



Tobacco Free Living for People with Diabetes

Advancements in Diabetes Seminar

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Learning Objectives

As a result of completing this training participants will be able to:

- Describe regional and national AI/AN tobacco use data.
- Teach patients about the harmful effects of exposure to second and third hand smoke.
- Describe connections between smoking, diabetes macro and micro-vascular complications, and CVD/PAD.
- Utilize smoking cessation and nicotine addiction information to help smokers identify successful strategies to quit smoking.
- Educate patients about the adverse effects of electronic cigarettes and vaping.
- Identify one clinical or public health practice change you can make to improve local tobacco cessation outcomes using the GPRA tobacco cessation measure.



Outline

- Background
- Tobacco Usage
- Health Impact
- Second & Thirdhand Smoke
- E-cigarettes
- Tobacco Dependence & Treatment
- 5 As Model
- How to Document in EHR
- Strategy to improve clinical or public health practice



Background

- Smoking is the single most preventable cause of death in the United States.
- Each year, approximately 480,000 persons in the United States die from smoking-related illnesses.
- An estimated 41,000 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/health_effects/tobacco_related_mortality/



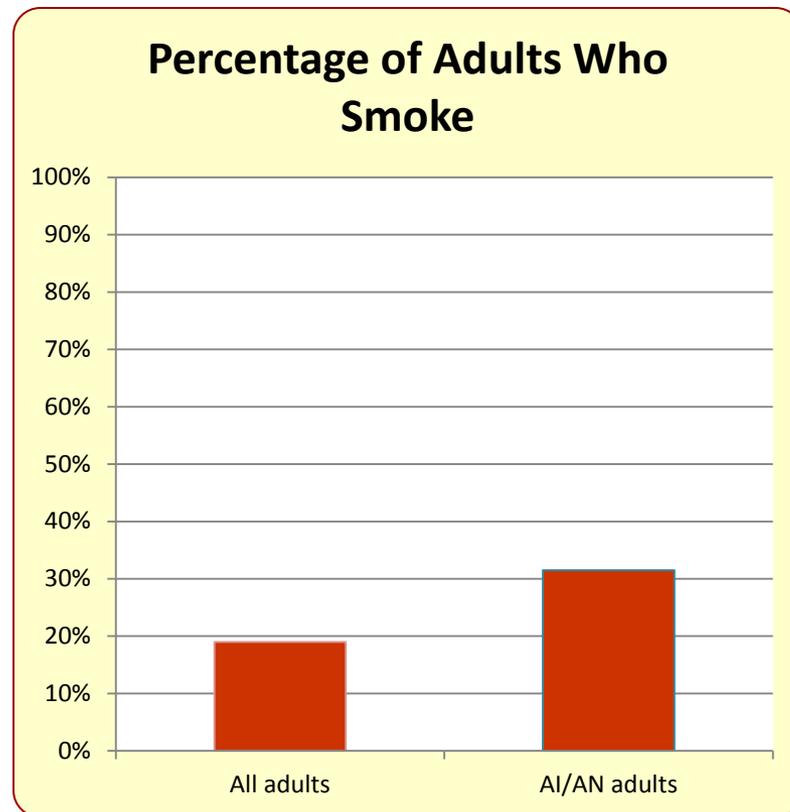
Traditional vs. Commercial Tobacco

- Traditional tobacco use
 - Sacred or ceremonial use for religious or medicinal purposes
- Commercial tobacco use
 - Recreational use

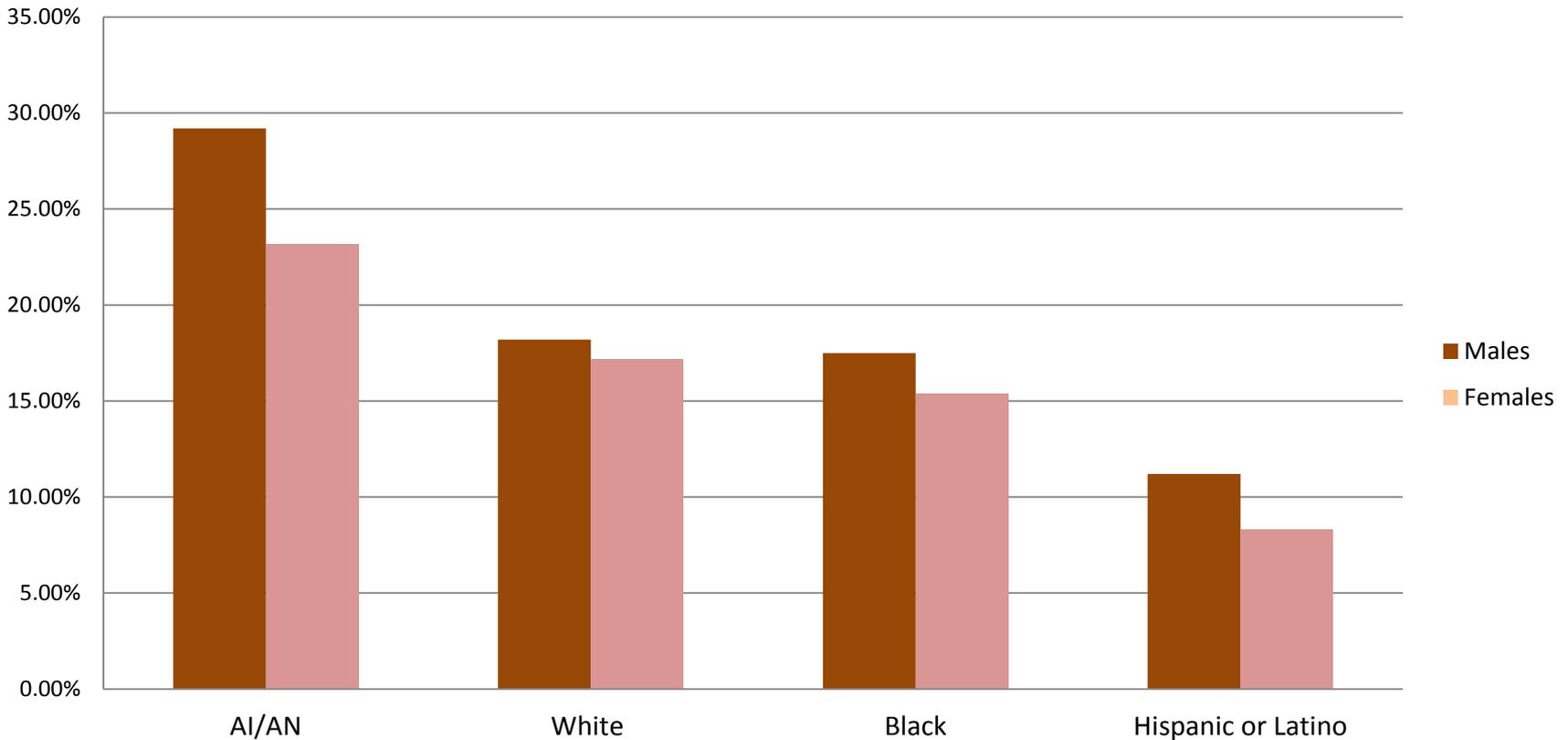
Tobacco Usage

- 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/a_m_indian_alaska_native/

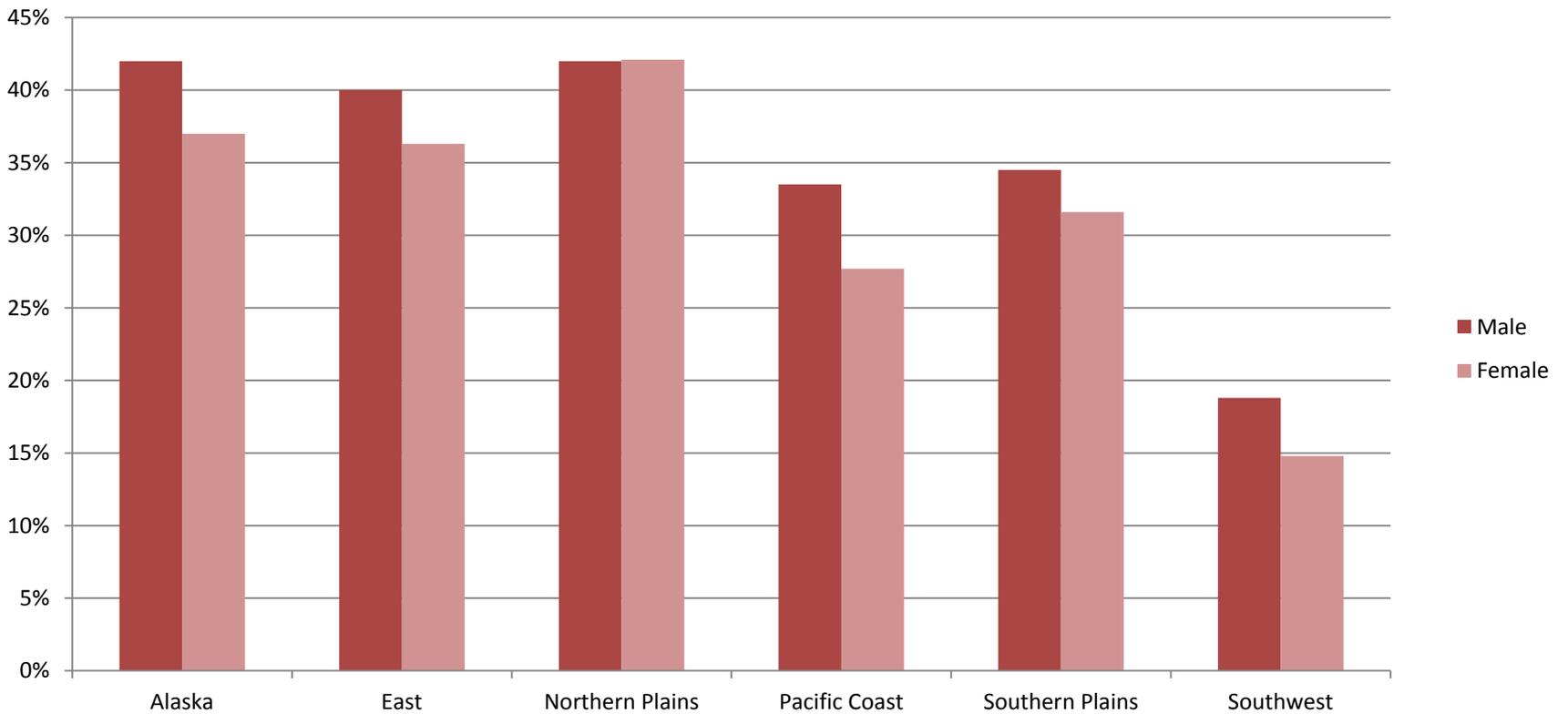


Cigarette Smoking Prevalence Among Adults by Gender and Ethnicity



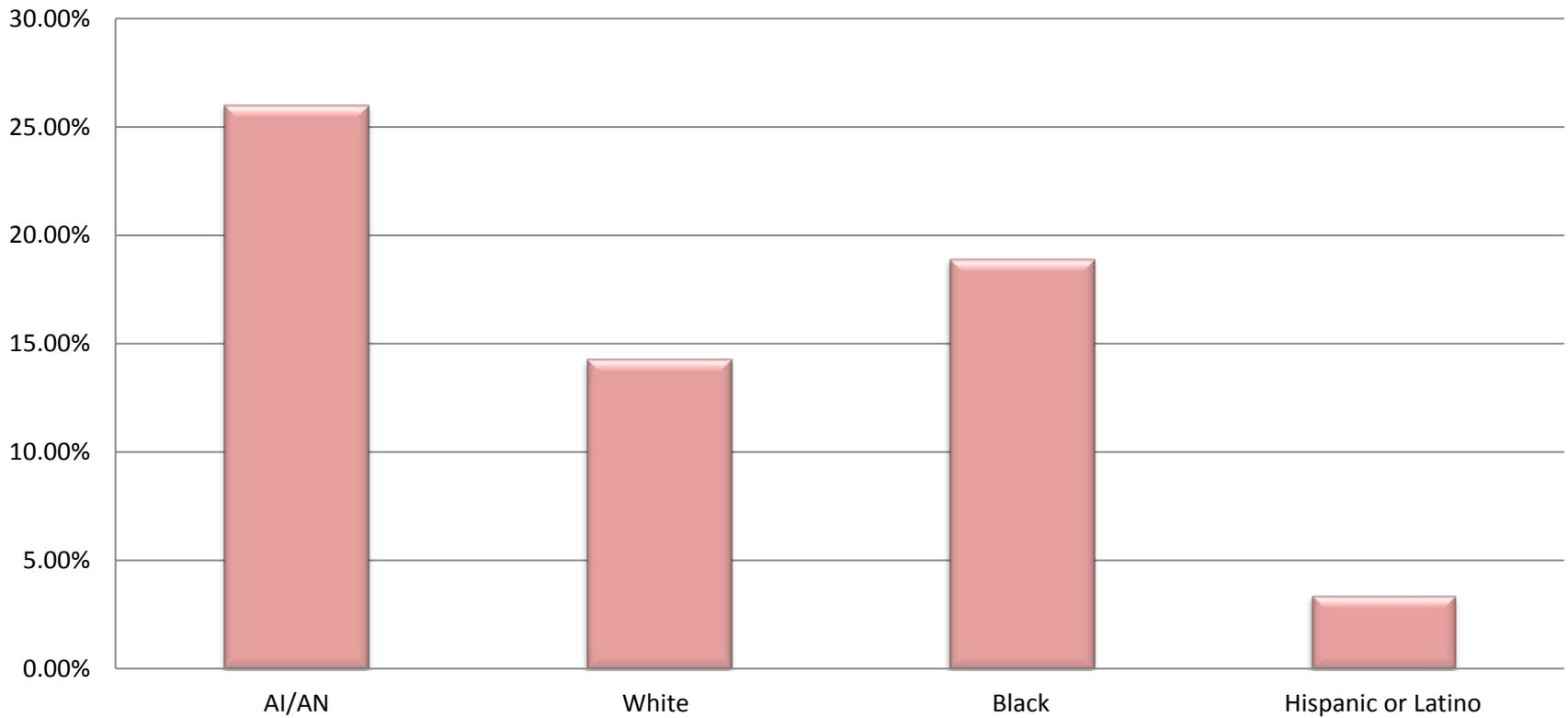
Source: [Centers for Disease Control and Prevention Morbidity and Mortality Weekly Report 2013.](#)

Cigarette Smoking Prevalence among AI/AN Adults by Region and Gender



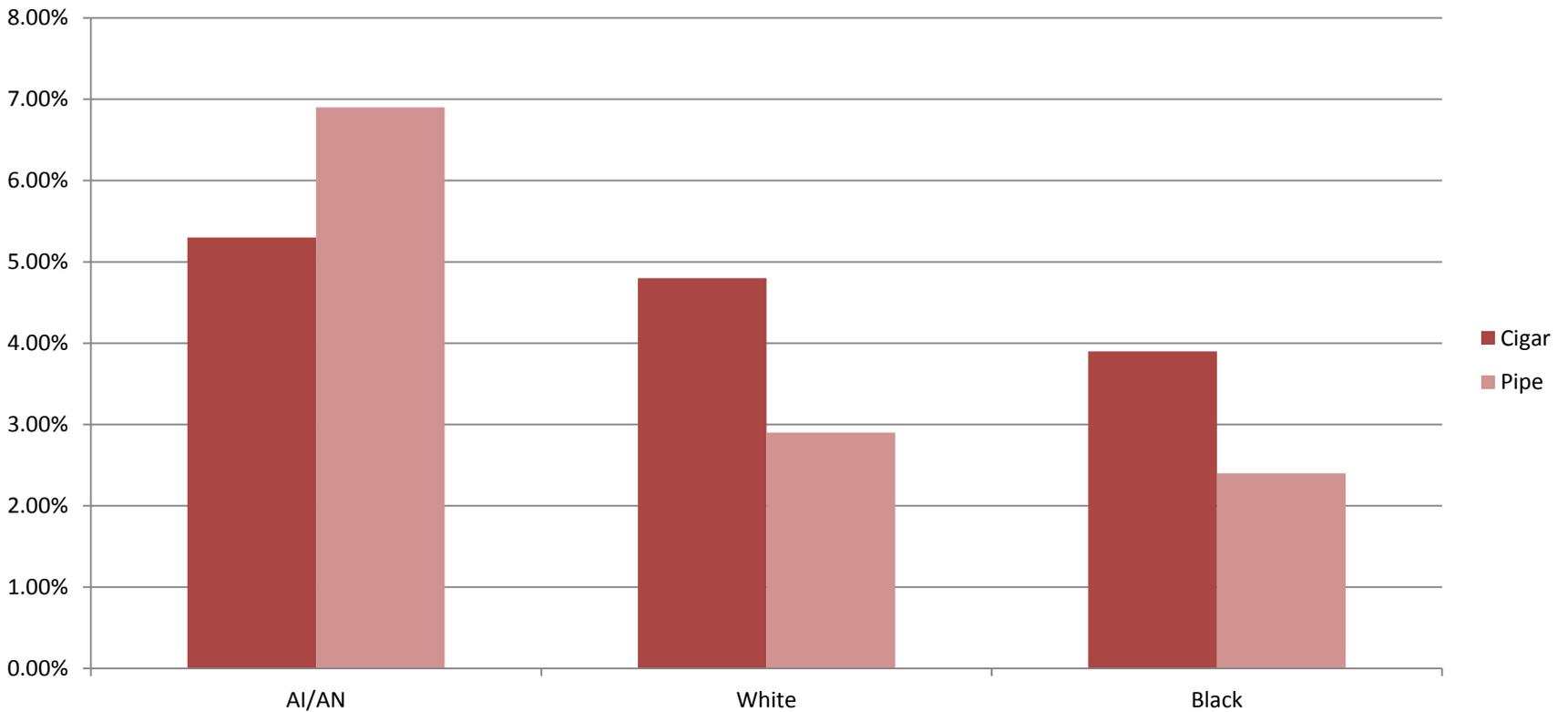
Source: Cobb et al. [American Journal of Public Health, April 22, 2014](#).

Smoking During Pregnancy Among Women by Ethnicity



Source: Cobb et al. [American Journal of Public Health, April 22, 2014](#).

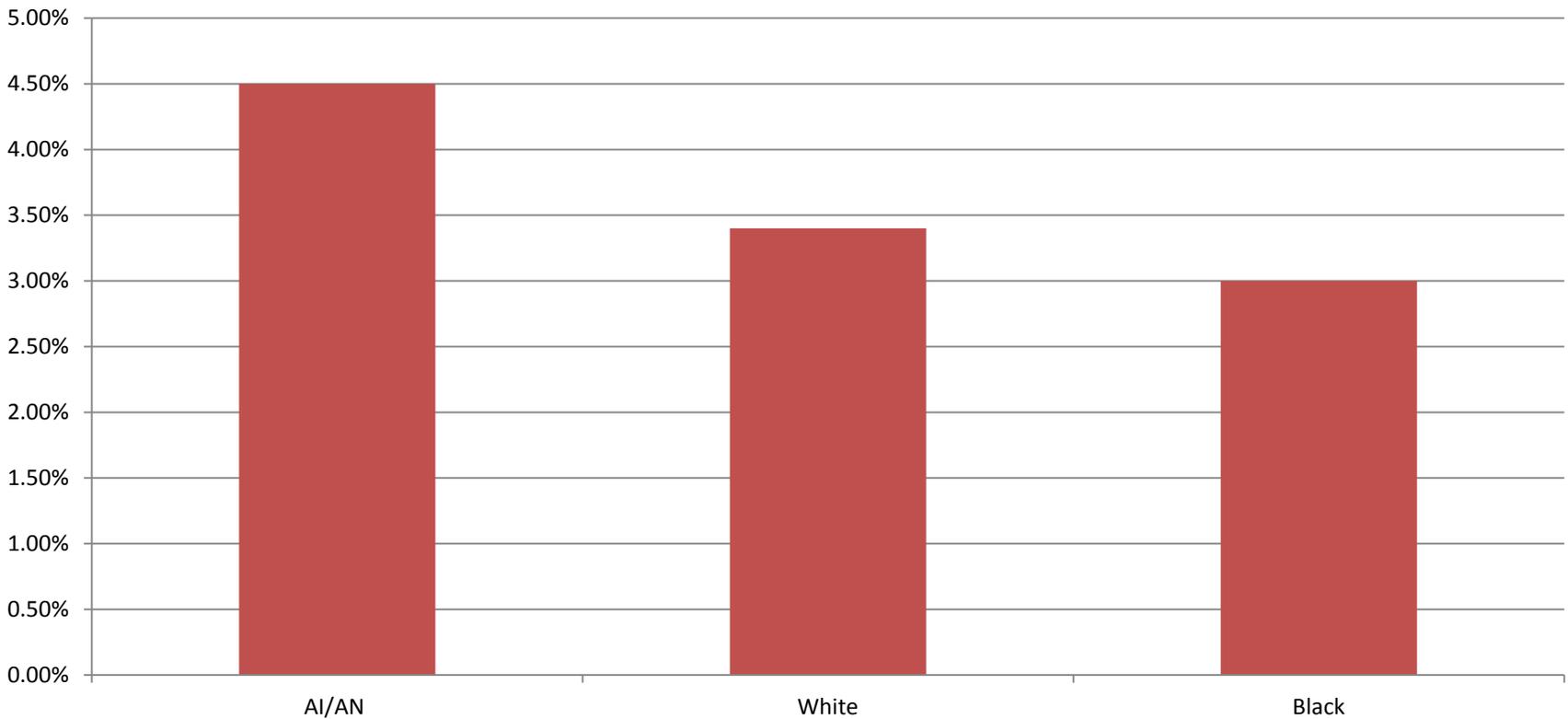
Cigar & Pipe Smoking Among Males by Ethnicity



Centers for Disease Control and Prevention (CDC):

http://www.cdc.gov/tobacco/data_statistics/sgr/1998/highlights/am_indian_alaska_native/index.htm

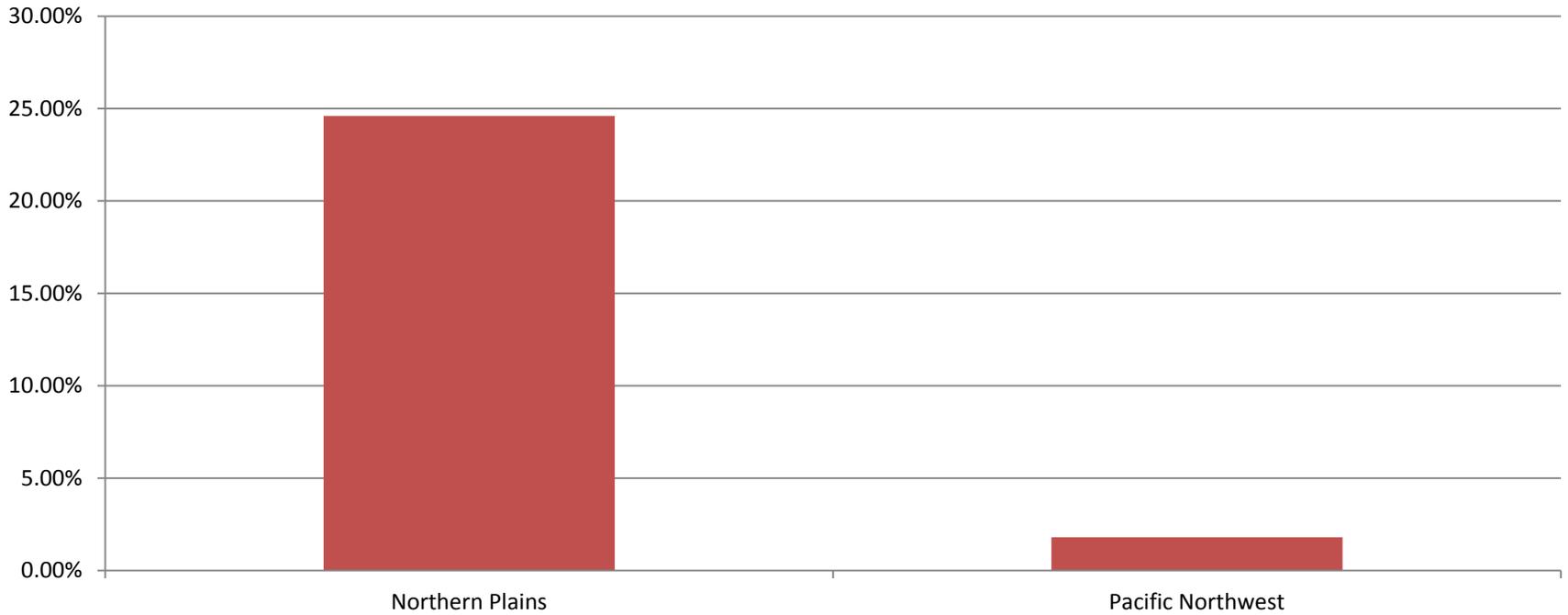
Chewing Tobacco or Snuff Use Among Male/Female by Ethnicity



Centers for Disease Control and Prevention (CDC):

http://www.cdc.gov/tobacco/data_statistics/sgr/1998/highlights/am_indian_alaska_native/index.htm

Smokeless Tobacco Use Among AI/AN Males by Region



Centers for Disease Control and Prevention (CDC):

http://www.cdc.gov/tobacco/data_statistics/sgr/1998/highlights/am_indian_alaska_native/index.htm

MORTALITY RATE DISPARITIES CONTINUE

American Indians and Alaska Natives in the IHS Service Area 2007-2009 and US All Races 2008 (Age-adjusted mortality rates per 100,000 population)

	AI/AN Rate 2007-2009	U.S. All Races Rate 2008	Ratio: AI/AN to U.S. All Races
ALL CAUSES	943.0	774.9	1.2
Diseases of the heart	182.4	192.1	0.9
Malignant neoplasm	169.4	178.4	0.9
Alzheimer's	170.8	176.4	1.0
Unintentional injuries*	94.5	39.2	2.4
Chronic lower respiratory diseases	43.2	44.7	1.0
Diabetes mellitus	61.0	22.0	2.8
Chronic liver disease and cirrhosis	43.1	9.2	4.7
Cerebrovascular diseases	39.1	42.1	0.9
Influenza and pneumonia	24.1	17.8	1.4
Nephritis, nephrotic syndrome	22.1	15.1	1.5
Intentional self-harm (suicide)	18.5	11.6	1.6



Smoking and Diabetes

- Smokers are 30–40% more likely to develop type 2 diabetes than nonsmokers.
- People with diabetes who smoke are more likely than nonsmokers to have trouble with insulin dosing and with controlling their disease.
- Smokers with diabetes have higher risks for serious complications, including:
 - Heart and kidney disease
 - Poor blood flow in the legs and feet
 - Retinopathy Peripheral

U.S. Department of Health and Human Services. [The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General](#), 2014 [accessed 2014 May 5].



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
 - Chronic Obstructive Pulmonary Disease (COPD)
 - Gum disease

Secondhand Smoke Impacts on Health

- It has been linked to health concerns in non-smokers such as
 - Asthma
 - Sudden Infant Death Syndrome (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

- Formaldehyde: Used to embalm dead bodies
- Benzene: Found in gasoline
- Potassium-210: Radioactive and very toxic
- Vinyl Chloride: Used to make pipes
- Carbon Monoxide: Found in car exhaust
- Hydrogen Cyanide: Used in chemical weapons
- Butane: Used in lighter fuel
- Ammonia: Used in household cleaners
- Toluene: Found in paint thinners

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

- Chromium: Used to make steel
- Arsenic: Used in pesticides
- Lead: Once used in paint
- Cadmium: Used in making batteries

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.



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.

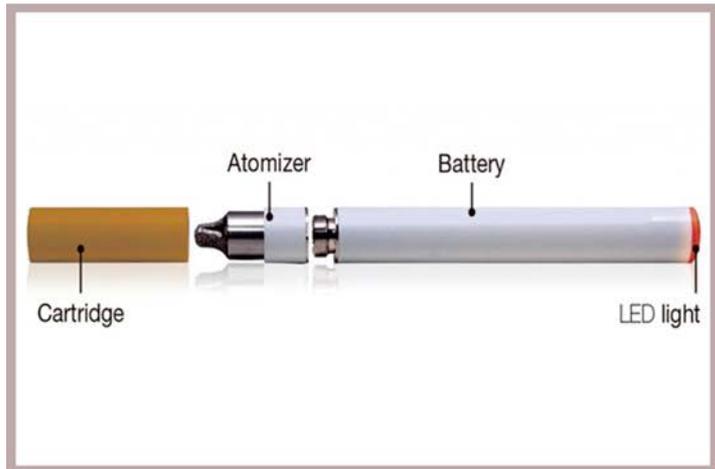


Thirdhand smoke

- Children of caregivers/parents who smoke cigarettes are especially at risk of thirdhand smoke exposure and contamination.
 - Residues
- Young children are vulnerable because they ingest tobacco residue by putting their hands in their mouths after touching contaminated surfaces.



Electronic Cigarettes





E-cigarettes

- Contains propylene glycol or glycerin
- Flavorings (tobacco, menthol, coffee, cinnamon, vanilla, chocolate, etc.)
- Nicotine: varying concentrations
 - 0.24 mg/mL in cartridges, cartomizers
 - Up to 100 mg/mL in refill fluids

Nearly 500 brands and 7,700 flavors of e-cigarettes are on the market



Health Effects of E-cigarettes

- Secondhand emission
 - Formaldehyde, benzene and tobacco-specific nitrosamines (all carcinogens)
- Secondhand aerosol (exhaled by user)
 - Formaldehyde, acetaldehyde and other potential toxins
- No evidence that e-cigarettes emissions (secondhand aerosol) are safe



E-cigarette Users Among Adults

- Current e-cigarette use was higher among non-Hispanic AIAN adults (10.7%) and non-Hispanic white adults (4.6%) than among Hispanic (2.1%), non-Hispanic black (1.8%), and non-Hispanic Asian (1.5%) adults.

NCHS Data Brief, October 2015: <http://www.cdc.gov/nchs/data/databriefs/db217.pdf>

Tobacco Dependence

- 70% of people want to quit.
- About 40% will try to quit on their own.
- But only 7% are successful *
- Tobacco dependence usually requires several interventions to break.

*Cromwell, Bartosch, Fiore, Hasselblad, & Baker, 1997



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

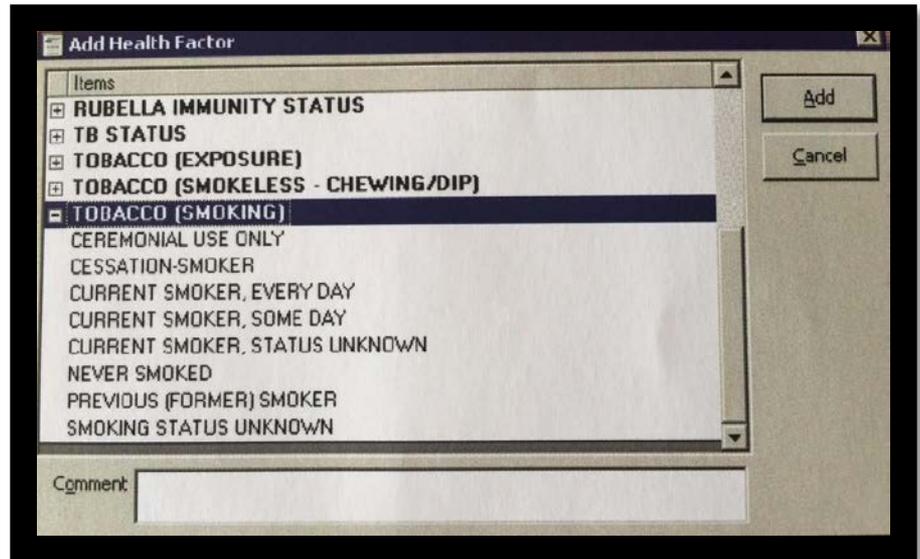


Ask

- 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



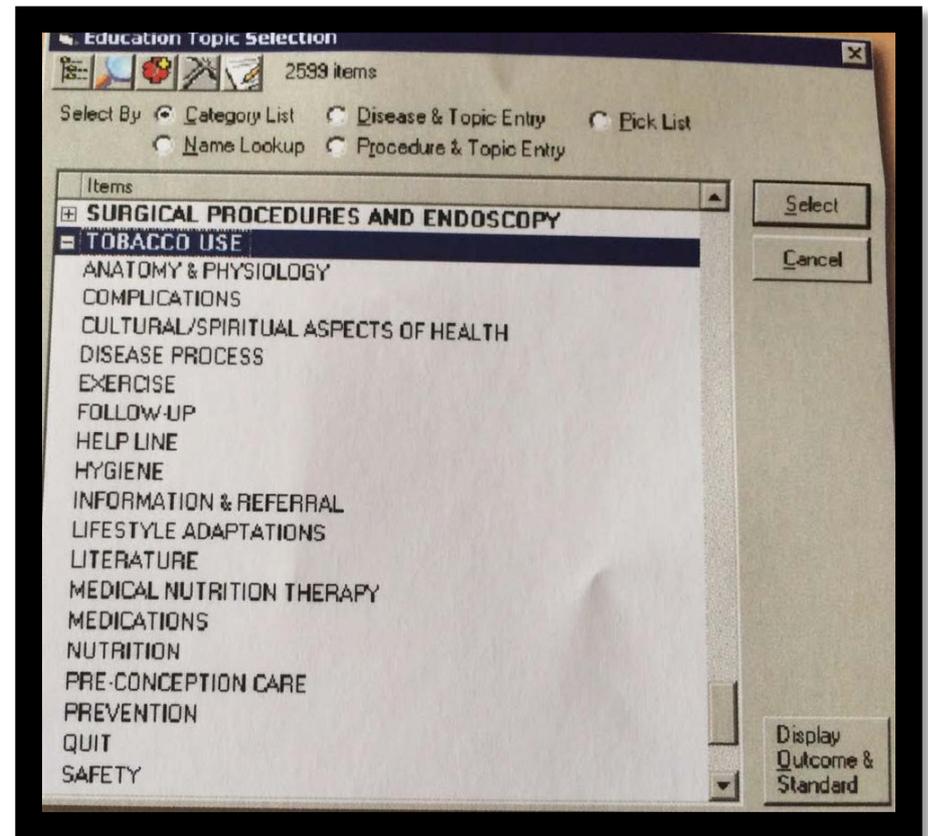


Advise

- 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 titled "Add Patient 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 dialog, there are several buttons and options:

- Add** button
- Cancel** button
- Historical**
- Display Outcome & Standard** button
- Patient's Learning Health Factors** section with a **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

Assist (cont.)

- 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.

The screenshot displays a medical software interface with three main sections: Education, Health Factors, and Visit Diagnosis. Each section has an 'Add', 'Edit', and 'Delete' button.

Education

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

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

Visit Diagnosis

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:
 - **Set a quit date** (ideally within 2 weeks)
 - **Tell family, friends, and coworkers** and ask for support
 - **Anticipate challenges**, including nicotine withdrawal symptoms
 - **Remove 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.



Tobacco Screening, Education, & Referral

- GPRA Indicator
- Screen for tobacco use
- Develop tobacco cessation protocol
- If there is no local tobacco cessation available, refer to 1-800-QUIT-NOW



HPDP Program

- Quarterly Tobacco Prevention Webinars
 - Wednesday, May 18, 2016 at 3:00 p.m. ET
 - Archived webinars for later viewing
- Provide Basic Tobacco Intervention Skills Certification training (evidence-based).
- Tobacco materials (posters, information cards, and public service announcement).

HP/DP Website

https://www.ihs.gov/hpdp/tobaccopreventi

MSN.com - Hotmail, Outlook, ... Tobacco Free Campaign | T...

File Edit View Favorites Tools Help

Travelpport ViewTrip This page can't be display... Adobe Connect Central Lo... Physical Activity Statistics ... Suggested Sites UPS CampusShip Login Welcome to HHS!

Tobacco Free Campaign

Resources

Contact Us

WE BREATHE HAPPY!
In Our Tobacco Smoke Free Home
Thanks to YOU!

Our Home is Free of Tobacco Smoke!
Tobacco smoke free homes and communities protect our children.
They are protected from the dangers of secondhand and thirdhand smoke.
• Secondhand smoke is smoke that comes off of lit cigarettes, and away from the smoker's mouth and nose.
• Thirdhand smoke is smoke that clings to clothes, hair, walls, and furniture, and the skin of the smoker. It stays there even after the cigarettes are put out.

Tobacco Free Family #2 Information Card (Peach) [PDF - 1.4 MB]

Tobacco Free Family Information Card (Blue) [PDF - 1.4 MB]

Tobacco Free Family #2 Poster [PDF - 1.6 MB]

WE BREATHE HAPPY!
In Our Tobacco Smoke Free Home
Thanks to YOU!

Our Home is Free of Tobacco Smoke!
Tobacco smoke free homes and communities protect our children.
They are protected from the dangers of secondhand and thirdhand smoke.
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Tobacco Free Youth Information Card (Blue) [PDF - 1.7 MB]

Tobacco Free Youth Information Card (Peach) [PDF - 1.7 MB]

Tobacco Free Youth Poster [PDF - 1.5 MB]



Resources

- Online Tobacco Cessation Training (free)
<http://rxforchange.ucsf.edu/registration.php>
- Tips from Former Smokers
<http://www.cdc.gov/tobacco/campaign/tips/index.html>



Questions?

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301-443-7122

<http://www.cdc.gov/nchs/data/databriefs/db217.pdf>

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520-295-2493



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/>