

**TABLE 9**  
**Trends in Harmfulness of Drugs as Perceived by 8th Graders**

How much do you think people risk harming themselves (physically or in other ways), if they . . .	Percentage saying great risk <sup>a</sup>															
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Try marijuana once or twice <sup>b</sup>	40.4	39.1	36.2	31.6	28.9	27.9	25.3	28.1	28.0	29.0	27.7	28.2	30.2	31.9	31.4	32.2
Smoke marijuana occasionally <sup>b</sup>	57.9	56.3	53.8	48.6	45.9	44.3	43.1	45.0	45.7	47.4	46.3	46.0	48.6	50.5	48.9	48.9
Smoke marijuana regularly <sup>b</sup>	83.8	82.0	79.6	74.3	73.0	70.9	72.7	73.0	73.3	74.8	72.2	71.7	74.2	76.2	73.9	73.2
Try synthetic marijuana once or twice <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Take synthetic marijuana occasionally <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Try inhalants once or twice <sup>d</sup>	35.9	37.0	36.5	37.9	36.4	40.8	40.1	38.9	40.8	41.2	45.6	42.8	40.3	38.7	37.5	35.8
Take inhalants regularly <sup>d</sup>	65.6	64.4	64.6	65.5	64.8	68.2	68.7	67.2	68.8	69.9	71.6	69.9	67.4	66.4	64.1	62.1
Take LSD once or twice <sup>e</sup>	—	—	42.1	38.3	36.7	36.5	37.0	34.9	34.1	34.0	31.6	29.6	27.9	26.8	25.8	23.8
Take LSD regularly <sup>e</sup>	—	—	68.3	65.8	64.4	63.6	64.1	59.6	58.8	57.5	52.9	49.3	48.2	45.2	44.0	40.0
Try ecstasy (MDMA, Molly) once or twice <sup>f</sup>	—	—	—	—	—	—	—	—	—	—	35.8	38.9	41.9	42.5	40.0	32.8
Take ecstasy (MDMA, Molly) occasionally <sup>f</sup>	—	—	—	—	—	—	—	—	—	—	55.5	61.8	65.8	65.1	60.8	52.0
Try salvia once or twice <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Take salvia occasionally <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Try cocaine once or twice <sup>d</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Take cocaine occasionally <sup>d</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Try crack once or twice <sup>d</sup>	62.8	61.2	57.2	54.4	50.8	51.0	49.9	49.3	48.7	48.5	48.6	47.4	48.7	49.0	49.6	47.6
Take crack occasionally <sup>d</sup>	82.2	79.6	76.8	74.4	72.1	71.6	71.2	70.6	70.6	70.1	70.0	69.7	70.3	70.4	69.4	68.7
Try cocaine powder once or twice <sup>d</sup>	55.5	54.1	50.7	48.4	44.9	45.2	45.0	44.0	43.3	43.3	43.9	43.2	43.7	44.4	44.2	43.5
Take cocaine powder occasionally <sup>d</sup>	77.0	74.3	71.8	69.1	66.4	65.7	65.8	65.2	65.4	65.5	65.8	64.9	65.8	66.0	65.3	64.0
Try heroin once or twice without using a needle <sup>g</sup>	—	—	—	—	60.1	61.3	63.0	62.8	63.0	62.0	61.1	62.6	62.7	61.6	61.4	60.4
Take heroin occasionally without using a needle <sup>g</sup>	—	—	—	—	76.8	76.6	79.2	79.0	78.9	78.6	78.5	78.5	77.8	77.5	76.8	75.3
Try OxyContin once or twice <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Take OxyContin occasionally <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Try Vicodin once or twice <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Take Vicodin occasionally <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Try Adderall once or twice <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Take Adderall occasionally <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Try bath salts (synthetic stimulants) once or twice <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Take bath salts (synthetic stimulants) occasionally <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Try cough/cold medicine once or twice <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Take cough/cold medicine occasionally <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Try one or two drinks of an alcoholic beverage (beer, wine, liquor) <sup>b</sup>	11.0	12.1	12.4	11.6	11.6	11.8	10.4	12.1	11.6	11.9	12.2	12.5	12.6	13.7	13.9	14.2
Take one or two drinks nearly every day <sup>b</sup>	31.8	32.4	32.6	29.9	30.5	28.6	29.1	30.3	29.7	30.4	30.0	29.6	29.9	31.0	31.4	31.3
Have five or more drinks once or twice each weekend <sup>b</sup>	59.1	58.0	57.7	54.7	54.1	51.8	55.6	56.0	55.3	55.9	56.1	56.4	56.5	56.9	57.2	56.4
Smoke one to five cigarettes per day <sup>c</sup>	—	—	—	—	—	—	—	—	26.9	28.9	30.5	32.8	33.4	37.0	37.5	37.0
Smoke one or more packs of cigarettes per day <sup>g</sup>	51.6	50.8	52.7	50.8	49.8	50.4	52.6	54.3	54.8	58.8	57.1	57.5	57.7	62.4	61.5	59.4
Use electronic cigarettes (e-cigarettes) regularly <sup>h</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Vape an e-liquid with nicotine occasionally <sup>c,i</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Vape an e-liquid with nicotine regularly <sup>c,i</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Vape marijuana occasionally <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Vape marijuana regularly <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Use JUUL occasionally <sup>k</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Use JUUL regularly <sup>k</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Smoke little cigars or cigarillos regularly <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Use smokeless tobacco regularly	35.1	35.1	36.9	35.5	33.5	34.0	35.2	36.5	37.1	39.0	38.2	39.4	39.7	41.3	40.8	39.5
Take dissolvable tobacco regularly <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Take snus regularly <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Take steroids <sup>l</sup>	64.2	69.5	70.2	67.6	—	—	—	—	—	—	—	—	—	—	—	—
Approximate weighted N =	17,400	18,700	18,400	17,400	17,500	17,900	18,800	18,100	16,700	16,700	16,200	15,100	16,500	17,000	16,800	16,500

Table continued on next page.

**TABLE 9 (cont.)**  
**Trends in Harmfulness of Drugs as Perceived by 8th Graders**

How much do you think people risk harming themselves (physically or in other ways), if they . . .	Percentage saying great risk <sup>a</sup>														2019–2020 change
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 <sup>1</sup>	2020	
Try marijuana once or twice <sup>b</sup>	32.8	31.1	29.5	29.5	28.2	26.0	24.1	23.0	23.0	22.8	22.0	20.3	22.2	21.7	-0.5
Smoke marijuana occasionally <sup>b</sup>	50.2	48.1	44.8	44.1	43.4	41.7	37.2	36.7	36.8	36.8	34.0	32.1	31.9	31.4	-0.5
Smoke marijuana regularly <sup>b</sup>	74.3	72.0	69.8	68.0	68.3	66.9	61.0	58.9	58.0	57.5	54.8	52.9	53.1	54.0	+0.9
Try synthetic marijuana once or twice <sup>c</sup>	—	—	—	—	—	24.4	24.2	23.9	26.0	27.5	23.0	22.2	26.5	25.7	-0.8
Take synthetic marijuana occasionally <sup>c</sup>	—	—	—	—	—	36.8	36.2	32.4	33.5	35.4	30.4	28.8	31.1	32.3	+1.2
Try inhalants once or twice <sup>d</sup>	35.9	33.9	34.1	35.5	34.7	34.2	33.7	34.5	33.7	32.0	31.5	29.6	25.4	27.2	+1.8
Take inhalants regularly <sup>d</sup>	61.9	59.2	58.1	60.6	59.0	59.0	56.7	55.3	54.1	52.1	50.0	46.8	43.1	50.7	+7.6 ss
Take LSD once or twice <sup>e</sup>	22.8	21.9	21.4	23.6	21.7	19.9	19.6	20.0	22.2	22.6	23.1	20.8	22.7	19.7	-3.0
Take LSD regularly <sup>e</sup>	38.5	36.9	37.0	38.6	37.8	35.0	34.5	33.7	37.0	36.8	37.9	36.4	40.0	38.4	-1.7
Try ecstasy (MDMA, Molly) once or twice <sup>f</sup>	30.4	28.6	26.0	27.0	25.4	23.6	24.1†	46.1	45.5	42.5	43.3	41.9	42.7	33.0	-9.6 sss
Take ecstasy (MDMA, Molly) occasionally <sup>f</sup>	48.6	46.8	43.9	45.0	43.7	41.0	42.1†	59.7	58.5	54.0	54.6	53.6	53.7	44.2	-9.5 sss
Try salvia once or twice <sup>c</sup>	—	—	—	—	—	9.5	8.5	—	—	—	—	—	—	—	—
Take salvia occasionally <sup>c</sup>	—	—	—	—	—	16.1	14.6	—	—	—	—	—	—	—	—
Try cocaine once or twice <sup>d</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	49.4	—
Take cocaine occasionally <sup>d</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	68.1	—
Try crack once or twice <sup>d</sup>	47.3	47.1	46.6	49.6	48.1	47.0	47.1	48.3	49.6	48.9	49.3	47.7	47.2	—	—
Take crack occasionally <sup>d</sup>	68.3	67.9	66.6	68.4	67.7	67.8	66.5	65.5	65.7	65.7	66.9	65.3	64.5	—	—
Try cocaine powder once or twice <sup>d</sup>	43.5	42.7	42.3	45.7	43.3	42.8	43.5	43.9	44.3	44.3	44.5	42.6	52.7	—	—
Take cocaine powder occasionally <sup>d</sup>	64.2	62.7	62.3	64.2	63.5	63.3	62.7	61.8	61.6	62.4	62.7	61.0	63.8	—	—
Try heroin once or twice without using a needle <sup>e</sup>	60.3	60.8	60.0	62.3	61.7	59.1	59.8	60.9	61.4	59.2	62.9	59.5	61.0	60.6	-0.5
Take heroin occasionally without using a needle <sup>e</sup>	76.4	75.5	74.0	76.7	75.9	75.1	73.4	73.2	72.7	70.3	74.7	72.1	70.5	73.1	+2.6
Try OxyContin once or twice <sup>c</sup>	—	—	—	—	—	21.9	19.9	22.1	20.2	21.3	21.0	20.8	22.4	18.7	-3.7
Take OxyContin occasionally <sup>c</sup>	—	—	—	—	—	35.3	32.6	34.4	32.5	33.5	32.6	32.5	35.5	34.0	-1.5
Try Vicodin once or twice <sup>c</sup>	—	—	—	—	—	17.5	15.0	18.4	16.9	18.3	17.1	16.1	21.8	19.6	-2.2
Take Vicodin occasionally <sup>c</sup>	—	—	—	—	—	29.4	26.2	28.2	26.7	28.8	26.7	25.9	30.6	29.2	-1.4
Try Adderall once or twice <sup>c</sup>	—	—	—	—	—	17.6	16.5	20.7	19.2	21.4	20.4	20.1	24.7	24.5	-0.1
Take Adderall occasionally <sup>c</sup>	—	—	—	—	—	29.9	28.3	32.5	32.0	35.9	33.8	34.0	32.0	32.2	+0.3
Try bath salts (synthetic stimulants) once or twice <sup>c</sup>	—	—	—	—	—	24.9	39.3	36.8	33.9	31.8	32.0	30.1	—	—	—
Take bath salts (synthetic stimulants) occasionally <sup>c</sup>	—	—	—	—	—	38.8	51.9	49.1	45.5	42.5	43.1	41.2	—	—	—
Try cough/cold medicine once or twice <sup>c</sup>	—	—	—	—	—	21.2	20.1	22.9	20.9	23.5	21.2	19.5	26.8	24.9	-1.9
Take cough/cold medicine occasionally <sup>c</sup>	—	—	—	—	—	38.8	37.3	37.9	37.3	38.6	35.2	34.5	36.8	34.9	-1.9
Try one or two drinks of an alcoholic beverage (beer, wine, liquor) <sup>b</sup>	14.9	13.5	14.4	14.9	14.5	13.9	13.7	14.8	15.3	14.7	14.2	13.6	15.6	9.8	-5.8 ss
Take one or two drinks nearly every day <sup>b</sup>	32.6	31.5	31.5	32.3	31.8	31.4	30.6	31.0	30.9	30.7	30.0	28.7	33.2	27.1	-6.0 s
Have five or more drinks once or twice each weekend <sup>b</sup>	57.9	57.0	55.8	57.2	58.4	58.2	55.7	54.3	53.9	53.4	53.7	52.3	55.6	49.3	-6.3 s
Smoke one to five cigarettes per day <sup>c</sup>	38.6	38.6	38.6	38.2	37.4	40.4	42.8	41.9	41.7	43.2	41.9	40.8	38.8	38.2	-0.6
Smoke one or more packs of cigarettes per day <sup>g</sup>	61.1	59.8	59.1	60.9	62.5	62.6	62.4	62.1	63.0	61.2	62.1	61.3	65.6	63.9	-1.7
Use electronic cigarettes (e-cigarettes) regularly <sup>h</sup>	—	—	—	—	—	—	—	14.5	18.5	21.3	20.3	22.1	—	—	—
Vape an e-liquid with nicotine occasionally <sup>c,i</sup>	—	—	—	—	—	—	—	—	—	—	18.3	16.9	21.3	28.0	+6.7 s
Vape an e-liquid with nicotine regularly <sup>c,i</sup>	—	—	—	—	—	—	—	—	—	—	32.7	32.4	43.6	53.1	+9.5 ss
Vape marijuana occasionally <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	36.4	—
Vape marijuana regularly <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	55.4	—
Use JUUL occasionally <sup>k</sup>	—	—	—	—	—	—	—	—	—	—	—	—	23.0	29.2	+6.2 sss
Use JUUL regularly <sup>k</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	37.9	+11.6 sss
Smoke little cigars or cigarillos regularly <sup>c</sup>	—	—	—	—	—	—	—	28.8	31.0	32.5	30.8	30.5	37.2	41.9	+4.7
Use smokeless tobacco regularly	41.8	41.0	40.8	41.8	40.8	37.8	36.2	34.5	36.6	35.1	34.8	34.3	40.9	37.3	-3.6
Take dissolvable tobacco regularly <sup>c</sup>	—	—	—	—	—	34.8	32.2	33.5	33.0	34.3	31.9	31.3	37.4	37.3	-0.1
Take snus regularly <sup>c</sup>	—	—	—	—	—	42.2	38.9	38.3	37.7	37.9	36.4	34.2	38.3	37.2	-1.1
Take steroids <sup>l</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Approximate weighted N = 16,100 15,700 15,000 15,300 16,000 15,100 14,600 14,600 14,400 16,900 15,300 14,000 6,800 3,100

Table continued on next page.

**TABLE 9 (cont.)**  
**Trends in Harmfulness of Drugs as Perceived by 8th Graders**

Source. The Monitoring the Future study, the University of Michigan.

Notes. Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . '—' indicates data not available. Any apparent inconsistency between the change estimate and the prevalence estimates for the two most recent years is due to rounding. \*† indicates that the question changed the following year.

\*Answer alternatives were: (1) No risk, (2) Slight risk, (3) Moderate risk, (4) Great risk, and (5) Can't say, drug unfamiliar.

†Beginning in 2012 data based on two thirds of  $N$  indicated.

‡Data based on one third of  $N$  indicated.

§Beginning in 1997, data based on two thirds of  $N$  indicated.

¶Data based on one of two forms in 1993–1996;  $N$  is one half of  $N$  indicated. Beginning in 1997, data based on one third of  $N$  indicated due to changes in questionnaire forms.

‡Beginning in 2014 data are based on the revised question which included "Molly,"  $N$  is one third of  $N$  indicated in 2014 and two thirds of  $N$  indicated in 2015. 2014 and 2015 data are not comparable to earlier years due to the revision of the question text.

§Beginning in 1999, data based on two thirds of  $N$  indicated due to changes in questionnaire forms.

¶E-cigarette data based on two thirds of  $N$  indicated. Little cigars or cigarillos data based on one third  $N$  indicated.

‡Data based on two forms in 1991 and 1992. Data based on one of two forms in 1993 and 1994;  $N$  is one half of  $N$  indicated.

†Percentages for all years reported here include respondents who replied "can't say, drug unfamiliar" in the denominator. The percentage for 2017 published in late 2017 and early 2018 did not include these respondents in the denominator.

‡Data based on two thirds of  $N$  indicated.

¶Drug prevalence results in 2019 combine results from paper-and-pencil surveys with those completed using electronic tablets. In 2019 students in a randomly-selected half of schools completed MTF surveys on paper-and-pencil and students in the other half completed the surveys using electronic tablets. Analysis of this randomized controlled trial demonstrated that these results did not significantly differ across survey mode (Miech, R.A., Couper, M.P., Heeringa, S. G., and Patrick M. E. Forthcoming. The Impact of Survey Mode on US National Estimates of Adolescent Drug Prevalence: Results from a Randomized Controlled Study, Addiction). Results for student attitudes and beliefs in 2019 are based on answers from electronic tablets only because these appear more susceptible to survey mode effects. Readers are cautioned that large changes in these results from 2018 to 2019 may stem from survey mode effects.