Asking Questions About Youth Mental Health

Victoria Kostour, BS
LEND Trainee 2024
University of Pittsburgh Genetic Counseling Program

What is Mental Health?

- **Mental Health**
  - Includes our emotional, psychological, and social well-being
- **Mental Health Conditions**
  - Spectrum of illnesses or disorders that affect a person's thinking, mood, and/or behavior (e.g. depression, anxiety disorders, bipolar disorder, schizophrenia)
- In 2019, 1 in 8 people around the world were living with a mental illness[1]
  - This has only increased because of the COVID-19 pandemic
- Influenced by many factors such as:
  - Biological factors (genes, brain chemistry)
  - Life experiences (trauma or abuse)
  - Family history of mental health conditions

1: Incidence estimates from https://www.who.int/news-room/fact-sheets/detail/mental-disorders

Examples of Mental Health Conditions

- **Depression Disorders**
  - Persistent feeling of sadness and loss of interest
  - Can decrease your ability to function day-to-day
  - Approximately 4.4%, or 2.7 million, children 3-17 have a diagnosis of depression[2]
  - Examples: major depression and seasonal affective disorder
- **Anxiety Disorders**
  - Having intense, excessive, and persistent worry and fear
  - Feelings interfere with daily activities, are difficult to control, and are out of proportion to the actual danger
  - Approximately 9.4%, or 5.8 million, children 3-17 have a anxiety disorder[2]
  - Examples: generalized anxiety, panic disorders, OCD, phobias, and social anxiety

2: Incidence estimates from https://www.cdc.gov/childrensmentalhealth/data.html#ref

Navigating the Datasets

1. National Survey on Drug Use and Health (NSDUH)
2. National Health Interview Survey (NHIS)

Navigating the Datasets

1. **National Survey on Drug Use and Health (NSDUH)**
2. National Health Interview Survey (NHIS)

National Survey on Drug Use and Health (NSDUH)

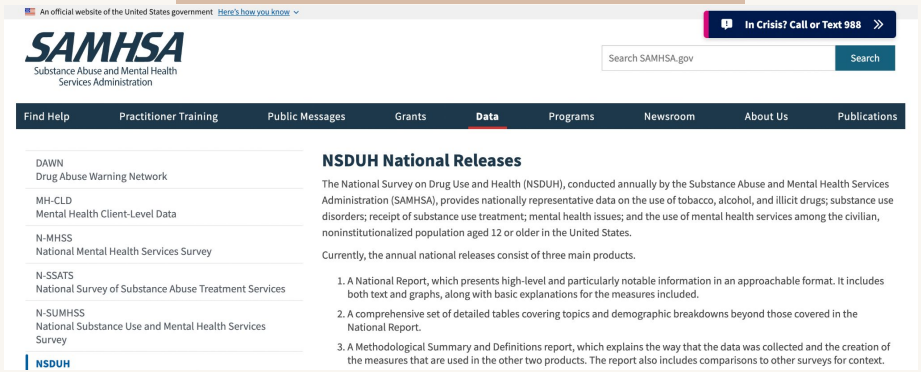
- Annual survey that provides information on substance use and mental health
- Collects data on both adolescents (12 - 17) and adults (18 and older)
- Can provide insight on:
  - Major depressive episodes (MDE)
  - Mental health treatment
  - Suicidality

For more information:
https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health

NSDUH - Navigating Detailed Tables

CLICK HERE https://www.samhsa.gov/data/nsduh/national-releases

The link should take you to a page that looks like this:



SCROLL DOWN to find the Available Years

Each year of the survey has its own page.

Example Research Question:

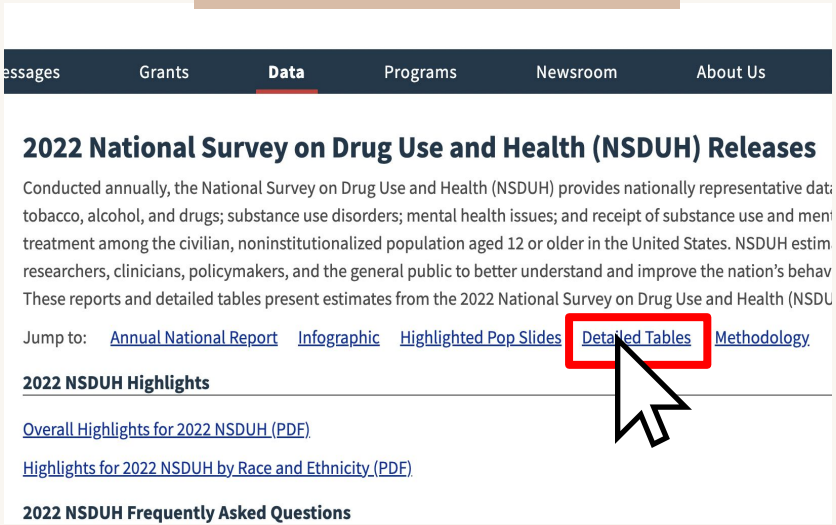
Does poverty level influence the prevalence of Major Depressive Episode (MDE)?

We will work the 2022 National Release for this example

Available Years

- 2022 National Release
- 2021 National Release
- 2020 National Release
- 2019 National Release
- 2018 National Release
- 2017 National Release
- 2016 National Release
- 2015 National Release
- 2014 National Release

Click "Detailed Tables"



Click "Section 7" Youth Mental Health Tables"

Detailed Tables

The 2022 NSDUH Detailed Tables present national estimates of substan
States. They present indicators for youths aged 12 to 17 and adults aged
and tobac initiat
major dep ed effe
pandemic he tabl
appropria two ye
tables are based on weights that were adjusted to allow for comparison
presented in the 2022 Detailed Tables may be different from the 2021 es
the Methodological Summary and Definitions report for more informati

Sections of the 2022 Detailed Tables:

Please refer to the related README file for instructions on how to use th

- Clickable Table of Contents
- Section 1: Illicit Drug Use/Misuse Tables - 1.1 to 1.134
- Section 2: Tobacco Product Use, Nicotine Vaping, and Alcohol Use
- Section 3: Risk and Protective Factor Tables - 3.1 to 3.18
- Section 4: Incidence Tables - 4.1 to 4.11
- Section 5: Substance Use Disorder and Treatment Tables - 5.1 to 5.
- Section 6: Adult Mental Health Tables - 6.1 to 6.87
- Section 7: Youth Mental Health Tables - 7.1 to 7.39
- Section 8: Miscellaneous Tables - 8.1 to 8
- Section 9: Sample Size and Population T 1 to 9.8

Example Research Question:

Does poverty level influence the prevalence of Major Depressive Episode (MDE)?

Scroll Down to Table 7.22A

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Table 7.22A – Major Depressive Episode (MDE) or MDE with Severe Impairn
12 to 17 with MDE and among People Aged 12 to 17 with MDE with Severe I
2022

Geographic/Socioeconomic/ Health Characteristic	Had MDE (2021)	Had MDE (2022)
TOTAL	5,186	4,823
GEOGRAPHIC REGION		
Northeast	811	713
Midwest	1,214[b]	954
South	1,791	1,888

Geographic/Socioeconomic/ Health Characteristic	Had MDE (2021)	Had MDE (2022)	Had MDE with Severe Impairment[1] (2021)	Had MDE with Severe Impairment[1] (2022)
TOTAL	5,186	4,823	3,773	3,595
GEOGRAPHIC REGION				
Northeast	811	713	537	510
Midwest	1,214[b]	954	884	735
South	1,791	1,888	1,310	1,428
West	1,370	1,268	1,041	923
COUNTY TYPE				
Large Metro	2,654	2,771	1,938	2,091
Small Metro	1,707	1,524	1,261	1,129
Nonmetro	826[b]	529	573[b]	375
POVERTY LEVEL				
Less Than 100%	963	833	709	616
100-199%	1,168	1,149	865	901
200% or More	3,055	2,841	2,198	2,079
HEALTH INSURANCE[3]				
Private	2,835	2,700	2,065	1,955
Medicaid/CHIP	2,053	1,989	1,495	1,552

Number in thousands of 12-17 year olds who had MDE

MDE prevalence by poverty level ranging from less than 100% (below the poverty level) to 200% or more (living 2x or more above the poverty level)

Example Research Question:

Does poverty level influence the prevalence of Major Depressive Episode (MDE)?

You can also look at the data in percentages (%) with Table 7.22B

Geographic/Socioeconomic/ Health Characteristic	Had MDE (2021)	Had MDE (2022)	Had MDE with Severe Impairment[1] (2021)	Had MDE with Severe Impairment[1] (2022)
TOTAL	[illegible]	[illegible]	[illegible]	[illegible]
GEOGRAPHIC REGION				
Northeast	20.7	18.3	13.7	13.1
Midwest	23.0[b]	18.3	16.8	14.1
South	18.3	19.4	13.4	14.7
West	23.0	21.6	17.7	15.7
COUNTY TYPE				
Large Metro	19.8	19.4	14.5	14.7
Small Metro	22.0	20.0	16.4	14.8
Nonmetro	21.9	18.8	15.3	13.3
POVERTY LEVEL				
Less Than 100%	18.4	16.6	13.6	12.3
100-199%	21.6	20.7	16.1	16.3
200% or More	21.4	20.1	15.4	14.7
HEALTH INSURANCE[3]				

Percentage of 12-17 year olds who had MDE

MDE prevalence by poverty level ranging from less than 100% (below the poverty level) to 200% or more (living 2x or more above the poverty level)

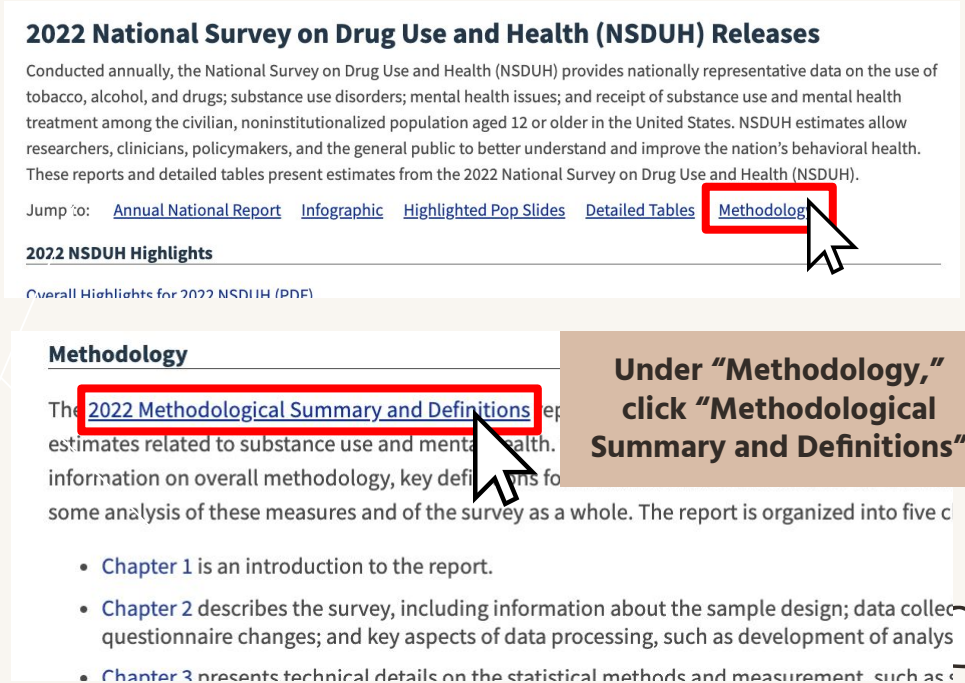
Example Research Question:

Does poverty level influence the prevalence of Major Depressive Episode (MDE)?

You might be asking, "How did these researchers define poverty level?"

You will find that information within the "Methodological Summary and Definitions"

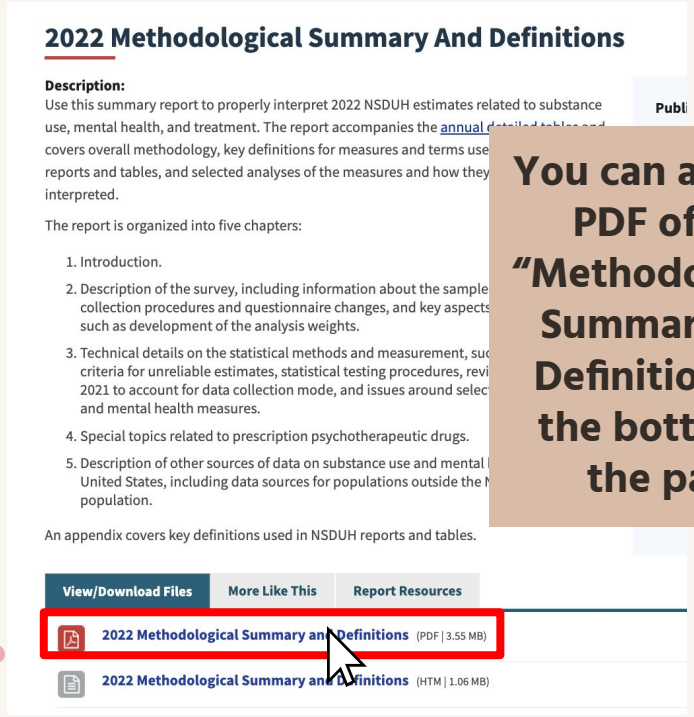
Each year's National Release will have a section labeled "Methodology"



Under "Methodology," click "Methodological Summary and Definitions"

Example Research Question:

Does poverty level influence the prevalence of Major Depressive Episode (MDE)?



2022 Methodological Summary And Definitions

Description:
Use this summary report to properly interpret 2022 NSDUH estimates related to substance use, mental health, and treatment. The report accompanies the annual d
covers overall methodology, key definitions for measures and terms use
reports and tables, and selected analyses of the measures and how they
interpreted.

The report is organized into five chapters:

1. Introduction.
2. Description of the survey, including information about the sample
collection procedures and questionnaire changes, and key aspects
such as development of the analysis weights.
3. Technical details on the statistical methods and measurement, suc
criteria for unreliable estimates, statistical testing procedures, revi
2021 to account for data collection mode, and issues around selec
and mental health measures.
4. Special topics related to prescription psychotherapeutic drugs.
5. Description of other sources of data on substance use and mental
United States, including data sources for populations outside the N
population.

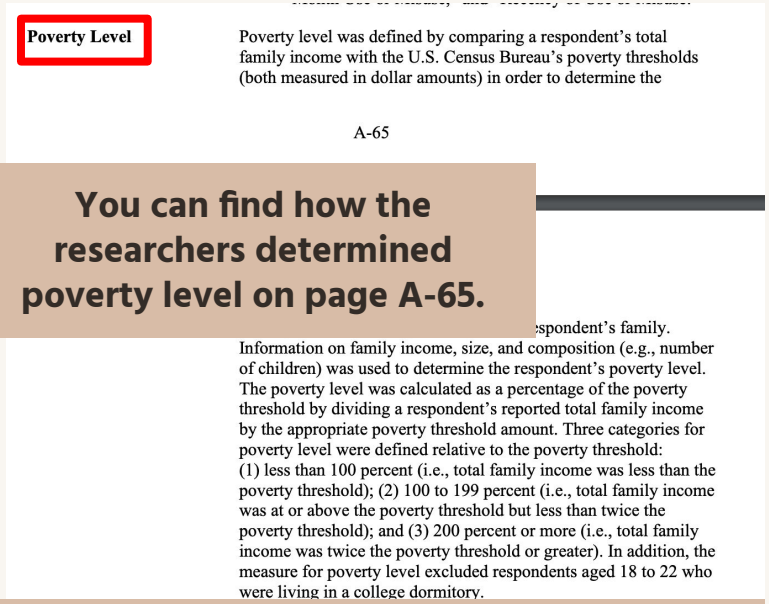
An appendix covers key definitions used in NSDUH reports and tables.

View/Download Files | More Like This | Report Resources

2022 Methodological Summary and Definitions (PDF | 3.55 MB)

2022 Methodological Summary and Definitions (HTM | 1.06 MB)

You can access a PDF of the "Methodological Summary and Definitions" at the bottom of the page



Poverty Level

Poverty level was defined by comparing a respondent's total family income with the U.S. Census Bureau's poverty thresholds (both measured in dollar amounts) in order to determine the

A-65

espondent's family.
Information on family income, size, and composition (e.g., number of children) was used to determine the respondent's poverty level. The poverty level was calculated as a percentage of the poverty threshold by dividing a respondent's reported total family income by the appropriate poverty threshold amount. Three categories for poverty level were defined relative to the poverty threshold: (1) less than 100 percent (i.e., total family income was less than the poverty threshold); (2) 100 to 199 percent (i.e., total family income was at or above the poverty threshold but less than twice the poverty threshold); and (3) 200 percent or more (i.e., total family income was twice the poverty threshold or greater). In addition, the measure for poverty level excluded respondents aged 18 to 22 who were living in a college dormitory.

You can find how the researchers determined poverty level on page A-65.

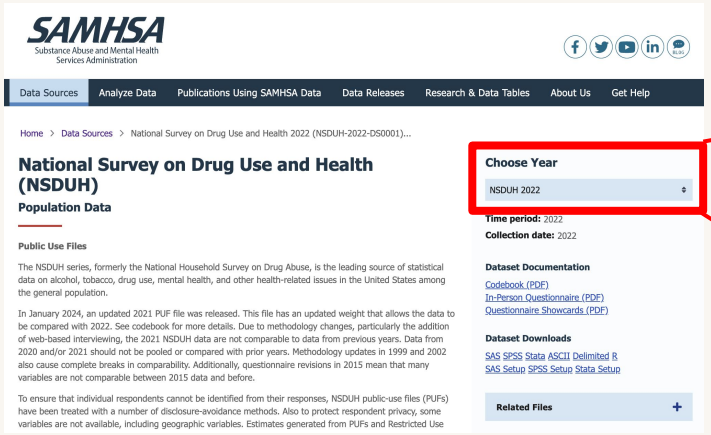
****This handbook can also be helpful when trying to define other variables in this survey, such as what U.S. states are included in each defined geographic region****

NSDUH - How to Download Data

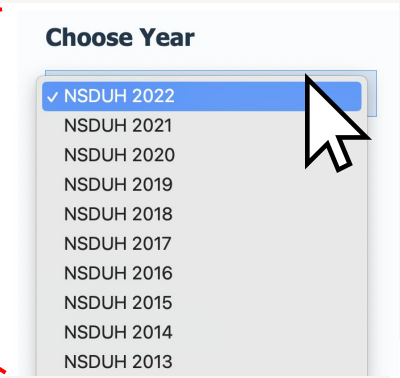
CLICK HERE

https://www.datafiles.samhsa.gov/dataset/national-survey-drug-use-and-health-2022-nsduh-2022-ds0001

The link above should take you to a page that looks like this:

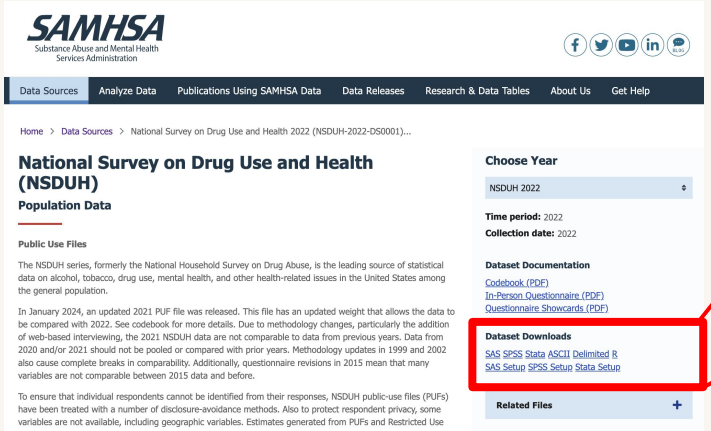


Each year of the survey has its own page that you can select with the dropdown menu on the right.



NSDUH - How to Download Data

You will also find the downloadable dataset files on the right hand side of this webpage



The dataset can be downloaded in many different formats, which require the usage of software such as SAS, Stata, or R

If you do not have access to these softwares, you can email datajam@thedatajam.org and let us know what dataset you would like.
We can download it for you and send it to you as an Excel file or Google Sheets file.

NSDUH - How to Download Data

The dataset when downloaded should look like this: (This screenshot is from the software R)

	QUESTID2	filedate	ANALWT2_C	VESTR_C	verep	PDEN10	COUTYP4	MAIIN102	AIIND1
	All	All	All	All	All	All	All	All	All
1	10000330	10/19/2023	298.00402	40030	2	1	1	2	
2	10000425	10/19/2023	2292.37770	40002	1	2	2	2	
3	10002771	10/19/2023	216.60434	40041	2	1	1	2	
4	10005250	10/19/2023	12828.31837	40012	2	2	1	2	
5	10005432	10/19/2023	6282.61206	40037	1	2	2	2	
6						2	2	2	
7						2	2	2	
8						2	2	2	
9						2	2	2	
10						1	1	2	
11						2	3	2	
12	10008482	10/19/2023	2919.33657	40048	2	2	3	2	
13	10008535	10/19/2023	2024.20576	40044	1	1	1	2	
14	10008655	10/19/2023	6768.47531	40012	2	2	2	1	

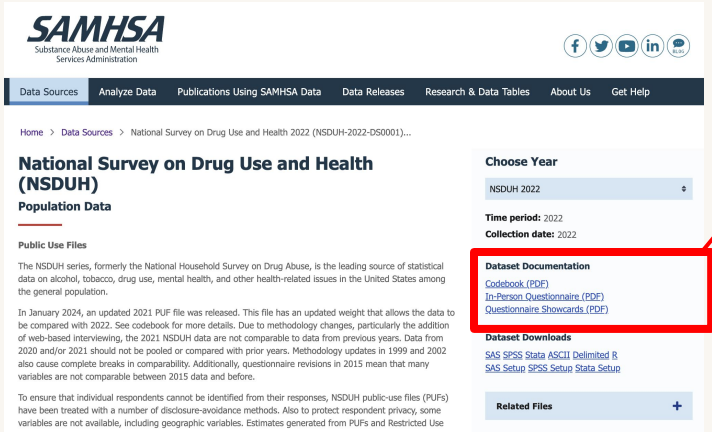
Each participant is represented with an ID code and their responses to the survey questions are defined by numbers in that row

Along the top are variables corresponding to each question from the survey

The numbers listed under each variable correspond to a specific answer. You will need to Codebook to interpret the numbers seen here (see next slide)

NSDUH - Using the Codebook

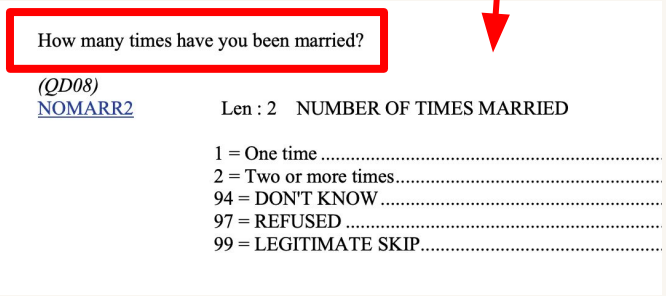
You will find the "Codebook" on the right hand side of the webpage where we downloaded the dataset



The codebook shows what question each variable at the top of a column corresponds to (An example can be seen on the next slide)

NSDUH - Using the Codebook

We seen on page 47/711 of the Codebook that the variable "NOMARR2" represents the question "How many times have you been married?"



How many times have you been married?

(QD08)
NOMARR2 Len : 2 NUMBER OF TIMES MARRIED

1 = One time
2 = Two or more times
94 = DON'T KNOW
97 = REFUSED
99 = LEGITIMATE SKIP

	QUESTID2	filedate	ANALWT2_C	VESTR_C	verep	AIIND102	AGE3	NOMARR2
	All	All	All	All	All	All	All	All
1	10000330	10/19/2023	298.00402	40030	2	2	6	1
2	10000425	10/19/2023	2292.37770	40002	1	2	9	99
3	10002771	10/19/2023	216.60434	40041	2	2	6	1
4	10005250	10/19/2023	13838.21837	40012	2	2	7	1
5	10005432	10/19/2023	6282.61206	40037	1	2	10	1
6	10005739	10/19/2023	1890.64214	40048	1	2	9	1
7	10006882	10/19/2023	78.51126	40004	1	2	9	1

Therefore, by looking at the number "1" under "NOMARR2" we see that participant 10005250 has been married one time.

Navigating the Datasets

1. National Survey on Drug Use and Health (NSDUH)
2. **National Health Interview Survey (NHIS)**

National Health Interview Survey (NHIS)

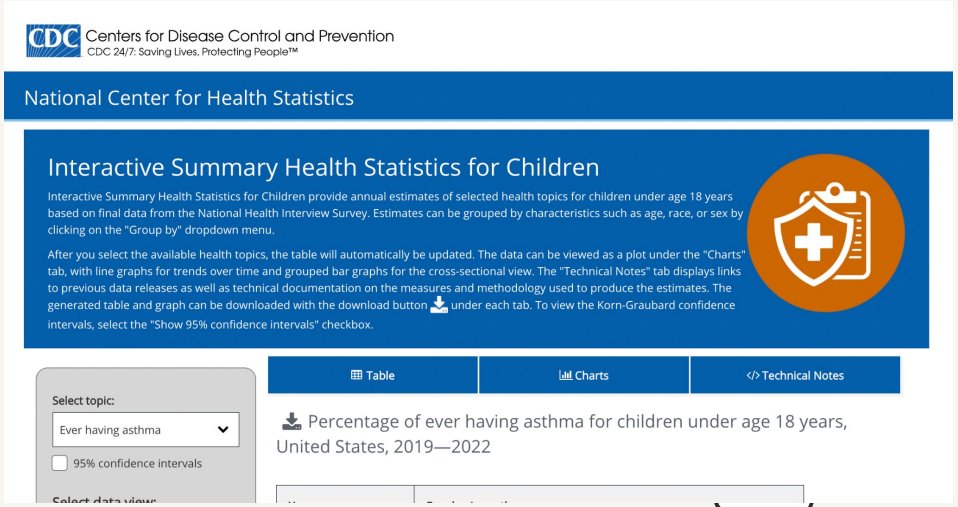
- Annual survey that monitors the health of the U.S. population
- Collects data on both children (4 - 17) and adults (18 and older)
- Can provide insight on:
  - Children's mental health
  - Diagnoses of mental disorders (ex. ADHD, depression and anxiety)
  - Use and need for mental health services/treatment

For more information: https://www.cdc.gov/nchs/nhis/index.htm

NHIS - Navigating the Interactive Data Query System

CLICK HERE https://wwwn.cdc.gov/NHISDataQueryTool/SHS_child/index.html

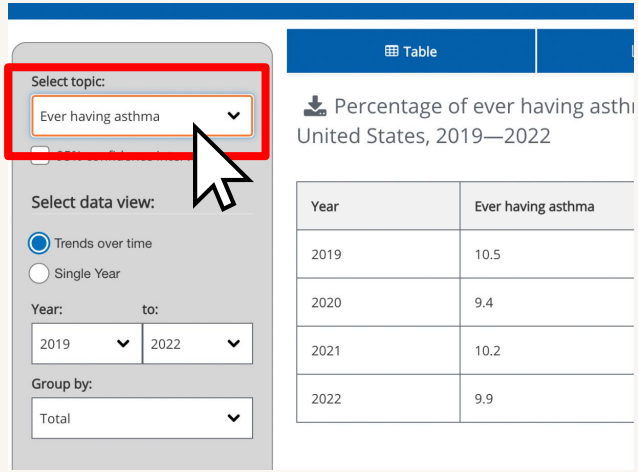
The link above should take you to a page that looks like this:



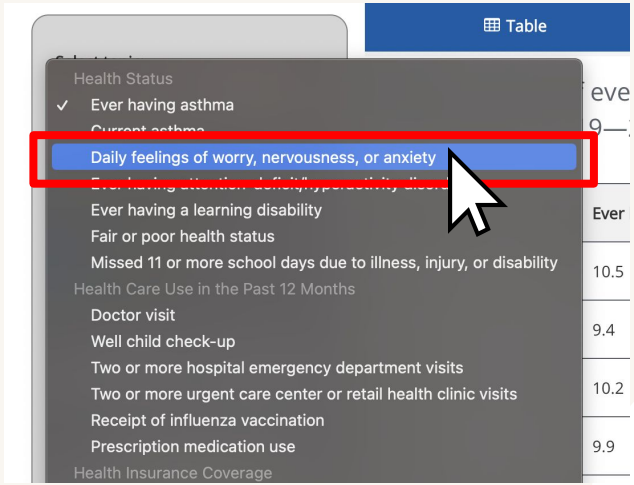
Example Research Question:

What is the relationship between family structure (parents in the household) and feelings of anxiety in children?

Navigate to the left panel

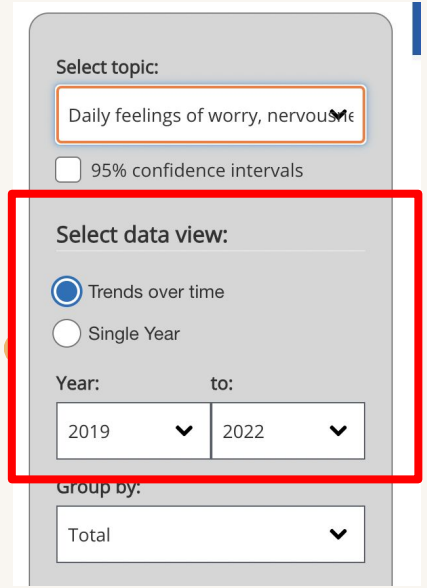


Use the drop down menu for "Select topic:" to select "Daily feelings of worry, nervousness, or anxiety"



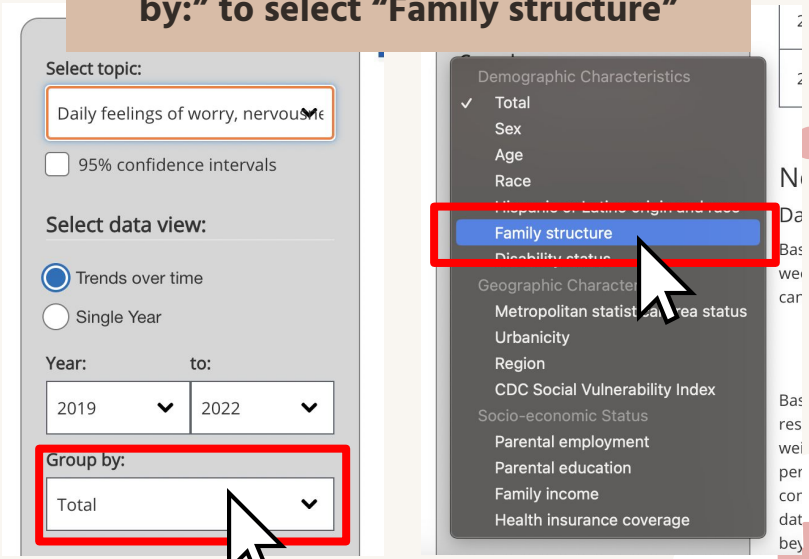
Example Research Question:

What is the relationship between family structure (parents in the household) and feelings of anxiety in children?



You can select what year(s) to analyze here. Data is available from 2019-2022. We will compare multiple years ("Trends over time") for this example.

Use the drop down menu for "Group by:" to select "Family structure"



Example Research Question:

What is the relationship between family structure (parents in the household) and feelings of anxiety in children?

Table | Charts | Technical Notes

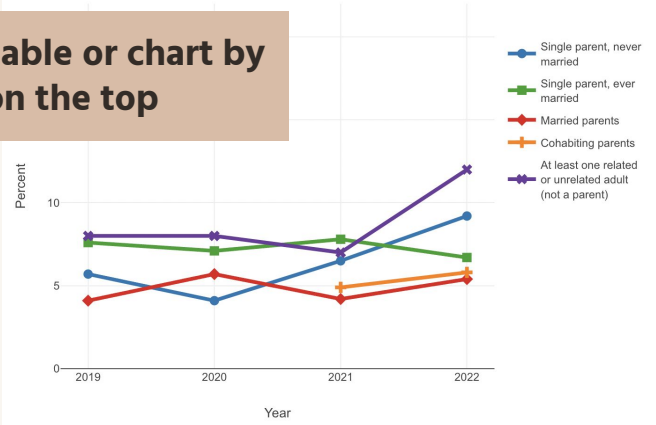
Percentage of daily feelings of worry, n…usness, or anxiety for children aged 5-17 years, United States, 2019—2022

Year	Single parent, never married	Single parent, ever married		
2019	5.7	7.6	4.1	*
2020	4.1	7.1	5.7	*
2021	6.5	7.8	4.2	4.9
2022	9.2	6.7	5.4	5.8

* Estimate does not meet NCHS standards of reliability / **While the estimate meets NCHS standards of reliability, its complement does not /-Quantity zero

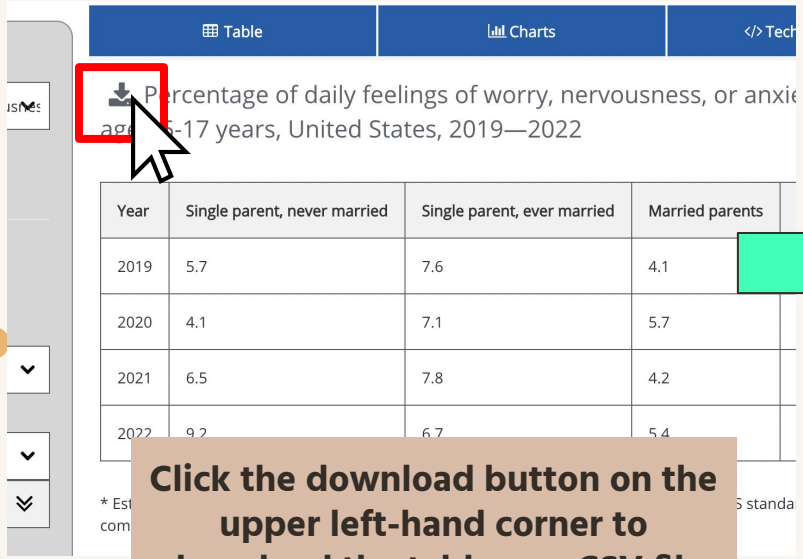
Can view results as a table or chart by using the tabs on the top

Percentage of daily feelings of worry, nervousness, or anxiety for children aged 5-17 years, United States, 2019—2022



Example Research Question:

What is the relationship between family structure (parents in the household) and feelings of anxiety in children?

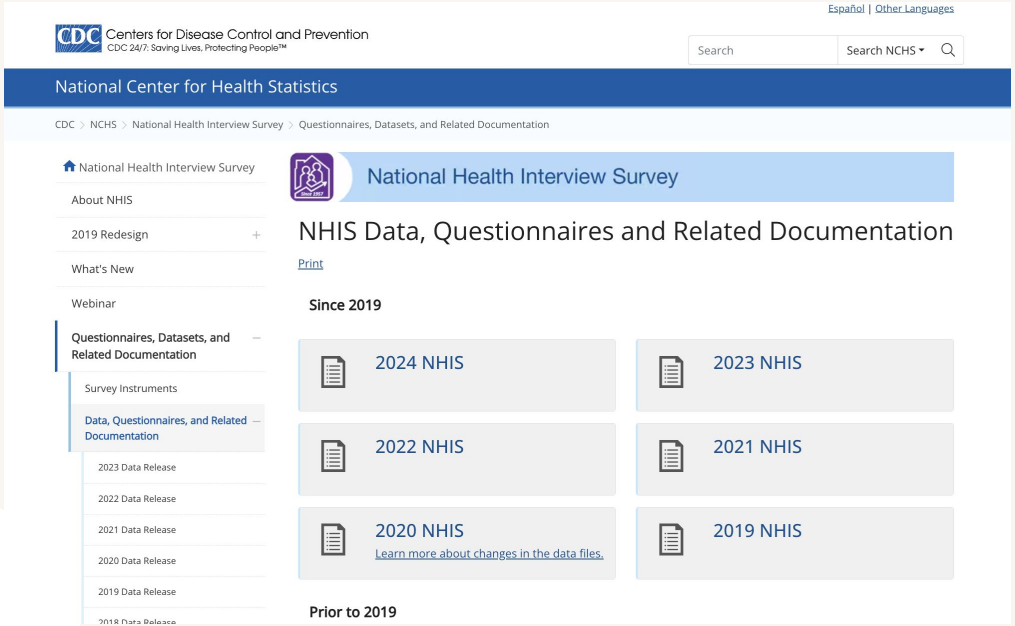


	A	B	C	D	E	F
1	Percentage of daily feelings of worry, nervousness, or anxiety for children aged 5-17 y					
2	Year	Single parent	Single parent	Married pare	Cohabiting p	At least one rela
3	2019	5.7	7.6	4.1	*	8
4	2020	4.1	7.1	5.7	*	8
5	2021	6.5	7.8	4.2	4.9	7
6	2022	9.2	6.7	5.4	5.8	12
7						
8	ard errors for percentage of daily feelings of worry, nervousness, or anxiety for c					
9	Year	Single parent	Single parent	Married pare	Cohabiting p	At least one rela
10	2019	3.9 ,8.1	5.9 ,9.7	3.4 ,4.8	*,*	4.5 ,12.9
11	2020	2.0, 7.3	4.4, 10.6	4.5, 7.0	*,*	4.3, 13.2
12	2021	4.4, 9.1	5.7, 10.4	3.5, 5.1	2.5, 8.5	3.6, 11.9
13	2022	5.9, 13.4	4.9, 9.0	4.5, 6.3	3.0, 9.8	7.6, 17.6
14						
15	Source: National Center for Health Statistics, National Health Interview Survey					
16						

NHIS - How to Download Data

CLICK HERE

https://www.cdc.gov/nchs/nhis/data-questionnaires-documentation.htm



This webpage links NHIS data for each year

NHIS - How to Download Data

Within each year, there will be Sample Child Interview files that can be downloaded in different formats

We will download the "CSV data file" under "Sample Child Interview"

NHIS - How to Download Data

This is how the dataset will look like when you download it!

A1 | URBRRL

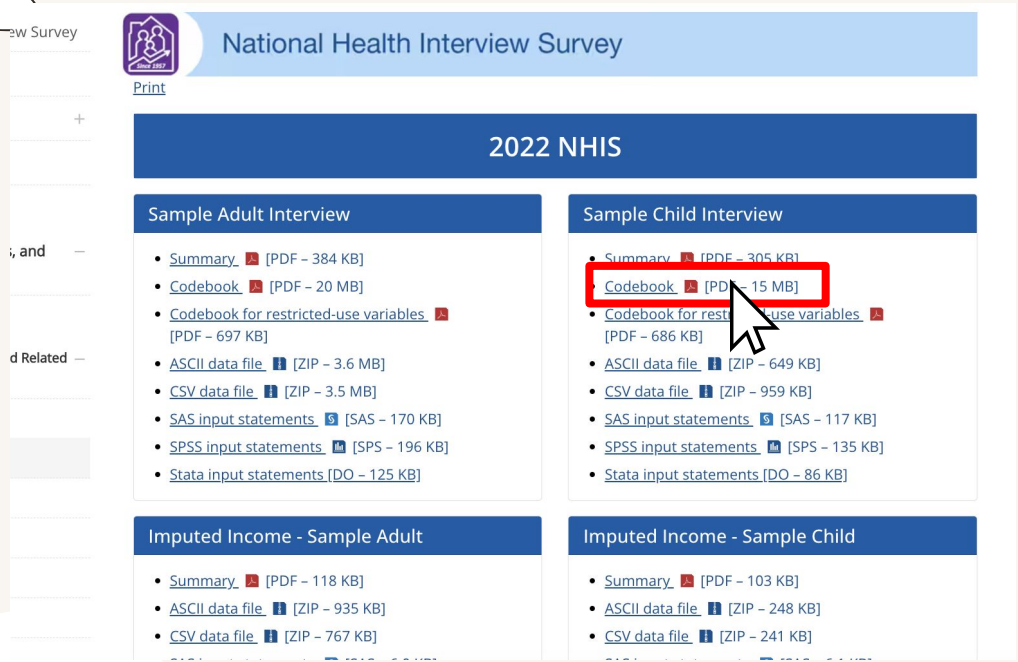
URBRRL	RATCAT_C	INCTCFLG_C	IMPINCFLG_	PPSU	PSTRAT	HISPALLP_C	RACEALLP_C	SDQIMPTOT_	SDQTOT_C	SDQPROS_C	SDQPEER_C	SDQHYPE_C	S
1	14	1	0	2	115	2	1		2	10	0	2	
4	4	0	0	3	122	2	1		3	10	1	0	
3	11	0	0	1	103	3	2						
3	13	0	0	4	103	3	2	2	15	10	3	7	
3	2	0	0	2	103	3	2	0	8	9	2	5	
3	14	0	0	1	111	2	1		6	10	2	3	
3	14	0	0	1	111	2	1		6	10	2	2	
3	11	0	0	1	143	3	2						
3	11	0	0	1	111	4	3						
1	14	0	0	3	138	2	1	0	9	8	3	4	
1	14	0	0	3	138	2	1	2	5	9	0	3	
1	8	0	0	1	138	7	6						
3						1	1	5	19	6	4	10	
2						2	1		3	9	3	0	
2						1	8	1	17	10	4	9	
4						2	1	0	16	9	2	8	
4						2	1						
4						3	2	0	9	10	3	4	
4						3	2		0	10	0	0	
3						3	2		1	10	1	0	
3						4	3		8	10	2	1	
1	2	0	0	12	151	1	8		5	6	5	0	
1	14	0	0	12	151	7	6	2	12	9	6	0	
1	13	0	0	12	151	1	1		1	10	1	0	

Each row represents a different participant's responses to the interview survey questions

Along the top are variables corresponding to each question from the interview survey

The numbers listed under each variable column correspond to a specific answer to a survey question. You will need to Codebook to interpret the numbers seen here (see next slide)

NHIS - Using the Codebook



The data is made up of numbers that indicate specific responses to interview survey questions.

You will need to download the Codebook to determine what variable(s) you want to use and what the data is telling you

Back at the 2022 NHIS page, you can find the PDF "Codebook" under "Sample Child Interview"

NHIS - Using the Codebook

The codebook shows what question each variable at the top of a column corresponds to

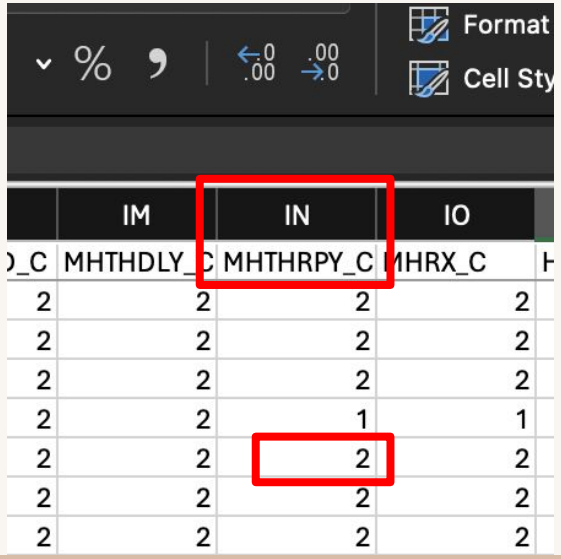
For example, we see on page 253/435 of the codebook that the variable "MHTHRPY_C" (found in column IN on the dataset) represents whether or not participants received mental health counseling in the last 12 months

Unweighted frequencies:

MHTHRPY_C Received counseling/therapy from mental health professional, past 12m

Code	Description	Freq
1	Yes	
2	No	
7	Refused	
8	Not Ascertained	
9	Don't Know	

Frequency Missing: 831



That means the highlighted participant with "2" did NOT receive mental health counseling in the last 12 months

Crisis Resources

- If you or someone you know needs immediate support, please use the following 24/7 resources:
  - 988 Suicude & Crisis Lifeline
    - **Call or text 988**
    - Chat on 988lifeline.org
  - Crisis Text Line
    - **Text HOME to 741741** to reach a volunteer Crisis Counselor

Other Resources

- You are not alone. If you are struggling with your mental health, please refer to the following resources:
  - **NAMI Teen & Young Adult (T&YA) HelpLine**
    - Offers information, resources, and support with direct connection with another young person
    - Call 1-800-950-6264, text "Friend" to 62640, or email helpline@nami.org
  - **SAMHSA National Helpline**
    - Referral and information service for those facing mental and/or substance use disorders
    - Call 1-800-662-HELP (4357)

Learn More

Learn more about youth depression and anxiety disorders:

- https://www.mayoclinic.org/diseases-conditions/anxiety/symptoms-causes/syc-20350961
- https://www.mayoclinic.org/diseases-conditions/depression/symptoms-causes/syc-20356007
- https://www.psychiatry.org/patients-families/depression/what-is-depression
- https://www.psychiatry.org/Patients-Families/Anxiety-Disorders/What-are-Anxiety-Disorders

Learn more about adolescent mental health:

- https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health#:~:text=It%20is%20estimated%20that%203.6,%E2%80%9319%2Dyear%2Dolds