



Child and Teen Tobacco Use

The good news: The number of younger Americans who smoke has been going down since the late 1990s.

The bad news: The rates of cigarette smoking among high school juniors and seniors are still higher than those of adults.

By 12th grade, about half the smokers had tried to quit at least once in the past year. On top of that, about 1 in 8 high school boys uses some form of spit or other type of smokeless tobacco. More than 2% of high school girls use spit or smokeless tobacco. Cigars and other forms of combustible tobacco (tobacco that is burned and smoked) are also commonly used by high school teens. (There's more on this in the section called "Other forms of tobacco favored by young people.")

Children and teens are easy targets for the tobacco industry. They're often influenced by TV, movies, the Internet, advertising, and by what their friends do and say. They don't realize what a struggle it can be to quit. And having cancer, emphysema, blindness, or impotence may not seem like real concerns — kids and teens don't think much about future health outcomes.

Here we talk about tobacco use among children and teens. We also give some tips for parents, teachers, and other adults who want to keep their kids tobacco-free.

Facts about kids and tobacco

Almost all smokers start while they're young

In 2011, 19% of high school girls and 28% of high school boys used some form of tobacco at least one day in the month before the survey. Studies have found that nearly all first use of tobacco takes place before high school graduation.

According to the 2012 Surgeon General's Report, very few people start smoking after age 25. Nearly 9 out of 10 adult smokers started by age 18; 99% started by age 26.

The younger you are when you begin to use tobacco, the more likely you are to use it when you are an adult. And people who start regularly using tobacco when they are younger are more likely to have trouble quitting than people who start later in life.

This means if we can keep kids tobacco free until age 18, most will never start using it.

Kids who smoke have smoking-related health problems

Cigarette smoking causes serious health problems in children and teens. Regular teen smokers report problems such as:

- Coughing spells
- Shortness of breath, even when not exercising
- Wheezing or gasping
- More frequent headaches
- Increased phlegm (mucus)
- Respiratory illnesses that are worse and happen more often
- Worse cold and flu symptoms
- Reduced physical fitness
- Poor lung growth and function
- Worse overall health
- Addiction to nicotine

As they get older, teens who continue to smoke can expect problems like:

- Gum disease and tooth loss
- Chronic lung diseases, like emphysema and bronchitis, which limit exercise and activity
- Hearing loss
- Vision problems, such as macular degeneration, which can lead to blindness
- Blood vessel disease, which can lead to heart attacks or strokes at a young age

Each day, nearly 4,000 kids under the age of 18 try their first cigarette and another 1,000 become regular, daily smokers. About one third of these kids will die prematurely from a smoking-related disease.

Most young smokers are addicted and find it hard to quit

Most young people who smoke regularly are already addicted to nicotine. In fact, they have the same kind of addiction as adult smokers. According to the 2012 Surgeon General's Report:

“Of every three young smokers, only one will quit, and one of those remaining smokers will die from tobacco-related causes. Most of these young people never considered the long-term health consequences associated with tobacco use when they started smoking; and nicotine, a highly addictive drug, causes many to continue smoking well into adulthood, often with deadly consequences.”

Most teen smokers say that they would like to quit and many have tried to do so without success. Those who try to quit smoking report withdrawal symptoms much like those reported by adults.

Tobacco use is linked to other harmful behaviors

Research has shown that teen tobacco users are more likely to use alcohol and illegal drugs than are non-users. Cigarette smokers are also more likely to get into fights, carry weapons, attempt suicide, suffer from mental health problems such as depression, and engage in high-risk sexual behaviors.

Spit or smokeless tobacco use is also a big problem among kids

Spit or smokeless tobacco is a less lethal, but still unsafe, alternative to smoking. There are many terms used to describe tobacco that is put into the mouth, such as spit, spitless, oral tobacco, and chewing or snuff tobacco.

The use of spit or smokeless tobacco by any name can cause:

- Cancers of the mouth
- Cancers of the pharynx (throat) and larynx (voice box)
- Cancers of the esophagus (swallowing tube) and stomach
- Cancer of the pancreas
- Receding gums and gum disease, which can worsen to the point that the teeth fall out
- Pre-cancerous spots in the mouth, called leukoplakia
- Nicotine addiction

There is also a link to heart disease and stroke. And research has shown that teens who use spit or other oral tobacco are more likely to become smokers than non-users.

Smoking bans mean more promotion of spit or smokeless tobacco

Unfortunately, the new smoking bans in many states may have an unintended effect on the use of spit and other smokeless tobacco. As recommended by the Centers for Disease and Prevention (CDC), many schools no longer allow students, staff, parents, or visitors to smoke on school grounds, in school vehicles, or at school functions. In light of bans

like this, tobacco companies are more strongly marketing their smokeless tobacco products. Many of these new tobacco products are being advertised as more discreet alternatives to smoking in places where smoking is not allowed.

Using spit or smokeless tobacco to quit smoking

Some companies promote using spit or smokeless tobacco as a way to help quit smoking, but there's no proof that spit tobacco or any other oral tobacco products help smokers quit smoking. Unlike US Food and Drug Administration (FDA)-approved standard treatments that have been proven to work, such as nicotine replacement, anti-depressants, nicotine receptor blockers, and behavioral therapy, oral tobacco products have not been tested to see if they can help a person stop smoking.

Look at the numbers

Tobacco use in middle school students

The most recent numbers on tobacco use among US middle school students come from a 2011 survey by the CDC. (Middle school includes children in grades 6, 7, and 8.)

- More than 7% of middle school students reported using some form of tobacco – cigarettes, spit or other oral tobacco, cigars, pipes, and flavored cigarettes like bidis or kreteks – at least once in the past 30 days.
- Over 4% of the students had smoked cigarettes, and 3.5% had smoked cigars. About 2% had used spit or other smokeless tobacco. Around 2% had smoked pipes and the same number had smoked bidis (about 2%). A little over 1% had smoked kreteks.
- Boys (about 10%) were more likely than girls (about 7%) to use some form of tobacco.

Tobacco use in high school students

The most recent tobacco numbers for high school students come from the 2011 CDC Youth Risk Behavior Survey and other CDC surveys. Keep in mind that these studies are done with students who are still in school. Those who drop out have higher rates of smoking and tobacco use.

- Nationwide, about 23% of high school students reported using some type of tobacco (cigarette, cigar, pipe, bidi, kretek, or smokeless tobacco) on at least 1 of the 30 days before the survey.
- On average, about 1 out of 5 students (18%) smoked cigarettes. Girls (16%) were less likely to smoke than boys (20%). White students (22%) were more likely to smoke than black (14%), or Hispanic/Latino (15%) students.

- About 13% of high school students had smoked cigars in the last 30 days. Male students (18%) were more likely to smoke cigars than female students (8%).
- About 8% of high school students reported using spit or other smokeless tobacco at least once in the 30 days before the survey. About 13% of all the boys and about 2% of all the girls surveyed had used some form of smokeless tobacco.
- About half of all the school students who reported that they still smoked had tried to quit at least once during the year before.
- Other tobacco use among high school students included pipes (about 4%), bidis (about 2%), and kreteks (about 2%).

Other forms of tobacco favored by young people

Kreteks and bidis

Clove and other flavored cigarettes are used mostly by younger smokers. They are nearly ideal in design as a “trainer cigarette” — giving kids another way to experiment with tobacco and get addicted to nicotine. The false image of these products as clean, natural, and safer than regular cigarettes seems to attract some young people who might otherwise not start smoking. But they are not safer than cigarettes, and each has its own additional problems.

New federal laws banned flavored cigarettes as of October 2009; it’s not illegal to have or smoke them, but it is illegal to sell them in the US. They can still be found in online shops hosted from other countries. US tobacco companies are working around this ban by making flavored small cigars (see the next section) as a replacement product.

Clove cigarettes (kreteks)

Clove cigarettes, also called kreteks (**kree**-teks), are a tobacco product with the same health risks as cigarettes. They are mainly sold from Indonesia or other Southeast Asian countries. Kreteks contain 60% to 70% tobacco and 30% to 40% ground cloves, clove oil, and other additives. They deliver more nicotine, carbon monoxide, and tar than regular cigarettes.

Kretek smokers have higher risks of asthma and other lung diseases than non-smokers. Kreteks can cause lung problems right away, such as lower oxygen levels, fluid in the lungs, and inflammation. Regular kretek smokers have up to 20 times the risk for abnormal lung function (blocked airways or poor oxygen uptake) compared with non-smokers. But kretek users often have the mistaken notion that smoking clove cigarettes is a safe alternative to smoking tobacco — this is not true.

Flavored cigarettes (bidis)

Flavored cigarettes, called *bidis* or *beedies*, are mainly sold from India or other Southeast Asian countries. They have become popular with young people in the United States in recent years. This is in part because they are sold in candy-like flavors such as chocolate, cherry, strawberry, licorice, and orange. Some people think they are safer and more natural than regular cigarettes. They tend to cost less than regular cigarettes and they give the smoker a quick buzz due to the high levels of nicotine.

Bidis are tobacco hand-rolled in a tendu or temburi leaf (plants native to Asia) and tied with colorful strings on the ends. Even though bidis contain less tobacco than regular cigarettes, they deliver 3 to 5 times more nicotine than regular cigarettes. They are unfiltered. And because they are thinner than regular cigarettes, they require about 3 times as many puffs per cigarette.

Bidis appear to have all of the same health risks of regular cigarettes, if not more. Bidi smokers have much higher risks of heart attacks, heart disease, emphysema, chronic bronchitis, and some cancers than non-smokers.

Cigars

Cigars are often thought to be less harmful, less addictive, and more stylish than cigarettes — though this is not true. Since 1998, small cigars have been the fastest growing product on the cigar market. They look much the same as cigarettes except for their color, and are also sold in packs.

Because they are cigars, they are not taxed as much or regulated the way cigarettes are. This makes them cheaper and easier for kids to get. Since the widespread use of small cigars is fairly recent, most surveys haven't asked about them separately from large cigars. But a 2010 study of 12th graders found that 30% of boys and 16% of girls had smoked small cigars in the past year.

Another appeal to youth is the flavorings commonly used in small cigars. Fruit, candy, and chocolate flavors attract kids. US laws have made flavored cigarettes illegal, which seems to have prompted some to use flavored small cigars instead. It's expected that the small and flavored cigar problem will get even worse as tobacco companies take advantage of the lack of regulation of these products.

Cigars are just as addictive and deadly as cigarettes. The smaller ones are often inhaled and smoked every day, just like cigarettes. Even when cigar smoke is not inhaled, smokers are breathing cigar smoke from the air around them. It's no wonder that cigars cause many of the same types of cancer and other illnesses as cigarettes.

You can learn more about cigars and the ways tobacco companies are using them to get around tobacco taxes and regulations in our document called *Cigar Smoking*.

Hookahs (water pipes)

Hookah is also called narghile (**nar**-guh-lee) smoking. It started in Asia and the Middle East. It involves burning tobacco that has been mixed with flavors such as honey, molasses, or dried fruit in a water pipe and inhaling the flavored smoke through a long hose. Usually, the tobacco mixture, which is called shisha (**she**-shuh), is heated using charcoal. Hookah smoking is usually a social event which allows the smokers to spend time together and talk as they pass the pipe around. It's becoming more and more popular among younger people in Western countries. A 2011 study found that 26% of high school students surveyed had used a hookah, and about 11% had smoked one in the past month. For young people, hookahs are a popular and socially acceptable way to smoke tobacco.

Hookahs are marketed as being a safe alternative to cigarettes. This claim is false. The water does not filter out the toxins. In fact, hookah smoke has been shown to contain concentrations of toxins, such as carbon monoxide, nicotine, tar, and heavy metals, that are as high or higher than those that are seen with cigarette smoke. People tested after hookah smoking have been found to have higher levels of carbon monoxide in their blood than those who had smoked a cigarette.

Several types of cancer, including lung cancer, have been linked to hookah smoking. Hookah is also linked to other unique risks not associated with cigarette smoking. For example, infectious diseases including tuberculosis (which can infect the lungs or other parts of the body), aspergillus (a fungus that can cause serious lung infections), and helicobacter (which can cause stomach ulcers) may be spread by sharing the pipe or through the way the tobacco is prepared.

What parents and other concerned adults can do

Keep kids from starting

Concerned parents may have more power over whether their children start using tobacco than they think they do. In a 2009 study, teens whose parents often talked to them about the dangers of smoking were about half as likely to smoke as those who didn't have these discussions with their parents. This held true no matter whether or not the parents were smokers themselves.

Here are some tips for parents to help them keep their kids tobacco-free:

- Remember that despite the impact of movies, music, the internet, and peers, **parents can be the greatest influence in their kids' lives.**
- Talk to your children about the risks of tobacco use — studies have shown that this works! If loved ones suffer with or died from tobacco-related illnesses, let your kids know. Let them know, for instance, that tobacco use strains the heart, damages the lungs, and can cause a lot of other problems, including cancer. Also mention what it

can do to the way a person looks and smells: smoking makes hair and clothes stink, causes bad breath, and stains teeth and fingernails. Spit and smokeless tobacco cause bad breath, stained teeth, tooth decay, tooth loss, and bone loss in the jaw.

- The children of parents who smoke are much more likely to smoke themselves. But even if you use tobacco, you can still make a difference. Your best move, of course, is to try to quit. Meanwhile, don't use tobacco around your children, don't offer it to them, and don't leave it where they can easily get it.
- Start talking about tobacco use when your children are 5 or 6 years old and continue through their high school years. Many kids start using tobacco by age 11. And many are addicted by age 14.
- Know if your kids' friends use tobacco. Talk about ways to say "no" to tobacco.
- Talk to your kids about the false glamorization of tobacco in the media, such as ads, movies, and magazines.

If you use tobacco yourself and don't want your children to start, know that you can still influence their decisions. You may even have more power, because you've been there. You can speak to your child firsthand about:

- How you got started and what you thought about it at the time
- How hard it is to quit
- How it has affected your health
- What it costs you, financially and socially

If you can, keep your house smoke-free. Don't smoke indoors and don't let anyone else to do it either.

Help your child quit

If your child has already started using tobacco, the CDC offers these suggestions to help them kick the habit:

- Try to avoid threats and ultimatums. Find out why your child is smoking or using other forms of tobacco. Is he or she trying to get your attention? Or maybe trying to fit in with a peer group? You may find out that just going through the teen years is quite stressful to your child.
- Show interest. Ask a few questions. Find out what changes can be made in his or her life to help your child quit smoking.
- If you smoke, try to quit. If you did smoke and have already quit, talk to your child about what it was like for you. Personalize the little problems around smoking and the big challenge of quitting. Teens and pre-teens often believe they can quit smoking

whenever they want, but research shows most teens never do. Try to share these facts with them in a non-threatening way.

- Support your child. Both you and your child need to prepare for the mood swings and crankiness that can come with nicotine withdrawal. Offer your teen the 5 Ds to get through the tough times:
 - **Delay:** The craving will go away with time.
 - **Deep breath:** Take a few calming deep breaths.
 - **Drink water:** It will help flush out the chemicals.
 - **Do something else:** Find a new, healthy habit.
 - **Discuss:** Talk about your thoughts and feelings.
- Make a list with your teen or pre-teen of the reasons why they want to quit. Refer to this list when your child is tempted.
- Finally, reward your child when he or she quits. Plan something special for you to do together.

Helping your child quit using tobacco is one of the best parenting activities you could ever do. If you're a smoker, the second best thing may be quitting yourself.

To learn more

More information from your American Cancer Society

Here is more information you might find helpful. You can order free copies of our documents from our toll-free number, 1-800-227-2345, or read them on our Web site, www.cancer.org.

If you or someone you care about is trying to quit

Guide to Quitting Smoking (also in Spanish)

Quitting Smoking: Help for Cravings and Tough Situations (also in Spanish)

Helping a Smoker Quit: Do's and Don'ts

Guide to Quitting Smokeless Tobacco

More information on tobacco and health

Questions About Smoking, Tobacco, and Health (also in Spanish)

Cigarette Smoking (also in Spanish)

Cigar Smoking (also in Spanish)

Smokeless Tobacco

Secondhand Smoke (also in Spanish)

National organizations and Web sites*

Along with the American Cancer Society, other sources of information and support include:

QuitNet

Web site: www.quitnet.com

Offers free, cutting edge services to people trying to quit tobacco

Centers for Disease Control and Prevention (CDC)

Office on Smoking and Health

Free quit support line: 1-800-784-8669 (1-800-QUIT-NOW)

TTY: 1-800-332-8615

Web site: www.cdc.gov/tobacco

The quit support line offers information on smoking and health as well as help quitting. Languages and range of services vary by your state of residence

National Cancer Institute

Toll-free tobacco line: 1-877-448-7848 (1-877-44U-QUIT) (also available in Spanish)

Direct tobacco Web site: www.smokefree.gov

Quitting information, quit-smoking guide, and phone counseling are offered, as well as referral to state telephone-based quit programs (if needed for special services)

Environmental Protection Agency (EPA)

Telephone: 202-272-0167

Web site: www.epa.gov

Has advice on how to protect children from secondhand smoke, a Smoke-free Home Pledge, and other tobacco-related materials on the direct Web site, www.epa.gov/smokefree, or at 1-866-766-5337 (1-866-SMOKE-FREE)

**Inclusion on this list does not imply endorsement by the American Cancer Society.*

No matter who you are, we can help. Contact us anytime, day or night, for information and support. Call us at **1-800-227-2345** or visit www.cancer.org.

References

Alguacil J, Silverman DT. Smokeless and other noncigarette tobacco use and pancreatic cancer: a case-control study based on direct interviews. *Cancer Epidemiol Biomarkers Prev.* 2004;13(1):55-58.

American Lung Association, Children and Teens. Accessed at www.lungusa.org/stop-smoking/about-smoking/facts-figures/children-teens-and-tobacco.html on October 16, 2012.

Arday DR, Giovino GA, Schulman J, et al. Cigarette smoking and self-reported health problems among U.S. high school seniors, 1982-1989. *Am J Health Promot.* 1995;10(2):111-116.

Butt AL, Anderson HA, Gates DJ. Parental influence and effects of pro-smoking media messages on adolescents in Oklahoma. *J Okla State Med Assoc.* 2009;102:147-151.

Campaign for Tobacco-Free Kids. *The Rise of Cigars and Cigar-Smoking Harms.* June 2012. Accessed at www.tobaccofreekids.org/research/factsheets/pdf/0333.pdf on October 16, 2012.

Centers for Disease Control and Prevention (CDC). *Calling It Quits* (brochure). Accessed at www.cdc.gov/tobacco/tobacco_control_programs/campaigns_events/got_a_minute/got_A_Minute_brochure/callingitquits/index.htm on November 10, 2010. Content no longer available.

Centers for Disease Control and Prevention (CDC). Current cigarette smoking among adults – United States, 2011. *MMWR.* 2012;61(44):889-894.

Centers for Disease Control and Prevention (CDC). Current Tobacco Use Among Middle and High School Students – United States, 2011. *MMWR.* 2012;61(31):581-585. Accessed at www.cdc.gov/mmwr/preview/mmwrhtml/mm6131a1.htm?s_cid=mm6131a1_w#tab on October 9, 2012.

Centers for Disease Control and Prevention (CDC). Tobacco Use, Access, and Exposure to Tobacco in Media Among Middle and High School Students – United States, 2004. *MMWR.* 2005;54(12); 297-301. Accessed at www.cdc.gov/mmwr/preview/mmwrhtml/mm5412a1.htm on October 16, 2012.

Centers for Disease Control and Prevention (CDC). Youth Risk Behavior Surveillance – United States, 2011. *MMWR.* 2012;61(4):1-162. Accessed at www.cdc.gov/mmwr/pdf/ss/ss6104.pdf on October 9, 2012.

Centers for Disease Control and Prevention (CDC). *Smoking & Tobacco Use. Bidis and Kreteks.* June 2012. Accessed at www.cdc.gov/tobacco/data_statistics/fact_sheets/tobacco_industry/bidis_kreteks/ on October 16, 2012.

Cogliano V, Straif K, Baan R, et al. Smokeless tobacco and tobacco-related nitrosamines. *Lancet Oncol.* 2004;5:708.

Critchley JA, Unal B. Is smokeless tobacco a risk factor for coronary heart disease? A systematic review of epidemiological studies. *Eur J Cardiovasc Prev Rehabil.* 2004;1:101-112.

Gilman SE, Rende R, Boergers J, et al. Parental smoking and adolescent smoking initiation: an intergenerational perspective on tobacco control. *Pediatrics.* 2009;123:e274-281.

Gold DR, Wang X, Wypij D, et al. Effects of Cigarette Smoking on Lung Function in Adolescent Boys and Girls. *N Engl J Med.* 1996;335:931-937.

Govtrack.us. 111th Congress 2009-2010. H.R.1256: Family Smoking Prevention and Tobacco Control Act. Accessed at www.govtrack.us/congress/bill.xpd?bill=h111-1256 on October 15, 2012.

Holmen TL, Barrett-Connor E, Holmen J, Bjermer L. Health problems in teenage daily smokers versus nonsmokers, Norway, 1995-1997: the Nord-Trøndelag Health Study. *Am J Epidemiol.* 2000;151(2):148-55.

Johnston LD, O'Malley PM, Bachman JG, Schulenberg JE. Monitoring the Future - National results on adolescent drug use: Overview of key findings, 2010. Ann Arbor: Institute for Social Research, The University of Michigan. 2011. Accessed at www.monitoringthefuture.org/pubs/monographs/mtf-overview2010.pdf on October 16, 2012.

Johnston, LD, O'Malley PM, Bachman JG. National survey results on drug use from the Monitoring the Future study, 1975-1997, Volume I: Secondary school students, National Institute on Drug Abuse, Rockville, MD, NIH Publication No. 98-4345, 1998. Accessed at www.monitoringthefuture.org/pubs/monographs/mtf-vol1_1997.pdf on October 16, 2012.

Knishkowsky B, Amitai Y. Water-Pipe (Narghile) Smoking: An Emerging Health Risk Behavior. *Pediatrics.* 2005;116:e113-e119.

Smith JR, Novotny TE, Edland SD, et al. Determinants of hookah use among high school students. *Nicotine Tob Res.* 2011;13(7):565-572.

Theron A, Schultz C, Ker JA, Falzone N. Carboxyhaemoglobin levels in water-pipe and cigarette smokers. *S Afr Med J.* 2010;100(2):122-124.

US Department of Health and Human Services. *Preventing Tobacco Use Among Young People: A Report of the Surgeon General.* 1994. Accessed at www.cdc.gov/tobacco/data_statistics/sgr/1994/index.htm on October 16, 2012.

US Department of Health and Human Services. *Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General.* 2012. Accessed at www.surgeongeneral.gov/library/reports/preventing-youth-tobacco-use/full-report.pdf on October 9, 2012.

Waldie KE, McGee R, Reeder AI, Poulton R. Associations between frequent headaches, persistent smoking, and attempts to quit. *Headache*. 2008;48:545-552.

Last Medical Review: 11/8/2012

Last Revised: 11/8/2012

2012 Copyright American Cancer Society

For additional assistance please contact your American Cancer Society
1 · 800 · ACS-2345 or www.cancer.org