Exploring the Surveillance and Evaluation Data Resource Guide for Heart Disease and Stroke Prevention Programs

AREB 2022 Coffee Break Presentation

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Centers for Disease Control and Prevention
National Center for Chronic Disease Prevention and Health Promotion
Division for Heart Disease and Stroke Prevention

Hello and welcome to today's Coffee Break presented by the Applied Research and Evaluation Branch in the Division for Heart Disease and Stroke Prevention at the Centers for Disease Control and Prevention.

My name is Ally Chase and I am an ORISE Fellow. I will be acting as today's moderator. Our presenters are Dr. Ami Bhatt, a contracted health scientist, and Cheryl A. Williams, a contracted public health analyst. We all work with the Applied Research and Evaluation Branch on the Applied Research and Translation team.

Before we begin…

- All phones have been placed in SILENT mode
- Any issues or questions?
  - Use Q & A box on your screen
  - Email AREBheartinfo@cdc.gov

Before we begin, there are some housekeeping items. If you are having issues with audio or seeing the presentation, please message us using the chat box or send us an email at AREBheartinfo@cdc.gov. Please hold your questions until we reach the end of the presentation. Since this is a training series on applied research and evaluation, we hope you will complete the poll at the end of the presentation and provide us with your feedback.

Disclaimer

The information presented here is for training purposes and reflects the views of the presenters. It does not necessarily represent the official position of the Centers for Disease Control and Prevention.

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So, without further delay. Let's get started. Cheryl and Ami, the floor is yours.

Background

The Surveillance and Evaluation Data Resource Guide

Methods for Guide Updates

Guide Content

How the Guide Can Inform Evaluation Planning

Q&A

Thank you, Ally.

In today's presentation, we will start with some background on the burden of Cardiovascular Disease before we dive into the purpose of The Surveillance and Evaluation Data Resource Guide for Heart Disease and Stroke Prevention Programs.

We will then discuss the methods used to update the Guide and review the organization of the resources in the Guide. Lastly, we will highlight how the Guide can help inform evaluation and surveillance planning.

BACKGROUND

Let's begin with a brief overview of the burden of cardiovascular disease in the United States.

The Burden of Cardiovascular Disease

Together, heart disease, stroke, and other vascular conditions contribute to:

931,538 lives lost each year[1]

696,962 lives lost each year attributed to heart disease[1,2]

$378 billion spent annually towards costs and lost productivity from premature death each year[1]

1. NATIONAL CENTER FOR HEALTH STATISTICS. MULTIPLE CAUSE OF DEATH 1999–2020 ON CDC WONDER ONLINE DATABASE WEBSITE. ACCESSED SEPTEMBER 22, 2022. HTTPS://WONDER.CDC.GOV/MCD-ICD10.HTML
2. TSAO CW, ADAY AW, ALMARZOOQ ZI, ET AL. HEART DISEASE AND STROKE STATISTICS-2022 UPDATE: A REPORT FROM THE AMERICAN HEART ASSOCIATION. *CIRCULATION*. FEB 22 2022;145(8):E153-E639. DOI:10.1161/CIR.0000000000001052

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- Over 900,000 people died from cardiovascular disease in the United States in 2020.[1]
- And Nearly 700,000 died from heart disease—that is 1 out of every 5 deaths (20 % of all deaths).[1,2]
- Annual cardiovascular disease costs to the nation averaged **$378.0 billion** in 2017–thru-2018.[1]
    - That includes direct costs such as hospital visits, home health, and medications (outpatient, other office visits)
    - As well as indirect costs such as loss of productivity due to mortalities

So, considering this burden we know that public health program managers and evaluators need to be able to determine the most appropriate methods to measure the effectiveness, efficiency, and impact of programs aimed

at lessening the burden of heart disease and stroke.

Introduction to the Surveillance and Evaluation Data Resource Guide

A compilation of data sources for heart disease and stroke prevention programs conducting policy or data surveillance and evaluation

To be used by program managers and evaluators in planning and evaluating heart disease and stroke prevention programs

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- So, what is the Surveillance and Evaluation Data Resource Guide for Heart Disease and Stroke Prevention Programs?
  - The Guide is a compilation of data sources useful for heart disease and stroke prevention programs conducting policy or data surveillance and/or evaluation.
  - The Guide is meant to be used by program managers and evaluators in the planning and evaluation stages of heart disease and stroke prevention programs.

Intended Audiences

- State and Local Public Health Practitioners
- Hospital Administrators
- Public Health Evaluators
- Leadership and Staff from Partner Organizations

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- Intended Audiences for the Guide include:

  - State and local public health practitioners

  - Hospital administrators

  - Public health evaluators

  - And leadership and staff from partner organizations working on heart disease and stroke prevention and control

Where to Find the Surveillance and Evaluation Data Resource Guide

The Guide can be found at this link:

https://www.cdc.gov/dhdsp/evaluation_resourc es/guides/surveillance_evaluation.htm

Surveillance and Evaluation Data Resource Guide

Heart Disease and Stroke Prevention Programs

National Center for Chronic Disease Prevention and Health Promotion
Division for Heart Disease and Stroke Prevention

Let me also share that the most recent version of the Surveillance and Evaluation Data Resource Guide was published earlier this month, November 2022, and can be found, in Html and PDF format at the link provided on the screen and in the chat.

This link will direct you to the Division for Heart Disease and Stroke Prevention's Evaluation Resources webpage where the Guide is live for downloading

I will now pass the mic to my colleague Ami to discuss the Methods used to update the most recent version of the Guide

METHODS FOR UPDATING THE GUIDE

Thank you, Cheryl! I'm going to share a bit about how we went about the update to the guide.
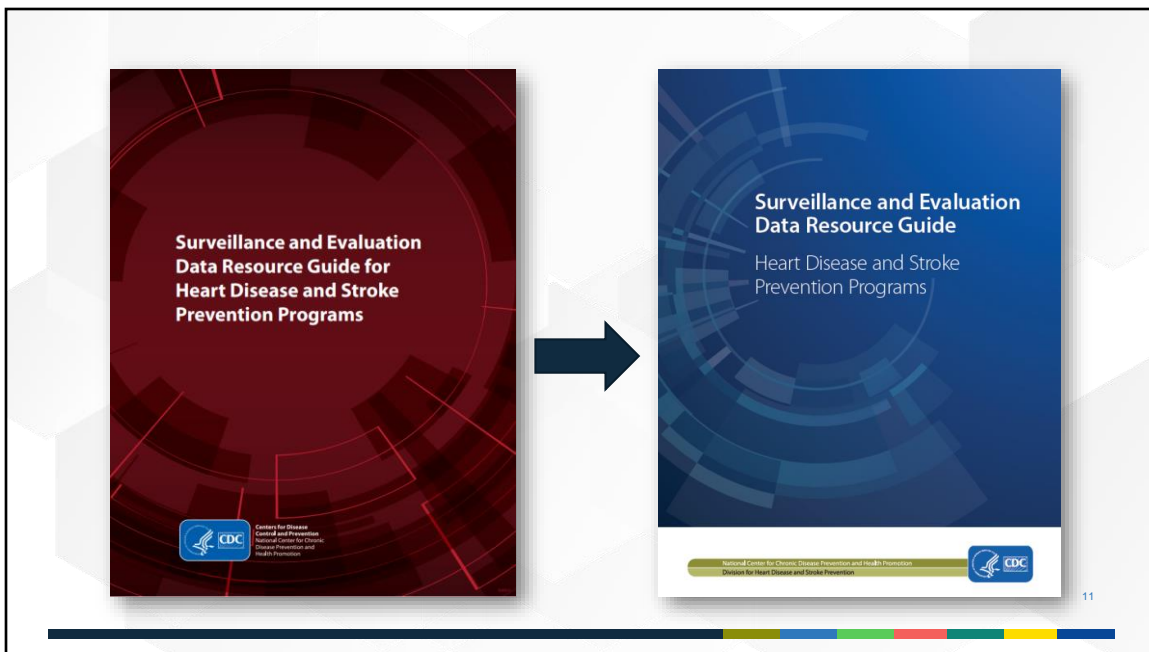
This version of the guide is an update to the version published in 2016. The 2016 version was developed by CDC's DHDSP, in collaboration with the American Heart Association.

The tool was meant to be used by program managers and evaluators in the planning and evaluation stages of heart disease and stroke prevention programs.

The first version of the guide served as a cardiovascular disease-specific companion resource to the Surveillance and Evaluation Data Resources for Comprehensive Tobacco Control Programs, which focused on cigarette smoking and smoking cessation, produced by the CDC's Office of Smoking and Health in June 2014.

This updated resource was developed in the context of CDC's Data Modernization Initiative, an effort to modernize core data and surveillance infrastructure to build more connected, resilient, adaptable, and sustainable "response-ready" systems.
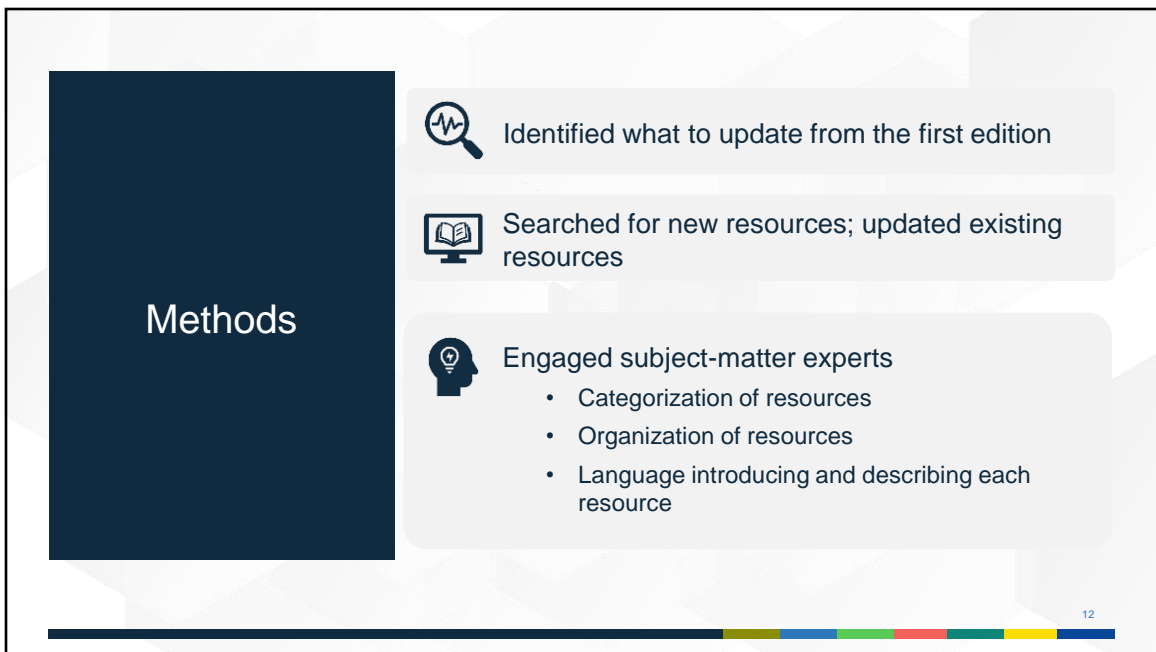
The methods used to update the guide included: Identifying which of the sources from the first version of the guide were still live and identifying those that needed to be updated.

Searching for new resources and updating existing resources.

Engaging subject-matter experts to ensure we had captured the appropriate data sources, including sources that may be in the pipeline and solicit feedback on:
- the categorization of sources,

- the organization of resources with respect to details about the sources themselves,
- and finally, the language of introduction and description of each resource.

Major Changes

- Added Data on Social Determinants of Health
- Combined Health Systems Data Reporting Tools + Health System Program and Performance Measures
- Published HTML & PDF Format
- Simplified Navigation
- Added Media Tools

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We made several changes in this update:

Notably, we added a new data category in the second version of the S&E guide on identifying and addressing Social Determinants of Health.

Next, we used SME feedback to remove redundant categories and resources, namely combining Healthy Systems Data reporting tools with the Program and Performance measures.

While the previous version of the guide was available only in PDF format, this one included both HTML and PDF options. This was to make the guide more accessible and user-friendly with the hopes to increase its use.

Additionally, SME feedback helped us to reorganize the guide to make it easier to navigate (reorganized categories alphabetically; used consistent key terms to simplify searching).

Finally, we updated and added to our media tools table for tracking and reporting relevant media metrics.

Strategic Alignments

CDC's CORE Commitment to Equity

CDC launched an agency-wide strategy to integrate equity into the fabric of all we do

Cultivate comprehensive health equity science
- CDC embeds health equity principles in the design, implementation, and evaluation of its research, data, surveillance, and intervention strategies

Optimize interventions
- CDC uses scientific, innovative, and data-driven strategies that address environmental, place-based, occupational, policy and systemic factors that impact health outcomes and address drivers of health disparities

Reinforce and expand robust partnerships
- CDC seeks out and strengthens sustainable multi-level, multi-sectoral and community partnerships to advance health equity

Enhance capacity and workplace diversity, inclusion, and engagement
- CDC builds internal capacity to cultivate a multi-disciplinary workforce and more inclusive climates, policies, and practices for broader public health impact

DMI DATA MODERNIZATION INITIATIVE

HTTPS://WWW.CDC.GOV/HEALTHEQUITY/CORE/INDEX.HTML

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New resources were added to align with CDC's CORE Health Equity Science and Intervention Strategy work.

This work aims to transform CDC's public health research, surveillance, and implementation science efforts to shift from <u>listing</u> the markers of health inequities to <u>identifying and addressing</u> the drivers of these disparities, including social determinants of health (SDOH). Resources to better understand health disparities and promote health equity are included in the new SDOH table.

This updated resource was developed in the context of CDC's Data Modernization Initiative, an effort to modernize core data and surveillance infrastructure to build more connected, resilient, adaptable, and sustainable "response-ready" systems.

I will now pass the mic back to my colleague Cheryl to outline the structure of the content in the Guide.
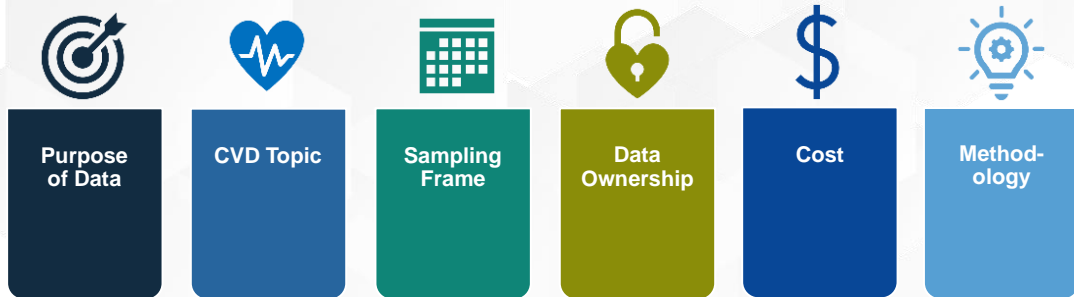
GUIDE CONTENT

Thanks, Ami.
Over the next few slides, I will be discussing the structure and organization of the content in the updated Guide.

So let's start with a quick overview of how the Guide resources are organized. The data sources are organized into a resource table format that provides the basic details for each data source or tool. On this slide I have highlighted resource detail categories included in the table format:

We have:
- **Purpose of the data source or tool**
- **The heart disease and stroke prevention-related topic** for which the information is collected or available
- **The Sampling frame** such as the population for which the sample is taken for example U.S. adults,
- **Data ownership, so** whom the data belongs to
- **Cost of the data, if any**
- **Methodology, which includes** how the subject sample was collected for example a random sampling of census data
- The table also includes info on the **Start Date** for which the survey or

data source was first available and
- The **Frequency** with which the data source is used for data collection, where applicable, such as annually

Resource Table Format

Purpose	Heart Disease/ Stroke Prevention Topics Addressed	Sampling Frame	Data Ownership/ Primary Contact Organization	Cost	Methodology
Resource Name _(name of the data source/tool with a URL hyperlink)_ **Start date:** _Year in which the survey or data source was first available_ | **Frequency:** _Frequency with which the data source is used for data collection (e.g., annually, periodically)_					
Purpose(s) of the data source or tool	Topics on which information is collected or available for the data source or tool	Population from which the sample is taken (e.g., high schools, visitors to a website, U.S. adults)	To whom the data belong	Cost associated with the data	• Subject Selection: How the sample was selected (e.g., random sampling, census) • Survey Delivery: How the survey or tool is delivered (e.g., self-administered survey, in-person interview) • Number of core questions

And here is a snapshot of what the table format actually looks like in the Guide.

And of course, the Table Format includes the name of the data source or tool with a URL hyperlink for access

Organization of Guide Sources

📋 National and State Surveys, Systems and Tools	↖ Media Tracking
📖 Health System Registries	🗺 Data Visualization, Interactive & Geographic Information Systems
📈 Health Systems Data and Reporting Tools	🧂 Sodium in the Food Supply
📄 National, State, and Local Policy Tracking	⚛ Social Determinants of Health

So we've discussed the details for each data source or tool included as per the resource table format.
Now, let's explore the different topic-specific resource tables in the Guide.

The Guide includes data resource tables for eight topic-specific resources including:
1.**National and state surveys and tools**
2.**Health system registries**
3.**Health systems data and reporting tools**
4.**National, state, and local policy tracking**
5.**Media tracking**
6.**Data visualization, interactive and geographic information systems**
7.**Sodium in the Food Supply**
8.And as Ami shared earlier, the new addition **Social Determinants of Health**, which includes resources to help understand disparities and

promote equity

•These data sources listed in the guide provide a wide variety of cardiovascular health-related information.
•For example, the stroke registries and hospital discharge records have data on health outcomes.
•An attempt was made to include the most cardiovascular health-related data sources in this guide; however, due to the ever-changing nature of this field, it is impossible to include all data sources at any given point, especially those related to media tracking.

I will now pass the mic back to my colleague Ami to discuss how the Guide can be used to inform evaluation and surveillance planning.

PUBLIC HEALTH IMPLICATIONS

Now, let's explore how the Guide can help inform evaluation and surveillance planning.

How Can the Guide Help Program Managers and Evaluators?

Identify data relevant to planning, monitoring and evaluation

Compare program impact and outcomes with those from other states

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So, the guide can:

- Assist state heart disease and stroke prevention programs identify data that are relevant to planning, monitoring, and evaluation.
- And data from these sources can be used to compare program impact and outcomes with those of other states and the nation as a whole.

We encourage users to review and assess the appropriateness of the listed resources in meeting their program's needs.
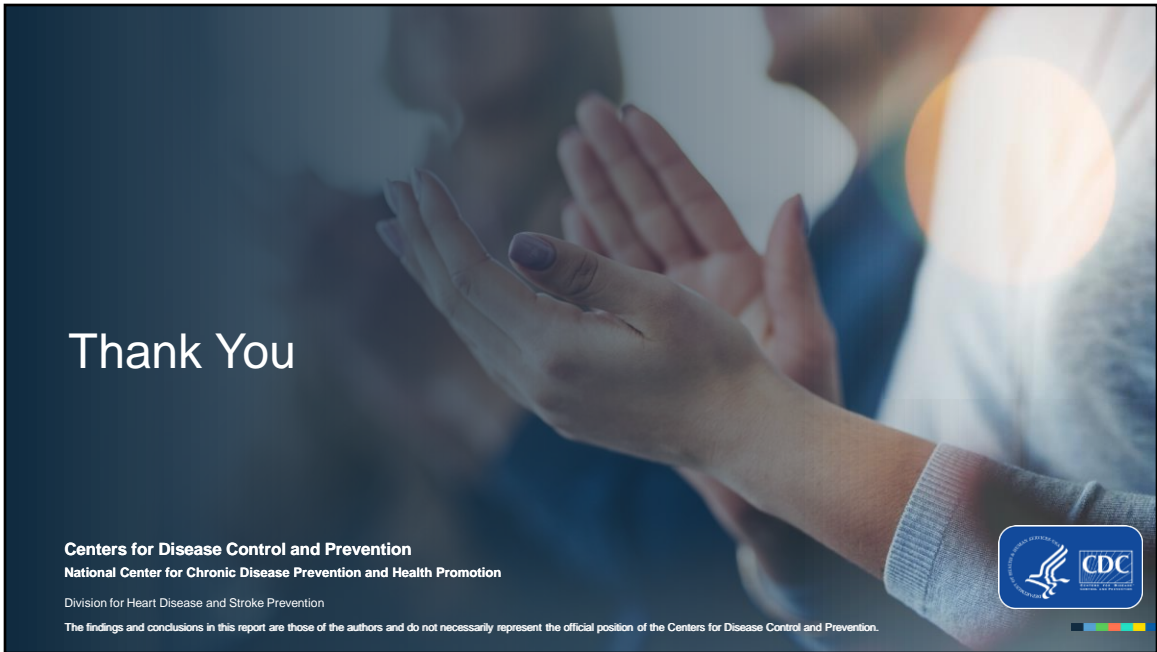
Considerations

- This guide addresses programs supported by DHDSP; however, not all sources are applicable to all programs.

- We encourage users to assess the appropriateness of resources in meeting their program's needs.

And finally, to close off, I'd like to highlight some considerations about the Guide:
•Although this guide addresses the broad spectrum of programs supported by the Division for Heart Disease and Stroke Prevention, not all sources are applicable to all programs.
•Therefore, we encourage users to review and assess the appropriateness of the listed resources in meeting their program's needs.

Thank You

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

MODERATOR

This concludes today's Coffee Break presentation. At this time, we will take questions from the audience. Please enter your question into the Q/A feature at the bottom of your screen. As we wait for questions from the audience, I'll ask our presenters a question to help start the discussion.

Question: Given that lots of research is being done on how to collect standardized and reliable data on SDOHs, what themes did you see in data collection practices for the SDOHs table?

Answer: So firstly, not all of the resources in the SDOH table are datasets, there are evaluation resources that can assist in using a health equity lens in how data is collected, analyzed, or used. Within the table, there are resources that compile indicators and data variables in one place, and often rely on experts working together to collect and categorize the data. Finally, of the datasets, many categorize variables or indicators into SDOH domains based on how they interact. For example, CDC's Social Vulnerability Index determines ranking of social vulnerability by collecting 15

social factors, including poverty, lack of vehicle access, and crowded housing. The SVI also gives rankings based on how the social factors are grouped into four related themes.

Question: What notable resources, related to the Social Determinants of Health, have been added to the updated version of the Surveillance and Evaluation Guide?

Answer: In collaborating with internal subject-matter experts we were able to identify several new and relevant resources to add to the Guide. What comes to mind is the Multidimensional Deprivation in the United States Index. This new resource was added to *Table 1. National and State Surveys, Systems, and Tools.* The methodology for the subject sample data collection includes individual-level indicators of deprivation in multiple (six) dimensions. Thus, this resource may provide a more extensive view of well-being beyond income-based poverty measures and it aligns with CDC's CORE Health Equity Science and Intervention Strategy work.