

TABLE 2
Trends in Harmfulness of Drugs as Perceived by 10th Graders

How much do you think people risk harming themselves (physically or in other ways), if they . . .

Percentage saying great risk ^a

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Use marijuana once or twice ^b	30.0	31.9	29.7	24.4	21.5	20.0	18.8	19.6	19.2	18.5	17.9	19.9	21.1	22.0	22.3	22.2	22.2	23.1
Use marijuana occasionally ^b	48.6	48.9	46.1	38.9	35.4	32.8	31.9	32.5	33.5	32.4	31.2	32.0	34.9	36.2	36.6	35.6	36.0	37.0
Use marijuana regularly ^b	82.1	81.1	78.5	71.3	67.9	65.9	65.9	65.8	65.9	64.7	62.8	60.8	63.9	65.6	65.5	64.9	64.5	64.8
Try inhalants once or twice ^d	37.8	38.7	40.9	42.7	41.6	47.2	47.5	45.8	48.2	46.6	49.9	48.7	47.7	46.7	45.7	43.9	43.0	41.2
Take inhalants regularly ^d	69.8	67.9	69.6	71.5	71.8	75.8	74.5	73.3	76.3	75.0	76.4	73.4	72.2	73.0	71.2	70.2	68.6	66.8
Try LSD once or twice ^e	—	—	48.7	46.5	44.7	45.1	44.5	43.5	45.0	43.0	41.3	40.1	40.8	40.6	40.3	38.8	35.4	34.6
Take LSD regularly ^e	—	—	78.9	75.9	75.5	75.3	73.8	72.3	73.9	72.0	68.8	64.9	63.0	63.1	60.8	60.7	56.8	55.7
Try ecstasy (MDMA, Molly) once or twice ^f	—	—	—	—	—	—	—	—	—	—	39.4	43.5	49.7	52.0	51.4	48.4	45.3	43.2
Take ecstasy (MDMA, Molly) occasionally ^f	—	—	—	—	—	—	—	—	—	—	64.8	67.3	71.7	74.6	72.8	71.3	68.2	66.4
Try cocaine once or twice ^{d,o}	59.1	59.2	57.5	56.4	53.5	53.6	52.2	50.9	51.6	48.8	50.6	51.3	51.8	50.7	51.3	50.2	49.5	49.8
Take cocaine occasionally ^{d,o}	82.2	80.1	79.1	77.8	75.6	75.0	73.9	71.8	73.6	70.9	72.3	71.0	71.4	72.2	72.4	71.3	70.9	71.1
Try heroin once or twice without using a needle ^e	—	—	—	—	70.7	72.1	73.1	71.7	73.7	71.7	72.0	72.2	70.6	72.0	72.4	70.0	70.5	70.8
Take heroin occasionally without using a needle ^e	—	—	—	—	85.1	85.8	86.5	84.9	86.5	85.2	85.4	83.4	83.5	85.4	85.2	83.6	84.2	83.1
Try OxyContin once or twice ^c	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Take OxyContin occasionally ^c	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Try Vicodin once or twice ^c	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Take Vicodin occasionally ^c	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Try Adderall once or twice ^c	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Take Adderall occasionally ^c	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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TABLE 2 (cont.)
Trends in Harmfulness of Drugs as Perceived by 10th Graders

<i>How much do you think people risk harming themselves (physically or in other ways), if they . . .</i>	Percentage saying great risk ^a																	
	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 ^c	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Take cough/cold medicine occasionally ^c	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Try one or two drinks of an alcoholic beverage (beer, wine, liquor) ^b	9.0	10.1	10.9	9.4	9.3	8.9	9.0	10.1	10.5	9.6	9.8	11.5	11.5	10.8	11.5	11.1	11.6	12.6
Take one or two drinks nearly every day ^b	36.1	36.8	35.9	32.5	31.7	31.2	31.8	31.9	32.9	32.3	31.5	31.0	30.9	31.3	32.6	31.7	33.3	35.0
Have five or more drinks once or twice each weekend ^b	54.7	55.9	54.9	52.9	52.0	50.9	51.8	52.5	51.9	51.0	50.7	51.7	51.6	51.7	53.3	52.4	54.1	56.6
Smoke one to five cigarettes per day ^c	—	—	—	—	—	—	—	—	28.4	30.2	32.4	35.1	38.1	39.7	41.0	41.3	41.7	43.5
Smoke one or more packs of cigarettes per day ^d	60.3	59.3	60.7	59.0	57.0	57.9	59.9	61.9	62.7	65.9	64.7	64.3	65.7	68.4	68.1	67.7	68.2	69.1
Vape marijuana occasionally ^m	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Vape marijuana regularly ^m	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Vape an e-liquid with nicotine occasionally ^{c,j}	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Vape an e-liquid with nicotine regularly ^{c,j}	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Smoke little cigars or cigarillos regularly ^c	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Use smokeless tobacco regularly	40.3	39.6	44.2	42.2	38.2	41.0	42.2	42.8	44.2	46.7	46.2	46.9	48.0	47.8	46.1	45.9	46.7	48.0
Take dissolvable tobacco regularly ^c	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Take snus regularly ^c	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
<i>Approximate weighted N =</i>																		
	14,700	14,800	15,300	15,900	17,000	15,700	15,600	15,000	13,600	14,300	14,000	14,300	15,800	16,400	16,200	16,200	16,100	15,100

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TABLE 2 (cont.)
Trends in Harmfulness of Drugs as Perceived by 10th Graders

<i>How much do you think people risk harming themselves (physically or in other ways), if they . . .</i>	Percentage saying great risk ^a															2022-2023 change		
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019p ^l	2019e ^l	2020	2021 ⁿ	2022			2023
Use marijuana once or twice ^b	20.5	19.9	19.3	17.2	15.7	15.2	15.8	16.4	14.8	13.9	14.1	15.2	§	16.9*	16.8	16.8	0.0	
Use marijuana occasionally ^b	32.9	30.9	30.1	26.8	25.1	23.9	24.7	24.4	21.9	21.4	20.6	21.0	§	22.6*	23.4	24.4	+1.0	
Use marijuana regularly ^b	59.5	57.2	55.2	50.9	46.5	45.4	43.2	44.0	40.6	38.1	39.5	39.6	§	41.0*	42.2	47.0	+4.8 sss	
Try inhalants once or twice ^d	42.0	42.5	42.4	42.4	43.0	43.1	43.1	40.7	37.9	38.6	39.7	36.1	§	30.4*	27.6	25.8	-1.8	
Take inhalants regularly ^d	66.8	67.1	66.2	66.1	65.9	64.7	63.1	59.7	57.7	57.6	57.5	55.0	§	52.3*	47.1	45.4	-1.7	
Try LSD once or twice ^e	34.9	33.9	34.2	34.7	34.7	34.5	36.4	34.4	31.6	33.8	32.9	33.3	§	27.6*	26.6	22.3	-4.3 s	
Take LSD regularly ^e	56.7	56.1	54.9	56.4	55.9	54.8	58.3	55.2	53.0	54.1	52.4	57.8	§	55.2*	51.5	46.5	-5.0 s	
Try ecstasy (MDMA, Molly) once or twice ^f	38.9	36.3	37.2	36.2	36.0‡	53.2	54.8	54.2	55.4	54.5	53.0	58.3	§	53.0*	47.8	47.3	-0.5	Table continued on next page.
Take ecstasy (MDMA, Molly) occasionally ^f	62.1	59.2	60.8	59.8	58.6‡	69.0	70.1	69.3	68.6	67.6	66.1	67.4	§	66.5*	59.8	60.3	+0.4	
Try cocaine once or twice ^{d,o}	50.8	52.9	53.0	53.4	54.5	54.1	54.8	54.6	52.5	52.6	53.7‡	62.3‡	§	55.3*	56.7	55.3	-1.4	
Take cocaine occasionally ^{d,o}	71.0	72.2	72.0	72.6	72.8	71.7	72.6	70.9	70.4	70.2	71.0‡	72.9‡	§	74.0*	70.2	69.6	-0.6	
Try heroin once or twice without using a needle ^e	72.2	73.0	72.9	72.6	73.2	72.6	74.1	73.3	72.2	71.4	73.6	75.6	§	73.2*	66.1	66.8	+0.7	
Take heroin occasionally without using a needle ^e	83.3	84.8	83.4	84.4	84.0	82.5	83.3	82.2	81.4	81.0	82.6	81.8	§	81.8*	77.0	76.4	-0.6	
Try OxyContin once or twice ^c	—	—	—	30.9	29.4	29.7	29.9	28.7	27.8	29.6	25.0	31.4	§	27.6*	29.7	26.6	-3.1 s	
Take OxyContin occasionally ^c	—	—	—	48.3	44.7	44.4	43.7	41.4	41.3	43.9	41.5	45.8	§	41.3*	43.5	39.5	-4.0 s	
Try Vicodin once or twice ^c	—	—	—	23.2	21.0	22.5	24.1	21.8	22.1	23.2	19.7	28.2	§	26.1*	27.5	24.3	-3.2 s	
Take Vicodin occasionally ^c	—	—	—	40.3	36.0	36.4	35.4	32.6	32.0	34.8	30.5	38.6	§	32.6*	35.2	31.1	-4.1 s	
Try Adderall once or twice ^c	—	—	—	19.7	17.6	22.2	22.9	22.5	21.6	23.2	22.3	29.4	§	25.9*	28.5	27.9	-0.6	
Take Adderall occasionally ^c	—	—	—	34.3	30.5	37.0	37.0	35.8	36.4	39.8	39.1	38.8	§	38.1*	37.6	32.8	-4.8 ss	

TABLE 2 (cont.)
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How much do you think people risk harming themselves (physically or in other ways), if they . . .	Percentage saying great risk ^a																2022-2023 change
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019p ^l	2019e ^l	2020	2021 ⁿ	2022	2023	
Try cough/cold medicine once or twice ^c	—	—	—	23.6	21.6	22.9	24.0	24.0	21.8	22.1	22.3	31.1	§ 27.9*	29.3	26.8	-2.6	
Take cough/cold medicine occasionally ^c	—	—	—	40.4	37.3	38.3	38.2	37.6	36.4	37.2	37.9	39.3	§ 37.0*	38.7	36.5	-2.3	
Try one or two drinks of an alcoholic beverage (beer, wine, liquor) ^b	11.9	11.9	12.3	11.3	11.3	11.6	12.4	13.3	12.5	13.0	13.6	13.4	§ 13.2*	12.2	12.5	+0.3	
Take one or two drinks nearly every day ^b	33.8	33.1	32.9	31.8	30.6	31.3	31.2	32.2	30.9	30.3	31.0	33.7	§ 34.7*	31.4	34.0	+2.6	
Have five or more drinks once or twice each weekend ^b	54.2	54.6	55.5	52.8	52.3	54.0	54.5	54.5	52.0	51.8	52.6	53.3	§ 54.2*	51.4	53.7	+2.3	
Smoke one to five cigarettes per day ^c	42.8	41.4	44.8	49.1	47.7	52.0	52.9	53.0	50.0	49.9	50.0	47.7	§ 45.8*	45.7	44.5	-1.2	
Smoke one or more packs of cigarettes per day ^g	67.3	67.2	69.8	71.6	70.8	72.0	72.9	71.5	69.8	69.6	73.2	72.8	§ 72.7*	71.0	69.2	-1.8	
Vape marijuana occasionally ^m	—	—	—	—	—	—	—	—	—	—	—	—	§ 28.7*	30.0	32.3	+2.3	
Vape marijuana regularly ^m	—	—	—	—	—	—	—	—	—	—	—	—	§ 42.9*	43.1	47.4	+4.4 s	
Vape an e-liquid with nicotine occasionally ^{c,j}	—	—	—	—	—	—	—	—	17.0	17.9	22.7	18.4	§ 22.8*	22.7	25.5	+2.8 s	
Vape an e-liquid with nicotine regularly ^{c,j}	—	—	—	—	—	—	—	—	30.0	31.3	40.7	39.2	§ 52.6*	51.5	57.2	+5.7 sss	
Smoke little cigars or cigarillos regularly ^c	—	—	—	—	—	31.0	34.9	35.3	34.0	34.9	39.1	45.3	§ 45.6*	36.6	37.1	+0.5	
Use smokeless tobacco regularly	44.7	43.7	45.7	42.9	40.0	39.9	42.5	43.0	40.7	41.0	44.5	45.4	§ 43.8*	44.1	43.4	-0.7	
Take dissolvable tobacco regularly ^c	—	—	—	33.3	31.3	32.0	35.6	34.2	32.7	33.2	32.9	41.7	§ 38.6*	37.5	36.7	-0.8	
Take snus regularly ^c	—	—	—	41.0	38.9	38.8	41.8	39.9	38.1	39.8	39.0	43.2	§ 38.8*	37.8	36.6	-1.3	
<i>Approximate weighted N =</i>	15,900	15,200	14,900	15,000	12,900	13,000	15,600	14,700	13,500	14,300	7,000	7,000	§ 11,000	11,200	8,100	0.0	

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TABLE 2 (cont.)
Trends in Harmfulness of Drugs as Perceived by 10th 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).

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

^bBeginning in 2012 data based on two thirds of N indicated.

^cData based on one third of N indicated.

^dBeginning in 1997, data based on two thirds of N indicated.

^eData 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.

^fBeginning 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.

^gBeginning in 1999, data based on two thirds of N indicated due to changes in questionnaire forms.

^hE-cigarette data based on two thirds of N indicated. Little cigars or cigarillos data based on one third N indicated.

ⁱData 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.

^jPercentages 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.

^kData based on two thirds of N indicated.

^lThe '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.

^mData based on one half of N indicated.

ⁿSample 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.

^oIn 2019 and previous years the survey question asked about 'cocaine powder' and in 2020 forward it asked about 'cocaine'.