

# **Contacts Between Police and the Public, 2018 – Statistical Tables**

Erika Harrell, Ph.D., and Elizabeth Davis, BJS Statisticians

**F** indings described in this report are based on data from the Bureau of Justice Statistics' 2018 Police-Public Contact Survey (PPCS), a supplement to the National Crime Victimization Survey (NCVS). The NCVS collects information from a nationally representative sample of persons age 12 or older in U.S. households. The PPCS collects information on contact with police during the prior 12 months from persons age 16 or older.

U.S. residents were asked about instances where they sought help from police (resident-initiated contacts) and when police approached or stopped them (police-initiated contacts). Residentinitiated contacts with police include reporting a crime, disturbance, or suspicious activity; reporting a non-crime emergency such as a medical emergency; reporting a non-emergency such as asking for directions; participating in a block watch or other anti-crime program; or approaching or seeking help from police for another reason. Police-initiated contacts include being stopped by police while in a public place or a parked vehicle (i.e., a street stop), being stopped by police while driving a motor vehicle (i.e., a traffic stop), riding as a passenger in a car that was stopped by police, being arrested, or being stopped or approached by police for some other reason. The PPCS also collected data on contacts resulting from a traffic accident.

### Highlights

In the prior 12 months, as of 2018, among persons age 16 or older—

- About 61.5 million residents had at least one contact with police.
- Twenty-four percent of residents experienced contact with police, up from 21% in 2015.
- Whites (26%) were more likely than blacks (21%), Hispanics (19%), or persons of other races (20%) to experience police contact.
- There was no statistically significant difference in the percentage of whites (12%) and blacks (11%) who experienced police-initiated contact.
- Persons ages 18 to 24 were most likely to have any contact with police (30%) and to experience police-initiated contact (19%).
- A higher percentage of blacks (4%) and Hispanics (3%) than whites (2%) or other races (2%) experienced threats or use of force.
- Males (3%) were more likely than females (1%) to experience threats or use of force.
- Four percent of blacks and 4% of Hispanics reported being handcuffed during their most recent contact with police, compared to 2% of whites and 2% of other races.





### List of tables

**TABLE 1.** Number and percent of U.S. residents age 16 or older with any police contact, by type of contact and demographic characteristics, 2018

TABLE 2. Residents with police contact, by reason for contact, 2015 and 2018

**TABLE 3.** Residents who experienced nonfatal threats or use of force during contacts with police, by demographic characteristics, 2015 and 2018

**TABLE 4.** Residents who experienced nonfatal threats or use of force during their most recent police-initiated contact or traffic-accident contact, by resident perception of force as necessary or excessive and demographic characteristics, 2015 and 2018

**TABLE 5.** Percent of residents who experienced nonfatal threats or use of force during their most recent police-initiated contact or traffic-accident contact, by resident race or ethnicity and type of force, 2018

### List of appendix tables

**APPENDIX TABLE 1.** Standard errors for table 1: Number and percent of U.S. residents age 16 or older with any police contact, by type of contact and demographic characteristics, 2018

**APPENDIX TABLE 2.** Standard errors for table 2: Residents with police contact, by reason for contact, 2015 and 2018

**APPENDIX TABLE 3.** Standard errors for table 3: Residents who experienced nonfatal threats or use of force during contacts with police, by demographic characteristics, 2015 and 2018

**APPENDIX TABLE 4.** Standard errors for table 4: Residents who experienced nonfatal threats or use of force during their most recent police-initiated contact or traffic-accident contact, by resident perception of force as necessary or excessive and demographic characteristics, 2015 and 2018

**APPENDIX TABLE 5.** Standard errors for table 5: Percent of residents who experienced nonfatal threats or use of force during their most recent police-initiated contact or traffic-accident contact, by resident race or ethnicity and type of force, 2018

### Police contact and resident demographics

- In 2018, about 61.5 million persons age 16 or older had at least one contact in the prior 12 months with police: 28.9 million U.S. residents experienced contacts initiated by police, 35.5 million initiated contact with police, and 8.9 million had contact with police as a result of a traffic accident (table 1).
- A higher percentage of males (13%) than females (10%) experienced police-initiated contacts in 2018.
- Whites (26%) were more likely than blacks (21%), Hispanics (19%), or persons of other races (20%) to experience police contact.

- There was no statistically significant difference in the percentage of whites (12%) and blacks (11%) who experienced police-initiated contact.
- Hispanics (10%) were less likely than whites (12%) to experience police-initiated contact.
- Whites (16%) were more likely than blacks (11%), Hispanics (10%), or other persons (11%) to initiate contact with police.
- Among all age groups measured, persons ages 18 to 24 were most likely to have any contact with police (30%) and to experience police-initiated contact (19%).

#### TABLE 1

## Number and percent of U.S. residents age 16 or older with any police contact, by type of contact and demographic characteristics, 2018

Demographic	U.S. population	Any cor	ntact	Police-initiate	ed contact	Resident-i contact	nitiated	Traffic-accide	nt contact
characteristic	age 16 or older	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	259,316,200	61,542,300	23.7%	28,880,900	11.1%	35,468,500	13.7%	8,882,000	3.4%
Sex									
Male*	125,725,800	30,467,400	24.2%	15,707,300	12.5%	16,443,500	13.1%	4,141,300	3.3%
Female	133,590,400	31,074,900	23.3 †	13,173,600	9.9 †	19,025,000	14.2 †	4,740,700	3.5 ‡
Race/ethnicity									
White <sup>a*</sup>	163,551,000	42,525,700	26.0%	19,216,500	11.7%	25,386,330	15.5%	5,885,200	3.6%
Black <sup>a</sup>	30,973,900	6,545,700	21.1 †	3,393,800	11.0	3,280,700	10.6 †	1,086,900	3.5
Hispanic	43,135,000	8,238,400	19.1 †	4,221,800	9.8 †	4,449,900	10.3 †	1,222,600	2.8 †
Other <sup>a,b</sup>	21,656,300	4,232,500	19.5 †	2,048,900	9.5 †	2,351,600	10.9 †	687,300	3.2
Age									
16-17	8,046,500	1,143,500	14.2% †	765,300	9.5% †	349,100	4.3% †	223,100	2.8% †
18-24*	29,941,900	8,859,700	29.6	5,730,700	19.1	3,984,200	13.3	1,769,400	5.9
25-44	86,126,600	23,518,700	27.3 †	11,791,500	13.7 †	13,314,800	15.5 †	3,255,500	3.8 †
45-64	83,540,200	19,160,700	22.9 †	7,744,300	9.3 †	12,075,100	14.5 ‡	2,355,300	2.8 †
65 or older	51,661,000	8,859,600	17.1 †	2,849,000	5.5 †	5,745,200	11.1 †	1,278,700	2.5 †
Household income									
\$24,999 or less*	48,322,500	11,112,600	23.0%	5,487,200	11.4%	6,339,000	13.1%	1,624,500	3.4%
\$25,000-\$49,999	65,747,300	14,380,200	21.9	6,973,400	10.6	8,113,600	12.3	2,014,700	3.1
\$50,000-\$74,999	47,676,700	11,015,000	23.1	5,228,700	11.0	6,339,100	13.3	1,570,000	3.3
\$75,000 or more	97,569,600	25,034,500	25.7 †	11,191,700	11.5	14,676,700	15.0 †	3,672,800	3.8 ‡

Note: Details may not sum to totals because respondents could indicate yes to multiple reasons. See appendix table 1 for standard errors. Missing data on annual household income was imputed. From July through December of 2018, 25% of persons age 16 or older in the NCVS sample had missing data on annual household income. For more information on imputation procedures, see *National Crime Victimization Survey, 2016: Technical Documentation* (NCJ 251442, BJS, December 2017).

\*Comparison group.

†Difference with comparison group is significant at the 95% confidence interval.

‡Difference with comparison group is significant at the 90% confidence interval.

<sup>a</sup>Excludes persons of Hispanic origin (e.g., "white" refers to non-Hispanic whites and "black" refers to non-Hispanic blacks).

<sup>b</sup>Includes Asians, Native Hawaiians, other Pacific Islanders, American Indians, Alaska Natives, and persons of two or more races.

# Reasons for police contact in 2018 compared to 2015

- The percentage of U.S. residents age 16 or older who experienced contact with police in the prior 12 months increased from 21% in 2015 to 24% in 2018 (table 2).
- The percentage of persons who initiated contact with police increased from 11% in 2015 to 14% in 2018.
- The percentage of persons who experienced a police-initiated contact did not change significantly from 2015 to 2018 (11% both years).
- Compared to 2015, higher percentages of residents in 2018 reported a possible crime or a non-crime emergency to police (among the resident-initiated contacts measured), while a lower percentage participated in a block watch.

20	15	2018*		
Number	Percent	Number	Percent	
53,469,300	21.1%†	61,542,300	23.7%	
27,060,200	10.7% †	35,468,500	13.7%	
16,928,100	6.7 †	19,109,200	7.4	
8,841,900	3.5 †	9,971,500	3.8	
		10,068,700	3.9	
2,366,200	0.9 ‡	2,160,900	0.8	
2,478,400	1.0 †	641,200	0.2	
7,950,500	3.1% †	8,882,000	3.4%	
27,415,900	10.8%	28,880,900	11.1%	
19,204,500	8.6 †	18,666,000	8.1	
5,964,100	2.4	5,702,600	2.2	
2,503,700	1.0 †	3,528,100	1.4	
814,800	0.3 †	386,000	0.1	
1,946,700	0.8 †	3,638,100	1.4	
	Number 53,469,300 27,060,200 16,928,100 8,841,900  2,366,200 2,478,400 7,950,500 27,415,900 19,204,500 5,964,100 2,503,700 814,800	53,469,300 21.1% †   27,060,200 10.7% †   16,928,100 6.7 †   8,841,900 3.5 †       2,366,200 0.9 ‡   2,478,400 1.0 †   7,950,500 3.1% †   27,415,900 10.8%   19,204,500 8.6 †   5,964,100 2.4   2,503,700 1.0 †   814,800 0.3 †	Number Percent Number   53,469,300 21.1% † 61,542,300   27,060,200 10.7% † 35,468,500   16,928,100 6.7 † 19,109,200   8,841,900 3.5 † 9,971,500     10,068,700   2,366,200 0.9 ‡ 2,160,900   2,478,400 1.0 † 641,200   7,950,500 3.1% † 8,882,000   27,415,900 10.8% 28,880,900   19,204,500 8.6 † 18,666,000   5,964,100 2.4 5,702,600   2,503,700 1.0 † 3,528,100   814,800 0.3 † 386,000	

TABLE 2

### Residents with police contact, by reason for contact, 2015 and 2018

Note: Details may not sum to totals because respondents could experience multiple types of contact. See appendix table 2 for standard errors.

\*Comparison year.

†Difference with comparison year is significant at the 95% confidence interval.

‡Difference with comparison year is significant at the 90% confidence interval.

...Not available.

<sup>a</sup>Includes medical emergencies and traffic accidents that were witnessed by the respondent in which the respondent was not involved.

<sup>b</sup>Not available as a separate category in 2015. Includes asking for directions, custody enforcement, court orders, or other non-emergency situations.

<sup>c</sup>Based on the driving population of 223,315,375 persons in 2015 and 231,290,951 persons in 2018.

<sup>d</sup>While in a public place or parked vehicle.

<sup>e</sup>Includes residents who reported, as the sole type of contact with police, an arrest that occurred outside of the context of a traffic stop, street stop, or traffic accident.

# Nonfatal threats or use of force during contacts with police by resident demographics

- Among the 61.5 million U.S. residents age 16 or older in 2018 who had contact with police during the prior 12 months, 1.3 million (2%) experienced threats or use of force from police (table 3).
- Males (3%) were more likely than females (1%) to experience threats or use of force.
- Whites (2%) were less likely than blacks (4%) or Hispanics (3%) to experience threats or use of force.
- Persons ages 18 to 24 (3%) were more likely than persons ages 45 to 64 (1%) or 65 or older (less than 0.5%) to experience threats or use of force from police.

#### TABLE 3

### Residents who experienced nonfatal threats or use of force during contacts with police, by demographic characteristics, 2015 and 2018

		2015			2018	
	Persons age 16 or older with any	Experienced thr at any time duri		Persons age 16 or older with any	Experienced th at any time dur	
Demographic characteristic	police contact	Number	Percent	police contact	Number	Percent
Total	53,469,300	985,300	1.8%	61,542,300	1,254,300	2.0%
Sex						
Male*	27,038,300	735,100	2.7%	30,467,400	917,900	3.0%
Female	26,431,000	250,200	0.9 †	31,074,900	336,400	1.1 †
Race/ethnicity						
White <sup>b*</sup>	37,334,200	485,700	1.3%	42,525,700	647,100	1.5%
Black <sup>b</sup>	6,146,400	201,100	3.3 †	6,545,700	250,700	3.8 †
Hispanic	6,680,700	203,100	3.0 †	8,238,400	280,100	3.4 †
Other <sup>b,c</sup>	3,307,900	95,500	2.9 †	4,232,500	76,300	1.8
Age						
16-17	1,188,300	24,300!	2.0% !	1,143,500	39,200	3.4%
18-24*	8,248,000	261,100	3.2	8,859,700	280,000	3.2
25-44	19,998,800	473,100	2.4	23,518,700	625,500	2.7
45-64	17,290,700	222,900	1.3 †	19,160,700	274,400	1.4 †
65 or older	6,743,400	4,000 !	0.1 † !	8,859,600	35,200	0.4 †

Note: Details may not sum to totals due to rounding. See appendix table 3 for standard errors.

\*Comparison group.

†Difference with comparison group is significant at the 95% confidence interval.

! Interpret with caution. Estimate is based on 10 or fewer sample cases, or coefficient of variation is greater than 50%.

<sup>a</sup>Includes threatening use of force, pushing, grabbing, handcuffing, hitting, kicking, using chemical or pepper spray, using an electroshock weapon, or pointing a gun. Includes persons reporting threats or use of force during the most recent contact or any earlier contacts with police in the last 12 months. In 2018, but not in 2015, force also included shooting a gun.

<sup>b</sup>Excludes persons of Hispanic origin (e.g., "white" refers to non-Hispanic whites and "black" refers to non-Hispanic blacks).

<sup>C</sup>Includes Asians, Native Hawaiians, other Pacific Islanders, American Indians, Alaska Natives, and persons of two or more races.

### Most recent contact

Tables 4 and 5 present information on the most recent police-initiated contact or traffic-accident contact with police reported by residents.

# Perception of nonfatal use of force during the most recent police-initiated contact or traffic-accident contact in the last 12 months, 2018

- About 3% of U.S. residents experienced a threat or use of force during their most recent contact with police (table 4).
- Males (4%) were more likely than females (1%) to experience force during their most recent contact with police.

- Of residents who experienced a threat or use of force during their most recent contact with police, about 28% felt that the action was necessary, while 51% felt it was excessive.
- Whites (32%) were more likely than Hispanics (17%) to view the threat or use of force during their most recent contact as necessary.
- Whites who experienced a threat or use of force were less likely than blacks to perceive it as excessive (44% to 63%).
- Persons ages 18 to 24 who experienced a threat or use of force were less likely (16%) than persons ages 25 to 44 (31%) and 45 to 64 (34%) to view the force as necessary.

#### TABLE 4

Residents who experienced nonfatal threats or use of force during their most recent police-initiated contact or traffic-accident contact, by resident perception of force as necessary or excessive and demographic characteristics, 2015 and 2018

		20				20	-	
	Most recent	police-initiated of	or traffic-accident contact <sup>a,b</sup> Of those who experienced force—		Most recent	police-initiated	Of those w	
Demographic characteristic	Number	Percent experienced force <sup>c</sup>	Perceived force as necessary <sup>d</sup>	Perceived force as excessive <sup>d</sup>	Number	Percent experienced force <sup>c</sup>	Perceived force as necessary <sup>d</sup>	Perceived force as excessive <sup>d</sup>
Total	30,195,900	3.3%	30.2%	48.4%	31,129,900	2.8%	27.5%	50.9%
Sex								
Male*	16,522,500	4.4%	28.2%	50.1%	16,601,800	4.2%	26.0%	52.9%
Female	13,673,400	1.8 †	36.2	43.4	14,528,100	1.1 †	34.0	42.5
Race/ethnicity								
White <sup>e*</sup>	20,282,400	2.4%	32.4%	42.7%	20,593,600	2.0%	31.7%	44.3%
Black <sup>e</sup>	3,886,200	5.2 †	32.0	59.9 ‡	3,713,800	5.3 †	25.8	62.9 †
Hispanic	3,986,400	5.1 †	20.8	52.5	4,541,900	4.8 †	16.9 †	53.7
Other <sup>e,f</sup>	2,040,900	4.7 †	35.5!	43.8	2,280,600	1.9	50.1 ‡!	43.4 !
Age								
16-17	988,900	2.5%!	35.3%!	22.1%!	871,200	3.9%!	30.4%!	62.0% !
18-24*	6,107,600	4.3	28.2	49.2	5,895,300	3.5	16.3	59.4
25-44	11,757,400	4.0	34.1	44.0	12,311,300	3.6	30.9 †	46.8
45-64	8,422,100	2.6 †	24.4	58.5	8,449,100	2.0 †	33.9 †	47.7
65 or older	2,919,900	0.1 † !	<0.1 † !	< 0.1 † !	3,603,000	0.4 † !	4.7 ‡!	63.1 !

Note: Details may not sum to totals due to rounding. See appendix table 4 for standard errors.

\*Comparison group.

†Difference with comparison group is significant at the 95% confidence interval.

‡Difference with comparison group is significant at the 90% confidence interval.

! Interpret with caution. Estimate is based on 10 or fewer sample cases, or coefficient of variation is greater than 50%.

<sup>a</sup>Includes persons stopped by police during the last 12 months for whom the most recent contact involved being stopped by police in a street stop, stopped as a driver or passenger in a traffic stop, arrested, in a traffic accident reported to police, or approached by police for another reason. <sup>b</sup>Denominator includes approximately 0.3% of respondents who had missing data on the most recent contact due to recoding of contacts originally

classified as "other-specify." See Methodology.

<sup>C</sup>Includes threatening use of force, pushing, grabbing, handcuffing, hitting, kicking, using chemical or pepper spray, using an electroshock weapon, or pointing a gun during the most recent police-initiated contact or traffic-accident contact. In 2018, but not in 2015, force also included shooting a gun. In 2018, 0.3% of persons had a gun pointed at them or were shot by a gun during their most recent police-initiated contact or traffic-accident contact. dRespondents who reported experiencing force during their most recent police-initiated contact or traffic-accident contact. dRespondents who reported experiencing force during their most recent police-initiated contact or traffic-accident contact. were asked two questions: if they felt that the actions were necessary and if they felt that any of the actions used against them were excessive. Respondents could respond "yes" to both questions, "no" to both questions, or "yes" to one question and "no" to the other.

<sup>e</sup>Excludes persons of Hispanic origin (e.g., "white" refers to non-Hispanic whites and "black" refers to non-Hispanic blacks).

<sup>f</sup>Includes Asians, Native Hawaiians, other Pacific Islanders, American Indians, Alaska Natives, and persons of two or more races.

# Type of nonfatal force and race or ethnicity during the most recent contact

- Among the types of force measured in 2018, being handcuffed (2%) was the most prevalent type of force that U.S. residents experienced during their most recent contact with police in the last 12 months (table 5).
- In 2018, blacks and Hispanics (5% each) were more likely than whites (2%) or persons of other races (2%) to experience at least one type of force during their most recent contact with police.
- Fewer than 1% of members of any race or ethnicity had a gun pointed at them during their most recent police-initiated contact or traffic-accident contact.

#### **TABLE 5**

Percent of residents who experienced nonfatal threats or use of force during their most recent police-initiated contact or traffic-accident contact, by resident race or ethnicity and type of force, 2018

		Race/ethnicity						
Type of force <sup>a</sup>	Total	White <sup>b</sup> *	Black <sup>b</sup>	Hispanic	Other <sup>b,c</sup>			
Any	2.8%	2.0%	5.3% †	4.8% †	1.9%			
Threat of force	0.7	0.5	2.0 †	1.2 ‡	0.2 † !			
Handcuffing	2.2	1.6	4.4 †	3.5 †	1.9			
Pushing/grabbing/hitting/ kicking	0.7	0.4	1.6 †	1.4 †	0.8 !			
Spraying/shocking	<0.1 !	0.1!	< 0.1 !	< 0.1 !	<0.1 !			
Pointing/shooting gun	0.3	0.1	0.8 †	0.7 ‡!	0.4 !			

Note: Details may not sum to totals because respondents could experience multiple types of force. See appendix table 5 for standard errors. \*Comparison group.

†Difference with comparison group is significant at the 95% confidence interval.

‡Difference with comparison group is significant at the 90% confidence interval.

! Interpret with caution. Estimate is based on 10 or fewer sample cases, or coefficient of variation is greater than 50%.

<sup>a</sup>Denominator includes approximately 0.3% of respondents who had missing data on the most recent contact due to recoding of contacts originally classified as "other-specify." See *Methodology*. Denominator also includes less than 0.1% of respondents who indicated that police used some other type of force.

<sup>b</sup>Excludes persons of Hispanic origin (e.g., "white" refers to non-Hispanic whites and "black" refers to non-Hispanic blacks).

<sup>C</sup>Includes Asians, Native Hawaiians, other Pacific Islanders, American Indians, Alaska Natives, and persons of two or more races.

### Methodology

The Police-Public Contact Survey (PPCS) is a supplemental survey to the National Crime Victimization Survey (NCVS). The NCVS collects data on crime against persons age 12 or older from a nationally representative sample of U.S. households. The NCVS sample includes persons living in group quarters (such as dormitories, rooming houses, and religious-group dwellings) and excludes persons living in military barracks and institutional settings (such as correctional or hospital facilities) and homeless persons.<sup>1</sup> The NCVS and PPCS are administered by the U.S. Census Bureau on behalf of the Bureau of Justice Statistics (BJS).

Since 1999, the PPCS has typically been administered every 3 years.<sup>2</sup> It is administered at the end of the NCVS interview to persons age 16 or older within households sampled for the NCVS. Proxy responders are ineligible to receive the PPCS. In 2018, persons who completed their NCVS interview in a language other than English could complete the PPCS in the same language. All NCVS and PPCS interviews were conducted using computer-assisted personal interviewing by telephone or personal visit.

The 2018 PPCS was administered between July 1, 2018 and December 31, 2018. The survey asked respondents if they had experienced different types of specific police contacts during the prior 12 months. Persons who reported contact were asked to describe the nature of the contact and their most recent contact during that period if more than one contact had occurred.

The PPCS sample increased 47% from 2015 (70,959 respondents) to 2018 (104,324 respondents), due to an increase in the NCVS sample designed to facilitate the ability to produce state- and local-level victimization estimates for the largest 22 states. For more information on the NCVS sample sizes in 2017 and 2018, see *Criminal Victimization, 2017* (NCJ 252472, BJS, December 2018) and *Criminal Victimization, 2018* (NCJ 253043, BJS, September 2019).

<sup>1</sup>For more information, see *Methodology* in *Criminal Victimization*, 2019 (NCJ 255113, BJS, September 2020).

PPCS non-respondents consisted of persons within an interviewed NCVS household who did not respond to the NCVS, NCVS proxy interviews, those who refused to participate in the PPCS, those who were unavailable to complete the PPCS, and other non-respondents. There were 35,368 non-respondents in the 2018 PPCS. For the 2018 PPCS, the NCVS household response rate was 72%, and the person response rate, which is based on persons in responding households, was 75%. By comparison, for the overall NCVS in 2018, the household response rate was 73%, and the person response rate was 82%. PPCS interviews were obtained from 104,324 of the 139,692 U.S. residents age 16 or older in the 2018 NCVS sample (75%), which includes all persons in responding households.

To produce national estimates on police-public contacts, sample weights designed for the PPCS were applied to PPCS data so that respondents represented the entire population, including non-respondents. PPCS weights were generated starting with the final NCVS person weights for each sample case. A non-response adjustment was applied to PPCS respondents to reduce the effects of PPCS non-response. The non-response adjustment was based on characteristics believed to be correlated with police contacts, such as respondents' place of residence, race or ethnicity, sex, age, and response propensities. The sample cases in 2018 were weighted by the PPCS weights to produce a national population estimate of 259,316,200 persons age 16 or older.

Despite non-response adjustments, low overall response rates may still result in biased estimates if non-respondents have characteristics associated with the outcomes of interest that differ from respondents. The Office of Management and Budget guidelines require a non-response bias analysis to be conducted when the overall response rate for a survey is below 80%. The overall 2018 PPCS response rate was 53.7%. Accordingly, BJS and the U.S. Census Bureau conducted a non-response bias analysis, comparing distributions of respondents and non-respondents and non-response estimates across various household and demographic characteristics. The analysis also examined the impact of any differences on key PPCS estimates.

Findings from the analysis suggested that any non-response bias could be corrected through weighting adjustments. The non-response bias analysis found significant differences in response rates and

<sup>&</sup>lt;sup>2</sup>The 2015 PPCS was delayed one year to further improve the instrument after the 2011 redesign. For more information, see *Police-Public Contact Survey: Assessment and Recommendations for Producing Trend Estimates after 2011 Questionnaire Redesign* (NCJ 250485, BJS, April 2017). The 2018 PPCS marked the survey's return to its 3-year cycle.

in respondent and non-respondent distributions among different demographic subgroups. However, non-response weighting adjustments were expected to minimize these differences as the demographic subgroups were used in creating the adjustment. Based on model-based predicted estimates, there was no evidence of non-response bias in any of the police-contact key estimates before or after non-response weighting adjustments.

#### Standard error computations

When national estimates are derived from a sample, as with the NCVS, caution must be used when comparing one estimate to another or when comparing estimates over time. Although one estimate may be larger than another, estimates based on a sample have some degree of sampling error. The sampling error of an estimate depends on several factors, including the amount of variation in responses and sample size. When the sampling error around an estimate is taken into account, estimates that appear different may not be statistically significant.

One measure of the sampling error associated with an estimate is the standard error. The standard error may vary from one estimate to the next. Generally, an estimate with a small standard error provides a more reliable approximation of the true value than an estimate with a larger standard error. Estimates with relatively large standard errors are associated with less precision and reliability and should be interpreted with caution.

In this report, to generate standard errors from the NCVS data, BJS used the Taylor Series Linearization (TSL) method. The TSL method directly estimates variances through a linearized function by combining variance estimates from the stratum and primary sampling units (PSUs) used to sample households and persons.<sup>3</sup>

Using statistical analysis programs developed specifically for the NCVS, all comparisons in the text were tested for significance. The primary test procedure was the Student's t-statistic, which tests the difference between two sample estimates. Findings described in this report as higher, lower, or different passed a test at either the 0.05 level (95% confidence level) or 0.10 level (90% confidence level) of significance. Tables in this report should be referenced for testing on specific findings.

Estimates and standard errors of the estimates provided in this report may be used to generate a confidence interval around the estimate as a measure of the margin of error. The following example illustrates how standard errors may be used to generate confidence intervals:

Based on the 2018 survey, an estimated 12.5% of male U.S. residents age 16 or older experienced some type of police-initiated contact during the year (see table 1); a standard error of 0.25% was determined for the estimate (see appendix table 1). A confidence interval around the estimate was generated by multiplying the standard error by  $\pm 1.96$  (the t-score of a normal, two-tailed distribution that excludes 2.5% at either end of the distribution). Therefore, the 95% confidence interval around the 12.5% estimate from 2018 is  $12.5 \pm (0.25 \times 1.96)$  or (12.00 to 12.98). In other words, if BJS used the same sampling method to select different samples and computed an interval estimate for each sample, it would expect the true population parameter (the percentage of males who experienced some type of police-initiated contact) to fall within the interval estimates 95% of the time.

For this report, BJS also calculated a coefficient of variation (CV) for all estimates, representing the ratio of the standard error to the estimate. CVs (not shown in tables) provide another measure of reliability and a means for comparing the precision of estimates across measures with differing levels or metrics.

### Missing data for most recent contact

The PPCS screener was divided into two sections, with the first series of questions asking about different types of resident-initiated contact and the second asking about different types of police-initiated contact. After each series of questions, respondents were given the opportunity to report any other contacts that were not already asked about. U.S. Census Bureau field representatives recorded all of these responses as "other-specify" text responses even though a large portion of them fit into pre-existing categories. For the current analysis, other-specify responses were recoded into the correct screener categories when possible. However, this affected how the respondent answered questions about the most recent contact. Also, in some

<sup>&</sup>lt;sup>3</sup>Woodruff, R.S. (2012). A simple method for approximating the variance of a complicated estimate. *Journal of the American Statistical Association*, 66(334), 411-414. https://doi.org/10.1080/01 621459.1971.10482279

instances, respondents should have been administered the questions about the nature of their traffic or street stop but were skipped out of that series of questions. Missing data accounted for 10.8% of the most recent contacts in 2018.

#### 2016 NCVS sample redesign

Every 10 years, the NCVS sample is redesigned to select PSUs based on population data from the most recent decennial Census. The most recent redesign of the NCVS sample involved adjusting U.S. population counts to reflect counts from the 2010 decennial Census rather than those from the 2000 decennial Census. For more information about the most recent redesign of the NCVS sample, see *National Crime Victimization Survey*, *2016: Technical Documentation* (NCJ 251442, BJS, December 2017). In 2015, the 2010 NCVS sample design was phased into production with the 2015 data collection. The 2015 NCVS marked the first year of the overlap between the 2000 design and the 2010 design NCVS samples. In the 2015 PPCS, 29% of all cases were drawn from the 2010 sample, with the remainder being drawn from the 2000 sample design. In the 2018 PPCS, all cases and interviews were drawn from the 2010 sample design.

### **APPENDIX TABLE 1**

## Standard errors for table 1: Number and percent of U.S. residents age 16 or older with any police contact, by type of contact and demographic characteristics, 2018

Demographic	U.S. population	Any co	ntact	Police-initiat	ed contact	Resident-i contact	initiated	Traffic-accid	ent contact
characteristic	age 16 or older	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	2,582,440	1,073,740	0.30%	593,005	0.18%	694,308	0.21%	232,308	0.08%
Sex									
Male	1,325,854	594,950	0.37%	367,070	0.25%	382,506	0.25%	136,550	0.10%
Female	1,400,949	575,107	0.33	299,561	0.19	396,261	0.24	149,542	0.10
Race/ethnicity									
White	2,196,168	882,891	0.37%	490,125	0.24%	575,845	0.26%	184,786	0.10%
Black	937,498	242,562	0.64	155,244	0.42	153,035	0.44	76,132	0.24
Hispanic	931,575	276,436	0.47	189,382	0.37	178,345	0.34	79,283	0.17
Other	471,120	159,775	0.63	98,356	0.42	110,431	0.47	56,476	0.25
Age									
16-17	255,343	69,978	0.92%	58,153	0.74%	42,511	0.53%	32,475	0.41%
18-24	638,394	305,767	0.75	223,771	0.63	183,184	0.52	105,187	0.31
25-44	1,077,657	510,340	0.43	310,744	0.29	328,786	0.30	122,431	0.13
45-64	945,394	397,820	0.37	214,735	0.22	296,149	0.29	87,875	0.10
65 or older	690,952	219,460	0.34	100,948	0.17	165,663	0.28	62,392	0.12
Household income									
\$24,999 or less	873,420	336,256	0.57%	213,991	0.38%	203,734	0.37%	84,797	0.16%
\$25,000-\$49,999	990,852	369,258	0.48	217,426	0.30	242,909	0.33	92,802	0.14
\$50,000-\$74,999	839,491	276,084	0.44	175,061	0.33	193,497	0.33	79,603	0.15
\$75,000 or more	1,430,414	497,188	0.36	302,036	0.27	343,858	0.26	137,297	0.13
Source: Bureau of Ju	stice Statistics, Police	-Public Contac	t Survey, 20	18.					

### APPENDIX TABLE 2

## Standard errors for table 2: Residents with police contact, by reason for contact, 2015 and 2018

	20	15	2018		
Reason for contact	Number	Percent	Number	Percent	
Any	998,696	0.30%	1,073,740	0.30%	
Resident-initiated contact	560,931	0.19%	694,308	0.21%	
Reported possible crime	383,674	0.13	412,694	0.13	
Reported non-crime emergency	259,485	0.09	249,595	0.09	
Reported non-emergency	~	~	286,859	0.10	
Block watch	117,969	0.05	98,499	0.04	
Other	105,856	0.04	49,544	0.02	
Traffic-accident contact	216,355	0.08%	232,308	0.08%	
Police-initiated contact	617,902	0.20%	593,005	0.18%	
Driver during a traffic stop	447,052	0.16	443,859	0.16	
Passenger during a traffic stop	223,034	0.08	186,564	0.07	
Street stop	131,084	0.05	148,721	0.06	
Arrested only	67,043	0.03	43,045	0.02	
Other	106,102	0.04	151,032	0.05	
~Not applicable.					

### **APPENDIX TABLE 3**

## Standard errors for table 3: Residents who experienced nonfatal threats or use of force during contacts with police, by demographic characteristics, 2015 and 2018

		2015		2018				
	Persons age 16 or older with any	Experienced th at any time du		Persons age 16 or older with any	Experienced th at any time du			
Demographic characteristic	police contact	Number	Percent	police contact 🥤	Number	Percent		
Total	998,696	74,277	0.13%	1,073,740	81,519	0.13%		
Sex								
Male	552,138	63,004	0.22%	594,950	68,306	0.22%		
Female	537,568	34,301	0.13	575,107	34,660	0.11		
Race/ethnicity								
White	742,753	51,452	0.14%	882,891	50,964	0.12%		
Black	252,583	33,752	0.54	242,562	34,872	0.54		
Hispanic	285,587	36,167	0.51	276,436	34,110	0.41		
Other	154,572	23,497	0.69	159,775	18,740	0.43		
Age								
16-17	94,639	12,478	1.03%	69,978	13,215	1.15%		
18-24	300,725	45,098	0.55	305,767	47,055	0.53		
25-44	431,294	48,030	0.23	510,340	54,278	0.23		
45-64	373,907	27,091	0.15	397,820	28,088	0.15		
65 or older	195,756	2,796	0.04	219,460	8,182	0.09		
Source: Bureau of Justice Statistics, I	,	,		219,100	0,102			

#### **APPENDIX TABLE 4**

Standard errors for table 4: Residents who experienced nonfatal threats or use of force during their most recent police-initiated contact or traffic-accident contact, by resident perception of force as necessary or excessive and demographic characteristics, 2015 and 2018

Most rece	nt police-initiate	Of those who		Most rece	nt police-initiate	d or traffic-accident cor Of those who experienced force-	
Number	Percent experienced force	Perceived force as necessary	Perceived force as excessive	Number	Percent experienced force	Perceived force as necessary	Perceived force as excessive
649,600	0.23%	3.20%	3.51%	586,249	0.21%	2.40%	2.99%
388,272	0.37%	3.66%	4.06%	380,828	0.35%	2.61%	3.45%
348,227	0.24	6.55	6.60	291,163	0.17	5.33	5.50
461,083	0.25%	4.70%	4.50%	485,669	0.20%	3.08%	3.35%
194,060	0.84	7.50	7.66	160,283	0.86	4.91	5.44
209,932	0.85	5.48	8.36	202,945	0.72	5.84	8.60
115,175	1.12	11.47	12.66	99,888	0.69	8.87	8.64
85,289	1.24%	26.39%	20.06%	60,941	1.43%	15.45%	15.61%
248,610	0.73	7.02	8.33	227,605	0.67	4.16	7.76
300,496	0.39	4.19	4.52	316,825	0.36	3.44	3.46
228,594	0.31	5.93	7.38	196,139	0.27	4.73	4.69
115,645	0.10	~	~	112,615	0.16	4.65	14.58
	Number 649,600 388,272 348,227 461,083 194,060 209,932 115,175 85,289 248,610 300,496	Most recent police-initiate   Number Percent experienced force   649,600 0.23%   388,272 0.37%   348,227 0.24   461,083 0.25%   194,060 0.84   209,932 0.85   115,175 1.12   85,289 1.24%   248,610 0.73   300,496 0.39   228,594 0.31	Number Percent experienced force Perceived force as necessary   649,600 0.23% 3.20%   388,272 0.37% 3.66%   348,227 0.24 6.55   461,083 0.25% 4.70%   194,060 0.84 7.50   209,932 0.85 5.48   115,175 1.12 11.47   85,289 1.24% 26.39%   248,610 0.73 7.02   300,496 0.39 4.19   228,594 0.31 5.93	Most recent police-initiated or traffic-accident contact   Of those who experienced force— Percent experienced force as necessary Perceived force as necessary Perceived excessive   649,600 0.23% 3.20% 3.51%   388,272 0.37% 3.66% 4.06%   348,227 0.24 6.55 6.60   461,083 0.25% 4.70% 4.50%   194,060 0.84 7.50 7.66   209,932 0.85 5.48 8.36   115,175 1.12 11.47 12.66   85,289 1.24% 26.39% 20.06%   248,610 0.73 7.02 8.33   300,496 0.39 4.19 4.52   228,594 0.31 5.93 7.38	Most recent police-initiated or traffic-accident contact Most recent contact Most recent of those who experienced force —   Percent experienced Perceived force as necessary Perceived excessive Perceived force as necessary Number   649,600 0.23% 3.20% 3.51% 586,249   388,272 0.37% 3.66% 4.06% 380,828   348,227 0.24 6.55 6.60 291,163   461,083 0.25% 4.70% 4.50% 485,669   194,060 0.84 7.50 7.66 160,283   209,932 0.85 5.48 8.36 202,945   115,175 1.12 11.47 12.66 99,888   85,289 1.24% 26.39% 20.06% 60,941   248,610 0.73 7.02 8.33 227,605   300,496 0.39 4.19 4.52 316,825   228,594 0.31 5.93 7.38 196,139	Most recent police-initiated or traffic-accident contact Most recent police-initiate   Percent experienced force Perceived perceived force as necessary Perceived excessive Perceived force as necessary Perceived experienced Perceived force Perceived forc	$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$

~Not applicable.

#### **APPENDIX TABLE 5**

Standard errors for table 5: Percent of residents who experienced nonfatal threats or use of force during their most recent police-initiated contact or traffic-accident contact, by resident race or ethnicity and type of force, 2018

		Race/ethnicity						
Type of force	Total	White	Black	Hispanic	Other			
Any	0.21%	0.20%	0.86%	0.72%	0.69%			
Threat of force	0.12	0.10	0.62	0.39	0.12			
Handcuffing	0.19	0.17	0.79	0.65	0.69			
Pushing/grabbing/ hitting/kicking	0.11	0.08	0.56	0.39	0.47			
Spraying/shocking	~	0.05	~	~	~			
Pointing/shooting gun	0.08	0.05	0.30	0.29	0.42			



The Bureau of Justice Statistics of the U.S. Department of Justice is the principal federal agency responsible for measuring crime, criminal victimization, criminal offenders, victims of crime, correlates of crime, and the operation of criminal and civil justice systems at the federal, state, tribal, and local levels. BJS collects, analyzes, and disseminates reliable statistics on crime and justice systems in the United States, supports improvements to state and local criminal justice information systems, and participates with national and international organizations to develop and recommend national standards for justice statistics. Jeffrey H. Anderson is the director.

This report was written by Erika Harrell and Elizabeth Davis. Grace Kena and Stephanie Mueller verified the report.

Theodore Robinson and Edrienne Su edited this report. Theodore Robinson produced this report.

December 2020, NCJ 255730



Office of Justice Programs Building Solutions • Supporting Communities • Advancing Justice www.ojp.gov