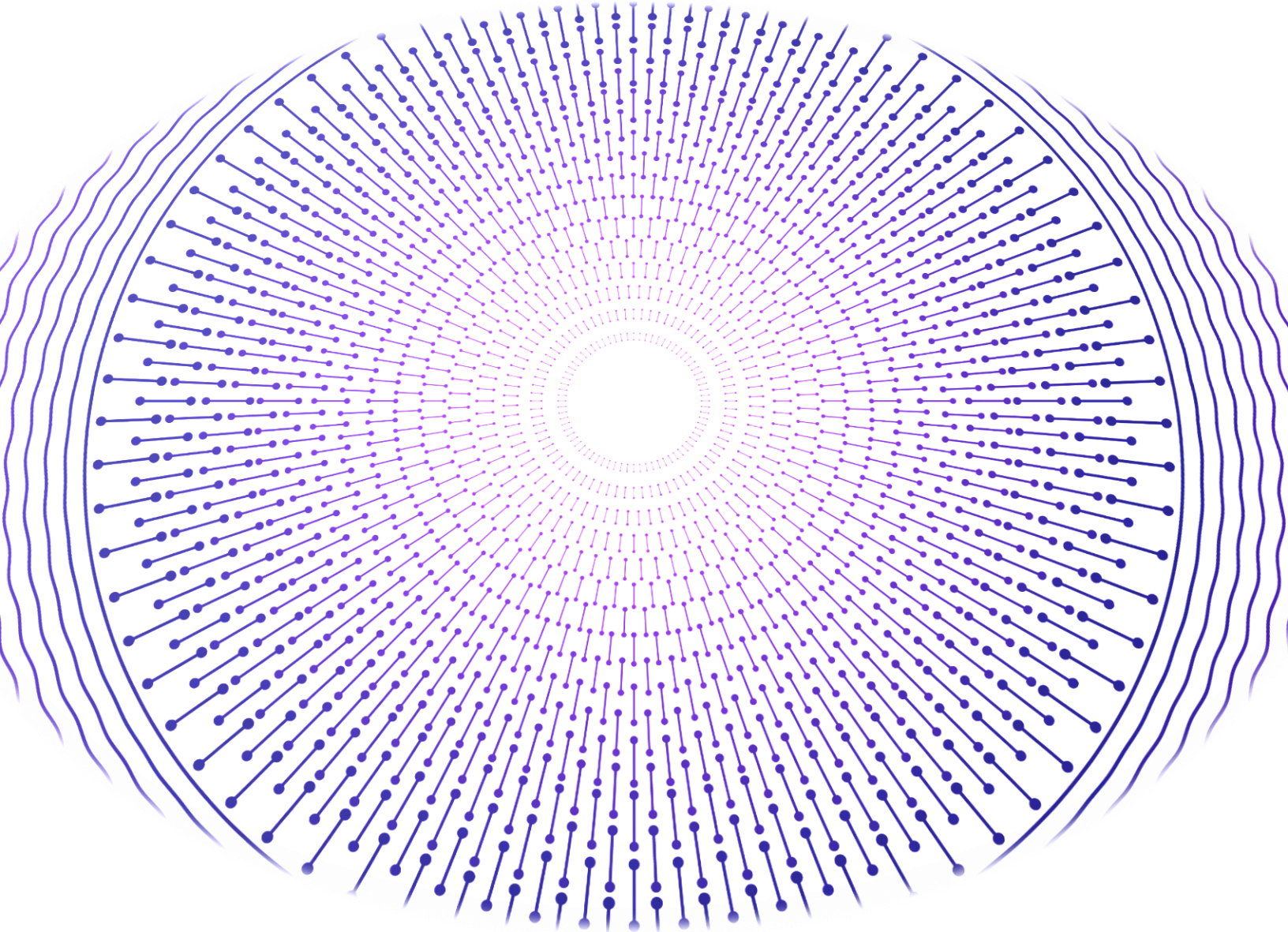
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CHAPTER 1

INTRODUCTION



Introduction

Background

Commercial tobacco use is the leading cause of preventable illness and death in the United States.¹ Smoking-related diseases in the United States cost billions of dollars each year in direct medical care and lost productivity.¹ Since the first landmark Surgeon General's report in 1964, *Smoking and Health*,² implementation of evidence-based strategies have led to reductions in commercial tobacco use, exposure to secondhand smoke (SHS), and commercial tobacco-related morbidity and mortality.¹ In 2018, 13.7 percent of U.S. adults reported current cigarette smoking, a two-thirds decline since 1965 and the lowest level ever recorded in the United States.^{1,3}

Despite progress over the past few decades, reductions in commercial tobacco use and related declines in morbidity and mortality have not been realized across all population groups. The 2014 Surgeon General's report, *The Health Consequences of Smoking—50 Years of Progress*, concluded that large disparities in tobacco use exist across groups defined by race, ethnicity, educational attainment, socioeconomic status, and geographic location.¹ Disparities include significant differences in the prevalence of smoking, tobacco use initiation, exposure to secondhand smoke, and cessation behaviors across population groups.⁴ For example, current use of any commercial tobacco product in 2019 was highest among American Indian/Alaska Native persons (29.3%) and lowest among Asian persons (10.0%).³

Tobacco-related health disparities are the result of and influenced by a complex mix of multi-level structural and social factors. Some of these influences were recognized in the 1998 Surgeon General's report, *Tobacco Use Among U.S. Racial/Ethnic Minority Groups*,⁵ which stated, "No single factor determines patterns of tobacco use among racial/ethnic groups; the patterns are a result of complex interactions of multiple factors such as socioeconomic status, cultural characteristics, acculturation, stress, biological elements, targeted advertising, price of products, and varying capacities of communities to mount effective tobacco control initiatives." Structural and social determinants of health⁶ contribute to tobacco-related disparities and can include key factors, such as tobacco industry influence and target marketing, inequitable implementation and enforcement of tobacco control policies, social and environmental conditions that increase exposure to commercial tobacco products and risk of tobacco use, structural racism and discriminatory practices, economic inequities, and access to education and job opportunity.^{1,7,8} Addressing many of these factors requires multisectoral public-private partnerships to execute multi-level approaches to tobacco prevention and control.

The persistence of tobacco-related disparities underscores the importance of expanding efforts to implement evidence-based strategies that can reach and reduce tobacco use among populations experiencing tobacco-related disparities. As tobacco control programs implement strategies to address tobacco-related disparities, it is important that they monitor and evaluate whether their efforts are having the intended public health impact. Choosing appropriate outcome indicators is a key step in doing this. This guide is intended to help facilitate the selection of such indicators.

Focus of the Guide

While tobacco-related health disparities can be addressed at multiple levels, this guide predominately focuses on outcome indicators linked to changes in commercial tobacco-related population-level policy, systems, environmental, and behavioral changes. Some of the indicators included in this guide can also be used to look at dimensions related to promoting health equity, however, this guide does not provide explicit guidance on advancing health equity in commercial tobacco control. Advancing health equity is a broader effort that would involve addressing multilevel structural and socioecological influences, historical and contemporary injustices and, therefore, extends beyond the scope of this guide. For example, indicators of equitable implementation and enforcement of comprehensive smokefree policies are important to understanding the impact of related actions for people from all socioeconomic, educational, and racial/ethnic backgrounds and thus can be a measure of progress toward health equity.⁷ Tobacco control programs can partner with multisectoral public health and non-public health partners to address and monitor broader socioecological issues that contribute to tobacco-related disparities, such as structural and social determinants of health that drive and influence disparities. Indicators in this guide can help programs determine whether their efforts and multisectoral partnerships are leading to reductions in commercial tobacco-related disparities.

While this guide predominantly focuses on *outcome* indicators to reduce tobacco-related health disparities, we also included a set of *process* indicators to acknowledge the importance of having capacity to effectively implement interventions that will reduce tobacco-related disparities. For example, tobacco control programs need access to disaggregated data for different population groups in order to identify disparities, in addition to informing the development, implementation, and evaluation of interventions to address them. Thus, addressing surveillance capacity is an important component in addressing disparities, even though it is not a direct outcome. Moreover, it is important for programs to meaningfully engage multisectoral public health and non-public health partners during all phases of related efforts and initiatives, to champion, stimulate, and facilitate socioecological changes, including policy interventions that can reduce tobacco-related disparities.

Guide Preparation

The indicators presented in this guide were developed using the same processes and procedures used to develop the outcome indicators for NTCP Goals 1-3: *Preventing Initiation of Tobacco Use: Outcome Indicators for Comprehensive Tobacco Control Programs—2014*; *Promoting Quitting Among Adults and Young People: Outcome Indicators for Comprehensive Tobacco Control Programs—2015*; *Eliminating Exposure to Secondhand Smoke: Outcome Indicators for Comprehensive Tobacco Control Programs—2017*.⁹⁻¹¹ The sections below provide details on the development of the guide.

Logic Model Development

As explained in *Introduction to Program Evaluation for Comprehensive Tobacco Control Programs*, logic models depict the presumed causal pathways that connect program inputs, activities, and outputs with short-term, intermediate, and long-term outcomes.¹²

The logic model for NTCP Goal Area 4, *Identifying and Eliminating Tobacco-Related Disparities*, was developed to depict pathways to achieve population-level changes in policies, systems, environments, and behaviors that can reduce tobacco-related disparities. It was reviewed by OSH and external subject matter experts, and a literature review was conducted to inform refinements to the model and to identify indicators linked to each outcome in the logic model.

Notably, many of the logic model outcomes and corresponding indicators identified for the NTCP Goal Area 4 logic model overlap with outcomes in the logic models for the NTCP Goals 1, 2 and 3.⁹⁻¹¹ This is not surprising, as the logic models included in previous indicator guides referenced decades of research and science to identify outcome indicators for preventing and reducing tobacco use and secondhand smoke exposure, including among population groups experiencing tobacco-related disparities. For example, there is extensive research on the environmental, social, and behavioral impacts of comprehensive smoke-free policies.^{1,7} Comprehensive smoke-free policies protect people who do not smoke from exposure to secondhand smoke exposure, reduce the social acceptability of smoking, and promote and support cessation.^{1,7} When equitably implemented and enforced, these policies have the potential to reach and benefit everyone. However, there are disparities related to policy protections experienced by population groups.^{7,8} Inequitable implementation and enforcement of these policies can diminish their ability to benefit all population groups in fair and just ways. Thus, indicators related to smoke-free policies are also included in this guide within the context of eliminating tobacco-related disparities.

To help tobacco prevention and control programs with planning and evaluation, the outcomes were numbered in each NTCP logic model to allow for easy reference in discussing the links between logic model components.

Identification and Selection of Outcome Indicators

Outcome indicators are specific, observable, and measurable characteristics or changes that represent achievement of an outcome.¹²⁻¹³ The logic model served as the framework for the development of the outcome indicators. For example, an indicator under outcome 2, “increase equitable adoption, implementation, and enforcement of tobacco prevention and control policies,” is the “proportion of jurisdictions that have comprehensive smokefree policies that prohibit smoking in all indoor areas of workplaces, including restaurants, and bars and the proportion of jurisdictions that are disproportionately burdened by secondhand smoke exposure that have comprehensive smokefree policies.” (Indicator 4.2.g).

Indicator Selection and Rating

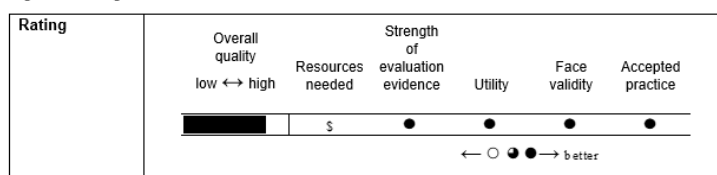
To start, CDC proposed a set of outcome indicators based on the results from the literature review. Next, a panel of 16 external subject matter experts in tobacco control practice, evaluation, and research to assess each indicator's value on the basis of the following criteria: strength of evaluation evidence, resources needed, utility, face validity, uniqueness, conformity with accepted practice, and overall quality of the indicator. Each of these is defined in more detail in the *Indicator Ratings Table* section that follows and in Appendix A. In addition to rating the indicators that CDC proposed, the experts were invited to suggest other indicators and sources of data for those indicators.

Upon completion of the external review, CDC convened an internal panel of nine OSH reviewers with different areas of expertise (e.g., evaluation, surveillance, policy, cessation, program, communications, disparities) to review the external subject matter experts' responses, comments, and suggestions. The internal panel then compiled the results across criteria for each indicator and subsequently refined, dropped (based on low ratings and/or insufficient evidence), and added new indicators (based on the input from the external and internal panels). New indicators have no ratings from the external panel because they were added after this step in the process. Thus, they have the symbol NR (i.e., "Not Rated,") after their indicator numbers.

Indicator Rating Table

For each outcome component of the logic model, CDC developed an indicator rating table that lists the indicators associated with the outcome component and the external experts' ratings for each indicator by criterion. Figure 1 presents an example of an indicator rating and detailed information on each of the criteria. For additional information on how the expert panelists rated each indicator and how the composite ratings were determined, see Appendix A.

Figure 1. Rating Table



The ratings are based on the following criteria:

- **Overall quality:** A summary rating that reflects the overall quality and general worth of the indicator as it relates to evaluating state tobacco prevention and control programs.
- **Resources needed:** Quantity of resources needed to collect reliable and precise measures and to analyze primary or secondary data on the indicator. Considerations affecting cost include availability of existing data (e.g., archival records or other secondary data) versus need for primary data collection, and methodological and sampling issues. Dollar signs show the amount of resources (funds, time, and effort) needed to collect and analyze data on the indicator using the most commonly available data source: more dollar signs (maximum four) indicates more resources needed. The dollar signs do not represent specific amounts because the actual cost of measuring and analyzing an indicator varies according to the existing capacity of a state health department or organization to evaluate its programs.

- **Strength of evaluation evidence:** The degree to which scientific evidence supports the assumption that implementing interventions to affect a given indicator will lead to a measurable change in the related outcome. This includes the extent to which the scientific literature supports use of the indicator for the evaluation of comprehensive, statewide tobacco prevention and control programs, and considers conflicting evidence and concerns regarding the methodology of supporting studies. Indicators with the highest ratings have a strong demonstrated relationship between the indicator and a downstream logic model outcome. Indicators with moderate ratings demonstrate an association between the indicator and an outcome in the logic model with moderately strong evidence. Indicators with low ratings may have conflicting evidence and/or be demonstrated by studies with weak methodology.
- **Utility:** The extent to which the indicator would help to answer important comprehensive tobacco prevention and control program evaluation questions.
- **Face validity:** The degree to which data on the indicator would appear valid to tobacco program stakeholders, such as decision makers who may be users of tobacco prevention and control program evaluation results.
- **Accepted practice:** The degree to which use of the indicator is consistent with currently accepted, real-world tobacco control practice.

Indicator Profiles

Each indicator profile presents the following information:

- **Indicator number and name:** Each indicator is uniquely identified by two numbers and a letter. The first number represents the goal area, the second number represents the outcome component (box) within the logic model, and the letter represents the indicator. For example, Indicator 4.1.a is first on the list of indicators (designated by the “a”) associated with outcome component 1 in the logic model for NTCP Goal Area 4.
- **Outcome box:** The title of the outcome component (i.e., logic model box) is provided in the logic model.
- **What to measure:** A description of what to measure in order to gather data on the indicator. **Population groups experiencing disparities** for each indicator can be selected by the tobacco control program based on their state and/or local/community level data relevant for the indicator. **Jurisdictions and/or communities disproportionately burdened by commercial tobacco use** can be expanded to include other measures deemed appropriate by the tobacco control programs. For example, when selecting priority jurisdictions/communities for measurement of some of the indicators, a program may want to consider socioeconomic status, poverty rates, access to healthcare, or other factors in addition to tobacco use prevalence.
- **Similar existing indicator(s) from other goal areas:** Indicates whether there is a similar indicator in the existing outcome indicator guides for the other NTCP goal areas and note the specific indicator.
- **Rationale:** The rationale is provided for using the indicator as a measure of a specific outcome in the logic model.

- **Applying health disparity framing:** Information is provided on why this indicator can help measure progress in reducing tobacco-related disparities. Populations and/or common characteristics noted in the cited literature are provided for reference. However, this information is not intended to be comprehensive. Tobacco control programs can use their state and/or community level data to determine population groups experiencing tobacco-related disparities.
- **Example data source(s):** Example past and current surveys and sources of data that measure the indicator as well as the population from which the data could be collected. In some cases, example data sources are shared to provide example survey questions that have been used in the past. For some indicators, programs may need to create data sources by adding questions to existing surveillance systems. Most listed data sources are well known and widely used national and state surveys or surveillance systems. Non-standardized, topic-specific data sources (e.g., policy tracking, environmental scans) that may not be as widely used but can be useful for evaluation are also included.
- **Example survey question(s):** These are typically survey questions from state or national surveys or surveillance systems. Where appropriate, the range of possible responses to the survey questions is also given. If no state or national survey has an applicable question, an example question may have been created. Note, example survey questions focus on the indicator construct; example questions on demographic and other population characteristics are not noted but are needed to assess tobacco-related disparities by population group characteristics.
- **Comments:** Additional information on the indicator that may be useful for program planning and/or evaluation purposes. For example, suggestions on other uses for the indicator, the indicator's limitations (if any) as a measure of a program's progress, potential elements of a model policy that may be used to guide measurement, or sources of information on data collection methods. Additionally, special considerations when measuring and/or analyzing the indicator are noted.
- **Reviewers' ratings:** The rating tables include the criterion ratings given to the indicator by the panel of experts.

Additionally, indicators in this guide that are linked to *Healthy People 2030* objectives are noted in the profile and have a symbol HP, which stands for "Healthy People."

Organization of Indicators

Similar to the outcome guides for NTCP Goals 1, 2, and 3, indicators in this guide are organized by the outcome component in the logic model: Short-term Outcomes (1-3), Intermediate Outcomes (4-5) and Long-term Outcomes (6-8).

Because the capacity building indicators are meant to support implementation of interventions to achieve logic model outcomes, these indicators do not link to outcome components in the logic model. Consequently, they are presented in this guide before the outcome indicators.

Using this Guide for Program Evaluation

Planning Your Evaluation

This guide supports evaluation efforts across the six steps of CDC's Evaluation Framework for Program Evaluation.¹⁴ The guide is especially helpful in implementing steps 2 (Describe the Program), 3 (Focus the Evaluation) and 4 (Planning for Gathering Credible Evidence) of CDC's Evaluation Framework for Program Evaluation.¹⁴

Describe the program. This guide assists in clarifying program efforts and expected outcomes related to identifying and eliminating tobacco-related disparities. Using this guide to help map a program's causal pathway(s) provides an opportunity for stakeholders to work through concerns and challenges regarding the goals and objectives of the work and to set the stage for identifying key evaluation questions, focusing the evaluation, and connecting program planning and evaluation. It is unlikely that your program logic model will look exactly the same as the logic model in this guide. Some of your program's activities, outputs, outcomes, and contextual factors may be different. It is critical for program staff and stakeholders to develop their logic model based on their program- and stakeholder-specific needs, taking into account program context. Moreover, your program may consider including organizational, structural, systemic, social, and economic factors that can influence tobacco-related disparities and/or acknowledging their influence and impact.

Focus the evaluation. After identifying your program's key evaluation questions, this guide can be used to select indicators of progress related to short-term, intermediate, and long-term outcomes. Examine the indicator rating tables relevant to the short-term, intermediate, and long-term outcomes in your program logic model. The ratings pertaining to the indicators' overall quality, resources needed, strength of evaluation evidence, utility, face validity, and accepted practice can help you select the indicators that may be the most relevant, feasible, and appropriate to measure and monitor progress toward your short-term, intermediate, and long-term outcomes.

Planning for gathering credible evidence. You can use the example data sources and survey questions included in the indicator profiles to help create a plan for gathering evidence for your program evaluation questions and related short-term, intermediate, and long-term outcomes.

While monitoring a single indicator can serve as a helpful guidepost, it is important to include indicators from across short-term, intermediate, and long-term outcomes within a logic model to help ensure a robust evaluation. By assessing outcome indicators along the logic model, tobacco prevention and control programs can begin to see where efforts are making gains and where they are not. When a key indicator within the pathway fails to improve or begins declining, additional inquiry can determine whether the program itself is failing to achieve the intended effects and/or whether contextual factors along the causal pathway are responsible. In either case, understanding the roadblocks in achieving the intended public health goals provides important information to guide program improvement efforts. Moreover, programs can assess key contextual factors that influence disparities, such as structural, social, and economic issues,

as well as factors related to implementation, such as community engagement efforts, and their influence on achieving outcomes along the logic model pathway.

More information on using outcome indicators to develop an evaluation plan is provided in this section and in CDC's workbook, *Developing an Effective Evaluation Plan: Setting the Course for Effective Program Evaluation*,¹⁵ which can be accessed at https://www.cdc.gov/tobacco/stateandcommunity/tobacco_control_programs/surveillance_evaluation/evaluation_plan/index.htm.

Evaluation-Specific versus Core Indicators

Evaluation-specific indicators are beneficial in supporting program evaluation of specific tobacco control interventions as they can help assess the extent to which intended outcomes of an implemented intervention were achieved. For example, a program whose efforts led to an increase in health systems change (e.g., protocols to screen and treat) in behavioral health treatment facilities may also want to assess whether these changes led to actual increased screening, advice to quit, treatment, and cessation among persons with behavioral health conditions. Having evaluation-specific indicators in place to address outcomes across the logic model pathway can be useful to see what is happening and how it is happening along the way, or conversely what is not happening to impede the impact of system-level changes.

In addition to having evaluation-specific indicators, having **core** indicators that will be consistently measured over time can provide a broader and long-term view of a program's impact. These core indicators can allow you to monitor progress across key outcomes (e.g., changes in priority policies, exposure to secondhand smoke, and prevalence of tobacco use), program goal areas, and/or for disproportionately impacted population groups. For example, a program's strategic efforts may identify reducing commercial tobacco use among American Indian and Alaska Native (AI/AN) populations as a program goal. To assess progress over time towards achieving their goal, the program may identify core indicators related to smoke-free policies and health systems changes in AI/AN properties and healthcare facilities, as well as indicators to track changes in quit attempts and commercial tobacco product use prevalence among AI/AN populations. The program may also include distal indicators to track morbidity and mortality among AI/AN populations.

Of note, evaluation-specific and core indicators are not necessarily mutually exclusive. Often, programs and their partners work on specific interventions that can contribute to the program's overarching strategic priorities and similar indicators may be assessed as part of both intervention-specific evaluations and the program's overarching priorities. However, core indicators may be tracked over a longer period of time and may extend beyond specific program interventions and evaluations during the period established by the program.

Measurement of Tobacco-Related Disparities

Measurement Options and Considerations

This section provides a brief overview of concepts and considerations when measuring tobacco-related disparities. The concepts are further detailed in the resources provided under this section. This section is not meant to provide an exhaustive or detailed explanation of measurement options and issues. Rather, information in this section raises some measurement issues that programs can consider when measuring disparities. Because there are many methodological choices for measuring disparities, tobacco control programs may want to consult with their program statistician and other subject matter experts for additional guidance. Moreover, it is important for programs to provide the reasons and implications for methodologic approaches to justify and increase the credibility of their approach. In determining the best methodological approach for measuring disparities and progress toward elimination, two early decisions that must be made involve specifying the reference point and determining whether differences will be measured on an absolute versus relative scale.

Reference Point: To measure changes in observed disparities, it is first necessary to identify a reference point from which differences will be measured. Common choices for reference points include the group with the lowest prevalence for a tobacco-related outcome or determinant, the largest social group, and the population average. There are advantages and disadvantages with each approach that should be considered when selecting a reference point that are detailed elsewhere.^{16,17} Each possible reference point has pros and cons. For example, while it may be convenient to use the group with the lowest prevalence of tobacco use as the reference point so that differences across groups are in the same direction, a disadvantage of this approach arises if the group with the lowest prevalence changes over time, and thus changes the scale upon which progress is measured. Programs can consider the pros and cons of each type of reference point and consider the implications of their selection to proactively identify strengths and weaknesses of the selection and to plan in advance for multiple possible scenarios. In some instances, programs may choose to instead use a program target established through their strategic planning process or by using *Healthy People* targets.

Absolute versus Relative Scale: An absolute scale involves a numerical difference between a rate or prevalence and the reference point, while a relative scale expresses differences between prevalence in terms of the selected reference point and is often expressed as a ratio.¹⁶⁻¹⁸ There is general consensus that differences should be measured on both an absolute and relative scale.¹⁶⁻²⁰ Measuring both can provide a more complete understanding of the magnitude of the differences and disparities.

In addition to making choices about the reference point and the use of an absolute versus relative scale, other important early considerations in methodology involve **accounting for differences in group size**, using **differential weighting** of certain groups (e.g., groups with low socioeconomic status), using a **pairwise versus summary approach** to compare differences across groups over time, and using **population-weighted measures** to account for changes in the distribution of the population over time. There are many available resources that provide more guidance and details on each of these for measuring disparities.¹⁶⁻²⁰

Measuring Disaggregated Population Group Differences

Research has shown that there can be substantial within-group differences in tobacco-related behaviors among population groups. For example, 2010-2013 data from the National Survey on Drug Use and Health showed that 10.9% of Asian American persons reported current tobacco product use, the lowest among racial/ethnic groups during those years.²¹ However, disaggregated data during those years showed that prevalence of tobacco use differed significantly among different Asian American populations, including Chinese (7.6%), Asian Indian (7.6%), Japanese (10.2%), Filipino (12.6%), Vietnamese (16.3%), and Korean (20.0%) persons.²¹ These findings underscore the need to measure differences within population groups as much as possible. This may be particularly relevant for states and communities that have a large proportion of diverse population groups. Tobacco control programs may need to oversample for some population groups to collect, analyze, and report on disaggregated population group data.

Measurement Plan

Measurement plans, best developed in meaningful collaboration with multisectoral stakeholders, can be useful in highlighting key decision points, including selected indicators, the measurement approach, and the rationale for decisions. The collaborative development of a plan can help ensure consensus and transparency among all stakeholders, as well as consistency in measurement over time as staff and leadership changes occur. A plan to measure evaluation-specific indicators may be part of an evaluation plan, but a standalone plan may be beneficial for programs that select core indicators to track over time. A standalone measurement plan can include:

Indicators: A set of actionable and priority indicators that will be consistently measured. These indicators may include key policy indicators and long-term indicators, as well as more distal tobacco-related morbidity and mortality indicators. Some programs may also choose to monitor social determinants of health indicators or other indicators that may be closely linked to tobacco-related disparities. When identifying indicators, programs may want to determine whether the indicator will be measured at the individual and/or community level.

Population Characteristics: Key population characteristics (e.g., race/ethnicity, income) that will be measured for selected indicators and over time. Examining state and community-specific data can help identify these population characteristics. Explicitly outlining these can also help inform potential changes in surveillance systems to capture these.

Social Determinants of Health: Due to their impact, assessing changes in social determinants of health is important to understanding commercial tobacco control outcomes. Tobacco control programs can consider monitoring and assessing changes in social determinants of health and their effect on program efforts to reduce tobacco-related disparities as part of their evaluation and measurement plans. The five key social determinants of health assessed by *Healthy*

People include: Economic Stability, Education, Social and Community Context, Health and Healthcare, and Neighborhood and Built Environment.⁶

Definition of Progress: Description of how progress will be defined. For example, progress may be defined as closing the gap between and within population groups, achieving a particular target, and/or shifts towards intended outcomes (e.g., decrease in tobacco use) among individual and intersectional population groups experiencing disparities regardless of closing the gap. Programs may want to consider a combination of these approaches, for example, monitoring not only changes in differences, but also changes towards intended outcomes among population groups experiencing disparities.

Measurement Approach: Description and rationale for how disparities will be measured and assessed over time. This is extremely important as it will influence the results and credibility of results.

Data Sources: List of data sources for selected indicators. Explicitly listing these can help ensure consistency in data used over time and can help identify data gaps that need to be addressed. When selecting data sources, programs may want to ensure that data collection instruments are culturally appropriate and cognitively tested to adequately capture data on population groups experiencing tobacco-related disparities.

Analysis: Proposed analysis for the indicators, including the type of analysis and planned disaggregation of data for individual and intersectional population groups. Programs can also consider specific geographic and spatial analyses that will be conducted for relevant indicators.

Reporting: The frequency and method of reporting indicators to program decision-makers and other stakeholders to stimulate use of the findings to inform program efforts and decisions.

Plan Updates: How often the measurement plan will be updated to reflect new information, lessons learned, and changes in program priorities.

Population Groups

Table 1 provides a list of key population characteristics that are associated with tobacco-related disparities. This list is not exhaustive, and disparities may vary by community. There are additional related structural and social characteristics, which can be associated with tobacco-related disparities (e.g., employment, home ownership). Programs should use their state and community-specific data to identify population characteristics most pertinent and relevant to tobacco-related disparities in their communities, including consideration of other characteristics (e.g., geographic locations with high poverty rates, high economic inequity, increased violence).

It is important for programs to maintain and enhance their surveillance systems and other data collection mechanisms to measure population characteristics in ways that will help identify unique and intersectional populations experiencing tobacco-related disparities. Moreover, engaging unique and intersectional populations affected by disparities can help ensure that data collection instruments are culturally appropriate to adequately identify and monitor tobacco-related disparities.

Applying Health Disparity Framing

Each outcome profile has a section titled “Applying Health Disparities Framing,” that highlights key population characteristics that emerged in the literature as being affected by tobacco-related disparities related to the indicator. This section may not be exhaustive. Moreover, many of the studies cited in this section are national studies and may not be relevant for all state and community-specific disparities. The characteristics shared by populations experiencing tobacco-related disparities may differ in different communities. Additionally, the populations that experience tobacco-related disparities in a community can change over time. Thus, this section may not have captured the entire range of population characteristics associated with these outcome indicators, but instead, reflect information derived from a point-in-time literature review.

Additionally, because the capacity building indicators in this guide are not population-level indicators, the “Applying Health Disparities Framing” section are not framed around population characteristics. Rather, this section focuses more on why it is important and relevant to assess these indicators in efforts to identify and eliminate tobacco-related disparities.

Table 1. Population Characteristic Categories
Age
Disability Status
Education Attainment
Geographic location
Income
Mental health conditions
Occupation
Race and ethnicity
Sex
Sexual orientation and gender identity
Substance use disorders
Veteran and military status

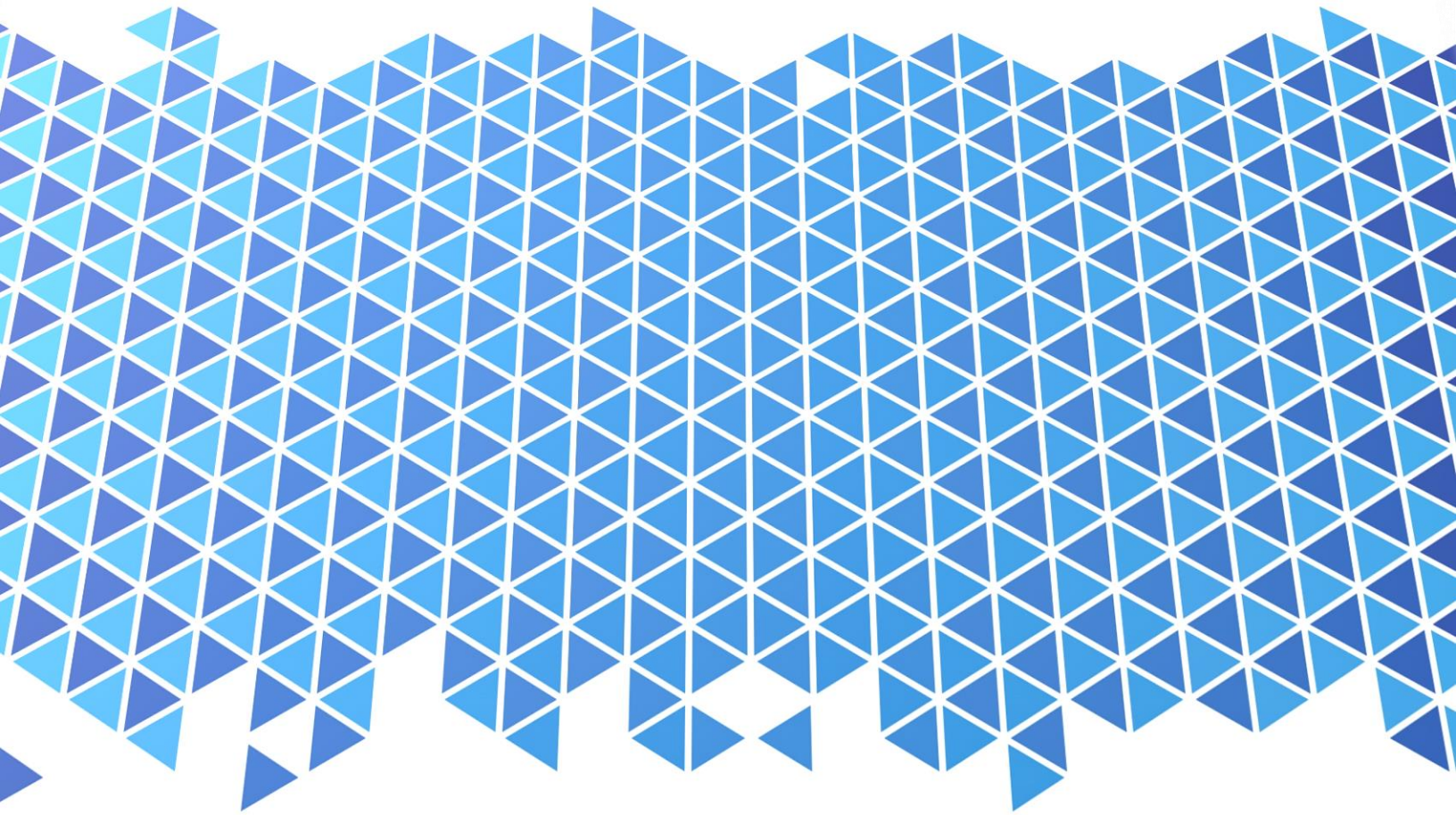
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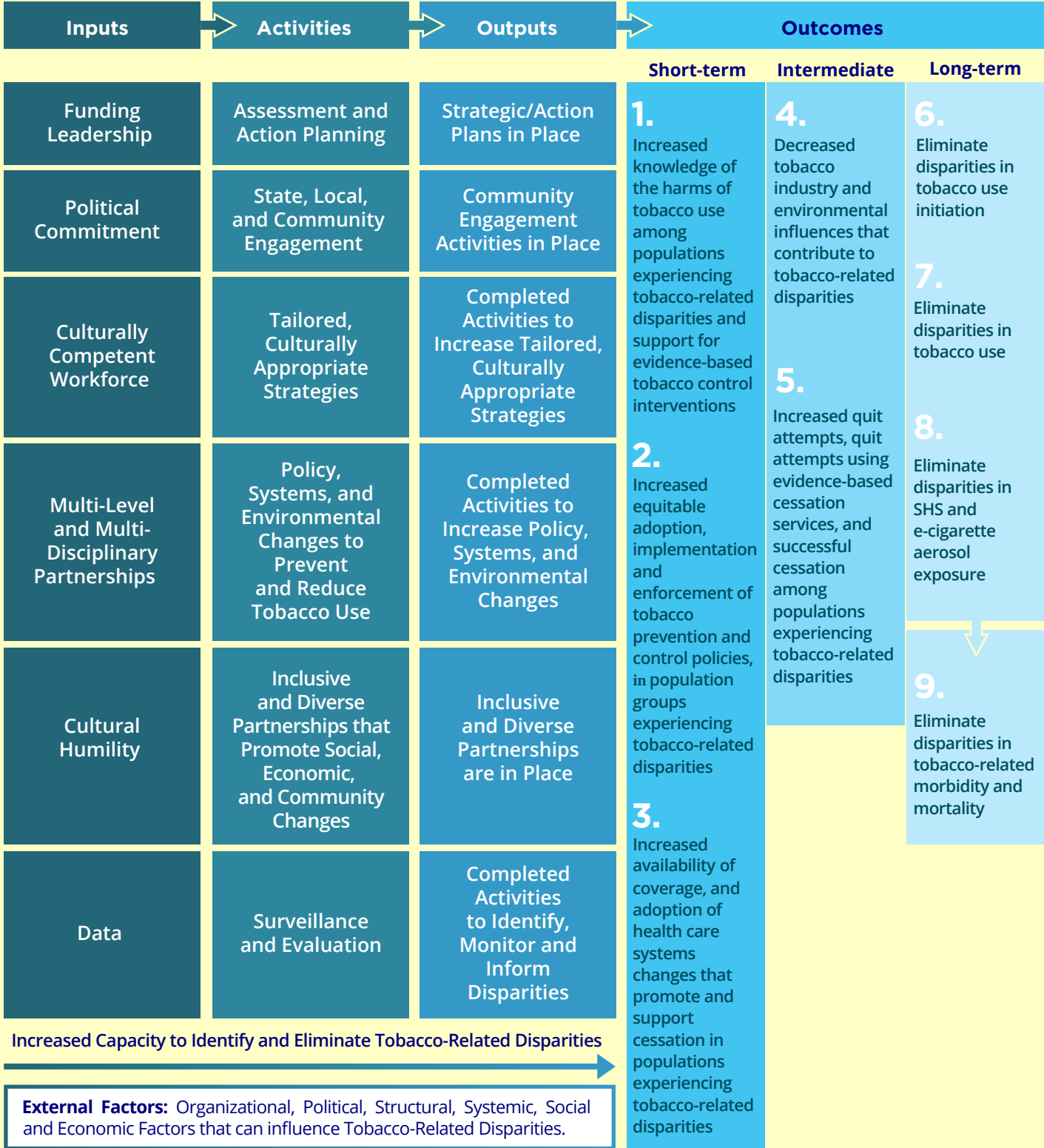
CHAPTER 2

LOGIC MODEL



Goal Area 4 Logic Model

Identifying and Eliminating Tobacco-Related Disparities



Goal Area 4: Identifying and Eliminating Tobacco-Related Disparities

Process Indicators

Increased capacity to develop and implement tobacco control interventions to identify and eliminate tobacco-related disparities

- 1: Decision-maker support to address tobacco-related disparities
- 2: Commitment to address tobacco-related disparities
- 3: Resources to address tobacco-related disparities
- 4: Culturally competent workforce to address tobacco-related disparities
- 5: Data systems to identify, monitor, and evaluate tobacco-related disparities
- 6: Multisectoral coalitions and partnerships to address tobacco-related disparities
- 7: State-tribal-local collaborations to address tobacco-related disparities
- 8: Community engagement in efforts to address tobacco-related disparities

Outcome Indicators

Outcome 1: Increased knowledge of the harms of tobacco use among populations experiencing tobacco-related disparities and support for evidence-based tobacco control interventions

- 4.1.a: Disparities in the perceived harm of tobacco use
- 4.1.b: Disparities in the perceived harm of secondhand smoke
- 4.1.c: Disparities in the awareness of available cessation services
- 4.1.d: Support for policies to reduce tobacco industry influence
- 4.1.e: Support for comprehensive smokefree policies

Outcome 2: Increased equitable adoption, implementation, and enforcement of tobacco prevention and control policies

- 4.2.a: Policies that regulate tobacco retail sales
- 4.2.b: Policies that regulate tobacco marketing
- 4.2.c: Retail licensing for tobacco sales
- 4.2.d: Policies that regulate the number, type, location, and density of tobacco retail outlets
- 4.2.e: Policies that regulate tobacco promotions, discounts, and coupons

- 4.2.f: Policies that prohibit the sale of flavored tobacco products
- 4.2.g: Comprehensive smokefree policies for indoor public places
- 4.2.h: Smokefree policies for casinos
- 4.2.i: Employed population covered by workplace smokefree policies
- 4.2.j: Smokefree policies in multiunit housing
- 4.2.k: Home and vehicle smokefree rules
- 4.2.l: Tobacco product price
- 4.2.m: Minimum price policies
- 4.2.n: Equitable enforcement of tobacco control policies

Outcome 3: Increased health systems changes and coverage that promote and support cessation in populations experiencing tobacco-related disparities

- 4.3.a: Healthcare systems that have implemented evidence-based cessation guidelines
- 4.3.b: Disparities in health care professional screening for tobacco use
- 4.3.c: Disparities in health care provider advise to quit tobacco use
- 4.3.d: Disparities in health care professionals' assistance in quitting tobacco use
- 4.3.e: Proportion of behavioral health treatment facilities that offer evidence-based tobacco treatment
- 4.3.f: Behavioral health treatment facilities with tobacco-free policies
- 4.3.g: Disparities in access to comprehensive evidence-based cessation services

Outcome 4: Decreased tobacco industry and environmental influences that contribute to tobacco-related disparities

- 4.4.a: Disparities in density of stores selling tobacco
- 4.4.b: Disparities in the amount and type of retail tobacco advertising
- 4.4.c: Disparities in exposure to tobacco marketing
- 4.4.d: Consumer-focused industry promotions
- 4.4.e: Disparities in exposure to tobacco discounts and promotions
- 4.4.f: Disparities in tobacco product sales to minors
- 4.4.g: Disparities in youth and young adult access to tobacco products

Outcome 5: Increased quit attempts, quit attempts using evidence-based cessation services, and successful cessation among populations experiencing tobacco-related disparities

- 4.5.a: Disparities in the intention to quit
- 4.5.b: Disparities in quit attempt
- 4.5.c: Disparities in quit attempts using an evidence-based cessation treatment(s)
- 4.5.d: Use of quitline services among populations experiencing disparities
- 4.5.e: Disparities in recent cessation success
- 4.5.f: Disparities in sustained abstinence from tobacco use

Outcome 6: Eliminate disparities in tobacco use initiation

- 4.6.a: Disparities in the average age at which young people first tried a tobacco product
- 4.6.b: Disparities in the initiation of tobacco use using a flavored tobacco product
- 4.6.c: Disparities in the proportion of youth and young adults who report never having tried a tobacco product

Outcome 7: Eliminate disparities in tobacco use

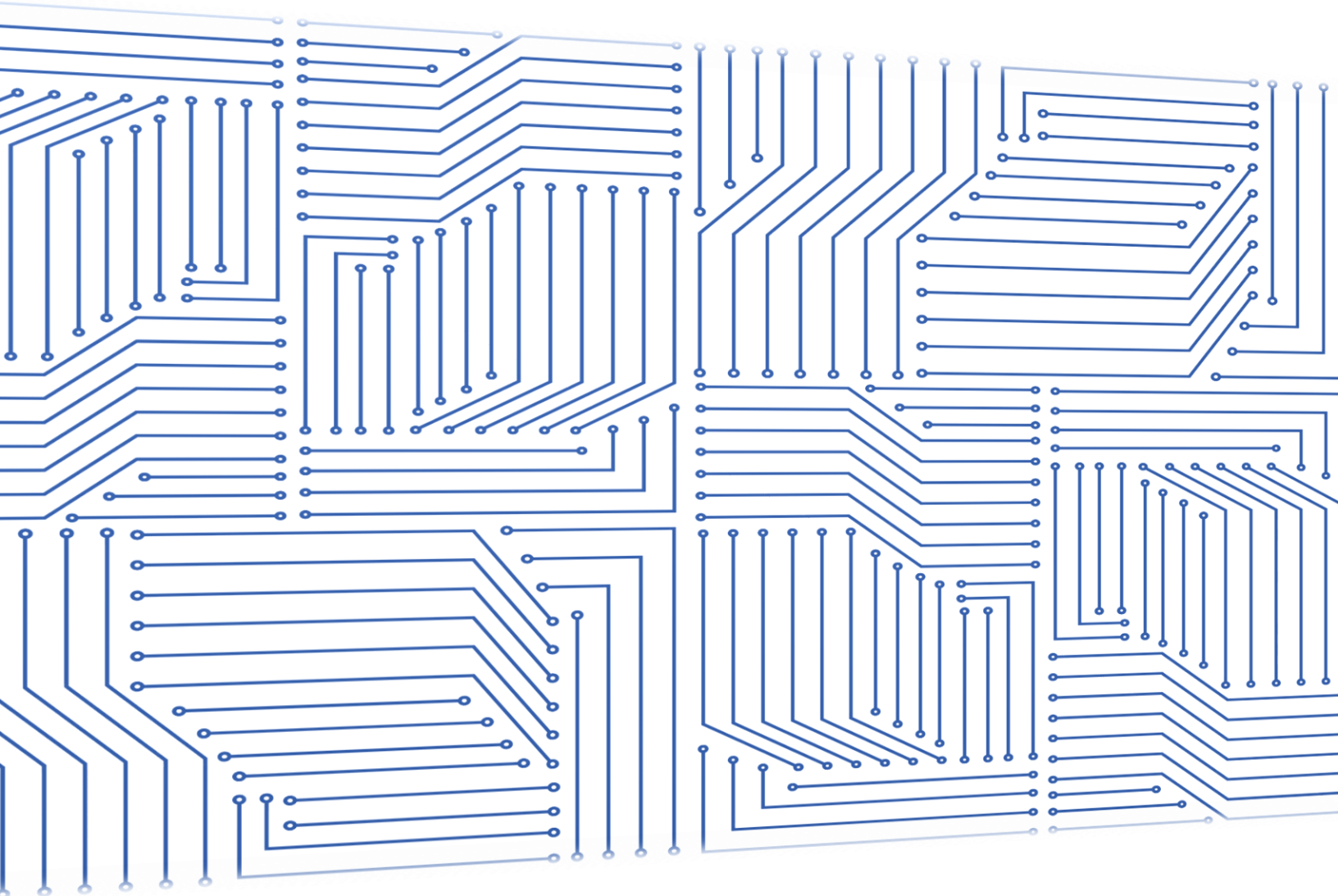
- 4.7.a: Disparities in tobacco use prevalence
- 4.7.b: E-cigarette use among youth and young adults
- 4.7.c: Disparities in the use of flavored tobacco products
- 4.7.d: Menthol flavored cigarette use
- 4.7.e: Disparities in polytobacco product use
- 4.7.f: Disparities in the daily use of tobacco products
- 4.7.g: Disparities in nicotine dependence

Outcome 8: Eliminate disparities in secondhand smoke exposure

- 4.8.a: Disparities in exposure to secondhand smoke among people who do not smoke
- 4.8.b: Disparities in exposure to secondhand smoke in the workplace
- 4.8.c: Disparities in exposure to secondhand smoke in indoor public places
- 4.8.d: Disparities in exposure to secondhand smoke in homes and vehicles
- 4.8.e: Disparities in exposure to secondhand smoke among multiunit housing residents

CHAPTER 3

PROCESS INDICATORS



Increased capacity to develop and implement interventions to identify and eliminate tobacco-related disparities

Adequate capacity and infrastructure are necessary to develop and implement evidence-based strategies that can improve tobacco-related outcomes among populations experiencing tobacco-related disparities.¹⁻⁴ In this guidance, building capacity refers to increasing the infrastructure, systems, skills and resources of organizations and communities to develop and implement evidence-based, culturally-appropriate strategies that lead to sustainable community- and individual-level changes to improve tobacco-related health outcomes.⁴⁻⁷ The guidance in this section predominately focuses on building capacity of state and local public health agencies because they are in a prime position to promote health equity, connect to social movements, and support broader community capacity and social and environmental changes necessary to reduce tobacco-related health disparities.

Certain factors have been identified as central to the concept of capacity, including supportive and informed leadership, adequate funding and resources, multisectoral partnerships, workforce capacity, support for community values, and the ability to identify and address community issues.⁶⁻¹¹ Many of these factors can affect practices that can enable or hinder efforts to identify and eliminate tobacco-related disparities. Increasing the capacity of public health agencies can foster practices and decisions that facilitate culturally appropriate efforts to reduce tobacco-related disparities and can better position these agencies to work with multisectoral partners and communities to address structural and social determinants that contribute to tobacco-related disparities.¹²⁻¹⁴

Studies have shown that opportunities exist to enhance capacity to support implementation of effective strategies to address tobacco-related disparities. For example, Wong et al. found wide variations across health departments in the level of understanding of health equity and health disparities, which created challenges in setting priorities and program goals.¹⁵ The same assessment found that public health department leaders often expressed uncertainty about the support of local officials to address disparities, which hindered staff's ability to take action.¹⁵ Moreover, a study of local health departments found that while many stressed the importance of diversity, few had considered or implemented recruitment and hiring practices to build an inclusive workforce reflective of the communities they served.¹⁵ Additionally, ongoing data collection on population subgroups remains challenging for many programs, impeding efforts to inform and evaluate efforts to address tobacco-related disparities.¹⁴

Building capacity to identify and eliminate health disparities requires engagement at multiple levels of the community between community members and the institutions that serve them.^{4,13} Building multisectoral partnerships with community organizations and members can provide grassroots support, infrastructure, and stakeholder representation to inform and drive community changes that can reduce tobacco-related disparities.¹⁻³ For example, a program in Eastern Tennessee used a community participatory approach along with actionable data as a means to inform and strengthen tobacco prevention and control actions, policies, and programs in disproportionately impacted communities.¹⁶ Many communities disproportionately burdened by

tobacco use are also affected by other health, economic, and social issues, such as limited access to healthcare services and poverty, that can hinder efforts to address disparities.^{4,17,18} Some communities, such as rural communities with tobacco farming history and economic ties, may have tobacco use engrained in their community culture.^{4,17} Meaningful community engagement can help tobacco control programs better understand these issues and can empower community members and leaders to advance sustainable changes – both public health and non-public health-related – in their communities to improve health outcomes and reduce tobacco-related disparities.

The capacity-building measures put forth in this section are not exhaustive. These indicators are useful in assessing and understanding key community capacity factors that can promote or impede efforts to address tobacco-related disparities. These indicators can also help stimulate thinking on components of capacity building and their role in reducing disparities. State and community assessments can help identify additional capacity building indicators to advance tobacco control in their communities. Programs should consider their organization and community context when using and selecting indicators in this section, as some may not be appropriate for an organization given its community context.

The following indicators are associated with this outcome:

- 1:** Decision-maker support to address tobacco-related disparities
- 2:** Commitment to address tobacco-related disparities
- 3:** Resources to address tobacco-related disparities
- 4:** Culturally competent workforce to address tobacco-related disparities
- 5:** Data systems to identify, monitor, and evaluate tobacco-related disparities
- 6:** Multisectoral coalitions and partnerships to address tobacco-related disparities
- 7:** State-tribal-local collaborations to address tobacco-related disparities ^{NR}
- 8:** Community engagement to address tobacco-related disparities

^{NR} Denotes an indicator that is not rated.

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Increased capacity to develop and implement interventions to identify and eliminate tobacco-related disparities

Indicator Rating

← ○ ● ● → better

Number	Indicator	Overall Quality low ↔ high	Resources Needed	Strength of Evaluation Evidence	Utility	Face Validity	Accepted Practice
1	Decision-maker support to address tobacco-related disparities		\$	●	●	●	●
2	Commitment to address tobacco-related disparities		\$	●	●	●	●
3	Resources to address tobacco-related disparities		\$	●	●	●	●
4	Culturally competent workforce to address tobacco-related disparities		\$	●	●	●	●
5	Data systems to identify monitor, and evaluate tobacco-related disparities		\$\$	●	●	●	●
6	Multisectoral coalitions and partnerships to address tobacco-related disparities		\$	●	●	●	●
7	State-tribal-local collaborations to address tobacco-related disparities ^{NR}	NR	NR	NR	NR	NR	NR
8	Community engagement to address tobacco-related disparities		\$	●	●	●	●

\$ Dollar signs denote a qualitative rating of the resources (funds, time, and effort) needed to collect and analyze data using the most commonly available data source. The more dollar signs (maximum four), the more resources needed. Dollar signs do not represent a specific amount or range of costs but are instead a relative measure of expert reviewers' ratings regarding resources required to collect and analyze data to measure the indicator.

^{NR} Denotes an indicator that is not rated.

Decision-Maker Support to Address Tobacco-Related Disparities

Indicator number	1
Goal area	4. Identify and eliminate tobacco-related disparities
What to measure	Level of support among decision-makers of state, tribal, territorial, and local tobacco control programs to implement interventions to identify and eliminate tobacco-related disparities.
Rationale	Because of their strong influence, decision-makers play a vital role in building capacity to achieve program goals. ¹⁻⁴ Leaders with decision-making authority drive strategic and funding decisions that can have a strong impact on tobacco control efforts. ⁴
Applying health disparities framing	The National Stakeholder Strategy for Achieving Health Equity outlines the importance of having strong, supportive leadership to promote community solutions to address disparities. ⁵ Supportive decision makers can yield significant benefits by helping to prioritize evidence-based practices, by developing action plans, and by allocating funding to address tobacco-related disparities. ⁶⁻⁸ Moreover, decision-makers can help build political will and secure commitments from multisectoral partners to address disparities. ⁶⁻⁷
Example survey question(s)	<p>Adapted from the Component Model of Infrastructure (CMI)⁸</p> <p>On a scale of 1 (no support) to 5 (high level of support), what level of decision-maker support does your program have to address disparities:</p> <ul style="list-style-type: none"> • Within the health department but external to the tobacco control program (e.g., health commissioner, chronic disease program director)? • From other state and local government agencies (e.g., local health department, directors, superintendents, mental health agency director)? • From tribal governments and agencies (e.g., tribal health departments, tribal health boards)? • From other non-government agencies (e.g., directors of community-based organizations, American Lung Association)? • From a policymaker (e.g., governor, mayor, state legislator, congressperson)? <p>On a scale of 1 (strongly disagree) to 5 (strongly agree), to what extent do you agree with the following statements about your most influential decision-makers?</p> <ul style="list-style-type: none"> • Decision-makers include tobacco-related disparities as a priority in action/strategic plans.

	<ul style="list-style-type: none"> • Decision-makers’ funding decisions reflect their commitment to address tobacco-related disparities. • Decision-makers’ decisions promote an inclusive and culturally competent workforce. • Decision-makers help build multisectoral partnerships with public, non-profit, and private entities to drive actions to reduce tobacco-related disparities. • Decision-makers help garner support for community strategies that can reduce tobacco-related disparities. 												
<p>Comments</p>	<p>Tobacco control programs may want to assess whether decision-maker support is written or verbal and how it is perceived by the respondents. Furthermore, tobacco control programs may want to assess support for healthy equity initiatives as they can promote reductions in disparities. Data collected on policymaker support are for informational purposes only, to better understand factors that may affect work on tobacco-related disparities.</p>												
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	<p>Department of Health and Human Services, Office of Minority Health; 2011.</p> <ol style="list-style-type: none">6. Lettlow HA. Engaging culturally competent, community-based programs in reducing tobacco-related health disparities. <i>Am J Public Health</i>, 2008;98(11):1936-9.7. David AM, Lew R, Lyman AK, Otto C, Robles R, Cruz GJ. Eliminating tobacco-related disparities among Pacific Islanders through leadership and capacity building: promising practices and lessons learned. <i>Health Promot Pract</i>. 2013;14 Suppl:S10-7.8. Lavinghouze SR, Snyder K, Rieker PP. The component model of infrastructure: a practical approach to understanding public health program infrastructure. <i>Am J Public Health</i>. 2014 Aug;104(8):e14-24.
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Commitment to Address Tobacco-Related Disparities

Indicator number	2
Goal area	4. Identify and eliminate tobacco-related disparities
What to measure	Level of commitment demonstrated by tobacco control program decision-makers to identify and eliminate tobacco-related disparities.
Rationale	Formalized commitments from public health programs in the way of statues, strategic plans, program goals, and funding priorities serve as a guide to focus programmatic efforts, decisions, and clarify priorities to partners. ¹⁻³ For example, strategic plans and funding requirements help communicate the program focus areas and goals to partners.
Applying health disparities framing	Tobacco control programs can clarify their commitment to address disparities by including actionable goals with targets to eliminate tobacco-related disparities in strategic plans. ¹⁻³ Formal strategic statements can facilitate and drive strategies focused on eliminating tobacco-related disparities. ² Moreover, practices such as frequently discussing tobacco-related disparities at meetings with decision makers and integrating processes to provide culturally-tailored interventions and services can help reinforce and institutionalize commitments to address tobacco-related disparities.
Example survey question(s)	<p>Adapted from Component Model of Infrastructure (CMI)⁴</p> <p>Is addressing health disparities included as a priority in your state health/strategic plan? Yes/No</p> <p>Does your program have goals with targets that are tracked to reduce tobacco-related disparities? Yes/No</p> <p>Does your program have a standalone plan to address tobacco-related disparities and/or health equity? Yes/No</p> <p>On a scale of 1 (strongly disagree) to 5 (strongly agree), to what extent do you agree with the following statements about your tobacco control program?</p> <ul style="list-style-type: none"> • The program includes a disparities component in tobacco-related funding requirements. • Workforce hiring and trainings decisions promote inclusivity and cultural competence. • Topics to address disparities are frequently included in meeting agendas with decision-makers. • Data and information on tobacco-related disparities are frequently included in major reports produced by the program.

	<ul style="list-style-type: none"> The program has processes in place to integrate culturally and linguistically appropriate services and resources into tobacco prevention and control interventions and products. 																		
<p>Comments</p>	<p>When assessing this indicator, tobacco control programs may also want to examine program strategies to promote health equity as they can promote reductions in disparities. Moreover, commitment to address tobacco-related disparities may be part of a larger plan and/or initiative to reduce health disparities within the health department.</p>																		
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Resources to Address Tobacco-Related Disparities

Indicator number	3
Goal area	4. Identify and eliminate tobacco-related disparities
What to measure	Proportion of resources* allocated by tobacco control programs to implement interventions to identify and eliminate tobacco-related disparities.
Rationale	Effective implementation of strategies to achieve tobacco prevention and control goals requires adequate resources, including sufficient funding and skilled staff to oversee programs and conduct technical assistance and training at all levels of the implementation process. ¹⁻² CDC provides recommended funding levels for tobacco control programs to effectively reduce tobacco use. ³
Applying health disparities framing	Budgetary constraints that typically exist in underserved communities can create barriers to the implementation of evidence-based and tailored, culturally appropriate programs to reduce health disparities. Research has shown that funding allocation to address tobacco-related disparities has often not been commensurate with the disparities being addressed. ⁴⁻⁶
Example survey question(s)	<p>Adapted from APPEAL Stages of Community Readiness Model⁵</p> <p>Does your program have funding dedicated to address tobacco-related disparities? Yes/No</p> <p>What percentage of your program's tobacco control funding is dedicated to address tobacco-related disparities?</p> <p>Does your tobacco control program have staff dedicated to implement interventions to address disparities? Yes/No</p> <p>How many full-time employees does your program have working on tobacco-related disparities?</p> <p>What percentage of staff's time is dedicated to implement interventions to reduce tobacco-related disparities?</p>
Comments	*This indicator focuses on resources related to funding and staffing; these are similar but different constructs that tobacco control programs may want to examine separately, as a program may have adequate funding but not adequate staffing and vice versa. Both constructs were lumped into one indicator for simplicity. When measuring this indicator, tobacco control programs may want to consider whether resources allocated are commensurate with the disparities being addressed.

	<p>Tobacco control programs can expand on this indicator by further examining the proportion of workplan strategies that are directed towards identifying and eliminating tobacco-related disparities; this can reflect the extent to which resources are translating into the implementation of interventions to address disparities.</p>																		
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Culturally Competent Workforce to Address Tobacco-Related Disparities

Indicator number	4
Goal area	4. Identify and eliminate tobacco-related disparities
What to measure	Extent to which state, tribal, territorial, and local tobacco control programs have an inclusive workforce that is culturally competent
Rationale	A culturally competent workforce has the skills, beliefs, attitudes, knowledge, and cultural humility to more effectively plan, implement, and evaluate tailored and culturally appropriate strategies to address tobacco-related disparities. ^{1,2} Hiring culturally competent staff and ongoing development of competencies among existing staff can help fill knowledge gaps and create a workforce that is better positioned to implement strategies to achieve program goals. ¹⁻³
Applying health disparities framing	Successful efforts to identify and eliminate health disparities require staff with the skills and competencies to understand the causes of disparities and inequities and the strategies and multisectoral partnerships that can help address them. ^{2,4} Research has found wide variation in workforce capacity, awareness, and training within health departments on health equity and disparities. ⁵
Example survey question(s)	<p>On a scale of 1 (strongly disagree) to 5 (strongly agree), to what extent do you agree with the following statements about the program's workforce?</p> <ul style="list-style-type: none"> • Program staff have a clear understanding of health disparities and health equity-related concepts. • Program staff are trained to implement culturally appropriate interventions to address tobacco-related disparities. • Program staff work well with people of different cultures and backgrounds. • Program staff always engage multisectoral partners and members representing populations experiencing tobacco-related disparities when planning and evaluating interventions. • The program has persons representing populations experiencing disparities in leadership/decision-making roles. • Diversity is reflected in my program's employee base. <p>On a scale of 1 (strongly disagree) to 5 (strongly agree), to what extent do you agree with the following statements about your program/organization's procedures and policies to promote cultural competence?</p>

	<ul style="list-style-type: none"> • The program/organization conducts ongoing cultural competency assessments and trainings. • The program/organization has strategies that promote recruitment, hiring, retention, and promotion of qualified culturally diverse staff. • The program/organization has an equal opportunity employment policy. • The program/organization includes inclusive language (i.e., language that does not marginalize groups of people) in job postings. • The program/organization actively recruits employees who have experience working with populations reflecting diverse cultural and linguistic backgrounds. • The program/organization promotes building diversity in the employee base through internships, fellowships, and student assistant opportunities. 												
<p>Comments</p>	<p>Tobacco control programs may also want to assess the extent to which program communication materials, services, and interventions are culturally tailored and/or targeted to population groups experiencing disparities. This information can help identify gaps in skills and competencies that need to be filled.</p> <p>Definition of Terms:</p> <ul style="list-style-type: none"> • Cultural competence: a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals and enables effective work in cross-cultural situations.⁶⁻⁷ • Cultural humility: The ability to maintain an interpersonal stance that is other-oriented (or open to the other) in relation to aspects of cultural identity that are most important to the person. Cultural humility is one construct for understanding and developing a process-oriented approach to competency^{6,8} • Diversity: an appreciation and respect for differences, similarities and opportunities inherent in the individuals and organizational characteristics that shape the workplace.⁹ • Inclusion: a set of behaviors that encourage employees to feel valued for their unique qualities and experience a sense of belonging.⁹ 												
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Data Systems to Identify, Monitor, and Evaluate Tobacco-Related Disparities




Indicator number	5
Goal area	4. Identify and eliminate tobacco-related disparities
What to measure	Extent to which state, tribal, territorial, and local tobacco control programs have data systems* to identify and monitor tobacco-related disparities.
Rationale	Data from surveillance systems and evaluation studies are foundational resources to help inform public health action, to garner decision-maker support, and to ensure that resources and efforts reflect community needs. ¹
Applying health disparities framing	Data systems to identify, monitor, and evaluate tobacco-related disparities are a foundational need for tobacco control programs seeking to address tobacco-related disparities. ^{1,2} Disaggregated data on population groups and community factors, including data on social determinants of health, can inform the development of strategies to address disparities and support evaluation of those strategies. ²⁻³ While many national and state surveillance systems monitor trends in tobacco use, most do not collect and report, or face challenges collecting and reporting, disaggregated population and community-level data, which are important to help inform and evaluate efforts to reduce tobacco-related disparities. ^{1,3}
Example survey question(s)	<p>Adapted from Component Model of Infrastructure (CMI)⁴</p> <p>Does your program's surveillance system collect and monitor data on the following population groups? Yes/No</p> <ul style="list-style-type: none"> • African American/Black • American Indian/Alaska Native • Asian American/Pacific Islander • Disability/Limitation • Hispanic/Latino • Mental Health Conditions • Substance Use Disorders • LGBTQ+ • Education • Income • Military/Veteran • Occupation • Rural/Urban • Youth (<18 years old) <p>On a scale of 1 to 5, to what extent do you agree with the following statements about your tobacco control program surveillance system?</p>

	<ul style="list-style-type: none"> • Surveillance systems routinely collect and monitor data on population groups experiencing tobacco-related disparities. • Community/local level surveillance data are used to augment understanding of tobacco-related disparities. • Surveillance questions are written in an inclusive, culturally appropriate manner. • Sample sizes are large enough to disaggregate data to identify and monitor tobacco-related disparities. • Geographic information systems are used to identify geographic disparities in tobacco-related interventions and outcomes. • Data on community level factors (e.g., density of tobacco retailers, social determinants of health) that influence disparities are routinely collected and analyzed. • Surveillance data are used to prioritize tobacco-related disparities efforts. <p>On a scale of 1 to 5, to what extent do you agree with the following statements about your tobacco control program evaluation efforts?</p> <ul style="list-style-type: none"> • Evaluation activities are in place to assess the effectiveness of interventions in influencing tobacco-related outcomes among populations experiencing disparities. • Evaluation processes, including planning, implementation, interpretation, dissemination, and use, incorporate strategies that promote inclusivity and cultural relevance. • The evaluation stakeholders represent those affected by the program being evaluated. • Evaluation findings are used to prioritize tobacco-related disparities efforts. 												
<p>Comments</p>	<p>*This indicator focuses on data systems related to surveillance and evaluation. These were lumped into one indicator for simplicity, but tobacco control program may want to consider examining them separately. Tobacco control programs can assess this indicator by priority population group as there may be variation in the extent to which surveillance and/or evaluation data adequately capture data for all populations experiencing tobacco-related disparities in the state and/or jurisdiction.</p>												
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Multisectoral Coalitions and Partnerships to Address Tobacco-Related Disparities

Indicator number	6
Goal area	4. Identify and eliminate tobacco-related disparities
What to measure	Extent to which tobacco control program coalitions and partnerships have diverse representation from institutions/organizations that can influence tobacco-related disparities.
Rationale	Coalitions have often led the way in safeguarding community health by promoting social norm change and policy adoption. Studies have found that local coalitions founded on collaborative partnerships are powerful forces for innovative change. ¹⁻³ Coalitions and partnerships provide an opportunity to leverage expertise, resources, and community assets and strengthen efforts to address health disparities ⁴
Applying health disparities framing	Multisectoral coalitions with partners from public, non-profit, and private entities can provide the infrastructure and stakeholder representation that is key to successful development, implementation and adoption of strategies to reduce tobacco-related disparities. ⁴⁻⁶ Moreover, multisectoral coalitions that include partners that can improve structural and community conditions that contribute to health disparities (e.g., social conditions, built environment, education, employment) are better positioned to address disparities. ^{4,6} By having members and representatives of the populations experiencing tobacco-related disparities in coalitions and partnerships, programs ensure that the voice, needs, and perspective are included in the development of efforts to address disparities and advance health equity. ^{1-3,7}
Example survey question(s)	<p>Adapted from Component Model of Infrastructure (CMI)⁸</p> <p>Does your state have a state tobacco control coalition in place? Yes/No</p> <p>Please indicate whether your tobacco control coalition has representation from each of the following organizations and how many organizations are represented. (For each, select Represented Yes/No and provide number of organizations actively represented within each category)</p> <ul style="list-style-type: none"> • Community (e.g., community organizations, community champions, local coalitions) • Community members representing members of populations experiencing tobacco-related disparities • Education (e.g., school administrators, PTA, Department of Education representative) • Faith-based organizations (e.g., churches) • Government health agencies (e.g., state cancer program, mental health agency)

	<ul style="list-style-type: none"> • Health care providers (e.g., hospitals, doctors, dentists, healthcare associations) • Higher professional education (e.g., schools of medicine, prevention research centers) • Housing (e.g., Department of Housing and Development) • Legal system (e.g., law enforcement agencies, attorneys) • Policymakers and/or decision-makers • Retail tobacco (retail tobacco outlets and their representatives) • Third-party payers (e.g., managed care organizations, health insurance companies, Medicaid) • Voluntary health organizations (e.g. American Lung Association) • Worksite and business (e.g., representatives from local businesses and business organizations) • Youth-focused organizations (e.g., YMCA/YWCA, 4-H, Boys/Girls Clubs) <p>Does your state participate in coalitions or work in partnership with organizations outside of tobacco control that can influence social determinants of health? Yes/No</p>																		
<p>Comments</p>	<p>In addition to examining the composition and organization of the coalition, tobacco control programs should also consider assessing the extent to which:</p> <ul style="list-style-type: none"> • Coalitions are meeting their intended goals; • Disparities efforts are being facilitated through the coalition and the effects of those efforts; and • The right partners that can influence community changes are at the table (these can vary depending on the strategies and priority populations). • Partners are actively engaged in efforts to promote health equity. <p>Because addressing social determinants of health is important for reducing health disparities, tobacco control programs may also want to assess the extent to which multisectoral coalitions and partnerships can effect changes to address social determinants of health.</p>																		
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References	<ol style="list-style-type: none"> 1. Tong EK, Fagan P, Cooper L, et al. Working to eliminate cancer health disparities from tobacco: a review of the National Cancer Institute's Community Network Program. <i>Nicotine Tob Res.</i> 2015 Jul 11;17(8):908-23. 2. Kegler MC, Steckler A, Mcleroy K, Malek SH. Factors that contribute to effective community health promotion coalitions: A study of 10 Project ASSIST coalitions in North Carolina. <i>Health Educ Behav.</i> 1998 Jun;25(3):338-53. 3. Douglas MR, Manion CA, Hall-Harper VD, Terronez KM, Love CA, Chan A. Case studies from community coalitions: advancing local tobacco control policy in a preemptive state. <i>Am J Prev Med.</i> 2015 Jan 1;48(Suppl 1):S29-35. 4. Centers for Disease Control and Prevention, Division of Community Health. A practitioner's guide for advancing health equity: community strategies for preventing chronic disease. Atlanta (GA): US Department of Health and Human Services; 2013. Accessed February 9, 2021. https://www.cdc.gov/nccdphp/dnpao/state-local-programs/health-equity-guide/index.htm 5. Butterfoss FD, Lachance LL, Orians CE. Building allies coalitions: why formation matters. <i>Health Promot Pract.</i> 2006 Apr;7 Suppl 2:23S-33S. 6. Centers for Disease Control and Prevention. Best practices user guide: health equity in tobacco prevention and control. Atlanta (GA): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2015. 7. Centers for Disease Control and Prevention. A sustainable planning guide for healthy communities. Atlanta (GA): Centers for Disease Control and Prevention; 2016. Accessed February 9, 2021. https://healthysafechildren.org/resource/sustainability-planning-guide-health-communities 8. Lavinghouze SR, Snyder K, Rieker PP. The component model of infrastructure: a practical approach to understanding public health program infrastructure. <i>Am J Public Health.</i> 2014 Aug;104(8):e14-24.
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State-Tribal-Local Collaborations to Address Tobacco-Related Disparities ^{NR}

Indicator number	7
Goal area	4. Identify and eliminate tobacco-related disparities
What to measure	Level of collaboration between state tobacco control programs, and tribal and local tobacco control programs on efforts to identify and eliminate tobacco-related disparities.
Rationale	Collaboration across state, tribal, and local tobacco control programs is essential to ensure proper infrastructure and capacity to effectively implement efforts at different levels of government and jurisdictions that have an impact on tobacco-related outcomes. ¹⁻³ Because health is heavily influenced by community-level factors, working closely and coordinating with programs at the community level can strengthen the effectiveness and impact of state tobacco control efforts.
Applying health disparities framing	Factors that influence health disparities occur at several levels and are the result of interactions between the individual, the community, and existing social, environmental, and political structures. Consequently, state tobacco control program collaboration with tribal and local tobacco control programs can support leveraging of resources and assets and strengthen implementation of interventions to reduce tobacco-related disparities. ^{2,4}
Example survey question(s)	<p>On a scale of 1 (strongly disagree) to 5 (strongly agree), to what extent do you agree with the following statements about your program's efforts to coordinate with tribal and local tobacco control programs?</p> <ul style="list-style-type: none"> • The program has processes in place to collaborate and/or coordinate strategies to identify and eliminate tobacco-related disparities. • Tribal and local multisector coalitions and partners are members of the state tobacco control coalition. • There is a designated individual or office that serves as a liaison to foster collaboration between state, and tribal and local tobacco control programs. • Frequent meetings are held between state, and tribal and tobacco control programs to support coordination and collaboration of tobacco-related disparities efforts. • The program always collaborates and coordinates with tribal and local tobacco control programs on planning, implementation, and evaluation of tribal/local efforts to eliminate tobacco-related disparities. <p>(Strength of Tobacco Control Index (SoTC))¹</p> <p>During the last 12 months, what have you been doing concerning tobacco control activities with personnel from (name appropriate state, local or tribal organization)? Code for highest level:</p>

	<p>0= no contact</p> <p>1 = networking (exchanging information for mutual benefit)</p> <p>2 = coordinating (exchanging information and altering activities for mutual benefit and a common purpose)</p> <p>3 = cooperating (exchanging information, altering activities, and sharing resources for mutual benefit and a common purpose)</p> <p>4 = collaborating (exchanging information, altering activities, sharing resources, and enhancing each other’s capacity for mutual benefit and a common purpose)</p>
Comments	When examining this indicator, tobacco control programs should also consider the frequency of contact and the type of coordination and collaboration to assess if these efforts are truly functional and thus more likely to produce the desired outcome.
Rating	Not rated.
References	<ol style="list-style-type: none"> 1. U.S. National Cancer Institute. Evaluating ASSIST: A blueprint for understanding state-level tobacco control. Tobacco Control Monograph No. 17. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute. NIH Pub. No. 06-6058, October 2006. 2. U.S. Department of Health and Human Services Office of Minority Health. National stakeholder strategy for achieving health equity. 2011. U.S. Department of Health and Human Services. Accessed April 10, 2020. Available at: https://minorityhealth.hhs.gov/npa/files/Plans/NSS/CompleteNSS.pdf. 3. Wong Croal N, Whitley J, Smedley BD. Building public health capacity to advance racial equity: a national environmental scan of tribal, state, and local governmental public health. Washington: National Collaborative for Health Equity; 2018. Accessed February 9, 2021. https://www.nationalcollaborative.org/our-programs/building-capacity-public-health-advance-equity-program/ 4. Task Force on the Principles of Community Engagement, et al. Principles of community engagement. 2nd ed. Washington, DC: Department of Health and Human Services, National Institutes of Health, Centers for Disease Control and Prevention, Agency for Toxic Substances and Disease Registry, Clinical and Translational Science Awards; 2011. Accessed February 9, 2021. https://www.atsdr.cdc.gov/communityengagement/

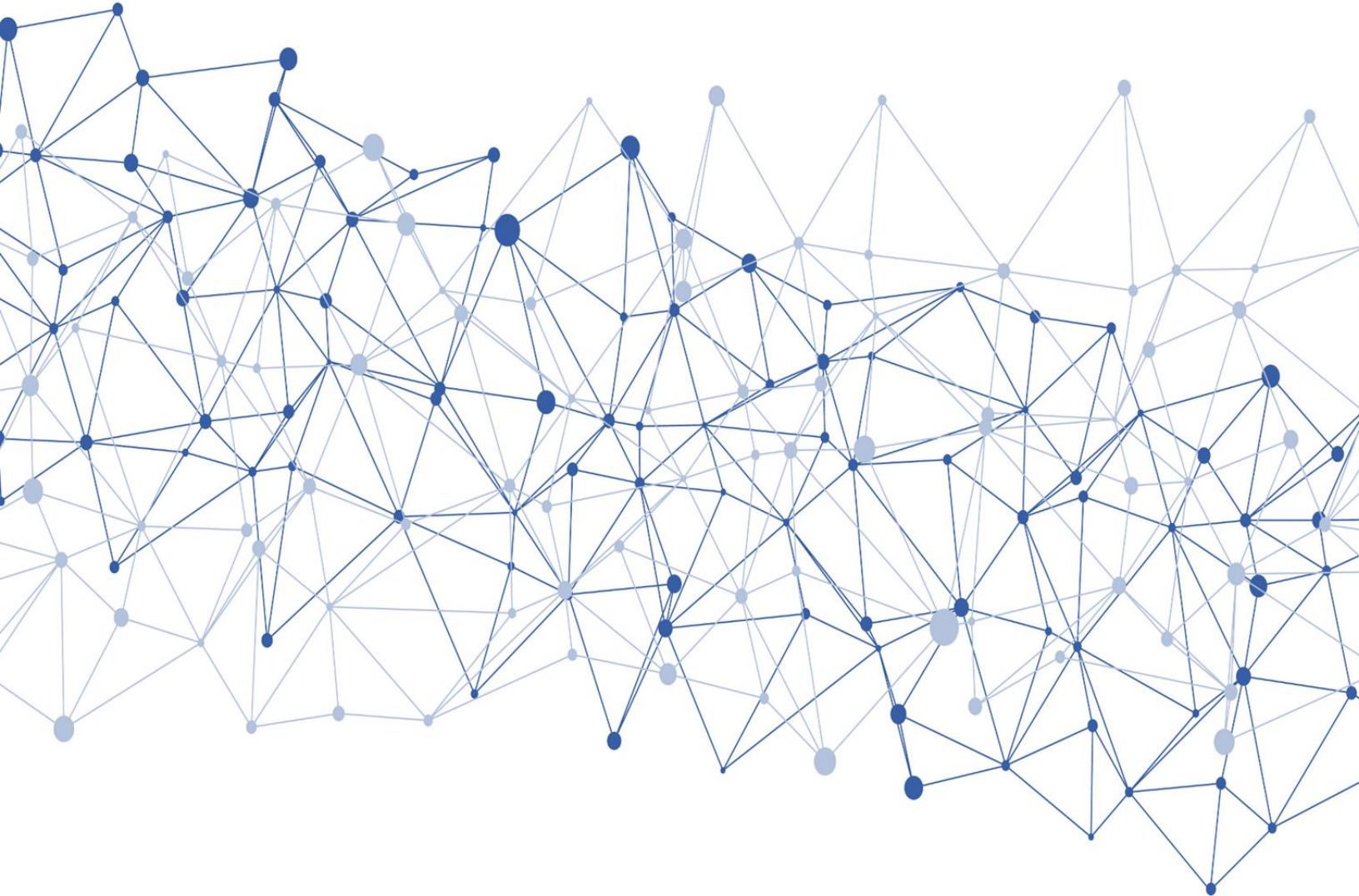
Community Engagement to Address Tobacco-Related Disparities

Indicator number	8
Goal area	4. Identify and eliminate tobacco-related disparities
What to measure	Level of community engagement to identify and eliminate tobacco-related disparities.
Rationale	The importance of community engagement is rooted in the recognition that health behaviors, health conditions, and health outcomes are impacted by structural and social determinants, some of which includes Social and community context, economic stability, neighbourhood and built environments and cultural norms. Subsequently these determinants can be best influenced by engaging community partners who can bring their own lived experiences, perspectives, and understanding of community life and health issues to public health interventions. ^{1,2}
Applying health disparities framing	Meaningful community engagement in planning, implementation, and evaluation of efforts to address disparities can foster trust and understanding of community issues, and empowers community members to advance sustainable change in their communities based on their community needs, values, and perspectives. ¹⁻⁴ Moreover, because tobacco-related disparities do not have one single cause or solution, bringing the lived experiences of community members who understand community issues into the development of tobacco control interventions can increase the likelihood that key factors that contribute to disparities are accounted for and addressed. ¹⁻⁴ Studies have shown that community engagement approaches can lead to improved health behaviors and outcomes among populations experiencing tobacco-related disparities. ^{5,6}
Example survey question(s)	<p>What percentage of your tobacco-related disparities interventions are community-led (e.g., local community coalitions and/or community members lead planning and implementation of tobacco-related efforts)?</p> <p>On a scale of 1 (strongly disagree) to 5 (strongly agree), to what extent do you agree with the following statements about your program efforts to address tobacco-related disparities?</p> <ul style="list-style-type: none"> • Local multisectoral coalitions and partnerships support planning, implementation, and evaluation of interventions to address disparities. • A community endorsed champion or influential person is engaged in planning and implementation of program efforts. • Community-level tobacco control efforts are frequently led by community leaders or members representing the community. • Local community members representing the target population are actively engaged in planning, implementation, and evaluation of tobacco-related efforts. • Frequent events are held to engage communities disproportionately affected by tobacco use.

Comments	Tobacco control program can also consider assessing whether it has adequate processes to maintain and increase participation from communities and populations that experience tobacco-related disparities.																								
Rating	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 15%;">Overall quality</td> <td style="text-align: center; width: 15%;">Resources needed</td> <td style="text-align: center; width: 15%;">Strength of evaluation evidence</td> <td style="text-align: center; width: 15%;">Utility</td> <td style="text-align: center; width: 15%;">Face validity</td> <td style="text-align: center; width: 15%;">Accepted practice</td> </tr> <tr> <td style="text-align: center;">low ↔ high</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;"></td> <td style="text-align: center;">\$</td> <td style="text-align: center;">●</td> <td style="text-align: center;">●</td> <td style="text-align: center;">●</td> <td style="text-align: center;">●</td> </tr> <tr> <td colspan="6" style="text-align: center;">← ○ ● ● → better</td> </tr> </table>	Overall quality	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice	low ↔ high							\$	●	●	●	●	← ○ ● ● → better					
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CHAPTER 4

OUTCOME INDICATORS



Outcome 1: Increased knowledge of the harms of tobacco use among populations experiencing tobacco-related disparities and support for evidence-based tobacco control interventions

Increasing knowledge about the harms of tobacco use can help change perceptions about tobacco use and attitudes toward tobacco industry practices, which can in turn increase support for tobacco prevention and control interventions, reduce the likelihood of tobacco use, and promote quitting.¹⁻⁵ The tobacco industry spends billions of dollars each year marketing tobacco products.^{6,7} Tobacco industry marketing practices, including advertising, promotions, and sponsorships, influence attitudes about tobacco products and are associated with susceptibility, initiation, and use of tobacco products.^{1,2,7-9} Research has shown that tobacco industry practices have contributed to tobacco-related disparities and disproportionately higher tobacco use among certain population groups, including youth, racial/ethnic minorities, persons with low educational attainment, and persons with low income.^{3,7-9}

Increasing knowledge of the health consequences of tobacco use through culturally tailored anti-tobacco media campaigns and other evidence-based interventions can decrease susceptibility to tobacco use, reduce tobacco use, and promote cessation behaviors among the general population and populations experiencing tobacco-related disparities.^{5,10} Studies have shown that many of the same population groups targeted by the tobacco industry have lower harm perceptions of tobacco use, including youth, African American or Black persons, and LGBTQ+ persons.^{11,12} Additionally, increasing knowledge of the harms of tobacco use and of tobacco industry practices can increase public and decision-maker support for evidence-based interventions to reduce tobacco industry influence and address disparities. For example, public perception of the harmful effects of secondhand smoke (SHS) exposure is associated with support for smokefree policies and actions to reduce exposure to SHS.^{15,16}

In addition to changing knowledge and perceptions of tobacco use, it is important to increase awareness of evidence-based cessation services among people who use tobacco to increase the use of cessation services and increase the likelihood of successfully quitting.^{17,18} Research has found that Latino/Hispanic persons, persons with low income, and Medicaid enrollees are less likely to be aware of available evidence-based cessation services and treatment.¹⁹⁻²²

Monitoring indicators in this outcome provides evidence for changes in knowledge and attitudes about tobacco use and secondhand smoke exposure. These factors are important to survey within specific populations in order to develop effective, targeted strategies to reduce tobacco use and secondhand smoke exposure in communities disproportionately affected by tobacco use.

The following indicators are associated with this outcome:

- 4.1.a:** Disparities in the perceived harm of tobacco use
- 4.1.b:** Disparities in the perceived harm of secondhand smoke
- 4.1.c:** Disparities in the awareness of available evidence-based cessation services
- 4.1.d:** Support for policies to reduce tobacco industry influence
- 4.1.e:** Support for comprehensive smokefree policies

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Increased knowledge of the harms of tobacco use among populations experiencing tobacco-related disparities and support for evidence-based tobacco control interventions

Indicator Rating

← ○ ● ● → better

Number	Indicator	Overall Quality low ↔ high	Resources Needed	Strength of Evaluation Evidence	Utility	Face Validity	Accepted Practice
4.1.a	Disparities in the perceived harm of tobacco use		\$\$	●	●	●	●
4.1.b	Disparities in the perceived harm of secondhand smoke		\$\$	●	●	●	●
4.1.c	Disparities in the awareness of available evidence-based cessation services		\$\$	●	●	●	●
4.1.d	Support for policies to reduce tobacco industry influence		\$\$	●	●	●	●
4.1.e	Support for comprehensive smokefree policies		\$\$	●	●	●	●

\$ Dollar signs denote a qualitative rating of the resources (funds, time, and effort) needed to collect and analyze data using the most commonly available data source. The more dollar signs (maximum four), the more resources needed. Dollar signs do not represent a specific amount or range of costs but are instead a relative measure of expert reviewers' ratings regarding resources required to collect and analyze data to measure the indicator.

Disparities in the Perceived Harm of Tobacco Use

Indicator number	4.1.a
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	1. Increased knowledge of tobacco-related disparities and support for evidence-based interventions
What to measure	Proportion of the population that thinks tobacco products are harmful, overall, and among population groups experiencing tobacco-related disparities
	Differences in the proportion of the population that thinks tobacco products are harmful by population group characteristics
Similar existing indicator(s) from other goal areas	Goal 3 (2015) 3.1.c, “Level of perceived risk of tobacco products among tobacco users.”
Rationale	Harm perceptions about tobacco products can influence initiation, sustained use, and cessation. ^{1,2} Research supports the relationship between increased harm perceptions and reductions in tobacco use. ¹⁻³ Monitoring perceptions of harm can help inform interventions to prevent tobacco use, promote cessation, and garner support for evidence-based tobacco control interventions.
Applying health disparities framing	Studies have shown that certain population groups, including youth, African Americans or Black persons, and LGBTQ+ persons have disproportionately lower harm perceptions of tobacco use. ⁴⁻⁶
Example data source(s)	National Youth Tobacco Survey (NYTS), 2020 Population Assessment of Tobacco and Health Youth Survey (PATH-Y), 2016-2017 Population Assessment of Tobacco and Health Adult Survey (PATH-A), 2016-2017

<p>Example survey question(s)</p>	<p>From NYTS (2020)</p> <p>How much do you think people harm themselves when they smoke cigarettes some days but not every day?</p> <ul style="list-style-type: none"> • No harm • A little harm • Some harm • A lot of harm <p>From PATH-Y Survey (2016-2017)</p> <p>How much do you think people harm themselves when they use e-cigarettes or other electronic nicotine products?</p> <ul style="list-style-type: none"> • No harm • A little harm • Some harm • A lot of harm <p>From PATH-A Survey (2016-2017)</p> <p>How harmful do you think cigarettes are to health?</p> <ul style="list-style-type: none"> • Not at all harmful • Slightly harmful • Somewhat harmful • Very harmful • Extremely harmful 																		
<p>Comments</p>	<p>Consider measuring this indicator by product type, as harm perceptions may vary by tobacco product. Tobacco control programs may also want to measure absolute and relative harm perceptions.</p>																		
<p>Rating</p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%; text-align: center;">Overall quality low ↔ high</td> <td style="width: 15%; text-align: center;">Resources needed</td> <td style="width: 15%; text-align: center;">Strength of evaluation evidence</td> <td style="width: 15%; text-align: center;">Utility</td> <td style="width: 15%; text-align: center;">Face validity</td> <td style="width: 15%; text-align: center;">Accepted practice</td> </tr> <tr> <td style="border: 1px solid black; height: 20px;"></td> <td style="text-align: center;">\$\$</td> <td style="text-align: center;">●</td> <td style="text-align: center;">●</td> <td style="text-align: center;">●</td> <td style="text-align: center;">●</td> </tr> <tr> <td colspan="6" style="text-align: center;">← ○ ● ● → better</td> </tr> </table>	Overall quality low ↔ high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		\$\$	●	●	●	●	← ○ ● ● → better					
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Disparities in the Perceived Harm of Secondhand Smoke

Indicator number	4.1.b
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	1. Increased knowledge of tobacco-related disparities and support for evidence-based interventions
What to measure	Proportion of the population that thinks that secondhand smoke is harmful by population group characteristics, overall, and among population groups experiencing tobacco-related disparities
	Differences in the proportion of the population that thinks that secondhand smoke is harmful by population group characteristics
Similar existing indicator(s) from other goal areas	Goal 2 (2017) 2.1.c, "Proportion of the population that thinks secondhand smoke is harmful."
Rationale	The perception that exposure to secondhand smoke is harmful is associated with strong support for adoption of smokefree policies. ¹⁻⁴ Increasing people's knowledge of the harms of exposure to secondhand smoke can help change attitudes toward the acceptability of exposing people who do not smoke to secondhand smoke and can increase the favorability toward smokefree environments.
Applying health disparities framing	Studies have shown that certain population groups, including men, American Indian/Alaska Native persons, non-Hispanic White persons, persons residing in the Midwestern geographic areas of the U.S., and persons residing in states that do not have comprehensive smokefree policies have disproportionately lower harm perceptions of secondhand smoke. ⁵⁻⁶
Example data source(s)	National Youth Tobacco Survey (NYTS), 2020 Population Assessment of Tobacco and Health Youth Survey (PATH-Y), 2016-2017 Population Assessment of Tobacco and Health Adult Survey (PATH-A), 2016-2017

<p>Example survey question(s)</p>	<p>From NYTS (2020)</p> <p>Not including the vapor from e-cigarettes, do you think that breathing smoke from other people’s cigarettes or other tobacco product causes...</p> <ul style="list-style-type: none"> • No harm • Little harm • Some harm • A lot of harm <p>From PATH-Y and PATH-A Survey (2016-2017)</p> <p>How harmful is it to be around people who are smoking shisha or hookah tobacco?</p> <ul style="list-style-type: none"> • Not at all harmful • Slightly harmful • Somewhat harmful • Very harmful • Extremely harmful 																					
<p>Comments</p>	<p>In addition to assessing harm perceptions of secondhand smoke, tobacco control programs may want to examine harm perceptions of e-cigarette aerosol. Secondhand smoke and secondhand aerosol should be measured separately. Refer to <i>the Eliminating Exposure to Secondhand Smoke: Outcome Indicators for Comprehensive Tobacco Control Programs—2017</i>,⁷ E-Cigarette Addendum 2.1, “Proportion of the population that thinks secondhand aerosol from e-cigarettes is harmful.” Additionally, tobacco control programs many want to assess this indicator by occupation.</p>																					
<p>Rating</p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;"></td> <td style="width: 15%; text-align: center;">Overall quality low ↔ high</td> <td style="width: 15%; text-align: center;">Resources needed</td> <td style="width: 15%; text-align: center;">Strength of evaluation evidence</td> <td style="width: 15%; text-align: center;">Utility</td> <td style="width: 15%; text-align: center;">Face validity</td> <td style="width: 15%; text-align: center;">Accepted practice</td> </tr> <tr> <td style="border: 1px solid black; background-color: black;"></td> <td style="border: 1px solid black; text-align: center;">\$\$</td> <td style="border: 1px solid black; text-align: center;">●</td> <td style="border: 1px solid black; text-align: center;">●</td> <td style="border: 1px solid black; text-align: center;">●</td> <td style="border: 1px solid black; text-align: center;">●</td> <td style="border: 1px solid black; text-align: center;">●</td> </tr> <tr> <td colspan="7" style="text-align: center;">← ○ ● ● → better</td> </tr> </table>		Overall quality low ↔ high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		\$\$	●	●	●	●	●	← ○ ● ● → better						
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References	<ol style="list-style-type: none"> 1. U.S. Department of Health and Human Services. The health consequences of involuntary exposure to tobacco smoke: a report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2006. 2. International Agency for Research on Cancer (IARC). IARC Handbooks of Cancer Prevention, Tobacco Control, Vol. 13: Evaluating the effectiveness of smoke-free policies. Lyon, France: IARC; 2009. 3. Blake KD, Viswanath K, Blendon RJ, Vallone D. The role of tobacco-specific media exposure, knowledge, and smoking status on selected attitudes toward tobacco control. <i>Nicotine Tob Res.</i> 2010;12(2):117–26. 4. Wilson N, Weerasekera D, Blakely T, Edwards R, Thomson G, Gifford H. What is behind smoker support for new smokefree areas? National survey data. <i>BMC Public Health.</i> 2010;10:498. 5. Kruger J, Patel R, Kegler M, Babb SD, King BA. Perceptions of harm from secondhand smoke exposure among U.S. adults, 2009- 2010. <i>Tob Induc Dis.</i> 2016 Feb;14:3. 6. King BA, Dube SR, Babb SD. Perceptions about the harm of secondhand smoke exposure among U.S. middle and high school students: findings from the 2012 National Youth Tobacco Survey. <i>Tob Induc Dis.</i> 2013 Jul 17;11(1):16. 7. Centers for Disease Control and Prevention. Eliminating exposure to secondhand smoke: outcome indicators for comprehensive tobacco control programs–2017. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2017.
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Disparities in the Awareness of Available Evidence-Based Cessation Services

Indicator number	4.1.c
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	1. Increased knowledge of tobacco-related disparities and support for evidence-based interventions
What to measure	Proportion of tobacco users who are aware of available cessation services (e.g., FDA-approved cessation medications, state quitlines, overall, and among population groups experiencing tobacco-related disparities)
	Differences in the proportion of tobacco users who are aware of available cessation services (e.g., FDA-approved cessation medications, state quitlines) by population group characteristics
Similar existing indicator(s) from other goal areas	Goal 3 (2015) 3.1.e, “Proportion of tobacco users who are aware of available cessation services.”
Rationale	The availability of evidence-based cessation services has a limited effect if tobacco users are not aware, and thus not using these services. ¹⁻³ Increased awareness of available evidence-based cessation services is associated with use of services. ^{1,4}
Applying health disparities framing	Research demonstrates that certain population groups, including Latino/Hispanic persons, persons with low income, and Medicaid enrollees, are less likely to be aware of available evidence-based cessation services and treatment. ⁵⁻⁸
Example data source(s)	Behavioral Risk Factor Surveillance System (BRFSS), 2011 National Adult Tobacco Survey (NATS), 2009-2010
Example survey question(s)	<p>From BRFSS (2011)</p> <p>A telephone quitline is a free telephone-based service that connects people who smoke cigarettes with someone who can help them quit. Are you aware of any telephone quitline services that are available to help quit smoking?</p> <ul style="list-style-type: none"> • Yes • No • Don't know/not sure • Refused

	<p>From NATS (2009-2010)</p> <p>Are you aware of any individual or group counseling services, other than quitlines, that are available to help you quit smoking cigarettes?</p> <ul style="list-style-type: none"> • Yes • No • Don't know/not sure 												
<p>Comments</p>	<p>Tobacco control programs may want to consider assessing this indicator by insurance type to determine the extent to which differences exist by insurance coverage. Moreover, when changes in cessation coverage occur, programs may want to assess the extent to which beneficiaries and providers are aware of changes in cessation services covered by the health insurance.</p>												
<p>Rating</p>	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 15%;">Overall quality low ↔ high</th> <th style="width: 15%;">Resources needed</th> <th style="width: 15%;">Strength of evaluation evidence</th> <th style="width: 15%;">Utility</th> <th style="width: 15%;">Face validity</th> <th style="width: 15%;">Accepted practice</th> </tr> </thead> <tbody> <tr> <td style="background-color: black; color: black;">██████████</td> <td>\$\$</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> </tr> </tbody> </table> <p style="text-align: center;">← ○ ● ● → better</p>	Overall quality low ↔ high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice	██████████	\$\$	●	●	●	●
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<p>References</p>	<ol style="list-style-type: none"> 1. U.S. Department of Health and Human Services. Smoking cessation. a report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2020. 2. Fiore MC, Jaén CR, Baker TB, et al. Treating tobacco use and dependence: 2008 update. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service; May 2008. 3. The Guide to Community Preventive Services. Reducing tobacco use and secondhand smoke exposure. Accessed February 9, 2021. https://www.thecommunityguide.org/topic/tobacco 4. Keller PA, Christiansen B, Kim SY, et al. Increasing consumer demand among Medicaid enrollees for tobacco dependence treatment: the Wisconsin “Medicaid Covers It” campaign. Am J Health Promot. 2011;25(6):392–5. 5. Knox B, Mitchell S, Hernly E, Rose A, Sheridan H, Ellerbeck EF. Barriers to utilizing Medicaid smoking cessation benefits. Kansas J Med. 2017 Nov;10(4):88. 6. McMenamin SB, Halpin HA, Bellows NM. Knowledge of Medicaid coverage and effectiveness of smoking treatments. Am J Med. 2006;31(5):369–374. 												

	<ol style="list-style-type: none"><li data-bbox="440 197 1414 342">7. Carter-Pokras OD, Feldman RH, Kanamori M, Rivera I, Chen L, Baezconde-Garbanati L, Nodora J, Noltenius J. Barriers and facilitators to smoking cessation among Latino adults. <i>J Natl Med Assoc.</i> 2011 May 1;103(5):423-31.<li data-bbox="440 359 1414 541">8. Young-Wolff KC, Adams SR, Tan AS, Adams AS, Klebaner D, Campbell CI, Satre DD, Salloum RG, Carter-Harris L, Prochaska JJ. Disparities in knowledge and use of tobacco treatment among smokers in California following healthcare reform. <i>Prev Med Rep.</i> 2019 Jun 1;14:100847.
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Support for Policies to Reduce Tobacco Industry Influence

Indicator number	4.1.d
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	1. Increased knowledge of tobacco-related disparities and support for evidence-based interventions
What to measure	Proportion of adults who support adopting policies to decrease tobacco industry influence, overall, and among population groups experiencing tobacco-related disparities
Similar existing indicator(s) from other goal areas	Not applicable.
Rationale	An extensive body of research demonstrates that tobacco industry marketing practices are associated with susceptibility, experimentation, initiation, and use of tobacco products. ¹⁻⁹ Because of their strong influence on tobacco-related behaviors, policies that decrease tobacco industry can have a strong impact on tobacco initiation, use, and cessation behaviors. However, tobacco control policies are unlikely to be adopted without support from policy makers and the public. ^{1,10} Changes in support for policies to reduce tobacco industry influence may also reflect changing public attitudes about tobacco use.
Applying health disparities framing	Studies have shown that tobacco industry influence is a strong contributor to tobacco-related disparities. ^{1-4,8-9} The tobacco industry has a history of targeting certain population groups, including youth, racial/ethnic minorities, LGBTQ+ persons, persons with low educational attainment, and persons with low income. ^{1-5,8-9}
Example data source(s)	California Adult Tobacco Survey (CATS), 2018 State policy tracking system
Example survey question(s)	From CATS (2018) Please indicate whether you agree or disagree with each statement. Response options: Strongly agree, agree, disagree, strongly disagree <ul style="list-style-type: none"> • Raising legal sale of age for tobacco products will reduce youth smoking. • Store owners should need a license to sell cigarettes (just like alcoholic beverages). • Local communities should strongly enforce laws that prevent people from selling cigarettes to minors.

	<ul style="list-style-type: none"> • The number of tobacco stores should be reduced. • Stores that sell tobacco products should not be allowed near schools. • Tobacco products should be treated like other foods and drugs, with each package having full disclosure of potentially harmful contents. • Flavored tobacco products like candy-flavored little cigars should not be allowed to be sold. • The sale of menthol cigarettes should not be allowed. • Tobacco products like cigarillos or little cigars should be sold in packages of 10 instead of individually. <p>How much additional tax on a pack of cigarettes would you be willing to support? Please mark the highest tax you are willing to support:</p> <ul style="list-style-type: none"> • \$0.25 a pack • \$0.50 a pack • \$0.75 a pack • \$1.00 a pack • \$1.50 a pack • \$2.00 a pack • \$3.00 a pack • More than \$3.00 <p>Tobacco control programs may also want to track and monitor pertinent laws that may preempt or preclude these types of policies from being adopted.</p>
<p>Comments</p>	<p>Tobacco control programs may want to focus this indicator on priority policies in their state and/or jurisdiction. As discussed more fully with respect to Outcome 2, below, policies to decrease tobacco industry influence can include, but are not limited to, policies to regulate the number, type, location, and density of tobacco stores, and policies that prohibit the sale of all flavored tobacco products.</p> <p>Tobacco control programs may want to measure support for each policy separately as support can vary by policy. Differences were not assessed for this indicator because policy adoption requires support from all population groups.</p>

Rating	<table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 15%;">Overall quality</td> <td style="width: 15%;">Resources needed</td> <td style="width: 15%;">Strength of evaluation evidence</td> <td style="width: 15%;">Utility</td> <td style="width: 15%;">Face validity</td> <td style="width: 15%;">Accepted practice</td> </tr> <tr> <td>low ↔ high</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>\$\$</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> </tr> <tr> <td colspan="6">← ○ ● ● → better</td> </tr> </table>	Overall quality	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice	low ↔ high							\$\$	●	●	●	●	← ○ ● ● → better					
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Support for Comprehensive Smokefree Policies

Indicator number	4.1.e
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	1. Increased knowledge of tobacco-related disparities and support for evidence-based interventions
What to measure	Proportion of adults who support adopting comprehensive smokefree policies,* overall, and among population groups experiencing tobacco-related disparities
Similar existing indicator(s) from other goal areas	Goal 2 (2017) 2.1.d, “Level of support for adopting smokefree policies in public places and workplaces.”
Rationale	Comprehensive smokefree policies can protect people who do not smoke from the harms of secondhand smoke exposure, reduce tobacco consumption, motivate quitting, and reduce the social acceptability of tobacco use. ^{1,2} Public and decision-maker support increases the likelihood of adoption and compliance with smokefree policies. ^{1,3,4} Changes in support for smokefree policies may also reflect changing public attitudes about tobacco use and/or secondhand exposure.
Applying health disparities framing	While support for smokefree policies is high, studies have shown that support is lower among certain population groups, including youth, American Indian/Alaska Natives, persons with low educational attainment, low income earners, and persons residing in rural areas and jurisdictions without comprehensive smokefree policies. ^{5,6} Many of these same groups are also disproportionately exposed to secondhand smoke. ^{2,7}
Example data source(s)	Tobacco Use Supplement to the Current Population Survey (TUS-CPS), 2018-2019 State policy tracking system
Example survey question(s)	From TUS-CPS (2018-2019) In indoor work areas, do you THINK that smoking SHOULD be allowed in ALL areas, allowed in SOME areas, or NOT allowed at ALL? <ul style="list-style-type: none">• Allowed in ALL areas• Allowed in SOME areas• NOT Allowed at ALL

	<p>Inside bars, cocktail lounges, and clubs, do you THINK that smoking SHOULD be allowed in ALL areas, allowed in SOME areas, or NOT allowed at ALL?</p> <ul style="list-style-type: none"> • Allowed in ALL areas • Allowed in SOME areas • NOT Allowed at ALL <p>Inside casinos, do you THINK that smoking SHOULD be allowed in ALL areas, allowed in SOME areas, or NOT allowed at ALL?</p> <ul style="list-style-type: none"> • Allowed in ALL areas • Allowed in SOME areas • NOT Allowed at ALL <p>Tobacco control programs may also want to track and monitor pertinent laws that may preempt or preclude these types of policies from being adopted.</p>												
<p>Comments</p>	<p>*A comprehensive smokefree policy is defined by the CDC Office on Smoking and Health as a policy that does not allow smoking in any indoor areas of workplaces, restaurants, and bars, with no exceptions. Since private settings are a major source of secondhand smoke exposure, tobacco control programs can consider assessing the level of support for smokefree policies in multiunit housing settings and other private settings. For additional guidance, tobacco control programs can refer to <i>Eliminating Exposure to Secondhand Smoke: Outcome Indicators for Comprehensive Tobacco Control Programs—2017</i>,⁸ Indicator 2.1.g “Level of support for adopting smokefree rules for homes or vehicles.”</p> <p>Tobacco control programs may want to focus this indicator on priority smokefree policies in their state and/or jurisdiction. Moreover, tobacco control programs may want to measure each policy separately as support can vary by policy. Differences were not assessed for this indicator because policy adoption requires support from all population groups.</p>												
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Outcome 2: Increase equitable adoption, implementation, and enforcement of tobacco prevention and control policies

Tobacco control policies are the cornerstone of state and local tobacco control efforts.¹ Policies can address the environmental and social factors that contribute to tobacco use while complementing other evidence-based tobacco prevention and control approaches. Since tobacco control policies affect the social-environmental context, have the ability to change social norms, and the potential to reach everyone, they can have a strong impact on reducing tobacco-related disparities.^{1,2}

Policies that regulate the sale of tobacco and decrease access to tobacco products can reduce tobacco industry influence among populations disproportionately burdened by tobacco use. Tobacco marketing, advertising, and promotional strategies are often targeted at low income earners, racial/ethnic minorities, and youth and young adult populations.¹⁻³ Tobacco products are also more accessible in low-income communities and communities with high proportions of racial/ethnic minorities. These communities often have a high concentration of tobacco retailers that also have more tobacco product advertisements and sell tobacco products at lower prices than in more affluent communities.²⁻⁵ Tobacco retailer licensing is an effective intervention for implementing other retail policies, such as addressing the number, type, location, and density of tobacco retailers, and prohibiting sales of flavored tobacco products.⁶ Limiting the number of tobacco retail outlets through licensing in communities with higher-than-average tobacco outlet density, such as low income and predominately African American or Black neighborhoods, can decrease the availability of tobacco products and may have a side benefit of reducing the number of tobacco advertisements in those communities, thereby reducing tobacco industry influence.^{7,8}

Comprehensive smokefree air laws prohibiting smoking in workplaces, restaurants, and bars protect people who do not smoke from the harms of secondhand smoke exposure.^{1,9,10} These policies have the added benefit of motivating and helping people who smoke to quit and reducing the social acceptability of smoking.¹¹ However, demographic, occupational, and geographic disparities still exist in smokefree law protections. Persons of low socioeconomic status, certain racial/ethnic minorities, those living in states and jurisdictions without comprehensive smokefree laws, and persons who work in service and hospitality jobs are disproportionately exposed to secondhand smoke.^{1-3,11} Moreover, as more indoor public spaces and workplaces are covered by comprehensive smokefree policies, private settings remain a major source of secondhand smoke for people who do not smoke and the main source of secondhand smoke exposure for children.^{1,12} Implementing smokefree policies in multiunit housing facilities and voluntary smokefree rules in private settings can protect people who do not smoke, especially children, from the harmful effects of secondhand smoke exposure and reinforce tobacco-free social norms.^{1,12}

Increasing the price of tobacco products is one of the most effective tobacco prevention and control strategies.^{1,2,9,10,13,14} Increases in the price of tobacco products can motivate people who use tobacco products to quit or reduce their consumption and/or intensity of tobacco use, and can prevent initiation of tobacco use.^{1,2,9,10,15} Price discounts and promotions disproportionately

affect low-income and racial/ethnic minority smokers, who are more sensitive to price.³ Evidence shows that increasing the price of tobacco products can reduce income-based tobacco-related disparities and prevent and decrease youth tobacco use.^{13,14}

While adoption of effective tobacco control policies is important, subsequent enforcement and compliance is also essential for the policies to be successful at achieving intended outcomes. Uneven implementation and enforcement of tobacco control policies may attenuate the intended effects of the policy and may prevent the benefits of these policies from reaching some segments of the population, thereby exacerbating tobacco-related disparities.² Inequitable implementation and enforcement of tobacco control policies can stem from several factors: communities may lack resources for full implementation and enforcement; inconsistent enforcement may lead to unequal effects in different settings or for different groups; weak policies can create or increase disparities by exempting certain settings (e.g., casino workers remaining unprotected by workplace smokefree laws because the policy exempts casinos); policies not reaching some populations because of differences in implementation or provisions in policies that inadvertently exclude or hinder the ability of the policy to benefit everyone.⁹ Because of their effect, all these factors should be considered when evaluating the implementation and impact of tobacco control policies.

The following indicators are associated with this outcome:

Policies to Reduce Tobacco Industry Influence

- 4.2.a:** Policies that regulate tobacco retail sales
- 4.2.b:** Policies that regulate tobacco marketing
- 4.2.c:** Retail licensing to sell tobacco products
- 4.2.d:** Policies that regulate the number, type, location, and density of tobacco retail outlets
- 4.2.e:** Policies that regulate tobacco promotions, discounts, and coupons
- 4.2.f:** Policies that prohibit the sale of flavored tobacco products

Policies to Reduce Exposure to Secondhand Smoke

- 4.2.g:** Comprehensive smokefree policies for indoor public places ^{HP}
- 4.2.h:** Smokefree policies for casinos ^{NR}
- 4.2.i:** Employed population covered by workplace smokefree policies
- 4.2.j:** Smokefree policies in multiunit housing
- 4.2.k:** Home and vehicle smokefree rules ^{HP}

Policies to Increase the Price of Tobacco Products

- 4.2.l:** Tobacco product price
- 4.2.m:** Minimum price policies

Enforcement of Tobacco Control Policies

- 4.2.n:** Equitable enforcement of tobacco control policies

^{NR} Denotes an indicator that is not rated.

^{HP} Denotes the indicator aligns with *Healthy People 2030* Objectives.

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Increase equitable adoption, implementation, and enforcement of tobacco prevention and control policies

Indicator Rating

← ○ ● ● → better

Number	Indicator	Overall Quality low ↔ high	Resources Needed	Strength of Evaluation Evidence	Utility	Face Validity	Accepted Practice
4.2.a	Policies that regulate tobacco retail sales		\$\$	●	●	●	●
4.2.b	Policies that regulate tobacco marketing		\$\$	●	●	●	●
4.2.c	Retail licensing to sell tobacco products		\$\$	●	●	●	●
4.2.d	Policies that regulate the number, type, location, and density of tobacco retail outlets		\$\$	●	●	●	●
4.2.e	Policies that regulate tobacco promotions, discounts, and coupons		\$	●	●	●	●
4.2.f	Policies that prohibit the sale of flavored tobacco products		\$	●	●	●	●
4.2.g	Comprehensive smokefree policies for indoor public places ^{HP}		\$	●	●	●	●
4.2.h	Smokefree policies for casinos ^{NR}	NR	NR	NR	NR	NR	NR
4.2.i	Employed population covered by workplace smokefree policies		\$\$	●	●	●	●
4.2.j	Smokefree policies in multiunit housing		\$\$	●	●	●	●

4.2.k	Home and vehicle smokefree rules ^{HP}		\$\$	●	●	●	●
4.2.l	Tobacco product price		\$\$	●	●	●	●
4.2.m	Minimum price policies		\$\$\$	●	●	●	●
4.2.n	Equitable enforcement of tobacco control policies		\$\$\$	◐	◐	●	●

\$ Dollar signs denote a qualitative rating of the resources (funds, time, and effort) needed to collect and analyze data using the most commonly available data source. The more dollar signs (maximum four), the more resources needed. Dollar signs do not represent a specific amount or range of costs but are instead a relative measure of expert reviewers’ ratings regarding resources required to collect and analyze data to measure the indicator.

^{NR} Denotes an indicator that is not rated.

^{HP} Denotes the indicator aligns with *Healthy People 2030* Objectives.

Policies That Regulate Tobacco Retail Sales




Indicator number	4.2.a
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	2. Increase equitable adoption, implementation, and enforcement of tobacco prevention and control policies
What to measure	Proportion of jurisdictions with policies that regulate the sale of tobacco products
	Proportion of jurisdictions that are disproportionately burdened by tobacco product use with policies that regulate the sale of tobacco products
Similar existing indicator(s) from other goal areas	Not applicable.
Rationale	Policies regulating retail tobacco sales have been shown to reduce tobacco consumption and also aid in cessation. ^{1,2} These policies can include restrictions on the distribution of tobacco products (including prohibiting sales to individuals of any age), requiring tobacco products to be placed behind the counter, and prohibiting the sale of flavored tobacco products. ³
Applying health disparities framing	The tobacco industry has a history of targeting specific groups and communities through their influence on the tobacco product landscape, the retail environment, and product marketing. ^{4,5} Consequently, policies that regulate the sale of tobacco products can have a strong influence on tobacco-related disparities.
Example data source(s)	American Lung Association's State Legislated Actions on Tobacco Issues (SLATI) American Nonsmokers' Rights (ANR) Foundation U.S. Tobacco Control Laws Database CDC State Tobacco Activities Tracking and Evaluation (STATE) System
Example survey question(s)	Not applicable. This indicator is best measured by tracking and monitoring pertinent tobacco laws, ordinances, or regulations.
Comments	Tobacco controls program may want to consider tracking this indicator across jurisdictions and/or communities to identify differences that may contribute to tobacco-related disparities. Below are pertinent national laws, policies, and/or regulations related to this indicator.

	<p>The 2009 Family Smoking and Prevention Act (Tobacco Control Act) granted the Food and Drug Administration (FDA) the authority to regulate the manufacturing, marketing, and sale of tobacco products and allows states and local jurisdictions the ability to implement additional or more stringent regulations on the sale of tobacco products.</p> <p>On December 20, 2019, the Federal Food, Drug, and Cosmetic Act was amended and raised the federal minimum legal sales age for tobacco products from 18 to 21 years, effective immediately.⁶ Federal law requires manufacturers of products that are put on the market after February 2007 to get FDA authorization before selling their products. On September 9, 2021, FDA announced that it denied marketing orders for nearly one million e-cigarette products.^{7,8} On October 12, 2021, FDA announced that it had authorized the marketing of three e-cigarette products – the first e-cigarette products for which it issued marketing orders.⁹ FDA has said that it will make enforcement decisions on a case-by-case basis with respect to products that need to come off the market while it continues to review the remaining marketing applications filed by e-cigarette companies.¹⁰</p>																		
<p>Rating</p>	<table border="1"> <thead> <tr> <th data-bbox="453 915 634 1045">Overall quality low ↔ high</th> <th data-bbox="659 915 797 1045">Resources needed</th> <th data-bbox="821 915 943 1045">Strength of evaluation evidence</th> <th data-bbox="967 915 1065 1045">Utility</th> <th data-bbox="1089 915 1219 1045">Face validity</th> <th data-bbox="1243 915 1382 1045">Accepted practice</th> </tr> </thead> <tbody> <tr> <td data-bbox="453 1056 634 1098">██████████</td> <td data-bbox="659 1056 797 1098">\$\$</td> <td data-bbox="821 1056 943 1098">●</td> <td data-bbox="967 1056 1065 1098">●</td> <td data-bbox="1089 1056 1219 1098">●</td> <td data-bbox="1243 1056 1382 1098">●</td> </tr> <tr> <td colspan="6" data-bbox="453 1119 1382 1161" style="text-align: center;">← ○ ● ● → better</td> </tr> </tbody> </table>	Overall quality low ↔ high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice	██████████	\$\$	●	●	●	●	← ○ ● ● → better					
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<p>References</p>	<ol style="list-style-type: none"> <li data-bbox="453 1178 1398 1283">1. Luke DA, Sorg AA, Combs T, Robichaux CB, Moreland-Russell S, Ribisl KM, Henriksen L. Tobacco retail policy landscape: a longitudinal survey of US states. <i>Tob Control</i>. 2016 Oct;25(Suppl 1):i44-i51. <li data-bbox="453 1293 1398 1398">2. Myers AE, Hall MG, Isgett LF, Ribisl KM. A comparison of three policy approaches for tobacco retailer reduction. <i>Prev Med</i>. 2015 May;74:67-73. <li data-bbox="453 1409 1398 1556">3. U.S. Food and Drug Administration. Family Smoking Prevention and Tobacco Control Act - An Overview. Accessed March 26, 2020. https://www.fda.gov/tobacco-products/rules-regulations-and-guidance/family-smoking-prevention-and-tobacco-control-act-overview <li data-bbox="453 1566 1398 1818">4. U.S. Department of Health and Human Services. Tobacco use among U.S. racial/ethnic minority groups—African Americans, American Indians and Alaska Natives, Asian Americans and Pacific Islanders, and Hispanics: a report of the Surgeon General. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 1998. <li data-bbox="453 1829 1398 1892">5. U.S. National Cancer Institute. A socioecological approach to addressing tobacco-related health disparities. National Cancer Institute 																		

	<p>Tobacco Control Monograph 22. NIH Publication No. 17-CA-8035A. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; 2017.</p> <p>6. U.S. Food and Drug Administration. Tobacco 21. Accessed February 9, 2021. https://www.fda.gov/tobacco-products/retail-sales-tobacco-products/tobacco-21</p> <p>7. U.S. Food and Drug Administration. FDA Makes Significant Progress in Science-Based Public Health Application Review, Taking Action on Over 90% of More Than 6.5 Million 'Deemed' New Tobacco Products Submitted. Accessed December 3, 2021. https://www.fda.gov/news-events/press-announcements/fda-makes-significant-progress-science-based-public-health-application-review-taking-action-over-90</p> <p>8. U.S. Food and Drug Administration. Perspective: FDA's Progress on Tobacco Product Application Review and Related Enforcement. Accessed December 3, 2021. https://www.fda.gov/tobacco-products/ctp-newsroom/perspective-fdas-progress-tobacco-product-application-review-and-related-enforcement/</p> <p>9. U.S. Food and Drug Administration. FDA Permits Marketing of E-Cigarette Products, Marking First Authorization of Its Kind by the Agency. Accessed December 3, 2021. https://www.fda.gov/news-events/press-announcements/fda-permits-marketing-e-cigarette-products-marking-first-authorization-its-kind-agency</p> <p>10. U.S. Food and Drug Administration. Perspective: FDA's Progress on Tobacco Product Application Review and Related Enforcement. Accessed December 3, 2021. https://www.fda.gov/tobacco-products/ctp-newsroom/perspective-fdas-progress-tobacco-product-application-review-and-related-enforcement/</p>
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Policies That Regulate Tobacco Marketing

Indicator number	4.2.b
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	2. Increase equitable adoption, implementation, and enforcement of tobacco prevention and control policies
What to measure	Proportion of local jurisdictions with policies that restrict the time, place, or manner of retail tobacco marketing (either inside or outside stores), such as laws that prohibit electronic advertisements or the proportion of advertisements on store windows
	Proportion of jurisdictions that are disproportionately burdened by tobacco product use with policies that restrict the time, place, or manner of retail tobacco marketing
Similar existing indicator(s) from other goal areas	Goal 1 (2014) 1.4.a, "Proportion of jurisdictions with strong policies that regulate tobacco advertising." Goal 3 (2015) 3.4.a, "Proportion of jurisdictions with policies that regulate tobacco retail sales and marketing."
Rationale	Tobacco products are one of the most heavily marketed consumer products in the United States. ^{1,2} The tobacco industry spends billions of dollars annually on promoting and advertising their products. ^{1,2} There is a causal relationship between exposure to tobacco marketing and tobacco initiation and increased and sustained tobacco use. ³⁻⁵ Tobacco advertising in stores increases unplanned cigarette purchases, the probability of smoking, and cravings to smoke. ³⁻⁶
Applying health disparities framing	The tobacco industry has a history of targeting certain population groups and communities through advertising, promotions, and by sponsoring events and making financial contributions to academic institutions, elected officials, and community organizations. ⁷⁻¹⁴ Many studies have found that tobacco marketing is more common in communities with high proportions of racial/ethnic minorities, including African American or Black persons, and communities with a high proportion of persons with low income. ^{7,9,11,15-19}
Example data source(s)	State and/or jurisdiction policy tracking system American Nonsmokers' Rights (ANR) Foundation U.S. Tobacco Control Laws Database American Lung Association's State Legislated Actions on Tobacco Issues (SLATI)

<p>Example survey question(s)</p>	<p>Not applicable. This indicator is best measured by tracking and monitoring pertinent tobacco laws, ordinances, or regulations.</p>																								
<p>Comments</p>	<p>Advertising restrictions are legally complex policy interventions that are best able to withstand legal challenges if they are content neutral (i.e. not focused on or specifically intended to address tobacco products) See the Public Health Law Center website at https://www.publichealthlawcenter.org/ for additional information. Tobacco control programs may want to consider tracking this indicator across jurisdictions and/or communities to identify differences that may contribute to disparities. Moreover, tobacco control programs can expand on this indicator by assessing the proportion of the population, including population groups experiencing tobacco-related disparities, that are protected by policies that regulate retail marketing.</p>																								
<p>Rating</p>	<table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 15%;">Overall quality</td> <td style="width: 15%;">Resources needed</td> <td style="width: 15%;">Strength of evaluation evidence</td> <td style="width: 15%;">Utility</td> <td style="width: 15%;">Face validity</td> <td style="width: 15%;">Accepted practice</td> </tr> <tr> <td>low ↔ high</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>\$\$</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> </tr> <tr> <td colspan="6">← ○ ● ● → better</td> </tr> </table>	Overall quality	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice	low ↔ high							\$\$	●	●	●	●	← ○ ● ● → better					
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	<p>17. John R, Cheney MK, Azad MR. Point-of-sale marketing of tobacco products: taking advantage of the socially disadvantaged? <i>J Health Care Poor Underserved</i>. 2009;20(2):489-506.</p> <p>18. Seidenberg AB, Caughey RW, Rees VW, Connolly GN. Storefront cigarette advertising differs by community demographic profile. <i>Am J Health Promot</i>. 2010;24(6):e26-31.</p> <p>19. Begay C, Soto C, Baezconde-Garbanati L, et al. Cigarette and e-cigarette retail marketing on and near California Tribal Lands. <i>Health Promot Pract</i>. 2020 Jan;21(1 Suppl):18S-26S.</p>
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Retail Licensing to Sell Tobacco Products

Indicator number	4.2.c																												
Goal area	4. Identify and eliminate tobacco-related disparities																												
Outcome	2. Increase equitable adoption, implementation, and enforcement of tobacco prevention and control policies																												
What to measure	Proportion of jurisdictions with strong policies that require retail licenses to sell tobacco products																												
	Proportion of jurisdictions that are disproportionately burdened by tobacco product use with strong policies that require licenses to sell tobacco products																												
Similar existing indicator(s) from other goal areas	Goal 1 (2014) 1.3.b, “Proportion of jurisdictions with strong policies that require retail licenses to sell tobacco products.”																												
Rationale	Tobacco retailer licensing is an effective mechanism for reducing the number, type, location, and density of tobacco retailers, restricting sales of tobacco products, and restricting price promotions at the point of sale, all of which contribute to tobacco use. ¹⁻⁴																												
Applying health disparities framing	Tobacco licensing can have a strong impact on factors that contribute to tobacco-related disparities, such as the concentration of tobacco retailers. Research has found that the number of retail tobacco outlets and promotions are higher in communities with a high proportion of racial/ethnic minorities, including African American or Black persons, and persons with low income. ⁵⁻⁸																												
Example data source(s)	American Lung Association’s State Legislated Actions on Tobacco Issues (SLATI) CDC State Tobacco Activities Tracking and Evaluation (STATE) System																												
Example survey question(s)	Not applicable. This indicator is best measured by tracking and monitoring pertinent tobacco laws, ordinances, or regulations.																												
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Comments	<p>Tobacco control programs may want to consider tracking this indicator across jurisdictions/communities to identify differences that may contribute to disparities. Moreover, tobacco control programs can expand on this indicator by assessing the proportion of the population, including population groups experiencing tobacco-related disparities, that are impacted by tobacco retailer licensing.</p> <p>Tobacco control programs should determine the scope of the policy standards before evaluating the presence/absence and reach of such policies. “Strong” licensure includes, among other things: a requirement to obtain a license and renew it annually; a license fee set high enough to cover costs associated with administration, implementation, and enforcement of the license; and provisions authorizing a penalty to the business, including suspension or revocation of the license for any violations of local, state, or federal tobacco laws.</p>
References	<ol style="list-style-type: none"> 1. McLaughlin I. License to kill? Tobacco retailer licensing as an effective enforcement tool. St. Paul, MN: Tobacco Control Legal Consortium; 2010. Accessed February 9, 2021. https://www.publichealthlawcenter.org/resources/license-kill-tobacco-retailer-licensing-effective-enforcement-tool 2. Myers AE, Knocke K, Leeman J. Tapping into multiple data "springs" to strengthen policy streams: A guide to the types of data needed to formulate local retail tobacco control policy. <i>Prev Chronic Dis.</i> 2019 Apr 4;16:E43. 3. Ackerman A, Etow A, Bartel S, Ribisl KM. Reducing the density and number of tobacco retailers: policy solutions and legal issues. <i>Nicotine Tob Res.</i> 2017 Feb;19(2):133-140. 4. Counter Tobacco. Licensing, zoning, and retailer density. Accessed March 27, 2020. https://countertobacco.org/policy/licensing-and-zoning/ 5. Levy DT, Tam J, Kuo C, Fong GT, Chaloupka F. The impact of implementing tobacco control policies: the 2017 tobacco control policy scorecard. <i>J Public Health Manag Pract.</i> 2018 Sep/Oct;24(5):448-457. 6. Lee JGL, Sun DL, Schleicher NM, Ribisl KM, Luke DA, Henriksen L. Inequalities in tobacco outlet density by race, ethnicity and socioeconomic status, 2012, USA: results from the ASPIRE Study. <i>J Epidemiol Community Health.</i> 2017;71(5):487-92. 7. Ribisl KM, Luke DA, Bohannon DL, Sorg AA, Moreland-Russell S. Reducing disparities in tobacco retailer density by banning tobacco product sales near schools. <i>Nicotine Tob Res.</i> 2017 Feb;19(2):239-44. 8. Kong AY, Queen TL, Golden SD, Ribisl KM. Neighborhood disparities in the availability, advertising, promotion, and youth appeal of little cigars and cigarillos, United States, 2015. <i>Nicotine Tob Res.</i> 2020 Jan 9:ntaa005.

Policies That Regulate the Number, Type, Location, and Density of Tobacco Retail Outlets




Indicator number	4.2.d
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	2. Increased equitable adoption, implementation, and enforcement of tobacco prevention and control policies
What to measure	d. Proportion of jurisdictions with policies that control the number, type, location, and density of tobacco retail outlets
	Proportion of jurisdictions that are disproportionately burdened by tobacco product use with policies that control the number, type, location, and density of tobacco retail outlets
Similar existing indicator(s) from other goal areas	Goal 1 (2014) 1.3.c, “Proportion of jurisdictions with policies that control the type, location, number, and/or density of retail outlets.”
Rationale	High tobacco retail density and the proximity of tobacco retailers to youth-oriented facilities have been associated with youth initiation, higher number of cigarettes smoked per day, and lower prevalence of successful cessation. ¹⁻⁵ Licensing requirements and zoning restrictions are effective policies for regulating the number, type, location and density of tobacco retail outlets. ⁵⁻⁹ Examples of policies enacted through retailer licensing requirements or zoning restrictions include prohibiting the sale of tobacco in pharmacies and restricting tobacco retailers within close proximity to youth-oriented facilities, such as schools.
Applying health disparities framing	Studies have shown that the density and number of tobacco retailers are disproportionately higher in communities with a high proportion of racial/ethnic minorities, including African American or Black persons, Latino/Hispanic persons, and LGBTQ+ persons, as well as persons with low income. ^{4,5,9-11} Research also indicates that the density of retail outlets is higher in urban and some rural communities. ^{4,12}
Example data source(s)	American Lung Association’s State Legislated Actions on Tobacco Issues (SLATI) CDC State Tobacco Activities Tracking and Evaluation (STATE) System
Example survey question(s)	This indicator is best measured by tracking and monitoring pertinent tobacco laws, ordinances, or regulations.
Comments	Tobacco control programs may want to consider measuring the number or concentration of licensed retailers by geographic location (e.g., within

	<p>wards or city districts) when assessing this indicator, as well as differences across jurisdictions and/or communities. Moreover, tobacco control programs can expand on this indicator by assessing the proportion of the population, including population groups experiencing tobacco-related disparities, that are protected by policies that regulate the number, type, location, and density of tobacco retailers.</p> <p>See the Public Health Law Center website at https://www.publichealthlawcenter.org/ for additional information.</p>																								
<p>Rating</p>	<table border="0" style="width: 100%; text-align: center;"> <tr> <td style="width: 15%;">Overall quality</td> <td style="width: 15%;">Resources needed</td> <td style="width: 15%;">Strength of evaluation evidence</td> <td style="width: 15%;">Utility</td> <td style="width: 15%;">Face validity</td> <td style="width: 15%;">Accepted practice</td> </tr> <tr> <td>low ↔ high</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>\$\$</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> </tr> <tr> <td colspan="6">← ○ ● ● → better</td> </tr> </table>	Overall quality	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice	low ↔ high							\$\$	●	●	●	●	← ○ ● ● → better					
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<p>References</p>	<ol style="list-style-type: none"> 1. Chan WC, Leatherdale ST. Tobacco retailer density surrounding schools and youth smoking behavior: a multi-level analysis. <i>Tob Induc Dis.</i> 2011;9(1):9. 2. Henriksen L, Feighery EC, Schleicher NC, Cowling DW, Kline RS, Fortmann SP. Is adolescent smoking related to the density and proximity of tobacco outlets and retail cigarette advertising near schools? <i>Prev Med.</i> 2008;47(2):210-4. 3. Reitzel LR, Cromley EK, Li Y, et al. The effect of tobacco outlet density and proximity on smoking cessation. <i>Am J Public Health.</i> 2011;101(2):315–320. 4. U.S. National Cancer Institute. A socioecological approach to addressing tobacco-related health disparities. National Cancer Institute Tobacco Control Monograph 22. NIH Publication No. 17-CA-8035A. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; 2017. 5. Counter Tobacco. Licensing, Zoning, and Retailer Density. March 27, 2020. https://countertobacco.org/policy/licensing-and-zoning/ 6. Ribisl KM, Luke DA, Bohannon DL, Sorg AA, Moreland-Russell S. Reducing disparities in tobacco retailer density by banning tobacco product sales near schools. <i>Nicotine Tob Res.</i> 2016;19(2):239-44. 7. Ackerman A, Etow A, Bartel S, Ribisl KM. Reducing the density and number of tobacco retailers: policy solutions and legal issues. <i>Nicotine Tob Res.</i> 2017 Feb;19(2):133-140. 8. Myers AE, Hall MG, Isgett LF, Ribisl KM. A comparison of three policy approaches for tobacco retailer reduction. <i>Prev Med.</i> 2015;74:67-73. 																								

	<ol style="list-style-type: none"><li data-bbox="444 197 1365 302">9. Lee JG, Pan WK, Henriksen L, Goldstein AO, Ribisl KM. Is there a relationship between the concentration of same-sex couples and tobacco retailer density? <i>Nicotine Tob Res.</i> 2016 Feb;18(2):147-55.<li data-bbox="444 317 1365 464">10. Lee JG, Sun DL, Schleicher NM, Ribisl KM, Luke DA, Henriksen L. Inequalities in tobacco outlet density by race, ethnicity and socioeconomic status, 2012, USA: results from the ASPIRE Study. <i>J Epidemiol Community Health.</i> 2017;71(5):487-92. .<li data-bbox="444 478 1406 583">11. Giovenco DP, Spillane TE, Mauro CM, Hernández D. Evaluating the impact and equity of a tobacco-free pharmacy law on retailer density in New York City neighbourhoods. <i>Tob Control.</i> 2019 Sep;28(5):548-54.<li data-bbox="444 598 1390 741">12. Hall J, Cho HD, Maldonado-Molina M, George TJ Jr, Shenkman EA, Salloum RG. Rural-urban disparities in tobacco retail access in the southeastern United States: CVS vs. the dollar stores. <i>Prev Med Rep.</i> 2019;15:100935.
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Policies That Regulate Tobacco Promotions, Discounts, and Coupons

Indicator number	4.2.e
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	2. Increase equitable adoption, implementation, and enforcement of tobacco prevention and control policies
What to measure	Proportion of jurisdictions with policies that regulate the extent and type of tobacco promotions, discounts, and coupons
	Proportion of jurisdictions that are disproportionately burdened by tobacco product use with policies that regulate the extent and type of tobacco promotions, discounts, and coupons
Similar existing indicator(s) from other goal areas	Goal 1 (2014) 1.4.b, “Proportion of jurisdictions with policies that regulate the extent and type of consumer-directed tobacco promotions.”
Rationale	Policies that increase the price of tobacco products have been found to be one of the most effective ways to reduce tobacco use. ¹⁻⁴ However, the tobacco industry utilizes tobacco promotions, discounts, and coupons to counteract the impact of price increases. ² According to the Federal Trade Commission, price promotions accounted for 62.2% of the industry’s advertising and promotional expenditures in 2018. ⁵
Applying health disparities framing	Studies show that tobacco product promotions, discounts, and coupons occur more frequently among retailers in communities with high proportions of racial/ethnic minorities including African American or Black persons, Latino/Hispanic persons, and American Indians/Alaska Native persons, as well as persons with low educational attainment, and persons with low income. ⁶⁻¹⁰ Policies that regulate the extent and type of tobacco promotions, discounts, and coupons are important to reduce exposure to these tobacco industry marketing tactics and to support equitable implementation of policies to increase tobacco product prices.
Example data source(s)	American Lung Association’s State Legislated Actions on Tobacco Issues (SLATI) CDC State Tobacco Activities Tracking and Evaluation (STATE) System
Example survey question(s)	Not applicable. This indicator is best measured by tracking and monitoring pertinent tobacco laws, ordinances, or regulations.
Comments	Example policies are those that prohibit the redemption of discount coupons and value-added sales for tobacco products. Tobacco control

	<p>programs can consider different types of tobacco promotions, discounts, and coupons including digital or print.⁸</p> <p>Tobacco control programs may want to consider tracking this indicator across jurisdictions and/or communities to identify differences that may contribute to disparities. Moreover, tobacco control programs can expand on this indicator by also assessing the proportion of the population, including population groups experiencing tobacco-related disparities, that are protected by policies that regulate tobacco promotions, discounts, and coupons.</p>																		
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	<p>impact of tobacco marketing and promotions. <i>Health Commun.</i> 2019 Mar;34(3):280-289.</p> <p>7. Barnoya J, Colditz G, Moreland-Russell S, Cyr J, Snider D, Schootman M. Prevalence of cigarette advertising and other promotional strategies at the point of sale in St Louis, Missouri: analysis by store type and distance from a school. <i>Prev Chronic Dis.</i> 2014 Apr 17;11:E61.</p> <p>8. Choi K, Chen JC, Tan ASL, Soneji S, Moran MB. Receipt of tobacco direct mail/email discount coupons and trajectories of cigarette smoking behaviors in a nationally representative longitudinal cohort of US adults. <i>Tob Control.</i> 2018 Jun 19;28(3):282-8.</p> <p>9. Lempert LK, Glantz SA. Tobacco industry promotional strategies targeting American Indians/Alaska Natives and exploiting Tribal sovereignty. <i>Nicotine Tob Res.</i> 2019;21(7):940-8.</p> <p>10. Richardson A, Ganz O, Vallone D. Tobacco on the web: surveillance and characterisation of online tobacco and e-cigarette advertising. <i>Tob Control.</i> 2015 Jul;24(4):341-7.</p>
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Policies that Prohibit the Sale of Flavored Tobacco Products

Indicator number	4.2.f
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	2. Increase equitable adoption, implementation, and enforcement of tobacco prevention and control policies
What to measure	Proportion of jurisdictions with policies that prohibit the sale of all flavored tobacco products, including menthol products
	Proportion of jurisdictions that are disproportionately burdened by tobacco product use with policies that prohibit the sale of all flavored tobacco products, including menthol products
Similar existing indicator(s) from other goal areas	Not applicable.
Rationale	Flavored tobacco products are associated with tobacco initiation, experimentation, and sustained use. ¹⁻⁴ Policies prohibiting the sale of flavored tobacco products can be an effective strategy to reduce tobacco use. ⁵⁻⁷ Policies that have passed at federal, state, and/or local levels and vary in composition and the level of comprehensiveness, with some exempting certain tobacco products and/or flavors. ⁸ Research has shown that the availability of flavors is associated with tobacco use, particularly among youth. ^{1,2,9-11} Moreover, menthol cigarettes are particularly appealing to African Americans or Black persons; nearly 9 in 10 African Americans or Black people ages 12 and older who smoke use menthol cigarettes. ⁹⁻¹⁰
Applying health disparities framing	The tobacco industry has historically marketed flavored tobacco products to certain populations and communities disproportionately burdened by tobacco use, including those with a high proportion of racial/ethnic minorities, particularly those with a high concentration of African Americans or Black persons, LGBTQ+ persons, persons with low educational attainment, and persons with low income. ^{9,11-13}
Example data source(s)	American Nonsmokers' Rights (ANR) Foundation U.S. Tobacco Control Laws Database Campaign for Tobacco Free Kids (CTFK) Truth Initiative
Example survey question(s)	This indicator is best measured by tracking and monitoring pertinent tobacco laws, ordinances, or regulations.

<p>Comments</p>	<p>Federal law requires manufacturers of products that are put on the market after February 2007 to get FDA authorization before selling their products. On January 2, 2020, FDA announced that, beginning February 7, 2020, it would prioritize its enforcement activities to remove from the market any flavored cartridge-based e-cigarette product other than tobacco- or menthol-flavored cartridge-based products, unless and until it authorized any of those types of products for sale.¹⁴ On October 12, 2021, FDA announced that it had authorized the marketing of three e-cigarette products – the first e-cigarette products for which it issued marketing orders. None of these e-cigarettes authorized for sale are flavored products. FDA will post information about any additional products that it has authorized for sale on its website: https://www.fda.gov/tobacco-products/market-and-distribute-tobacco-product/tobacco-products-marketing-orders.</p> <p>Tobacco control programs may want to consider tracking this indicator across jurisdictions and/or communities to identify differences in the policy (e.g., provisions) and/or implementation of the policy that may contribute to disparities. Moreover, tobacco control programs can expand on this indicator by assessing the proportion of the population, including population groups experiencing tobacco-related disparities, that are protected by policies that prohibit the sale of all flavored tobacco products, including menthol products.</p>																		
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<p>References</p>	<ol style="list-style-type: none"> <li data-bbox="443 1419 1406 1524">1. Villanti AC, Johnson AL, Glasser AM, et al. Association of flavored tobacco use with tobacco initiation and subsequent use among US youth and adults, 2013-2015. <i>JAMA Netw Open</i>. 2019;2(10):e1913804. <li data-bbox="443 1545 1406 1650">2. Cullen KA, Liu ST, Bernat JK, et al. Flavored Tobacco product use among middle and high school students — United States, 2014–2018. <i>MMWR Morb Mortal Wkly Rep</i>. 2019;68:839–844. <li data-bbox="443 1671 1406 1776">3. Odani S, Armour B, Agaku IT. Flavored tobacco product use and its association with indicators of tobacco dependence among US adults, 2014–2015. <i>Nicotine Tob Res</i>. 2019 Oct;22(6):1004-15. <li data-bbox="443 1797 1406 1892">4. Giovino GA, Villanti AC, Mowery PD, et al. Differential trends in cigarette smoking in the USA: is menthol slowing progress? <i>Tob Control</i>. 2013;24(1):28-37. 																		

	<ol style="list-style-type: none"> 5. Courtemanche CJ, Palmer MK, Pesko MF. Influence of the flavored cigarette ban on adolescent tobacco use. <i>Am J Prev Med.</i> 2017;52(No 5):e139-e46. 6. Farley SM, Johns M. New York City flavoured tobacco product sales ban evaluation. <i>Tob Control.</i> 2017;26(No 1):78-84. 7. Lester JM, Gagosian SY. Finished with menthol: An evidence-based policy option that will save lives. <i>J Law Med Ethics.</i> 2017 Mar;45(1 Suppl):41-4. 8. Campaign for Tobacco-Free Kids. States and localities that have restricted the sale of flavored tobacco products. Washington, DC: Campaign for Tobacco-Free Kids; 2020 Feb. 9. U.S. National Cancer Institute. A socioecological approach to addressing tobacco-related health disparities. National Cancer Institute Tobacco Control Monograph 22. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; 2017. 10. Rath JM, Villanti AC, Williams VF, Richardson A, Pearson JL, Vallone DM. Correlates of current menthol cigarette and flavored other tobacco product use among U.S. young adults. <i>Addict Behav.</i> 2016 Nov;62:35-41. 11. Wang TW, Gentzke AS, Creamer MR, et al. Tobacco product use and associated factors among middle and high school students - United States, 2019. <i>MMWR Surveill Summ.</i> 2019 Nov 6;68(12):1-22. 12. Yerger VB, Przewoznik J, Malone RE. Racialized geography, corporate activity, and health disparities: tobacco industry targeting of inner cities. <i>J Health Care Poor Underserved.</i> 2007 Nov;18(4 Suppl):10-38. 13. Henriksen L, Schleicher NC, Dauphinee AL, Fortmann SP. Targeted advertising, promotion, and price for menthol cigarettes in California high school neighborhoods. <i>Nicotine Tob Res.</i> 2012;14(1):116–21. 14. U.S. Food and Drug Administration. FDA finalizes enforcement policy on unauthorized flavored cartridge-based e-cigarettes that appeal to children, including fruit and mint. Accessed February 9, 2021. https://www.fda.gov/news-events/press-announcements/fda-finalizes-enforcement-policy-unauthorized-flavored-cartridge-based-e-cigarettes-appeal-children
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Comprehensive Smokefree Policies for Indoor Public Places ^{HP}

Indicator number	4.2.g
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	2. Increase equitable adoption, implementation, and enforcement of tobacco prevention and control policies
What to measure	Proportion of jurisdictions that have comprehensive smokefree policies that prohibit smoking in all indoor areas of workplaces, including restaurants, and bars
	Proportion of jurisdictions that are disproportionately burdened by secondhand smoke exposure that have comprehensive smokefree policies that prohibit smoking in all indoor areas of workplaces, including restaurants, and bars
Similar existing indicator(s) from other goal areas	Goal 2 (2017) 2.2.a, "Proportion of jurisdictions with comprehensive smokefree policies for indoor public places." Goal 2 (2017) Addendum E-cigarette 2.2, "Proportion of jurisdictions with comprehensive smokefree policies, including e-cigarettes, for indoor public places."
Rationale	Evidence shows that comprehensive smokefree policies making indoor workplaces and public areas smokefree are highly effective in protecting people who do not smoke from exposure to secondhand smoke. ^{1,2} These policies can also motivate and support smoking cessation by reducing the social acceptability of smoking, limiting opportunities to smoke, and increasing the inconvenience of smoking. ¹⁻⁵ Despite the progress that has been made in creating smokefree environments in past years, coverage varies across states and localities, leaving some U.S. populations less protected. ⁵⁻⁹
Applying health disparities framing	Comprehensive smokefree policy coverage is lower in some communities, including those with a high proportion racial/ethnic minorities, including African American or Black persons, and persons with low educational attainment. ⁵⁻⁸ Additionally, communities in the Southern U.S., and some Midwestern geographic areas of the U.S. also experience lower levels of smokefree policy coverage. ^{5-7,9-10}
Example data source(s)	American Nonsmokers' Rights (ANR) Foundation U.S. Tobacco Control Laws Database CDC State Tobacco Activities Tracking and Evaluation (STATE) System
Example survey question(s)	Not applicable. This indicator is best measured by tracking and monitoring pertinent tobacco laws, ordinances, or regulations.

<p>Comments</p>	<p>A comprehensive smokefree policy is defined by the CDC Office on Smoking and Health as a policy that does not allow smoking in any indoor areas of workplaces, restaurants, and bars, with no exceptions. States or jurisdictions that have already adopted comprehensive smokefree policies or are attempting to adopt comprehensive smokefree policies can consider enhancing their policies to include e-cigarettes. Refer to <i>Eliminating Exposure to Secondhand Smoke: Outcome Indicators for Comprehensive Tobacco Control Programs—2017</i>,¹¹ E-cigarette Addendum 2.2, “Proportion of jurisdictions with comprehensive smoke-free policies, including e-cigarettes, for indoor public places” for more information.</p> <p>Tobacco control programs may want to consider tracking this indicator across jurisdictions and/or communities to identify differences that may contribute to disparities. Moreover, tobacco control programs can expand on this indicator by also assessing the proportion of population, including population groups experiencing tobacco-related disparities, that are protected by comprehensive smokefree policies.</p> <p>This indicator supports the Healthy People 2030 objective TU-17: Increase the number of states, territories, and District of Columbia that prohibit smoking in worksites, restaurants, and bars.</p>												
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	<ol style="list-style-type: none"> 4. Garrett BE, Dube SR, Babb S, McAfee T. Addressing the social determinants of health to reduce tobacco-related disparities. <i>Nicotine Tob Res.</i> 2014;17(8):892-7. 5. U.S. National Cancer Institute. A socioecological approach to addressing tobacco-related health disparities. National Cancer Institute Tobacco Control Monograph 22. NIH Publication No. 17-CA-8035A. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; 2017 6. American for Nonsmokers' Rights Foundation. U.S.100% Smokefree Laws in Non-Hospitality Workplaces and Restaurants and Bars. Accessed March 27, 2020. https://no-smoke.org/materials-services/lists-maps/#1518200878061-ebc83fdc-2d6c 7. Gonzalez M, Sanders-Jackson A, Song AV, Cheng K-w, Glantz SA. Strong smoke-free law coverage in the United States by race/ethnicity: 2000–2009. <i>Am J Public Health.</i> 2013;103(5):e62-e6. 8. Huang J, King BA, Babb SD, Xu X, Hallett C, Hopkins M. Sociodemographic disparities in local smoke-free law coverage in 10 States. <i>Am J Public Health.</i> 2015 Sep;105(9):1806-13. 9. Hafez AY, Gonzalez M, Kulik MC, Vijayaraghavan M, Glantz SA. Uneven access to smoke-free laws and policies and its effect on health equity in the United States: 2000-2019. <i>Am J Public Health.</i> 2019;109(11):1568-75. 10. Buettner-Schmidt K, Miller DR, Maack B. Disparities in rural tobacco use, smoke-free policies, and tobacco taxes. <i>West J Nurs Res.</i> 2019 Aug;41(8):1184-202. 11. Centers for Disease Control and Prevention. Eliminating exposure to secondhand smoke: outcome indicators for comprehensive tobacco control programs–2017. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2017.
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Smokefree Policies for Casinos ^{NR}

Indicator number	4.2.h
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	2. Increase equitable adoption, implementation, and enforcement of tobacco prevention and control policies
What to measure	Proportion of jurisdictions that have policies that prohibit smoking in all indoor areas of casinos
	Proportion of jurisdictions that are disproportionately burdened by secondhand smoke exposure that have policies that prohibit smoking in all indoor areas of casinos
Similar existing indicator(s) from other goal areas	Not applicable.
Rationale	Despite wide support for smokefree casinos, state and local comprehensive smokefree policies often exempt casinos. ^{1,2} Moreover, casinos on tribal lands are exempt from state and local policies because of tribal sovereignty. ^{3,4} Studies of air quality in casinos that allow smoking have found high levels of secondhand smoke exposure, as demonstrated by elevated secondhand smoke constituents, including high concentrations of particulate matter and particulate polycyclic aromatic hydrocarbons, and tobacco-specific biomarkers in the blood, urine, and saliva. ^{2,3} Smoking inside casinos involuntarily exposes casino patrons and employees to the harms of secondhand smoke. ³⁻⁶
Applying health disparities framing	Women and racial/ethnic minorities, including African American or Black persons and Latino/Hispanic persons, make up close to half of gaming employees in non-tribal commercial casinos in the United States and consequently experience a higher risk of exposure to secondhand smoke in casinos that allow smoking. ⁶ Additionally, American Indian/Alaska Native persons often comprise a large number of tribal casino employees and patrons, and thus experience an increased risk of secondhand smoke exposure in tribal casinos that allow smoking. ³
Example data source(s)	American Nonsmokers' Rights (ANR) Foundation U.S. Tobacco Control Laws Database CDC State Tobacco Activities Tracking and Evaluation (STATE) System
Example survey question(s)	Not applicable. This indicator is best measured by tracking and monitoring pertinent tobacco laws, ordinances, or regulations.

Comments	<p>Tobacco control programs can also consider assessing this indicator in jurisdictions with a large proportion of casinos without comprehensive smokefree policies.</p> <p>Tobacco control programs may want to consider tracking this indicator across jurisdictions and/or communities to identify differences that may contribute to disparities. Moreover, tobacco control programs can expand on this indicator by also assessing the proportion of population groups experiencing tobacco-related disparities, including those employed in casinos, that are protected by smokefree policies in casinos.</p>
Rating	Not rated.
References	<ol style="list-style-type: none"> 1. Tynan MA, Wang TW, Marynak KL, Lemos P, Babb SD. Attitudes toward smoke-free casino policies among US adults, 2017. <i>Public Health Rep.</i> 2019 May/Jun;134(3):234-40. 2. Tynan, MA, Holmes, CB, Promoff, G, Hallett, C, Hopkins, M, Frick, B. State and local comprehensive smoke-free laws for worksites, restaurants, and bars—United States, 2015. <i>MMWR Morb Mortal Wkly Rep.</i> 2016;65(24):623-6. 3. Babb S, McNeil C, Kruger J, Tynan MA. Secondhand smoke and smoking restrictions in casinos: a review of the evidence. <i>Tob Control.</i> 2015 Jan;24(1):11-7. 4. Public Health Law Center, Casinos. Accessed April 28, 2020. https://www.publichealthlawcenter.org/topics/commercial-tobacco-control/smoke-free-tobacco-free-places/casinos 5. American Gaming Association. State of the states 2019: the AGA survey of casino entertainment. Accessed March 30, 2020. https://www.americangaming.org/resources/state-of-the-states-2019-the-aga-survey-of-the-commercial-casino-industry 6. American Gaming Association. Gaming Careers: Gateway to the Middle Class. Accessed April 30, 2020. https://www.oxfordeconomics.com/recent-releases/gaming-careers-gateway-to-the-middle-class

Disparities in the Population Covered by Workplace Smokefree Policies




Indicator number	4.2.i
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	2. Increase equitable adoption, implementation, and enforcement of tobacco prevention and control policies
What to measure	<p>Proportion of the employed population that is covered by a workplace smokefree policy, overall, and among occupations and/or settings with disproportionately higher risk of exposure to secondhand smoke</p> <p>Differences in the proportion of the employed population that is covered by a workplace smokefree policy by population group characteristics and occupation</p>
Similar existing indicator(s) from other goal areas	Goal 2 (2017) 2.2.c, “Proportion of the employed population covered by a workplace smokefree policy.”
Rationale	Because employed adults spend a substantial amount of their time at work, workplaces without smokefree policies are a major source of secondhand smoke exposure for nonsmoking adults. ^{1,2} Smokefree workplaces protect workers from secondhand smoke exposure, reduce the social acceptability of smoking, and increase the likelihood of successful cessation among workers who use tobacco. ¹⁻⁵ This indicator is especially relevant for evaluation in states that exempt some workplaces from state smokefree air laws (e.g., casinos, hotels/motels).
Applying health disparities framing	Research has shown that persons with low income and persons working in certain occupations, including blue collar and service workers and casino and other gaming facility workers, experience a higher risk of secondhand smoke exposure in the workplace. ^{1,2,4,6-8} Additionally, persons living in rural areas are less likely to be covered by a workplace smokefree policy. ^{1,2,7,9}
Example data source(s)	American Nonsmokers’ Rights (ANR) Foundation U.S. Tobacco Control Laws Database Tobacco Use Supplement to the Current Population Survey (TUS-CPS), 2018-2019
Example survey question(s)	<p>From TUS-CPS (2018-2019)</p> <p>Is smoking restricted in ANY WAY at your place of work?</p> <ul style="list-style-type: none"> • Yes • No

	<p>Which of these best describes the smoking policy at your place of work for INDOOR work areas?</p> <ul style="list-style-type: none"> • Not allowed in ANY work areas • Allowed in SOME work areas • Allowed in ALL work areas • NOT APPLICABLE <p>Which of these best describes the smoking policy at your place of work for INDOOR PUBLIC OR COMMON AREAS, such as lobbies, rest rooms, and lunch rooms?</p> <ul style="list-style-type: none"> • Not allowed in ANY public areas • Allowed in SOME public areas • Allowed in ALL public areas • NOT APPLICABLE 												
<p>Comments</p>	<p>Tobacco control programs may want to assess this indicator by occupation type and across jurisdictions/communities. Moreover, tobacco control programs can expand on this indicator by also assessing the proportion of the population, including population groups experiencing tobacco-related disparities, such as those that work in occupations with high risk of secondhand smoke exposure, who are protected by a smokefree policy in the workplace.</p>												
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Smokefree Policies in Multiunit Housing

Indicator number	4.2.j
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	2. Increase equitable adoption, implementation, and enforcement of tobacco prevention and control policies
What to measure	Proportion of multiunit housing operators that have adopted voluntary smokefree policies that prohibit smoking in all indoor areas of multiunit housing
	Differences in the proportion of multiunit housing operators that have adopted voluntary smokefree policies that prohibit smoking in all indoor areas of multiunit housing by type of multiunit housing (subsidized, market rate) and community and population group characteristics
Similar existing indicator(s) from other goal areas	Goal 2 (2017) 2.2.i, “Proportion of multiunit housing operators that have adopted a smokefree policy in their buildings.”
Rationale	The home is a major source of secondhand exposure, especially for children. ¹ Persons living in multiunit housing, such as apartment buildings and condominiums, are at particular risk of exposure to secondhand smoke because smoke can transfer from neighboring units and public areas. ^{1,2} In 2016, the U.S. Department of Housing and Urban Development issued a smokefree rule prohibiting smoking in all indoor areas of public housing. ³ However, many subsidized and private multiunit complexes still do not have smokefree policies in place. ⁴
Applying health disparities framing	Certain types of multiunit housing, including government-subsidized housing, are occupied by large proportions of vulnerable population groups that are at higher risk for chronic disease and poor health outcomes, including older adults and children, racial/ethnic minorities, persons with low income, and persons with disabilities. ^{1,2,5}
Example data source(s)	UC Davis, Center for Evaluation and Research, Tobacco Control Evaluation Center, Multi-Unit Housing: Public Intercept Survey (MUHPIS), 2018 UC Davis, Center for Evaluation and Research, Tobacco Control Evaluation Center, Colusa County Tobacco Education Project, Owners/Managers of Multi-Unit Housing Complexes (MUHMI), 2017 Social Climate Survey of Tobacco Control (SCS-TC), 2014

<p>Example survey question(s)</p>	<p>From the Experience with Smoke-Free Policies in Affordable Multiunit Housing Study (2016)</p> <p>What best describes the rules about smoking in residential units?</p> <ul style="list-style-type: none"> • Smoking is allowed in all residential units • Smoking is allowed in some residential units • Smoking is not allowed in any residential units <p>From SCS-TC (2014)</p> <p>Which of the following best describes the building in which you live? Would you say:</p> <ul style="list-style-type: none"> • A mobile home • A one-family house detached from any other house • A one-family house attached to one or more houses • An apartment or condominium building • Other <p>Does your property manager allow smoking in your apartment/condo units?</p> <ul style="list-style-type: none"> • Yes • No <p>Does your property manager allow smoking on the property?</p> <ul style="list-style-type: none"> • Yes • No 																								
<p>Comments</p>	<p>In addition to self-reported data, this indicator can be assessed through resources such as air quality studies. This indicator is best measured by state and local policy tracking systems; however, survey data can be helpful in providing estimates.</p> <p>Tobacco control programs may want to assess this indicator across jurisdictions and/or communities to identify differences that may contribute to disparities. Moreover, tobacco control programs may want to expand on this indicator by assessing the proportion of multiunit housing residents that are covered by smokefree policies.</p>																								
<p>Rating</p>	<table border="0" style="width: 100%; text-align: center;"> <tr> <td style="width: 15%;">Overall quality</td> <td style="width: 15%;">Resources needed</td> <td style="width: 15%;">Strength of evaluation evidence</td> <td style="width: 15%;">Utility</td> <td style="width: 15%;">Face validity</td> <td style="width: 15%;">Accepted practice</td> </tr> <tr> <td>low ↔ high</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>\$\$</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> </tr> <tr> <td colspan="6">← ○ ● ● → better</td> </tr> </table>	Overall quality	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice	low ↔ high							\$\$	●	●	●	●	← ○ ● ● → better					
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<p>References</p>	<p>1. US Department of Health and Human Services. The health consequences of involuntary exposure to tobacco smoke: a report of</p>																								

	<p>the Surgeon General. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention; 2006.</p> <ol style="list-style-type: none">2. Snyder K, Vick JH, King BA. Smoke-free multiunit housing: a review of the scientific literature. <i>Tob Control</i>. 2016;25(1):9-20.3. U.S. Department of Housing and Urban Development. Smoke-free public housing and multifamily properties. Accessed March 30, 2020. https://www.hud.gov/program_offices/healthy_homes/smokefree4. Centers for Disease Control and Prevention. Best practices user guide: health equity. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2015.5. King BA, Babb SD, Tynan MA, Gerzoff RB. National and state estimates of secondhand smoke infiltration among US multiunit housing residents. <i>Nicotine Tob Res</i>. 2012;15(7):1316-21.
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Home and Vehicle Smokefree Rules ^{HP}




Indicator number	4.2.k
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	2. Increase equitable adoption, implementation, and enforcement of tobacco prevention and control policies
What to measure	Proportion of the population reporting 100% smokefree rules in their homes, overall, and among population groups experiencing tobacco-related disparities and differences in the proportion of the population reporting 100% smokefree rules in their homes by population group characteristics
	Proportion of the population reporting 100% smokefree rules in their vehicles, overall, and among population groups experiencing tobacco-related disparities and differences in the proportion of the population reporting 100% smokefree rules in their vehicles by population group characteristics
Similar existing indicator(s) from other goal areas	Goal 2 (2017) 2.2.f, “Proportion of the population reporting 100% smokefree rules for homes or vehicles.”
Rationale	Home and vehicles remain a significant source of secondhand smoke exposure, especially for children. ¹ Smokefree home and vehicle rules can reduce exposure to secondhand smoke among people who do not smoke, encourage smoking cessation, prevent relapse, and reduce the social acceptability of tobacco use. ^{1,2} Despite program in increasing voluntary smokefree home and vehicle rules in the U.S., nonsmoking adults and children continue to be exposed to secondhand smoke in these settings. ^{1,3,4}
Applying health disparities framing	Studies have found that certain populations, including African American or Black persons, LGBTQ+ persons, persons with low educational attainment, and persons with low income are less likely to be protected by voluntary smokefree home and vehicle rules. ⁵⁻⁸
Example data source(s)	Tobacco Use Supplement to the Current Population Survey (TUS-CPS), 2014-2015 National Adult Tobacco Survey (NATS), 2013-2014 Social Climate Survey of Tobacco Control (SCS-TC), 2014
Example survey question(s)	From TUS-CPS (2014-2015) Which statement best describes the rules about smoking INSIDE YOUR HOME? <ul style="list-style-type: none"> • No one is allowed to smoke anywhere INSIDE YOUR HOME

	<ul style="list-style-type: none"> • Smoking is allowed in some places or at sometimes INSIDE YOUR HOME • Smoking is permitted anywhere INSIDE YOUR HOME <p>From NATS (2013-2014)</p> <p>Not counting motorcycles, in the vehicles that you or family members who live with you own or lease, is smoking...?</p> <ul style="list-style-type: none"> • Always allowed • Sometimes allowed in at least one vehicle • Never allowed in any vehicle • Respondents' family does not own or lease a vehicle • Don't know/Not sure • Refused <p>From SCS-TC (2014)</p> <p>Which statement best describes the rules about smoking in your home...?</p> <ul style="list-style-type: none"> • No one is allowed to smoke anywhere • Smoking is permitted in some places or at some times • Smoking is permitted anywhere 												
<p>Comments</p>	<p>This indicator supports the <i>Healthy People 2030</i> objective TU-18: Increase the proportion of smoke free homes.</p>												
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	<ol style="list-style-type: none">3. King BA, Dube SR, Homa DM. Smoke-free rules and secondhand smoke exposure in homes and vehicles among US adults, 2009-2010. <i>Prev Chronic Dis.</i> 2013 May 16;10:E79.4. Hopkins DP, Razi S, Leeks KD, Priya Kalra G, Chattopadhyay SK, Soler RE. Task force on community preventive services. <i>Am J Prev Med.</i> 2010 Feb; 38(2 Suppl):S275-89.5. Nguyen KH, Gomez Y, Homa DM, King BA. Tobacco use, secondhand smoke, and smoke-free home rules in multiunit housing. <i>Am J Prev Med.</i> 2016;51(5):682-92.6. Kruger J, Jama A, Homa DM, Babb SD, King BA. Smoke-free home and vehicle rules by tobacco use status among US adults. <i>Prev Med.</i> 2015;78:9–13.7. King B, Hyland A, Borland R, McNeill A, Cummings KM. Socioeconomic variation in the prevalence, introduction, retention, and removal of smoke-free policies among smokers: findings from the International Tobacco Control (ITC) Four Country Survey. <i>Int J Environ Res Public Health.</i> 2011;8(2):411-34.8. Murphy-Hoefer R, Madden P, Maines D, Coles C. Prevalence of smoke-free car and home rules in Maine before and after passage of a smoke-free vehicle law, 2007–2010. <i>Prev Chronic Dis.</i> 2014;11:130132.
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Tobacco Product Price

Indicator number	4.2.l
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	2. Increase equitable adoption, implementation, and enforcement of tobacco prevention and control policies
What to measure	<p>Average price paid by a consumer for a unit of tobacco product adjusted for inflation and including industry discounts and applicable taxes and fees, overall, and among population groups experiencing tobacco-related disparities</p> <p>Proportion of jurisdictions that have an average retail price of at least \$10.00 for a pack of cigarettes and the proportion of jurisdictions that are disproportionately burdened by tobacco product use that have an average retail price of at least \$10.00 for a pack of cigarettes</p>
Similar existing indicator(s) from other goal areas	<p>Goal 1 (2014) 1.8.b, "Price paid for tobacco product."</p> <p>Goal 3 (2015) 3.4.f, "Tobacco product price."</p>
Rationale	<p>Increasing the price of tobacco product is one of the most effective strategies in reducing tobacco consumption.¹⁻⁴ Studies have shown that increases in the price of tobacco products prevents initiation of tobacco use, promotes cessation, and reduces tobacco consumption and prevalence overall, and among populations experiencing tobacco-related disparities.¹⁻⁸ Research has shown that increasing the cost of cigarettes to \$10.00 per pack can substantially decrease tobacco product use, particularly among youth and young adults.² A mechanism to increase the price of tobacco products is through excise taxes. However, the tobacco industry utilizes tobacco promotions, discounts, and coupons to counteract the impact of price increases.⁸</p>
Applying health disparities framing	<p>Studies show that tobacco promotions, discounts, and coupons occur more frequently among retailers in communities with high proportions of racial/ethnic minorities, including African American or Black persons, Latino/Hispanic persons, and American Indian/Alaska Native persons, as well as persons with low education attainment, persons with low income, and persons living in the communities in the Southeastern and Midwestern U.S.⁹⁻¹⁴ Many of these subgroups, as well as youth, are often more responsive to changes in tobacco prices.^{5-7,14,15} Coupled with cessation interventions, price increases can have a strong impact on reducing socioeconomic inequalities in smoking.⁵⁻⁷</p>
















<p>Example data source(s)</p>	<p>Tobacco Use Supplement to the Current Population Survey (TUS-CPS), 2018-2019 Nielsen Store Scanner Tobacco Product Pricing Data</p>																		
<p>Example survey question(s)</p>	<p>From TUS-CPS (2018-2019)</p> <p>What price did you pay for the last pack of cigarettes you bought? Please report the cost after using discounts or coupons.</p> <ul style="list-style-type: none"> • Includes dollar amount and cents • Don't know • Refused <p>What price did you pay for the last carton of cigarettes you bought? Please report the cost after using discounts or coupons.</p> <ul style="list-style-type: none"> • Includes dollar amount and cents • Don't know • Refused <p>Did you use coupons, rebates, or any other special promotions when you bought your last (PACK or CARTON) of cigarettes?</p> <ul style="list-style-type: none"> • Yes • No • Don't know • Refused 																		
<p>Comments</p>	<p>This indicator is best measured by store scanner data or retail observation. However, self-reported data captured through population-based surveys can provide estimates on changes in price paid for tobacco products.</p> <p>Tobacco control programs can consider assessing this indicator by product type and across priority jurisdictions and/or communities that are disproportionately burdened by tobacco use. Programs may also want to examine whether price changes had unintended consequences, such as consumers switching to a lower priced tobacco product (if discounts are still allowed or there are not laws establishing tax parity among products).</p>																		
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	<p>behaviors in a nationally representative longitudinal cohort of US adults. <i>Tob Control</i>. 2018 Jun 19;28(3):282-8.</p> <p>12. Lempert LK, Glantz SA. Tobacco industry promotional strategies targeting American Indians/Alaska Natives and exploiting Tribal sovereignty. <i>Nicotine Tob Res</i>. 2019;21(7):940-8.</p> <p>13. Richardson A, Ganz O, Vallone D. Tobacco on the web: surveillance and characterisation of online tobacco and e-cigarette advertising. <i>Tob Control</i>. 2015 Jul;24(4):341-7.</p> <p>14. Campaign for Tobacco-Free Kids. 2020. State cigarette excise tax rates & rankings. Accessed February 10, 2020. https://www.tobaccofreekids.org/assets/factsheets/0097.pdf</p> <p>15. Centers for Disease Control and Prevention. STATE System Excise Tax Fact Sheet. Accessed March 30, 2020. https://www.cdc.gov/statesystem/factsheets/excisetax/ExciseTax.html</p>
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Minimum Price Policies

Indicator number	4.2.m
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	2. Increase equitable adoption, implementation, and enforcement of tobacco prevention and control policies
What to measure	Proportion of jurisdictions that have strong minimum price policies
	Proportion of jurisdictions that are disproportionately burdened by tobacco use that have strong minimum price policies
Similar existing indicator(s) from other goal areas	Goal 1 (2014) 1.4.d, “Proportion of jurisdictions with strong minimum tobacco product price laws.”
Rationale	Minimum price policies are associated with higher cigarette prices. ¹ Minimum price laws are one way for states and localities to counteract tobacco industry strategies to lower tobacco product prices through price promotions, discounts, and coupons and undermine efforts to raise the price of tobacco products. ^{2,3} Price increases can reduce tobacco use overall, prevent initiation of tobacco use, and promote cessation among populations experiencing disparities. ⁴⁻¹²
Applying health disparities framing	Research has shown that minimum price policies can reduce income-based tobacco-related disparities. ^{12,13} Tobacco industry price promotions, discounts, and coupons occur more frequently in communities with high proportions of racial/ethnic minorities including African American or Black persons, Latino/Hispanic persons, and American Indian/Alaska Native persons, as well as persons with low educational attainment and persons with low income. ¹⁴⁻¹⁸
Example data source(s)	State and/or jurisdiction policy tracking system CDC State Tobacco Activities Tracking and Evaluation (STATE) System
Example survey question(s)	Not applicable. This indicator is best measured by tracking and monitoring pertinent tobacco laws, ordinances, or regulations.
Comments	“Strong” laws may include those that prohibit trade discounts from the minimum price calculation, set a minimum price by mandating a high percentage markup for tobacco wholesalers and retailers, and are applied to a breadth of tobacco products. Tobacco control programs should determine the scope of the policy standards and set an operational

	<p>definition of strong minimum tobacco product price laws before evaluating the presence/absence and reach of such policies.</p> <p>Tobacco control programs should consider assessing this by product type, as well as across jurisdictions/communities that are disproportionately burdened by tobacco use. When examining this indicator, tobacco control programs may want to assess the extent of price promotions, discounts, and coupons in the community/jurisdiction with these policies in place to better understand their potential impact.</p>																		
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Equitable Enforcement of Tobacco Control Policies

Indicator number	4.2.n
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	2. Increase equitable adoption, implementation, and enforcement of tobacco prevention and control policies
What to measure	Number and type of commercial or business enforcement actions, including warnings, civil penalties, and criminal penalties taken to support compliance with tobacco control policies
	Differences in the number and type of commercial or business enforcement actions taken to support compliance with tobacco control policies across jurisdictions and/or communities and type of retailers
Similar existing indicator(s) from other goal areas	Goal 1 (2014) 1.3.e, “Number and type of enforcement actions issued for violations of restrictions on tobacco product availability.” Goal 1 (2014) 1.4.g, “Number and type of enforcement actions issued for violations of restrictions on tobacco marketing.”
Rationale	While adoption of effective tobacco control policies is important, subsequent enforcement and compliance is essential for the policies to be successful at achieving intended outcomes. Uneven enforcement of tobacco control policies may attenuate the intended effects of the policy and may prevent the benefits of these policies from reaching some segments of the population, thus creating and/or exacerbating tobacco-related disparities. An effective means of enforcing tobacco control public policies is to conduct regular compliance checks. ^{1,2}
Applying health disparities framing	Low compliance with tobacco control policies has been documented among tobacco retailers located in communities with a high proportion of racial/ethnic minorities and persons with low income, which may result in those population groups being less likely to benefit from the intended effects of the policy. ³⁻⁶
Example data source(s)	FDA, Compliance Check Inspection of Tobacco Product Retailers Information
Example survey question(s)	Not applicable. This indicator is best measured by tracking and monitoring national, state, and local agencies’ inspection and violation reports.
Comments	Tobacco control programs may want to focus on assessing enforcement at the commercial/business level and avoid enforcement activities at the individual level as this can have the unintended consequence of

	<p>exacerbating tobacco-related disparities and/or negatively affecting population groups experiencing disparities.</p> <p>When assessing differences across jurisdictions and/or communities, tobacco control programs may want to examine the community composition, such as racial/ethnic characteristics, socioeconomic status, and tobacco use prevalence, to assess whether differences in enforcement and compliance may be pronounced in communities that are disproportionately burdened by tobacco use.</p> <p>In addition to assessing enforcement, tobacco control programs can consider examining retailer compliance with tobacco control policies and changes in compliance over time, as these data can help examine the effects of enforcement actions and identify the contextual factors that may be moderating the intended impact of the policy.</p>																		
<p>Rating</p>	<table border="1"> <thead> <tr> <th data-bbox="443 768 651 905">Overall quality low ↔ high</th> <th data-bbox="651 768 813 905">Resources needed</th> <th data-bbox="813 768 976 905">Strength of evaluation evidence</th> <th data-bbox="976 768 1122 905">Utility</th> <th data-bbox="1122 768 1252 905">Face validity</th> <th data-bbox="1252 768 1416 905">Accepted practice</th> </tr> </thead> <tbody> <tr> <td data-bbox="443 905 651 957">■■■■■</td> <td data-bbox="651 905 813 957">\$\$\$</td> <td data-bbox="813 905 976 957">●</td> <td data-bbox="976 905 1122 957">●</td> <td data-bbox="1122 905 1252 957">●</td> <td data-bbox="1252 905 1416 957">●</td> </tr> <tr> <td colspan="6" data-bbox="443 957 1416 1024" style="text-align: center;">← ○ ● ● → better</td> </tr> </tbody> </table>	Overall quality low ↔ high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice	■■■■■	\$\$\$	●	●	●	●	← ○ ● ● → better					
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<p>References</p>	<ol style="list-style-type: none"> Roeseler A, Feighery EC, Cruz TB. Tobacco marketing in California and implications for the future. <i>Tob Control</i>. 2010 Apr;19 Suppl 1(Suppl 1):i21-9. Institute of Medicine. 2015. Public health implications of raising the minimum age of legal access to tobacco products. Washington, DC: The National Academies Press. Lee JG, Landrine H, Torres E, Gregory KR. Inequities in tobacco retailer sales to minors by neighbourhood racial/ethnic composition, poverty and segregation, USA, 2015. <i>Tob Control</i>. 2016 Dec;25(e2):e142-5. Lee JG, Baker HM, Ranney LM, Goldstein AO. Neighborhood inequalities in retailers' compliance with the Family Smoking Prevention and Tobacco Control Act of 2009, January 2014-July 2014. <i>Prev Chronic Dis</i>. 2015;12:E171. Lee JGL, Shook-Sa BE, Bowling JM, Ribisl KM. Comparison of sampling strategies for tobacco retailer inspections to maximize coverage in vulnerable areas and minimize cost. <i>Nicotine Tob Res</i>. 2018 Sep 25;20(11):1353-8. U.S. National Cancer Institute. A socioecological approach to addressing tobacco-related health disparities. National Cancer Institute Tobacco Control Monograph 22. NIH Publication No. 17-CA-8035A. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; 2017. 																		

Outcome 3: Increased health systems changes and coverage that promote and support cessation in populations experiencing tobacco-related disparities

Health systems changes and clinical protocols to address tobacco use and dependence, promote evidence-based treatments for tobacco cessation, and health insurance coverage for all evidence-based cessation treatment play a key role in supporting tobacco cessation.¹ The U.S. Public Health Service's Clinical Practice Guideline, *Treating Tobacco Use and Dependence: 2008 Update* (hereafter referred to as the *Clinical Practice Guideline*), recommends that clinicians and health care delivery systems consistently identify, document, and treat persons who use tobacco by implementing protocols to: (1) ask about tobacco use, (2) advise tobacco users to quit, (3) assess willingness to make a quit attempt, (4) assist in quit attempt, and (5) arrange for follow-up.^{1,2} Integration of these guidelines increases the likelihood that persons who use a tobacco product will be screened and treated for tobacco use.¹

Approximately 70 percent of people who smoke visit a physician each year, yet over 40 percent of adults who smoke do not receive advice to quit from a healthcare provider.^{1,3} Moreover, patient screening and treatment for tobacco use varies by race/ethnicity, educational attainment, income level, insurance status, and mental health and substance use disorders (i.e., behavioral health conditions).^{1,4-8} For instance, persons with mental health conditions are less likely to receive tobacco use counseling to quit from a health care provider.⁹ Implementing health systems and clinical changes that support cessation in healthcare facilities that serve people disproportionately burdened by tobacco use (e.g., behavioral health treatment facilities, federally qualified health centers) can increase reach and cessation behaviors among these groups.¹ Additionally, ensuring tobacco-free policies in these facilities creates a supportive environment for quitting.

Beyond implementing health systems and clinical changes, it is important for people who use a tobacco product to have access to evidence-based treatment for tobacco cessation. Individual, group, and telephone counseling and FDA-approved cessation medications are evidence-based treatments that are effective in helping cigarette smokers quit.² Having comprehensive, barrier-free coverage for these treatments increases access to and use of cessation treatments and quit rates among tobacco users.¹ However, disparities exist in access to comprehensive cessation treatment by level of educational attainment, income level, and insurance status.¹⁰⁻¹² For example, persons with low educational attainment are less likely to have access to comprehensive, barrier-free cessation coverage.¹¹

When assessing indicators under this outcome, tobacco control programs may need to consider that some population groups disproportionately affected by tobacco use often encounter barriers that limit their ability to access the healthcare they need, such as financial means to pay for services and means to reach and physically use services (e.g., lack of transportation). These factors are important to consider when evaluating cessation efforts related to health systems and insurance coverage changes.

The following indicators are associated with this outcome:

- 4.3.a:** Healthcare systems that have implemented evidence-based cessation guidelines ^{NR}
- 4.3.b:** Disparities in health care professional screening for tobacco use
- 4.3.c:** Disparities in health care provider advice to quit tobacco use ^{HP}
- 4.3.d:** Disparities in health care professionals' assistance in quitting tobacco use
- 4.3.e:** Proportion of behavioral health facilities that offer evidence-based cessation treatment ^{NR}
- 4.3.f:** Behavioral health facilities with tobacco-free policies
- 4.3.g:** Disparities in access to comprehensive evidence-based cessation services ^{HP}

^{NR} Denotes an indicator that is not rated.

^{HP} Denotes the indicator aligns with *Healthy People 2030* Objectives.

References






1. U.S. Department of Health and Human Services. Smoking cessation. a report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2020.
2. Fiore MC, Jaén CR, Baker TB, et al. Treating tobacco use and dependence: 2008 update. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service; May 2008.
3. Centers for Disease Control and Prevention. National Health Interview Survey. Available at: <http://www.cdc.gov/nchs/nhis.htm>
4. Jamal A, Dube SR, Malarcher AM, Shaw L, Engstrom MC. Tobacco use screening and counseling during physician office visits among adults—National Ambulatory Medical Care Survey and National Health Interview Survey, United States, 2005–2009. Morbidity and Mortality Weekly Report. 2012 Jun 15;61 Suppl:38–45.
5. Keith DR, Stanton CA, Gaalema DE, et al. Disparities in US healthcare provider screening and advice for cessation across chronic medical conditions and tobacco products. J Gen Intern Med. 2017 Sep 1;32(9):974-80.
6. Kruger J, O'Halloran A, Rosenthal AC, Babb SD, Fiore MC. Receipt of evidence-based brief cessation interventions by health professionals and use of cessation assisted treatments among current adult cigarette-only smokers: National Adult Tobacco Survey, 2009–2010. BMC Public Health. 2016 Dec;16(1):141.
7. Fortmann SP, Bailey SR, Brooks NB, et al. Trends in smoking documentation rates in safety net clinics. Health Serv Res. 2020 Apr;55(2):170-177.
8. Tran S-TT, Rosenberg KD, Carlson NE. Racial/ethnic disparities in the receipt of smoking cessation interventions during prenatal care. Matern Child Health J. 2010;14(6):901-9.
9. Duffy SA, Kilbourne AM, Austin KL, et al. Risk of smoking and receipt of cessation services among veterans with mental disorders. Psychiatr Serv. 2012 Apr 1;63(4):325-32.

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12. Land T, Warner D, Paskowsky M, Cammaerts A, Wetherell L, Kaufmann R, Zhang L, Malarcher A, Pechacek T, Keithly L. Medicaid coverage for tobacco dependence treatments in Massachusetts and associated decreases in smoking prevalence. *PLoS One.* 2010 Mar 18;5(3):e9770.

Increased health system changes and coverage that promote and support cessation in populations experiencing tobacco-related disparities

Indicator Rating

← ○ ● ● → better

Number	Indicator	Overall Quality low ↔ high	Resources Needed	Strength of Evaluation Evidence	Utility	Face Validity	Accepted Practice
4.3.a	Healthcare systems that have implemented evidence-based cessation guidelines ^{NR}	NR	NR	NR	NR	NR	NR
4.3.b	Disparities in health care professional screening for tobacco use		\$\$	●	●	●	●
4.3.c	Disparities in health care provider advice to quit tobacco use ^{HP}		\$\$	●	●	●	●
4.3.d	Disparities in health care professionals' assistance in quitting tobacco use		\$\$	●	●	●	●
4.3.e	Proportion of behavioral health facilities that offer evidence-based cessation treatment ^{NR}	NR	NR	NR	NR	NR	NR
4.3.f	Behavioral health treatment facilities with tobacco-free policies		\$\$	●	●	●	●
4.3.g	Disparities in access to comprehensive evidence-based cessation services ^{HP}		\$\$	●	◐	◐	●

\$ Dollar signs denote a qualitative rating of the resources (funds, time, and effort) needed to collect and analyze data using the most commonly available data source. The more dollar signs (maximum four), the more resources needed. Dollar signs do not represent a specific amount or range of costs but are instead a relative measure of expert reviewers' ratings regarding resources required to collect and analyze data to measure the indicator.

^{NR} Denotes an indicator that is not rated.

^{HP} Denotes the indicator aligns with ***Healthy People 2030*** Objectives.

Healthcare Systems that Have Implemented Evidence-Based Cessation Guidelines ^{NR}

Indicator number	4.3.a
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	3. Increased adoption of practices in health care systems to promote and support cessation in populations experiencing tobacco-related disparities
What to measure	<p>Proportion of healthcare facilities that have implemented clinical protocols consistent with the <i>Clinical Practice Guideline</i>¹ to: 1) ask all patients about tobacco use, 2) advise patients who use tobacco to quit, 3) assess willingness to make a quit attempt, 4) assist in a quit attempt, and 5) arrange for follow-up</p> <p>Proportion of healthcare facilities that serve population groups experiencing tobacco-related disparities that have implemented clinical protocols consistent with the <i>Clinical Practice Guideline</i>¹</p>
Similar existing indicator(s) from other goal areas	Goal 3 (2015) 3.3.a, “Proportion of healthcare systems that have fully implemented current evidence-based cessation guidelines.”
Rationale	Implementing the <i>Clinical Practice Guideline</i> ¹ supports integration of tobacco dependence treatment into the clinical workflow, and the increasing likelihood that health care providers will consistently screen and treat patients for tobacco use, thereby increasing rates of cessation. ¹⁻³
Applying health disparities framing	Research has shown that integration of cessation interventions remains suboptimal in certain healthcare systems, including mental health and substance use disorder treatment facilities. For example, less than half of mental health and substance use disorder treatment facilities screened for tobacco use and offered cessation treatment to patients. ⁴
Example data source(s)	National Mental Health Services Survey (N-MHSS), 2020 National Survey of Substance Abuse Treatment Services (N-SSATS), 2020
Example survey question(s)	<p>From N-MHSS (2020)</p> <p>Which of these services and practices are offered at this facility, at this location? MARK ALL THAT APPLY</p> <ul style="list-style-type: none"> • Assertive community treatment (ACT) • Intensive case management (ICM) • Case management (CM) • Court-ordered outpatient treatment • Chronic disease/illness management (CDM)

	<ul style="list-style-type: none"> • Illness management and recovery (IMR) • Integrated primary care services • Diet and exercise counseling • Family psychoeducation • Education services • Housing services • Supported housing • Psychosocial rehabilitation services • Vocational rehabilitation services • Supported employment • Therapeutic foster care • Legal advocacy • Psychiatric emergency walk-in services • Suicide prevention services • Consumer-run (peer support) services • Screening for tobacco use • Smoking/tobacco cessation counseling • Nicotine replacement therapy • Non-nicotine smoking/tobacco cessation medications (by prescription) • Other (Specify: _____) • None of these services and practices are <p>From N-SSATS (2020)</p> <p>Which of the following services are offered by this facility at this location, that is, the location listed on the front cover? MARK ALL THAT APPLY</p> <p>Assessment and Pre-Treatment Services</p> <ul style="list-style-type: none"> • Screening for substance abuse • Screening for mental disorders • Comprehensive substance abuse assessment or diagnosis • Comprehensive mental health assessment or diagnosis (for example, psychological or psychiatric evaluation and testing) • Screening for tobacco use • Outreach to persons in the community who may need treatment • Interim services for clients when immediate admission is not possible • Professional interventionist/educational consultant • We do not offer any of these assessment and pre-treatment services <p>Education and Counseling Services</p> <ul style="list-style-type: none"> • HIV or AIDS education, counseling, or support
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	<ul style="list-style-type: none"> • Hepatitis education, counseling, or support • Health education other than HIV/AIDS or Hepatitis • Substance abuse education • Smoking/tobacco cessation counseling • Individual counseling • Group counseling • Family counseling • Marital/couples counseling • Vocational training or educational support (for example, high school coursework, GED preparation, etc.) • We do not offer any of these education and counseling services <p>Pharmacotherapies</p> <ul style="list-style-type: none"> • Disulfiram (Antabuse®) • Naltrexone (oral) • Naltrexone (extended-release, injectable, for example, Vivitrol®) • Acamprosate (Campral®) • Nicotine replacement • Non-nicotine smoking/tobacco cessation medications (for example, bupropion, varenicline) • Medications for psychiatric disorders • Methadone • Buprenorphine with naloxone • Buprenorphine without naloxone • Buprenorphine sub-dermal implant (Probuphine®) • Buprenorphine (extended-release, injectable, for example, Sublocade®) • Medications for HIV treatment • Medications for Hepatitis C (HCV) treatment • Lofexidine • Clonidine • We do not offer any of these pharmacotherapy services
<p>Comments</p>	<p>Healthcare facilities that serve a large proportion of persons disproportionately affected by tobacco use include, but are not limited to, the following facilities:</p> <ul style="list-style-type: none"> • Federally Qualified Health Centers • Indian Health Service facilities • Mental Health Treatment facilities • Substance Use Treatment facilities • Veterans Health Administration facilities

	Tobacco control programs can use their state and community level data to identify healthcare facilities that serve population groups experiencing tobacco-related disparities. Moreover, tobacco control programs may want to expand on this indicator by assessing additional healthcare system changes consistent with the Million Hearts Tobacco Cessation Change Package that support cessation. ⁵
Rating	Not rated.
References	<ol style="list-style-type: none"> 1. Fiore MC, Jaén CR, Baker TB, et al. Treating tobacco use and dependence: 2008 update. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service; May 2008. 2. U.S. Department of Health and Human Services. Smoking cessation. a report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2020. 3. Land TG, Rigotti NA, Levy DE, Schilling T, Warner D, Li W. The effect of systematic clinical interventions with cigarette smokers on quit status and the rates of smoking-related primary care office visits. PLoS ONE. 2012;7(7):e41649. 4. Marynak K, VanFrank B, Tetlow S, Mahoney M, Phillips E, Jamal A, et al. Tobacco cessation interventions and smoke-free policies in mental health and substance abuse treatment facilities—United States, 2016. MMWR Morb Mortal Wkly Rep. 2018;67(18):519-23. 5. Centers for Disease Control and Prevention. Tobacco cessation change package. Atlanta, GA: Centers for Disease Control and Prevention, US Department of Health and Human Services; 2020.

Disparities in Health Care Provider Screening for Tobacco Use

Indicator number	4.3.b
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	3. Increased adoption of practices in health care systems to promote and support cessation in populations experiencing tobacco-related disparities
What to measure	<p>Proportion of the population who were asked by a health care professional about their tobacco use, overall and among population groups experiencing tobacco-related disparities</p> <p>Differences in the proportion of the population who were asked by a health care professional about their tobacco use, by population group characteristics</p>
Similar existing indicator(s) from other goal areas	Goal 3 (2015) 3.3.b, “Proportion of the population that has been asked by a health care professional about tobacco use.”
Rationale	Asking patients about their tobacco use is a recommendation from the <i>Clinical Practice Guideline</i> ¹ to reduce tobacco use and dependence. ^{1,2} An estimated 70 percent of people who smoke visit a physician each year. ² Evidence shows that when patients are asked about their tobacco use by a health care professional and when that response is documented, the rates and success of clinician cessation interventions increase. ¹⁻³
Applying health disparities framing	Studies have found that certain population groups, including Latino /Hispanic persons and American Indian/Alaska Native persons, persons who are underinsured or have public insurance, and persons with mental health or substance use disorders are less likely to be screened for tobacco use by a health care professional. ³⁻⁸
Example data source(s)	National Youth Tobacco Survey (NYTS), 2020 National Health Interview Survey (NHIS), 2017 Pregnancy Risk Assessment Monitoring System (PRAMS), 2016
Example survey question(s)	<p>From NYTS (2020)</p> <p>Think about when you have visited a doctor, dentist, or nurse in the past 12 months. During any of these visits, were you asked if you used any tobacco product?</p> <ul style="list-style-type: none"> • I did not see a doctor, dentist, or nurse during the past 12 months • Yes • No

	<p>Think about when you have visited a doctor, dentist, or nurse in the past 12 months. During any of these visits, were you asked if you used e-cigarettes?</p> <ul style="list-style-type: none"> • I did not see a doctor, dentist, or nurse during the past 12 months • Yes • No <p>From NHIS (2017)</p> <p>DURING THE PAST 12 MONTHS, has a doctor or other health professional talked to you about your smoking?</p> <ul style="list-style-type: none"> • Yes • No • Refused • Don't know <p>From PRAMS (2016)</p> <p>During any of your prenatal care visits, did a doctor, nurse, or other health care worker ask you any of the things listed below? For each item, check No if they did not ask you about it or Yes if they did.</p> <ul style="list-style-type: none"> • Tell me to take a vitamin with folic acid • Talk to me about maintaining a healthy weight • Talk to me about controlling any medical conditions such as diabetes or high blood pressure • Talk to me about my desire to have or not have children • Talk to me about using birth control to prevent pregnancy • Talk to me about how I could improve my health before a pregnancy • Talk to me about sexually transmitted infections such as chlamydia, gonorrhea, or syphilis • Ask me if I was smoking cigarettes • Ask me if someone was hurting me emotionally or physically • Ask me if I was feeling down or depressed • Ask me about the kind of work I do
Comments	<p>Tobacco control programs may consider measuring this indicator by insurance status, provider specialty, and healthcare facility type, including facilities that serve population groups disproportionately affected by tobacco use, including, but not limited to:</p> <ul style="list-style-type: none"> • Federally Qualified Health Centers • Indian Health Service facilities • Mental Health Treatment facilities • Substance Use Treatment facilities

	<ul style="list-style-type: none"> • Veterans Health Administration facilities <p>Tobacco control programs can use their state and community level data to identify healthcare facilities that serve population groups experiencing tobacco-related disparities.</p>																		
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Disparities in Health Care Provider Advice to Quit Tobacco Use ^{HP}

Indicator number	4.3.c
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	3. Increased adoption of practices in health care systems to promote and support cessation in populations experiencing tobacco-related disparities
What to measure	Proportion of people who use tobacco who were advised by a health care provider to quit tobacco use, overall, and among population groups experiencing tobacco-related disparities
	Differences in the proportion of people who use tobacco who were advised by a health care provider to quit tobacco use by population group characteristics
Similar existing indicator(s) from other goal areas	Goal 3 (2015) 3.3.c, “Proportion of tobacco users who have been advised to quit tobacco use by a health care professional.”
Rationale	Advising patients to quit smoking is a recommendation from <i>Clinical Practice Guideline</i> . ¹ Research shows that health care professional advice to quit has a positive effect on increasing quit attempts and tobacco cessation rates. ¹⁻⁵ However, over 40 percent of adults who smoke do not receive advice to quit from a healthcare provider. ¹
Applying health disparities framing	Studies have shown that certain population groups, including young adults, American Indian/Alaska Native persons, Asian Americans/Pacific Islander persons, Latino/Hispanic persons, African American or Black persons, persons with low educational attainment, persons with low income, persons who are uninsured, veterans, and persons residing in the Southern and Western geographic areas of the U.S., are less likely to receive advice to quit from a health care professional. ^{2,6-13}
Example data source(s)	National Youth Tobacco Survey (NYTS), 2020 National Health Interview Survey Cancer Control Supplement (NHIS-CCS), 2015 Tobacco Use Supplement to the Current Population Survey (TUS-CPS), 2018-2019 Pregnancy Risk Assessment Monitoring System (PRAMS), 2016
Example survey question(s)	From NYTS (2020) Think about when you have visited a doctor, dentist, or nurse in the past 12 months. During any of these visits, were you given advice not to use any tobacco products?

	<ul style="list-style-type: none"> • I did not see a doctor, dentist, or nurse during the past 12 months • Yes • No <p>Think about when you have visited a doctor, dentist, or nurse in the past 12 months. During any of these visits, were you given advice not to use e-cigarette?</p> <ul style="list-style-type: none"> • I did not see a doctor, dentist, or nurse during the past 12 months • Yes • No <p>From NHIS-CCS (2015)</p> <p>In the past 12 months, has a medical doctor, dentist, or other health professional ADVISED you to quit smoking, or to quit using other kinds of tobacco?</p> <ul style="list-style-type: none"> • Yes • No • Don't know • Refused <p>From TUS-CPS (2018-2019)</p> <p>During the PAST 12 MONTHS, did any medical doctor ADVISE you to stop smoking?</p> <ul style="list-style-type: none"> • Yes • No <p>From PRAMS (2016)</p> <p>During any of your prenatal care visits, did a doctor, nurse, or other health care worker advise you to stop smoking?</p> <ul style="list-style-type: none"> • Yes • No • I had quit smoking before my first prenatal care visit
Comments	<p>Tobacco control programs may consider measuring this indicator by insurance status, provider specialty, and healthcare facility type, including facilities that serve population groups disproportionately affected by tobacco use, including, but not limited to:</p> <ul style="list-style-type: none"> • Federally Qualified Health Centers • Indian Health Service facilities • Mental Health Treatment facilities • Substance Use Treatment facilities • Veterans Health Administration facilities

	<p>Tobacco control programs can use their state and community level data to identify healthcare facilities that serve population groups experiencing tobacco-related disparities.</p> <p>This indicator is related to Healthy People 2030 objective TU-12: Increase the proportion of adults who smoke who get advice to quit from a health care provider.</p>												
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<p>References</p>	<ol style="list-style-type: none"> 1. Fiore MC, Jaén CR, Baker TB, et al. Treating tobacco use and dependence: 2008 update. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service; May 2008. 2. U.S. Department of Health and Human Services. Smoking cessation. a report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2020. 3. Stead LF, Buitrago D, Preciado N, Sanchez G, Hartmann-Boyce J, Lancaster T. Physician advice for smoking cessation. Cochrane Database Syst Rev. 2013(5):CD000165. 4. Aveyard P, Begh R, Parsons A, West R. Brief opportunistic smoking cessation interventions: a systematic review and meta-analysis to compare advice to quit and offer of assistance. Addiction. 2012 Jun;107(6):1066-73. 5. Kruger J, O’Halloran A, Rosenthal AC, Babb SD, Fiore MC. Receipt of evidence-based brief cessation interventions by health professionals and use of cessation assisted treatments among current adult cigarette-only smokers: National Adult Tobacco Survey, 2009–2010. BMC Public Health. 2016 Dec;16(1):141. 6. U.S. National Cancer Institute. A socioecological approach to addressing tobacco-related health disparities. National Cancer Institute Tobacco Control Monograph 22. NIH Publication No. 17-CA-8035A. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; 2017. 												

	<ol style="list-style-type: none"> 7. Tan AS, Young-Wolff KC, Carter-Harris L, Salloum RG, Banerjee SC. Disparities in the receipt of tobacco treatment counseling within the US context of the Affordable Care Act and meaningful use implementation. <i>Nicotine Tob Res.</i> 2018 Nov 15;20(12):1474-80. 8. Landrine H, Corral I, Campbell KM. Racial disparities in healthcare provider advice to quit smoking. <i>Prev Med Rep.</i> 2018 Jun 1;10:172-5. 9. Tran S-TT, Rosenberg KD, Carlson NE. Racial/ethnic disparities in the receipt of smoking cessation interventions during prenatal care. <i>Matern Child Health J.</i> 2010;14(6):901-9. 10. Fagan P, Moolchan ET, Lawrence D, Fernander A, Ponder PK. Identifying health disparities across the tobacco continuum. <i>Addiction.</i> 2007;102:5-29. 11. Hammett PJ, Fu SS, Burgess DJ, et al. Treatment barriers among younger and older socioeconomically disadvantaged smokers. <i>Am J Manag Care.</i> 2017;23(9):e295-e302. 12. Duffy SA, Kilbourne AM, Austin KL, et al. Risk of smoking and receipt of cessation services among veterans with mental disorders. <i>Psychiatr Serv.</i> 2012;63(4):325-32. 13. Babb S, Malarcher A, Schauer G, Asman K, Jamal A. Quitting Smoking Among Adults — United States, 2000–2015. <i>MMWR Morb Mortal Wkly Rep</i> 2017;65:1457–1464.
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Disparities in Health Care Providers' Assistance in Quitting Tobacco Use

Indicator number	4.3.d
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	3. Increased health systems changes and coverage that promote and support cessation in populations experiencing tobacco-related disparities
What to measure	Proportion of tobacco users who were assisted by a health care provider to quit tobacco use, overall and among population groups experiencing tobacco-related disparities
	Differences in the proportion of tobacco users who were assisted by a health care provider to quit, by population group characteristics
Similar existing indicator(s) from other goal areas	Goal 3 (2015) 3.3.e, "Proportion of tobacco users who have been assisted in quitting tobacco use by a health care professional."
Rationale	Assisting patients in quitting smoking by offering evidence-based cessation treatment is a recommendation from the <i>Clinical Practice Guideline</i> . ¹ There is strong evidence that health care professionals' assistance in cessation leads to improved quit rates. ¹⁻⁵
Applying health disparities framing	Studies have shown that certain population groups, including young adults and older adults, American Indian/Alaska Native persons, Asian American/Pacific Islander persons, Latino/Hispanic persons, African American or Black persons, non-English speakers, persons with low education, persons with low income, persons who are uninsured, Medicaid enrollees, persons with mental health conditions, veterans, and persons residing in rural areas are less likely to receive assistance to quit from a health care professional. ⁶⁻¹⁵
Example data source(s)	National Health Interview Survey (NHIS), 2020 California Adult Tobacco Survey (CATS), 2018 Pregnancy Risk Assessment Monitoring System (PRAMS), 2016 Nationwide Adult Medicaid Consumer Assessment of Healthcare Providers and Systems (NAM CAHPS), 2014-2015
Example survey question(s)	From NHIS (2020) In the past 12 months, has a doctor, dentist, or other health professional ADVISED you about ways to stop smoking or prescribed medication to help you quit? <ul style="list-style-type: none">• Yes• No

	<ul style="list-style-type: none"> • Don't know • Refused <p>From CATS (2018)</p> <p>In the last 12 months did your doctor or other health care provider do any of the following...</p> <ul style="list-style-type: none"> • Advise you to stop smoking? (Note, this response can be used to assess indicator 4.3.c) • Suggest that you set a specific date to quit smoking? • Prescribe anything to help you to quit smoking? • Suggest that you receive any other assistance in quitting? • Other assistance (please specify) • No assistance <p>From PRAMS (2016)</p> <p>Listed below are some things about quitting smoking that a doctor, nurse, or other health care worker might have done during any of your prenatal care visits. For each thing, check No if it was not done or Yes if it was.</p> <ul style="list-style-type: none"> • Spend time with me discussing how to quit smoking • Suggest that I set a specific date to stop smoking • Suggest I attend a class or program to stop smoking • Provide me with booklets, videos, or other materials to help me quit smoking on my own • Refer me to counseling for help with quitting • Ask if a family member or friend would support my decision to quit • Refer me to a national or state quitline • Recommend using nicotine gum • Recommend using a nicotine patch • Prescribe a nicotine nasal spray or nicotine inhaler • Prescribe a pill like Zyban® (also known as Wellbutrin® or Bupropion®) to help me quit • Prescribe a pill like Chantix® (also known as Varenicline) to help me quit <p>From NAM CAHPS (2014-2015)</p> <p>In the last 6 months, how often was medication recommended or discussed by a doctor or health provider to assist you with quitting smoking or using tobacco?</p> <ul style="list-style-type: none"> • Never • Sometimes • Usually • Always
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	<ul style="list-style-type: none"> • Appropriately skipped • Multiple mark • Missing <p>In the last 6 months, how often did your doctor or health provider discuss or provide methods and strategies other than medication to assist you with quitting smoking or using tobacco?</p> <ul style="list-style-type: none"> • Never • Sometimes • Usually • Always • Appropriately skipped • Multiple mark • Missing 												
<p>Comments</p>	<p>Tobacco control programs may consider measuring this indicator by insurance status, provider specialty, and healthcare facility type, including facilities that serve population groups disproportionately affected by tobacco use such as:</p> <ul style="list-style-type: none"> • Federally Qualified Health Centers • Indian Health Service facilities • Mental Health Treatment facilities • Substance Use Treatment facilities • Veterans Health Administration facilities 												
<p>Rating</p>	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 15%;">Overall quality low ↔ high</th> <th style="width: 15%;">Resources needed</th> <th style="width: 15%;">Strength of evaluation evidence</th> <th style="width: 15%;">Utility</th> <th style="width: 15%;">Face validity</th> <th style="width: 15%;">Accepted practice</th> </tr> </thead> <tbody> <tr> <td style="background-color: black; color: black;">██████████</td> <td>\$</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> </tr> </tbody> </table> <p style="text-align: center;">← ○ ● ● → better</p>	Overall quality low ↔ high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice	██████████	\$	●	●	●	●
Overall quality low ↔ high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice								
██████████	\$	●	●	●	●								
<p>References</p>	<ol style="list-style-type: none"> 1. U.S. Department of Health and Human Services. Smoking cessation. A report of the surgeon general. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2020. 2. Aveyard P, Begh R, Parsons A, West R. Brief opportunistic smoking cessation interventions: a systematic review and meta-analysis to compare advice to quit and offer of assistance. <i>Addiction</i>. 2012 Jun;107(6):1066-73. 3. Park ER, Gareen IF, Japuntich S, et al. Primary care provider-delivered smoking cessation interventions and smoking cessation among participants in the National Lung Screening Trial. <i>JAMA Intern Med</i>. 2015 Sep 1;175(9):1509-16. 												

	<ol style="list-style-type: none"> 4. Kruger J, O'Halloran A, Rosenthal AC, Babb SD, Fiore MC. Receipt of evidence-based brief cessation interventions by health professionals and use of cessation assisted treatments among current adult cigarette-only smokers: National Adult Tobacco Survey, 2009–2010. <i>BMC Public Health</i>. 2016 Dec;16(1):141. 5. Fiore MC, Jaén CR, Baker TB, et al. Treating tobacco use and dependence: 2008 update. <i>Clinical Practice Guideline</i>. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service; May 2008. 6. U.S. National Cancer Institute. A socioecological approach to addressing tobacco related health disparities. <i>National Cancer Institute Tobacco Control Monograph 22</i>. NIH Publication No. 17-CA-8035A. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; 2017. 7. Vijayaraghavan M, Yuan P, Gregorich S, et al. Disparities in receipt of 5As for smoking cessation in diverse primary care and HIV clinics. <i>Pre Med Rep</i>. 2017 Jun 1;6:80-7. 8. Sardana M, Tang Y, Magnani JW, et al. Provider-level variation in smoking cessation assistance provided in the cardiology clinics: insights from the NCDR PINNACLE Registry. <i>Journal Am Heart Assoc</i>. 2019 Jul 2;8(13):e011307. 9. Gubner NR, Williams DD, Chen E, et al. Recent cessation attempts and receipt of cessation services among a diverse primary care population—A mixed methods study. <i>Prev Med Rep</i>. 2019 Sep 1;15:100907. 10. Bailey SR, Heintzman J, Jacob RL, Puro J, Marino M. Disparities in smoking cessation assistance in US primary care clinics. <i>American J Public Health</i>. 2018 Aug;108(8):1082-90. 11. Melzer AC, Feemster LC, Collins MP, Au DH. Predictors of pharmacotherapy for tobacco use among veterans admitted for COPD: the role of disparities and tobacco control processes. <i>J Gen Int Med</i>. 2016 Jun 1;31(6):623-9. 12. Tran S-TT, Rosenberg KD, Carlson NE. Racial/ethnic disparities in the receipt of smoking cessation interventions during prenatal care. <i>Matern Child Health J</i>. 2010;14(6):901-9. 13. Solberg LI, Parker ED, Foldes SS, Walker PF. Disparities in tobacco cessation medication orders and fills among special populations. <i>Nicotine Tob Res</i>. 2009;12(2):144-51. 14. Browning KK, Ferketich AK, Salsberry PJ, Wewers ME. Socioeconomic disparity in provider-delivered assistance to quit smoking. <i>Nicotine Tob Res</i>. 2008;10(1):55-61. 15. Duffy SA, Kilbourne AM, Austin KL, et al. Risk of smoking and receipt of cessation services among veterans with mental disorders. <i>Psychiatr Serv</i>. 2012;63(4):325-32.
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Proportion of Behavioral Health Treatment Facilities that Offer Evidence-Based Cessation Treatment ^{NR}

Indicator number	4.3.e
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	3. Increased health systems changes and coverage that promote and support cessation in populations experiencing tobacco-related disparities
What to measure	Proportion of mental health treatment facilities that offer evidence-based cessation treatment
	Proportion of substance use disorder treatment facilities that offer evidence-based cessation treatment
Similar existing indicator(s) from other goal areas	Not applicable.
Rationale	Many people with mental health conditions and/or substance use disorders (i.e., behavioral health conditions) who smoke want to and can quit smoking, but may require more intensive treatment to successfully quit. ¹⁻⁵ Integration of evidence-based cessation treatment into routine clinical practice in behavioral health facilities can improve tobacco-related outcomes among individuals with mental health and substance use disorders. ^{4,7}
Applying health disparities framing	Persons with mental health conditions and/or substance use disorders are more than twice as likely to smoke cigarettes as persons without such disorders, and are more likely to die from smoking-related illness than from their behavioral health conditions. ^{1,3} However, less than half of mental health and substance use disorder treatment facilities in the U.S. report offering evidence-based cessation treatment to patients. ⁵
Example data source(s)	National Mental Health Services Survey (N-MHSS), 2020 National Survey of Substance Abuse Treatment Services (N-SSATS), 2020


<p>Example survey question(s)</p>	<p>From N-MHSS (2020)</p> <p>Which of these services and practices are offered at this facility, at this location? MARK ALL THAT APPLY</p> <ul style="list-style-type: none"> • Assertive community treatment (ACT) • Intensive case management (ICM) • Case management (CM) • Court-ordered outpatient treatment • Chronic disease/illness management (CDM) • Illness management and recovery (IMR) • Integrated primary care services • Diet and exercise counseling • Family psychoeducation • Education services • Housing services • Supported housing • Psychosocial rehabilitation services • Vocational rehabilitation services • Supported employment • Therapeutic foster care • Legal advocacy • Psychiatric emergency walk-in services • Suicide prevention services • Consumer-run (peer support) services • Screening for tobacco use • Smoking/tobacco cessation counseling • Nicotine replacement therapy • Non-nicotine smoking/tobacco cessation medications (by prescription) • Other (Specify: ____) • None of these services and practices are <p>From N-SSATS (2020)</p> <p>Which of the following services are offered by this facility at this location, that is, the location listed on the front cover? MARK ALL THAT APPLY</p> <p>Assessment and Pre-Treatment Services</p> <ul style="list-style-type: none"> • Screening for substance abuse • Screening for mental disorders • Comprehensive substance abuse assessment or diagnosis • Comprehensive mental health assessment or diagnosis (for example, psychological or psychiatric evaluation and testing)
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	<ul style="list-style-type: none"> • Screening for tobacco use • Outreach to persons in the community who may need treatment • Interim services for clients when immediate admission is not possible • Professional interventionist/educational consultant • We do not offer any of these assessment and pre-treatment services <p>Education and Counseling Services</p> <ul style="list-style-type: none"> • HIV or AIDS education, counseling, or support • Hepatitis education, counseling, or support • Health education other than HIV/AIDS or Hepatitis • Substance abuse education • Smoking/tobacco cessation counseling • Individual counseling • Group counseling • Family counseling • Marital/couples counseling • Vocational training or educational support (for example, high school coursework, GED preparation, etc.) • We do not offer any of these education and counseling services <p>Pharmacotherapies</p> <ul style="list-style-type: none"> • Disulfiram (Antabuse®) • Naltrexone (oral) • Naltrexone (extended-release, injectable, for example, Vivitrol®) • Acamprosate (Campral®) • Nicotine replacement • Non-nicotine smoking/tobacco cessation medications (for example, bupropion, varenicline) • Medications for psychiatric disorders • Methadone • Buprenorphine with naloxone • Buprenorphine without naloxone • Buprenorphine sub-dermal implant (Probuphine®) • Buprenorphine (extended-release, injectable, for example, Sublocade®) • Medications for HIV treatment • Medications for Hepatitis C (HCV) treatment • Lofexidine • Clonidine • We do not offer any of these pharmacotherapy services
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Comments	Tobacco control programs may want to assess this indicator by facility type (i.e., inpatient outpatient, residential).
Rating	Not rated.
References	<ol style="list-style-type: none"> 1. Prochaska JJ, Das S, Young-Wolff KC. Smoking, mental illness, and public health. <i>Annu Rev Public Health</i> 2017;38:165–85. 2. Cornelius ME, Wang TW, Jamal A, Loretan CG, Neff LJ. Tobacco Product Use Among Adults — United States, 2019. <i>MMWR Morb Mortal Wkly Rep</i> 2020;69:1736–1742. 3. Centers for Disease Control and Prevention. Vital signs: current cigarette smoking among adults aged ≥18 years with mental illness—United States, 2009–2011. <i>MMWR Morb Mortal Wkly Rep</i>. 2013;62:81–7. 4. Compton W. The need to incorporate smoking cessation into behavioral health treatment. <i>Am J Addict</i> 2018;27:42–3. 5. Marynak K, VanFrank B, Tetlow S, et al. Tobacco Cessation Interventions and Smoke-Free Policies in Mental Health and Substance Abuse Treatment Facilities — United States, 2016. <i>MMWR Morb Mortal Wkly Rep</i>. 2018;67:519–523. 6. U.S. Department of Health and Human Services. Smoking cessation. a report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2020. 7. Fiore MC, Jaén CR, Baker TB, et al. Treating tobacco use and dependence: 2008 update. <i>Clinical Practice Guideline</i>. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service; May 2008.

Behavioral Health Treatment Facilities with Tobacco-Free Policies


Indicator number	4.3.f
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	3. Increased health systems changes and coverage that promote and support cessation in populations experiencing tobacco-related disparities
What to measure	Proportion of mental health facilities that prohibit smoking in all indoor and outdoor locations
	Proportion of substance use disorder treatment facilities that prohibit smoking in all indoor and outdoor locations
Similar existing indicator(s) from other goal areas	Not applicable.
Rationale	Tobacco-free policies prohibiting tobacco use on all grounds of healthcare facilities can provide a supportive environment for quitting, prevent relapses, and reduce exposure to secondhand smoke. ¹⁻³
Applying health disparities framing	Persons with mental health conditions and/or substance use disorders are more than twice as likely to smoke cigarettes as persons without such disorders. ³⁻⁴ Creating a supportive, tobacco-free environment in facilities that serve these population groups can promote and support quitting. However, less than half of mental health and substance use disorder treatment facilities in the U.S. prohibit smoking in all indoor and outdoor locations. ⁵
Example data source(s)	National Mental Health Services Survey (N-MHSS), 2020 National Survey of Substance Abuse Treatment Services (N-SSATS), 2020 American Nonsmokers' Rights (ANR) Foundation, 100% Smokefree U.S. Hospital Campuses and Psychiatric Facilities, 2019
Example survey question(s)	From N-MHSS (2020) and N-SSATS (2020) Which of the following statements BEST describes this facility's smoking policy for clients? <ul style="list-style-type: none"> • Not permitted to smoke anywhere outside or within any building • Permitted in designated outdoor area(s) • Permitted anywhere outside • Permitted in designated indoor area(s) • Permitted anywhere inside • Permitted anywhere without restriction

<p>Comments</p>	<p>Tobacco control programs can consider assessing this indicator in other healthcare facilities that serve population groups disproportionately affected by tobacco use in their state and/or community. Moreover, tobacco control programs can consider examining provider support for tobacco cessation in behavioral health facilities when assessing this indicator.</p>					
<p>Rating</p>	<p>Overall quality low ↔ high</p> 	<p>Resources needed</p> <p>\$\$</p>	<p>Strength of evaluation evidence</p> <p>●</p>	<p>Utility</p> <p>●</p>	<p>Face validity</p> <p>●</p>	<p>Accepted practice</p> <p>●</p>
<p>← ○ ● ● → better</p>						
<p>References</p>	<ol style="list-style-type: none"> 1. Fee E, Brown TM. Hospital smoking bans and their impact. <i>Am J Public Health.</i> 2004;94(2):185. 2. Williams SC, Hafner JM, Morton DJ, Holm AL, Milberger SM, Koss RG, et al. The adoption of smoke-free hospital campuses in the United States. <i>Tob Control.</i> 2009;18(6):451-8. 3. Prochaska JJ, Das S, Young-Wolff KC. Smoking, Mental Illness, and Public Health. <i>Annu Rev Public Health.</i> 2017;38:165–185. 4. CDC. Vital signs: current cigarette smoking among adults aged ≥18 years with mental illness—United States, 2009–2011. <i>MMWR Morb Mortal Wkly Rep.</i> 2013;62:81–7. 5. Marynak K, VanFrank B, Tetlow S, Mahoney M, Phillips E, Jamal A, et al. Tobacco cessation interventions and smoke-free policies in mental health and substance abuse treatment facilities—United States, 2016. <i>MMWR Morb Mortal Wkly Rep.</i> 2018;67(18):519-23. 					

Disparities in Access to Comprehensive Evidence-Based Cessation Services ^{HP}

Indicator number	4.3.g
Goal Area	4. Identify and eliminate tobacco-related disparities
Outcome	3. Increased health systems changes and coverage that promote and support cessation in populations experiencing tobacco-related disparities
What to measure	Proportion of insured population whose public and/or private insurance covers all recommended evidence-based cessation treatments, overall, and among population groups experiencing tobacco-related disparities
	Differences in insured population whose public and/or private insurance covers all recommended evidence-based cessation treatments by population group characteristics
Similar existing indicator(s) from other goal areas	Goal 3 (2015), 3.2.a “Proportion of the insured population with access to comprehensive cessation services.”
Rationale	Comprehensive coverage of evidence-based cessation treatments, including counseling and medications, increases access to and utilization of effective cessation treatment services, as well as successful quit attempts. ¹⁻³
Applying health disparities framing	Studies have found that certain populations are less likely to have access to comprehensive coverage, including persons with low educational attainment, persons with low income, Medicaid enrollees, and persons who are underemployed or unemployed. ⁴⁻⁸
Example data source(s)	National Health Interview Survey (NHIS), 2017 American Lung Association (ALA), State Cessation Coverage
Example survey question(s)	Adapted from NHIS Access to Health Care and Utilization Questions (2017) During the PAST 12 MONTHS, was there any time when you needed to get any of the following, but didn’t get it because you couldn’t afford it: (for each, select: Yes, No, Don’t know, or Refused) <ul style="list-style-type: none"> • A nicotine patch? • A prescription pill, such as Zyban, Bupropion, or Wellbutrin? • A prescription pill called Chantix or Varenicline? • A telephone help line or quit line? • A stop smoking clinic, class, or support group? • One-on-one counseling?

	<ul style="list-style-type: none"> • A nicotine gum or lozenge? • A nicotine containing nasal spray or inhaler? <p>During the PAST 12 MONTHS, were any of the following true for tobacco cessation treatments or prescriptions: (for each, select: Yes, No, Don't know, or Refused)</p> <ul style="list-style-type: none"> • You skipped medication doses to save money • You took less medicine to save money • You delayed filling a prescription to save money • You asked your doctor for a lower cost medication to save money • You bought prescription drugs from another country to save money • You used alternative therapies to save money 												
<p>Comments</p>	<p>Comprehensive cessation services are currently defined as coverage of all evidence-based treatments, which includes all FDA-approved cessation medications (nicotine replacement therapy (NRT) gum, NRT patch, NRT nasal spray, NRT lozenge, NRT inhaler, varenicline, and bupropion), group counseling, and individual counseling. Telephone counseling is evidence-based as well, but coverage of telephone counseling can be more difficult to define. This definition may change over time as evidence emerges on new treatments.</p> <p>To increase use, coverage of cessation services should be without barriers. Health insurance-related barriers include: provisions in coverage that pose barriers to accessing cessation treatments, such as co-payments, requirements for prior authorization, and limitations on the number and duration of treatments, which may reduce use of these treatments and therefore reduce cessation.¹⁻² For additional guidance on assessing barriers to cessation coverage, refer to <i>Promoting Quitting among Adults and Young People: Outcome Indicators for Comprehensive Tobacco Control Programs— 2015</i>,⁶ Indicator 3.2.b, “Proportion of the insured population without health insurance barriers to accessing evidence-based cessation treatments.”</p> <p>This indicator is related to Healthy People 2030 objective TU-16: Increase Medicaid coverage of evidence-based treatment to help people quit using tobacco.</p>												
<p>Rating</p>	<table border="0" style="width: 100%;"> <tr> <td style="text-align: center;">Overall quality</td> <td style="text-align: center;">Resources needed</td> <td style="text-align: center;">Strength of evaluation evidence</td> <td style="text-align: center;">Utility</td> <td style="text-align: center;">Face validity</td> <td style="text-align: center;">Accepted practice</td> </tr> <tr> <td style="text-align: center;">low ↔ high</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Overall quality	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice	low ↔ high					
Overall quality	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice								
low ↔ high													

		\$\$ ● ● ● ●
← ○ ● ● → better		
References	<ol style="list-style-type: none"> 1. U.S. Department of Health and Human Services. Smoking cessation. a report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2020. 2. Kahende J, Malarcher A, England L, et al. Utilization of smoking cessation medication benefits among medicaid fee-for-service enrollees 1999-2008. PLoS One. 2017;12(2):e0170381. Published 2017 Feb 16. doi:10.1371/journal.pone.0170381 3. Ku L, Brantley E, Bysshe T, Steinmetz E, Bruen BK. How Medicaid and Other Public Policies Affect Use of Tobacco Cessation Therapy, United States, 2010–2014. Prev Chronic Dis 2016;13:160234 4. DiGiulio A, Jump Z, Babb S, et al. State Medicaid coverage for tobacco cessation treatments and barriers to accessing treatments — United States, 2008–2018. MMWR Morb Mortal Wkly Rep. 2020;69:155–160. 5. Zhang L, Babb S, Schauer G, Asman K, Xu X, Malarcher A. Cessation behaviors and treatment use among US smokers by insurance status, 2000–2015. Am J Prev Med. 2019 Oct 1;57(4):478-86. 6. Land T, Warner D, Paskowsky M, et al. Medicaid coverage for tobacco dependence treatments in Massachusetts and associated decreases in smoking prevalence. PLoS One. 2010 Mar 18;5(3):e9770. 7. Duffy SA, Kilbourne AM, Austin KL, et al. Risk of smoking and receipt of cessation services among veterans with mental disorders. Psychiatr Serv. 2012 Apr 1;63(4):325-32. 8. Centers for Disease Control and Prevention. Promoting quitting among adults and young people: outcome indicators for comprehensive tobacco control programs—2015. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2015. 	

Outcome 4: Decreased tobacco industry and environmental influences that contribute to tobacco-related disparities

Environmental and community factors have a strong influence on tobacco-related attitudes, beliefs, and behaviors.¹⁻⁷ Features in the environment, such as a high concentration of tobacco retailers and exposure to tobacco marketing, promote tobacco use, increase the likelihood of initiation and sustained use, and reduce cessation.¹⁻⁷ Studies have shown that tobacco retailers are often more concentrated in urban, racial/ethnic minority, and low-income communities.^{1,2,8-10} Increased density of tobacco retailer stores increases availability and accessibility of tobacco products and exposure to point-of-sale marketing and promotions. Moreover, evidence demonstrates that the greater the number of tobacco retailers surrounding schools, the more likely youth who smoke are to purchase their own cigarettes.^{5,11} Because of their effect on tobacco use, reducing retail tobacco outlets in communities can foster social norms that discourage and reduce tobacco use.

Numerous studies have documented the tobacco industry's marketing strategies in target communities with a high proportion of racial/ethnic minorities, persons with low educational attainment, and persons with low income.^{2,6,8-19} These industry marketing tactics have contributed to tobacco-related disparities in many populations disproportionately affected by tobacco use, including youth, African Americans or Black persons, American Indian/Alaska Native persons, and LGBTQ+ persons.^{2,6,8-19} Point-of-sale tobacco advertising is often more prevalent in stores near schools and in minority and low-income neighborhoods.^{2,4,14,16,20} Moreover, research has shown that the tobacco industry uses strategic, tailored approaches to reach their target audiences through a variety of channels, including through tobacco imagery on television, print media (e.g., magazines), point-of-sale advertising, and sponsorship.^{2,6} For example, the tobacco industry advertises in publications and sponsors community events of target population groups.² Evidence also indicates tailored strategies are used to market menthol products to urban, low income, and predominantly African American or Black communities.¹⁷⁻¹⁹

The tobacco industry also spends billions of dollars each year on marketing, much of which is spent on price discounts.²¹ The industry offers retailers volume discounts, price promotions, in-store branded displays, and payment for prime shelf spaces to promote use of tobacco products in the retail environment. In return for financial incentives, retailers enter into contractual agreements with tobacco companies to ensure high visibility and accessibility of their products to stimulate impulse purchases.^{2,22,23} The tobacco industry also engages in a variety of price-related marketing strategies to control prices that are charged to consumers. These strategies include distributing coupons via print ads, at the point of sale, and via direct mail, as well as offering multipack discounts.² Strategies to reduce prices are especially appealing to youth and persons with low income.^{2,24} Research has shown that exposure to tobacco product promotions, such as tobacco product discounts and promotions, are higher in communities with a high proportion of racial/ethnic minorities and persons with low income.^{2,16}

Policies and environmental changes that reduce the tobacco industry's influence can have a strong impact on reducing tobacco use overall, and among populations experiencing tobacco-related disparities. Monitoring indicators under this outcome can help determine the extent to which tobacco control policies and interventions effect community and environmental factors that are known to have a strong influence on tobacco-related disparities.

While not included in this guide, tobacco control programs may want to assess indicators related to social influences (e.g., tobacco product use among peers, living with someone who uses a tobacco product) as they have shown to influence tobacco use and affect exposure to secondhand smoke.² Some research has shown that these factors can influence tobacco-related disparities; however, the evidence is conflicting and seems to vary by population group characteristics.²

The following indicators are associated with this outcome:

- 4.4.a:** Disparities in density of stores selling tobacco
- 4.4.b:** Disparities in tobacco product sales to minors
- 4.4.c:** Disparities in youth and young adult access to tobacco products
- 4.4.d:** Disparities in the amount and type of retail tobacco advertising
- 4.4.e:** Disparities in exposure to tobacco marketing ^{HP}
- 4.4.f:** Consumer-focused industry promotions
- 4.4.g:** Disparities in exposure to tobacco discounts and promotions

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Decreased Tobacco Industry and Environmental Influences That Contribute to Tobacco-Related Disparities

Indicator Rating

← ○ ● ● → better

Number	Indicator	Overall Quality low ↔ high	Resources Needed	Strength of Evaluation Evidence	Utility	Face Validity	Accepted Practice
4.4.a	Disparities in density of stores selling tobacco		\$\$	●	●	●	●
4.4.b	Disparities in tobacco product sales to minors		\$\$	●	●	●	●
4.4.c	Disparities in youth and young adult access to tobacco products		\$\$	●	●	●	●
4.4.d	Disparities in the amount and type of retail tobacco advertising		\$\$	●	●	●	●
4.4.e	Disparities in exposure to tobacco marketing ^{HP}		\$\$	●	●	●	●
4.4.f	Consumer-focused industry promotions		\$\$	●	●	●	●
4.4.g	Disparities in exposure to tobacco discounts and promotions		\$\$	●	●	●	●

\$ Dollar signs denote a qualitative rating of the resources (funds, time, and effort) needed to collect and analyze data using the most commonly available data source. The more dollar signs (maximum four), the more resources needed. Dollar signs do not represent a specific amount or range of costs but are instead a relative measure of expert reviewers' ratings regarding resources required to collect and analyze data to measure the indicator.

Disparities in Density of Stores Selling Tobacco

Indicator number	4.4.a
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	4. Decreased tobacco industry and environmental influences that contribute to tobacco-related disparities
What to measure	The number of retailers selling tobacco products within a given geographic area or population size, and in jurisdictions and/or communities disproportionately burdened by tobacco product use
	Differences in the number of retailers selling tobacco products within a given geographic area or population size by community population group characteristics
Similar existing indicator(s) from other goal areas	Goal 1 (2014) 1.6.a, "Density of stores selling tobacco"
Rationale	Research has shown that the density of tobacco retailers influences smoking behaviors for youth and adults. ¹⁻⁵ Persons who live in areas with a high density of tobacco retailers are at an increased risk for smoking initiation, tobacco use, and reduced abstinence. ¹⁻⁶
Applying health disparities framing	Studies have found that stores selling tobacco products are more concentrated in communities with a high proportion of racial/ethnic minorities, including African American or Black persons and Latino/Hispanic persons, persons with low educational attainment, and persons with low income, as well as in urban communities. ^{1,5-8}
Example data source(s)	North American Industry Classification Systems (NAICS)
Example survey question(s)	Not applicable.
Comments	Density may be determined by calculating the number of tobacco retailers per population or the number of retailers per land area/street segment. The most appropriate method should be determined based on the specific geographic circumstances.
	This measure is best measured by reviewing tobacco retail licensing data and tracking location (e.g., geographic information system information) of retail outlets in geographic areas, including which types of tobacco

	<p>products are being sold at the retail outlets and the characteristics of those geographic areas.</p> <p>The NAICS codes for all businesses likely to sell tobacco products based on their primary classification code, including supermarkets and other grocery stores, convenience stores, beer/wine/liquor stores, pharmacies and drug stores, gas stations with convenience stores, and other gasoline stations and tobacco stores. Ideally, this indicator should be based on license data rather than NAICS codes and business rights.</p> <p>Tobacco control programs may want to assess this indicator across jurisdictions and/or communities and among communities disproportionately affected by tobacco use to examine the extent to which these differences may contribute to tobacco-related disparities.</p>																		
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Disparities in Tobacco Product Sales to Youth and Young Adults

Indicator number	4.4.b
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	4. Decreased tobacco industry and environmental influences that contribute to tobacco-related disparities
What to measure	Proportion of tobacco product retailers who are not in compliance with policies prohibiting sales to persons under 21 years of age, overall, and among jurisdictions and/or communities with disproportionately high youth and young adult tobacco product use and with heavily concentrated youth-oriented facilities (e.g., schools)
	Differences in the proportion of tobacco product retailers who are not in compliance with policies prohibiting sales to persons under 21 years of age by community population group characteristics
Similar existing indicator(s) from other goal areas	Not applicable.
Rationale	Reducing young people's ability to purchase tobacco products is an important component of a comprehensive approach to prevent youth smoking. ¹ The recent increases in youth tobacco use underscores the importance of preventing youth access to tobacco products to reduce youth experimentation and initiation. ² In 2018, only one in four U.S. youth who attempted to buy were refused sale. ³ Research suggests that pockets of retailer noncompliance may contribute to inequities in tobacco retailer sales. ⁴
Applying health disparities framing	Some evidence suggests that tobacco retailers in communities that share certain demographic characteristics, including but not limited to, those with high proportions of racial/ethnic minorities, including American Indian/Alaska Native persons, Latino/Hispanic persons, and African American or Black persons, as well as persons with low income, are more likely to sell tobacco products to minors. ⁴⁻⁸
Example data source(s)	FDA, Compliance Check Inspection of Tobacco Product Retailers
Example survey question(s)	Not applicable. This indicator is best measured by tracking and monitoring national, state, and local agencies' inspection and violation reports.
Comments	This indicator may be best measured by examining tobacco retailer inspections/compliance data. Tobacco control programs may want to

	<p>consider assessing the proportion of tobacco retailer inspections resulting in underage buy violations by geographic area, demographic characteristics, tobacco product type, and retailer type when measuring this indicator.</p> <p>Programs should distinguish between characteristics of the communities where the store is located (e.g., a low income, predominantly African American neighborhood) and characteristics of the underage purchaser (e.g., an African American or Black teenager).</p>												
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Disparities in Youth and Young Adult Access to Tobacco Products

Indicator number	4.4.c
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	4. Decreased tobacco industry and environmental influences that contribute to tobacco-related disparities
What to measure	c. Proportion of youth and young adults reporting that they have purchased tobacco products from a retailer, overall, and among population groups experiencing tobacco-related disparities
	Differences in the proportion of youth and young adults reporting that they have purchased tobacco products from a retailer by population group characteristics and retailer type
Similar existing indicator(s) from other goal areas	Goal 1 (2014) 1.6.d, "Proportion of young people reporting that they have purchased tobacco products from a retailer."
Rationale	Reducing youth access to tobacco products can reduce opportunities for experimentation and initiation of tobacco use. ^{1,2} In 2018, only one in four U.S. youth who attempted to buy were refused sale. ³ Data on access to tobacco products by underage persons can provide an indication of retailer compliance that can help inform interventions to reduce youth and young adult access.
Applying health disparities framing	Studies have shown that youth that live in communities with a high proportion of racial/ethnic minorities, including American Indian/Alaska Native persons, Latino/Hispanic persons, and African American or Black persons, were more likely to purchase a tobacco product from a retailer. ⁴⁻⁷ However, one national study found that a higher proportion of non-Hispanic White youth reported purchasing their own product at a retailer, ³ which underscores the need to collect state and community level data to better identify state- and community-specific disparities. ³
Example data source(s)	National Youth Tobacco Survey (NYTS), 2020

<p>Example survey question(s)</p>	<p>From NYTS (2020)</p> <p>During the past 30 days, where did you get or buy the e-cigarettes that you have used? (Select one or more)</p> <ul style="list-style-type: none"> • A gas station or convenience store • A grocery store • A drugstore • A mall or shopping center kiosk/stand • On the Internet • A vape shop or other store that only sells e-cigarettes • Some other place not listed here (specify: _____) • From a family member • From a friend • From some other person that is not a family member or a friend <p>During the past 30 days, where did you buy your [tobacco name]? (Select one or more)</p> <ul style="list-style-type: none"> • I did not buy this tobacco product during the past 30 days • A gas station or convenience store • A grocery store • A drugstore • A vending machine • On the Internet • Through the mail • A vape shop or tobacco shop • Some other place not listed here (specify):_____ <p>During the past 30 days, did anyone ever refuse to sell you cigarettes because of your age?</p> <ul style="list-style-type: none"> • I did not try to buy cigarettes in a store during the past 30 days • Yes • No
<p>Comments</p>	<p>Tobacco control programs may want to assess this indicator by geographic area, retailer type, and by type of tobacco product. Moreover, programs should consider evaluating youth and young adult purchasing of tobacco products from online retailers.</p>

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Disparities in the Amount and Type of Retail Tobacco Advertising

Indicator number	4.4.d
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	4. Decreased tobacco industry and environmental influences that contribute to tobacco-related disparities
What to measure	Amount and type of advertising in retail stores including in store promotions, product placement, and product power wall displays across jurisdictions and/or communities, and among jurisdictions and/or communities disproportionately affected by tobacco use
	Differences in the amount and type of advertising in retail stores including in store promotions, product placement, and product power wall displays by community population group characteristics
Similar existing indicator(s) from other goal areas	Goal 1 (2014) 1.7.a, “Extent and type of retail tobacco advertising.”
Rationale	There is a causal relationship between exposure to retail tobacco advertising and promotion and tobacco initiation, continued use, and fewer successful quit attempts. ¹⁻⁴
Applying health disparities framing	Numerous studies have shown that communities with a high proportion of racial/ethnic minorities, including African American or Black persons and Latino/Hispanic persons, and persons with low income, as well as urban communities, have a higher concentration of retail stores with tobacco advertising and promotions. ⁵⁻¹² Additionally, evidence demonstrates that the tobacco industry targets youth through increased advertising in stores located near schools. ¹²⁻¹⁵
Example data source(s)	Environmental scan of tobacco advertising in retail outlets Kantar Media database
Example survey question(s)	Not applicable.
Comments	Tobacco control programs may want to consider assessing this indicator by retailer type and geographic area. Evaluators may want to consider utilizing the standardized tobacco assessments for retail settings (STARS).

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Disparities in Exposure to Tobacco Marketing

Indicator number	4.4.e
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	4. Decreased tobacco industry and environmental influences that contribute to tobacco-related disparities
What to measure	Proportion of the population who report exposure to pro-tobacco marketing, overall, and among population groups experiencing tobacco-related disparities Differences in the proportion of the population who report exposure to pro-tobacco marketing by population group characteristics
Similar existing indicator(s) from other goal areas	Not applicable.
Rationale	The tobacco industry spends billions of dollars on marketing and promotion of tobacco products each year. ¹⁻² Exposure to tobacco product marketing increases the likelihood of tobacco use initiation, continued use, and increased consumption, and reduces successful quit attempts. ³⁻⁹
Applying health disparities framing	The tobacco industry has a history of targeting marketing practices, including advertising, promotions, sponsorships, and contributions to elected officials, that have contributed to tobacco-related disparities, including among youth, African American or Black persons, American Indian/Alaska Native persons, Latino/Hispanic persons, LGBTQ+ persons, persons with low income, and persons residing in urban communities. ¹⁰⁻²²
Example data source(s)	National Youth Tobacco Survey (NYTS), 2020 Population Assessment of Tobacco and Health- Youth Survey (PATH-Y) Study, 2016-2017 Population Assessment of Tobacco and Health- Adult Survey (PATH-A) Study, 2016-2017
Example survey question(s)	From NYTS (2020) When you are using the Internet, how often do you see ads or promotions for cigarettes, or other tobacco products? <ul style="list-style-type: none"> • I do not use the Internet • Never • Rarely • Sometimes • Most of the time

	<ul style="list-style-type: none"> • Always <p>When you read newspapers or magazines, how often do you see ads or promotions for cigarettes, or other tobacco products?</p> <ul style="list-style-type: none"> • I do not read newspapers or magazines • Never • Rarely • Sometimes • Most of the time • Always <p>When you go to a convenience store, supermarket, or gas station, how often do you see ads or promotions for cigarettes, or other tobacco products?</p> <ul style="list-style-type: none"> • I never go to a convenience store, supermarket, or gas station • Never • Rarely • Sometimes • Most of the time • Always <p>When you watch TV or streaming services (such as Netflix, Hulu, or Amazon Prime), or go to the movies, how often do you see ads or promotions for cigarettes or other tobacco products?</p> <ul style="list-style-type: none"> • I do not watch TV or streaming services, or go to the movies • Never • Rarely • Sometimes • Most of the time • Always <p>From PATH-Y (2016-2017)</p> <p>In the past 30 days, when you visited convenience stores, small markets, or liquor stores, how often did you see ads for cigarettes or other tobacco products (not including e-cigarettes or electronic nicotine products)?</p> <ul style="list-style-type: none"> • Never • Rarely • Sometimes • Often • Don't know • Refused <p>From PATH-Y and PATH-A (2016-2017)</p>
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	<p>In the past 30 days, have you noticed cigarettes or other tobacco products (not including e-cigarettes or electronic nicotine products) being advertised in any of the following places? Choose all that apply.</p> <ul style="list-style-type: none"> • I haven't seen any advertisements in the past 30 days • At gas stations, convenience stores, or other retail stores • On billboards • In newspapers or magazines • On radio • On television • At events such as fairs, festivals, or sporting events • At nightclubs, bars, or music concerts • On websites or social media sites • Somewhere else (SPECIFY) • Don't know • Refused 																		
<p>Comments</p>	<p>Tobacco control programs may want to assess the amount and frequency of exposure to pro-tobacco marketing when assessing this indicator.</p> <p>This indicator supports the <i>Healthy People 2030</i> objective TU-22: Reduce the proportion of adolescents exposed to tobacco marketing.</p>																		
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Consumer-Focused Industry Promotions

Indicator number	4.4.f
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	4. Decreased tobacco industry and environmental influences that contribute to tobacco-related disparities
What to measure	Level and type of consumer-focused tobacco industry promotions within a defined geographic area and among jurisdictions and/or communities disproportionately burdened by tobacco use. Consumer-focused promotions can include sale price, rebates, coupons, and buy one get one free offers.
Similar existing indicator(s) from other goal areas	Goal 1 (2014) 1.8.c, “Extent and type of consumer-focused industry promotions.”
Rationale	The tobacco industry uses promotions to counteract the impact of advertising restrictions. ¹⁻⁷ Greater availability of promotions lowers the price of tobacco and incentivizes increased consumption and sustained use of tobacco products. ^{1,7} Discounts and promotions are also associated with increased initiation and uptake among youth and decreased quit attempts among people who smoke. ^{1,7-9}
Applying health disparities framing	Price discounts can disproportionately affect racial/ethnic minorities and persons with low income, who are more sensitive to price and more likely to take advantage of promotional offers. ^{1,7,10} Research shows that price promotions contribute to tobacco-related disparities because price-related promotions are disproportionately higher at retailers in communities with a higher proportion of racial/ethnic minorities, persons with low educational attainment, and persons with low income. ^{7,11-14} The tobacco industry has used price discounts to increase the menthol cigarette market in communities with a high proportion of African American or Black persons and persons with low income, as well as in urban communities. ^{7,12,13}
Example data source(s)	Nielsen Store Scanner Tobacco Product Pricing Data
Example survey question(s)	Not applicable.
Comments	Tobacco control programs can track the price of tobacco products using retail scanner data that provide information on volume, price, brand, product type, package type, and promotions; however, scanner data are

	<p>generally only available for designated market areas that may not correspond with state borders. Additionally, scanner data can be costly to obtain and complex to analyze. Scanner data are not available for all store types.</p> <p>States may also use retail observation to capture price information with the benefits of flexibility in obtaining unique price data (e.g., advertised prices), specific price-promotional strategies, and compliance with certain policies such as minimum price law. Suggested variables for retail observation include:</p> <ul style="list-style-type: none"> • Tobacco product prices and promotions (sale price, rebates, coupons, buy one get one free, bundles, gifts with purchase) • Average number of tobacco promotions • Percentage of tobacco retailers with promotions <p>Evaluators may want to consider utilizing the standardized tobacco assessments for retail settings (STARS).</p>																		
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Disparities in Exposure to Tobacco Discounts and Promotions

Indicator number	4.4.g
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	4. Decreased tobacco industry and environmental influences that contribute to tobacco-related disparities
What to measure	Proportion of the population reporting exposure to tobacco discounts and promotions, overall, and among population groups experiencing tobacco-related disparities
	Differences in the proportion of the population reporting exposure to tobacco discounts and promotions by population group characteristics
Similar existing indicator(s) from other goal areas	Not applicable.
Rationale	Exposure to tobacco product discounts and promotions can increase the likelihood of youth experimentation and promotes increased consumption and sustained use among youth and adults who use tobacco. ^{1,2}
Applying Health Disparities Framing	Studies have shown that certain populations, including but not limited to, youth (<18 years old), non-Hispanic White persons, African American or Black persons, American Indian/Alaska Native persons, LGBTQ+ persons, persons with low educational attainment, persons with low income, and persons who reside in urban communities experience higher risk of exposure to tobacco discounts and promotions. ³⁻¹¹
Example data source(s)	Population Assessment of Tobacco and Health- Adult Survey (PATH-A), 2016-2017
Example survey question(s)	<p>From PATH-A (2016-2017)</p> <p>In the past 12 months, have you received discounts or coupons for any of the following products? Choose all that apply.</p> <ul style="list-style-type: none"> • Cigarettes • E-cigarettes or other electronic nicotine products (including e-liquid) • Cigars • Shisha or hookah tobacco • Snus • Other types of smokeless tobacco (such as dip, spit or chew) • Some other type of tobacco product • None of the above • Don't know

	<ul style="list-style-type: none"> • Refused 												
Comments	<p>In addition to assessing exposure, tobacco control programs may want to expand on this indicator by also examining use of tobacco discounts and promotion. Example question from Tobacco Use Supplement to the Current Population Survey (2018-2019) is listed below.</p> <p>Did you use coupons, rebates, or any other special promotions when you bought your LAST (“PACK” or “CARTON”) of cigarettes?</p>												
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Outcome 5: Increased quit attempts, quit attempts using evidence-based cessation services, and successful cessation among populations experiencing tobacco-related disparities

Increasing quit rates among tobacco users decreases tobacco-related diseases and deaths and increases healthcare savings.¹ While the benefits of quitting are greater the earlier in life that an individual quits, quitting smoking benefits people who smoke at any age.^{2,3} Research has shown that most people who smoke want to quit but often need to make several quit attempts before successfully quitting.⁴ While some people can quit smoking without the use of cessation services, evidence demonstrates that people who smoke who use evidence-based cessation pharmacotherapy with behavioral support are more likely to successfully quit than those quitting without these treatments.^{3,5} Use of individual, group, and telephone counseling, as well as FDA-approved medications, increase quit rates.^{2-3,5} However, only about a third of people who smoke who try to quit use evidence-based cessation services.⁵

Disparities exist both in general quit attempts and in quit attempts using evidence-based services.^{3,6-9} Studies have found that older adults, racial/ethnic minorities, persons with low income, persons with low educational attainment, persons who are uninsured, and those living in rural communities are less likely to make a quit attempt.^{3,6-9} Similar disparities have been documented in the use of evidence-based cessation services to quit smoking.^{3,6-7,10} These disparities may be partly explained by differences in tobacco use behaviors, healthcare access and utilization, access to evidence-based cessation treatment, and knowledge of and beliefs about available cessation treatment.^{1-3,11} Moreover, studies have shown that successful cessation is lower among racial/ethnic minorities, persons with low educational attainment, Medicaid enrollees and persons who are uninsured, and those living in rural communities.^{3,6-7}

Population groups and characteristics listed under the indicators in this outcome reflect those that emerged as having significant disparities in the literature review conducted. Because cessation behaviors and factors influencing these behaviors can vary across states and communities, tobacco control programs should consider using their state and community-level data to identify populations experiencing disparities in this outcome. Additionally, as new products enter the market, it is important to monitor whether tobacco users are quitting altogether or substituting one type of product for another.

The following indicators are associated with this outcome:

- 4.5.a:** Disparities in the intention to quit
- 4.5.b:** Disparities in quit attempts ^{HP}
- 4.5.c:** Disparities in quit attempts using evidence-based cessation treatment(s)
- 4.5.d:** Use of quitline services among populations experiencing disparities ^{NR}
- 4.5.e:** Disparities in recent cessation success ^{HP}
- 4.5.f:** Disparities in sustained abstinence from tobacco use

^{HP} Denotes the indicator aligns with *Healthy People 2030* Objectives.

^{NR} Denotes an indicator that is not rated.

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7. U.S. National Cancer Institute. A socioecological approach to addressing tobacco-related health disparities. National Cancer Institute Tobacco Control Monograph 22. NIH Publication No. 17-CA-8035A. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; 2017.
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9. Naavaal S, Malarcher A, Xu X, Zhang L, Babb S. Variations in cigarette smoking and quit attempts by health insurance among US adults in 41 states and 2 jurisdictions, 2014. *Public Health Rep*. 2018;133(2):191–199.
10. Babb S, Malarcher A, Asman K, et al. Disparities in cessation behaviors between Hispanic and non-Hispanic White adult cigarette smokers in the United States, 2000–2015. *Prev Chronic Dis* 2020;17:190279.
11. Fiore MC, Jaén CR, Baker TB, et al. Treating tobacco use and dependence: 2008 update. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service; May 2008.

Increased Quit Attempts, Quit Attempts using Evidence-Based Cessation Services, and Successful Cessation among Populations Experiencing Tobacco-Related Disparities

Indicator Rating

← ○ ● ● → better

Number	Indicator	Overall Quality low ↔ high	Resources Needed	Strength of Evaluation Evidence	Utility	Face Validity	Accepted Practice
4.5.a	Disparities in the intention to quit		\$\$	●	●	●	●
4.5.b	Disparities in quit attempts ^{HP}		\$\$	●	●	●	●
4.5.c	Disparities in quit attempts using evidence-based cessation treatment(s)		\$\$	●	●	●	●
4.5.d	Use of quitline services among populations experiencing disparities ^{NR}	NR	NR	NR	NR	NR	NR
4.5.e	Disparities in recent cessation success ^{HP}		\$\$	●	●	●	●
4.5.f	Disparities in sustained abstinence from tobacco use		\$\$	●	●	●	●

\$ Dollar signs denote a qualitative rating of the resources (funds, time, and effort) needed to collect and analyze data using the most commonly available data source. The more dollar signs (maximum four), the more resources needed. Dollar signs do not represent a specific amount or range of costs but are instead a relative measure of expert reviewers' ratings regarding resources required to collect and analyze data to measure the indicator.

^{NR} Denotes an indicator that is not rated.

^{HP} Denotes the indicator aligns with *Healthy People* 2030 Objectives.

Disparities in the Intention to Quit

Indicator number	4.5.a
Goal area	4. Identify and eliminate disparities
Outcome	5. Increased quit attempts, quit attempts using evidence-based cessation services, and successful cessation among populations experiencing tobacco-related disparities
What to measure	Proportion of tobacco users who intend to stop using tobacco products, overall, and among population groups experiencing tobacco-related disparities
	Differences in the proportion of tobacco users who intend to stop using tobacco products by population group characteristics
Similar existing indicator(s)	Goal 3 (2015) 3.1.d, “Proportion of tobacco users who intend to quit.”
Rationale	Intention to quit smoking is an important step in tobacco use cessation; research has shown that intention to quit is a predictor of quit attempts and successful quitting. ¹⁻⁴
Applying Health Disparities Framing	<p>Studies have shown that certain population groups, including older adults, certain racial/ethnic groups including American Indian/Alaska Native persons, LGBTQ+ persons, persons with low educational attainment, persons with low income, persons who are uninsured, and persons residing in rural areas are less likely to report interest in quitting smoking.^{1,5-8}</p> <p>One study in California found that African American or Black persons were less interested in quitting as compared to other racial/ethnic groups; conversely, a national study found there was more interest among this group as compared to other racial/ethnic groups.^{6,9} These findings underscore the importance of collecting and using state- and community-level data to identify and monitor tobacco-related disparities.</p>
Example data source(s)	<p>National Youth Tobacco Survey (NYTS), 2020</p> <p>National Quitline Data Warehouse (NQDW) Intake Survey, 2020</p> <p>Tobacco Use Supplement to the Current Population Survey (TUS-CPS), 2018-2019</p>
Example survey question(s)	<p>From NYTS (2020)</p> <p>Are you seriously thinking about quitting the use of all tobacco products?</p> <ul style="list-style-type: none"> • I do not use tobacco products • Yes, during the next 30 days




	<ul style="list-style-type: none"> • Yes, during the next 6 months • Yes, during the next 12 months • Yes, but not during the next 12 months • No, I am not thinking about quitting the use of all tobacco products <p>From NQDW Intake Survey (2020)</p> <p>Do you intend to quit using [NAME OF TOBACCO PRODUCT] within the next 30 days?</p> <ul style="list-style-type: none"> • Yes • No • Don't Know • Refused <p>From TUS-CPS (2018-2019)</p> <p>Are you seriously considering quitting smoking within the next 6 months?</p> <ul style="list-style-type: none"> • Yes • No • Don't know • Refused <p>Are you planning to quit within the next 30 days?</p> <ul style="list-style-type: none"> • Yes • No • Don't know • Refused 												
<p>Comments</p>	<p>For polytobacco users, it is important to measure quit intentions for all tobacco products used because intentions may vary across products. Tobacco users may quit one product but continue to use others.</p>												
<p>Rating</p>	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 15%;">Overall quality low ↔ high</th> <th style="width: 15%;">Resources needed</th> <th style="width: 15%;">Strength of evaluation evidence</th> <th style="width: 15%;">Utility</th> <th style="width: 15%;">Face validity</th> <th style="width: 15%;">Accepted practice</th> </tr> </thead> <tbody> <tr> <td style="background-color: black; color: black;">██████████</td> <td>\$\$\$</td> <td>●●</td> <td>●●</td> <td>●●</td> <td>●●</td> </tr> </tbody> </table> <p style="text-align: right;">← ○ ● ● → better</p>	Overall quality low ↔ high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice	██████████	\$\$\$	●●	●●	●●	●●
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<p>References</p>	<ol style="list-style-type: none"> 1. U.S. Department of Health and Human Services. Smoking cessation. a report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2020. 2. Emery JL, Sutton S, Naughton F. Cognitive and Behavioral Predictors of Quit Attempts and Biochemically-Validated Abstinence During Pregnancy. <i>Nicotine Tob Res.</i> 2017 May 1;19(5):547-554. 3. Vangeli E, Stapleton J, Smit ES, Borland R, West R. Predictors of attempts to stop smoking and their success in adult general population samples: a systematic review. <i>Addiction.</i> 2011;106:2110–2121. 4. Smit ES, Fidler JA, West R. The role of desire, duty and intention in predicting attempts to quit smoking. <i>Addiction.</i> 2011;106(4):844–851. 5. U.S. National Cancer Institute. A socioecological approach to addressing tobacco-related health disparities. National Cancer Institute Tobacco Control Monograph 22. NIH Publication No. 17-CA-8035A. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; 2017. 6. Babb S, Malarcher A, Schauer G, Asman K, Jamal A. Quitting smoking among adults — United States, 2000–2015. <i>MMWR Morb Mortal Wkly Rep.</i> 2017;65:1457–1464. 7. Bennett K, McElroy JA, Johnson AO, Munk N, Everett KD. A persistent disparity: smoking in rural sexual and gender minorities. <i>LGBT Health.</i> 2015 Mar;2(1):62-70. 8. Reid JL, Hammond D, Boudreau C, Fong GT, Siahpush M; ITC Collaboration. Socioeconomic disparities in quit intentions, quit attempts, and smoking abstinence among smokers in four western countries: findings from the International Tobacco Control Four Country Survey. <i>Nicotine Tob Res.</i> 2010;12 Suppl(Suppl 1):S20–S33. 9. Trinidad DR, Xie B, Fagan P, et al. Disparities in the population distribution of African American and non-Hispanic White smokers along the quitting continuum. <i>Health Educ Behav.</i> 2015 Dec;42(6):742-51.
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Disparities in Quit Attempts ^{HP}

Indicator number	4.5.b
Goal area	4. Identify and eliminate disparities
Outcome	5. Increased quit attempts, quit attempts using evidence-based cessation services, and successful cessation among populations experiencing tobacco-related disparities
What to measure	Proportion of tobacco users who have stopped using tobacco for more than one day during the previous 12 months in an attempt to quit, overall, and among population groups experiencing tobacco-related disparities
	Differences in the proportion of tobacco users who have stopped using tobacco for more than one day during the previous 12 months in an attempt to quit by population group characteristics
Similar existing indicator(s)	Goal 3 (2015) 3.6.a, "Proportion of tobacco users who have made a quit attempt."
Rationale	Attempting to quit is an essential step in tobacco use cessation. ^{1,2} Increased numbers of quit attempts are associated with increased cessation and reduced overall smoking prevalence. ^{1,2} Research has found that people who smoke often need to make several quit attempts before successfully quitting. ^{2,3}
Applying Health Disparities Framing	Studies have shown that certain population groups, including older adults, non-Hispanic White persons, American Indian/Alaska Native persons, persons with low educational attainment, persons who have public insurance, persons who are uninsured, persons with low income, blue collar and service workers, and persons residing in rural areas are less likely to report a quit attempt. ^{2,4-10}
Example data source(s)	National Youth Tobacco Survey (NYTS), 2020 Behavioral Risk Factor Surveillance System (BRFSS), 2019
Example survey question(s)	<p>From NYTS (2020)</p> <p>During the past 12 months, how many times have you stopped smoking cigarettes for one day or longer because you were trying to quit smoking cigarettes for good?</p> <ul style="list-style-type: none"> • I did not smoke cigarettes during the past 12 months • I did not try to quit during the past 12 months • 1 time • 2 times • 3 to 5 times • 6 to 9 times

	<ul style="list-style-type: none"> • 10 or more times <p>During the past 12 months, how many times have you stopped using all tobacco products for one day or longer because you were trying to quit all tobacco products for good?</p> <ul style="list-style-type: none"> • I did not use tobacco products during the past 12 months • I did not try to quit all tobacco products during the past 12 months • 1 time • 2 times • 3 to 5 times • 6 to 9 times • 10 or more times <p>NHIS (2020)</p> <p>During the PAST 12 MONTHS, have you stopped smoking for more than one day BECAUSE YOU WERE TRYING TO QUIT SMOKING?</p> <ul style="list-style-type: none"> • Yes • No • Refused • Don't know <p>(Note: Asked of current smokers)</p> <p>How long has it been since you quit smoking cigarettes?</p> <p>* Enter number for time since quit smoking, and time period for time since quitting (day(s), week(s), month(s), year(s))</p> <p>(Note: Asked of former smokers, include former smokers who quit in the past year in measure)</p> <p>From BRFSS (2019)</p> <p>During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?</p> <ul style="list-style-type: none"> • Yes • No • Don't know / Not sure • Refused
<p>Comments</p>	<p>When considering population quit rates, it is important to understand both the number of tobacco users who made a quit attempt and the number of times they made a quit attempt. Tobacco control programs can also consider the population quit rate, which is driven by two factors: prevalence of quit attempts, and prevalence of successful quitting among people who smoke who make a quit attempt.</p>

	<p>This indicator is related to Healthy People 2030 objective TU-11: Increase past-year attempts to quit smoking in adults.</p>																		
<p>Rating</p>	<table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 15%;">Overall quality</td> <td style="width: 15%;">Resources needed</td> <td style="width: 15%;">Strength of evaluation evidence</td> <td style="width: 15%;">Utility</td> <td style="width: 15%;">Face validity</td> <td style="width: 15%;">Accepted practice</td> </tr> <tr> <td>low ↔ high</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>\$\$</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> </tr> </table> <p style="text-align: center;">← ○ ● ● → better</p>	Overall quality	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice	low ↔ high							\$\$	●	●	●	●
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<p>References</p>	<ol style="list-style-type: none"> 1. U.S. Department of Health and Human Services. The health consequences of smoking—50 years of progress: a report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2014. 2. U.S. Department of Health and Human Services. Smoking cessation. a report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2020. 3. Chaiton M, Diemert L, Cohen JE, et al. Estimating the number of quit attempts it takes to quit smoking successfully in a longitudinal cohort of smokers. <i>BMJ Open</i>. 2016;6(6):e011045. 4. Alexander LA, Crawford T, Mendiondo MS. Occupational status, work-site cessation programs and policies and menthol smoking on quitting behaviors of US smokers. <i>Addiction</i>. 2010;105 Suppl 1:95-104. 5. Reid JL, Hammond D, Boudreau C, Fong GT, Siahpush M; ITC Collaboration. Socioeconomic disparities in quit intentions, quit attempts, and smoking abstinence among smokers in four western countries: findings from the International Tobacco Control Four Country Survey. <i>Nicotine Tob Res</i>. 2010;12 Suppl(Suppl 1):S20–S33. 6. Naavaal S, Malarcher A, Xu X, Zhang L, Babb S. Variations in cigarette smoking and quit attempts by health insurance among US adults in 41 states and 2 jurisdictions, 2014. <i>Public Health Rep</i>. 2018;Mar/Apr;133(2):191-9. 7. U.S. National Cancer Institute. A socioecological approach to addressing tobacco-related health disparities. National Cancer Institute Tobacco Control Monograph 22. NIH Publication No. 17-CA-8035A. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; 2017. 8. Babb S, Malarcher A, Asman K, et al. Disparities in cessation behaviors between Hispanic and non-Hispanic White adult cigarette smokers in the United States, 2000-2015. <i>Prev Chronic Dis</i>. 2020;17:E10. 																		

	<p>9. Babb S, Malarcher A, Schauer G, Asman K, Jamal A. Quitting Smoking Among Adults — United States, 2000–2015. <i>MMWR Morb Mortal Wkly Rep</i> 2017;65:1457–1464.</p> <p>10. Trinidad DR, Pérez-Stable EJ, White MM, Emery SL, Messer K. A nationwide analysis of US racial/ethnic disparities in smoking behaviors, smoking cessation, and cessation-related factors. <i>Am J Public Health</i>. 2011;101(4):699–706.</p>
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Disparities in Quit Attempts Using Evidence-Based Cessation Treatment(s)

Indicator number	4.5.c
Goal area	4. Identify and eliminate disparities
Outcome	5. Increased quit attempts, quit attempts using evidence-based cessation services, and successful cessation among populations experiencing tobacco-related disparities
What to measure	Proportion of tobacco users who have stopped using tobacco for more than one day during the previous 12 months using an evidence-based method* for their quit attempt, overall, and among population groups experiencing tobacco-related disparities
	Differences in the proportion of tobacco users who have stopped using tobacco for more than one day during the previous 12 months using an evidence-based method* for their quit attempt by population group characteristics
Similar existing indicator(s) from other goal areas	Goal 3 (2015) 3.5.b, "Proportion of tobacco users who have made a quit attempt using evidence-based strategies."
Rationale	Research demonstrates that people who smoke who use evidence-based cessation pharmacotherapy with behavioral support are more likely to successfully quit than those attempting to quit without these treatments. ^{1,2} Use of individual, group, and telephone counseling, as well as FDA-approved medications, increases quit rates. ¹⁻³ However, only about a third of people who try to quit use evidence-based cessation services. ⁴
Applying health disparities framing	Studies have found that using evidence-based cessation services is particularly low among certain population groups, including young adults, racial/ethnic minorities, including Latino/Hispanic persons and Asian American/Pacific Islander persons, LGBTQ+ persons, persons with low educational attainment, persons with low income, persons who are uninsured, persons who are unemployed, and persons residing in rural areas. ^{1,4-8}
Example data source(s)	Tobacco Use Supplement to the Current Population Survey (TUS-CPS), 2018-2019 Population Assessment of Tobacco and Health- Adult Survey (PATH-A), 2016-2017 National Health Interview Survey Cancer Control Supplement (NHIS-CCS), 2015

<p>Example survey question(s)</p>	<p>From TUS-CPS (2018-2019)</p> <p>Thinking back to the (LAST TIME/time) you tried to QUIT smoking in the past 12 months: Did you use ANY of the following PRODUCTS: Yes/No</p> <ul style="list-style-type: none"> • A NICOTINE.... patch, gum, lozenge, nasal spray or inhaler • A prescription pill, called Chantix, Varenicline, Zyban, Bupropion, or Wellbutrin? <p>Thinking back to the (LAST TIME/time) you tried to QUIT smoking in the past 12 months: Did you use ANY of the following: Yes/No</p> <ul style="list-style-type: none"> • A telephone help line or quit line? • One-on-one IN-PERSON counseling by a health professional? • A stop smoking clinic, class, or support group? • Internet or web-based program or tool including smartphone apps and text messaging programs? <p>From PATH-A (2016-2017)</p> <p>Thinking back to [the time you tried to quit/the last time you tried to quit/when you quit] [tobacco product] in the past 12 months, did you use any of the following to help you: counseling, a telephone help line or quit line, books, pamphlets, videos, a quit tobacco clinic, class, or support group, or an internet or web-based program?</p> <ul style="list-style-type: none"> • Yes • No • Don't know • Refused <p>Thinking back to [the time you tried to quit/the last time you tried to quit/when you quit] [tobacco product] in the past 12 months, did you use a nicotine patch, gum, inhaler, nasal spray, lozenge or pill?</p> <ul style="list-style-type: none"> • Yes • No • Don't know • Refused <p>Thinking back to [the time you tried to quit/the last time you tried to quit/when you quit] [tobacco product] in the past 12 months, did you use Chantix, varenicline, Wellbutrin, Zyban, or bupropion?</p> <ul style="list-style-type: none"> • Yes • No • Don't know • Refused
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	<p>From NHIS-CCS (2015)</p> <p>Thinking back to when you tried to QUIT smoking in the PAST 12 MONTHS, did you use ANY of the following PRODUCTS: (for each, select: Yes, No, Don't know, or Refused)</p> <ul style="list-style-type: none"> • A nicotine patch? • A prescription pill, such as Zyban, Bupropion, or Wellbutrin? • A prescription pill called Chantix or Varenicline? • A telephone help line or quit line? • A stop smoking clinic, class, or support group? • One-on-one counseling? • A nicotine gum or lozenge? • A nicotine containing nasal spray or inhaler? <p>(Note: asked of current smokers who tried to quit for more than one day during the past 12 months)</p> <p>Thinking back to when you stopped smoking completely, did you use ANY of the following PRODUCTS: (for each, select: Yes, No, Don't know, or Refused)</p> <ul style="list-style-type: none"> • A nicotine patch? • A prescription pill, such as Zyban, Bupropion, or Wellbutrin? • A prescription pill called Chantix or Varenicline? • A telephone help line or quit line? • A stop smoking clinic, class, or support group? • One-on-one counseling? • A nicotine gum or lozenge? • A nicotine containing nasal spray or inhaler? <p>(Note: asked of former smokers who quit in the last two years)</p>																		
<p>Comments</p>	<p>*Evidence-based treatment includes use of FDA-approved cessation medications (nicotine replacement therapy (NRT) gum, NRT patch, NRT nasal spray, NRT lozenge, NRT inhaler, varenicline, bupropion), and/or counseling (group, individual, and telephone-based). This definition may change over time as evidence emerges on new treatments.</p>																		
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Use of Quitline Services among Populations Experiencing Disparities ^{NR}

Indicator number	4.5.d
Goal area	4. Identify and eliminate disparities
Outcome	5. Increased quit attempts, quit attempts using evidence-based cessation services, and successful cessation among populations experiencing tobacco-related disparities
What to measure	Proportion of tobacco users who received a quitline service, overall, and among population groups experiencing tobacco-related disparities
Similar existing indicator(s) from other goal areas	Not applicable.
Rationale	Quitlines are an important resource for linking tobacco users with evidence-based cessation services. Quitlines increase quit rates, have broad reach, and are effective with diverse populations. ^{1,2} Residents in all 50 U.S. states, the District of Columbia, the commonwealth of Puerto Rico, and the territory of Guam have access to Quitline services. ^{1,2} Moreover, because quitlines connect tobacco users to free evidence-based cessation services, they can be beneficial in supporting cessation among low income, uninsured, and underinsured tobacco users. ^{1,2}
Applying health disparities framing	While quitlines are reaching populations experiencing tobacco-related disparities, overall reach remains low and differences by population characteristics. ³ For example, some studies have found that quitline use is particularly lower among younger and older adults, American Indian/Alaska Native persons and Asian American/Pacific Islander persons ^{1,2,4}
Example data source(s)	National Quitline Data Warehouse (NQDW), Quitline Intake Survey, 2020 CDC State Tobacco Activities Tracking and Evaluation (STATE) System
Example survey question(s)	Not applicable.
Comments	When calculating the proportion or reach ratio of tobacco users receiving quitline services, tobacco control programs should assess the unique number of tobacco users receiving quitline services divided by the total estimated number of tobacco users in the state. Tobacco control programs should consider examining the reach of quitline services overall and by population group characteristics.
Rating	Not rated.

References	<ol style="list-style-type: none"><li data-bbox="431 201 1421 386">1. Baezconde-Garbanati L, Guy MC, Soto C; North American Quitline Consortium. The use of quitlines among priority populations in the U.S.: lessons from the scientific evidence. 2011. Accessed March 23, 2020. http://c.ymcdn.com/sites/www.naquitline.org/resource/resmgr/Issue_Papers/IssuePaperTheUseofQuitlinesA.pdf<li data-bbox="431 401 1421 585">2. U.S. Department of Health and Human Services. Smoking cessation. a report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2020.<li data-bbox="431 600 1421 743">3. Schauer GL, Malarcher AM, Zhang L, Engstrom MC, Zhu SH. Prevalence and correlates of quitline awareness and utilization in the United States: an update from the 2009–2010 National Adult Tobacco Survey. <i>Nicotine Tob Res.</i> 2014 May 1;16(5):544-53.<li data-bbox="431 758 1421 871">4. Marshall LL, Zhang L, Malarcher AM, Mann NH, King BA, Alexander RL. Race/ethnic variations in quitline use among US adult tobacco users in 45 states, 2011-2013. <i>Nicotine Tob Res.</i> 2017;19(12):1473-81.
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Disparities in Recent Cessation Success ^{HP}

Indicator number	4.5.e
Goal area	4. Identify and eliminate disparities
Outcome	5. Increased quit attempts, quit attempts using evidence-based cessation services, and successful cessation among populations experiencing tobacco-related disparities
What to measure	Proportion of former tobacco users who last used tobacco 6 months to one year ago among those who quit in the past year, overall, and among population groups experiencing tobacco-related disparities
	Differences in the proportion of former tobacco users who last used tobacco 6 months to one year ago among those who quit in the past year by population group characteristics
Similar existing indicator(s) from other goal areas	Goal 3 (2015) 3.7.a, "Proportion of tobacco users who have sustained abstinence from tobacco use."
Rationale	Increasing tobacco quit rates will decrease tobacco-related morbidity and mortality. ¹ Recent cessation can help assess progress toward permanent tobacco cessation and can serve as a more proximate measures of the impact of public health interventions.
Applying health disparities framing	Although the frequency of quit attempts is greater among African American or Black persons than non-Hispanic White persons, they experience less success in cessation. Moreover, older adults, persons with low income, persons with low educational attainment, and persons with mental health conditions are also less likely to report recent cessation success. ²⁻⁶
Example data source(s)	National Health Interview Survey (NHIS), 2020 Behavioral Risk Factor Surveillance System (BRFSS), 2019
Example survey question(s)	From NHIS (2020) How long has it been since you quit smoking cigarettes? * Enter number for time since quit smoking, and time period for time since quitting (day(s), week(s), month(s), year(s)) (Note: Asked of former smokers, include former smokers who quit in the past year in measure) From BRFSS (2019)

	<p>How long has it been since you last smoked a cigarette, even one or two puffs?</p> <ul style="list-style-type: none"> • Within the past month (less than 1 month ago) • Within the past 3 months (1 month but less than 3 months ago) • Within the past 6 months (3 months but less than 6 months ago) • Within the past year (6 months but less than 1 year ago) • Within the past 5 years (1 year but less than 5 years ago) • Within the past 10 years (5 years but less than 10 years ago) • 10 years or more • Never smoked regularly • DON'T KNOW/NOT SURE • REFUSED 																								
<p>Comments</p>	<p>Evaluators could modify the example questions to measure sustained abstinence from all tobacco products and ask current people who use a tobacco product about their last quit attempt or longest quit.</p> <p>This indicator is related to the follow <i>Healthy People 2030</i> objective TU-14: Increase successful quit attempts in adults who smoke</p>																								
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	<p>6. U.S. National Cancer Institute. A socioecological approach to addressing tobacco related health disparities. National Cancer Institute Tobacco Control Monograph 22. NIH Publication No. 17-CA-8035A. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; 2017.</p>
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Disparities in Sustained Abstinence from Tobacco Use

Indicator number	4.5.f
Goal area	4. Identify and eliminate disparities
Outcome	5. Increased quit attempts, quit attempts using evidence-based cessation services, and successful cessation among populations experiencing tobacco-related disparities
What to measure	Proportion of former tobacco users who have sustained abstinence from tobacco use for 6 months or longer, overall, and among population groups experiencing tobacco-related disparities
	Differences in the proportion of former tobacco users who have sustained abstinence from tobacco use for 6 months or longer by population group characteristics
Similar existing indicator(s) from other goal areas	Goal 3 (2015) 3.7.b, “Proportion of tobacco users who have sustained abstinence from tobacco use.”
Rationale	The longer a person has gone without using a tobacco product, the more likely they are to remain abstinent. ¹ Sustained abstinence is an important measure to assess progress toward permanent tobacco cessation and reducing tobacco use.
Applying health disparities framing	Studies have found that certain population groups, including non-Hispanic African American or Black persons, persons with low educational attainment, persons with low income, Medicaid enrollees, persons with mental health conditions, and persons who are unemployed are less likely to report sustained abstinence from tobacco. ²⁻⁶
Example data source(s)	National Youth Tobacco Survey (NYTS), 2020 Behavioral Risk Factor Surveillance System (BRFSS), 2019
Example survey question(s)	<p>From NYTS (2020)</p> <p>When was the last time you smoked a cigarette, even one or two puffs?</p> <ul style="list-style-type: none"> • I have never smoked cigarettes, even one or two puffs • Earlier today • Not today but sometime during the past 7 days • Not during the past 7 days but sometime during the past 30 days • Not during the past 30 days but sometime during the past 6 months • Not during the past 6 months but sometime during the past year • 1 to 4 years ago • 5 or more years ago

	<p>When was the last time you used an e-cigarette, even one or two times?</p> <ul style="list-style-type: none"> • I have never smoked cigarettes, even one or two puffs • Earlier today • Not today but sometime during the past 7 days • Not during the past 7 days but sometime during the past 30 days • Not during the past 30 days but sometime during the past 6 months • Not during the past 6 months but sometime during the past year • 1 to 4 years ago • 5 or more years ago <p>From BRFSS (2019)</p> <p>How long has it been since you last smoked a cigarette, even one or two puffs?</p> <ul style="list-style-type: none"> • Within the past month (less than 1 month ago) • Within the past 3 months (1 month but less than 3 months ago) • Within the past 6 months (3 months but less than 6 months ago) • Within the past year (6 months but less than 1 year ago) • Within the past 5 years (1 year but less than 5 years ago) • Within the past 10 years (5 years but less than 10 years ago) • 10 years or more • Never smoked regularly • DON'T KNOW/NOT SURE • REFUSED 																		
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	<p>Tobacco Control Monograph 22. NIH Publication No. 17-CA-8035A. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; 2017.</p> <ol style="list-style-type: none">3. Kendzor DE, Reitzel LR, Mazas CA, et al. Individual-and area-level unemployment influence smoking cessation among African Americans participating in a randomized clinical trial. <i>Soc Sci Med</i>. 2012 May;74(9):1394-401.4. Fagan P, Shavers VL, Lawrence D, Gibson JT, O'Connell ME. Employment characteristics and socioeconomic factors associated with disparities in smoking abstinence and former smoking among US workers. <i>J Health Care Poor Underserved</i>. 2007 Nov;18(4 Suppl):52-72.5. Varghese M, Sheffer C, Stitzer M, Landes R, Brackman SL, Munn T. Socioeconomic disparities in telephone-based treatment of tobacco dependence. <i>Am J Public Health</i>. 2014 Aug;104(8):e76-84.6. Smith PH, Mazure CM, McKee SA. Smoking and mental illness in the US population. <i>Tob Control</i>. 2014;23(e2):e147-e53.
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Outcome 6: Eliminate disparities in tobacco use initiation

Tobacco use and nicotine dependence begins primarily in adolescence and young adulthood.¹ Nearly 90 percent of adults who smoke daily begin smoking cigarettes before the age of 18.¹ Research has linked earlier age of initiation to greater nicotine dependence, longer duration of smoking, and sustained use.¹ The tobacco industry is known to market tobacco products, including flavored tobacco products, to appeal to youth and young adults.^{1,2} This has in part contributed to the significant increase in the use of tobacco products among young and young adults in recent years, and the disproportionate use of e-cigarettes among youth and young adults.³⁻⁵ Reducing and delaying initiation can prevent adverse health outcomes related to tobacco initiation in adolescence and young adulthood and decrease the likelihood of continued, sustained use in adulthood.¹⁻⁶

Tobacco use initiation mostly begins with flavored products.^{2,7} Federal law prohibits cigarettes from containing characterizing flavors other than tobacco or menthol. Non-cigarette tobacco products, such as cigars, smokeless tobacco products, hookah, and e-cigarettes are available in a variety of fruit, candy, and other flavors. Federal law also requires manufacturers of products entering the market after 2007 to get FDA authorization before selling their products. FDA announced that, beginning on February 7, 2020, it would prioritize its enforcement activities to remove from the market any flavored cartridge-based e-cigarette product other than tobacco- or menthol-flavored cartridge-based products, unless and until it authorized any of those types of products for sale. FDA has said that it will make enforcement decisions on a case-by-case basis with respect to other products that need to come off the market while it continues to review the remaining marketing applications filed by e-cigarette companies. In addition, in April 2021, FDA said that it intends to issue a rule, prohibiting menthol as a characterizing flavor in cigarettes, and banning all characterizing flavors (including menthol) in cigars.

Studies have shown significant increases in recent years in the use of e-cigarettes among U.S. middle and high school students, the vast majority of whom reported using flavored products.³⁻⁵ Research has also shown that some youth populations at higher risk for initiation disproportionately use flavored tobacco products.¹⁰ Jurisdictions at the local, state, and federal levels have proposed and enacted bans on flavored tobacco products, including e-cigarettes, to discourage use and initiation among youth and young adults.¹⁰ However, bans that include exemptions, such as for menthol, could mitigate the equitable reach and effectiveness of the policies among all populations.¹⁰

Additionally, disparities in initiation behaviors exist among subgroups of youth and young adults by race/ethnicity, gender identity and sexual orientation, income, and geographic location.^{2,12-18} Factors that contribute to differences and increases in risk of initiation among these groups include social and environmental factors, including interaction with peers who engage in tobacco use, as well as living in environments where tobacco use is prominent and heavily marketed.^{1,2,13}

Monitoring the indicators under this outcome can help assess progress in preventing and reducing initiation of tobacco use among youth and young adults and can help examine the extent to which tobacco control efforts are reducing tobacco-related disparities related to initiation.

The following indicators are associated with this outcome:

4.6.a: Disparities in the average age at which young people first tried a tobacco product

4.6.b: Disparities in the initiation of tobacco use through flavored tobacco products

4.6.c: Disparities in the proportion of youth and young adults who report never having tried a tobacco product

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Eliminate Disparities in Tobacco Use Initiation

Indicator Rating

← ○ ● ● → better

Number	Indicator	Overall Quality low ↔ high	Resources Needed	Strength of Evaluation Evidence	Utility	Face Validity	Accepted Practice
4.6.a	Disparities in the average age at which young people first tried a tobacco product		\$	●	●	●	●
4.6.b	Disparities in the initiation of tobacco use using a flavored tobacco product		\$	●	●	●	●
4.6.c	Disparities in the proportion youth and young adults who report never having tried a tobacco product		\$	●	●	●	●

\$ Dollar signs denote a qualitative rating of the resources (funds, time, and effort) needed to collect and analyze data using the most commonly available data source. The more dollar signs (maximum four), the more resources needed. Dollar signs do not represent a specific amount or range of costs but are instead a relative measure of expert reviewers' ratings regarding resources required to collect and analyze data to measure the indicator.

Disparities in the Average Age at Which Young People First Tried a Tobacco Product

Indicator number	4.6.a
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	6. Eliminate disparities in tobacco use initiation
What to measure	Average age at which youth under age 18 years and young adults aged 18-24 years first tried a tobacco product, overall, and among population groups experiencing tobacco-related disparities
	Differences in the average age at which youth under age 18 years and young adults aged 18-24 years first tried a tobacco product by population group characteristics
Similar existing indicator(s) from other goal areas	Goal 1 (2014) 1.9.b, “Average age at which young people first tried a commercial tobacco product other than cigarettes.”
Rationale	Research has linked earlier age of initiation to greater nicotine dependence and longer duration of smoking. ¹ Most people who smoke daily report having initiated tobacco use before the age of 18 years. ¹ Reducing or delaying initiation can have an impact on overall tobacco use prevalence and reduce adverse tobacco-related outcomes. ^{1,2}
Applying health disparities framing	Studies have found that certain youth and young adult subgroups, including American Indian/Alaska Native persons, Native Hawaiian/Other Pacific Islander persons, African American or Black persons, Latino/Hispanic persons, LGBTQ+ persons, persons with low educational attainment, and persons with low income are more likely to initiate tobacco use at a younger age. ³⁻⁸
Example data source(s)	National Youth Tobacco Survey (NYTS), 2020 Tobacco Use Supplement to the Current Population Survey (TUS-CPS), 2018-2019
Example survey question(s)	From NYTS (2020) How old were you when you first tried [cigarette smoking/ smoking a cigar, cigarillo, or little cigar/ smoking tobacco in a hookah or waterpipe], even one or two puffs? <ul style="list-style-type: none"> • 8 years old or younger • ____ [whole years between ages 9 and 18] • 19 years old or older

	<p>How old were you when you first used chewing tobacco, snuff, or dip for the first time?</p> <ul style="list-style-type: none"> • 8 years old or younger • ____ [whole years between ages 9 and 18] • 19 years old or older <p>How old were you when you first tried using an e-cigarette, even once or twice?</p> <ul style="list-style-type: none"> • 8 years old or younger • ____ [whole years between ages 9 and 18] • 19 years old or older <p>From TUS-CPS (2018-2019)</p> <p>How old (were/was) (you/name) the first time (you/he/she) smoked part or all of a cigarette?</p> <p>ENTER (0) IF NEVER SMOKED REGULARLY</p> <p>ENTER AGE (01 – AGE)</p> <p> _ _ </p>																		
<p>Comments</p>	<p>Tobacco products include e-cigarettes, cigarettes, cigars (cigars, little cigars, and cigarillos), smokeless tobacco (chewing tobacco, snuff, dip, snus), pouches, heated tobacco products, and dissolvable tobacco [e.g., sticks, strips, orbs, tablets, lozenges]), hookahs, pipe tobacco, and bidis (small brown cigarettes wrapped in a leaf).</p> <p>Tobacco control programs may want to assess this indicator by tobacco product, as age of initiation may vary by tobacco product. Programs may want to capture and report on commercially available tobacco products most pertinent to their unique state and/or local market.</p>																		
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Disparities in the Initiation of Tobacco Use Using a Flavored Tobacco Products

Indicator number	4.6.b
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	6. Eliminate disparities in tobacco use initiation
What to measure	Proportion of tobacco users who initiated tobacco product use with a flavored tobacco product, overall, and among population groups experiencing tobacco-related disparities
	Differences in the proportion of tobacco users who initiated tobacco product use with a flavored tobacco product by population group characteristics
Similar existing indicator(s) from other goal areas	Not applicable.
Rationale	Studies have found that flavored tobacco products are especially appealing to youth and young adults and are associated with experimentation among these age groups. ¹⁻⁶ Most youth who have ever used a tobacco product report that their first tobacco product was flavored. ²⁻⁴ Initiating tobacco with flavored tobacco products is associated with subsequent sustained and regular tobacco use and consequently, higher risk of adverse health outcomes. ^{2,4} Flavored tobacco products, including e-cigarettes, have contributed to significant increases in the prevalence of tobacco use among youth and young adults in recent years. ^{5,6}
Applying health disparities framing	The tobacco industry has marketed flavored tobacco products to appeal to certain population groups, including youth and young adults, women, and certain racial/ethnic groups. ^{1,2,6} Research indicates that while non-Hispanic White persons report higher use of flavored tobacco products, African American or Black persons and Latino/Hispanic persons report disproportionately higher use of menthol cigarettes. ^{2,6}
Example data source(s)	Population Assessment of Tobacco and Health- Youth Survey (PATH-Y), 2016-2017 Population Assessment of Tobacco and Health- Adult Survey (PATH-A), 2016-2017
Example survey question(s)	From PATH-Y (2016-2017) Was the first cigarette you smoked flavored to taste like menthol or mint? <ul style="list-style-type: none"> • Yes • No • I don't know

	<ul style="list-style-type: none"> • Don't know • Refused <p>Was the first shisha or hookah tobacco product you smoked flavored to taste like clove, spice, candy, fruit, chocolate, alcohol (such as wine or cognac), or other sweets?</p> <ul style="list-style-type: none"> • Yes • No • I don't know • Don't know • Refused <p>When you first used an electronic nicotine product, which flavor did you use? Choose all that apply.</p> <ul style="list-style-type: none"> • Tobacco-flavored • Menthol or mint • Clove or spice • Fruit • Chocolate • An alcoholic drink (such as wine or cognac, margarita or other cocktails) • A non-alcoholic drink (such as coffee, soda, energy drinks, or other beverages) • Candy, desserts, or other sweets? • Some other flavor • Don't know • Refused <p>From PATH-A (2016-2017)</p> <p>When you first started smoking cigarettes, did you start with cigarettes flavored to taste like menthol or mint?</p> <ul style="list-style-type: none"> • Yes • No • I don't know • Don't know • Refused <p>When you first started smoking hookah, did you smoke shisha or hookah tobacco flavored to taste like menthol, mint, clove, spice, fruit, chocolate, alcoholic drinks, candy or other sweets?</p> <ul style="list-style-type: none"> • Yes • No • I don't know
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	<ul style="list-style-type: none"> • Don't know • Refused <p>When you first used an electronic nicotine product, which flavor did you use? Choose all that apply.</p> <ul style="list-style-type: none"> • Tobacco-flavored • Menthol or mint • Clove or spice • Fruit • Chocolate • An alcoholic drink (such as wine or cognac, margarita or other cocktails) • A non-alcoholic drink (such as coffee, soda, energy drinks, or other beverages) • Candy, desserts, or other sweets? • Some other flavor • Don't know • Refused 																		
<p>Comments</p>	<p>Tobacco products include e-cigarettes, cigarettes, cigars (cigars, little cigars, and cigarillos), smokeless tobacco (chewing tobacco, snuff, dip, snus, pouches, heated tobacco products, and dissolvable tobacco [e.g., sticks, strips, orbs, tablets, lozenges]), hookahs, pipe tobacco, and bidis (small brown cigarettes wrapped in a leaf).</p> <p>Tobacco control programs may want to assess this indicator by tobacco product, as initiation with flavored tobacco products may vary by product.</p>																		
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<p>References</p>	<p>1. U.S. Department of Health and Human Services. Preventing tobacco use among youth and young adults: a report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2012.</p>																		

	<ol style="list-style-type: none">2. U.S. National Cancer Institute. A socioecological approach to addressing tobacco-related health disparities. National Cancer Institute Tobacco Control Monograph 22. NIH Publication No. 17-CA-8035A. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; 2017.3. Ambrose BK, Day HR, Rostron B, et al. Flavored tobacco product use among US youth aged 12-17 years, 2013-2014. <i>JAMA</i>. 2015;214:1871-2.4. Villanti AC, Johnson AL, Glasser AM, et al. Association of flavored tobacco use with tobacco initiation and subsequent use among US youth and adults, 2013-2015. <i>JAMA Netw Open</i>. 2019;2(10):e1913804.5. Cullen KA, Gentzke AS, Sawdey MD, et al. E-Cigarette use among youth in the United States, 2019. <i>JAMA</i>. 2019 Dec 3;322(21):2095-103.6. Cullen KA, Liu ST, Bernat JK, et al. Flavored Tobacco product use among middle and high school students — United States, 2014–2018. <i>MMWR Morb Mortal Wkly Rep</i>. 2019;68:839–844.
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Disparities in the Proportion of Youth and Young Adults Who Report Never Having Tried a Tobacco Product

Indicator number	4.6.c
Goal area	4. Identify and Eliminate Disparities
Outcome	6. Eliminate disparities in tobacco use initiation
What to measure	<p>Proportion of youth under age 18 years and young adults aged 18-24 years who report never having tried a tobacco product, overall, and among population groups experiencing tobacco-related disparities</p> <p>Differences in the proportion of youth under age 18 years and young adults aged 18-24 years who report never having tried a tobacco product by population group characteristics</p>
Similar existing indicator(s) from other goal areas	<p>Goal 1 (2014) 1.9.c, “Proportion of young people who report never having tried a tobacco product.”</p> <p>Goal 2 (2017) 2.5.d, “Proportion of young people who have never tried a tobacco product.”</p>
Rationale	Nearly 9 out of 10 adults who smoke cigarettes first try cigarette smoking by age 18 years, and 98% first try smoking by age 26 years. ¹ Reducing the number of youth and young adults who experiment with tobacco will decrease the number who become established tobacco users. ^{1,2}
Applying health disparities framing	Certain youth and young adult subgroups, including men, non-Hispanic White persons, Latino/Hispanic persons, LGBTQ+ persons, and persons living in the Southern and Midwestern geographic areas of the U.S., have a disproportionately higher prevalence of ever use. ^{1,3,4} While overall ever use of a tobacco product is highest among non-Hispanic White persons, ever use of a combustible product is highest among African American or Black persons. ⁴ Moreover, one national study assessing racial/ethnic disparities found that ever use of a tobacco product was disproportionately higher among American Indian/Alaska Native persons and Native Hawaiians/Other Pacific Islander persons. ⁵
Example data source(s)	National Youth Tobacco Survey (NYTS), 2020 Youth Risk Behavior Surveillance System (YRBSS), 2019 National Health and Nutrition Examination Survey, (NHANES), 2015-2016
Example survey question(s)	<p>From NYTS (2020)</p> <p>Have you ever tried cigarette smoking, even one or two puffs?</p> <ul style="list-style-type: none"> • Yes • No

	<p>Have you ever tried smoking cigars, cigarillos, or little cigars, such as Black and Milds, Swisher Sweets, Dutch Masters, White Owl, or Phillies Blunts, even one or two puffs?</p> <ul style="list-style-type: none"> • Yes • No <p>Have you ever used chewing tobacco, snuff, or dip, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen, even just a small amount?</p> <ul style="list-style-type: none"> • Yes • No <p>Have you ever used an e-cigarette, even once or twice?</p> <ul style="list-style-type: none"> • Yes • No <p>Have you ever tried smoking tobacco in a hookah or waterpipe, even one or two puffs?</p> <ul style="list-style-type: none"> • Yes • No <p>Which of the following tobacco products have you ever tried, even just one time?</p> <ul style="list-style-type: none"> • Roll-your-own cigarettes • Pipes filled with tobacco (not waterpipe) • Snus, such as Camel, Marlboro, or General Snus • Dissolvable tobacco products such as Ariva, Stonewall, Camel orbs, Camel sticks, Marlboro sticks, or Camel strips • Bidis (small brown cigarettes wrapped in a leaf) • I have never tried any of the products listed above <p>From YRBSS (2019)</p> <p>Have you ever tried cigarette smoking, even one or two puffs?</p> <ul style="list-style-type: none"> • Yes • No <p>Have you ever used an electronic vapor product?</p> <ul style="list-style-type: none"> • Yes • No
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	<p>From NHANES (2015-2016)</p> <p>Have you ever smoked a cigarette, even one time?</p> <ul style="list-style-type: none"> • Yes • No • Don't know/Not sure • Refused <p>Have you ever smoked a regular cigar, cigarillo or little filtered cigar even one time?</p> <ul style="list-style-type: none"> • No • Don't know/Not sure • Refused <p>. Have you ever used an e-cigarette even one time?</p> <ul style="list-style-type: none"> • Yes • No • Don't know/Not sure • Refused <p>Have you ever used smokeless tobacco even one time?</p> <ul style="list-style-type: none"> • Yes • No • Don't know/Not sure • Refused 												
<p>Comments</p>	<p>Tobacco products include e-cigarettes, cigarettes, cigars (cigars, little cigars, and cigarillos), smokeless tobacco (chewing tobacco, snuff, dip, snus, pouches, heated tobacco products, and dissolvable tobacco [e.g., sticks, strips, orbs, tablets, lozenges]), hookahs, pipe tobacco, and bidis (small brown cigarettes wrapped in a leaf).</p> <p>Tobacco control programs may want to assess this indicator by tobacco product, as ever use of a tobacco product may vary by product.</p>												
<p>Rating</p>	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 15%;">Overall quality low ↔ high</th> <th style="width: 15%;">Resources needed</th> <th style="width: 15%;">Strength of evaluation evidence</th> <th style="width: 15%;">Utility</th> <th style="width: 15%;">Face validity</th> <th style="width: 15%;">Accepted practice</th> </tr> </thead> <tbody> <tr> <td style="background-color: black; color: white;">■■■■■</td> <td>\$\$</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> </tr> </tbody> </table> <p style="text-align: center;">← ○ ● ● → better</p>	Overall quality low ↔ high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice	■■■■■	\$\$	●	●	●	●
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	<p>Disease Prevention and Health Promotion, Office on Smoking and Health, 2012.</p> <ol style="list-style-type: none"> 2. Paul SL, Blizzard L, Patton GC, Dwyer T, Venn A. Parental smoking and smoking experimentation in childhood increase the risk of being a smoker 20 years later: the Childhood Determinants of Adult Health Study. <i>Addiction</i>. 2008 May;103(5):846–53. 3. U.S. National Cancer Institute. A socioecological approach to addressing tobacco-related health disparities. National Cancer Institute Tobacco Control Monograph 22. NIH Publication No. 17-CA-8035A. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; 2017. 4. Wang TW, Gentzke AS, Creamer MR, et al. Tobacco product use and associated factors among middle and high school students — United States, 2019. <i>MMWR Surveill Summ</i>. 2019;68(No. SS-12):1–22. 5. Odani S, Armour BS, Agaku IT. Racial/ethnic disparities in tobacco product use among middle and high school students — United States, 2014–2017. <i>MMWR Morb Mortal Wkly Rep</i>. 2018;67:952–957.
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Outcome 7: Eliminate disparities in tobacco use

Tobacco use remains the leading cause of preventable morbidity and mortality in the United States, resulting in more than 480,000 deaths each year.¹ Despite progress in reducing cigarette smoking and related morbidity and mortality in the past few decades, these reductions have not been equally distributed across population groups.¹⁻³ Significant disparities in tobacco use persist by certain population characteristics, including age, race/ethnicity, gender identity and sexual orientation, educational attainment, income, mental health and substance use conditions, occupation, and geographic location. Studies indicate that certain population groups, including racial/ethnic minorities, LGBTQ+ persons, persons with low educational attainment, persons with low income, persons with mental health and substance use disorders, and persons living in the Southern and Midwestern geographic areas of the United States have experienced less progress in reducing tobacco use.¹⁻⁸ These disparities are present across and vary by patterns of tobacco use, including type of product used, number of products used, frequency of use, and use of flavored products.^{1,2,4-8}

Multiple individual and community-level factors that are often interrelated, including educational attainment, income level, social, cultural and environmental characteristics, targeted tobacco sales and marketing practices, and variation both in tobacco control strategies and policies and in local policymaking authority, contribute to tobacco-related disparities among these population groups.^{2,9-11} The introduction of new tobacco products (e.g., e-cigarettes) has also contributed to significant increases in tobacco use in some population groups, including youth.^{1,6} Moreover, population groups experiencing disparities often lack access to evidence-based, culturally appropriate cessation interventions; this, in part, contributes to sustained tobacco use, nicotine dependences, and reduced likelihood of quitting.^{2,10,12}

Population groups listed under the indicators in this outcome reflect those that emerged in the literature, many of which are based on national-level studies and do not assess within-group disparities. Tobacco control programs should consider using their state- and community-level data to identify populations experiencing disparities within this outcome.

The following indicators are associated with this outcome:

- 4.7.a:** Disparities in tobacco use prevalence ^{HP}
- 4.7.b:** E-cigarette use among youth and young adults ^{NR, HP}
- 4.7.c:** Disparities in the use of flavored tobacco products ^{HP}
- 4.7.d:** Menthol flavored cigarette use ^{NR, HP}
- 4.7.e:** Disparities in polytobacco use
- 4.7.f:** Disparities in the daily use of tobacco products
- 4.7.g:** Disparities in nicotine dependence

^{NR} Denotes an indicator that is not rated.

^{HP} Denotes the indicator aligns with *Healthy People 2030* Objectives.

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1. U.S. Department of Health and Human Services. The health consequences of smoking—50 years of progress: a report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2014.
2. U.S. National Cancer Institute. A socioecological approach to addressing tobacco-related health disparities. National Cancer Institute Tobacco Control Monograph 22. NIH Publication No. 17-CA-8035A. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; 2017.
3. Centers for Disease Control and Prevention. Best practices user guide: health equity in tobacco prevention and control. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2015.
4. Creamer MR, Wang TW, Babb S, et al. Tobacco product use and cessation indicators among adults — United States, 2018. *MMWR Morb Mortal Wkly Rep.* 2019;68:1013–1019.
5. Wang TW, Gentzke AS, Creamer MR, et al. Tobacco product use and associated factors among middle and high school students — United States, 2019. *MMWR Surveill Summ.* 2019;68(No. SS-12):1–22.
6. Gentzke AS, Creamer M, Cullen KA, et al. Vital Signs: Tobacco product use among middle and high school students — United States, 2011–2018. *MMWR Morb Mortal Wkly Rep.* 2019;68:157–164.
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Eliminate Disparities in Tobacco Use

Indicator Rating

← ○ ● ● → better

Number	Indicator	Overall Quality low ↔ high	Resources Needed	Strength of Evaluation Evidence	Utility	Face Validity	Accepted Practice
4.7.a	Disparities in tobacco use prevalence ^{HP}		\$\$	●	●	●	●
4.7.b	E-cigarette use among youth and young adults ^{NR, HP}	NR	NR	NR	NR	NR	NR
4.7.c	Disparities in the use of flavored tobacco products ^{HP}		\$\$	●	●	●	●
4.7.d	Use of menthol flavored cigarettes ^{NR, HP}	NR	NR	NR	NR	NR	NR
4.7.e	Disparities in polytobacco use		\$\$	●	●	●	●
4.7.f	Disparities in the daily use of tobacco products		\$	●	●	●	●
4.7.g	Disparities in nicotine dependence		\$\$	●	●	●	●

\$ Dollar signs denote a qualitative rating of the resources (funds, time, and effort) needed to collect and analyze data using the most commonly available data source. The more dollar signs (maximum four), the more resources needed. Dollar signs do not represent a specific amount or range of costs but are instead a relative measure of expert reviewers' ratings regarding resources required to collect and analyze data to measure the indicator.

^{HP} Denotes the indicator aligns with *Healthy People 2030* Objectives.

^{NR} Denotes an indicator that is not rated.

Disparities in Tobacco Use Prevalence ^{HP}

Indicator number	4.7.a
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	7. Eliminate disparities in tobacco use
What to measure	<p>Cigarettes Proportion of youth under age 18 years who report smoking cigarettes on at least one day of the past 30 days and the proportion of adults aged 18 years or older who have smoked at least 100 cigarettes in their lifetime* and who now report smoking cigarettes every day or some days, overall, and among population groups experiencing tobacco-related disparities</p> <p>Differences in the proportion of youth under age 18 years who report smoking cigarettes on at least one day of the past 30 days and the proportion of adults aged 18 years or older who have smoked at least 100 cigarettes in their lifetime* and who now report smoking cigarettes every day or some days by population group characteristics</p> <p>All other tobacco products Proportion of youth under age 18 years who report using a tobacco product at least one day of the past 30 days and the proportion of adults aged 18 years or older who have ever used a tobacco product and who now report using the product every day or some days, overall, and among population groups experiencing tobacco-related disparities</p> <p>Differences in the proportion of youth under age 18 years who report using a tobacco product at least one day and in the proportion of adults aged 18 years or older who have ever used a tobacco product and who now report using the product every day or some days by population group characteristics</p>
Similar existing indicator(s) from other goal areas	<p>Goal 1 (2014) 1.10.a, “Prevalence of tobacco use among young people.”</p> <p>Goal 2 (2017) 2.5.c “Tobacco use prevalence.”</p> <p>Goal 3 (2015) 3.8.a, “Tobacco use prevalence.”</p>
Rationale	<p>Tobacco use remains the leading cause of preventable morbidity and mortality in the United States, resulting in more than 480,000 deaths each year.¹ Preventing and reducing the use of all forms of tobacco products as early in life as possible is the best strategy for decreasing preventable tobacco-related disease and premature death attributed to tobacco.¹ While prevalence of tobacco use has decreased in recent decades, progress has not been equally distributed across population groups.²⁻⁵ Moreover, there has been a substantial increase in youth tobacco use in recent years, erasing much of the progress in preventing and reducing tobacco use among this population group.^{4,5}</p>

<p>Applying health disparities framing</p>	<p>Males, American Indian/Alaska Native persons, Native Hawaiian/Other Pacific Islander persons, non-Hispanic White persons, multi-racial persons, LGBTQ+ persons, persons with low educational attainment, persons with low income, persons with mental health and substance use conditions, persons with disabilities, veterans and active military personnel, blue collar and service workers, persons who are unemployed or underemployed, and persons who live in the Southern and Midwestern geographic areas of the U.S. experience disproportionately high prevalence of tobacco use.²⁻¹⁵ Rural and urban differences have also been noted, but these have varied by geographic areas of the U.S.¹⁶</p>
<p>Example data source(s)</p>	<p>National Youth Tobacco Survey (NYTS), 2020 Youth Risk Behavioral Surveillance System (YRBSS), 2019 National Health Interview Survey (NHIS), 2020 Behavioral Risk Factor Surveillance System (BRFSS), 2019</p>
<p>Example survey question(s)</p>	<p>From NYTS (2020)</p> <p>During the past 30 days, on how many days did you smoke/use [e-cigarettes/cigarettes/cigar, cigarillo, or little cigar/chewing tobacco, snuff, or dip/hookah or waterpipe]?</p> <p>Specify _ _ (Range 0-30)</p> <p>During the past 30 days, which of the following products have you used on at least one day (Select one or more)?</p> <ul style="list-style-type: none"> • Roll-your-own cigarettes • Pipes filled with tobacco (not hookah or waterpipe) • Snus, such as Camel, Marlboro, or General Snus • Dissolvable tobacco products such as Ariva, Stonewall, Camel orbs, Camel sticks, Marlboro sticks, or Camel strips • Bidis (small brown cigarettes wrapped in a leaf) • I have not used any of the products listed above in the past 30 days <p>From YRBSS (2019)</p> <p>During the past 30 days, on how many days did you smoke/use [electronic vapor product/ cigarettes/ cigars, cigarillos, or little cigars/ chewing tobacco, snuff, dip, snus, or dissolvable tobacco products]?</p> <ul style="list-style-type: none"> • 0 days • 1 or 2 days • 3 to 5 days • 6 to 9 days • 10 to 19 days • 20 to 29 days • All 30 days <p>From NHIS (2020)</p>

	<p>Have you smoked at least 100 cigarettes in your entire life?</p> <ul style="list-style-type: none"> • Yes • No • Refused • Don't Know <p>Do you now smoke cigarettes every day, some days, or not at all?</p> <ul style="list-style-type: none"> • Every day • Some days • Not at all • Refused • Don't know <p>Have you ever smoked a regular cigar, cigarillo, or a little filtered cigar even one time?</p> <ul style="list-style-type: none"> • Yes • No • Refused • Don't Know <p>Do you now smoke regular cigars, cigarillos, or little filtered cigars every day, some days, or not at all?</p> <ul style="list-style-type: none"> • Every day • Some days • Not at all • Refused • Don't know <p>From BRFSS (2019)</p> <p>Have you smoked at least 100 cigarettes in your entire life?</p> <ul style="list-style-type: none"> • Yes • No • Don't know/Not sure • Refused <p>Do you now smoke cigarettes every day, some days, or not at all?</p> <ul style="list-style-type: none"> • Every day • Some days • Not at all • Don't know/Not sure • Refused
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<p>Comments</p>	<p>Tobacco products include e-cigarettes, cigarettes, cigars (cigars, little cigars, and cigarillos), smokeless tobacco (chewing tobacco, snuff, dip, snus, pouches, heated tobacco products, and dissolvable tobacco [e.g., sticks, strips, orbs, tablets, lozenges]), hookahs, pipe tobacco, and bidis (small brown cigarettes wrapped in a leaf).</p> <p>Tobacco control programs may want to assess this indicator by tobacco product as disparities can vary by tobacco product.²⁻⁵ Moreover, within-group disparities can be identified when disaggregating tobacco use estimates within broad population categories, including racial/ethnic categories.^{2,6,14}</p> <p>*To maintain consistency with some previously published studies, the use of lifetime thresholds for cigarette and non-cigarette tobacco products could also be considered in the calculation of current use of these products.</p> <p>This indicator is related to Healthy People 2030 objectives:</p> <ul style="list-style-type: none"> • TU-01 Reduce current tobacco use in adults • TU-02-Reduce current cigarette smoking in adults • TU-03 Reduce current cigarette, cigar, and pipe smoking in adults • TU-04 Reduce current tobacco use in adolescents • TU-05 Reduce current e-cigarette use in adolescents • TU-06 Reduce current cigarette smoking in adolescents • TU-07 Reduce current cigar smoking in adolescents • TU-08 Reduce current use of smokeless tobacco products among adolescents 												
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<p>References</p>	<ol style="list-style-type: none"> 1. U.S. Department of Health and Human Services. The health consequences of smoking—50 years of progress: a report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2014. 2. U.S. National Cancer Institute. A socioecological approach to addressing tobacco-related health disparities. National Cancer Institute 												

	<p>Tobacco Control Monograph 22. NIH Publication No. 17-CA-8035A. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; 2017.</p> <ol style="list-style-type: none"> 3. Creamer MR, Wang TW, Babb S, et al. Tobacco product use and cessation indicators among adults — United States, 2018. <i>MMWR Morb Mortal Wkly Rep.</i> 2019;68:1013–1019. 4. Wang TW, Gentzke AS, Creamer MR, et al. Tobacco product use and associated factors among middle and high school students — United States, 2019. <i>MMWR Surveill Summ.</i> 2019;68(No. SS-12):1–22. 5. Gentzke AS, Creamer M, Cullen KA, et al. Vital Signs: Tobacco product use among middle and high school students — United States, 2011–2018. <i>MMWR Morb Mortal Wkly Rep.</i> 2019;68:157–164. 6. Martell BN, Garrett BE, Caraballo RS. Disparities in adult cigarette smoking — United States, 2002–2005 and 2010–2013. <i>MMWR Morb Mortal Wkly Rep</i> 2016;65:753–758.. 7. Fagan P, Shavers VL, Lawrence D, Gibson JT, O'Connell ME. Employment characteristics and socioeconomic factors associated with disparities in smoking abstinence and former smoking among US workers. <i>J Health Care Poor Underserved.</i> 2007 Nov;18(4 Suppl):52-72. 8. Trinidad DR, Pérez-Stable EJ, White MM, Emery SL, Messer K. A nationwide analysis of US racial/ethnic disparities in smoking behaviors, smoking cessation, and cessation-related factors. <i>Am J Public Health.</i> 2011;101(4):699-706. 9. Weaver KE, Palmer N, Lu L, Case LD, Geiger AM. Rural–urban differences in health behaviors and implications for health status among US cancer survivors. <i>Cancer Causes & Control.</i> 2013;24(8):1481-90. 10. Pampel FC, Mollborn S, Lawrence EM. Life course transitions in early adulthood and SES disparities in tobacco use. <i>Social Science Research.</i> 2014;43:45-59. 11. Bennett K, McElroy JA, Johnson AO, Munk N, Everett KD. A persistent disparity: smoking in rural sexual and gender minorities. <i>LGBT health.</i> 2015;2(1):62-70. 12. Max WB, Stark B, Sung H-Y, Offen N. Sexual identity disparities in smoking and secondhand smoke exposure in California: 2003–2013. <i>Am J Public Health.</i> 2016;106(6):1136-42. 13. Kasza KA, Ambrose BK, Conway KP, et al. Tobacco product use by adults and youths in the United States in 2013 and 2014. <i>N Engl J Med.</i> 2017 Jan 26;376(4):342-353.
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E-cigarette Use Among Youth and Young Adults ^{NR, HP}

Indicator number	4.7.b
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	7. Eliminate disparities in tobacco use
What to measure	<p>Proportion of youth under 18 years who report using an e-cigarette product at least one day of the past 30 days and differences by population group characteristics</p> <p>Proportion of young adults 18-24 years who have ever used an e-cigarette and who report using an e-cigarette every day or some days and differences by population group characteristics</p>
Similar existing indicator(s) from other goal areas	Not applicable.
Rationale	E-cigarette use is a key driver of tobacco product use among youth. ¹ E-cigarettes are the most commonly used tobacco product among youth and the second most commonly used product among young adults. ¹⁻² During 2017-2018, e-cigarette use among youth reached epidemic levels, erasing passed progress in reducing tobacco product use among youth. ¹ Some youth who use e-cigarettes transition to use of combustible tobacco products. ³⁻⁴ No form of tobacco product use among youth is safe. ⁵
Applying health disparities framing	E-cigarette use is highest among youth and young adults, in particular non-Hispanic White and Hispanic youth. ^{1-2,6} The availability of flavored e-cigarettes and marketing of e-cigarette products has contributed to use of e-cigarettes in youth and young adults. ⁵⁻⁷
Example data source(s)	National Youth Tobacco Survey (NYTS), 2020 Youth Risk Behavioral Surveillance System (YRBSS), 2019 Behavioral Risk Factor Surveillance System (BRFSS), 2019
Example survey question(s)	<p>From NYTS (2020)</p> <p>During the past 30 days, on how many days did you use e-cigarettes? Specify _ _ (Range 0-30)</p> <p>From YRBSS (2019)</p> <p>During the past 30 days, on how many days did you use an electronic vapor product?</p>

	<ul style="list-style-type: none"> • 0 days • 1 or 2 days • 3 to 5 days • 6 to 9 days • 10 to 19 days • 20 to 29 days • All 30 days <p>From BRFSS (2018), Optional Module</p> <p>Have you ever used an e-cigarette or other electronic vaping product, even just once, in your entire life?</p> <ul style="list-style-type: none"> • Yes • No • Don't know/Not sure • Refused <p>Do you know use e-cigarettes or other electronic vaping products every day, some days, or not at all?</p> <ul style="list-style-type: none"> • Every day • Some days • Not at all • Don't know/Not sure • Refused
Comments	This indicator is related to Healthy People 2030 objective TU-05: Reduce current e-cigarette use in adolescents.
Rating	Not rated.
References	<ol style="list-style-type: none"> 1. Gentzke AS, Creamer M, Cullen KA, et al. Vital Signs: Tobacco product use among middle and high school students — United States, 2011–2018. <i>MMWR Morb Mortal Wkly Rep.</i> 2019;68:157–164. 2. Creamer MR, Wang TW, Babb S, et al. Tobacco product use and cessation indicators among adults — United States, 2018. <i>MMWR Morb Mortal Wkly Rep.</i> 2019;68:1013–1019. 3. Vogel EA, Prochaska JJ, Ramo DE, et al. Adolescents' e-cigarette use: increases in frequency, dependence, and nicotine exposure over 12 months. <i>J Adolesc Health</i> 2019;64(6):770-75. 4. Berry KM, Fetterman JL, Benjamin EJ, et al. Association of electronic cigarette use with subsequent initiation of tobacco cigarettes in US youths. <i>JAMA Netw Open</i> 2019;2(2):e18771.

	<ol style="list-style-type: none"><li data-bbox="443 195 1398 415">5. U.S. Department of Health and Human Services. E-Cigarette use among youth and young adults. a report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2016.<li data-bbox="443 443 1398 548">6. Wang TW, Gentzke AS, Creamer MR, et al. Tobacco product use and associated factors among middle and high school students —United States, 2019. MMWR Surveill Summ. 2019;68(No. SS-12):1–22.<li data-bbox="443 575 1398 680">7. Cullen KA, Gentzke AS, Sawdey MD, et al. E-cigarette use among youth in the United States, 2019. JAMA. 2019 Nov 5;322(21):2095–103.
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Disparities in the Use of Flavored Tobacco Products ^{HP}

Indicator number	4.7.c
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	7. Eliminate disparities in tobacco use
What to measure	Proportion of youth under age 18 years who used a flavored tobacco product at least 1 day in the previous 30 days and the proportion of adults aged 18 years or older who report using a flavored tobacco product every day or some days, overall, and among population groups experiencing tobacco-related disparities
	Differences in the proportion of youth under age 18 years who used a flavored tobacco product at least 1 day in the previous 30 days and in the proportion of adults aged 18 years or older who report using a flavored tobacco product every day or some days by population group characteristics
Similar existing indicator(s) from other goal areas	Not applicable.
Rationale	Flavors play a key role in smoking initiation and continued tobacco use among youth and young adults. ^{1,2} Research has shown that sweet-tasting flavors are particularly appealing to youth and young adults. ²⁻⁷ About 7 out of 10 youth who use tobacco use a flavored product. ⁸ Menthol flavored products, which have multiple sensory effects, have been heavily marketed by the tobacco industry. ^{7,9-11} Some studies show that people who smoke menthol cigarettes have a harder time quitting smoking than those who smoke non-menthol cigarettes. ¹²
Applying health disparities framing	The tobacco industry has targeted marketing of flavored tobacco products to youth, racial/ethnic minorities, low income communities, and urban areas. ^{7,9-11} Youth and young adults have the highest use of flavored tobacco products. ⁶⁻⁸ Additional population groups, including LGBTQ+ persons, persons with low educational attainment, and persons with low income also have disproportionately higher prevalence of use of flavored tobacco products. ^{3,6-7,13} Menthol flavored tobacco products contribute to significant tobacco-related health disparities, including among youth and young adults, women, African American or Black persons, LGBTQ+ persons, and persons with mental health conditions. ^{6-7,13-15}
Example data source(s)	National Youth Tobacco Survey (NYTS), 2020 Population Assessment of Tobacco and Health- Adult (PATH-A), 2016-2017

<p>Example survey question(s)</p>	<p>From NYTS (2020)</p> <p>During the past 30 days, were the cigarettes that you usually smoked menthol?</p> <ul style="list-style-type: none"> • Yes • No • Not sure <p>Were any of the [tobacco product] that you used in the past 30 days flavored to taste like menthol, mint, clove or spice, alcohol (wine, cognac), candy, fruit, chocolate, or any other flavor?</p> <ul style="list-style-type: none"> • Yes • No • Don't Know <p>What flavors were the [tobacco product] that you have used in the past 30 days? (Select one or more)</p> <ul style="list-style-type: none"> • Menthol • Mint • Clove or spice • Fruit • Chocolate • Alcoholic drinks (such as wine, cognac, margarita, or other cocktails) • Candy, desserts, or other sweets • Some other flavor not listed here (Specify: _____) <p>From PATH-A (2016-2017)</p> <p>In the past 30 days, [were any of the cigarettes/was any of the roll-your-own cigarette tobacco] you smoked flavored to taste like menthol or mint?</p> <ul style="list-style-type: none"> • Yes • No • I don't know • Don't know • Refuse <p>In the past 30 days, [were/was] any of the [traditional cigar/cigarillo/filtered cigar/pipe tobacco/shisha or hookah tobacco]s that you smoked flavored to taste like menthol, mint, clove, spice, fruit, chocolate, alcoholic drinks, candy or other sweets?</p> <ul style="list-style-type: none"> • Yes • No • I don't know • Don't know • Refuse
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	<p>In the past 30 days, was any of the [snus /smokeless tobacco] you used flavored to taste like menthol, mint, wintergreen, spearmint or frost, clove, spice, fruit, chocolate, alcoholic drinks, candy or other sweets?</p> <ul style="list-style-type: none"> • Yes • No • I don't know • Don't know • Refuse <p>In the past 30 days, which flavors of [electronic nicotine products/electronic nicotine cartridges/e-liquid], have you used? Chose all that apply.</p> <ul style="list-style-type: none"> • Tobacco-flavored • Menthol or mint • Clove or spice • Fruit • Chocolate • An alcoholic drink (such as wine, cognac, margarita or other cocktails) • A non-alcoholic drink (such as coffee, soda, energy drinks, or other beverages) • Candy, desserts or other sweets • Some other flavor (SPECIFY) • DON'T KNOW • REFUSED 												
<p>Comments</p>	<p>Tobacco control programs may want to assess this indicator by tobacco product as disparities can vary by tobacco product. Moreover, because of its impact on tobacco-related disparities, it's important to assess differences in menthol-flavored tobacco products across and within population groups, including race/ethnicity.</p> <p>This indicator is related to a Healthy People 2030 objective TU-09: Reduce current use of flavored tobacco products in adolescents who use tobacco.</p>												
<p>Rating</p>	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 15%;">Overall quality low ↔ high</th> <th style="width: 15%;">Resources needed</th> <th style="width: 15%;">Strength of evaluation evidence</th> <th style="width: 15%;">Utility</th> <th style="width: 15%;">Face validity</th> <th style="width: 15%;">Accepted practice</th> </tr> </thead> <tbody> <tr> <td style="background-color: black; width: 15%;"></td> <td style="width: 15%;">\$\$</td> <td style="width: 15%;">●</td> <td style="width: 15%;">●</td> <td style="width: 15%;">●</td> <td style="width: 15%;">●</td> </tr> </tbody> </table> <p style="text-align: right;">← ○ ● ● → better</p>	Overall quality low ↔ high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		\$\$	●	●	●	●
Overall quality low ↔ high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice								
	\$\$	●	●	●	●								

<p>References</p>	<ol style="list-style-type: none"> 1. Villanti AC, Johnson AL, Glasser AM, et al. Association of flavored tobacco use with tobacco initiation and subsequent use among US youth and adults, 2013-2015. <i>JAMA Netw Open</i>. 2019;2(10):e1913804. 2. Ambrose BK, Day HR, Rostron B, et al. Flavored tobacco product use among US youth aged 12-17 years, 2013-2014. <i>JAMA</i>. 2015;314(17):1871-3. 3. Huang L-L, Baker HM, Meernik C, Ranney LM, Richardson A, Goldstein AO. Impact of non-menthol flavours in tobacco products on perceptions and use among youth, young adults and adults: a systematic review. <i>Tob Control</i>. 2017;26(6):709-19. 4. Mennella JA, Pepino MY, Reed DR. Genetic and environmental determinants of bitter perception and sweet preferences. <i>Pediatrics</i>. 2005;115(2):e216-222. 5. De Graaf C, Zandstra EH. Sweetness intensity and pleasantness in children, adolescents, and adults. <i>Physiol Behav</i>. 1999;67(4):513-520. 6. Cullen KA, Liu ST, Bernat JK, et al. Flavored tobacco product use among middle and high school students — United States, 2014–2018. <i>MMWR Morb Mortal Wkly Rep</i>. 2019;68:839–844. 7. U.S. National Cancer Institute. A socioecological approach to addressing tobacco-related health disparities. National Cancer Institute Tobacco Control Monograph 22. NIH Publication No. 17-CA-8035A. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; 2017. 8. Wang TW, Gentzke AS, Creamer MR, et al. Tobacco product use and associated factors among middle and high school students — United States, 2019. <i>MMWR Surveill Summ</i>. 2019;68(No. SS-12):1–22. 9. Carpenter CM, Wayne GF, Pauly JL, Koh HK, Connolly GN. New cigarette brands with flavors that appeal to youth: tobacco marketing strategies. <i>Health Aff (Millwood)</i>. 2005 Nov-Dec;24(6):1601-10. 10. Cummings KM, Morley CP, Horan JK, Steger C, Leavell NR. Marketing to America's youth: evidence from corporate documents. <i>Tob Control</i>. 2002 Mar;11 Suppl 1(Suppl 1):15-17. 11. Kreslake JM, Wayne GF, Connolly GN. The menthol smoker: tobacco industry research on consumer sensory perception of menthol cigarettes and its role in smoking behavior. <i>Nicotine Tob Res</i>. 2008 Apr;10(4):705-15. 12. Villanti AC, Collins LK, Niaura RS, Gagosian SY, Abrams DB. Menthol cigarettes and the public health standard: a systematic review. <i>BMC Public Health</i>. 2017;17:983.
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	<p>13. Villanti AC, Mowery PD, Delnevo CD, Niaura RS, Abrams DB, Giovino GA. Changes in the prevalence and correlates of menthol cigarette use in the USA, 2004-2014. <i>Tob Control</i>. 2016;25:ii14-ii20.</p> <p>14. Sterling K, Fryer C, Pagano I, Jones D, Fagan P. Association between menthol-flavoured cigarette smoking and flavoured little cigar and cigarillo use among African-American, Hispanic, and White young and middle-aged adult smokers. <i>Tob Control</i>. 2016;25(Suppl 2):ii21-ii31.</p> <p>15. Young-Wolff KC, Hickman NJ III, Kim R, Gali K, Prochaska JJ. Correlates and prevalence of menthol cigarette use among adults with serious mental illness. <i>Nicotine Tob Res</i>. 2015;17(3):285-291.</p>
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Use of Menthol Flavored Cigarettes ^{NR, HP}

Indicator number	4.7.d
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	7. Eliminate disparities in tobacco use
What to measure	<p>Proportion of youth under age 18 years who smoked a menthol flavored cigarette at least 1 day in the previous 30 days and the proportion of adults aged 18 years or older who smoked a menthol flavored cigarette every day or some days, overall, and among population groups experiencing tobacco-related disparities</p> <p>Differences in the proportion of youth under age 18 years who smoked a menthol flavored cigarette at least 1 day in the previous 30 days and in the proportion of adults aged 18 years or older who smoked a menthol flavored cigarette product every day or some days by population group characteristics</p>
Similar existing indicator(s) from other goal areas	Not applicable.
Rationale	Flavors play a key role in smoking initiation and sustained use. ^{1,2} Menthol flavored products, which have multiple sensory effects, have been heavily marketed by the tobacco industry. ³⁻⁶ Some studies show that people who smoke menthol cigarettes have a harder time quitting smoking than those who smoke non-menthol cigarettes. ⁷
Applying health disparities framing	Menthol flavored tobacco products, particularly menthol cigarettes, contribute to significant tobacco-related health disparities in the U.S. ^{3,8-11} African American or Black persons have the highest percentage of menthol cigarette use of all racial/ethnic groups, and menthol cigarettes are a key contributor to tobacco-related disparities among this population group. More than 7 in 10 African American or Black persons who smoke use menthol cigarettes. ⁸⁻⁹ Other population groups that have a high prevalence of menthol cigarette use include youth and young adults, women, LGBTQ+ persons, and persons with mental health conditions. ^{3,8-11}
Example data source(s)	National Youth Tobacco Survey (NYTS), 2020 Population Assessment of Tobacco and Health- Adult (PATH-A), 2016-2017
Example survey question(s)	<p>From NYTS (2020)</p> <p>During the past 30 days, were the cigarettes that you usually smoked menthol?</p> <ul style="list-style-type: none"> • Yes • No • Not Sure

	<p>From PATH-A (2016-2017)</p> <p>In the past 30 days, [were any of the cigarettes/was any of the roll-your-own cigarette tobacco] you smoked flavored to taste like menthol or mint?</p> <ul style="list-style-type: none"> • Yes • No • I don't know • Don't know • Refuse
Comments	<p>Tobacco control programs may want to assess this indicator by tobacco product as disparities can vary by tobacco product. Moreover, because of its strong influence on tobacco-related disparities, it's important to assess differences in menthol-flavored tobacco products across and within population groups, including race/ethnicity.</p> <p>This indicator is related to a <i>Healthy People 2030</i> objective TU-09: Reduce current use of flavored tobacco products in adolescents who use tobacco.</p>
Rating	Not rated.
References	<ol style="list-style-type: none"> 1. Villanti AC, Johnson AL, Glasser AM, et al. Association of flavored tobacco use with tobacco initiation and subsequent use among US youth and adults, 2013-2015. <i>JAMA Netw Open</i>. 2019;2(10):e1913804. 2. Ambrose BK, Day HR, Rostron B, et al. Flavored tobacco product use among US youth aged 12-17 years, 2013-2014. <i>JAMA</i>. 2015;314(17):1871-3. 3. U.S. National Cancer Institute. A socioecological approach to addressing tobacco-related health disparities. National Cancer Institute Tobacco Control Monograph 22. NIH Publication No. 17-CA-8035A. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; 2017. 4. Carpenter CM, Wayne GF, Pauly JL, Koh HK, Connolly GN. New cigarette brands with flavors that appeal to youth: tobacco marketing strategies. <i>Health Aff (Millwood)</i>. 2005 Nov-Dec;24(6):1601-10. 5. Cummings KM, Morley CP, Horan JK, Steger C, Leavell NR. Marketing to America's youth: evidence from corporate documents. <i>Tob Control</i>. 2002 Mar;11 Suppl 1(Suppl 1):15-17. 6. Kreslake J, Ferris Wayne G, Connolly G. The menthol smoker: tobacco industry research on consumer sensory perception of menthol cigarettes and its role in smoking behavior. <i>Nicotine Tob Res</i>. 2008;10(8):705-16. 7. Villanti AC, Collins LK, Niaura RS, Gagosian SY, Abrams DB. Menthol cigarettes and the public health standard: a systematic review. <i>BMC Public Health</i>. 2017;17:983.

	<ol style="list-style-type: none">8. Centers for Disease Control and Prevention. Menthol and cigarettes. Accessed April 7, 2020. https://www.cdc.gov/tobacco/basic_information/tobacco_industry/menthol-cigarettes/index.html.9. Villanti AC, Mowery PD, Delnevo CD, Niaura RS, Abrams DB, Giovino GA. Changes in the prevalence and correlates of menthol cigarette use in the USA, 2004-2014. <i>Tob Control</i>. 2016;25:ii14-ii20.10. Sterling K, Fryer C, Pagano I, Jones D, Fagan P. Association between menthol-flavoured cigarette smoking and flavoured little cigar and cigarillo use among African-American, Hispanic, and White young and middle-aged adult smokers. <i>Tob Control</i>. 2016;25(Suppl 2):ii21–ii31.11. Young-Wolff KC, Hickman NJ III, Kim R, Gali K, Prochaska JJ. Correlates and prevalence of menthol cigarette use among adults with serious mental illness. <i>Nicotine Tob Res</i>. 2015;17(3):285–291.
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Disparities in Polytobacco Use

Indicator number	4.7.e
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	7. Eliminate disparities in tobacco use
What to measure	<p>Proportion of youth under age 18 years who report having used two or more tobacco products in the past 30 days and the proportion of adults aged 18 years or older who report using two or more tobacco products every day or some days, overall, and among populations experiencing tobacco-related disparities</p> <p>Differences in the proportion of youth under age 18 years who report having used two or more tobacco products in the past 30 days and in the proportion of adults aged 18 years or older who report using two or more tobacco products every day or some days by population group characteristics</p>
Similar existing indicator(s) from other goal areas	Goal 1 (2014) 1.10.d, “Proportion of polytobacco product use among young people.”
Rationale	Use of multiple products increases exposure to higher levels of nicotine and other harmful constituents and increases the risk of nicotine dependence and adverse health effects. ^{1,2} Patterns of multiple product use have shifted over time, in part, because of new products that have entered the market. ³⁻⁷
Applying health disparities framing	Studies indicate that certain population groups, including youth and young adults, men, American Indian/Alaska Native persons, non-Hispanic White persons, Latino/Hispanic persons, persons with low educational attainment, persons with low income, persons with mental health and substance use conditions, persons with disabilities, and persons living in the Southern and Midwestern geographic areas of the U.S. are more likely to be polytobacco users. ^{3,4,6,8-11}
Example data source(s)	National Youth Tobacco Survey (NYTS), 2020 Youth Risk Behavioral Surveillance System (YRBSS), 2019 Population Assessment of Tobacco and Health- Adult Survey (PATH-A), 2016-2017
Example survey question(s)	From NYTS (2020) During the past 30 days, on how many days did you [smoke/use] [any tobacco product(s)/ e-cigarettes/ cigarettes/ cigars, cigarillos, or little cigars /chewing tobacco, snuff, or dip/ tobacco in a hookah or waterpipe]?

	<p>Specify _ _ (Range 0-30)</p> <p>During the past 30 days, which of the following products have you used on at least one day (Select one or more)?</p> <ul style="list-style-type: none"> • Roll-your-own cigarettes • Pipes filled with tobacco (not hookah or waterpipe) • Snus, such as Camel, Marlboro, or General Snus • Dissolvable tobacco products such as Ariva, Stonewall, Camel orbs, Camel sticks, Marlboro sticks, or Camel strips • Bidis (small brown cigarettes wrapped in a leaf) • I have not used any of the products listed above in the past 30 days <p>From YRBSS (2019)</p> <p>During the past 30 days, on how many days did you smoke/use [electronic vapor products/cigarettes/cigars, cigarillos, or little cigars/chewing tobacco, snuff, dip, snus, or dissolvable tobacco products]?</p> <ul style="list-style-type: none"> • 0 days • 1 or 2 days • 3 to 5 days • 6 to 9 days • 10 to 19 days • 20 to 29 days • All 30 days <p>From PATH-A (2016-2017)</p> <p>In the past 30 days, have you smoked a [cigarette/traditional cigar/cigarillo or filtered cigar/pipe filled with tobacco/smoked tobacco in a hookah], even one or two puffs?</p> <ul style="list-style-type: none"> • Yes • No • Don't know/Not sure • Refused <p>In the past 30 days, have you used [a/an] [electronic nicotine product/snus pouches/other smokeless tobacco products, such as loose snus, moist snuff, dip, spit, or chewing tobacco], even one or two times?</p> <ul style="list-style-type: none"> • Yes • No • Don't know/Not sure • Refused
Comments	Not applicable.

Rating	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">Overall quality low ↔ high</div> <div style="text-align: center;">Resources needed</div> <div style="text-align: center;">Strength of evaluation evidence</div> <div style="text-align: center;">Utility</div> <div style="text-align: center;">Face validity</div> <div style="text-align: center;">Accepted practice</div> </div> <div style="display: flex; justify-content: center; align-items: center; margin-top: 10px;"> <div style="width: 100px; height: 15px; background-color: black; margin-right: 10px;"></div> <div style="margin-right: 10px;">\$\$</div> <div style="margin-right: 10px;">●</div> <div style="margin-right: 10px;">●</div> <div style="margin-right: 10px;">●</div> <div style="margin-right: 10px;">●</div> </div> <div style="text-align: center; margin-top: 5px;">← ○ ● ● → better</div>					
References	<ol style="list-style-type: none"> 1. U.S. Department of Health and Human Services. Preventing tobacco use among youth and young adults : a report of the Surgeon General. Atlanta: US Department of Health and Human Services. Centers for Disease Control and Prevention; 2012. 2. Ali M, Gray TR, Martinez DJ, Curry LE, Horn KA. Risk profiles of youth single, dual, and poly tobacco users. <i>Nicotine Tob Res.</i> 2016;18(7):1614-21. 3. Creamer MR, Wang TW, Babb S, et al. Tobacco product use and cessation indicators among adults — United States, 2018. <i>MMWR Morb Mortal Wkly Rep.</i> 2019;68:1013–1019. 4. Gentzke AS, Creamer M, Cullen KA, et al. Vital Signs: Tobacco product use among middle and high school students — United States, 2011–2018. <i>MMWR Morb Mortal Wkly Rep.</i> 2019;68:157–164. 5. Johnson AL, Collins LK, Villanti AC, Pearson JL, Niaura RS. Patterns of nicotine and tobacco product use in youth and young adults in the United States, 2011-2015. <i>Nicotine Tob Res.</i> 2018;20(suppl_1):S48–S54. 6. Gilreath TD, Leventhal A, Barrington-Trimis JL, Unger JB, Cruz TB, Berhane K, et al. Patterns of alternative tobacco product use: emergence of hookah and e-cigarettes as preferred products amongst youth. <i>J Adolesc Health.</i> 2016;58(2):181-5. 7. Huh J, Leventhal AM. Progression of poly-tobacco product use patterns in adolescents. <i>Am J Prev Med.</i> 2016;51(4):513-7. 8. U.S. National Cancer Institute. A socioecological approach to addressing tobacco-related health disparities. National Cancer Institute Tobacco Control Monograph 22. NIH Publication No. 17-CA-8035A. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; 2017. 9. U.S. Department of Health and Human Services. The health consequences of smoking—50 years of progress: a report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2014. 					

	<p>10. Wang TW, Gentzke AS, Creamer MR, et al. Tobacco product use and associated factors among middle and high school students — United States, 2019. <i>MMWR Surveill Summ.</i> 2019;68(No. SS-12):1–22.</p> <p>11. Osman A, Kowitt SD, Ranney LM, Heck C, Goldstein AO. Trends and racial disparities in mono, dual, and poly use of tobacco products among youth. <i>Nicotine Tob Res.</i> 2018;20(suppl_1):S22–S30.</p>
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Disparities in the Daily Use of Tobacco Products

Indicator number	4.7.f
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	7. Eliminate disparities in tobacco use
What to measure	<p>Proportion of youth under age 18 years and adults aged 18 years or older who report daily use of at least one tobacco product, overall, and among population groups experiencing tobacco-related disparities</p> <p>Differences in the proportion of youth under age 18 years and adults aged 18 years or older that report daily use of at least one tobacco product by population group characteristics</p>
Similar existing indicator(s) from other goal areas	Not applicable.
Rationale	Daily use of tobacco products increases the risk of nicotine dependence, sustained use, and tobacco-related adverse health effects. ¹⁻² Moreover, daily users are less likely to make a quit attempt and successfully quit. ²
Applying health disparities framing	Studies indicate that adults, men, American Indian/Alaska Native persons, non-Hispanic White persons, LGBTQ+ persons, persons with low income, persons with mental health conditions, blue collar and service workers, and persons residing in the Midwestern geographic areas of the U.S. and in rural areas are more likely to be daily tobacco users. ³⁻¹¹
Example data source(s)	National Youth Tobacco Survey (NYTS), 2020 Youth Risk Behavioral Surveillance System (YRBSS), 2019 Behavioral Risk Factor Surveillance System (BRFSS), 2019 Population Assessment of Tobacco and Health- Adult Survey (PATH-A), 2016-2017
Example survey question(s)	<p>From NYTS (2020)</p> <p>During the past 30 days, on how many days did you [smoke/use] [any tobacco product(s)/ e-cigarettes/ cigarettes/ cigars, cigarillos, or little cigars /chewing tobacco, snuff, or dip/ tobacco in a hookah or waterpipe]?</p> <p>Specify _ _ (Range 0-30)</p> <p>From YRBSS (2019)</p> <p>During the past 30 days, on how many days did you smoke/use [electronic vapor product/cigarettes/cigars, cigarillos, or little cigars/chewing tobacco, snuff, dip, snus, or dissolvable tobacco products]?</p>

	<ul style="list-style-type: none"> • 0 days • 1 or 2 days • 3 to 5 days • 6 to 9 days • 10 to 19 days • 20 to 29 days • All 30 days <p>From BRFSS (2019)</p> <p>Do you now smoke/use [cigarettes/ chewing tobacco, snuff, or snus] every day, some days, or not at all?</p> <ul style="list-style-type: none"> • Every day • Some days • Not at all • Don't know / Not sure • Refused <p>From PATH-A (2016-2017)</p> <p>Do you now [smoke cigarettes/use electronic nicotine products/smoke traditional cigars/cigarillos/filtered cigars as blunts/smoke a pipe filled with tobacco/smoke tobacco in a hookah/use snus/use smokeless tobacco]</p> <ul style="list-style-type: none"> • Every day • Some days • Not at all • Don't know / Not sure • Refused 												
Comments	Tobacco control programs may want to consider examining this indicator by tobacco product and intensity of use to help interpret the results of this indicator.												
Rating	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 15%;">Overall quality low ↔ high</th> <th style="width: 15%;">Resources needed</th> <th style="width: 15%;">Strength of evaluation evidence</th> <th style="width: 15%;">Utility</th> <th style="width: 15%;">Face validity</th> <th style="width: 15%;">Accepted practice</th> </tr> </thead> <tbody> <tr> <td style="background-color: black; color: black;">██████████</td> <td>\$</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> </tr> </tbody> </table> <p style="text-align: center;">← ○ ● ● → better</p>	Overall quality low ↔ high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice	██████████	\$	●	●	●	●
Overall quality low ↔ high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice								
██████████	\$	●	●	●	●								
References	<ol style="list-style-type: none"> 1. Schane RE, Ling PM, Glantz SA. Health effects of light and intermittent smoking: a review. <i>Circulation</i>. 2010;121(13):1518–1522. 2. Tindle HA, Shiffman S. Smoking cessation behavior among intermittent smokers versus daily smokers. <i>Am J Public Health</i>. 2011;101(7):e1–e3. 												

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Disparities in Nicotine Dependence

Indicator number	4.7.g
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	7. Eliminate disparities in tobacco use
What to measure	<p>Proportion of youth under age 18 years and adults aged 18 years or older that report nicotine dependence, overall, and among population groups experiencing tobacco-related disparities</p> <p>Differences in the proportion of youth under age 18 years and adults aged 18 years or older that report nicotine dependence by population group characteristics</p>
Similar existing indicator(s) from other goal areas	Not applicable.
Rationale	Nicotine is the addictive drug in tobacco. ¹ Tobacco companies are known to design products with enough nicotine to create and sustain addiction. ¹ For example, cigarettes were designed to increase the likelihood that initiation would lead to dependence and difficulty quitting. ¹ This indicator can help examine the extent to which interventions to decrease tobacco, multiple product use, and daily use are having an effect on nicotine dependence. ¹
Applying health disparities framing	Studies show that certain population groups including non-Hispanic White persons, LGBTQ+ persons, persons with low educational attainment, and persons with low income are more likely to experience nicotine dependence. ²⁻⁴ Because youth and pregnant persons are especially vulnerable to the harmful effects of nicotine, programs may want to monitor nicotine dependence among these population groups. ¹
Example data source(s)	National Youth Tobacco Survey (NYTS), 2020 Population Assessment of Tobacco and Health- Adult Survey (PATH-A), 2016-2017
Example survey question(s)	<p>From NYTS (2020)</p> <p>During the past 30 days, have you had a strong craving or felt like you really needed to use a tobacco product of any kind?</p> <ul style="list-style-type: none"> • Yes • No <p>How soon after you wake up do you want to use a tobacco product?</p> <ul style="list-style-type: none"> • I do not want to use tobacco

	<ul style="list-style-type: none"> • Within 5 minutes • From 6 to 30 minutes • From more than 30 minute to 1 hour • After more than 1 hour but less than 24 hours • I rarely want to use tobacco <p>From PATH-A (2016-2017)</p> <p>Do you ever have strong cravings to [smoke/use] [tobacco product]?</p> <ul style="list-style-type: none"> • Yes • No • Don't know <p>Have you ever felt like you really needed to [smoke/use] [tobacco product]?</p> <ul style="list-style-type: none"> • Yes • No • Don't know <p>Please rate your level of agreement for each statement using the following scale: 1=not true of me at all to 5=extremely true of me</p> <ul style="list-style-type: none"> • I find myself reaching for [tobacco product] without thinking about it. [My urges keep getting stronger if I don't/I still have urges to] [smoke/use] [tobacco product]. • [Tobacco product] [control/controls] me. • My [tobacco product][smoking/use] is out of control. • My urge to [smoke/use] [tobacco product] is out of control. • I usually want to [smoke/use] [tobacco product] right after I wake up. • I can only go a couple of hours without [smoking/using]/wanting to [smoke/use] [tobacco product]. • [I frequently [smoke/use]]/I find myself almost [smoking/using] [tobacco product] without thinking about it. • [Smoking/Using] [tobacco product] [really helps/would really help] me feel better if I've been feeling down. • [Smoking/Using] [tobacco product] helps me think better. • I would find it really hard to stop [smoking/using] [tobacco product]. • [I would find it hard to stop [smoking/using] [tobacco product] for a week./ I would find it hard to not [smoke/use] [tobacco product] for another week.] • After not [smoking/using] [tobacco product] for a while, [I need/I would like] to [smoke/use] [tobacco product] in order to feel less restless and irritable.
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	<ul style="list-style-type: none"> • [After not [smoking/using] [tobacco product] for a while, [I need/I feel like I need] to [smoke/use] [tobacco product] in order to keep myself from experiencing any discomfort. 																		
<p>Comments</p>	<p>Because frequency, intensity of use, and polytobacco use are strongly associated with nicotine dependence, population groups with high and frequent consumption of tobacco products and those who use multiple products are at increased risk of nicotine dependence.^{5,6} For this reason, disparities across these indicators should be monitored and considered when measuring this indicator and interpreting results.</p> <p>There are several known tests for nicotine dependence, including Fagerstrom Test for Nicotine Dependence⁷ and the Hooked on Nicotine Checklist.⁸⁻⁹ Tobacco control programs may want to remain consistent with the scale used to compare this indicator over time. Moreover, programs may want to assess this indicator by product type, as nicotine levels can vary by tobacco product.</p>																		
<p>Rating</p>	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 15%;">Overall quality low ↔ high</th> <th style="width: 10%;">Resources needed</th> <th style="width: 15%;">Strength of evaluation evidence</th> <th style="width: 15%;">Utility</th> <th style="width: 15%;">Face validity</th> <th style="width: 15%;">Accepted practice</th> </tr> </thead> <tbody> <tr> <td style="background-color: black; color: black;">██████████</td> <td>\$</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> </tr> <tr> <td colspan="6">← ○ ● ● → better</td> </tr> </tbody> </table>	Overall quality low ↔ high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice	██████████	\$	●	●	●	●	← ○ ● ● → better					
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Outcome 8: Eliminate disparities in secondhand smoke exposure

Secondhand smoke (SHS) exposure contributes to approximately 41,000 deaths among nonsmoking adults each year in the U.S.¹ The 2006 Surgeon General's report, *The Health Consequences of Involuntary Exposure to Secondhand Smoke*, concluded that there is no risk-free level of SHS exposure.² Exposure to SHS can lead to lung cancer, heart disease, and stroke in adults and to increased risk of acute respiratory infections, ear problems, and sudden infant death syndrome in children.^{1,2} Exposure to SHS has decreased substantially in the past three decades, in large part because of the significant declines in smoking and the growing number of states and communities with comprehensive smokefree laws that do not allow smoking in indoor areas of work and public places, including restaurants, and bars.³

Although substantial progress toward protecting people who do not smoke from SHS exposure has been made, disparities in SHS exposure exist by age, race/ethnicity, gender identity and sexual orientation, educational attainment, income, housing type, occupation, and geographic location.³ Many studies have found that children, youth, African American or Black persons, LGBTQ+ persons, persons with low educational attainment, persons with low income, persons who work in blue collar and service occupations, persons living in rental and multiunit properties, and persons who live in states without comprehensive smokefree policies continue to be disproportionately exposed to SHS.¹⁻¹⁶ These disparities may partly exist because these population groups are less likely to be protected by smokefree policies in workplaces and by voluntary smokefree rules in private settings.^{1,2,10,12,17} Gaps in coverage may reflect policy exemptions, which are common for hospitality venues; casinos; tobacco-oriented businesses, such as smoke shops; and outdoor workplaces.^{17,18}

Moreover, as indoor public spaces and workplaces are covered by comprehensive smokefree policies, private settings remain a major source of SHS for people who do not smoke and the main source for SHS exposure for children.¹⁻² Persons living in multiunit housing, such as apartment buildings and condominiums, are particularly at risk of exposure in the home, where secondhand smoke can transfer between neighboring living units and common areas.⁴⁻¹⁶ Multiunit housing properties are home to a high proportion of children, racial/ethnic minorities, and individuals of low socioeconomic status.^{15,19}

The following indicators are associated with this outcome:

- 4.8.a:** Disparities in nonsmokers exposed to secondhand smoke
- 4.8.b:** Disparities in exposure to secondhand smoke in the workplace
- 4.8.c:** Disparities in exposure to secondhand smoke in indoor public spaces
- 4.8.d:** Disparities in exposure to secondhand smoke in homes and vehicles
- 4.8.e:** Disparities in multiunit housing residents' exposure to secondhand smoke

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4. U.S. National Cancer Institute. A socioecological approach to addressing tobacco-related health disparities. National Cancer Institute Tobacco Control Monograph 22. NIH Publication No. 17-CA-8035A. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; 2017.
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Eliminate Disparities in Secondhand Smoke Exposure

Indicator Rating

← ○ ● ● → better

Number	Indicator	Overall Quality low ↔ high	Resources Needed	Strength of Evaluation Evidence	Utility	Face Validity	Accepted Practice
4.8.a	Disparities in exposure to secondhand smoke among people who do not smoke ^{HP}		\$\$	●	●	●	●
4.8.b	Disparities in exposure to secondhand smoke in the workplace		\$\$	●	●	●	●
4.8.c	Disparities in exposure to secondhand smoke in indoor public spaces		\$\$	●	●	●	●
4.8.d	Disparities in exposure to secondhand smoke in homes and vehicles		\$\$	●	●	●	●
4.8.e	Disparities in exposure to secondhand smoke among multiunit housing residents		\$\$	●	●	●	●

\$ Dollar signs denote a qualitative rating of the resources (funds, time, and effort) needed to collect and analyze data using the most commonly available data source. The more dollar signs (maximum four), the more resources needed. Dollar signs do not represent a specific amount or range of costs but are instead a relative measure of expert reviewers' ratings regarding resources required to collect and analyze data to measure the indicator.

^{HP} Denotes the indicator aligns with *Healthy People 2030* Objectives.

Disparities in Exposure to Secondhand Smoke Among People Who Do Not Smoke ^{HP}

Indicator number	4.8.a
Goal area	4. Identify and Eliminate Disparities
Outcome	8. Eliminate disparities in secondhand smoke exposure
What to measure	Proportion of the nonsmoking population who report exposure to secondhand smoke, overall, and among population groups experiencing tobacco-related disparities
	Differences in the proportion of the nonsmoking population who report exposure to secondhand smoke by population group characteristics
Similar existing indicator(s) from other goal areas	Goal 2 (2017) 2.4.a, “Proportion of nonsmokers exposed to secondhand smoke.”
Rationale	Secondhand smoke (SHS) exposure has been causally linked to a number of adverse health outcomes, including heart disease and lung cancer in adults, and increased risk of acute respiratory infections, ear problems, and sudden infant death syndrome in children. ^{1,2} SHS contains more than 7,000 chemicals; hundreds are toxic, and nearly 70 can cause cancer. ² About 1 in 4 people in the U.S remain exposed to secondhand smoke. ³
Applying health disparities framing	Studies have found that exposure to SHS remains higher among certain population groups, including children, youth, African American or Black persons, LGBTQ+ persons, persons with low educational attainment, persons with low income, blue collar and service workers, and multiunit housing residents. ³⁻⁹ Moreover, persons residing in states without comprehensive smokefree policies and a lower proportion of households without smokefree home rules, including states in the Southern and Midwestern geographic areas of the U.S., have higher exposure to SHS. ^{1-2,10}
Example data source(s)	National Youth Tobacco Survey (NYTS), 2020 National Health and Nutrition Examination Survey (NHANES), 2013-2014 Social Climate Survey of Tobacco Control (SCS-TC), 2015
Example survey question(s)	From NYTS (2020) During the past 30 days, on how many days did you breathe the smoke from someone who was smoking tobacco products in an indoor public place? Examples of indoor public places are school buildings, stores, restaurants, and sports arenas. <ul style="list-style-type: none"> • 0 days




	<ul style="list-style-type: none"> • 1 or 2 days • 3 to 5 days • 6 to 9 days • 10 to 19 days • 20 to 29 days • All 30 days <p>During the past 30 days, on how many days did you breathe the smoke from someone who was smoking tobacco products in an outdoor public place? Examples of outdoor public places are school grounds, parking lots, stadiums, and parks.</p> <ul style="list-style-type: none"> • 0 days • 1 or 2 days • 3 to 5 days • 6 to 9 days • 10 to 19 days • 20 to 29 days • All 30 days <p>From NHANES (2017-2018)</p> <p>Measured serum cotinine level greater than or equal to 0.05 ng/mL and less than or equal to 10 ng/mL among self-reported non-tobacco users and those not using nicotine replacement therapy. (biochemical marker)</p> <p>From SCS-TC (2015)</p> <p>During the past SEVEN DAYS, in which of the following places have you smelled secondhand tobacco smoke?</p> <ul style="list-style-type: none"> • In your home • In your car • At work • In an indoor public place, such as a restaurant or salon
<p>Comment</p>	<p>Exposure to secondhand smoke can be measured in many ways, including by using self-reported data, biochemical markers, or environmental measures of air quality. Self-reported tobacco product users and those currently using nicotine replacement therapy should be excluded when measuring smoke exposure via biochemical markers. When employing survey options, questions about tobacco use status (current tobacco-user, former tobacco user, or non-tobacco user) should be connected to questions about exposure. Self-reported data is not feasible for measuring exposure among very young children. For more information on measuring secondhand smoke exposure, please refer to the Evaluation Toolkit for Smoke-free Policies.</p>

	<p>Exposure to e-cigarette aerosol should be examined separately. Tobacco control programs can refer <i>Eliminating Exposure to Secondhand Smoke: Outcome Indicators for Comprehensive Tobacco Control Programs—2017</i>, Indicator 2.4 “Proportion of non-users exposed to secondhand e-cigarette aerosol” for additional guidance.</p> <p>This indicator is related to a Healthy People 2030 objective TU-19: Reduce the proportion of people who don’t smoke but are exposed to secondhand smoke.</p>																		
<p>Rating</p>	<table border="1"> <tr> <td>Overall quality low ↔ high</td> <td>Resources needed</td> <td>Strength of evaluation evidence</td> <td>Utility</td> <td>Face validity</td> <td>Accepted practice</td> </tr> <tr> <td></td> <td>\$\$</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> </tr> <tr> <td colspan="6" style="text-align: center;">← ○ ● ● → better</td> </tr> </table>	Overall quality low ↔ high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		\$\$	●	●	●	●	← ○ ● ● → better					
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Disparities in Exposure to Secondhand Smoke in the Workplace

Indicator number	4.8.b
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	8. Eliminate disparities in secondhand smoke exposure
What to measure	<p>Proportion of the population who are employed outside the home and who report exposure to secondhand smoke in the workplace, overall, and among population groups experiencing tobacco-related disparities</p> <p>Differences in the proportion of the population who are employed outside the home and who report exposure to secondhand smoke in the workplace by population group characteristics and occupation</p>
Similar existing indicator(s) from other goal areas	Goal 2 (2017) 2.4.b, "Proportion of the employed population exposed to secondhand smoke in the workplace."
Rationale	<p>The workplace is a primary source of involuntary exposure to tobacco smoke for adults.^{1,2} Secondhand smoke exposure in the workplace has been linked to an increased risk of adverse health outcomes, including heart disease and cancer.^{1,2} About one-fifth of employed U.S. adults who do not smoke report secondhand smoke exposure in the workplace.³ Studies have shown significantly higher levels of tobacco smoke exposure in restaurants, bars, and casinos not covered by comprehensive smokefree policies.^{1,3}</p>
Applying health disparities framing	<p>Certain population groups, including young adults, men, African American or Black persons, Latino/Hispanic persons, persons with low educational attainment, and persons with low income, have reported higher exposure to SHS in the workplace.⁴⁻⁸ Research has shown that blue collar and service workers experience higher exposure to workplace SHS than do White-collar workers.³⁻⁵ In particular, persons who work in certain occupations, including construction, mining, accommodation and food services, and repair and maintenance, are disproportionately exposed to SHS.³⁻⁶</p>
Example data source(s)	<p>National Health and Nutrition Examination Survey (NHANES), 2019-2020</p> <p>National Health Interview Survey (NHIS), 2015</p> <p>Social Climate Survey of Tobacco Control (SCS-TC), 2015</p>
Example survey question(s)	<p>From NHANES (2019-2020)</p> <p>While {you were/SP was} working at a job or business outside of the home, did someone else smoke cigarettes or other tobacco products indoors?</p> <ul style="list-style-type: none"> • Yes • No

	<ul style="list-style-type: none"> • Refused • Don't know <p>From NHIS (2015)</p> <p>DURING THE PAST 12 MONTHS, while at work, how often were you exposed to tobacco smoke from other people? Would you say...</p> <ul style="list-style-type: none"> • Never • Less than twice a week • Twice a week or more, but not every day • Every day • Refused • Don't know <p>From SCS-TC (2015)</p> <p>During the past SEVEN DAYS, in which of the following places have you smelled secondhand tobacco smoke?</p> <ul style="list-style-type: none"> • In your home • In your car • At work • In an indoor public place, such as a restaurant or salon 																								
Comments	Tobacco control programs may want to assess this indicator by occupation since exposure to secondhand smoke can vary by occupation type.																								
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	<ol style="list-style-type: none">3. Su C, Syamlal G, Tamers S, Li J, Luckhaupt SE. Workplace secondhand tobacco smoke exposure among U.S. nonsmoking workers, 2015. <i>MMWR Morb Mortal Wkly Rep.</i> 2019;68:604–607.4. Calvert GM, Luckhaupt SE, Sussell A, Dahlhamer JM, Ward BW. The prevalence of selected potentially hazardous workplace exposures in the US: findings from the 2010 National Health Interview Survey. <i>Am J Ind Med.</i> 2013;56(6):635-46.5. U.S. National Cancer Institute. A socioecological approach to addressing tobacco-related health disparities. National Cancer Institute Tobacco Control Monograph 22. NIH Publication No. 17-CA-8035A. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute; 2017.6. U.S. Bureau of Labor Statistics. Labor force statistics from the Current Population Survey. 2019. Accessed April 23, 2020. https://www.bls.gov/cps/cpsaat11.htm7. Gan WQ, Mannino DM, Jemal A. Socioeconomic disparities in secondhand smoke exposure among US never-smoking adults: the National Health and Nutrition Examination Survey 1988–2010. <i>Tob Control.</i> 2015;24(6):568-73.8. Harris JK, Geremakis C, Moreland-Russell S, et al. Demographic and geographic differences in exposure to secondhand smoke in Missouri workplaces, 2007-2008. <i>Prev Chronic Dis.</i> 2011;8(6).
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Disparities in Exposure to Secondhand Smoke in Indoor Public Spaces

Indicator number	4.8.c
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	8. Eliminate disparities in secondhand smoke exposure
What to measure	Proportion of the population reporting exposure to secondhand smoke in indoor public spaces, overall, and among population groups experiencing tobacco-related disparities
	Differences in the proportion of the population reporting exposure to secondhand smoke in indoor public spaces by population group characteristics
Similar existing indicator(s) from other goal areas	Goal 4 (2017) 2.4.c, “Proportion of the population exposed to secondhand smoke in indoor public places.”
Rationale	Indoor secondhand smoke is the main source of exposure to tobacco smoke among people who do not smoke. ¹ SHS exposure has been causally linked to a number of adverse health outcomes, including heart disease and lung cancer in adults, and increased risk of acute respiratory infections, ear problems, and sudden infant death syndrome in children. ^{1,2} Persons in indoor locations not covered by comprehensive smokefree policies are at increased risk of exposure to SHS. ^{1,3}
Applying health disparities framing	Research shows that service and hospitality workers, largely comprised of Latino/Hispanic persons and African American or Black persons, are at increased risk of SHS exposure in indoor public spaces. ⁵⁻⁷ One study also found that LGBTQ+ persons were disproportionately affected by SHS in bars. ⁸ Studies have shown that SHS exposure in indoor public spaces also disproportionately impacts persons with low income and persons who live in states without comprehensive smoke free policies, including states in the Southern and Midwestern geographic areas of the U.S. ¹⁻⁶
Example data source(s)	National Health and Nutrition Examination Survey (NHANES), 2019-2020 Social Climate Survey of Tobacco Control (SCS-TC), 2015
Example survey question(s)	From NHANES (2019-2020) While {you were/SP was} in a restaurant, did someone else smoke cigarettes or other tobacco products indoors? <ul style="list-style-type: none">• Yes• No• Refused




	<ul style="list-style-type: none"> • Don't know <p>While {you were/SP was} in a bar, did someone else smoke cigarettes or other tobacco products indoors?</p> <ul style="list-style-type: none"> • Yes • No • Refused • Don't know <p>From SCS-TC (2015)</p> <p>During the past SEVEN DAYS, in which of the following places have you smelled secondhand tobacco smoke?</p> <ul style="list-style-type: none"> • In your home • In your car • At work • In an indoor public place, such as a restaurant or salon 												
Comments	Indoor public spaces include (but are not limited to) bars, restaurants, casinos, sporting arenas, and concert venues.												
Rating	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="width: 15%;">Overall quality low ↔ high</th> <th style="width: 15%;">Resources needed</th> <th style="width: 15%;">Strength of evaluation evidence</th> <th style="width: 15%;">Utility</th> <th style="width: 15%;">Face validity</th> <th style="width: 15%;">Accepted practice</th> </tr> </thead> <tbody> <tr> <td style="background-color: black; width: 15%;"></td> <td style="width: 15%;">\$\$</td> <td style="width: 15%;">●</td> <td style="width: 15%;">●</td> <td style="width: 15%;">●</td> <td style="width: 15%;">●</td> </tr> </tbody> </table> <p style="text-align: center;">← ○ ● ● → better</p>	Overall quality low ↔ high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		\$\$	●	●	●	●
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	<ol style="list-style-type: none">5. Huang J, King BA, Babb SD, Xu X, Hallett C, Hopkins M. Sociodemographic disparities in local smoke-free law coverage in 10 states. <i>Am J Public Health</i> 2015;105:1806–13.6. U.S. Bureau of Labor Statistics. Labor force statistics from the Current Population Survey. 2019. Accessed April 23, 2020. https://www.bls.gov/cps/cpsaat11.htm7. Americans for Nonsmokers' Rights Foundation. Secondhand smoke and gaming facilities. Accessed February 10, 2021. https://no-smoke.org/secondhand-smoke-gaming-facilities/8. Fallin A, Neilands TB, Jordan JW, Ling PM. Secondhand smoke exposure among young adult sexual minority bar and nightclub patrons. <i>Am J Public Health</i>. 2014;104(2):e148–e153.
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Disparities in Exposure to Secondhand Smoke in Homes and Vehicles

Indicator number	4.8.d
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	8. Eliminate disparities in secondhand smoke exposure
What to measure	<p>Proportion of population groups reporting exposure to secondhand smoke at home, overall, and among population groups experiencing tobacco-related disparities</p> <p>Proportion of population groups reporting exposure to secondhand smoke in their vehicles, overall, and among population groups experiencing tobacco-related disparities</p> <p>Differences in the proportion of the population reporting exposure to secondhand smoke at home by population group characteristics</p> <p>Differences in the proportion of the population reporting exposure to secondhand smoke in their vehicles by population group characteristics</p>
Similar existing indicator(s) from other goal areas	<p>Goal 2 (2017) 2.4.h, “Proportion of the population exposed to secondhand smoke originating in their homes.”</p> <p>Goal 2 (2017) 2.4.i, “Proportion of the population exposed to secondhand smoke in vehicles.”</p>
Rationale	<p>Private settings such as homes and vehicles remain a major source of exposure to secondhand smoke for many people who do not smoke; homes are the main source of SHS exposure for children.¹ SHS exposure has been causally linked to a number of adverse health outcomes, including heart disease and lung cancer in adults, and increased risk of acute respiratory infections, ear problems, and sudden infant death syndrome in children.¹⁻³ Although exposure among people who do not smoke in the U.S. has declined in the past few decades overall and in private settings, many people, including children, continue to be exposed to SHS in private settings.^{4,5} Exposure to SHS is higher in homes and vehicles without voluntary smokefree rules.⁶⁻⁸</p>
Applying health disparities framing	<p>Research has found that certain population groups, including children, youth, African American or Black persons, Latino/Hispanic persons, LGBTQ+ persons, persons with low educational attainment, persons with low income, and persons who reside in the Midwestern and Southern geographic areas of the U.S., experience higher prevalence of SHS exposure in private settings.^{4,5,8-14}</p>

Example data source(s)	National Youth Tobacco Survey (NYTS), 2020 National Health and Nutrition Examination Survey (NHANES), 2019-2020 Social Climate Survey of Tobacco Control (SCS-TC), 2015
Example survey question(s)	<p>From NYTS (2020)</p> <p>During the past 7 days, on how many days did someone smoke tobacco products in your home while you were there?</p> <ul style="list-style-type: none"> • 0 days • 1 day • 2 days • 3 days • 4 days • 5 days • 6 days • 7 days <p>During the past 7 days, on how many days did you ride in a vehicle when someone was smoking a tobacco product?</p> <ul style="list-style-type: none"> • 0 days • 1 day • 2 days • 3 days • 4 days • 5 days • 6 days • 7 days <p>Does anyone who lives with you now...? (Select one or more)</p> <ul style="list-style-type: none"> • Smoke cigarettes • Smoke cigars, cigarillos, or little cigars • Use chewing tobacco, snuff, or dip • Use e-cigarettes • Smoke tobacco in a hookah or waterpipe • Smoke pipes filled with tobacco (not waterpipes) • Use snus • Use dissolvable tobacco products • Smoke bidis (small brown cigarettes wrapped in a leaf) • No one who lives with me now uses any form of tobacco <p>From NHANES (2019-2020)</p> <p>While {you were/SP was} riding in a car or motor vehicle, did someone else smoke cigarettes or other tobacco products?</p> <ul style="list-style-type: none"> • Yes

	<ul style="list-style-type: none"> • No • Refused • Don't know <p>While {you were/SP was} in a home other than {your/his/her} own, did someone else smoke cigarettes or other tobacco products indoors?</p> <ul style="list-style-type: none"> • Yes • No • Refused • Don't know <p>From SCS-TC (2015)</p> <p>Over the past 3 months, has anyone smoked anywhere in your home?</p> <ul style="list-style-type: none"> • Yes • No <p>Over the past 3 months, has anyone smoked in your car?</p> <ul style="list-style-type: none"> • Yes • No <p>During the past SEVEN DAYS, in which of the following places have you smelled secondhand tobacco smoke?</p> <ul style="list-style-type: none"> • In your home • In your car • At work • In an indoor public place, such as a restaurant or salon 																								
Comments	Not applicable.																								
Rating	<table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 20%;">Overall quality</td> <td style="width: 15%;">Resources needed</td> <td style="width: 15%;">Strength of evaluation evidence</td> <td style="width: 15%;">Utility</td> <td style="width: 15%;">Face validity</td> <td style="width: 20%;">Accepted practice</td> </tr> <tr> <td>low ↔ high</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>\$\$</td> <td>●</td> <td>●</td> <td>●</td> <td>●</td> </tr> <tr> <td colspan="6">← ○ ● ● → better</td> </tr> </table>	Overall quality	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice	low ↔ high							\$\$	●	●	●	●	← ○ ● ● → better					
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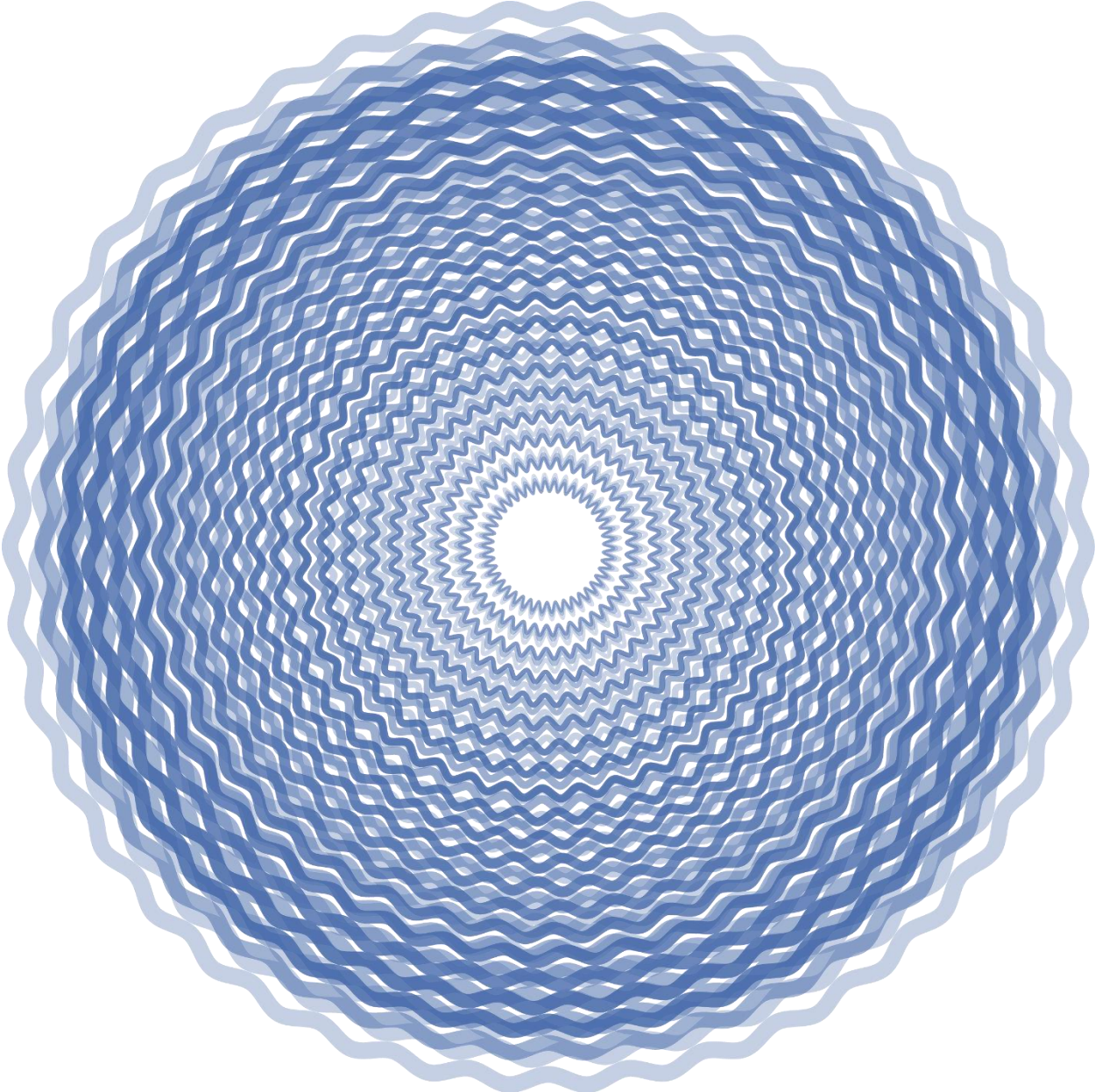
Disparities in Exposure to Secondhand Smoke Among Multiunit Housing Residents

Indicator number	4.8.e
Goal area	4. Identify and eliminate tobacco-related disparities
Outcome	8. Eliminate disparities in secondhand smoke exposure
What to measure	<p>Proportion of multiunit housing residents reporting exposure to secondhand smoke from nearby housing units or shared areas, overall, and among population groups experiencing tobacco-related disparities</p> <p>Differences in the proportion of multiunit housing residents reporting exposure to secondhand smoke from nearby housing units or shared areas by population characteristics and type of multiunit housing</p>
Similar existing indicator(s) from other goal areas	Goal 2 (2017) 2.4.g, “Proportion of multiunit housing residents exposed to secondhand smoke in their homes from nearby units or shared areas.”
Rationale	<p>About 80 million (1 in 4 people) in the U.S. live in multiunit housing, including about 7 million living in government-subsidized housing.^{1,2} Persons who live in multiunit housing are at increased risk of SHS exposure because SHS can enter their units from nearby units and common areas.¹⁻⁴ Each year, about a third of U.S. multiunit housing residents with smokefree home rules experience secondhand smoke incursions in their unit from elsewhere in their building.⁵</p>
Applying Health Disparities Framing	<p>Certain types of multiunit housing, including government-subsidized housing, are occupied by large proportions of vulnerable population groups that are at higher risk for chronic disease and poor health outcomes, including children, older adults, racial/ethnic minorities, persons with low income, and persons with disabilities.^{1,4,6-7} Moreover, certain population groups, including African American or Black persons, Latino/Hispanic persons, persons with low educational attainment, and persons with low income have reported higher levels of multiunit housing SHS exposure.^{4,5,8,9} Research has also shown that children who live in multiunit housing have higher levels of SHS exposure than those living in single family homes.¹⁰</p>
Example data source(s)	National Health and Nutrition Examination Survey (NHANES), 2019-2020
Example survey question(s)	<p>From NHANES (2019-2020)</p> <p>I would like to ask you a few questions about your home. Please look at this card. Which best describes your house or building?</p>

	<ul style="list-style-type: none"> • A one-family house detached from any other house • A one-family house attached to one or more houses • A building with 2 apartments • A building with 3 or 4 apartments • A building with 5 to 9 apartments • A building with 10 to 19 apartments • A building with 20 to 49 apartments • A building with 50 or more apartments • A mobile home, trailer, or manufactured home • A dormitory or similar boarding house • Refused • Don't know <p>Is this home owned, being bought, rented, or occupied by some other arrangement by {you/you or someone else in your family}?</p> <ul style="list-style-type: none"> • Owned or being bought • Rented • Other arrangement • Refused • Don't know <p>Not counting decks, porches, or detached garages, how many people who live here smoke cigarettes, cigars, little cigars, pipes, water pipes, hookah, or any other tobacco product inside this home?</p> <ul style="list-style-type: none"> • [Enter number of persons] • Refused • Don't know <p>During the past 7 days, that is since last [TODAY'S DAY OF WEEK], on how many days did {anyone who lives here/you}, smoke tobacco inside this home?</p> <ul style="list-style-type: none"> • [Enter number of days] • Refused • Don't know 												
Comments	When assessing this indicator, tobacco control programs can also measure secondhand smoke in common areas or residences by monitoring indoor air quality.												
Rating	<table border="0" style="width: 100%;"> <tr> <td style="text-align: center;">Overall quality</td> <td style="text-align: center;">Resources needed</td> <td style="text-align: center;">Strength of evaluation evidence</td> <td style="text-align: center;">Utility</td> <td style="text-align: center;">Face validity</td> <td style="text-align: center;">Accepted practice</td> </tr> <tr> <td style="text-align: center;">low ↔ high</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Overall quality	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice	low ↔ high					
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	<div style="display: flex; align-items: center; justify-content: center;"> <div style="background-color: black; width: 40px; height: 15px; margin-right: 10px;"></div> \$\$ <div style="display: flex; gap: 10px;"> ● ● ● ● </div> </div> <div style="text-align: center; margin-top: 5px;"> ← ○ ● ● → better </div>
<p>References</p>	<ol style="list-style-type: none"> 1. King BA, Babb SD, Tynan MA, Gerzoff RB. National and state estimates of secondhand smoke infiltration among US multiunit housing residents. <i>Nicotine Tob Res.</i> 2012;15(7):1316-21. 2. King BA, Travers MJ, Cummings KM, Mahoney MC, Hyland AJ. Secondhand smoke transfer in multiunit housing. <i>Nicotine Tob Res.</i> 2010;12(11):1133-41. U.S. Department of Housing and Urban Development, Public Housing Agency Profiles. Accessed March 24, 2020. https://www.huduser.gov/portal/pdrdatas_landing.html 3. Chambers C, Sung H-Y, Max W. Home exposure to secondhand smoke among people living in multiunit housing and single family housing: a study of California adults, 2003–2012. <i>J Urban Health.</i> 2015;92(2):279-90. 4. Wilson KM, Torok M, McMillen R, Tanski S, Klein JD, Winickoff JP. Tobacco smoke incursions in multiunit housing. <i>Am J Public Health.</i> 2014;104(8):1445-53. 5. Nguyen K, Gomez Y, Homa DM, King BA. Tobacco use, secondhand smoke, and smoke-free home rules in multiunit housing. <i>Am J Prev Med.</i> 2016 Nov;51(5):682-692. 6. U.S. Department of Health and Human Services. The health consequences of involuntary exposure to tobacco smoke: a report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2006. 7. U.S. Department of Housing and Urban Development. Resident characteristics report. 2020. Accessed April 24, 2020. https://pic.hud.gov/pic/RCRPublic/rcrmain.asp 8. Delgado-Rendon A, Cruz TB, Soto D, Baezconde-Garbanati L, Unger JB. Second and thirdhand smoke exposure, attitudes and protective practices: results from a survey of Hispanic residents in multi-unit Housing. <i>J Immig Min Health.</i> 2017;19(5):1148-55. 9. Hewett MJ, Sandell SD, Anderson J, Niebuhr M. Secondhand smoke in apartment buildings: renter and owner or manager perspectives. <i>Nicotine Tob Res.</i> 2007;9(Suppl_1):S39-S47. 10. Wilson KM, Klein JD, Blumkin AK, Gottlieb M, Winickoff JP. Tobacco smoke exposure in children who live in multiunit housing. <i>Pediatrics</i> 2011;127(1):85-92.

APPENDICES



Appendix A: Instructions for Expert Panel Reviewers

CDC/OSH Key Outcome Indicator 2019

Instructions for Expert Reviewers

Background and Purpose

In 2005, CDC's Office on Smoking and Health (OSH) released the guidance document, *Key Outcome Indicators for Evaluating Comprehensive Tobacco Control Programs* (KOI Guide) to assist state and territorial tobacco control program evaluation efforts under the National Tobacco Control Program (NTCP). The guide described key outcome indicators (KOIs) for evaluation of comprehensive tobacco control programs that were linked to the following National Tobacco Control Program (NTCP) goal areas: (1) Prevent initiation among youth and young adults; (2) Eliminate exposure to secondhand smoke; and (3) Promote quitting among adults and youth. The primary audiences for the publication included (1) planners, managers, and evaluators of state programs to prevent or control tobacco use, and (2) CDC's national partners.

Since the release of the 2005 guide, there have been substantial changes and advances in tobacco control. Between 2014 and 2017, OSH collaborated with partners to review, revise, and release updated KOI guides for NTCP goal areas 1 through 3 to reflect changes in the tobacco control landscape. For each of the goal areas, indicators, data sources, and survey items were updated to reflect the current state of the science. At the time, the 2005 KOI Guide did not describe indicators for NTCP Goal Area 4: Eliminating Tobacco-related Disparities but identified the goal area as a future direction for the work of OSH.

OSH is currently working on developing a KOI guide for NTCP goal area 4. When complete, this guide will serve as the fourth in a series of outcome indicator guides and the first to focus on tobacco-related disparities. We are implementing a similar process to what was used during the development and external review of the prior outcome indicator guides. As a first step, a list of draft outcome indicators has been developed based on the existing outcome indicator guides and a literature review of tobacco-related disparities research.

The updated KOI Guide will serve the same functions as the initial report, including:

- Serve as a companion to OSH's *Best Practices for Comprehensive Tobacco Control Programs* and *Introduction to Program Evaluation for Comprehensive Tobacco Control Programs*, as well as to the updated KOI guides for NTCP goal areas 1 through 3.
- Describe key outcome indicators for evaluation of statewide, comprehensive tobacco control programs, and suggest appropriate data sources and measures for these indicators.
- Encourage states to use consistent evaluation measures and comparable data sources.
- Guide the provision of consistent surveillance and evaluation technical assistance to states.

Methods

The candidate indicators included in the following document have been identified through an extensive review of the literature, review of the prior indicators, and input from OSH. Each of the proposed indicators included in this document is linked to a component of the proposed Goal Area 4 logic model included in Exhibit 1. Internal indicator selection decisions were guided by a need to highlight key indicators for planning and evaluating comprehensive tobacco control programs. Linkages connecting antecedent and consequent logic model components (boxes), and nested indicators were reviewed for evidence of association. An initial draft of the logic model was sent to a handful of external experts for preliminary review, and their feedback was used to update the draft logic model.

While OSH does not directly fund many institutions that strongly influence disparities (e.g., education, housing), state, territorial, and local tobacco control programs are encouraged to partner and include these institutions in their coalitions as part of their capacity building efforts. Consequently, this guide focuses on indicators and markers of progress for tobacco-related disparities outcomes. However, unlike the logic model in Goal 1, 2, and 3 KOI Guides, we incorporated antecedent community capacity indicators necessary to effectively implement interventions to identify and eliminate tobacco-related disparities before consequent short, intermediate, and long-term outcomes can occur. We included these indicators to recognize and emphasize that community and institutional level changes are critical to achieving individual and population-level health outcomes.

Rating Process

The principal purpose of this expert review process is to provide CDC/OSH with expert opinion about the quality and utility of the candidate indicators for use in planning and evaluating comprehensive state tobacco control programs, and what data sources and measures would be most useful for tracking these indicators. Reviewers are asked to do the following:

- Rate each indicator on a set of criteria
- Comment on the data source and measures that have been identified for each proposed indicator
- Suggest alternative data sources and measures
- Comment on the priority populations that have been identified for each proposed indicator
- Comment on the degree to which the proposed indicators would influence disparities
- Offer additional indicators that may be useful for state tobacco control program evaluation
- Identify indicators that are redundant or, for other reasons, should be deleted

This review process also aims to gather expert feedback on the quality and utility of the proposed Goal Area 4 logic model. Reviewers are asked to provide open-ended comments reflecting the strengths and weaknesses of the model, if any.

The final product will be similar to the original and updated KOI Guides in that it will include tables displaying the indicators, ratings of the indicators along the review criteria, and detail summary information on each indicator.

We would like you to rate the indicators based on your expertise and experience in this substantive area using the following criteria:

- Strength of evidence
- Costs (in money, time, and other resources) required to collect and analyze indicator data
- Utility
- Face validity
- Uniqueness
- Conformity with accepted practice
- Overall quality

Below you will find additional clarification and guidance regarding these rating criteria.

Rating Form

The proposed Goal Area 4 logic model is followed by an open-ended response box, independent from the indicator rating forms. No particular criteria are required to comment on the model.

Each indicator is presented on a separate rating form. The rating forms have three sections:

- Summary information on the proposed indicator, including what to measure, example data sources, priority population group(s), example survey questions, other relevant information, and a reference regarding the evidence supporting use of the indicator, where available. Please note that the references provided are intended to support the inclusion of certain priority population groups and **not** intended to be a comprehensive bibliography.
- Rating criteria scales for reviewer response
- Space for open-ended reviewer comments on priority populations included and on the proposed indicator, including data sources/measures

In the summary information section on the rating forms, the example data sources/measures suggested are intended only to help operationalize the indicators and **do not represent a comprehensive list of all possible measures for the indicators**. Additionally, information included in the “Comments” section has been limited to what will help to provide clarity or address nuances of the specific indicator. The final, updated KOI Guide will include suggestions for other uses of the indicator, the indicator’s limitations (if any) as a measure of a program’s progress, or sources of other information on data collection methods.

IMPORTANT NOTE: Given our plan to provide information on current, relevant indicators for tobacco control, we ask that you **not** reference the original KOI Guide or the subsequent goal area guides when rating these candidate indicators. Please rate the following indicators based on your expertise and knowledge of the current state of the science on tobacco-related disparities. This will help to identify indicators that are not pertinent or that have limited supporting evidence.

Rating Criteria

The following criteria are to be used to rate each indicator:

1. **Strength of the evaluation evidence**—extent to which you believe that the literature supports use of the indicator for the evaluation of comprehensive, statewide tobacco control programs, as characterized by the logic model. The references included on each indicator rating form are intended to provide guidance in your ratings on this criterion, but your knowledge of the literature should also be used. Please add your comments regarding conflicting evidence, additional citations, and/or concerns with methodology.
2. **Costs required for collecting and analyzing indicator data**—your rating of the cost (in money, time, other resources) to collect reliable and precise measures, and to analyze appropriately primary or secondary data on the indicator. In making your judgments, please consider availability of existing data (e.g., archival records or other secondary data) versus need for primary data collection, and methodological and sampling issues.
3. **Utility**—extent to which you believe that the indicator would help to answer important comprehensive tobacco control program evaluation questions. Although these indicators may also be appropriate and useful for community-level evaluation, the utility criterion refers primarily to statewide efforts.
4. **Face validity**—your estimation of how face valid the indicator would appear to be in the eyes of key program stakeholders, including policymakers and decision-makers who may be users of tobacco control program evaluation results.
5. **Uniqueness**—your opinion of whether the indicator contributes distinct information for the evaluation of tobacco control efforts. If you believe that the indicator is not unique, please note the redundant indicator in the space provided.
6. **Conformity with accepted practice**—your opinion of the degree to which use of the indicator is consistent with currently accepted, “real-world” tobacco control practice.
7. **Overall quality**—a summary rating that reflects your opinion of the overall quality of the indicator.

Reviewer Comments

Please provide comments and suggestions regarding the priority populations listed, proposed logic model, proposed indicators, data sources, and measures in the spaces provided. The electronic copy of the review materials limits where you may add information; however, there is no character limit to text responses, so please be as expansive with your responses as necessary. Upon completion, please save a copy and return as an email attachment.

Rating Form

Please darken the square that best reflects your opinion:

1. Scientific literature supports use of the indicator:	2. Cost (in money, time, other resources) required to collect and analyze indicator data:	3. Utility of the indicator to answer key program effectiveness and impact:
Strong support	Low cost	Strong utility
Moderate support	Moderate cost	Moderate utility
Minimal support	High cost	Minimal utility
No support	Very high cost	No utility
Don't know	Don't know	Don't know
4. How face valid the indicator would be to policy- and decision-makers:	5. Contributes unique information:	6. How consistent the indicator is with accepted tobacco control practice:
Highly valid	Unique	Highly consistent
Moderately valid	Not Unique	Moderately consistent
Minimally valid	IF NOT UNIQUE, Write Number of Redundant Indicator	Minimally consistent
Not at all valid		Not at all consistent
Don't know	Click here to enter text.	Don't know

Comments (include any recommendations specific to priority populations listed only):

Click here to enter text.

8. Overall quality of the indicator: **LOW** 1 2 3 4 5 6 7 8 9 10 **HIGH**

9. Reviewer Comments (including any recommendations on other data sources/measures or alternative indicators):

Analysis and Synthesis of Data from the Expert Reviews

After CDC received the completed rating forms from the experts, all criteria ratings and written comments were entered into an electronic file using Python. We adjusted for multiple responses, skipped items, and coding errors. If, for example, a rater circled more than one adjacent response for a criterion, we averaged the responses unless the rater had noted a preference for one response over another. Skipped items and “don’t know” responses were combined into a missing data category. All data were analyzed using SAS software, Version 9.4 (SAS Institute Inc. 2013.)

For each type of rating, numerical data were analyzed in various ways. Frequency distributions of numerical data were analyzed to help us understand the raters’ perceptions of the indicators. To limit the effect of outliers, we used the median scores for each indicator. “Uniqueness” ratings, which were dichotomous, were only used to determine redundant indicators. Narrative comments included on the raters’ rating sheets were also reviewed to help us understand why raters gave an indicator a particularly high or low rating.

Appendix B: Data Source Indicator Table

The following table cross-references example data sources and indicators in this publication. The example data sources do not represent all data sources available. When possible, Web addresses are provided. For additional information on tobacco-related data sources and data collection methods, refer to the *Introduction to Program Evaluation for Comprehensive Tobacco Control Programs* or *Surveillance and Evaluation Data Resources for Comprehensive Tobacco Control Programs*.

Data source	Indicator number	For more information
American Lung Association’s State Legislated Actions on Tobacco Issues (SLATI)	4.2.a, 4.2.b, 4.2.c, 4.2.d, 4.2.e	▶ https://www.lung.org/policy-advocacy/tobacco/slati
American Lung Association (ALA), State Cessation Coverage	4.3.g	▶ https://www.lung.org/policy-advocacy/tobacco/cessation/state-cessation-coverage
American Nonsmokers’ Rights (ANR) Foundation, 100% Smokefree U.S. Hospital Campuses and Psychiatric Facilities, 2019	4.3.f	▶ https://no-smoke.org/wp-content/uploads/pdf/smokefreehealthcare.pdf
American Nonsmokers’ Rights (ANR) Foundation U.S. Tobacco Control Laws Database	4.2.a, 4.2.b, 4.2.f, 4.2.g, 4.2.h, 4.2.i	▶ https://no-smoke.org/tobacco-control-laws-database-tool-researchers/
Behavioral Risk Factor Surveillance System (BRFSS), 2019	4.5.b, 4.5.e, 4.5.f, 4.7.a, 4.7.c	▶ https://www.cdc.gov/brfss/index.html
Behavioral Risk Factor Surveillance System (BRFSS), 2011	4.1.c	▶ https://www.cdc.gov/brfss/index.html
California Adult Tobacco Survey (CATS), 2018	4.1.e, 4.3.d	▶ Not publicly available

Campaign for Tobacco Free Kids (CTFK)	4.2.f, 4.2.m	▶ https://www.tobaccofreekids.org/what-we-do/us/state-tobacco-taxes
CDC State Tobacco Activities Tracking and Evaluation (STATE) System	4.2.a, 4.2.c, 4.2.d, 4.2.e, 4.2.g, 4.2.h, 4.2.m, 4.2.n, 4.5.d	▶ https://www.cdc.gov/statesystem/
FDA, Compliance Check Inspection of Tobacco Product Retailers	4.2.o, 4.4.b	▶ http://www.accessdata.fda.gov/scripts/oce/inspections/oce_insp_searching.cfm
National Adult Tobacco Survey (NATS), 2013-2014	4.2.k	▶ http://www.cdc.gov/tobacco/data_statistics/surveys/nats/
National Adult Tobacco Survey (NATS), 2009-2010	4.1.c	▶ http://www.cdc.gov/tobacco/data_statistics/surveys/nats/
National Health and Nutrition Examination Survey (NHANES), 2019-2020	4.8.b, 4.8.c, 4.8.d, 4.8.e	▶ https://wwwn.cdc.gov/nchs/nhanes/
National Health and Nutrition Examination Survey (NHANES), 2015-2016	4.6.c	▶ https://wwwn.cdc.gov/nchs/nhanes/
National Health and Nutrition Examination Survey (NHANES), 2013-2014	4.8.a	▶ https://wwwn.cdc.gov/nchs/nhanes/
National Health Interview Survey (NHIS), 2020	4.3.c, 4.3.d, 4.5.e	▶ http://www.cdc.gov/nchs/nhis.htm
National Health Interview Survey (NHIS), 2017	4.3.b	▶ http://www.cdc.gov/nchs/nhis.htm
National Health Interview Survey (NHIS), 2015	4.8.b	▶ http://www.cdc.gov/nchs/nhis.htm
National Health Interview Survey Cancer Supplement (NHIS-CS), 2015	4.5.c	▶ http://www.cdc.gov/nchs/nhis.htm

National Mental Health Services Survey (N-MHSS), 2020	4.3.a, 4.3.e, 4.3.f	▶ https://www.samhsa.gov/data/data-we-collect/n-mhss-national-mental-health-services-survey
National Survey of Substance Abuse Treatment Services (N-SSATS), 2020	4.3.a,4.3.e, 4.3.f	▶ https://www.samhsa.gov/data/data-we-collect/nssats-national-survey-substance-abuse-treatment-services
National Youth Tobacco Survey (NYTS), 2020	4.1.a, 4.1.b, 4.3.b, 4.3.c, 4.4.c, 4.4.e, 4.5.a, 4.5.b, 4.5.f, 4.6.a, 4.6.c, 4.7.a, 4.7.b, 4.7.c, 4.7.d, 4.7.e, 4.8.a, 4.8.d	▶ https://www.cdc.gov/tobacco/data_statistics/surveys/nyts/
National Quitline Data Warehouse (NQDW) Intake Survey, 2020	4.5.a	▶ https://www.naquitline.org/page/NatDataWarehouse
National Quitline Data Warehouse (NQDW), Quitline Services Survey, 2020	4.5.d	▶ https://www.naquitline.org/page/NatDataWarehouse
Nationwide Adult Medicaid Consumer Assessment of Healthcare Providers and Systems (NAM CAHPS), 2014-2015	4.3.d	▶ https://www.cms.gov/Research-Statistics-Data-and-Systems/Files-for-Order/LimitedDataSets/CAHPS.html
Nielsen Store Scanner Tobacco Product Pricing Data	4.2.l, 4.4.f	▶ https://www.nielsen.com/us/en/solutions/measurement/retail-measurement.html
North American Industry Classification Systems (NAICS)	4.4.a	▶ www.naics.com
Population Assessment of Tobacco and Health-Adult Survey (PATH-A), 2016-2017	4.1.a, 4.1.b, 4.4.e, 4.4.g, 4.5.c, 4.6.b, 4.7.b, 4.7.c, 4.7.d, 4.7.e	▶ https://www.icpsr.umich.edu/icpsrweb/NAHDAP/series/606

Population Assessment of Tobacco and Health-Adult Survey (PATH-A), 2013-2014	4.4.e	▶ https://www.icpsr.umich.edu/icpsrweb/NAHDAP/series/606
Population Assessment of Tobacco and Health-Youth Survey (PATH-Y) , 2016-2017	4.1.a, 4.1.b, 4.4.e, 4.6.b	▶ https://www.icpsr.umich.edu/icpsrweb/NAHDAP/series/606
Pregnancy Risk Assessment Monitoring System (PRAMS), 2016	4.3.b, 4.3.c , 4.3.d	▶ http://www.cdc.gov/prams/AboutPRA/MS.htm
Print, Internet Media Monitoring: Kantar Media Intelligence’s Strategy™ database	4.4.d	▶ https://www.kantarmedia.com/us/our-solutions/advertising-monitoring-and-evaluation
Social Climate Survey of Tobacco Control (SCS-TC), 2015	4.8.a, 4.8.b, 4.8.c, 4.8.d	▶ http://www.socialclimate.org/
Social Climate Survey of Tobacco Control (SCS-TC), 2014	4.2.j, 4.2.k	▶ http://www.socialclimate.org/
Standardized Tobacco Assessment source(s) for Retail Settings (STARS)	4.4.d, 4.4.f	▶ https://countertobacco.org/resources-tools/store-assessment-tools/stars/
State Departments of Revenue	4.2.m	▶ State-Specific Data Source
State/local policy tracking system	4.2.b, 4.2.n	▶ Not publicly available
Tobacco Use Supplement to the Current Population Survey (TUS-CPS), 2018-2019	4.1.f, 4.2.i, 4.2.l, 4.3.c, 4.5.a, 4.5.c, 4.6.a	▶ https://cancercontrol.cancer.gov/brp/tcrb/tus-cps/
Tobacco Use Supplement to the Current Population Survey (TUS-CPS), 2014-2015	4.2.k	▶ https://cancercontrol.cancer.gov/brp/tcrb/tus-cps/

Youth Risk Behavior Surveillance System (YRBSS), 2019	4.6.c, 4.7.a, 4.7.b, 4.7.c	▶ http://www.cdc.gov/healthyyouth/yrbs/index.htm
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Glossary and Acronyms

Activities

The events or actions that are part of a tobacco control program.

Aerosol

Emissions of electronic nicotine delivery systems.

Attitudes

Biases, inclinations, or tendencies that influence a person's response to situations, activities, other people, or program goals.

Awareness

The extent to which people in the target population know about an event, activity, or campaign.

Capacity

The resources (e.g., staff, data collection systems, funds) needed to conduct a tobacco control program or to evaluate such a program.

CBOs

Community-Based Organizations.

CDC

Centers for Disease Control and Prevention.

CMI

Component Model of Infrastructure.

Commercial Tobacco

Tobacco that is manufactured by companies for use in cigarettes, e-cigarettes, smokeless tobacco, pipe tobacco, cigars, hookahs, and other products. Commercial tobacco is mass-produced and sold for profit by tobacco companies. This definition excludes traditional tobacco that is used for ceremonial or medicinal purposes.¹

Cultural Competence

A set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals and enables effective work in cross-cultural situations.

Cultural Humility

The ability to maintain an interpersonal stance that is other-oriented (or open to the other) in relation to aspects of cultural identity that are most important to the person. Cultural humility is one construct for understanding and developing a process-oriented approach to competency.

Data

Documented information or evidence.

Data sources

Surveys or surveillance systems used to gather data.

Diversity (Workforce)

An appreciation and respect for differences, similarities and opportunities inherent in the individuals and organizational characteristics that shape the workplace.

E-Cigarettes

Battery-powered devices designed to deliver aerosolized nicotine and additives to users. These devices are referred to as “e-cigarettes,” “e-cigs,” “cigalikes,” “e-hookahs,” “mods,” “vape pens,” “vapes,” and “tank systems.”

Evaluation

The process of determining whether programs—or certain aspects of programs—are appropriate, adequate, effective, or efficient and, if not, how to make them so.

Example data source

Surveys or surveillance systems used to measure an indicator and the population on which the data are needed.

Face validity

The degree to which data on an indicator appear reliable to stakeholders and policy makers.

Family Smoking Prevention and Tobacco Control Act (Tobacco Control Act)

Signed into law on June 22, 2009, it gives the Food and Drug Administration (FDA) the authority to regulate the manufacture, distribution, and marketing of tobacco products to protect public health. <https://www.fda.gov/tobacco-products/rules-regulations-and-guidance/family-smoking-prevention-and-tobacco-control-act-table-contents>

FDA

U.S. Food and Drug Administration.

FQHC

Federally Qualified Health Center.

Goal area

One of the four components of the overall goal of CDC’s National Tobacco Control Program.

Health Disparities

Differences in health outcomes and their determinants between segments of the population, as defined by social, demographic, environmental, and geographic attributes.²⁻³

Health Equity

The attainment of the highest level of health for all people. Achieving health equity requires valuing everyone equally with focused and ongoing societal efforts to address avoidable inequalities, historical and contemporary injustices, and the elimination of health and health care disparities.⁴

Health Inequities

Systematic, unfair, unjust, and avoidable differences in health that result from discrimination based on socioeconomic status, age, race or ethnicity, sexual orientation and gender identity, education, income, disability status, geographic location, or a combination of these.

HP

Healthy People.

Implementation

Carrying out or putting into effect a plan or program.

Inclusion

A set of behaviors that encourage employees to feel valued for their unique qualities and experience a sense of belonging.

Indicator

An observable and measurable characteristic or change that shows the progress a program is making toward achieving a specified outcome.

Indicator profile

The term used in this manual for a table with detailed information on one indicator listed in this publication (see page 49 for an example).

Indicator rating table

The term used in this publication for the list of indicators associated with one outcome in one National Tobacco Control Program logic model. The experts' rating for each indicator is also included (see page 49 for an example).

Inputs

Resources used to plan and set up a tobacco control program.

Intervention

The method, device, or process used to prevent an undesirable outcome or create a desirable outcome.

LGBTQ+

Lesbian, Gay, Bisexual, Transgender/Transexual, Queer.

Logic model

A graphic depiction of the presumed causal pathways that connect program inputs, activities, outputs, and outcomes.

Morbidity

Any departure, subjective or objective, from a state of physiological or psychological well-being.

Multisectoral Partnerships

Multi-sector partnerships are those that meaningfully include stakeholders from across multiple industries and groups (e.g. government, non-profit, private, and public organizations, community groups, and individual community members with lived experience), across geographic sectors (e.g. community/locality, county, multi-county level, state, multi-state) with varying sociodemographic characteristics (e.g. race, ethnicity, age, education, income, etc.), perspectives, and approaches to addressing SDOHs among disproportionately impacted population groups in community areas, tribes, and catchment areas.

NCI

National Cancer Institute.

NIH

National Institutes of Health.

NR

Not Rated.

NRT

Nicotine Replacement Therapy.

NTCP

National Tobacco Control Program.

Observation

A method of collecting data that does not involve any communication with the subjects being studied. The investigators merely watch for particular behaviors and record what they see.

Outcome

The results of an activity such as a countermarketing campaign or an effort to reduce secondhand smoke exposure among people who do not smoke. Outcomes can be short-term, intermediate, or long-term.

Outcome components

The term used in this publication for the short-term, intermediate, and long-term results described in the National Tobacco Control Program logic models for the first three goal areas. These are the results expected if tobacco control programs provide the needed inputs and engage in the recommended activities also described in the logic models.

Outcome evaluation

The systematic collection of information to assess the effect of a program or an activity within such a program to reduce the adverse health effects of tobacco use. Good evaluation allows evaluators to draw conclusions about the merit of a program and make recommendations about the program's direction.

Outcome overview

The term used in this publication for the summary of the scientific evidence in support of the assumption that achieving an outcome on a National Tobacco Control Program logic model affects all concurrent and later activities and outcomes (see page 24 for an example).

Outputs

The direct products of a program (e.g., the materials needed for a media campaign).

Preemption

Federal or state legislation that prevents states or local jurisdictions from enacting tobacco control laws more stringent than or otherwise different from the federal or state law.

Prevalence

Proportion of persons in a population who have a particular disease or attribute at a specific point in time or over a specified period of time.

Process evaluation

Systematic collection of information to determine how well a program is implemented and the extent to which it was implemented as intended.

Program evaluation

Systematic collection of information about activities, characteristics, and outcomes of programs, used to make judgments about a program, improve its effectiveness, or inform decisions about future program activities.

SDOH

Social Determinants of Health are conditions in the environments where people are born, live, learn, work, play, worship, and age that lead to equal or unequal opportunities, choices, and access to resources needed and affect a wide range of health, functioning, and quality-of-life risks and outcomes to pursue healthy, thriving lives.⁵⁻⁷

SHS

Secondhand Smoke.

SMART

Specific, Measurable, Achievable, Relevant, and Time-bound.

Surveillance

The ongoing, systematic collection, analysis, and interpretation of data about a hazard, risk factor, exposure, or health event.

Survey

A quantitative method of collecting information on a target population at one point in time. Surveys can be conducted by interview (in person or by telephone), mail, or electronically.

Tobacco-related Health Disparities

Differences in: (1) patterns, prevention, cessation, and treatment of commercial tobacco use and dependence; (2) commercial tobacco-related risk, prevalence, morbidity and mortality that exist among specific population groups in the United States, and globally; and (3) related differences in health capacity and infrastructure, access to health resources, and exposure to secondhand smoke and aerosol emissions.⁴

Utility

The extent to which evaluation produces reports that are disseminated to relevant audiences, that inform program decisions, and that have a beneficial effect.

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