



Tobacco/Smoking Cessation

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Health Promotion Disease Prevention

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Learning Objectives

- Know statistics related to AI/AN commercial tobacco use
 - Understand how secondhand and third hand smoke endangers health
 - Document tobacco screening appropriately in the Electronic Health Record
- 



Wait wait, don't tell me

- The number of known carcinogens in secondhand smoke is ?

3 18 69

- The air in a room is clean about 15 minutes after a cigarette is extinguished.

True False

- Tobacco use can actually change brain structure, but it quickly reverts when someone quits.

True False





Wait wait, don't tell me

- The number of known carcinogens in secondhand smoke is ?

3 **18** **69**

- The air in a room is clean about 15 minutes after a cigarette is extinguished.


True False

Secondhand smoke remains in an enclosed environment for approximately two weeks before the air is officially clean.

- Tobacco use can actually change brain structure, but it quickly reverts when someone quits.

True False

Tobacco use can change brain structures associated with reward and arousal, but those changes persist long after someone quits.





Background

- Smoking is the single most preventable cause of death in the United States.
- Each year, approximately 443,000 persons in the United States die from smoking-related illnesses.
- An estimated 49,000 of these smoking-related deaths are a result of secondhand smoke exposure.
- Smoking has been estimated to cost the United States \$96 billion in direct medical expenses and \$97 billion in lost productivity each year.

Centers for Disease Control and Prevention.

http://www.cdc.gov/tobacco/data_statistics/fact_sheets/adult_data/cig_smoking/

http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6035a5.htm?s_cid=%20mm6035a5.htm_w





Tobacco Usage

- Both AI/AN youth aged 12-17 years and AI/AN adults aged 18 years or older have the *highest prevalence of current smoking* compared with other racial/ethnic populations.

Tobacco Usage

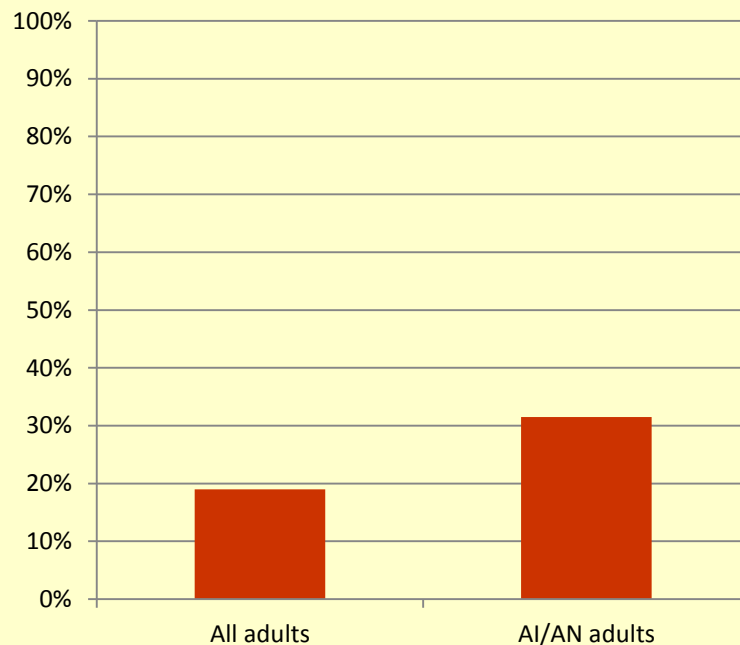
- An estimated 43.8 million people, or 19.0% of all adults (aged 18 years or older), in the United States smoke cigarettes.
- 31.5% of AI/AN adults in the United States smoked cigarettes.

Centers for Disease Control and Prevention.

http://www.cdc.gov/tobacco/data_statistics/fact_sheets/adult_data/cig_smoking

http://www.cdc.gov/tobacco/data_statistics/sgr/1998/highlights/am_in_dian_alaska_native/

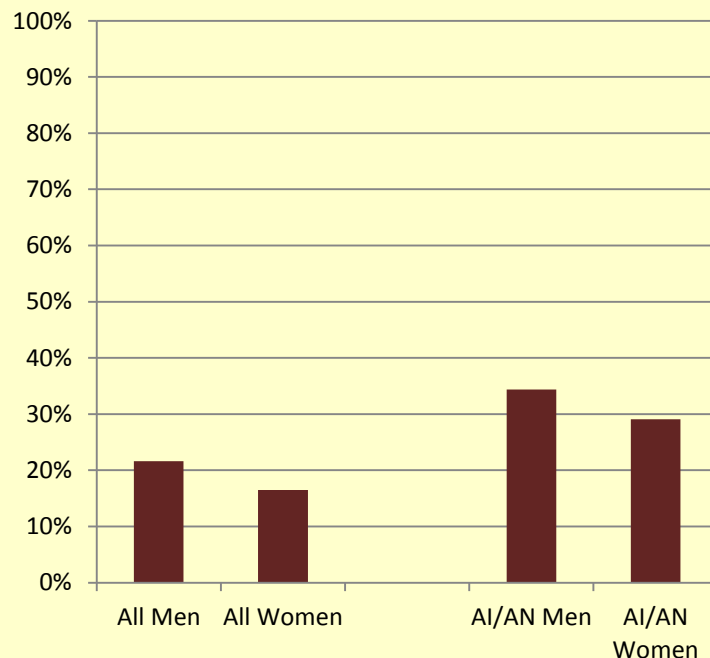
Percentage of Adults Who Smoke



Tobacco Usage

- Cigarette smoking is more common among men (21.6%) than women (16.5%).
- The prevalence of current smoking is higher among AI/AN men (34.4%) than among AI/AN women (29.1%).

Percentage of Men and Women Who Smoke



Centers for Disease Control and Prevention.

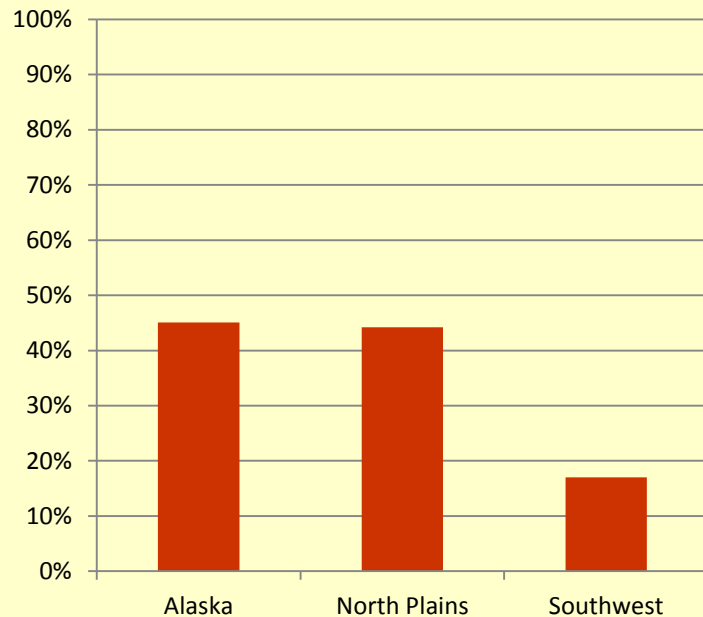
http://www.cdc.gov/tobacco/data_statistics/fact_sheets/adult_data/cig_smoking/

http://www.cdc.gov/tobacco/data_statistics/sgr/1998/highlights/a_m_indian_alaska_native/

Tobacco Usage

- Smoking rates are highest in Alaska (45.1%) and the North Plains (44.2%) and lowest in the Southwest (17.0%).
- The prevalence of *heavy smoking* (25 or more cigarettes per day) is also highest in the North Plains (13.5%).

Percentage of Adults Who Smoke in Select Geographic Areas



Centers for Disease Control and Prevention.
[http://www.cdc.gov/tobacco/data_statistics/sgr/1998/
highlights/am_indian_alaska_native/](http://www.cdc.gov/tobacco/data_statistics/sgr/1998/highlights/am_indian_alaska_native/)



Tobacco Usage Impacts on Health

- Tobacco use is known to cause health problems and disease
 - Cancers (lung, bladder, kidney, pancreas, nose, and throat)
 - Heart disease
 - Lung disease
 - Emphysema
 - COPD
 - Gum disease



Tobacco Usage Impacts on Health

- Nationally, lung cancer is the leading cause of cancer death among American Indians and Alaska Natives.
- Cardiovascular disease is the leading cause of death among American Indians and Alaska Natives



Centers for Disease Control and Prevention.
http://www.cdc.gov/tobacco/data_statistics/sgr/1998/highlights/am_indian_alaska_native

Secondhand Smoke Impacts on Health

- Secondhand smoke affects the health of those who do not smoke.
- It has been linked to health concerns in non-smokers such as
 - Asthma
 - SIDS
 - Respiratory infections
 - Ear infections



Secondhand Smoke Impacts on Health

1. There are over 4000 chemicals compounds found in secondhand smoke.
2. 69 of the chemicals cause cancer (USDHHS, 2006).



Secondhand Smoke
is toxic

Cancer Causing Chemicals
All are extremely toxic

- Benzene** Found in gasoline
- Formaldehyde** Used to embalm dead bodies
- Chromium** Used to make steel
- Polonium-210** Radioactive and very toxic
- Arsonic** Used in pesticides
- Lead** Once used in paint
- Vinyl Chloride** Used to make pipes
- Cadmium** Used in making batteries
- Carbon Monoxide** Found in car exhaust
- Toluene** Found in paint thinners
- Hydrogen Cyanide** Used in chemical weapons
- Butane** Used in lighter fuel
- Ammonia** Used in household cleaners

Toxic Metals
Can cause cancer
Can cause death
Can damage the brain and kidneys

Poison Gases
Can cause death
Can affect heart and respiratory functions
Can burn your throat, lungs, and eyes
Can cause unconsciousness


Secondhand smoke has more than 4,000 chemicals.
Many of these chemicals are toxic and cause cancer.
You breathe in these chemicals when you are around someone who is smoking.

Secondhand smoke
It hurts you. It doesn't take much. It doesn't take long.

The CDC logo is located in the bottom right corner of the infographic.




Secondhand Smoke Impacts on Health

- According to the American Cancer Society, secondhand smoke causes about *3,400* lung cancer deaths
 - 60% of U.S children ages 3 to 11 are exposed to environmental tobacco smoke each year (USDHHS, 2006), by the age of 5, each of them will have inhaled the equivalent of 102 packs of cigarettes (Hammond et al., 1995).
- 



Secondhand Smoke Impacts on Health

- There is no risk-free level of exposure to secondhand smoke.
 - Eliminating smoking in indoor spaces fully protects non-smokers.
 - Separating smokers from nonsmokers, cleaning the air, and ventilating buildings CAN NOT eliminate exposure of nonsmokers to secondhand smoke.
- 

Third Hand Smoke

- Third Hand Smoke-residual of tobacco smoke contamination that settles into the environment and stays there even after a cigarette has been extinguished.



Thirdhand Smoke

- The chemical particles resulting in the burning of tobacco, including the tar and nicotine, linger on clothes, upholstery, drapers long after the smoke has cleared the air.
- These particles are formed from more than 200 poisonous gas such as cyanide, ammonia, arsenic, and polonium-210 which is radioactive.



Thirdhand Smoke

- A study in Feb. 2011-(no-smoke.org), found that third hand smoke causes the formation of hazardous carcinogens, which occurs when the nicotine in the tobacco smoke reacts with nitrous acid, a common component of indoor air.



Thirdhand smoke

- Children of caregivers/parents who smoke cigarettes are especially at risk of thirdhand smoke exposure and contamination because tobacco residue is noticeably present in dust throughout areas where smoking has occurred, as well as on hair and clothes.
- Young children are vulnerable because they ingest tobacco residue by putting their hands in their mouths after touching contaminated surfaces.



Tobacco Dependence

- 70% of people want to quit.
- About 40% will try to quit on their own.
- But only 7% are successful
(Cromwell, Bartosch, Fiore, Hasselblad, & Baker, 1997).
- Tobacco dependence usually requires several interventions to break.



Breaking the Dependency

- Smoking is a chronic condition. Most people that have tried to quit try more than once.
- They will try 9-11 times before actually quitting.





Why is it so hard to quit?

- The addiction to nicotine is biological, psychological, and social cultural.
- Tobacco use causes dependence on nicotine, comparably physically to the dependence of caused by heroin, speed, or cocaine (Fiore et al., 2008).
- Many people use nicotine to self-medicate for pain or psychiatric conditions such as depression, anxiety, and eating disorders (Lasser et al, 2000).






Tobacco Dependence Treatment

- The first step in treating tobacco use and dependence is to identify tobacco users' willingness to quit
- The 5 “A” Model
 - Research evidence concludes current best practice





The Five “A” Model

Ask

- Ask about present/past use of tobacco and exposure to environmental tobacco use (vital signs)

Advise

- Offer clear, strong, personal advice to quit


Assess

- Assess willingness to quit, using the Stages of Change Model

Assist


- Provide assistance in quitting through stage-based interventions and motivational interviewing

Arrange

- Arrange for follow-up and offer local and national resources
- 



Ask

- Ask about tobacco use at every encounter
 - Keep it simple:
 - Do you smoke cigarettes?
 - Do you chew tobacco?
 - Have you ever smoked or used commercial tobacco products?
 - What type of tobacco do you use?
 - Does anybody in your house smoke or chew commercial tobacco?
 - Are you exposed to environmental tobacco smoke elsewhere during your day?
- 

Ask

- Add Health Factor

Items

- RUBELLA IMMUNITY STATUS
- TB STATUS
- TOBACCO (EXPOSURE)
- TOBACCO (SMOKELESS - CHEWING/DIP)
- TOBACCO (SMOKING)
 - CEREMONIAL USE ONLY
 - CESSATION-SMOKER
 - CURRENT SMOKER, EVERY DAY
 - CURRENT SMOKER, SOME DAY
 - CURRENT SMOKER, STATUS UNKNOWN
 - NEVER SMOKED
 - PREVIOUS (FORMER) SMOKER
 - SMOKING STATUS UNKNOWN

Comment

Add

Cancel



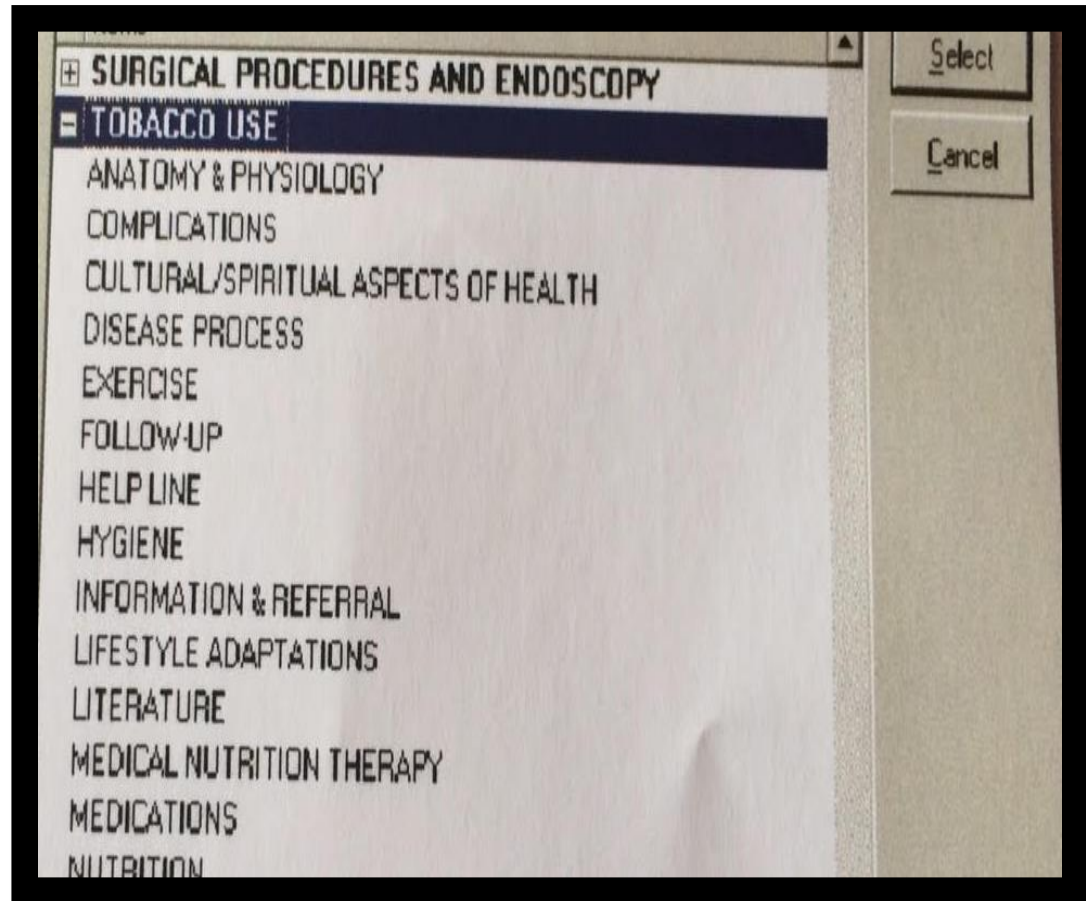
Advise

- In a *clear, strong, and personalized* manner, urge every patient who uses commercial tobacco to quit
 - **Clear:** Advise individual to quit smoking/chewing completely
 - **Strong:** Explain that quitting tobacco use is the single most important way to protect themselves and their family
 - **Personalized:** Make advice relevant to the individual when explaining the benefits of quitting and the consequences of continues tobacco use




Advise

- Under the Education Topic Selection





Assess

- Determine the patient's willingness to make a quit attempt within the next 30 days using the "Stages of Change Model."
 - Ask: Are you willing to set a quit date within the next 30 days?
 - If unwilling to make an attempt to quit in 30 days, offer information to move to "Assist/Unwilling to Quit."
 - If willing, move to "Assist/Willing to Quit."
- 

Assess

- Add Patient under Education Event

The screenshot shows a software window for adding a patient under an education event. The form contains the following fields and options:

- Education Topic:** Tobacco Use-Quit (Tobacco Use)
- Type of Training:** Individual (selected), Group
- Comprehension Level:** GOOD
- Length:** 5 (min)
- Comment:** Preparation - willing to quit within 30 days
- Provided By:** KNUTSON, DAYLE L
- Readiness to Learn:** EAGER TO LEARN
- Status/Outcome:** Goal Set (selected), Goal Met, Goal Not Met
- Quit Date Set for:** --/------


On the right side of the window, there are several buttons and options:

- Add** (button)
- Cancel** (button)
- Historical** (checkbox)
- Display Outcome & Standard** (button)
- Patient's Learning Health Factors** (button)
- Talk Emotional Stressors** (button)



Stages of Change Model

Precontemplation	(Unwilling to Quit)	Has no intention to quit within the next 6 months
Contemplation	(Thinking About Quitting)	Intends to quit within the next 6 months
Preparation	(Willing to Quit)	Willing to set a quit date within the next 30 days
Action	(Quit)	Has quit using tobacco for less than 6 months
Maintenance	(Staying Quit)	Has remained tobacco free for more than 6 months
Termination	(Living Quit)	No longer giving into urges and has total self-efficacy
Relapse	(Relapse)	A return to regular tobacco use; may be less, than, equal to, or greater than the beginning level of tobacco use





Assist

- If unwilling to quit;
 - **Express empathy:** Be non-judgmental, listen reflectively, accept ambivalence
 - **Develop discrepancy:** Help patient perceive the difference between present behavior and desired lifestyle change
 - **Avoid Argumentation:** When a patient demonstrates resistance to change, switch your strategies
 - **Roll with Resistance:** Reframe patient's thinking/statements. Invite patient to examine new perspectives
 - **Support Self-Efficacy:** Provide hope; increase patient's self confidence in ability to change behavior





- Offer educational literature on detrimental effects of commercial tobacco use on health.
- Remind client that you will ask about commercial tobacco use at every visit.

Education Show Standard Add Edit Delete

Visit Date	Education Topic	Comprehension	Readiness To Learn	Status	Objectives
03/29/2011	Tobacco Use-Information And Referral	FAIR	UNRECEPTIVE		
03/29/2011	Tobacco Use-Complications	FAIR	UNRECEPTIVE		
03/29/2011	Tobacco Use-Literature	FAIR	RECEPTIVE		
03/29/2011	Tobacco Use-Quit	FAIR	UNRECEPTIVE		

Health Factors Add Edit Delete

Visit Date	Health Factor	Category	Comment
03/29/2011	Current Smoker	Tobacco	smokes 1 pack per day X 25 years.

SUPERBILL NOTES REPORTS iCare PEDS LAB REF DISCHARGE SUMMARY CONSULTS FHM

Visit Diagnosis Add Edit Delete

Provider Narrative	ICD	ICD Name	Priority	Cause	Injury Date	Injury Cause	Injury Place	Modifier	Onset Date	Asth
Smokes cigarettes x 20 years	305.1	TOBACCO USE DISORDER	Primary							
Tobacco Cessation Intervention	V65.49	OTHER SPECIFIED COUNSELING	Secondary							






Assist

- If willing to quit:
 - STAR:
 - **S**et a quit date (ideally within 2 weeks)
 - **T**ell family, friends, and coworkers and ask for support
 - **A**nticipate challenges, including nicotine withdrawal symptoms
 - **R**emove tobacco products from home and work environments
 - Arrange
 - Arrange for follow-up whenever possible
 - First follow up should be soon after quit date





Arrange

- Order a consult to in-house cessation program, or document referral to external cessation program (ex. State quit line) in primary provider note.
 - Order appropriate pharmacotherapy and document follow-up plans on note.
 - Follow up within 2 weeks of quitting.
- 

Questions?

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References

1. Center for Disease Control and Prevention (CDC), 2006. Racial/Ethnic Differences Among Youth in Cigarette and Susceptibility to Start Smoking- United States, 2002-2004 MMWR, December 1, 2006: 55 (47):1275-7.
 2. Center for Disease Control and Prevention (CDC), 2010 Health Characteristics of the American Indian or Alaska Native Adult Population : United States , 2004-2008. Table 4.
 3. Christen, A. G. & Christen, J.A. (1990). What Nicotine addiction and Alcoholism teach us about other chemical dependencies. *Journal of Indian Dental Association*, 69, 22-26.
 4. Cromwell, J. Bartosch, W.J., Fiore, M.C, Hasselbad, V., & Baker, T. (1997). Cost effective of the clinical practice recommendation in the AHCPR guideline for smoking cessation. Agency for Health Care Policy and Research. *Journal of the American Medical Association*, 278, 1759-1766.
 5. Fiore, M.C., Jaen C.R, Baker, T.B. (1994). The Effectiveness of the Nicotine Patch for Smoking Cessation: a Meta analysis. *Journal of American Medical Association*, 271, 1940-1947.
 6. Hammond S.K., Sorensen, G. Youngstrom R., & Ockene, J.K. (1995). Occupational Exposure to Environmental Tobacco Smoke. *Journal of the American Medical Association*, 274, 956-960.
 7. Lasser, K. , Boyd, J.W. , Woolhanders, S., Himmelstein, D.U., McCormick, D., & Bor, D.H., (2000);. Smoking and Mental Illness. A Population Based Prevalence Study. *Journal of The American Medical Association.*, 282-2606-2610.
 8. Prochaska J.O., Redding C.A., Evers K.E. (2008) The Transtheoretical Model and Stages of Change. In *Health Behavior and Health Education: Theory, Research, and Practice* by Karen, Glanz, Barbara K., Rimer K., Viswanath. San Francisco.
 9. Electronic Health Record (2015). Indian Health Service, retrieved 10-19-2015.
 10. U.S. Department of Health And Human Service (2006). The Health Consequences for involuntary exposure to tobacco smoke. A report of the Surgeon General. Atlanta, GA.
- 



Sources of Additional Information

- Culturally appropriate intervention research -
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3117716/>
- I'm Ready to Quit!
<http://www.cdc.gov/tobacco/campaign/tips/quit-smoking/>
- American Cancer Society
<http://www.cancer.org/healthy/stayawayfromtobacco/guidetoquittingsmoking/index>





Sources of Additional Information

- Smokefree.gov <http://smokefree.gov/>
- American Lung Association
<http://www.lung.org/stop-smoking/how-to-quit/freedom-from-smoking/>
- Indian Health Service
http://www.ihs.gov/epi/index.cfm?module=epi_tobacco_resources





Sources of Additional Information

- Keepitsacred.org
 - [Great Start: http://www.legacyforhealth.org/our-issues](http://www.legacyforhealth.org/our-issues)
 - ASH-Action on Smoking and Health
 - <http://www.ash.org.uk/stopping-smoking/quitting-smoking>
 - La Leche League” <http://www.lalecheleague.org/faq/smoking.html>
 - Surgeon Generals’ Video Contest Winners on Smoking Prevention
<http://www.youtube.com/playlist?list=PLE2B599FB3EEA72B9>
 - Surgeon General’s Page
<http://www.surgeongeneral.gov/library/reports/preventing-youth-tobacco-use/index.html>
 - Help Pregnant Smokers Quit <http://www.helppregnant smokersquit.org/>
 - American Lung Association <http://www.lung.org/>
 - Nicotine-Anonymous <http://www.nicotine-anonymous.org/>
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