



NCVS User Workshop

BJS Victimization Statistics Unit &

University of Maryland
Department of Criminology and Criminal Justice

May 4, 2022 1pm-3pm EST

Important Information for Today's Webinar

- Having difficulties hearing? Dial in via phone using the information located in the meeting invite.
- Live-captioning is available for deaf or hard-of-hearing individuals.
- Need technical assistance? Please use the Chat box to send your issue to the host.
- Questions about the presentation? Submit questions at any time by using the Chat box and selecting Everyone. Questions will be answered at the end of the presentation.
- The recording, transcript, and related slides will be posted to the BJS website.



Workshop agenda

- NCVS presentation (35 minutes)
 -Background, methodology, accessing data and statistics, data file structure, weighting, unit of analysis
- Break (10 minutes)
- N-DASH demonstration (15 minutes)
- Data analysis demonstrations (45 minutes)
 - -Estimate victimization rates of certain groups
 - -Estimate rates of police reporting
- Closing remarks and Q&A (15 minutes)

The National Crime Victimization Survey (NCVS)

What is the National Crime Victimization Survey?

- Currently sponsored and directed by the Bureau of Justice Statistics (BJS)
- Started in 1972 as the National Crime Survey
- Redesigned and renamed National Crime Victimization Survey (NCVS) in 1992
- One of two of the nation's major sources of information on criminal victimization (with the FBI's Uniform Crime Reporting (UCR) program)

What is the National Crime Victimization Survey?

Goals -

- Measure unreported crime
- Provide an independent calibration for the UCR program
- Provide an indicator of the crime problem outside of indicators generated by police
- Provide a measure of victim risk
- Serve as an index of change in police reporting in the population

How are the data collected?

- Administered by U.S. Census Bureau interviewers to a nationally representative sample of persons age 12 or older living in U.S. households
- Interviews everyone in a sampled household that is age 12 or older
 - Seven interviews over a course of 3.5 years (every 6 months)
 - First interviews in person, subsequent interviews conducted either in person or by phone
- Self-report survey persons asked about criminal victimizations experienced during the prior 6 months
- Incident based collects information about each victimization incident

What data are collected?

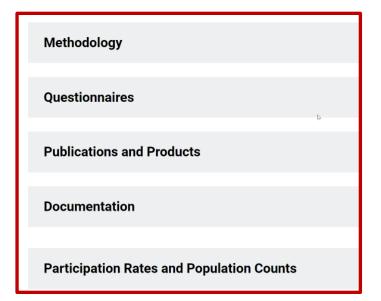
- Violent crime (rape/sexual assault, robbery, aggravated assault, and simple assault)
- Personal larceny (purse snatching and pocket -picking)
- Property crime (burglary/trespassing, motor vehicle theft, and other types of household theft)
- Characteristics of victims and crimes for the population and for subgroups
- Only source of national data on topics including intimate partner violence, crimes against persons with disabilities, injury, firearms and crime, cost of crime, and reporting to police

NCVS supplements

- In addition to the core NCVS survey, short topical surveys or supplements are administered at the end of the NCVS interview to eligible respondents.
- Usually in the field for 6 months: January -June or July-December
- Supplements allow BJS to capture the changing landscape of crime.
- In recent years, BJS administered 5 different supplements on a rotating basis:
 - Identity Theft Supplement (ITS)
 - Police-Public Contact Survey (PPCS)
 - School Crime Supplement (SCS)
 - Supplemental Fraud Survey (SFS)
 - Supplemental Victimization Survey (SVS) stalking

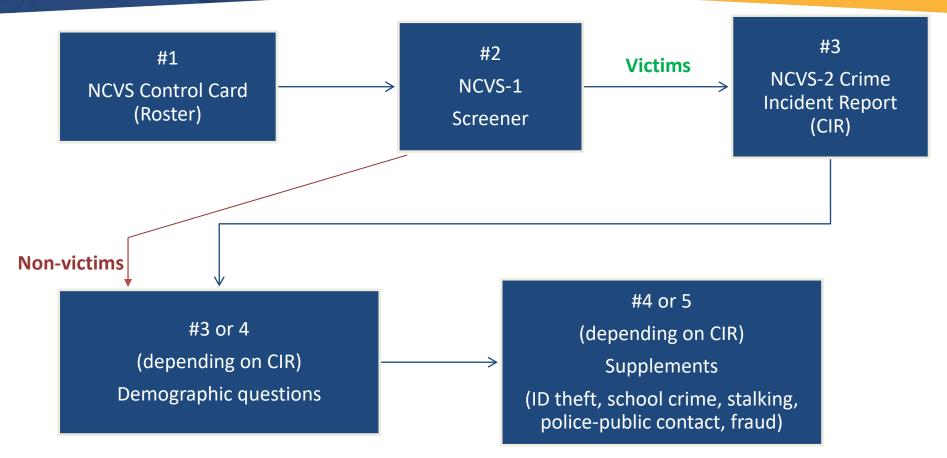
More information on the NCVS

BJS website –
 https://bjs.ojp.gov/data collection/ncvs



- Workshop materials
 - NCVS Technical Documentation, 2016
 - NCVS Variance User's Guide
 - Criminal Victimization, 2020 nnual bulletin

Survey instruments



Accessing NCVS data and statistics

How to access NCVS data and statistics?

Three ways –

- 1. BJS statistical reports
- 2. N-DASH online data tool (https://ncvs.bjs.ojp.gov/Home)
- 3. Data files public-use files and restricted -use files

BJS statistical reports

U.S. Department of Justice Office of Justice Programs Bureau of Justice Statistic

- SPECIAL REPORT -



Stalking Victimization, 2016

Jennifer L. Truman, Ph.D., and Rachel E. Morgan, Ph.D., BJS Statisticians

2016, an estimated 1.5% of all U.S. residents age 16 or older (3.8 million persons) were victims of stalking (figure 1, table 1). Stalking is repeated victim to experience fear or substantial emotional distress or that would cause a reasonable person to Most persons reported experiencing both stalking with technology and traditional stalking (0.7%). A with technology only (0.5%) than traditional stalking

Victimization Survey (SVS) to the National Crime Victimization Survey (NCVS). From July of 2016 to December of 2016, the SVS asked persons age 16 or older about their experiences with stalking during the the demographic characteristics of victims who were stalked during a 12-month period. It also describes the nature of stalking victimization, including the number of offenders, the victim-offender relationship, and the frequency and duration of the stalking.



HIGHLIGHTS

- A greater percentage of persons age 16 or olde
- than traditional stalking only (0.3%).
- Most victims of stalking (69%) knew their offender in some capacity.
- experienced stalking with technology only (0.5%)
- Females were stalked more than twice as often (2.0%)
- About 1.5% (3.8 million) of persons age 16 or older were victims of stalking in 2016.
 - . Twenty four percent of stalking victims said the stalking behaviors lasted 2 years or more. About 1 in 10 victims said it happened too many

 - the interview for more than a quarter all victims.



Source Bureau of Austice Statistics, National Crime Victimization Survey, Supplemental Victimization Survey, 2016.

21.0 to 16.4 victimizations per 1,000 persons age 12 or older (figure 1). Violent victimization includes rape or sexual assault robbery, aggravated assault, and simple assault · Victims were three times as likely to be stalked by Based on data from the National Crime ex-intimate partners (21%) as by current intimate

Criminal Victimization, 2020

a decline in assault. The rate of simple assault

per 1,000 in 2020, and the rate of aggravated

assault declined from 3.7 to 2.9 per 1,000. The

decline in aggravated assault drove the decreas-

n violent crime, excluding simple assault, from

rates of rape or sexual assault or robbery did not

A smaller share of intimate partner victimizations

were reported to police in 2020 (41%) than in

ages 12 to 17 declined 51% from 2019 to 2020.

The rate of violent victimization against person

From 2019 to 2020, the rates of violent and

did not change in urban and rural areas

from 2019 (481,950) to 2020 (350,460).

■ The number of firearm victimizations declined

BIS

2019 (58%).

2019 (7.3 per 1.000) to 2020 (5.6 per 1.000). The

change between 2019 and 2020.

declined from 13.7 per 1.000 in 2019 to 10.7

Rachel E. Morgan, Ph.D., and Alexandra Thompson, BJS Statisticians

from 2019 to 2020, the total violent

→ victimization rate declined 22%, from

Rate of victimization, by type of crime, 2019–2020

Rate per 1,000 persons age 12 or older Note: See appendix table 1 for estimates and standard errors.

*Comparison year.
†Difference with comparison year is significant at the 95% confidence level.

#Difference with comparison year is significant at the 90% confidence level.

*See table 1 footnote for violent crime definition.

*See table 2 footnote for property crime definition. Source: Bureau of Justice Statistics, National Crime Victimization Survey, 2019-2020.

Victimization Survey (NCVS), the decrease in violent victimization was driven primarily by

EIGHDE 1

Violent crimes

HIGHLIGHTS

2020 (1.7 million).

■ The violent victimization rate declined from

21.0 per 1,000 persons age 12 or older in 2019 to 16.4 per 1,000 in 2020.

assault, fell from 2.0 million in 2019 to 1.6 million

victimizations declined from 2019 (2.2 million) to

■ About 40% of violent victimizations and 33% of

property victimizations were reported to police

■ The number of violent crimes, excluding simple

partners (7%).

. Stalking behaviors were still ongoing at the time of

SPECIAL REPORT —



Hate Crime Victimization, 2005-2019

Grace Kena and Alexandra Thompson, BJS Statisticians

n 2019, the overall rate of hate crime victimizations involving nonfatal violence was 1.0 hate crimes per 1,000 persons age 12 or older, according to (figure 1). During the 15-year period of 2005 to 2019, the rate of total violent hate crime victimization fluctuated, ranging from about 0.6 to 1.1 per 1,000.12 The 2016 rate of violent hate crime victimizations (0.6 per 1,000) was lower than the rates in most years during the period. Between 2016 and 2019, this rate increased, reaching 1.0 per 1,000 in 2019. Despite the increase between 2016 and 2019, the 2019 rate was not significantly different from the 2005 rate (0.8 per 1.000)

1,000) and aggravated assault (0.2 per 1,000) in 2019 were not statistically different from the respective rates in 2005. Patterns for these crime types over the 15-year crime victimizations.

¹In this report, statistical significance is reported at both the 90% and 95% confidence levels for estimates based on the NCVS. See figures and tables for testing on specific findings. Nonfatal violent victimization in the NCVS includes rape or sexual assault, robbery, aggravated assault, and simple assault

FIGURE 1 Rates of violent hate crime victimizations per 1,000 persons age 12 or older, 2005-2019



Note: Includes nonfatal incidents that police confirmed as bias-motivated

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 2005, 2029

нібні ібнтя

- . In 2019, there were 1.0 violent hate crime victimizations per 1,000 persons age 12 or older
- Hate crime victimizations accounted for 1.6% of all nonfatal victimizations in 2019, up from 0.9% in 2005.
- During 2015-19, nearly two-thirds (62%) of hate crime victimizations were simple assaults. A bias against the victim's race, ethnicity, or nation. violent hate crimes during 2015-19
- During 2010-19, persons ages 12 to 17 accounted for share of the U.S. population (9%)
- Most nonfatal violent hate crimes motivated by gender bias involved female victims during 2010-19. During 2015-19, more than half (56%) of nonfatal
 - a stranger. A greater percentage of violent hate crimes (23%).
 - than violent nonhate crimes (13%) involved multiple offenders during 2015-19.

(BJS

U.S. Department of Justic



Crime Against Persons with Disabilities, 2009-2019 - Statistical Tables

Erika Harrell, Ph.D., BIS Statistician

against persons with disabilities was nearly four times the rate for persons without disabilities (49.2 compared to 12.4 per 1.000 age 12 or older) (figure 1). Since July 2016, the has asked all respondents their disability status allowing rates by disability status to be generated

solely from NCVS data. See Methodology. Prior to this, American Community Survey (ACS) population data were used to calculate the rate of violent victimization against persons with disabilities, which was at least twice the rate for persons without disabilities every year from 2009

Rate of violent victimization, by disability status, 2009–2019 (2-year rolling averages

2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 Note: Based on the noninstitutionalized U.S. resident population age 12 or older. The definition of noninstitutional population differ Name based on the nohinotrationalized U.S. resident population age 1.2 or older, ine-deminison of nohinotrational population amen-by survey. See Methodology. Etimizets are based on 2-year rolling averages. For each year, tales for the population visitoral a diabelit were adjusted using direct standardization with the population with a disability as the standard population. See appendix table 2 for estimates and standard errors.

Source: Bureau of Justice Statistics, National Crime Victimization Survey, 2008–2019; and U.S. Census Bureau, American Community Survey, 2008–2019.

Highlights

From 2017 to 2019-

 Research with disabilities were victims of 26% of all nonfatal violent crime, while accounting for about 12% of the population.

 The rate of violent victimization against persons with disabilities (46.2 per 1,000 age 12 or older) was almost four times the rate for persons without disabilities (12,3 per 1,000).

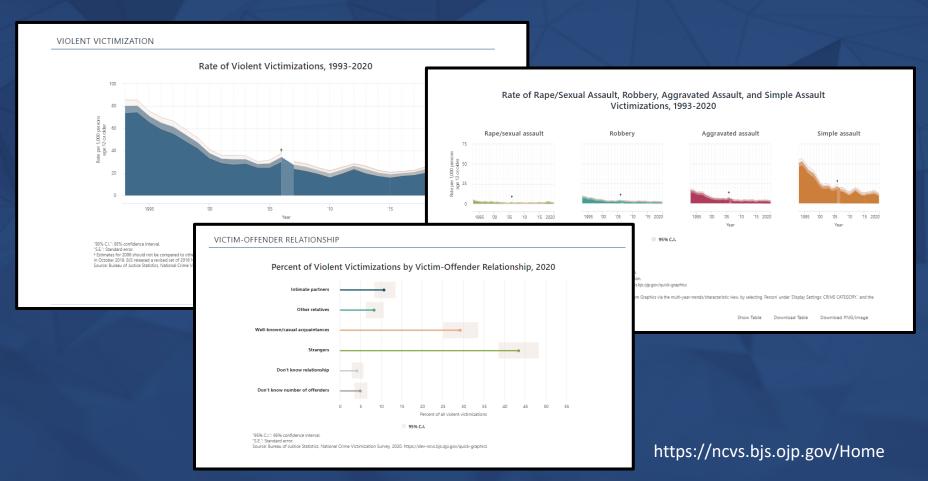
 One in three robbery victims (33%) had at least one disability.

Persons with cognitive disabilities had the highest rate of violent victimization (83.3 per 1,000) among the disability types measured.

 Nineteen percent of rapes or sexual assaults against persons with disabilities were reported to police, compared to 36% of those against persons without disabilities.



N-DASH Online Data Tool



NCVS public-use data files

Archived at the National Archive of Criminal Justice Data (NACJD) at the Inter-university Consortium for Political and Social Research (ICPSR)



LOG IN/CREATE ACCOUNT

Share Data

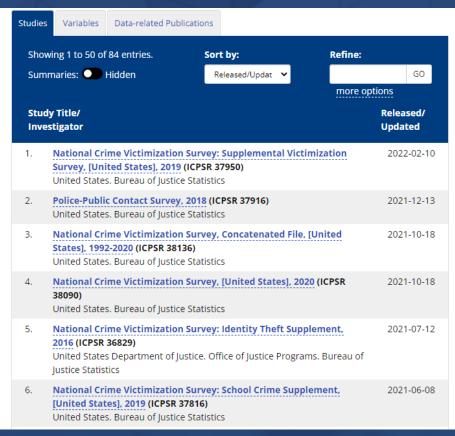
About

Resources

National Crime Victimization Survey (NCVS) Series

Investigator(s): Bureau of Justice Statistics

NCVS public-use data files



NCVS restricted-use data files

Available through the U.S. Census Bureau's Federal Statistical Research Data Centers (FSRDC)



NCVS restricted-use data files

		V.		
National Crime Victimization Survey (NCVS)	Annually	Individual	2005-2017	Bureau of Justice Statistics (BJS)
National Crime Victimization Survey (NCVS) Identity Theft Supplement	Every Two Years	Individual	2012, 2014, 2016, 2018	Bureau of Justice Statistics (BJS)
National Crime Victimization Survey (NCVS) School Crime Supplement	Every Two Years	Individual	2009, 2011, 2013, 2015, 2017	Bureau of Justice Statistics (BJS), and National Center for Education Statistics (NCES)
National Crime Victimization Survey (NCVS) Police Public Contact Survey	Every Three Years	Individual	2011, 2015, 2018	Bureau of Justice Statistics (BJS)
National Crime Victimization Survey (NCVS) Supplemental Fraud Survey	Variable	Individual	2017	Bureau of Justice Statistics (BJS)

NCVS data file structure

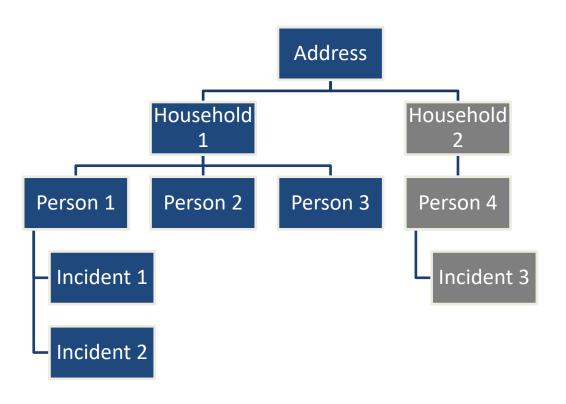
Annual NCVS data

- Data users can download individual years of data
- Codebooks include detailed information on individual NCVS year
- Download (SAS, SPSS, Stata, R, ASCII, delimited) from NACJD includes 5 files:
 - (1) address record-type file; (2) household record-type file; (3) person record-type file; (4) incident record-type file; and (5) incident-level extract file.

Concatenated NCVS data

- Data users can download public-use files which include all years 1992 through most recent year (currently 2020)
- Codebooks include fewer details because there are so many years of data; refer to annual codebook for further details
- Download (SAS, SPSS, Stata, R, ASCII, delimited) from NACJD includes 3 files:
 - (1) Concatenated household file; (2) concatenated person file; and (3) concatenated incident extract file.

Hierarchical nature of NCVS data



Householdlevel file

File contains information about the household and household respondent

Variables are named V2XXX (2000-level variables)

Person-level file

File contains information about each person in the household age 12 or older

Variables are named V3XXX (3000-level variables)

Incident-level extract file

File contains information about each criminal incident reported by respondents.

Property crimes reported by household respondent.

Personal crimes reported by all persons age 12 or older.

Variables are named V4XXX (4000-level variables)

*This *extract* file also includes HH and person variables so data users can analyze victim demographics

NCVS public-use file (PUF) structure

- Annual files include collection year data from January 1 December 31
 - Based on date of interview, not date of incident
- Most sampled persons/households should be included twice in the person/household level file
 - Interview 1 January-June; Interview 2 July-December
 - 1/7 phases in during July -December; 1/7 phases out + replacement households

What is a sample weight?

- Sample weights are adjustments that are applied to sample data to make the data representative of a specific population of interest.
- For the NCVS, sample weights are applied to make sample data representative of the U.S. population of nouseholds or persons age 12 or older.

What is a sample weight?

- Sample data that are not weighted (unweighted data) can be biased as a result of who
 completed and did not complete the survey. Unweighted data are not representative
 and cannot be used to generalize about specific populations of interest.
 - BJS does not report out on unweighted NCVS data. Statisticians examine unweighted data to understand sample characteristics and assess sample sizes for estimate reliability.
 - All NCVS statistical estimates in BJS reports are weighted to be representative of the U.S. population.
- The NCVS has four types of weights: household, person, incident, and victimization.
- Knowing when to use each type of weight is critical for your analysis

NCVS household weights – household data file

V2116 (household weight)

 Adjusts each 6month period to total count of U.S. households

WGTHHCY (adjusted household weight)

- Divides V2116 by 2 for annual count of U.S. households.
- Use this weight to generate the annual count of U.S. households when calculating property crime rates

Example from 2020 NCVS household file – WGTHHCY values are half of V2116 values

2178.09928	1089.04964	
1458.33774	729.16887	
1149.92410	574.96205	
2318.40290	1159.20145	

NCVS person weights – person data file

V3080 (person weight)

 Adjusts each 6-month period to U.S. population count of persons age 12 or older

WGTPERCY (adjusted person weight)

- Divides V3080 by 2 for annual U.S. population of persons age 12 or older
- Use this weight to generate the annual count of U.S. persons age 12 or older when calculating violent crime or personal larceny rates

Example from 2020 NCVS person file – WGTPERCY values are half of V3080 values

35216.46583	17608.23291	
27521.29886	13760.64943	
27332.19656	13666.09828	
26355.58253	13177.79127	

NCVS victimization and incident weights – incident data file

Incident

- The number of specific criminal acts involving one or more victims.
- If every incident had one victim, the number of incidents would be the same as the number of victimizations.
- If there was more than one victim, the incident estimate is adjusted to compensate for the possibility that the incident could be reported multiple times and over-counted.

Victimization

- The total number of times that people or households were victimized by crime.
- For violence and personal larceny, the number of victimizations is the number of victims of that crime.
- Each crime against a household is counted as having a single victim – the affected household.
- *Only respondents that reported an incident/victimization are included in the incident data file.
- *Data users must decide if they are interested in analyzing incidents or victimizations and apply the appropriate weight.

NCVS victimization weights — incident data file

WGTVICCY

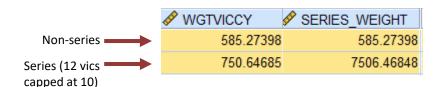
- Provides total count of victimizations
- No adjustment for series crimes

SERIES WEIGHT

- Accounts for highfrequency repeat victimizations or series victimizations
- This weight counts series victimizations as the actual number of victimizations up to a maximum of 10 (avoiding extreme outlier effect)

Series victimizations – crimes that are similar in type to one another but occur with such frequency that a victim is unable to recall each event or describe in detail (e.g., domestic violence)

If it's not a series victimization, weight values for WGTVICCY and SERIES_WEIGHT are equal.



NCVS incident weights – incident data file

V4527

- Provides total count of incidents
- No adjustment for series crimes

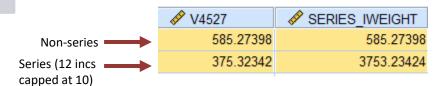
SERIES_iWEIGHT

- Accounts for highfrequency repeat incidents or series incidents
- This weight counts series incidents as the actual number of incidents up to a maximum of 10 (avoiding extreme outlier effect)

Series incidents – crimes that are similar in type to one another but occur with such frequency that a victim is unable to recall each event or describe in detail (e.g., domestic violence)

If it's not a series incident, weight values for V4527 and SERIES iWEIGHT are equal.

Remember, the difference between victimizations and incidents is the number of victims involved.



NCVS weights

In 2020 -

- Household weight (WGTHHCY) ranged from 61 to 10,090
- Person weight (WGTPERCY) ranged from 72 to 17,608
- Victimization weight (SERIES_WEIGHT) ranged from 151 to 77,560

*In other words, a weighted count of about \sim 77,000 victimizations could be based on n = 1 or n = 100s, depending on characteristics of victim

Always important to check unweighted counts

BJS statisticians ensure that all published estimates meet data quality standards. In certain cases, an estimate may be flagged or suppressed if it does not meet the minimum sample size or coefficient of variation is above a certain threshold.

Unit of analysis

Property crimes reported at the **household** level

- Burglary
- Trespassing
- Motor vehicle theft
- Other types of household theft (theft from the housing unit or property)

Violent crimes reported at the person level

- Rape or sexual assault
- Robbery
- Aggravated assault
- Simple assault

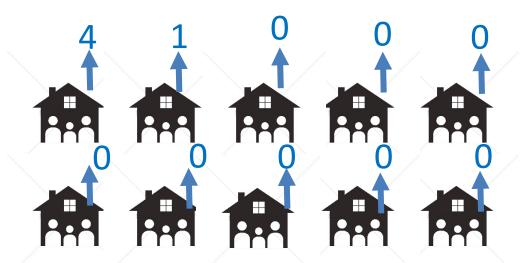
Personal larceny reported at the person level (theft from the person's body)

- Purse snatching
- Pocket-picking

Unit of analysis

Household estimates: based on counting *households* affected by the crime

- → For property victimizations in bulletin, based on the SERIES_WEIGHT
- → 5 property crimes among these 10 households



Unit of analysis

<u>Victimization estimates:</u> based on counting *victimizations*

- → Uses the SERIES_WEIGHT
- → 7 victimizations among these 10 people

<u>Incident estimates:</u> based on counting incidents

- → Uses the SERIES iWEIGHT
- → 1 incident among these 10 people

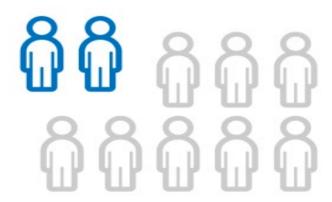


Unit of analysis

Prevalence estimates: based on counting

victims

- → Uses the WGTPERCY
- → 2 victims among these 10 people



Break (~10 mins)

Participants:

- 1. Download Workshop files for users from Dropbox (link provided)
 - 2. Download ICPSR data for study #38090 (in SPSS format) ICPSR:

https://www.icpsr.umich.edu/

N-DASH demonstration

Data analysis demonstrations



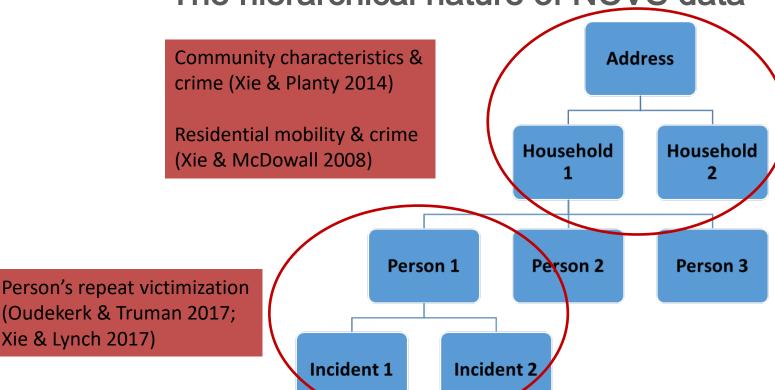
NCVS data structure: Let's start with an example NCVS 2020 public use files

ICPSR: https://www.icpsr.umich.edu/

- Thousands of original datasets of varying topics with varying levels of documentation.
- Can search by topic and quickly download data.
- Download data for study #38090 (in SPSS format)

Xie & Lynch 2017)

The hierarchical nature of NCVS data

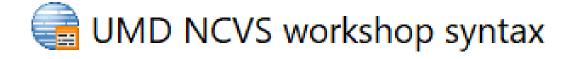


Identification variables

- Make sure you know the correct IDs for addresses, households, and persons
- Use IDs to link files; check the quality of the linking
 - E.g., a matched person should have the same gender/race and consistent age patterns over time



SPSS practice Understand ID variables





Analysis Example: Criminal Victimization 2020

Rate of violent victimization for Hispanics

TABLE 6

Rate of violent victimization, by type of crime and demographic characteristics of victims, 2019–2020

Victim demographic	Total v	violent	Violent crime excluding simple assault b			
Victim demographic characteristic	2019	2020*	2019	2020*		
Total	21.0 †	16.4	7.3 †	5.6		
Sex						
Male	21.2 †	16.6	7.5 †	5.1		
Female	20.8 †	16.2	7.0	6.2		
Race/ethnicity						
White ^c	21.0 †	16.2	6.5 ‡	5.3		
Black ^c	18.7	17.5	7.0	7.5		
Hispanic	21.3 ‡	15.9	10.2 †	5.5		

N-DASH:

Crime type: **Violent victimization** Race/Hispanic ethnicity: **Hispanic**

Rate: **15.9**

95% C.L.: **12.18 - 19.59**

S.E.: **1.89**



Analysis Example: Criminal Victimization 2020

Rate of violent victimization for Hispanics

Key Steps:

- 1. Incident file: get number of violent victimizations for Hispanics (both weighted and unweighted)
- 2. Person file: get number of Hispanic population (weighted)
- Calculate rate
- Calculate standard error:



significance testing rates and percentages (Sig2)

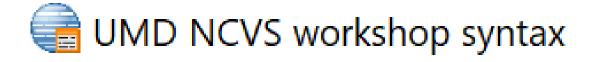


GVF parameters and rhos

To generate standard errors around victimization, incidence and prevalence estimates from the NCVS, you can use **generalized variance function (GVF) parameters** produced by the U.S. Census Bureau for BJS



SPSS practice





Analysis Example: Criminal Victimization 2020

Rate of violent victimization for Hispanics

Calculate standard error:



significance testing rates and percentages (Sig2)



GVF parameters and rhos

SIG2LNU			Revised November 14, 1994				03/10/22					*only fill i	
	Enter 1 if you want to compare rates per 1000. Enter 2 if you want to compare percents.							1					
								Are rhos needed (Y/N)?	n ,				
Comment	n								Þ				
From Tabl	le n												
SERIES 1													
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Set		"b"	"c"	Base	Rates	90% CI	95% CI	Characteristic	Rho	Variance	Rho	Error	CV
	1	2,338	11.25	48,640,166	15.900	3.112	3.708	Hispanic, violent victimization rate	0.000	3.57915		1.891864	1.89851
											\		
											`		



Analysis Example: Criminal Victimization 2020 Percent of Hispanic violent victimization reported to police

From last exercise:

Hispanic violent victimization number---772,739

```
* Use these variables to count: total number of victimizations for Hispanics
*weighted using series_weight (victimization weight adjusted for series crimes).

weight by SERIES_WEIGHT.

*.

temporary.
select if newcrime=1 and inc_outsideUS=0 and v_Hispanic=1.
frequencies newcrime.

*
newcrime

Frequency Percent Valid Percent Cumu
Valid Violence 772739 100.0 100.0 100.0

*.
```

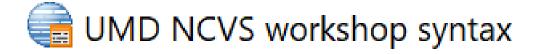
N-DASH: reported to police

Race/Hispanic ethnicity: **Hispanic**Reporting to the police: **Yes**Number: **260,875**95% C.l.: **171,857** - **349,894**S.E.: **45,418**

% reported to police: 33.8



SPSS practice





Analysis Example: Criminal Victimization 2020 Percent of Hispanic violent victimization reported to police

Calculate standard error:

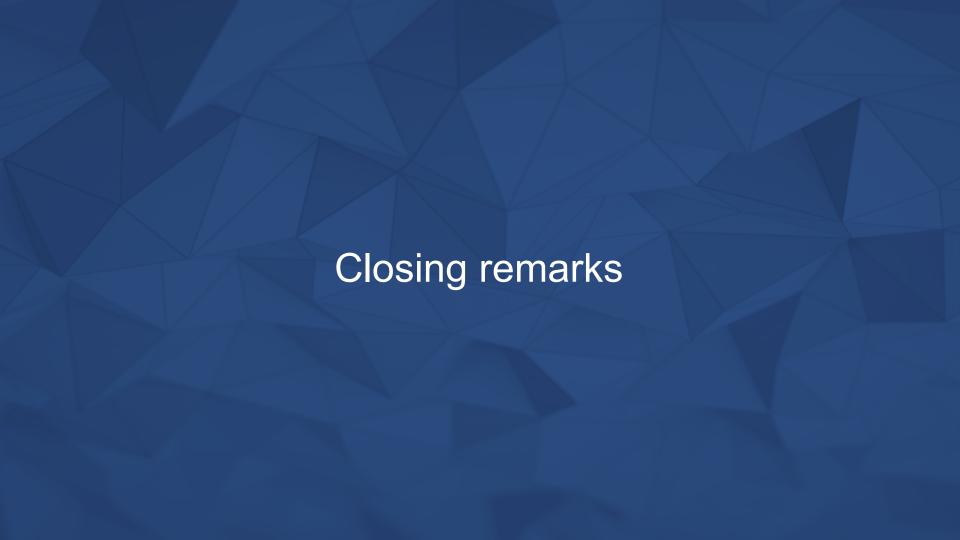


significance testing rates and percentages (Sig2)



GVF parameters and rhos

SIG2LNU			Revised Novembe	r 14, 1994			04/04/22					*only fill
	Enter 1 if you want to compare rates per 1000. Enter 2 if you want to compare percents.											
							Are rhos needed (Y/N)?	n				
Comment:	n											
From Table	n											
SERIES 1												
								Calculated		Keyed	Standard	
Set	"b"	"c"	Base	Percents	90% CI	95% CI	Characteristic	Rho	Variance	Rho	Error	CV
1	2,338	11.25	772,739	33.800	6.842	8.152	Hispanic vio. victimization, reported to police	0.000	17.30047		4.159384	2.30587
									_			



Updates from BJS

- Subscribe to <u>JUSTSTATS</u>
 - Stay up-to-date with data releases, statistical report releases, and data tool updates
- Follow BJS on Twitter and Facebook
- Email <u>AskBJS@usdoj.gov</u> with questions emails are forwarded to BJS statisticians with topical expertise

See BJS at the ASC conference in Atlanta!

Tuesday, November 15, 2022, from 1-5pm Analyzing Data from the National Crime Victimization Survey pre-conference workshop

BJS submitted abstracts for a variety of panel presentations so check out the conference program for details!

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Additional reference slides on –

-NCVS survey instruments
-NCVS crime classifications
-NCVS supplements
-Additional replication examples

NCVS-500 Control Card

- Basic record for each sample unit throughout each enumeration period
- Used by U.S. Census Bureau field representatives (FR) to locate/confirm they have contacted the correct sample household
- Household respondent = most knowledgeable adult household member
- Household roster = contains demographic information on every person living in the household
 - Demographic information such as age, race, Hispanic origin, sex, marital status, and educational attainment

^{*}There is a copy of the NCV-\$00 in your workshop materials

NCVS-1 Basic Screen Questionnaire

- Contains questions designed to determine whether any crimes were committed against the household as a whole (property crime) ragainst an individual household member (personal crime) uring the 6-month reference period
 - Household respondent answers questions about property crimes
 - All respondents answer questions about personal crimes
- Questions are written in a "short cue" format
 - The interviewer reads a question "stem" about whether the respondent has experienced a certain type of incident and then gives examples of the type of incident in "short cues" to prompt respondent memory

NCVS-1 Basic Screen Questionnaire

- No crime estimates come from the screener questions the screener is used to trigger recall of incidents
- If no incidents are recorded, the interview proceeds on a person -by-person basis until a questionnaire is completed for each person age 12 or older in the household

*For households that refuse to participate or are not available n NCVS-7 Noninterview Record is completed, which contains select information about the household (e.g., housing unit type, reason for noninterview, public housing status, Indian country status, restricted access to the unit)

*There is a copy of the NCV-\$\mathbf{S}\$ in your workshop materials

- Used to gather detailed information about incidents reported in the NCVS -1
- One Crime Incident Report (CIR) is completed for each crime incident reported in the NCVS-1
- Attribute/incident based questions focused on details regarding the criminal incident
- Crime estimates come from the CIR after confirming a crime was committed

- Within the CIR, questions are asked in topical modules:
 - Location and presence (items 10a & 20a)
 - Attack/threat/injury/medical care (items 31a -35b)
 - Emotional consequences (items 36a -37i)
 - Actions against the offender (items 41a -46a)
 - Offender information/characteristics (items 58a -86b)
 - Attempted and completed thefts (items 88 -107d)
 - Property damage and police (items 108 -129)

- Series crimes
 - Victimizations that are similar in nature and occur with such frequency that a victim is unable to recall each event or describe each event in detail (e.g., domestic violence)
 - Interviewers can identify and classify these similar victimizations as series victimizations and collect detailed information (on the CIR) on only the most recent incident in the series
 - Can exist for any crime type

- Use of narratives for editing and coding
 - Last question on CIR asks interviewer to write a summary of the incident
 - Incident data are compared to incident summaries and pertinent information in case notes
 - Particular attention is paid to questions that classify crime incidents (i.e., location, presence, physical attack, attempted attack, threat, and theft)
- Type of crime
 - Details collected in the CIR allow crimes to be classified with substantial detail

^{*}There is a copy of the NCV-28 in your workshop materials

NCVS crime classification

Violent crime

- Completed
- Attempted
- Rape/sexual assault
 - Rape
 - Completed
 - Attempted
 - Sexual assault
- Robbery
 - Completed
 - With injury
 - Without injury
 - Attempted
 - With injury
 - Without injury

Assault

- Aggravated
 - Completed with injury
 - Attempted/threatened with weapon
- Simple
 - Completed with injury
 - Attempted/threatened without weapon

Purse snatching/pick-pocketing

- Completed purse snatching
- Attempted purse snatching
- Pick-pocketing

NCVS crime classification

Property crime

- Burglary/trespassing
 - Completed
 - Forcible entry
 - Unlawful entry without force
 - Attempted forcible entry
- Motor vehicle theft
 - Completed
 - Attempted

- Other household theft
 - Completed
 - Less than \$50
 - **-** \$50-\$249
 - \$250 or more
 - Amount not available
 - Attempted

NCVS supplements

- Public-use files
 - Can be found at the National Archive of Criminal Justice Data (NACJD)
 - Flat file, have core NCVS variables attached
 - See codebooks for generalized variance functions (GVF)
 - Or can use direct estimation for standard errors (e.g., with Complex Sample option in SPSS)
- Restricted -use files available through Census FSRDC

Conducting basic analyses using the NCVS

- Resources for calculating victimization (and incident) rates, numbers, and percentages
 - NCVS Resource Guideand Codebooks (NACJD)
 - NCVS Technical Documentation (also in workshop materials)
 - Variance estimation
 - User's guides
 - Generalized variance function (GVF) parameters
 - <u>Direct variance estimation</u>
 - Significance testing files (included in 'NCVS workshop replication example.xlsx')
 - NACJD <u>Learning Guide</u> for the NCVS
 - NCVS library recodes

Refer to the zipped file Extra NCVS Replication Examples which include files discussed in slides 71-76

Replicating the *Criminal Victimization*, 2020 bulletin

We will be replicating the highlighted estimates

TABLE 1
Number and rate of violent victimizations, by type of crime, 2016–2020

	2016		2017		2018		201	9	2020*	
Type of violent crime	Number	Rate per 1,000 ^a	Number	Rate per 1,000 ^a						
Violent crime ^b	5,353,820 †	19.7 †	5,612,670 †	20.6 †	6,385,520 †	23.2 †	5,813,410 †	21.0 †	4,558,150	16.4
Rape/sexual assault ^c	298,410	1.1	393,980	1.4	734,630 †	2.7 †	459,310	1.7	319,950	1.2
Robbery	458,810	1.7	613,840 †	2.3 †	573,100	2.1	534,420	1.9	437,260	1.6
Assault	4,596,600 †	16.9 †	4,604,850 †	16.9 †	5,077,790 †	18.4†	4,819,680 †	17.4 †	3,800,950	13.7
Aggravated assault	1,040,580 †	3.8 †	993,170 ‡	3.6 ‡	1,058,040 †	3.8†	1,019,490 ‡	3.7 ‡	812,180	2.9
Simple assault	3,556,020 †	13.1 †	3,611,680 †	13.3 †	4,019,750 †	14.6 †	3,800,190 †	13.7 †	2,988,770	10.7

TABLE 2
Number and rate of property victimizations, by type of crime, 2016–2020

	201	6	2017		2018	3	2019)	2020*	
Type of property crime	Number	Rate per 1,000 ^a	Number	Rate per 1,000 ^a	Number	Rate per 1,000 ^a	Number	Rate per 1,000 ^a	Number	Rate per 1,000 ^a
Total ^b	15,815,310	118.6†	13,340,220 †	108.4 †	13,502,840 †	108.2 †	12,818,000 †	101.4 †	12,085,170	94.5
Burglary/trespassing ^c	3,160,450	23.7 †	2,538,170 †	20.6 †	2,639,620 †	21.1 †	2,178,400 †	17.2 †	1,741,250	13.6
Burglary ^d	2,205,180	16.5 †	1,688,890 †	13.7 †	1,867,620 †	15.0 †	1,484,730 †	11.7 †	1,210,640	9.5
Trespassing ^e	955,270	7.2 †	849,280 †	6.9 †	772,000 †	6.2 †	693,670 †	5.5 †	530,610	4.1
Motor vehicle theft	618,330	4.6	516,810	4.2	534,010	4.3	495,670	3.9	545,810	4.3
Other theft ^f	12,036,530	90.3 †	10,285,240	83.6 †	10,329,210 ‡	82.7 †	10,143,930	80.2	9,798,110	76.6

Replicating the estimates in CV20 – overview

In SPSS-

- 1. Use 92-20 **incident** data file to generate number of violent and property crimes
- 2. Use 92-20 **person** data file to generate number of persons age 12 or older in the U.S.
- 3. Use 92-20 household data file to generate the total number of households in the U.S.

In Excel-

- 1. Calculate **rates**, dividing the number of crimes by the population counts and multiplying by 1,000
- 2. Calculate **standard errors** using GVFs

Key recodes

Type of crime (TOC)

Also included in the workshop files-

- Victim-offender relationship
- Injury
- Weapon use

Missing data

- Out of universe respondent was skipped out of question
- Residue treated as 'missing/unknown'

Replicating the estimates in tables 1 & 2

In SPSS (see 'NCVS replicationsyntax.sps')

- 1. Access incident data file (38136 -0003-Data)
 - a. Include recodes of interest (type of crime)
 - b. Exclude non-U.S. crimes (v4022 ne 1)
- 2. Generate number of victimizations
 - a. Total number of victimizations both violent and property
 - b. Apply victimization weight to get weighted number of victimizations (SERIES WEIGHT)
- 3. Generate person and household populations
 - a. Access person (38136-0002-Data) and household data files (38136-0001-Data)
 - b. Apply person (WGTPERCY) or household (WGTHHCY) weight to get population estimates

Replicating the estimates in tables 1 & 2

In Excel (see 'NCVS workshop replication example.xlsx') –

- 1. Calculate victimization rates
 - a. Access SPSS output
 - b. Link output to a worksheet tab
 - c. Divide violent victimization numbers over person populations and multiply by 1,000; divide property victimization numbers over household populations and multiply by 1,000
 - d. Also, consider unweighted cell sizes to determine reliability of each estimate

Calculating the standard errors for tables 1 & 2

In Excel (see 'NCVS workshop replication example.xlsx') –

- 1. One GVF worksheet for numbers, another rates and percentages
- 2. Include appropriate GVF parameters for analysis
 - a. See 'GVF parameters.xlsx'
- 3. Enter or link estimates (number, rate, percent)
 - a. In significance testing worksheet for rates and percentages –
 indicate whether you are estimating rates or percentages
 enter or link base for rate or percent
- 4. Standard errors are calculated in the worksheet (also, confidence intervals (CI) and coefficients of variation (CV))