

KidsHealth® KidsPoll—Tobacco Poll: Summary of Findings

KidsHealth® KidsPoll is collaboration among the Nemours Foundation/KidsHealth, the Department of Health Education and Recreation at Southern Illinois University Carbondale, the National Association of Health Education Centers, and participating health education centers. The purpose is to gather information (opinions, attitudes, and feelings etc.) about current health issues from children. The information is gathered using handheld data collection devices from children ages 9 to 13 as they attend classes in the health education centers. The information is shared with educators, caregivers, health care organizations, the media, and other interested parties at national and local levels. The goal is to provide insightful information that will enable them to develop programs to help children to make healthy life decisions, prevent disease and injury, and understand their bodies. This poll focused on issues related to tobacco.

Individual Demographics

Individual-level information was collected anonymously from each child who participated.

- 1,433 children
- 51% girls, 49% boys
- 9 to 13 (average age 10.5)
- 12 centers participated in this poll:
 - Alice Aycock Poe Center for Health Education – Raleigh, NC
 - CDC-Global Health Odyssey Museum – Atlanta, GA
 - Children’s Health Education Center – Milwaukee, WI
 - HealthSpace Cleveland – Cleveland, OH
 - HealthWorks! Kids Museum – South Bend, IN
 - Health World Children’s Museum – Barrington, IL
 - Kansas Learning Center for Health – Halstead, KS
 - Robert Crown Center for Health Education – Hinsdale, IL
 - Ruth Lilly Health Education Center – Indianapolis, IN
 - Saint Joseph Mercy Health Exploration Station – Canton, MI
 - Susan P. Byrnes Health Education Center – York, PA
 - Weller Health Education Center – Easton, PA

School Demographics

School-level information was not collected from each child but is based on statistics for the schools.

- 38 schools
- The schools participating averaged: 54% White, 18% Black, 24% Hispanic, 3% Asian/Pacific, 1% Native American
 - 48% of the schools had student bodies that were 0% to 33% Black/Hispanic/Asian/Native American combined
 - 20% of the schools had student bodies that were 33% to 67% of these groups
 - 32% of the schools had student bodies that were 67% to 100% of these groups
- 43% students in participating schools qualified for free or reduced lunch
 - 39% of the schools had 0% to 33% of their student body qualifying for free or reduced lunch
 - 42% of the schools had 33% to 67% of their student body qualifying for free or reduced lunch
 - 19% of the schools had 67% to 100% of their student body qualifying for free or reduced lunch

The U.S. Census Bureau and the U.S. Department of Education use a measure of city size and location called a Metropolitan Statistical Area (MSA). The categories for MSA are:

- *Large city center = center of an MSA city with a population $\geq 250,000$*
 - *Midsized city center = center of an MSA city with a population $< 250,000$*
 - *Large city fringe = urban fringe of a large MSA city*
 - *Midsized city fringe = urban fringe of a midsized MSA city*
 - *Large town = not within an MSA with a population $\geq 25,000$*
 - *Small town = not within an MSA with a population $2,500 < X < 25,000$*
 - *Rural outside = not within an MSA with a population $< 2,500$*
 - *Rural inside = within an MSA with a population $< 2,500$*
- Of the participating schools: 44% large city center, 15% mid-size city center, 9% large city fringe, 10% midsized city fringe, and 22% rural inside MSA
 - Average school size: 673
 - 44% enrollment of $250 < X < 500$
 - 34% enrollment of $500 < X < 800$
 - 0% enrollment of $800 < X < 1,000$
 - 22% enrollment of $\geq 1,000$

Significant Demographic Associations

- There was a high correlation between the proportion of schools with more non-white students and the proportion receiving lunch assistance ($r = 0.83$).

Statistically Significant Findings – Overall

- How many people regularly smoke inside your house?
 - A. None
 - B. One
 - C. Two
 - D. More than two

Over one third of the respondents responded that there was someone who smokes at home: 18%, one person; 9%, two people; and 11%, three or more people. Children who said that they know several peers who have tried smoking were also more likely to be from homes where someone smoked (see table). Children who replied that they are never spoken to about not smoking were also more likely to be from homes where someone is smoking (see table).

- How many kids you know have tried smoking or chew tobacco?
 - A. Almost no one
 - B. Some
 - C. About half
 - D. Most
 - E. Almost everyone

About two thirds of respondents said that almost none of the kids they know have tried smoking. Another 23% replied that some of the kids that they know have tried smoking or chew tobacco, while about 5% each said half, most, or everyone. As expected, 12- and 13-year-olds were more likely to respond using the choice of half or more of the kids they know have tried smoking (9=11%, 10=11%, 11=13%, 12/13=21%). Children who have a family member who smokes were also more likely to respond that half or more of their peers smoke (no=10%, yes=21%). Children who said parents never talk to them about smoking are the most likely to say that half or more of their peers smoke (never=22%, once/twice=11%, once-in-a-while=8%, monthly or more=17%). There were no differences by gender.

- How often has someone in your family talked to you about not smoking or chewing tobacco?
 - A. Never
 - B. Once or twice
 - C. Once in a while – but not every month
 - D. Every month – but not every week
 - E. Every week

Almost equal numbers report they are spoken to never (23%), once or twice (24%), once-in-a-while (28%), and monthly/weekly (10% + 15%). Kids who have a family member who smokes are more likely to say they are spoken to never (no=19% v. 29%) and weekly (no=13% v. yes=17%). Likewise, kids who say half or more of their friends have tried smoking are also more likely to say they are spoken to never and weekly (see table). There no differences by age or gender.

- Teens who smoke are:
 - A. Very popular
 - B. Sort of popular
 - C. Sort of unpopular
 - D. Very unpopular

Three fourths of all respondents said teens who smoke are very or sort of unpopular. Older children were somewhat more likely to respond that teens who smoke are very or sort of popular (9=19%, 10=26%, 11=29%, 12/13=27%). In addition, those who said many of their peers were smoking were more likely to believe teens who smoke are very or sort of popular (none=23%, some=27%, half or more=37%). There were no differences based on gender, having a family member who smokes, or how often family talks to the child about smoking.

- Of the following choices, what is the main reason kids try smoking?
 - A. Other kids are doing it
 - B. They want to be like adults they know
 - C. They just want to see what its is like
 - D. They have noting else to do
 - E. They think it will make them popular

A large majority of kids (61%) thought that the primary reason for smoking experimentation is the pursuit of *popularity*. The second most common choice (22%) was *other kids are doing it*. Boys were somewhat more apt to name *popularity* as the main reason kids try smoking (boys=62% v. girls=59%), while girls were more likely to say it's because *other kids are doing it* (boys=19% v. girls=26%). Younger children were more likely to name *popularity* (9=69%, 10=69%, 11=56%, 12/13=44%), while older children said *other kids are doing it, to see what it's like, or nothing else to do*. Children with family members who smoke are less likely to respond by using the option that *other kids are doing it* (no=24% v. yes=19%), but slightly more apt to choose *to be like adults they know* (no=3% v. yes=6%). Interestingly, the more peers that a child said have tried smoking, the less likely he or she was to think *popularity* is the main reason to try it (none=63%, some=58%, half or more=53%). The pattern based on how often family talk to kids about smoking was difficult to interpret.

- Of the following choices, what is the best way to keep kids from smoking or chewing tobacco?
 - A. Have a nurse or doctor talk to them
 - B. Teach lessons at school
 - C. Show messages against it on TV
 - D. Let them learn from their own experiences
 - E. Give them other fun things to do

When asked the best way to prevent smoking, 29% said *give them other fun things to do*. This was closely followed by *having a nurse/doctor talk to them* (23%) and *let them learn on their own* (22%). Girls were somewhat more likely to name *nurse/dr* (boys=21% v. girls=25%). In general, younger children also favored *nurse/doctor* and *school lessons*, while older kids *learn own their own* (see table). Children with a family member who smoked were more likely to respond using *let them learn on their own* (no=18% v. yes=27%) and less likely to choose *school*

lessons (no=16% v. yes=13%) or *TV messages* (no=14% v. yes=10%). The more peers children said that they knew have tried smoking, the more likely they were to respond with *let them learn on their own* and the less likely they were to choose *school lessons* or *TV messages* will help (see table). There were no differences based on how often family talks to kids about smoking.

- If your best friend tried smoking, how likely would you be to try smoking?
 - A. Very likely
 - B. Sort of likely
 - C. Sort of unlikely
 - D. Very unlikely

Only 12% of all the respondents said they would be sort of or very likely to try smoking if their best friend did. Age as well as family and peer variables all seem to affect likelihood of smoking. Older kids responded that they were more likely to be tempted (very or sort of likely) if a best friend smoked (9=7%, 10=9%, 11=12%, 12/13=20%) as well as children with family members who smoke (no=10% v. yes=16%). Additionally, the more peers that a respondent said that they know who smoke, the more temptation (none=6%, some=20%, half or more=30%). Children whose family never talk to them about smoking were the most inclined to say they would be very likely to smoke if their best friend did (never=15%, once/twice=5%, once-in-a-while=3%, monthly+=4%).

- How often do you smoke or chew tobacco?
 - A. Never
 - B. I tried it once
 - C. Once in a while – but not every month
 - D. Every month – but not every week
 - E. Every week

Five percent of the respondents responded that they smoke with some regularity: 3% weekly, 1% monthly, and 1% once in a while. Another 10% say they have tried it once. Gender, age, and family and peer variables all seem to affect likelihood of smoking. As observed elsewhere, being younger (9=92%, 10=87%, 11=85%, 12/13=76%) and female (boys=82% v. girls 89%) increase the likelihood of never having tried smoking. In addition, coming from a home with no smokers (no=90% v. yes=78%) and having few or no peers who smoke (none=93%, some=78%, half or more=60%) also provide some protection against smoking experimentation. Having a family who has talked at least once about not using tobacco also adds protection (never=76%, once/twice=85%, once in a while=91%, monthly or more=87%).

Other Findings Worth Highlighting

Another way of looking at the data is to calculate odds ratios for outcomes based on the predictive variables. To control for overlapping effects, the odds ratios were adjusted by including all the variables simultaneously in a logistic regression model. For ease of interpretation, both outcome variables (*likely to try smoking if best friend did*, and *smoking experience*) and three of the predictor variables (*smokers at home*, *family talks*, and *likelihood of smoking with best friend*) were collapsed into dichotomous variables. Each level of each variable has a comparison level. For example, boys are 1.4 times more likely (very + somewhat) than girls to say they would try smoking if their best friend did.

	Likely to try smoking if best friend did (prediction)	Have tried smoking (historical admission)
Boy	1.4x	2.1x
Girl	comparison level	comparison level
12/13 years old	2.4x	3.1x
11 years old	1.8x*	1.8x*
10 years old	1.2x*	1.6x*
9 years old	comparison level	comparison level
Smoker at home	1.2x	2.2x
No smoker at home	comparison level	comparison level
Family talk to once or more	2.1x	1.8x
never	comparison level	comparison level
Half or more of peers have tried	5.4x	5.9x
Some peers of tried	3.7x	2.4x
Almost none	comparison level	comparison level
Likely to try if best friend did	n/a	5.7x
Unlikely to try if best friend did	n/a	comparison level

* odds ratio NOT statistically significant at $p < 0.05$

From these odds ratios, it can be noted that all the variables have some degree of effect on smoking behavior. Knowing or believing that several peers have tried smoking has the greatest effect on risk for smoking. The high odds ratio for smoking based on *the likelihood of smoking if a best friend did* may point to an intuitive sequence. Alternatively, it could be interpreted to mean that kids who have tried smoking were searching for an explanation for their behavior. Since we did not ask this question before they tried smoking we cannot be sure.

for additional information, contact:
 Stephen L. Brown, PhD
 Health Education and Recreation
 Southern Illinois University
 Mailcode 4632
 Carbondale, IL 62901-4632
 (618) 453-1863
slbrown@siu.edu