



# Enhancing Data Services: Insights from NCHS' 2023 Health Data User Survey

2024 Research and Policy Conference, FCSM

Session I-3: Vital Signs and Data: A Health Dose of Analytics

Thursday October 24, 2024, 10:30am

**Ryne Paulose, PhD, MA**

National Center for Health Statistics (NCHS), CDC

***Co-Authors:***

Catherine Lesesne, PhD, MPH, Deloitte Consulting

Dagny Olivares, MPA, NCHS/CDC

Amy Branum, PhD, NCHS/CDC

Kiana Morris, MBA, CMCP, NCHS/CDC





NATIONAL CENTER FOR HEALTH STATISTICS

## Strategic Plan

Fiscal Years 2022–2025



### VISION

To be a world-class innovator and provider of health data and statistics



### MISSION

NCHS collects, analyzes, and disseminates timely, relevant, and accurate health data and statistics. Our products and services inform the public and guide program and policy decisions to improve our nation's health.

### GOALS

NCHS' goals reflect the broad, long-term accomplishments it aspires to achieve:

#### GOAL 1



Expand NCHS' relevance and external engagement

#### GOAL 2




Accelerate NCHS' health data capabilities

#### GOAL 3



Build on NCHS' workforce and operational excellence



 <h3>VISION</h3> <p>To be a world-class innovator and provider of health data and statistics</p>	 <h3>MISSION</h3> <p>NCHS collects, analyzes, and disseminates timely, relevant, and accurate health data and statistics. Our products and services inform the public and policy decisions to improve our nation's health.</p>	
<h4>GOAL 1</h4> <p>Expand NCHS' relevance and external engagement</p> 	<h4>GOAL 1</h4> <p>Expand NCHS' relevance and external engagement</p> <p><b>Objective 1.1:</b> Expand understanding of current and potential users</p> <p><b>Objective 1.2:</b> Improve user awareness of and access to NCHS data</p> <p><b>Objective 1.3:</b> Build and maintain strategic partnerships with public and private entities</p>	<h4>GOAL 3</h4> <p>Build on NCHS' workforce and operational excellence</p> 

# Understanding the NCHS User

NCHS Website User Survey ....

NCHS Power User Interviews ....

## Attachment A. NCHS Website User Customer Satisfaction Survey

You've been invited to participate in a brief, 15-question customer satisfaction survey. This survey will NOT capture any personally identifiable information. All submissions are voluntary and anonymous. Your participation is extremely important and will be used to improve NCHS' products and services. All information will be treated

### NCHS Federal Power User Interviews |

1. For what purpose do you seek NCHS products and services?
2. How successful are you in achieving this purpose?
3. How would you rate your experience with NCHS products and services (scale from 1-5 with 5 being Excellent)?
4. Rate the following on the same scale:
  - a. Data quality:
  - b. Ease-of-use:
  - c. Professionalism of staff:
  - d. Relevance to major health issues:
  - e. Relevance to your needs as data user:
5. What aren't we doing that we should be doing?
6. What tradeoffs, if any, should we make to address the answer to above question?
7. What do you like best about us?
8. What do we most need to improve?
9. Who else do you turn to for your data needs?
10. If applicable, do you have any thoughts on the ease of the process to engage with NCHS on reimbursable services.

Budget (OMB). (Form

a 10 minutes per person, nation. An agency may it displays a currently his collection of fier, 1600 Clifton Road,

the last year?

you obtain from it

e explanation.

ou visit it? (Check

# NCHS Health Data User Survey

## Purpose:

- To explore the experience, needs, and wishes regarding NCHS data and products from a range of NCHS constituents, including federal and non federal, and users and nonusers of NCHS products.

# NCHS Health Data User Survey

1	Which of the following health topics are of most interest to you? (Check all that apply)
2	How do you prefer health data to be made available? (Select your top choice)
3	Do you do your own statistical analyses using analytic software?
4	What is your preferred analytical software?
5	Have you ever used any data or publications from the National Center for Health Statistics (NCHS)? If Q5 Yes, continue to Q6 If Q5 No, SKIP to Q14

|

6	Are you familiar with any of these NCHS publications? (Check all that apply)
7	How often have you used any NCHS data or publications in the past 12 months?
8	Did you access the NCHS data or publications through one of the following? (Check all that apply)
9	For what reasons have you accessed NCHS data or publications in the past? (Check all that apply)
10	For what purposes did you access NCHS data or publications? (Check all that apply)
11	Have you obtained health statistics from publications or reports that included the following data sources in the last 12 months? (Check all that apply)
12	Have you obtained NCHS data files to analyze any of the following data sources in the last 12 months? (Check all that apply)
13	If NCHS could do one thing to improve their health data or publications for you personally, what would that be?

14	Are you familiar with any of these NCHS publications or resources? (Check all that apply)
15	Do you have suggestions on how we can increase your potential use of NCHS health data or publications?

16	Which best describes your occupation?
17	How would you best describe your organization?

OMB Control Number:

0920-0729

Expiration Date: 02/28/2026

### Health Data User Survey

You are invited to participate in a brief, 5-minute health data user survey that will help the National Center of Health Statistics (NCHS) understand your health data needs and better deliver health data products and services. NCHS, part of the Centers for Disease Control and Prevention (CDC), provides health data and statistics to inform the public and guide program and policy decisions to improve our nation's health. Your participation is extremely important to us and the information you provide will be used to improve health statistics products and services.

This survey will NOT capture any personally identifiable information. All submissions are voluntary and anonymous. All information will be treated in a secure manner. Thank you for your assistance.

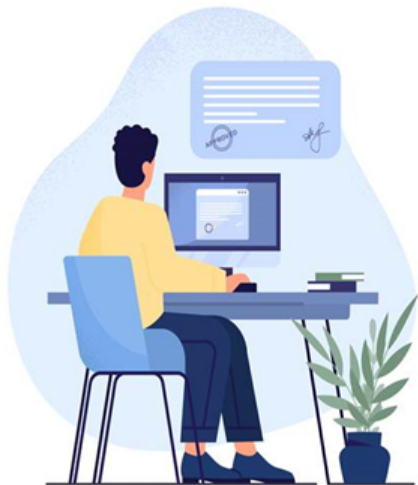
**NOTICE** - Public reporting burden of this collection of information is estimated to average 5 minutes per response, including the time for reviewing instructions, and completing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: CDC/ATSDR Information Collection Review Office; 1600 Clifton Road, MS D-74, Atlanta, GA 30333, ATTN: PRA (0920-0729).

Item #	Question	Response Options	SKIPs/Comments
1	Which of the following health topics are of most interest to you? (check all that apply)	Asthma / Respiratory Health Births / Fertility Diet / Nutrition Exercise / Physical Activity Heart Health / Cardiac Health Care Use / Access	



Re: National Center for Health Statistics Needs Your Help!

## The National Center for Health Statistics Needs Your Help!



NCHS is seeking to understand health data users better so we can improve the products and services we offer. Whether you are a regular user of NCHS statistics and products or you have yet to explore our health data, we want your input on how we can make our data, products, and services more useful to you. This very brief survey **should only take a few minutes** to complete and will **help NCHS better meet your public health data needs!** Take the survey today by clicking on the link or scanning the QR code with your mobile device. We want to hear from you! **Take the survey by June 23, 2023!**

 Survey Link: <https://www.surveymonkey.com/r/HDUS>

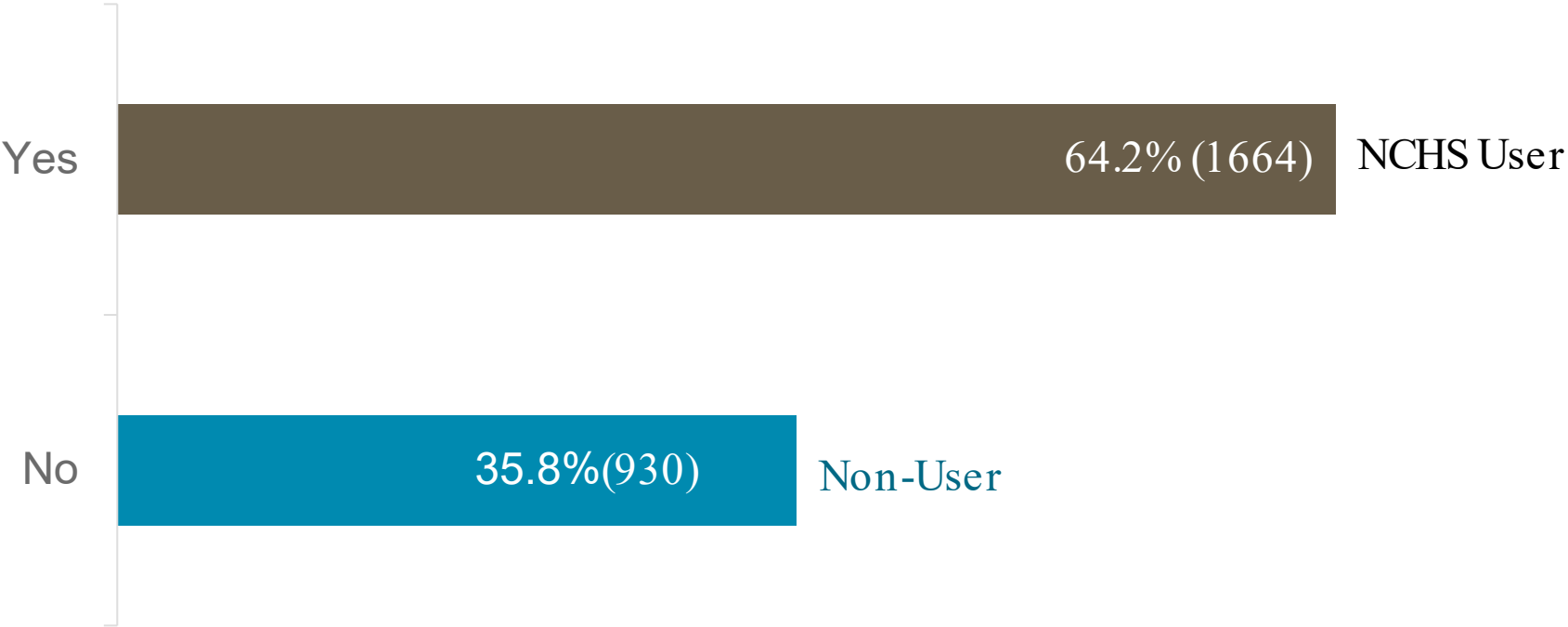


Or open survey using your mobile camera to scan this QR code

# RESULTS

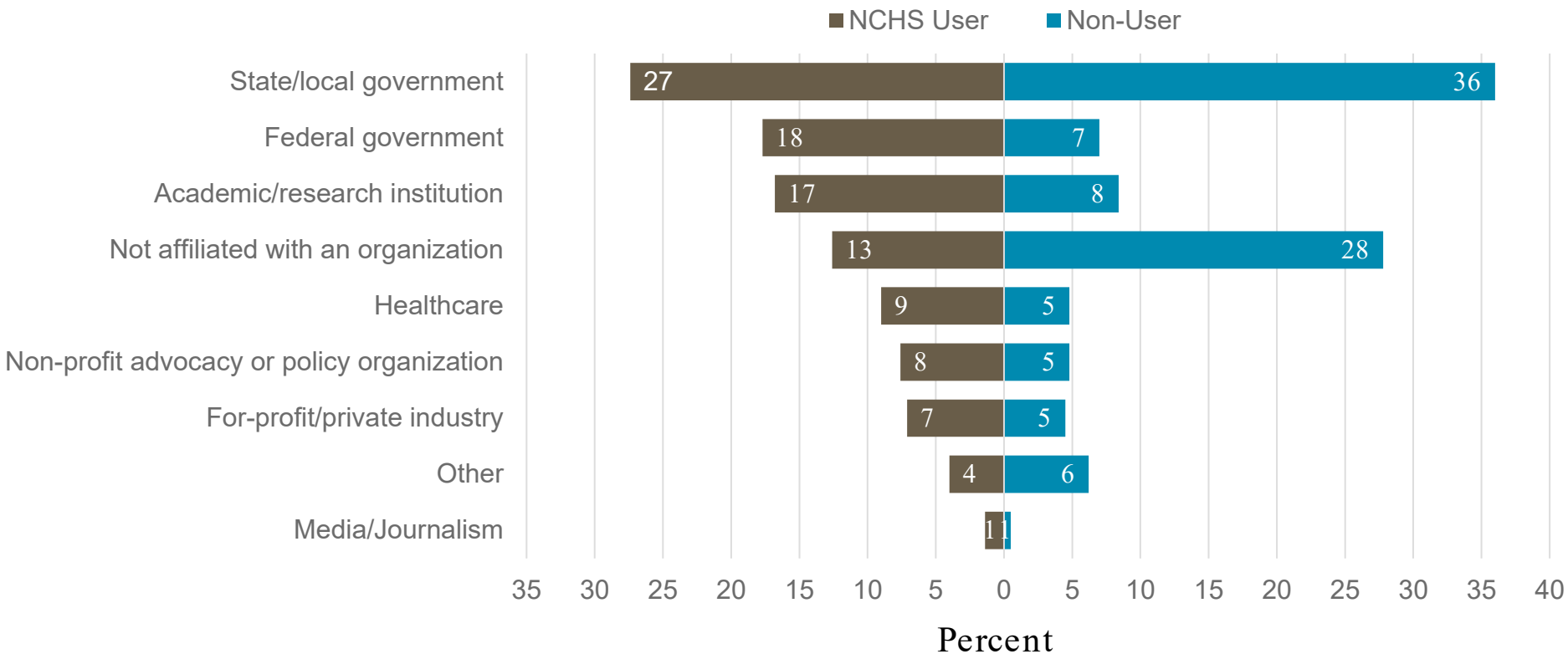
NCHS Health Data User Survey

# Engagement with NCHS



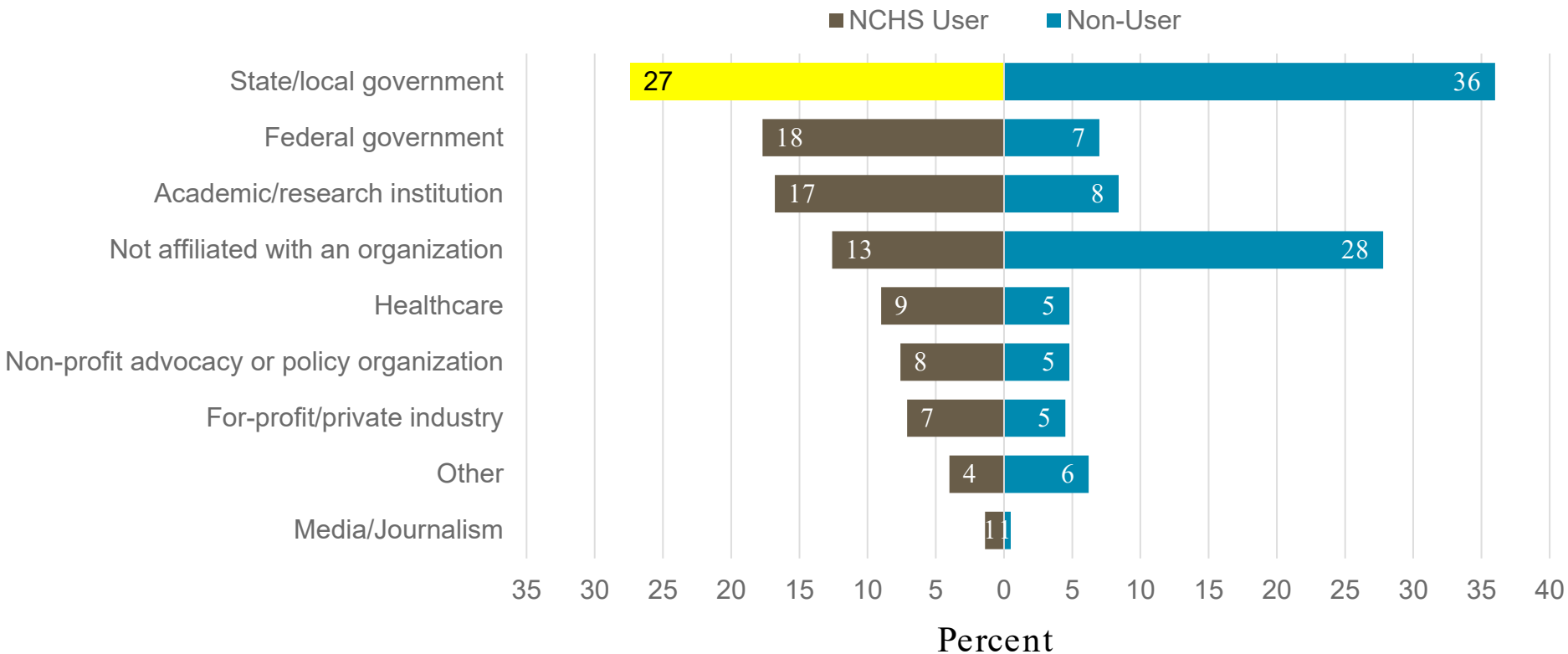
Question - Have you ever used any data or publications from NCHS?

# Respondents' Organizational Affiliation by User Type



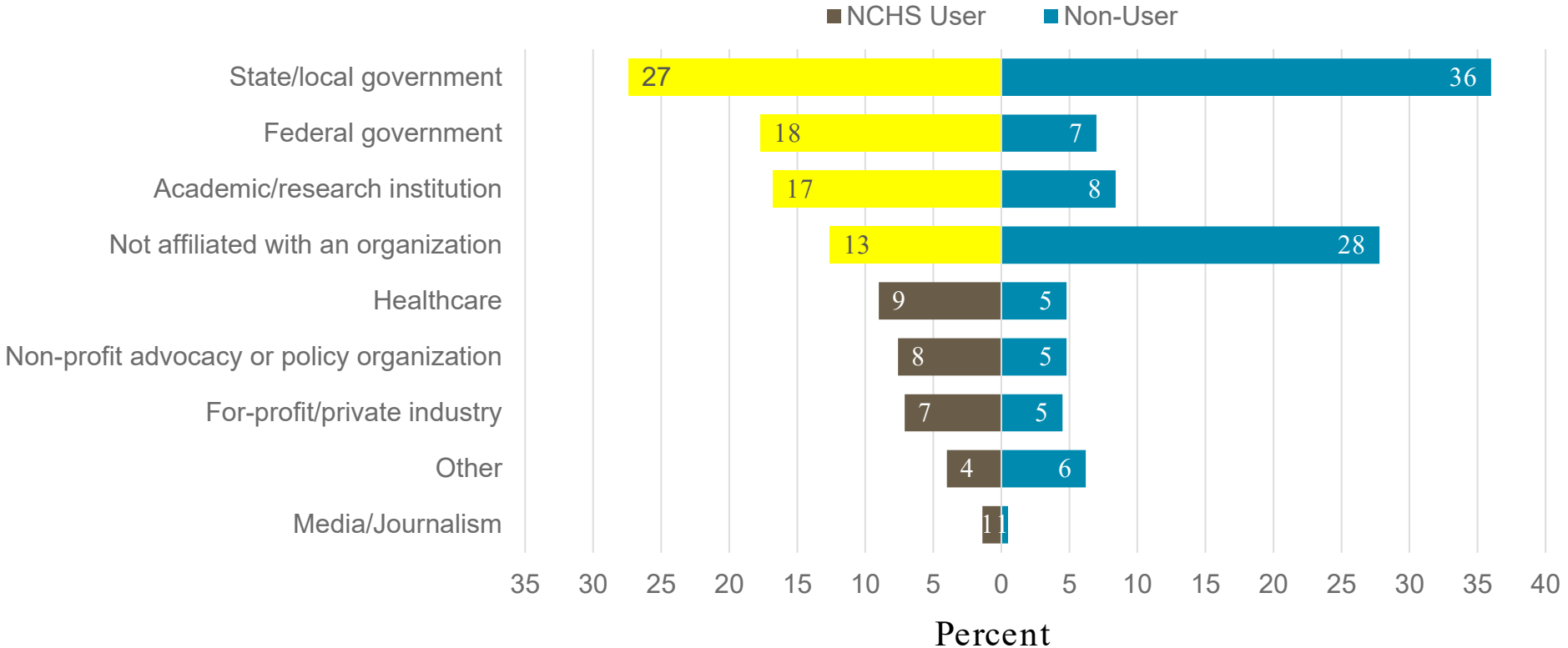
Question: How would you best describe your organization?

# Respondents' Organizational Affiliation by User Type



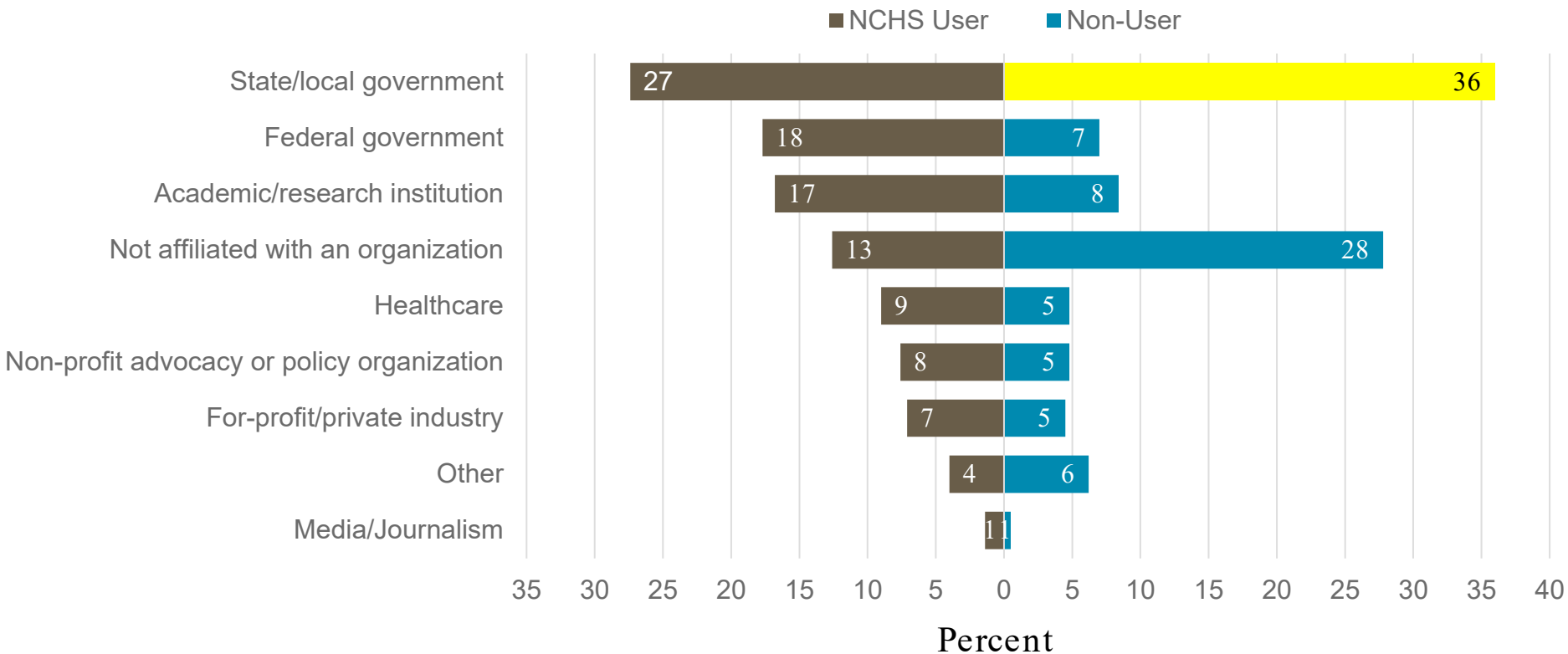
Question: How would you best describe your organization?

# Respondents' Organizational Affiliation by User Type



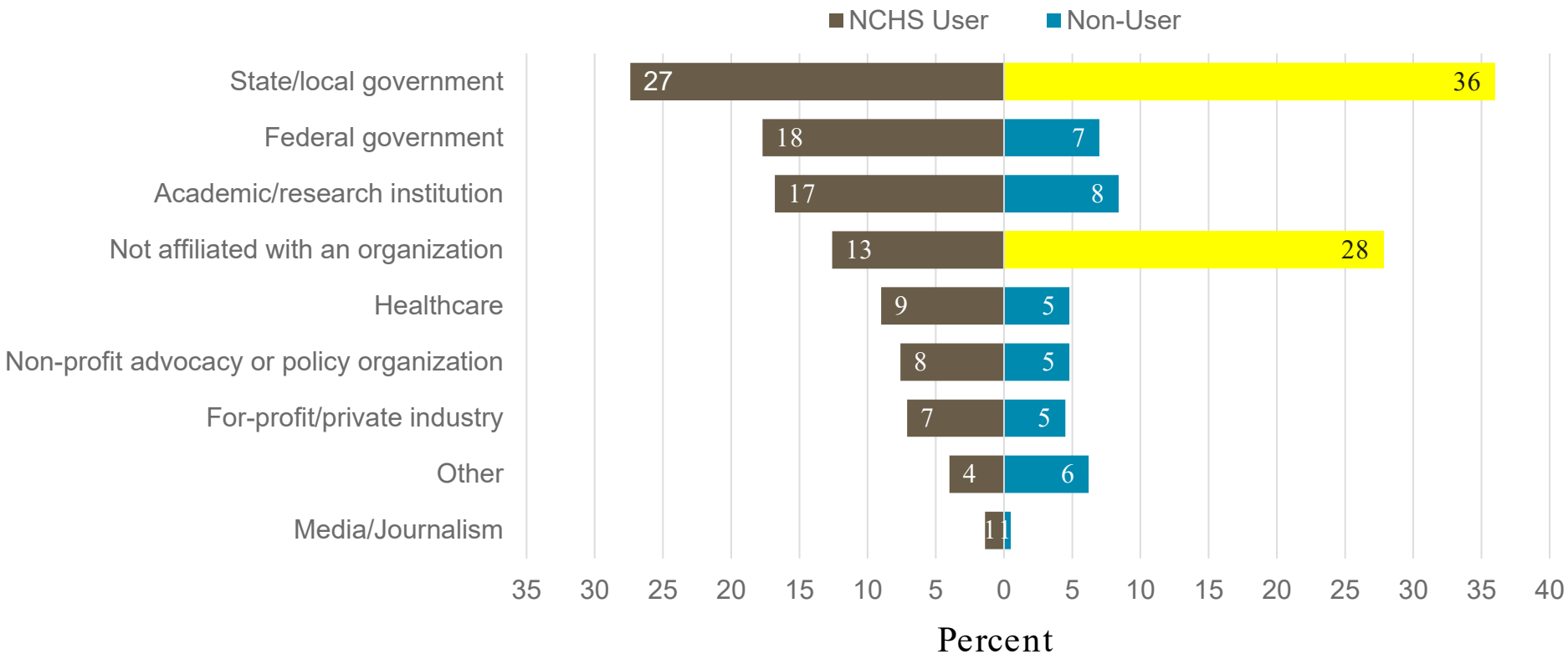
Question: How would you best describe your organization?

# Respondents' Organizational Affiliation by User Type



Question: How would you best describe your organization?

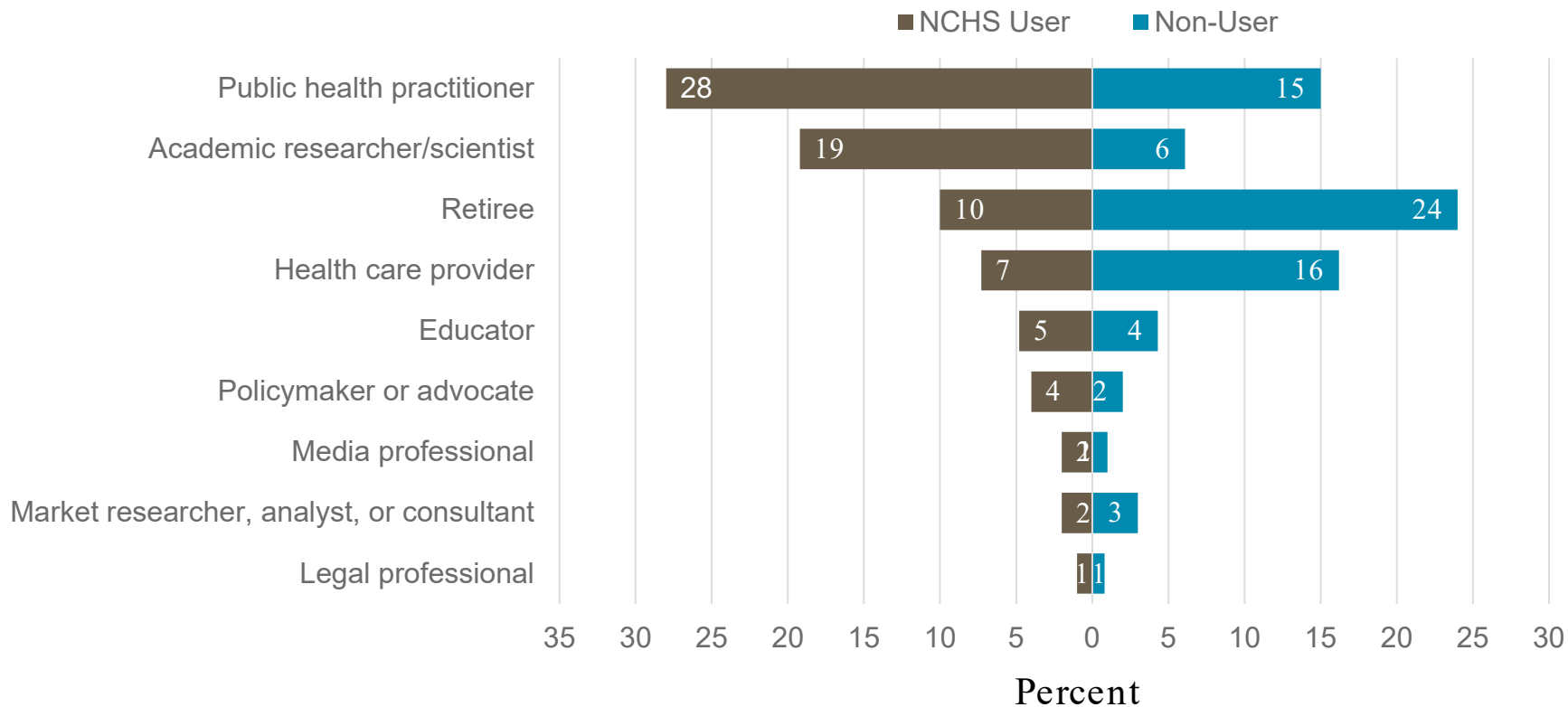
# Respondents' Organizational Affiliation by User Type



Question: How would you best describe your organization?

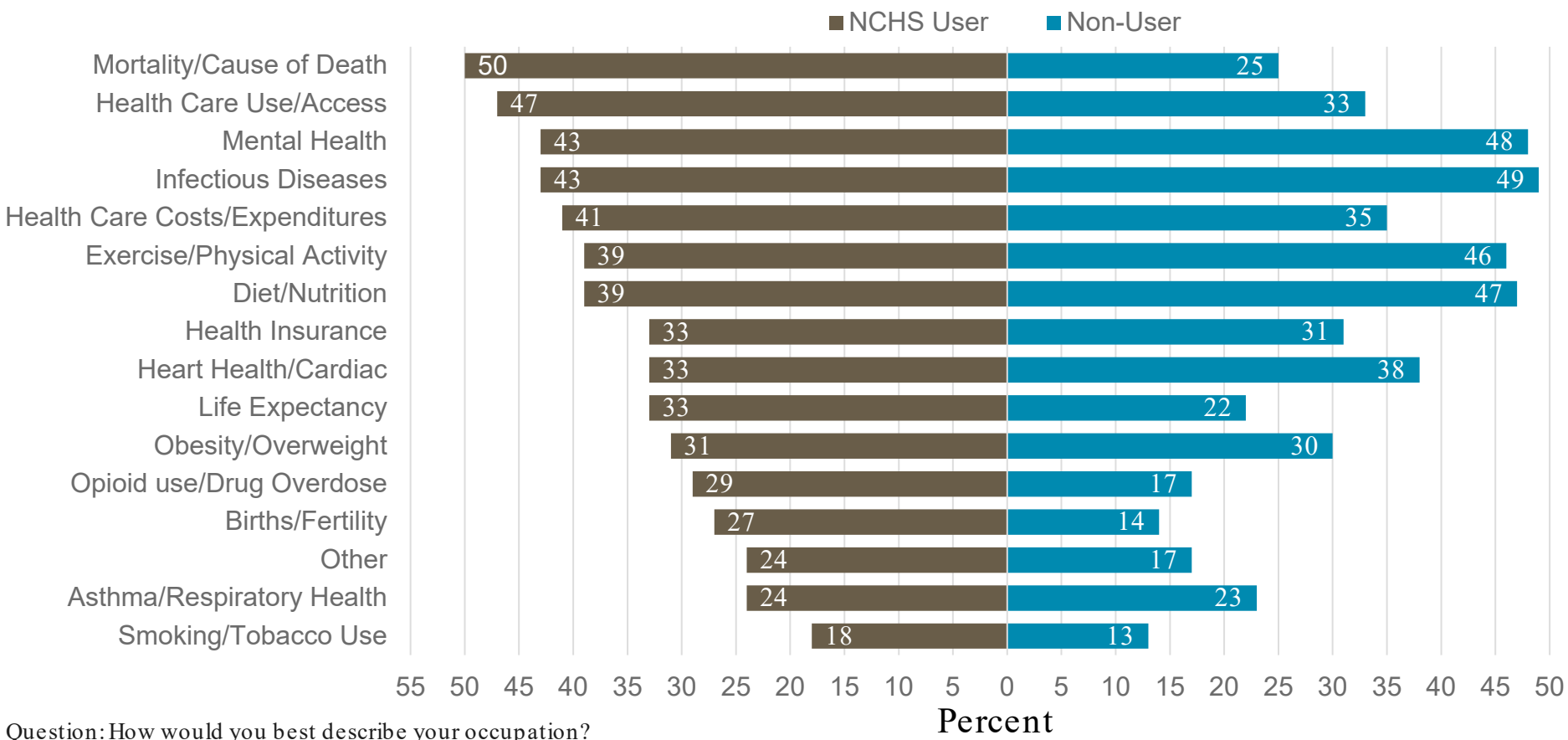


# Occupation by Data User Type

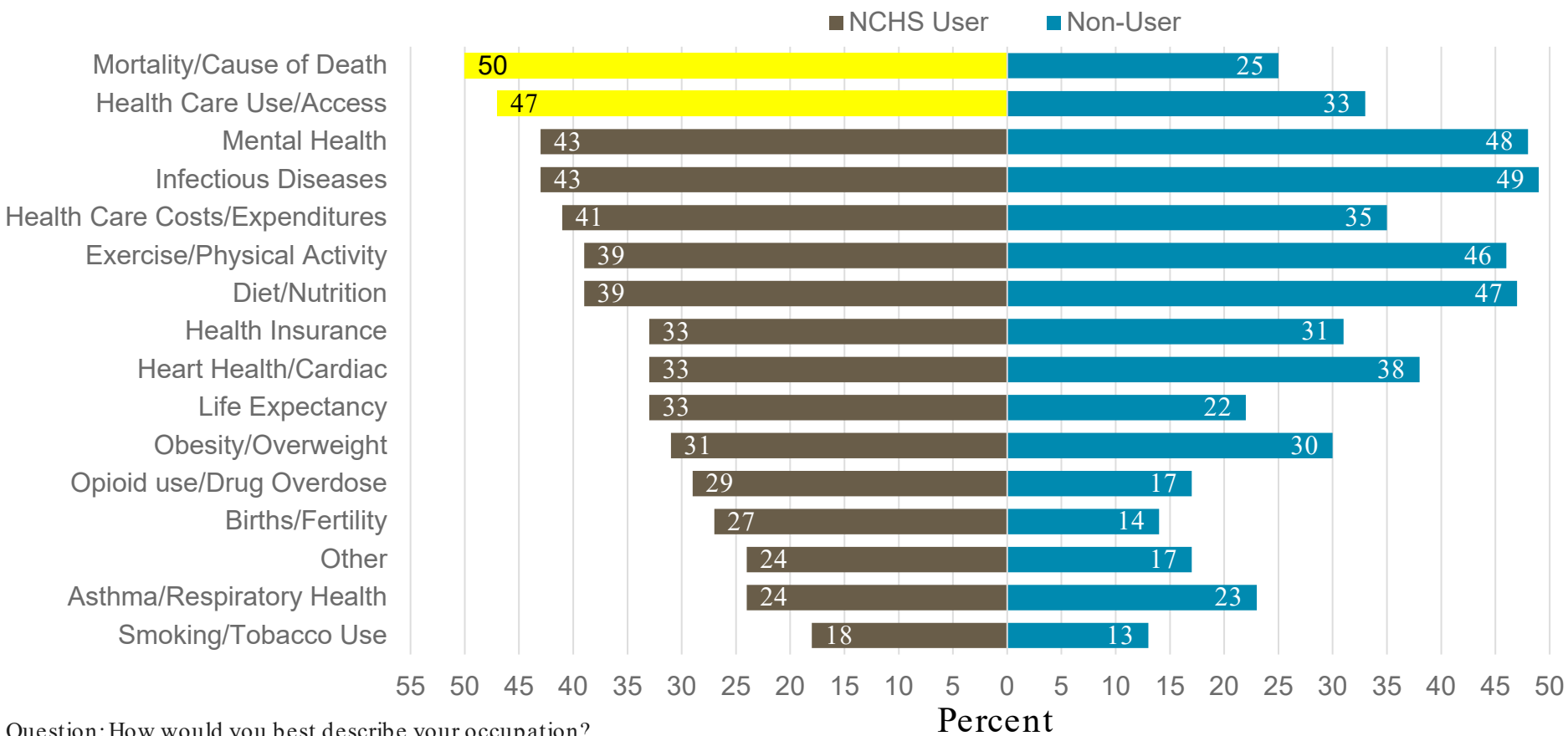


Question: How would you best describe your occupation?

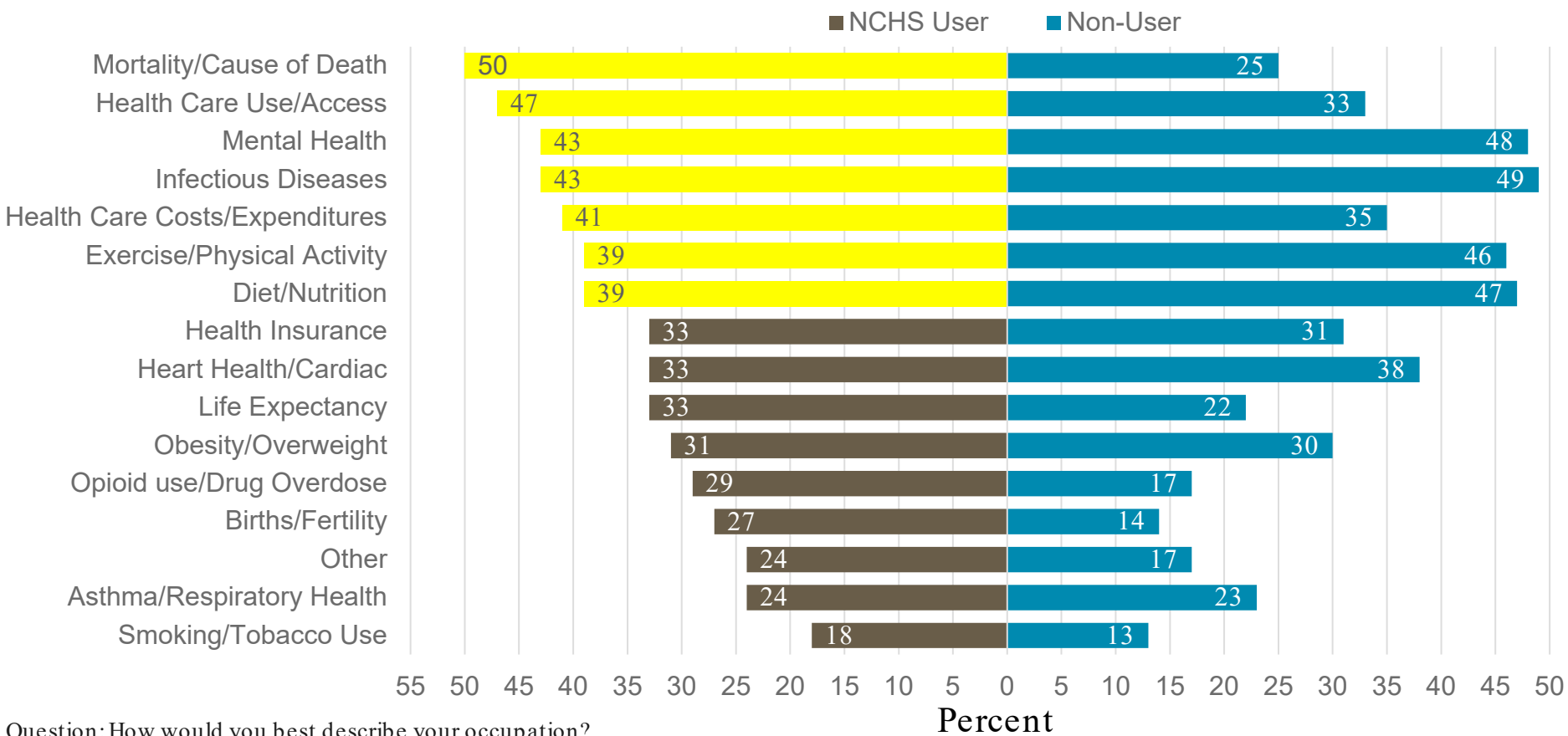
# Health Topics of Most Interest by User Type



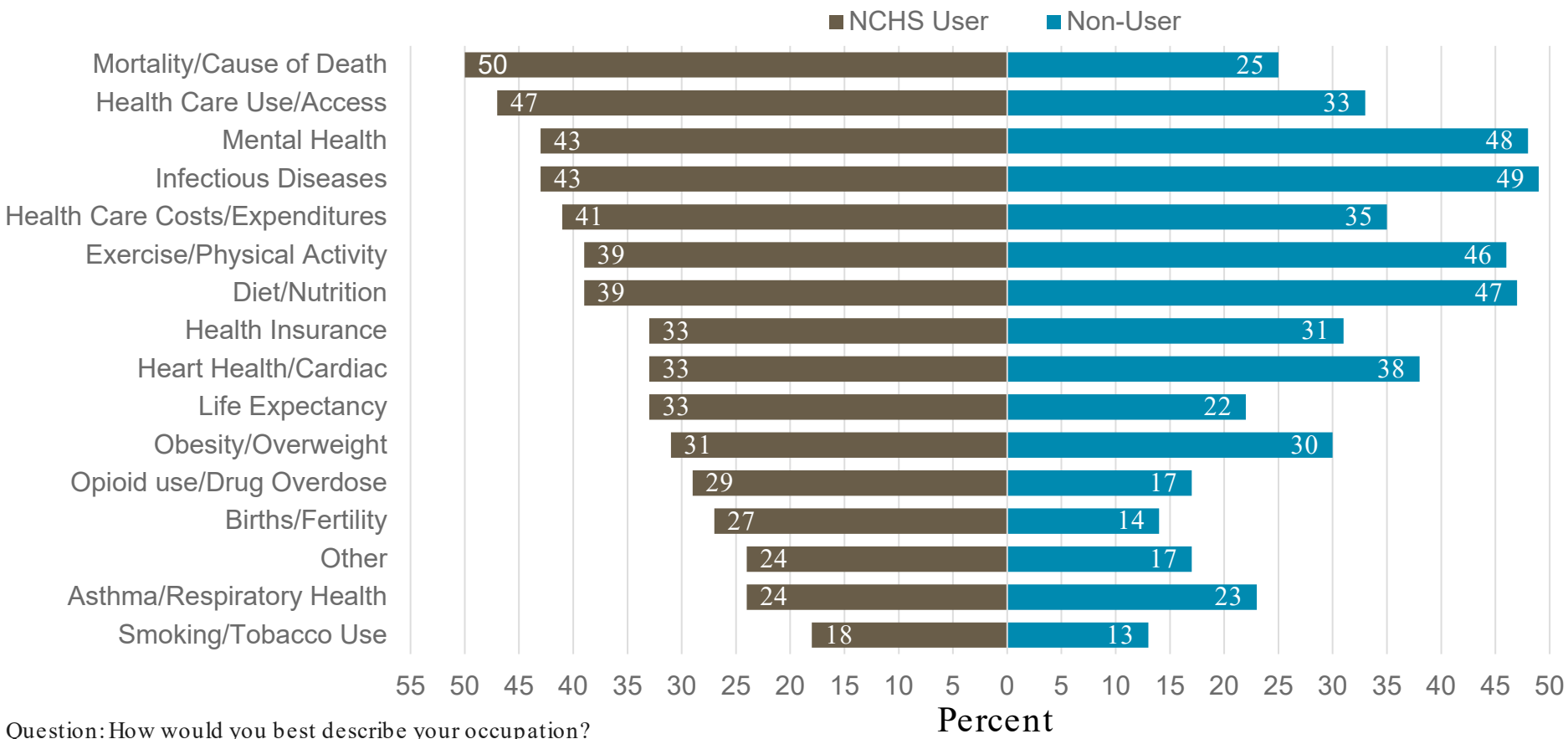
# Health Topics of Most Interest by Data User Type



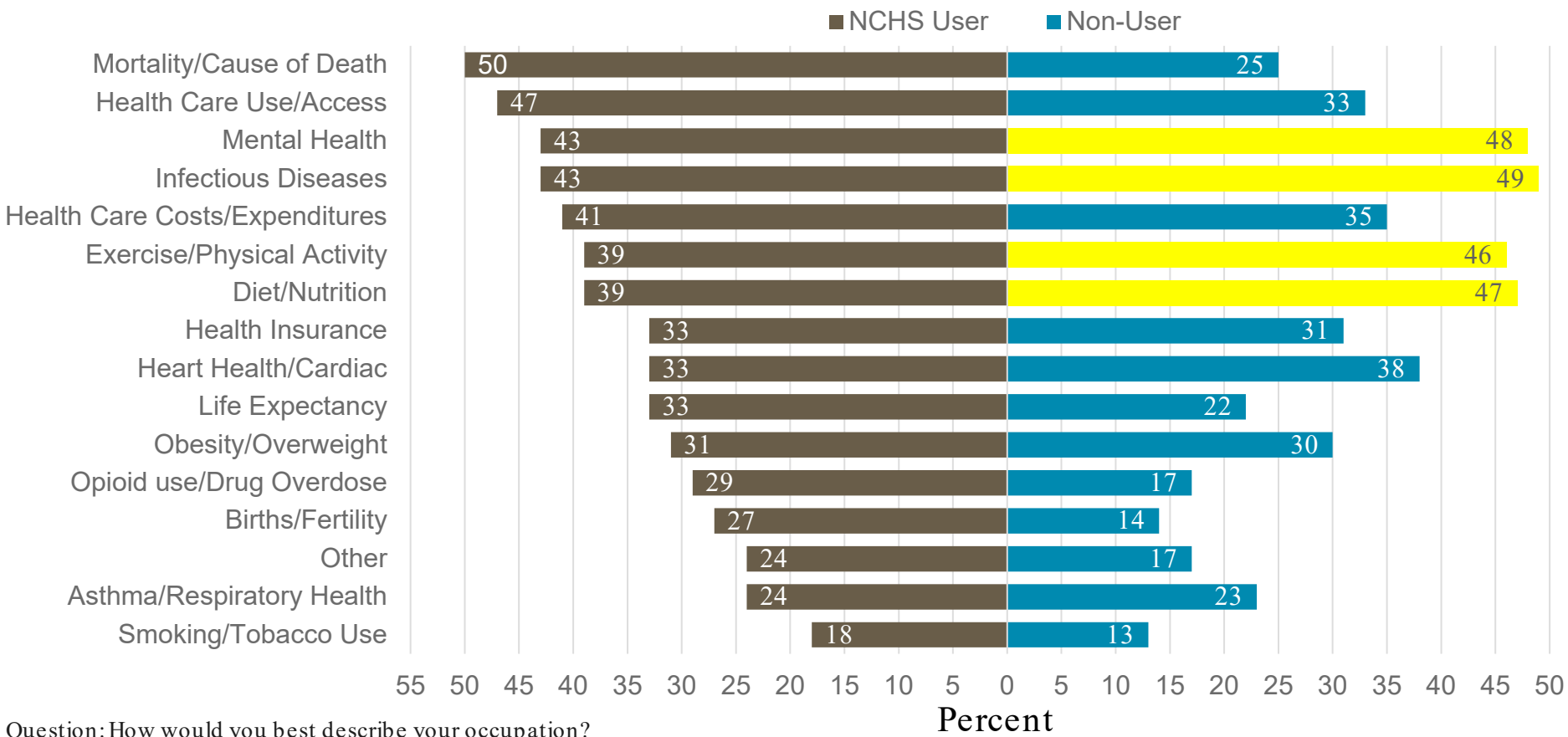
# Health Topics of Most Interest by Data User Type



# Health Topics of Most Interest by User Type



# Health Topics of Most Interest by Data User Type

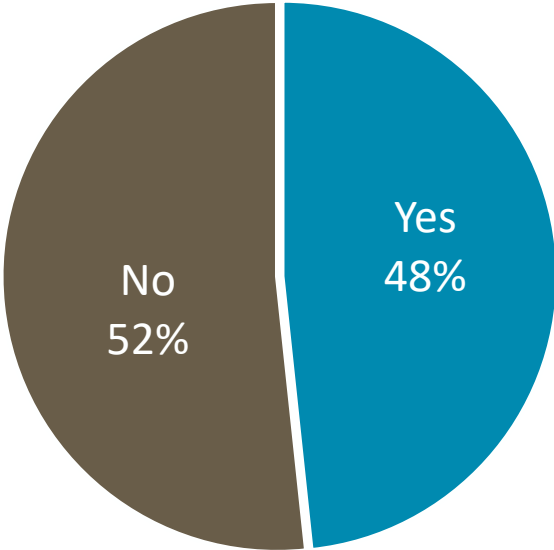


# Preference for Data Access

Answer Choices	NCHS User % (N=1664)	Non-User % (N=930)
Data files for analysis: I like to do my own statistical analyses.	30%	12%
Interactive data tools: I like to customize the way I view data.	24%	19%
In-depth report: I like to read more about the context and meaning of the statistics.	21%	31%
Simple graphics: I like to visualize data with pre-prepared graphics.	14%	24%
Simple summary tables: I like to look up statistics without additional text or interpretation.	9%	12%
Other (please specify)	3%	2%

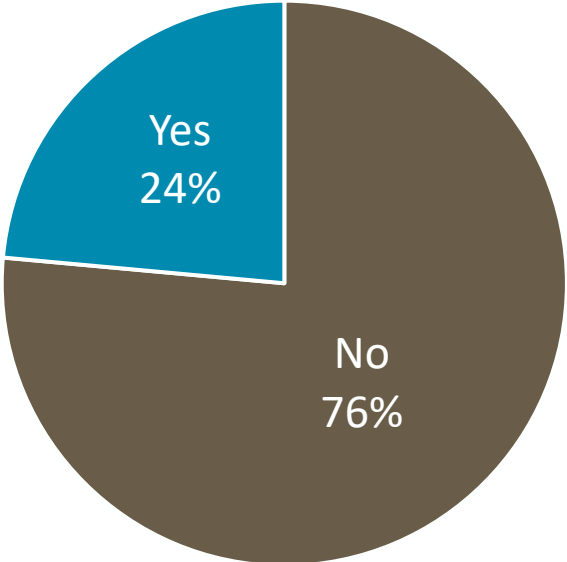
Question: How do you prefer health data to be made available? (Select your top choice)

# Statistical Analysis



**NCHS Users**

N=1,664



**Non-User**

N=930

Question: Do you do your own statistical analyses using analytic software?



# Additional insight into NCHS Users\*

\* Respondents reported “Yes” to the question, “Have you ever used data or publications from the National Center for Health Statistics (NCHS)”

# Frequency of NCHS Usage

**40%**

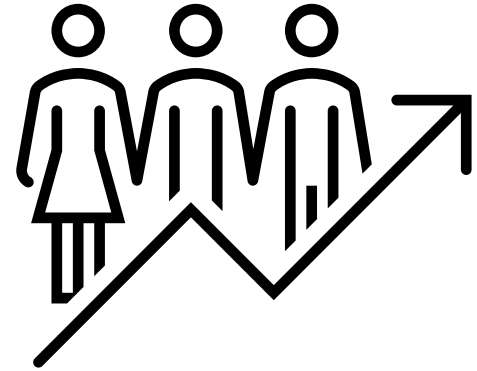
1–2 times in last 12 months

**32%**

3–6 times in last 12 months

**28%**

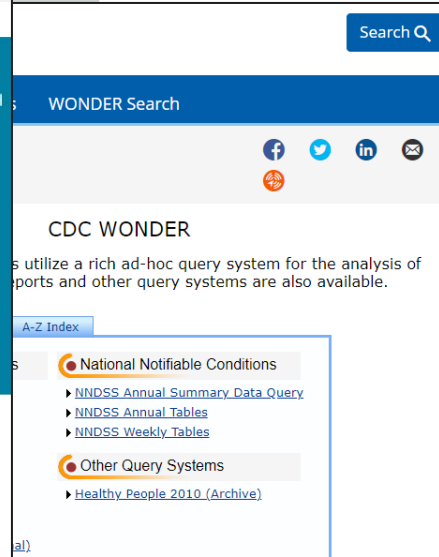
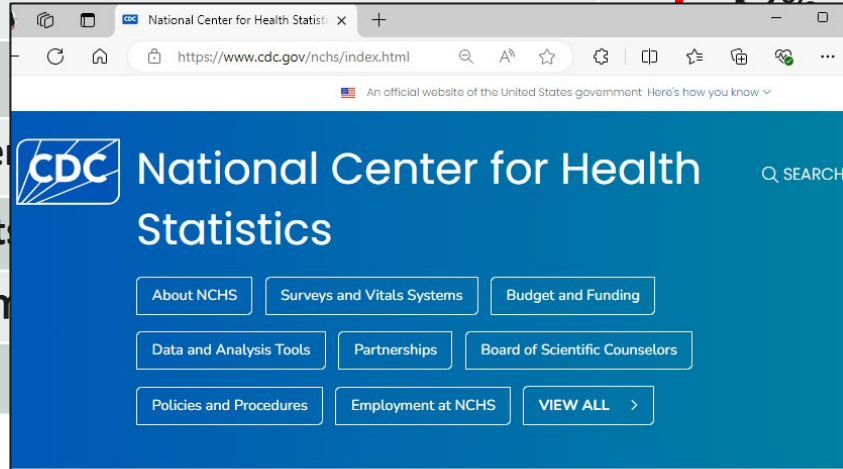
7+ times in last 12 months



# Access Channels

Answer Choices	NCHS Users % (N=1491)
NCHS Website - <a href="https://www.cdc.gov/nchs">www.cdc.gov/nchs</a>	84%
CDC WONDER	25%
CDC WISQARS	
Research Data Center	
Data Use Agreement	
Interagency Agreement	
Other	

\*Check all that apply



## Suicide Mortality

Men were nearly 4 times as likely as women to die by suicide in 2022



Question: How did you access the NCHS data or pu

# Analytical Software Preference

Answer Choices	NCHS Users who do statistical analyses % (N=1,083)
SAS	47%
Excel	36%
R or R Studio	30%
Stata	16%
SPSS	17%
Other (SUDAAN, JMP, Python, PowerBI, ArcGIS)	10%
N/A	1%

\* Check all that apply

Question: What is your preferred analytical software?

# Reasons for Accessing NCHS Data/Publication

Answer Choices	NCHS Users %
To obtain statistics on a health topic	84%
To obtain a specific report, publication, or data table	56%
To obtain public use micro-data files or obtain information about these files	22%
To identify survey methods or data collection forms to apply to your own research	10%
Other	5%

\*Check all that apply

Question: For what reasons have you accessed NCHS data or publications in the past?

## For what purposes did you access NCHS data or publications?

Answer Choices	% (N=1491)
Work project	43%
Health program planning, administration	39%
Academic research	34%
Personal interest	33%
To inform/develop policy or legislation	22%
Other	7%
School project	6%
Media/journalism	4%
Market research/product development	4%

# NCHS User Suggestions for NCHS Improvements

- Access to data, data that was user friendly and a great resource
- Streamline accessibility between municipalities (federal, state, local) and comparison analyses
- Publish a guide to what's available to disseminate; less variation of data sources
- Availability of health equity data and pub-med
- Clarity on health data sources and their connections
- Email alerts, especially when new data line NHANES was available; publicize what is available early; make registry so email comes regularly
- Easy guidelines on finding data and reports
- Easy tutorials that can be shared
- Simplifying technical instructions (using charts summarizing data)
- Timely reporting of data including mortality data, Long COVID, nutrition, obesity, and gun violence
- Timely release of newsletters, data (like NHANES)
- Training on how to access data; statistical software and training
- More social determinants of health information
- Public health surveillance systems and population data, easy access to raw data
- More statistics on disability; more longitudinal studies
- Dental and oral health information
- Make sure to include SOGI
- Modernize websites, including the CDC WONDER interface
- Update website and search functions, update data definitions

Question: If NCHS could do one thing to improve their products and services for you personally, what would that be?

# Additional insight into Non-users\*

\* Respondents reported “No” to the question, “Have you ever used data or publications from the National Center for Health Statistics (NCHS)”



# Non-User Familiarity with NCHS Publications or Resources

\*Check all that apply

Answer Choices	%
I am not familiar with any of these	50%
Healthy People	25%
National Vital Statistics Reports	17%
NCHS Website	14%
National Health Statistics Reports	13%
Data Briefs	12%
CDC WONDER	10%
Vital and Health Statistics Series	8%
Research Data Center (RDC)	5%
Health, United States	5%
Health E-Stats	5%
CDC WISQARS	4%
Vital Statistics Rapid Release	2%
Visual Abstracts	2%
Other	1%

Question: Are you familiar with any of these NCHS publications or resources?

# Non-User Feedback

## Topics Identified in the Open Response

**Promotion:** Increase availability, SDOH promotion, advertising, updating, webinars, and training for health data/publications

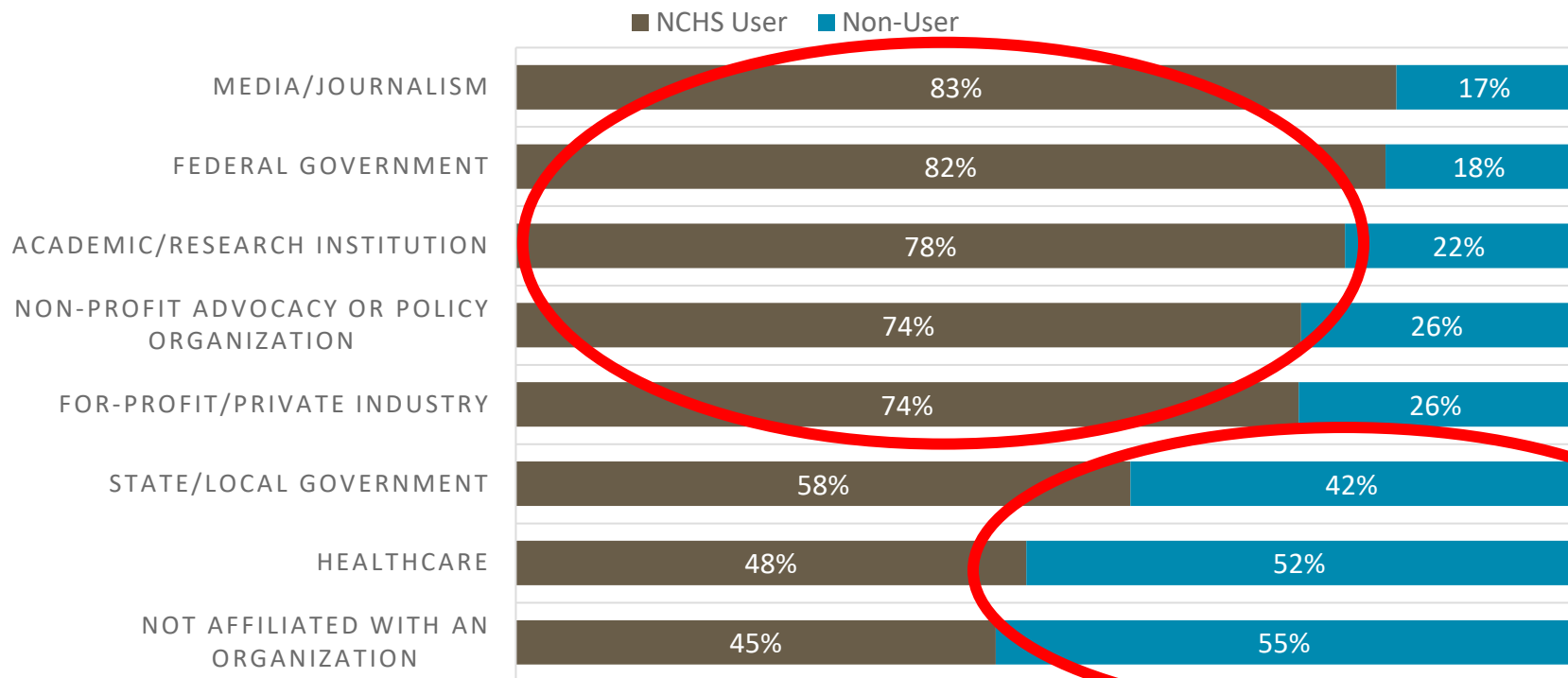
**Simplifying materials:** Participants discussing simplifying data/materials. This includes familiarization and making it easier to access and use the data.

**Resolving data challenges:** Participants discussing all data issues, troubleshooting, complexity, including increasing availability of publications and data

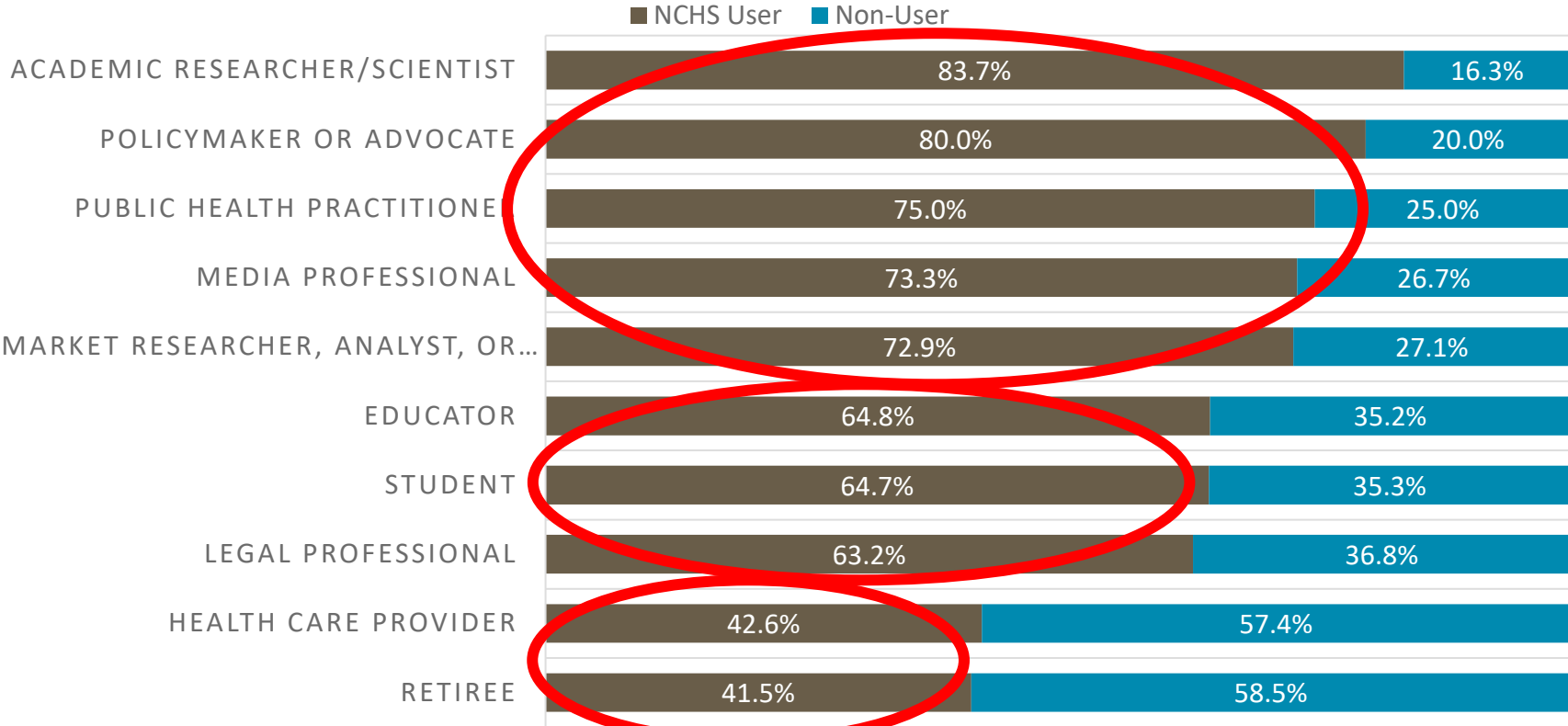
**Increasing access via emails:** Participants wanting access to data through emails, links through emails, publications through emails

**Linking data info across platforms:** Participants discussing links, websites, summaries, and other materials to connect services/access to information

# Organizational Affiliation and NCHS Engagement



# Occupation and NCHS Engagement



# Summary of Findings

- Nearly two-thirds of survey respondents had used NCHS data or publications.
- Users and Non-Users had diverse organizational affiliations and occupations.
- Top health topics of interest for both groups included mortality, health care use/access, mental health, infectious diseases, health care costs, exercise/PA, and diet/nutrition.
- Preferences for accessing health data varied, with 30% of Users preferring data files for statistical analyses while non-users preferred in-depth reports (31%) and simple graphics (24%).
- Over one-half of Users do their own statistical analysis compared to only about one quarter of Non-Users.
- Users predominantly accessed NCHS resources via the NCHS website (84%) and CDC WONDER (32%), and mainly to obtain statistics on a health topic (84%) or for a specific report or publication (56%).
- One-half of Non-Users were unfamiliar with any specific NCHS publication or resource.

# Conclusions

- The survey results provide insights into health data user preferences and needs, including their utilization of specific resources and preferred formats for accessing data.
- Routinely engaging stakeholders and conducting surveys like the Health Data User Survey are important for statistical agencies like NCHS to ensure relevance of products and services.
- The results offer valuable guidance not only for NCHS but also for other data and statistical agencies seeking to better understand and serve their user base effectively.

# NCHS Initiatives that Reflect or Align with Study Findings

- Reimagined NCHS website and web delivery of information to users
- The Data Query System, a tool to more easily access data on various health topics
- More easily digestible products that respond to ways users' access/ways non-users want to access
- Specific products, services, trainings and education that best target specific audiences
- Obtaining continued feedback from users

# NCHS Initiatives that Reflect or Align with Study Findings

- Reimagined NCHS website and web delivery of information to users

The screenshot shows the NCHS website homepage with a blue header. The header includes the CDC logo, the text 'National Center for Health Statistics', and a search bar. Below the header is a navigation menu with buttons for 'About NCHS', 'Surveys and Vital Statistics', 'Budget and Funding', 'Data and Analysis Tools', 'Partnerships', 'Board of Scientific Counselors', 'Policies and Procedures', 'Employment at NCHS', and 'VIEW ALL'. The main content area features several featured articles: 'Suicide Mortality' (Men were nearly 4 times as likely as women to die by suicide in 2022), 'NHIS Teen' (The latest health data about teens from teens), and 'Obesity Prevalence' (40% of adults had obesity in August 2021–August 2023). A 'Find our latest data and analysis' section includes a 'Learn More' button. Below this is an 'Explore our data' section with three cards: 'Data Query System' (Thousands of estimates on more than 120 health topics in one easy-to-use tool), 'Publications' (Analysis of timely, accurate data to increase understanding of American health), and 'Linked Data' (Connected data from multiple sources to help answer complex health questions). The 'Health surveys and vital statistics' section features six survey cards: 'Family Growth Survey' (Fertility, family formation, and reproductive health), 'National Survey of Family Growth' (NSFG logo), 'Health and Nutrition Examination Survey' (The only national survey with health exams and lab tests), 'nhanes' logo, 'Health Care Surveys' (Monitoring healthcare use, access, and changes over time), and 'Health Interview Survey' (The nation's oldest and largest household health survey).



# NCHS Initiatives that Reflect or Align with Study Findings

- Reimagined our website and web delivery of information to users
- The Data Query System, a tool to more easily access data on various health topics

The screenshot shows the NCHS Data Query System (DQS) website. At the top, the CDC logo and "National Center for Health Statistics" are visible, along with a search bar. Below the header is a large banner for the "NCHS Data Query System" with the tagline "Customize charts, tables, and maps on health topics that matter to you". To the right of the banner, a "Print" link is present. Below the banner, a "Key application features" section lists:

- Access data on a variety of health topics
- Select demographic characteristics and time periods
- View data in chart, table, and map formats
- Download data as an image or in a spreadsheet

A blue button labeled "Enter DQS application" is located below the features list. Below this, a grid of six light blue boxes provides quick links to resources:

- About DQS**: Learn more about DQS
- User guide**: Step-by-step instructions for using DQS
- Health topics**: Explore the full list of DQS health topics
- Get updates**: Receive DQS updates
- Partner toolkit**: Access resources that connects users to DQS
- Questions**: Email the [DQS team](#)

Below the grid is a "Featured health topics" section with six light blue buttons:

- Unmet need for healthcare due to cost
- Difficulty with self care
- Death rates for suicide
- BMI among adults
- Diagnosed diabetes
- Any skin cancer

In the bottom right corner, a box titled "Data available in chart, table, and map formats" features icons for a chart, table, and map, with a decorative border of green circles.

[Data Query System \(cdc.gov\)](https://www.cdc.gov/dataquery)

# NCHS Initiatives that Reflect or Align with Study Findings

- Reimagined our website and web delivery of information to users
- Delivered the Data Query System, a tool to more easily access data on various health topics.
- More easily digestible products that respond to ways users' access/ways non-users want to access

### National Health Statistics Reports

Number 210 ■ September 18, 2024

#### Telemedicine Use During the COVID-19 Pandemic by Office-based Physicians and Long-term Care Providers

by Zachary J. Peters, M.P.H., Jessica Lendon, Ph.D., Christine Caffrey, Ph.D., Kelly L. Myrick, Ph.D., Mohsin Mahar, M.P.H., and Carol J. DeFrances, Ph.D.

NCHS Data Brief ■ No. 436 ■ June 2022

#### Sleep Difficulties in Adults: United States, 2020

Dzifa Adjaye-Gbewonyo, Ph.D., Amanda E. Ng, M.P.H., and Lindsey I. Black, M.P.H.

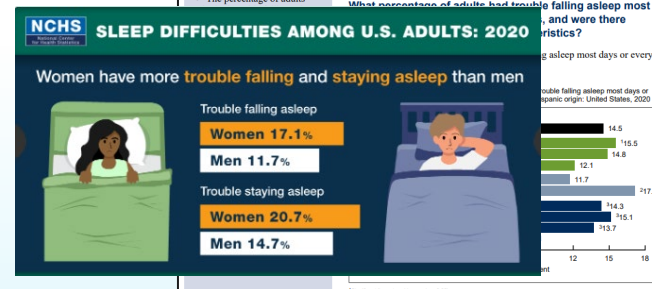
##### Key findings

##### Data from the National Health Interview Survey

- In 2020, 14.5% of adults had trouble falling asleep most days or every day in the past 30 days.
- The percentage of adults

The American Academy of Sleep Medicine and the Sleep Research Society recommend adults sleep at least 7 hours a night (1); over one-quarter of adults do not meet this recommendation (2). Signs of good sleep quality include taking less time to fall asleep and not waking up often or for long periods (3). This report uses 2020 National Health Interview Survey (NHIS) data to describe the prevalence of sleep difficulties, defined here as trouble falling or staying asleep most days or every day in the past 30 days, among adults in the United States by sociodemographic and geographic characteristics.

What percentage of adults had trouble falling asleep most days or every day in the past 30 days or long periods in 2020, and were there differences by demographic characteristics?



[Products- Publications and Information Products from the National Center for Health Statistics \(cdc.gov\)](#)

National  
Information  
2023

data can be downloaded from:  
[cdc.gov/nchs/products/index.htm](https://cdc.gov/nchs/products/index.htm)

data can be downloaded from:  
[cdc.gov/nchs/products/index.htm](https://cdc.gov/nchs/products/index.htm)

# NCHS Initiatives that Reflect or Align with Study Findings

- Reimagined our website and web delivery of information to users
- Delivered the Data Query System, a tool to more easily access data on various health topics.
- Delivering products to be more easily digestible to respond to ways users access/ways non-users want to access
- Specific products, services, trainings and education that best target specific audiences.

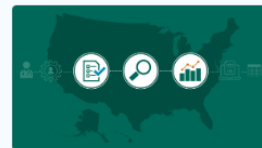
# NCHS Initiatives that Reflect or Align with Study Findings

- Reimagined our website and web delivery of information to users
- Delivered the Data Query System, a tool to more easily access data on various health topics.
- Delivering products to be more easily digestible to respond to ways users' access/ways non-users want to access
- Considering how best to target specific audiences with specific products, services, trainings and education.
- Obtaining continued feedback from users

## Email Updates

### KEY POINTS

- Free CDC email service sends automatic updates on selected health topics.
- Subscribers receive updates without revisiting the CDC website.
- Add no-reply@emailupdates.cdc.gov to your address book to prevent your email provider's system from treating these messages as "Spam."



## CDC Email Updates

CDC offers a [free email subscription service](#). You can sign up to receive email alerts when new information is available about the topics you select. With a subscription profile, you get updated information that interests you. Once you subscribe, you will get updates automatically without needing to return to the website to check for changes.

If you subscribe, your email address will be used only to deliver the requested information and to give you access to your user profile.

## Subscribe to NCHS updates

If you want to receive email updates from the [National Center for Health Statistics \(NCHS\)](#), read through our list of available update topics and click to subscribe.

- [Classification of Diseases, Functioning, and Disability](#)
- [Health, United States](#)
- [National Committee on Vital & Health Statistics \(NCVHS\)](#)
- [National Survey of Family Growth \(NSFG\) Updates](#)

### ON THIS PAGE

#### CDC Email Updates

Subscribe to NCHS updates

Prevent emails from being marked "S..."

### RELATED PAGES

- Listservs
- Policies and Procedures
- Employment at NCHS
- Responses to Health Data Requests

# Thank You

[RPaulose@cdc.gov](mailto:RPaulose@cdc.gov)

