

Tobacco and Chronic Disease

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Presentation Overview

- Tobacco and chronic diseases
- Working with health care providers to address tobacco and chronic diseases
- Resources to help LLAs, coalitions
- What LLAs/coalitions can do to address tobacco and chronic diseases



Your Task

- Listen to the webinar
- Ask questions
- Think about how your workplan can incorporate chronic diseases and outreach to health care providers



Smokers with Chronic Disease

- **12.3%** of adults (4 million people) smoke in California (California Adult Tobacco Survey, 2008)
- Smokers with chronic disease experience increased hospitalization, complications and increased risk of death.
- The California Smokers' Helpline has partnered with the California Diabetes Program and the Department of Public Health to address tobacco use among people with diabetes and other chronic diseases.

Smoking & Chronic Disease

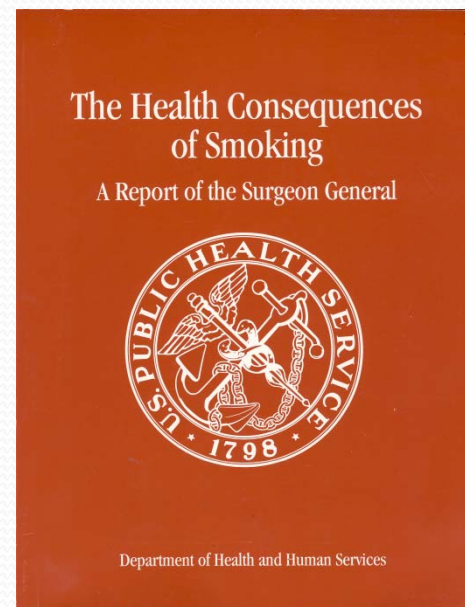
	Has High Blood Pressure	Has Had a Heart Attack	Has Had a Stroke	Has Diabetes	Has Asthma
% of CA Daily Smokers	23.2%	5.0%	16.7%	5.9%	15.2%

California Health Information Survey 2007

2004 Surgeon General's Report: The Health Consequences of Smoking

ADVERSE HEALTH EFFECTS ASSOCIATED with SMOKING

- Cancer
- Cardiovascular disease
- Respiratory disease
- Reproductive complications
- Osteoporosis
- Periodontitis
- Cataract
- Postoperative complications

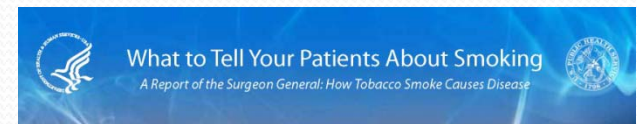


USDDHHS. (2004). *The Health Consequences of Smoking: A Report of the Surgeon General.*

2010 Surgeon General's Report: How Tobacco Smoke Causes Disease

The Biology and Behavioral Basis for Smoking – Attributable Disease

- There is no safe level of tobacco smoke
- Damage from tobacco smoke is immediate
- Smoking longer means more damage
- Cigarettes are designed for addiction
- Second hand smoke is dangerous
- There is no safe cigarette



What to Tell Your Patients About Smoking
A Report of the Surgeon General: How Tobacco Smoke Causes Disease

Quitting Will Save Your Patients' Lives
Tobacco use remains the leading preventable cause of death and disease in the United States. Recent studies show that brief advice from a clinician about smoking cessation yielded a 66% increase in successful quit rates. Talk to your patients. Tell them that quitting smoking is the most important step they can take to improve their health. They will listen to you.

How to Help Patients Quit*

Assist the tobacco user to:

- Set a quit date, ideally within 2 weeks.
- Remove tobacco products from the environment.
- Get support from family, friends, and coworkers.
- Review past quit attempts—what helped, what led to relapse.
- Anticipate challenges, particularly during the critical first few weeks, including nicotine withdrawal.
- Identify reasons for quitting and benefits of quitting.

Give advice on successful quitting:

- Total abstinence is essential—not even a single puff.
- Drinking alcohol is strongly associated with relapse.
- Allowing others to smoke in the household hinders successful quitting.

Encourage use of medication:

- Recommend use of over-the-counter nicotine patch, gum, or lozenge; or give prescription for varenicline, bupropion SR, nicotine inhaler, or nasal spray, unless contraindicated.

Provide resources:

- Recommend 1-800-QUIT NOW (784-8669), the national access number to state-based quitline services.
- Refer to Web sites for free materials (www.smokefree.gov and www.ahrq.gov/path/tobacco.htm).

*Excerpted from *Helping Smokers Quit: A Guide for Clinicians* (Treating Tobacco Use and Dependence: 2008 Update, A Clinical Practice Guideline) found at www.ahrq.gov/path/tobacco.htm

Summary of Findings from the 2010 Report of the Surgeon General

1. **There is no safe level of exposure to tobacco smoke.** Any exposure to tobacco smoke—even an occasional cigarette or exposure to secondhand smoke—is harmful.
2. **Damage from tobacco smoke is immediate.** Tobacco smoke contains more than 7,000 chemicals and chemical compounds, which reach your lungs every time you inhale. Your blood then carries the poisons to all parts of your body. These poisons damage DNA, which can lead to cancer; damage blood vessels and cause clotting, which can cause heart attacks and strokes; and damage the lungs, which can cause asthma attacks, emphysema, and chronic bronchitis.
3. **Smoking longer means more damage.** Both the risk and the severity of many diseases caused by smoking are directly related to how long the smoker has smoked and the number of cigarettes smoked per day.
4. **Cigarettes are designed for addiction.** The design and contents of tobacco products make them more attractive and addictive than ever before. Nicotine addiction keeps people smoking even when they want to quit.
5. **Even low levels of exposure, including exposure to secondhand tobacco smoke, are dangerous.** You don't have to be a heavy smoker or a long-time smoker to get a smoking-related disease or have a heart attack or asthma attack triggered by smoke.
6. **There is no safe cigarette.**

“ You can quit, and I can help. ”

USDDHHS. (2010). *How Tobacco Smoke Causes Disease: A Report of the Surgeon General.*

Smoking

Cancers

Oropharynx

Larynx

Esophagus

Trachea,
bronchus,
and lung

Acute
myeloid
leukemia

Stomach

Pancreas

Kidney
and ureter

Cervix

Bladder

Chronic Diseases

Stroke

Blindness,
cataracts

Periodontitis

Aortic aneurysm

Coronary
heart disease

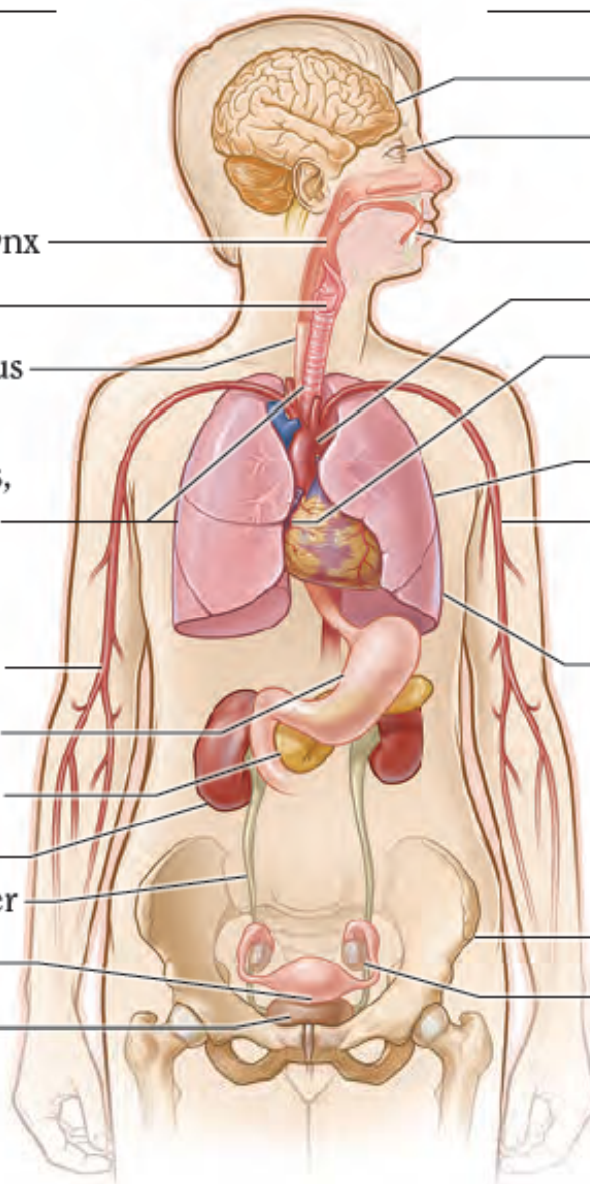
Pneumonia

Atherosclerotic
peripheral
vascular disease

Chronic
obstructive
pulmonary disease,
asthma, and other
respiratory effects

Hip fractures

Reproductive
effects in women
(including
reduced fertility)



Secondhand Smoke Exposure

Children

Adults

Middle ear disease

Respiratory symptoms, impaired lung function

Lower respiratory illness

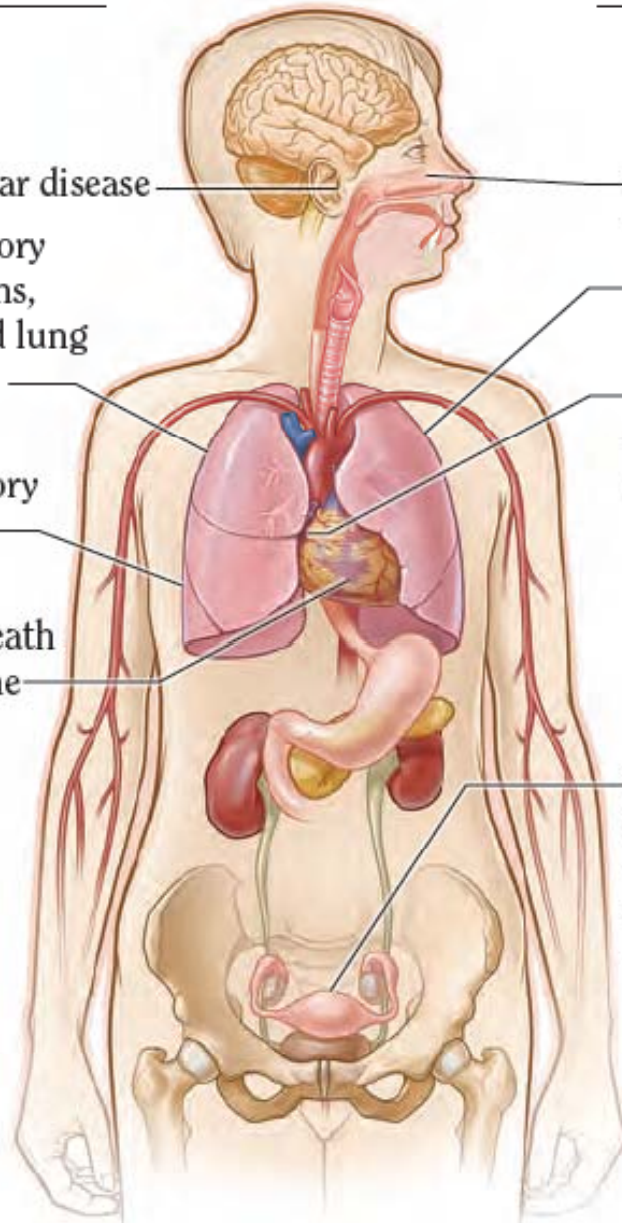
Sudden infant death syndrome

Nasal irritation

Lung cancer

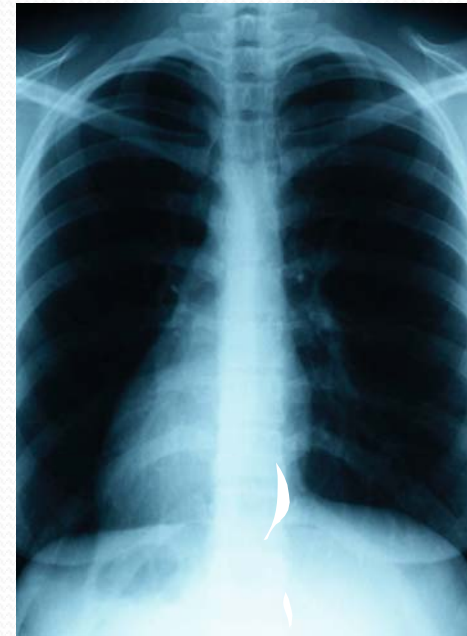
Coronary heart disease

Reproductive effects in women: low birth weight



Smoking and Respiratory Disease

- Acute respiratory diseases
 - Upper respiratory tract
 - Rhinitis, laryngitis, pharyngitis, sinusitis
 - Lower respiratory tract
 - Bronchitis, pneumonia
- Chronic respiratory diseases
 - Reduced lung function in infants
 - Respiratory symptoms in children & adults
 - Cough, phlegm, wheezing, dyspnea
 - Poor asthma control
 - Chronic obstructive pulmonary disease





Asthma

- 14.7% of adults with asthma smoke
- Smoking and secondhand smoke can trigger asthma episodes and increase the severity of attacks
 - SHS is also a risk factor for new cases of asthma in preschool aged children who have not already exhibited asthma symptoms.



COPD

- Smoking causes or worsens COPD, which includes emphysema and chronic bronchitis.
- Smoking is directly responsible for approximately 80-90% of COPD
- Among current smokers, chronic lung disease accounts for 73% of smoking-related conditions. Even among smokers who have quit chronic lung disease accounts for 50% of smoking-related conditions.

Smoking and Osteoporosis

Smoking causes

- Low bone density
 - Postmenopausal women
- Hip fractures
 - Observed in women and men





Smoking & Diabetes:

A Dangerous Combination

Smoking exacerbates the harmful effects of diabetes by:

- Making it hard for the body to process food into energy
- Raising the blood sugar level
- Smoking affects diabetes-related complications by causing:
 - Problems with blood vessels
 - Problems with the nerves: poor circulation, impotence, amputations (neuropathy)
 - Kidney disease (nephropathy)
 - Increased risk for blindness (retinopathy)
 - Gum disease, infection (periodontal disease)



Smoking May Be An Independent Risk Factor for Type 2 Diabetes

JAMA meta-analysis 2007

- 12% of diabetes attributable to smoking
- Despite lower weight in smokers, more fat in the center of the body: sign of insulin resistance and high risk for diabetes
- ***Smoking cessation should be a key facet of diabetes prevention and treatment***

*Willi et al JAMA 2007;298:2654-64; Ding and Hu editorial 2675-76

Smoking by People with Diabetes

- Over 3.7 million people in California have diabetes
 - 12.9% are smokers

12% of Californians with heart disease smoke



Sources: California Diabetes Program 2009 *Fact Sheet* and 2009 *Diabetes in California Counties*

Why address tobacco & chronic disease?

Diabetes \longleftrightarrow Chronic Disease

Smoking \longrightarrow Chronic Disease

Diabetes + Smoking + Chronic Disease = High Risk, Opportunity for Change

\uparrow
Important Intervention Point



Smoking & Cardiovascular Disease

- Coronary heart disease
 - Angina pectoris, ischemic heart disease, myocardial infarction
- Cerebrovascular disease
 - Stroke, transient ischemic attacks
- Abdominal aortic aneurysm
- Peripheral arterial disease



Cardiovascular Disease

12% of Californians with heart disease smoke

Coronary Heart Disease

- Cigarette smokers are 2 to 4 times more likely to develop coronary heart disease than nonsmokers.

2006 U.S. Department of Health and Human Services. CDC Smoking and Tobacco Use Fact Sheet

Stroke

- Cigarette smoking is a major cause of strokes.

2004 Surgeon General's Report on Smoking

People with diabetes are more likely to have cardiovascular complications, including coronary heart disease and stroke, at an earlier age that result in premature death American Diabetes Association

Hypertension

- 14.4% of Californians with hypertension smoke
- Smoking, and the nicotine within cigarettes, increases blood pressure
2004 Surgeon General's Report—The Health Consequences of Smoking.
- High blood pressure can cause kidney damage.
- Smokers with diabetes have a 2 to 3 times higher risk of kidney disease than people with diabetes who don't smoke 2010
Surgeon General's Report—How Tobacco Smoke Causes Disease
- 2 of 3 adults with diabetes have high blood pressure. American Diabetes Association
- Hypertension is an important risk factor for the development and worsening of diabetes complications, especially heart disease.
American Heart Association



High Cholesterol

- Studies have suggested a synergism between smoking and high cholesterol 2004 Surgeon Generals Report on Smoking
- Cigarette smoking is associated with increases in plasma triglycerides and decreases in good cholesterol. Lancet. 1992 May 9;339(8802):1128-30
- Diabetes also tends to cause an adverse lipid profile (Diabetic dyslipidemia) of increased triglycerides and decreased HDL leading to risk for heart attack and stroke. American Heart Association

Peripheral Vascular Disease

- Cigarette smoking causes reduced circulation by narrowing the blood vessels (arteries). Smokers are more than 10 times as likely as nonsmokers to develop peripheral vascular disease (PVD). 2006 U.S. Department of Health and Human Services. CDC Smoking and Tobacco Use Fact Sheet
- Smoking increases the risk of PVD resulting in amputations. Clinical Diabetes Vol. 24, number 3, 2006
- People with diabetes are at greater risk for severe PVD. Diabetes Care 24 (2001):1433-37
- More than 60% of non-traumatic lower-limb amputations occur in people with diabetes. 2005 U.S. Department of Health and Human Services CDC National Diabetes Fact Sheet

Ophthalmologic Diseases

- Tobacco smoke is composed of as many as 4,000 active compounds, most of them toxic and potentially damaging to the eye. 2004 Surgeon Generals Report on Smoking
- Smokers have 2 to 3 times the risk of developing cataracts as nonsmokers. 2004 Surgeon Generals Report on Smoking
- Smoking may accelerate the development of, or worsen, diabetic retinopathy. “Cigarettes: What the warning label doesn’t tell you.” (Chapter 15: Smoking and the eyes.) 1996 American Council on Science and Health.

Periodontal Disease

- Smoking changes the blood supply, immune response, and healing mechanisms of the mouth, increasing risk of infections and periodontal disease. *Journal of Periodontal Research*, 34(7): 363-9, October 1999
- People with diabetes are more likely to have periodontal disease than those without diabetes, especially if their diabetes is not well controlled.



Depression

- Persons with depression have higher rates of cardiovascular disease and diabetes and more risk behaviors for these diseases, such as smoking, poor diet, or lack of exercise, than persons without depression (CDC)
- Smoking has been associated with depression in people with diabetes
- One study found that the number of cigarettes smoked correlated with the level of depression in smokers with diabetes



Smoking and Behavioral Health

- Rates of smoking are 2-4 times higher than among the general population.¹
- 60% of current smokers report having had a mental health or substance use diagnosis sometime in their lifetime.¹
- This population consumes 45% of cigarettes smoked.³
- About 41% of people with mental illness & substance use disorders smoke.²

1. Kalman, 2005 2. Lasser, 2000, 3. Breslau, 2003



Smoking and Behavioral Health

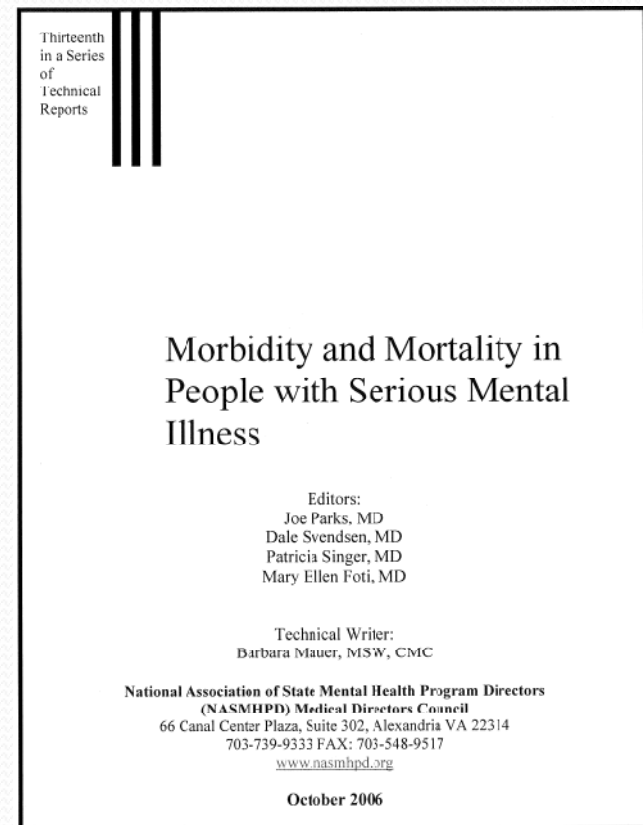
- 200,000 of the 435,000 annual deaths are people with mental illness and substance use disorders
- For patients in treatment for alcohol and drug dependence, more than half die from tobacco-caused illnesses¹
- Among treated narcotic addicts, smokers' death rates are 4 times that of nonsmokers²

¹Hurt et al., 1996

²Hser et al., 1994; Lynch & Bonnie, 1994

Morbidity and Mortality

- Persons with mental illnesses die up to 25 years earlier and suffer increased medical comorbidity
 - Often from tobacco related diseases





Tobacco-Related Disease: Summary

- Tobacco use harms nearly every organ of the body and is associated with a variety of adverse health outcomes resulting in significant morbidity and mortality.
- Mechanisms for disease have not been definitively established, but constituents of tobacco and smoke disrupt many normal cellular processes.
- Tobacco cessation efforts are essential to arrest or prevent disease progression.



An Opportunity for Health Care Providers

- 70% of smokers want to quit
- A brief 30-second intervention can help someone to quit
- Patients are more satisfied with their health care if their provider offers smoking cessation interventions - even if they're not yet ready to quit.



Provider Intervention is Important

- Provider advice significantly increases the chance that patients will make a quit attempt and quit for good.
- 66% of smokers were advised by a provider to quit
- 40% of smokers were advised to quit and referred to a program by a provider during the past 12 months



Provider Intervention is Important

- Physicians reported they are not confident in their ability to motivate smokers to quit (44%), make referrals (34%), or monitor patient progress (33%).
- “More effective interventions” (78%) and “Increased availability of interventions” (60%) would most motivate providers to assist patients to quit smoking
- On average it takes 12 – 14 attempts to quit successfully (Zhu)



Clinical Practice Guidelines

- Comprehensive, evidence-based approach for smoking cessation
- Updated version released in 2008 by the U.S. Public Health Service
- Systematic approach to tobacco for all health care facilities



Evidence-Based Model: The 5 A's

Ask: Systematically identify all tobacco users at every visit

Advice: Advise tobacco users to quit

Assess: Assess each tobacco user's willingness to quit

Assist: Assist tobacco users with a quit plan

Arrange: Arrange follow-up contact

“Do You CAARd?” *Ask. Advise. Refer.*



Ask: Systematically identify all tobacco users at every visit

Advise: Advise smokers to quit

Assess: Assess each smoker's willingness to quit

→ **Refer** to the California Smokers' Helpline

Assist: Assist smokers with a quit plan →

The Helpline provides behavior modification counseling (quit plan and quit date)

Arrange: Arrange follow-up contact →

The Helpline provides 5 follow-up calls – timing is based on the probability of relapse.



California Smokers' Helpline

- A free, statewide, telephone-based tobacco cessation program
- Established in 1992 by UCSD researchers
- Funded by Propositions 99 & 10
- Experimentally validated behavioral counseling protocols
- Proven to double a smoker's chance of success
- 6 languages: English, Spanish, Cantonese, Mandarin, Korean, Vietnamese
- Open 74 hours a week
- Has served over 500,000 Californians



Helpline Services

- Self-help materials
- Referral to local cessation programs
- Web site: www.nobutts.org
- Individual telephone counseling
 - Delivered by trained counseling staff
 - Individualized
 - Consists of an initial session and up to 5 follow-up sessions with the same counselor
 - Proactive



Populations Served

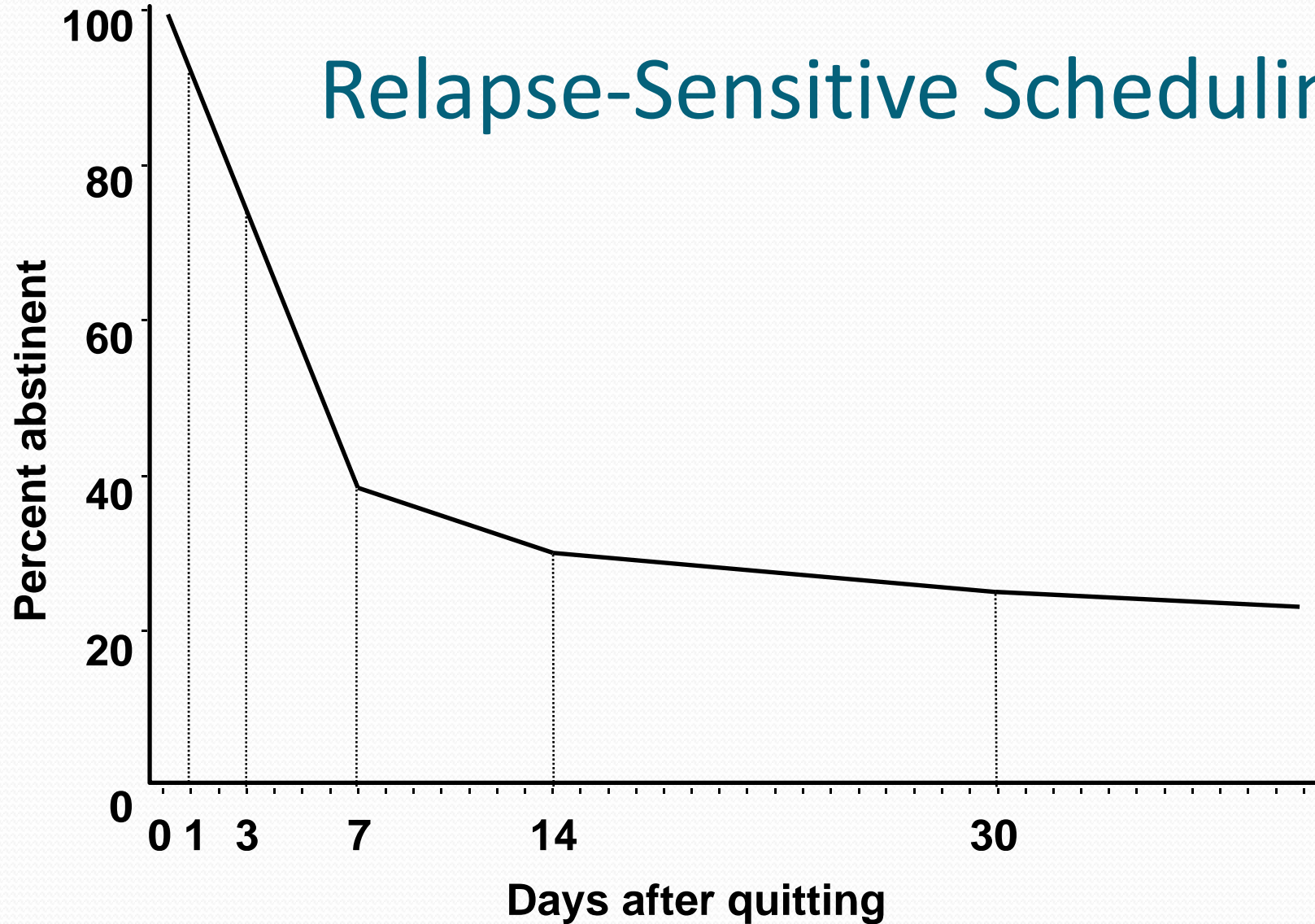
- Adults
 - English
 - Spanish
 - Chinese (Mandarin and Cantonese)
 - Korean
 - Vietnamese
- Teens
- Pregnant/nursing women
- Chew/spit tobacco users
- Non-tobacco using clients (proxy)



What Happens in Each Call?

- **Initial session** (30 to 40 minutes)
 - Build self-confidence
 - Create individualized plan
 - Motivate quit attempts
- **Up to 5 follow-up sessions with same counselor** (10 minutes each)
 - Convey support and accountability
 - Help prevent relapse

Relapse-Sensitive Scheduling



Zhu & Pierce (1995), *Prof. Psych. Res. & Practice*, 26, 624-625

Smoking & Chronic Disease

	Has High Blood Pressure	Has Had a Heart Attack	Has Had a Stroke	Has Diabetes
% of Helpline Callers ¹	30.6%	5.0%	5.0%	12.0%
% of CA Daily Smokers ²	23.2%	5.0%	16.7%	5.9%

1. California Smokers' Helpline 2009
2. California Health Information Survey 2007

2009 Helpline Caller Demographic Profile

Ethnicity	Helpline Callers	CA Daily Smokers¹
American Indian	2%	2%
Asian	5%	11%
Black	15%	10%
Hispanic/Latino	16%	13%
White	55%	56%
Other	7%	9%

1. 2007 California Health Interview Survey

2009 Helpline Caller Demographic Profile

Heard About	
Health Care Provider	44%
Media	33%
Family/Friend	12%
Other	11%

Insurance Status	
Public insurance	62%
Private insurance	13%
No insurance	18%
Other	7%

Helpline Referral Options

- For smokers who want to be contacted by the Helpline:
 - Two-way call
 - Fax referral
 - Electronic referral
- For smokers who prefer to contact the Helpline:
 - Gold Card
 - Regale Salud Card
 - Brochures

Pregnancy & Smoking Referral Form
Please complete this together with your pregnant smoker and fax the completed form to the California Smokers' Helpline at 1-858-300-1099 and a Helpline counselor will contact the smoker to provide FREE tobacco cessation telephone counseling.

Contact Information (Please print)

First Name _____	Last Name _____
Street address _____	
City _____	State _____ Zip _____

Home Phone (_____) _____ <small>Area Code</small>	Best Time to Reach You <input type="checkbox"/> Morning (9am-4pm) <input type="checkbox"/> Early afternoon (Noon - 3pm) <input type="checkbox"/> Late afternoon (3pm - 6 pm) <input type="checkbox"/> Evening (6pm - 9pm)
Work Phone (_____) _____ <small>Area Code</small>	

Please check next to the statement that best describes you.

I smoke now.
 I smoke now, but cut down after I learned I was pregnant.
 I smoke from time to time.
 I quit smoking after I learned I was pregnant.

Please circle your preferred language: English/Spanish/Chinese/Korean/Vietnamese

By signing below, I give my permission for the California Smokers' Helpline to contact me about joining a free stop smoking telephone program.

Signature _____ Date _____
(Without your signature the Helpline can't contact you)

Fax to 1-858-300-1099
Questions? Call Jill Macinko at 858-300-1016



Outreach to Health Care Providers: Do you cAARd? Taskforce

- Diabetes educators promote smoking cessation for people with diabetes
- Encourage other diabetes educators to Ask, Advise, Refer
- Developed pocket guide for health care providers about AAR, available through TECC
- Created online CEU to train nurses, pharmacists, dietitians on smoking cessation and chronic diseases



Outreach to Health Care Providers: California Collaborative for Chronic Disease Prevention (CCCDP)

State diabetes, arthritis, heart programs collaborating
with 5 counties to offer:

- Chronic Disease Self-Management Program/Healthier Living workshops
- Smoking status/cessation in electronic medical record
- Performance Partnerships
- Training of medical assistants and promotores

Mendocino County ***MORPH SUMMIT***

January 27, 2011



Mendocino **O**rganizations **R**aising
People's **H**ealth

Mary Williamson
Project Director
Tobacco Control Program

Participants included:

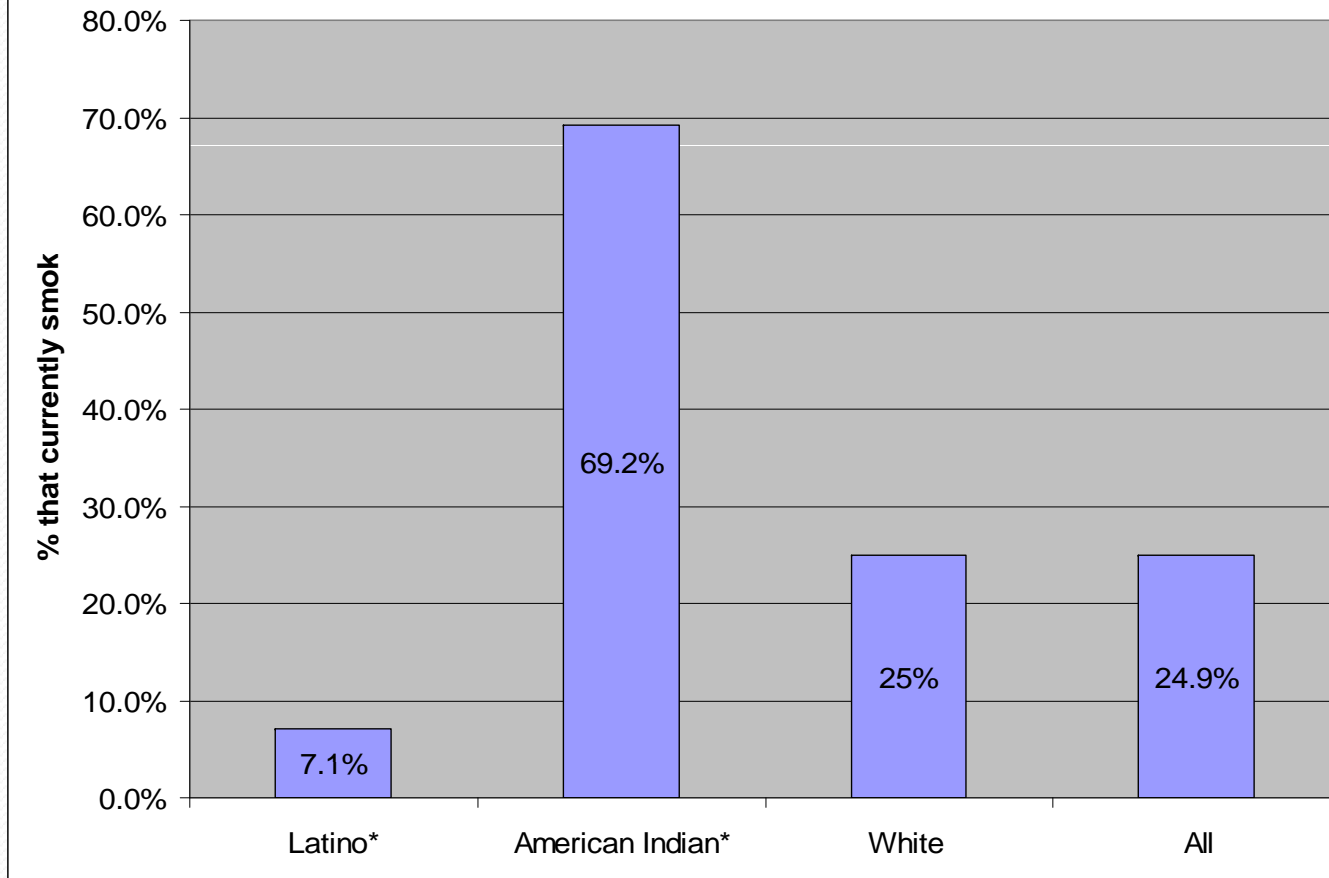
- Organized by Mendocino County Health and Human Services Prevention and Planning Unit
- Providers who attended included:
 - Nuestra Casa
 - American Lung Association
 - Ukiah Valley Medical Center
 - Mendocino Coast District Hospital
 - Alliance for Rural Community Health
 - Consolidated Tribal Health Project, Inc.
 - Action Network/Family Resource Center
 - And others



Smoking prevalence in Mendocino County:



Mendocino County Current Smokers: % of population (CHIS, 2007)



Heart Failure Deaths:



- Mendocino is among the nine California counties with the highest heart failure death rates
- 32.1 per 100,000 Mendocino County residents died of heart failure in 2006 (California Death Statistical Master File)
- 14 per 100,000 Californians died of heart failure in 2006

Heart Disease and High Blood Pressure:



- 8.7% of Mendocino County residents have been diagnosed with heart disease
- 6.3% of Californians have been diagnosed with heart disease
- 37.1% of Mendocino County adults have been diagnosed with high blood pressure (CHIS, 2007)
- 26.1% of California adults have been diagnosed with high blood pressure

Target: By January 2015, reduce the percent of Mendocino County residents diagnosed with heart disease to 7.5%.

- Brainstorm Multiple Strategies:

Examples

- Systematize referrals to Healthier Living program for patients with chronic conditions
- Train all healthcare providers to ask, advise and refer patients to CA Smokers' Helpline
- Promote CA Smokers' Helpline in Employee Orientation Packets

Target: By January 2015, reduce the percent of Mendocino County residents diagnosed with heart disease to 7.5%.

● Commit to Action Steps:

Examples



- Systematize referrals to Healthier Living
- Train providers to ask, advise and refer
- Promote Helpline in Employee Orientation Packets
- Ukiah Valley Medical Center
- Ukiah Valley Medical Center, Alliance for Rural Community Health, Consolidated Tribal Health
- Mendocino County Employee Wellness Program, Ukiah Valley Medical Center

Next Steps for Participants



- Identify gaps in provider participation and circulate MORPH Action Steps
- Tobacco Control Program will work with providers to carry out Action Steps related to Smokers' Helpline
- Check-in Conference Call with participants May 2011 – check on progress, successes and barriers and brainstorm solutions
- Survey Monkey with participants for Action Steps updates - July 2011 and January 2012

Periodic Updates to Providers



- Mendocino County residents diagnosed with heart disease (by gender and ethnicity)
- Mendocino County residents diagnosed with high blood pressure (by gender and ethnicity)
- Mendocino County residents who call the Smokers' Helpline (by gender and ethnicity)
- Mendocino County residents who smoke (by gender and ethnicity)
- California Death Statistical Master File data on Mendocino County heart failure deaths

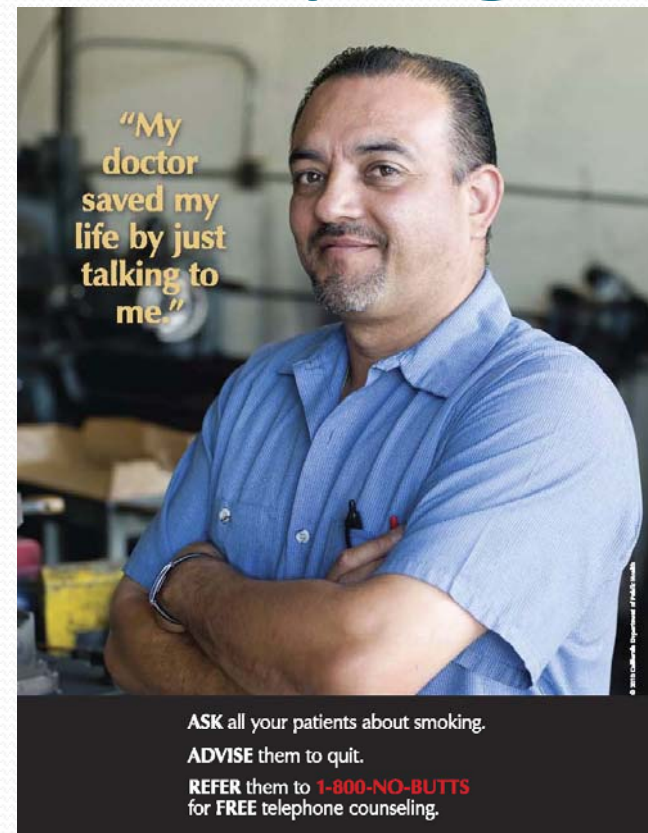


Resources:

Center for Tobacco Cessation

- Training and technical assistance for LLAs, coalitions, health care providers is available via webinar or in-person
- www.centerforcessation.org
 - Trainings
 - Fact sheets
 - Links

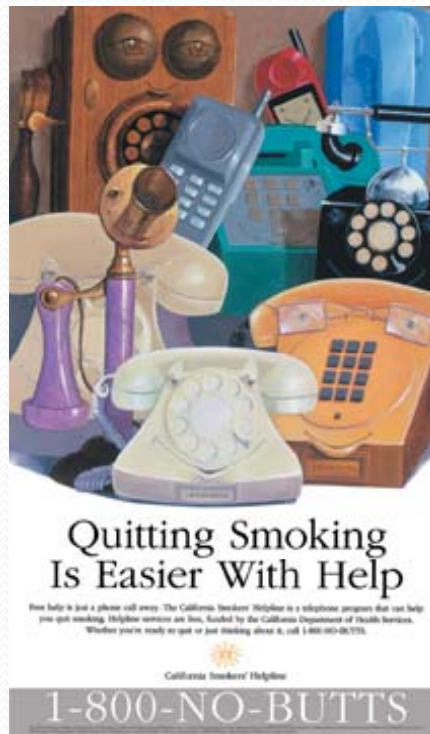
Ask, Advise, Refer Campaign



Download from TECC – posters, postcards, web/banner ads,
stickers, fact sheets, click to call...

<http://www.tobaccofreecatalog.org/category.aspx?id=86#2>

Free Helpline Materials



Order **free** materials at www.nobutts.org



Role for LLAs in Addressing Chronic Disease

- Form relationships with chronic disease partners in county or local coalitions/associations: heart disease, diabetes, asthma, behavioral health
 - Promote Ask, Advise, Refer intervention
 - Describe impact of cessation on physical and mental health
- Identify a health care provider who could be a champion, part of the tobacco coalition
- Join a chronic disease coalition to represent cessation and smokefree policies
- Relate chronic disease to secondhand smoke objectives/activities: smokefree hospital campus policies, smokefree doorway policies for workplaces



Discussion

Questions?



Contact Information

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