



## Child and Teen Tobacco Use

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

**The bad news:** 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 smokers will die prematurely from a smoking-related disease.

**More bad news:** As of 2012, more than 23% of all high school students (grades 9-12) had used some kind of tobacco product in the past month. Now, there are many more forms of tobacco to choose from, and more teens are choosing flavored cigars, smokeless tobacco, hookahs, pipes, and even electronic cigarettes. Some still smoke cigarettes.

Whatever they choose, kids are getting hooked in high school – by 12th grade, about half the smokers had tried to quit at least once in the past year.

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 2012, 18% of high school girls and 23% 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: 99% of adult smokers first smoked by age 26. Nearly 9 out of 10 adult smokers had their first smoke by age 18.

The younger a person is when they start using tobacco, the more likely they are to use it as 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. Children and teens who smoke regularly have 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
- Infertility and impotence
- 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

## 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.

## 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 2012 survey by the CDC. (Middle school includes children in grades 6, 7, and 8.)

- Nearly 7% of middle school students reported using some form of tobacco – cigarettes, spit or other oral tobacco, cigars, hookahs, pipes, electronic cigarettes (e-cigarettes), and flavored cigarettes like bidis or kreteks – at least once in the past 30 days.
- 3.5% of the students had smoked cigarettes, and 2.8% had smoked cigars. Nearly 2% had smoked pipes, 1.3% had smoked hookahs, and 1.1% had used e-cigarettes. Around 0.5% had used kreteks and about the same number had smoked bidis (0.6%).
- 1.7% used spit or other smokeless tobacco. Nearly 1% had used snus (a newer form of snuff). Half a percent (0.5%) had used dissolvable tobacco.
- Boys (about 8%) were more likely than girls (about 6%) to use some form of tobacco.

## Tobacco use in high school students

The most recent tobacco numbers for high school students come from the 2012 CDC Youth Tobacco 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, and are not included in these numbers.

- Nationwide, more than 23% of high school students reported using some type of tobacco (cigarette, cigar, pipe, bidi, kretek, hookah, e-cigarette, or some form of smokeless tobacco) on at least 1 of the 30 days before the survey.
- On average, about 1 out of 7 students (14%) smoked cigarettes. Girls (12%) were less likely to smoke cigarettes than boys (16%). White students (15%) were more likely to smoke cigarettes than black (10%), or Hispanic/Latino (14%) students.
- About 13% of high school students had smoked cigars in the last 30 days. Male students (17%) were more likely to smoke cigars than female students (8%).
- About 6% of high school students reported using spit or other smokeless tobacco at least once in the 30 days before the survey. About 11% of all the boys and about 2% of all the girls surveyed had used 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 (over 4%), bidis (about 1%), and kreteks (about 1%).

## Other forms of tobacco favored by young people

### 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. Many of the smaller cigars look much the same as cigarettes except for their color (they're brown, not white), and are also sold in packs.

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.

Because they're cigars, most of them are not taxed as much or regulated the way cigarettes are. This makes them cheaper and easier for kids to get, too.

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*.

## Spit or smokeless tobacco use among kids

Spit or smokeless tobacco is a less lethal, but still unsafe, alternative to smoking. Many terms are 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 (**loo**-ko-**PLAY**-key-uh)
- 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.

## Snus and dissolvable tobacco

Snus and dissolvable tobacco are two new forms of smokeless tobacco that are now being used by kids and teens.

Snus (pronounced “snoose”) is a finely ground form of moist snuff made of tobacco and flavorings. Snus is often packaged in small pouches, but can also be used like loose moist snuff. In the 2012 survey, 2.5% of high school students had used snus in the past month.

Dissolvables are sold as lozenges, tablets (orbs or pellets), strips, and sticks that contain tobacco and nicotine. Depending on the type, they are held in the mouth, chewed, or sucked until they are absorbed by the tissues of the mouth. Some of these products are mint-flavored and look like candy. Others look like toothpicks or meltaway mouthwash strips. In 2012, about 1% of high school students had recently used them. For more on snus and dissolvables, see our document *Smokeless Tobacco*.

## Smokeless tobacco is promoted where smoking is banned

Unfortunately, tobacco companies have used the smoking bans in many states to push for people to use 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. Many workplaces are making changes like this, too. Tobacco companies have quickly stepped in to market their smokeless 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, specific types of 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.

## 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 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 often a social event which allows the smokers to spend time together and talk as they pass the pipe around.

Hookah smoking has become popular among younger people in Western countries. More than 5% of high school students surveyed in 2012 had used a hookah 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. And 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), or even Epstein-Barr virus (EBV, which can cause mononucleosis and is linked to a few types of cancer) may be spread by sharing the pipe or through the way the tobacco is prepared.

Newer forms of hookah smoking can include steam stones or even battery powered hookah pens. Both of these create a vapor that is inhaled, which makes them more much like electronic cigarettes. Some advertise that they are purer and healthier alternatives to regular hookahs, even though less is known about them.

## Electronic cigarettes

Electronic cigarettes are small refillable devices that look like cigarettes. They use battery power to vaporize nicotine solutions so they can be inhaled. The vapor can be flavored like fruit and candy, which appeals to youth. As of late 2013, there are no national restrictions on sale of these products to children, although many states forbid sales to minors.

Among middle school students, those who had ever used e-cigarettes nearly doubled from 1.4% to 2.7% during 2011–2012. Students reporting e-cigarette use in the month before the survey climbed from 0.6% to 1.1%. As of 2012, 0.7% used both e-cigarettes and conventional cigarettes.

High school students who reported ever using e-cigarettes more than doubled, from 4.7% to 10.0% during 2011–2012. Students reporting e-cigarette use in the past month increased from 1.5% to 2.8%. As of 2012, 2.2% used both cigarettes and e-cigarettes, although some students used only e-cigarettes.

## 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 still legal to have or smoke them, but it’s illegal to sell them in the US. They can sometimes be found in online shops hosted from other countries, even though the US FDA has warned both foreign and domestic websites that flavored cigarettes can’t be sold here. US tobacco companies are working around this ban by making flavored small cigars (see the section, “Cigars”) 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. 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. They mainly come from Indonesia and other Southeast Asian countries, although there is information on the internet on how to make your own.

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. Laws against flavored cigarettes also apply to kreteks, and the FDA has warned companies that they can't be sold in the United States.

## **Flavored cigarettes (bidis)**

Flavored cigarettes, called *bidis* or *beedies*, often come from India and other Southeast Asian countries. They have become popular with young people in the United States. 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

# **What parents and other concerned adults can do**

## **Keep your 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 with 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 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 might 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 home smoke-free. Don't smoke indoors and don't let anyone else do it either. If you have a car or vehicle, make it smoke-free too.

## 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 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 using tobacco.
- If you use tobacco, try to quit. If you did smoke or use other forms of tobacco and have already quit, tell your child what it was like for you. Personalize the little

problems around tobacco use and the big challenge of quitting. Teens and pre-teens often believe they can quit 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 use tobacco, 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 website, [www.cancer.org](http://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 websites\*

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

### **Centers for Disease Control and Prevention Office on Smoking and Health**

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

TTY: 1-800-332-8615

Website for quitting: [www.cdc.gov/tobacco/quit\\_smoking/index.htm](http://www.cdc.gov/tobacco/quit_smoking/index.htm)

The toll-free number takes you to your state's free quit support line, which offers information on smoking and health as well as help with quitting all forms of tobacco. Languages, hours, and services vary by your state of residence; call for more information. The website links to online quitting resources, podcasts, e-cards, and other helpful tools

### **National Cancer Institute**

Toll-free number: 1-800-422-6237 (1-800-4-CANCER) for cancer information

Website: [www.cancer.gov](http://www.cancer.gov)

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

Smoking cessation online: [www.smokefree.gov](http://www.smokefree.gov)

Trained counselors provide information and help you form a personalized quit plan Monday through Friday, 8:00 a.m. to 8:00 p.m. Eastern Time using the toll free number. Website also has quitting information, live chat, and tools for quitting. Sign up for SmokefreeTXT to get 24/7 encouragement, advice, and tips to help you quit for good. Separate websites for women, teens, and Spanish language are available.

### **QuitNet**

Website: [www.quitnet.com](http://www.quitnet.com)

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

*\*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](http://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](http://www.lungusa.org/stop-smoking/about-smoking/facts-figures/children-teens-and-tobacco.html) on November 14, 2013.

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.

British Medical Association. Smoking and Reproductive Life: The Impact of Smoking on Sexual, Reproductive and Child Health. 2004. Accessed at [www.bma.org.uk](http://www.bma.org.uk) on November 14, 2013.

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.* March 7, 2013. Accessed at [www.tobaccofreekids.org/research/factsheets/pdf/0333.pdf](http://www.tobaccofreekids.org/research/factsheets/pdf/0333.pdf) on November 15, 2013.

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](http://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). Consumption of Cigarettes and Combustible Tobacco – United States, 2000-2011. *MMWR.* 2012;61(30):565-569. Accessed at [www.cdc.gov/mmwr/preview/mmwrhtml/mm6130a1.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6130a1.htm) on November 14, 2013.

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). Notes from the Field: Electronic Cigarette Use Among Middle and High School Students – United States, 2011-2012. *MMWR.* 2013;62(35); 729-730. Accessed at [www.cdc.gov/mmwr/preview/mmwrhtml/mm6235a6.htm?s\\_cid=mm6235a6\\_w](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6235a6.htm?s_cid=mm6235a6_w) on November 14, 2013.

Centers for Disease Control and Prevention (CDC). Tobacco Product Use Among Middle and High School Students – United States, 2011 and 2012. *MMWR.* 2013;62(45); 893-897. Accessed at [www.cdc.gov/mmwr/preview/mmwrhtml/mm6245a2.htm?s\\_cid=mm6245a2\\_e](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6245a2.htm?s_cid=mm6245a2_e) on November 14, 2013.

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](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5412a1.htm) on November 15, 2013.

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/](http://www.cdc.gov/tobacco/data_statistics/fact_sheets/tobacco_industry/bidis_kreteks/) on November 14, 2013.

Centers for Disease Control and Prevention (CDC). *Smoking & Tobacco Use. Hookahs*. June 14, 2013. Accessed at [www.cdc.gov/tobacco/data\\_statistics/fact\\_sheets/tobacco\\_industry/hookahs/index.htm](http://www.cdc.gov/tobacco/data_statistics/fact_sheets/tobacco_industry/hookahs/index.htm) on November 20, 2013.

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](http://www.govtrack.us/congress/bill.xpd?bill=h111-1256) on October 15, 2012.

Holmen TL, Barrett-Connor E, Holmen J, Bjerner 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.

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

Lee YO, Mukherjea A, Grana R. Hookah steam stones: smoking vapour expands from electronic cigarettes to waterpipes. *Tob Control*. 2013;22(2):136-137.

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 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](http://www.surgeongeneral.gov/library/reports/preventing-youth-tobacco-use/full-report.pdf) on November 8, 2013.

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

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