

**TABLE 1**  
**Trends in Harmfulness of Drugs as Perceived by 8th Graders**

<i>How much do you think people risk harming themselves (physically or in other ways), if they . . .</i>	<i>Percentage saying great risk <sup>a</sup></i>																	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Use 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	32.8	31.1
Use 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	50.2	48.1
Use 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	74.3	72.0
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	35.9	33.9
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	61.9	59.2
Try 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	22.8	21.9
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	38.5	36.9
Try ecstasy (MDMA, Molly) once or twice <sup>f</sup>	—	—	—	—	—	—	—	—	—	—	35.8	38.9	41.9	42.5	40.0	32.8	30.4	28.6
Take ecstasy (MDMA, Molly) occasionally <sup>f</sup>	—	—	—	—	—	—	—	—	—	—	55.5	61.8	65.8	65.1	60.8	52.0	48.6	46.8
Try cocaine once or twice <sup>d,o</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	43.5	42.7
Take cocaine occasionally <sup>d,o</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	64.2	62.7
Try heroin once or twice without using a needle <sup>e</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	60.3	60.8
Take heroin occasionally without using a needle <sup>e</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	76.4	75.5
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>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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**TABLE 1 (cont.)**  
**Trends in Harmfulness of Drugs as Perceived by 8th Graders**

<i>How much do you think people risk harming themselves (physically or in other ways), if they . . .</i>	Percentage saying great risk <sup>a</sup>																	
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
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	14.9	13.5
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	32.6	31.5
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	57.9	57.0
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	38.6	38.6
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	61.1	59.8
Vape marijuana occasionally <sup>m</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Vape marijuana regularly <sup>m</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Vape an e-liquid with nicotine occasionally <sup>c,j</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Vape an e-liquid with nicotine regularly <sup>c,j</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	41.8	41.0
Take dissolvable tobacco regularly <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Take snus regularly <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
<i>Approximate weighted N =</i>																		
	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	16,100	15,700

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**TABLE 1 (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>															2022-2023 change	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019p <sup>l</sup>	2019e <sup>l</sup>	2020	2021 <sup>n</sup>	2022		2023
Use marijuana once or twice <sup>b</sup>	29.5	29.5	28.2	26.0	24.1	23.0	23.0	22.8	22.0	20.3	19.6	22.2	§	18.8*	20.6	21.4	+0.8
Use marijuana occasionally <sup>b</sup>	44.8	44.1	43.4	41.7	37.2	36.7	36.8	36.8	34.0	32.1	28.8	31.9	§	28.2*	31.1	33.3	+2.2
Use marijuana regularly <sup>b</sup>	69.8	68.0	68.3	66.9	61.0	58.9	58.0	57.5	54.8	52.9	51.4	53.1	§	51.6*	53.6	54.4	+0.7
Try inhalants once or twice <sup>d</sup>	34.1	35.5	34.7	34.2	33.7	34.5	33.7	32.0	31.5	29.6	27.9	25.4	§	18.2*	20.0	20.1	+0.1
Take inhalants regularly <sup>d</sup>	58.1	60.6	59.0	59.0	56.7	55.3	54.1	52.1	50.0	46.8	45.5	43.1	§	37.1*	37.1	38.4	+1.3
Try LSD once or twice <sup>e</sup>	21.4	23.6	21.7	19.9	19.6	20.0	22.2	22.6	23.1	20.8	21.8	22.7	§	16.1*	17.9	13.7	-4.2 s
Take LSD regularly <sup>e</sup>	37.0	38.6	37.8	35.0	34.5	33.7	37.0	36.8	37.9	36.4	38.1	40.0	§	36.7*	35.9	29.4	-6.5 ss
Try ecstasy (MDMA, Molly) once or twice <sup>f</sup>	26.0	27.0	25.4	23.6	24.1‡	46.1	45.5	42.5	43.3	41.9	39.0	42.7	§	33.2*	36.2	36.0	-0.3
Take ecstasy (MDMA, Molly) occasionally <sup>f</sup>	43.9	45.0	43.7	41.0	42.1‡	59.7	58.5	54.0	54.6	53.6	50.2	53.7	§	48.0*	48.7	46.9	-1.7
Try cocaine once or twice <sup>d,o</sup>	42.3	45.7	43.3	42.8	43.5	43.9	44.3	44.3	44.5	42.6	43.4‡	52.7‡	§	43.8*	46.0	43.0	-3.0
Take cocaine occasionally <sup>d,o</sup>	62.3	64.2	63.5	63.3	62.7	61.8	61.6	62.4	62.7	61.0	60.8‡	63.8‡	§	63.9*	59.5	58.4	-1.1
Try heroin once or twice without using a needle <sup>e</sup>	60.0	62.3	61.7	59.1	59.8	60.9	61.4	59.2	62.9	59.5	59.0	61.0	§	53.4*	53.8	52.7	-1.1
Take heroin occasionally without using a needle <sup>e</sup>	74.0	76.7	75.9	75.1	73.4	73.2	72.7	70.3	74.7	72.1	69.1	70.5	§	67.8*	66.6	64.3	-2.3
Try OxyContin once or twice <sup>c</sup>	—	—	—	21.9	19.9	22.1	20.2	21.3	21.0	20.8	19.2	22.4	§	17.7*	17.2	19.8	+2.6
Take OxyContin occasionally <sup>c</sup>	—	—	—	35.3	32.6	34.4	32.5	33.5	32.6	32.5	31.0	35.5	§	29.6*	29.1	31.1	+2.1
Try Vicodin once or twice <sup>c</sup>	—	—	—	17.5	15.0	18.4	16.9	18.3	17.1	16.1	16.0	21.8	§	18.0*	18.3	19.5	+1.2
Take Vicodin occasionally <sup>c</sup>	—	—	—	29.4	26.2	28.2	26.7	28.8	26.7	25.9	25.3	30.6	§	23.9*	22.9	29.2	+6.2 ss
Try Adderall once or twice <sup>c</sup>	—	—	—	17.6	16.5	20.7	19.2	21.4	20.4	20.1	20.6	24.7	§	20.9*	20.5	24.0	+3.6
Take Adderall occasionally <sup>c</sup>	—	—	—	29.9	28.3	32.5	32.0	35.9	33.8	34.0	35.2	32.0	§	30.0*	28.1	29.1	+1.0

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**TABLE 1 (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>																2022-2023 change
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019p <sup>l</sup>	2019e <sup>l</sup>	2020	2021 <sup>n</sup>	2022	2023	
Try cough/cold medicine once or twice <sup>c</sup>	—	—	—	21.2	20.1	22.9	20.9	23.5	21.2	19.5	20.7	26.8	§	22.8*	24.5	27.3	+2.8
Take cough/cold medicine occasionally <sup>c</sup>	—	—	—	38.8	37.3	37.9	37.3	38.6	35.2	34.5	37.8	36.8	§	34.1*	33.7	36.7	+3.0
Try one or two drinks of an alcoholic beverage (beer, wine, liquor) <sup>b</sup>	14.4	14.9	14.5	13.9	13.7	14.8	15.3	14.7	14.2	13.6	13.4	15.6	§	10.1*	12.1	12.5	+0.4
Take one or two drinks nearly every day <sup>b</sup>	31.5	32.3	31.8	31.4	30.6	31.0	30.9	30.7	30.0	28.7	26.9	33.2	§	27.2*	29.5	28.7	-0.8
Have five or more drinks once or twice each weekend <sup>b</sup>	55.8	57.2	58.4	58.2	55.7	54.3	53.9	53.4	53.7	52.3	50.7	55.6	§	51.8*	51.9	52.4	+0.4
Smoke one to five cigarettes per day <sup>c</sup>	38.6	38.2	37.4	40.4	42.8	41.9	41.7	43.2	41.9	40.8	39.8	38.8	§	39.5*	35.5	36.2	0.8
Smoke one or more packs of cigarettes per day <sup>g</sup>	59.1	60.9	62.5	62.6	62.4	62.1	63.0	61.2	62.1	61.3	63.3	65.6	§	64.0*	61.9	58.5	-3.4
Vape marijuana occasionally <sup>m</sup>	—	—	—	—	—	—	—	—	—	—	—	—	§	33.8*	36.2	39.0	+2.8
Vape marijuana regularly <sup>m</sup>	—	—	—	—	—	—	—	—	—	—	—	—	§	52.7*	53.0	55.4	+2.4
Vape an e-liquid with nicotine occasionally <sup>c, j</sup>	—	—	—	—	—	—	—	—	18.3	16.9	21.7	21.3	§	23.2*	24.1	23.2	-0.8
Vape an e-liquid with nicotine regularly <sup>c, j</sup>	—	—	—	—	—	—	—	—	32.7	32.4	40.2	43.6	§	55.1*	53.2	50.2	-3.0
Smoke little cigars or cigarillos regularly <sup>c</sup>	—	—	—	—	—	28.8	31.0	32.5	30.8	30.5	35.9	37.2	§	42.8*	31.6	33.0	+1.4
Use smokeless tobacco regularly	40.8	41.8	40.8	37.8	36.2	34.5	36.6	35.1	34.8	34.3	37.1	40.9	§	37.6*	36.5	39.0	+2.5
Take dissolvable tobacco regularly <sup>c</sup>	—	—	—	34.8	32.2	33.5	33.0	34.3	31.9	31.3	32.0	37.4	§	36.7*	34.0	38.4	+4.4 s
Take snus regularly <sup>c</sup>	—	—	—	42.2	38.9	38.3	37.7	37.9	36.4	34.2	36.0	38.3	§	36.4*	33.7	35.7	+2.0
Approximate weighted N = 15,000 15,300 16,000 15,100 14,600 14,600 14,400 16,900 15,300 14,000 6,800 6,800 § 10,700 9,300 5,700																	

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**TABLE 1 (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.

§Estimates not presented due to insufficient data this year.

\*Comparison of 2021+ estimates with previous years may be subject to a survey mode effect in 2019. The size and direction of the mode effect (if any) is indicated by the difference between the estimates in the '2019p' and the '2019e' columns. The '2019p' column reports estimates based on students in the randomly-selected half of schools that used paper-and-pencil questionnaires (used in 2018 and all previous years). The '2019e' column reports estimates on the other half that used electronic data collection on devices connected to the internet (used in 2021 and all subsequent years).

<sup>a</sup>Answer alternatives were: (1) No risk, (2) Slight risk, (3) Moderate risk, (4) Great risk, and (5) Can't say, drug unfamiliar.

<sup>b</sup>Beginning in 2012 data based on two thirds of  $N$  indicated.

<sup>c</sup>Data based on one third of  $N$  indicated.

<sup>d</sup>Beginning in 1997, data based on two thirds of  $N$  indicated.

<sup>e</sup>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.

<sup>f</sup>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.

<sup>g</sup>Beginning in 1999, data based on two thirds of  $N$  indicated due to changes in questionnaire forms.

<sup>h</sup>E-cigarette data based on two thirds of  $N$  indicated. Little cigars or cigarillos data based on one third  $N$  indicated.

<sup>i</sup>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.

<sup>j</sup>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.

<sup>k</sup>Data based on two thirds of  $N$  indicated.

<sup>l</sup>The '2019p' column reports estimates from students in the randomly-selected half of schools that completed the 2019 questionnaire using paper and pencil. The '2019e' column reports estimates for the other half in schools that completed the 2019 questionnaire using web-connected electronic tablets. Estimates in italics indicate statistically significant ( $p < .05$ ) differences in 2019 between the two survey modes.

<sup>m</sup>Data based on one half of  $N$  indicated.

<sup>n</sup>Sample is decreased by as much as 50% for the following drugs due to survey question experiments: alcohol, inhalants, heroin, LSD, OxyContin, Vicodin, and cough/cold medicine.

<sup>o</sup>In 2019 and previous years the survey question asked about 'cocaine powder' and in 2020 forward it asked about 'cocaine'.