



# Cessation 101

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# Housekeeping

- ▶ Your phones have been muted
- ▶ Use the chat box to ask questions
- ▶ We are taping the presentation
- ▶ Follow-up document will be emailed



# Webinar Overview

- ▶ Center for Tobacco Cessation overview
- ▶ How do we help people quit?
  - Defining the issues  
Sharon Cummins
  - Helping individuals  
Gary Tedeschi
  - Helping through systems  
Kirsten Hansen



# Center for Tobacco Cessation

- ▶ Funded by the California Tobacco Control Program
- ▶ Statewide training and technical assistance center
- ▶ Purpose is to build capacity to support tobacco cessation



# Center for Tobacco Cessation

## ▶ Services:

- Trainings (webinars and in-person)
- Technical assistance
- Website

▶ [www.centerforcessation.org](http://www.centerforcessation.org)



# Center for Tobacco Cessation

- ▶ Faculty and staff:
  - Shu-Hong Zhu, Principal Investigator
  - Chris Anderson, Program Director
  - Gary Tedeschi, Clinical Director
  - Sharon Cummins, Director of Research and Evaluation
  - Kristin Harms, Communications Manager
  - Kirsten Hansen, Curriculum Development Manager



# Defining the Issues



# How Do We Help People Quit?

- ▶ What do we mean by **quit**?
- ▶ Who are the **people** we're trying to help?
- ▶ What really **helps**?

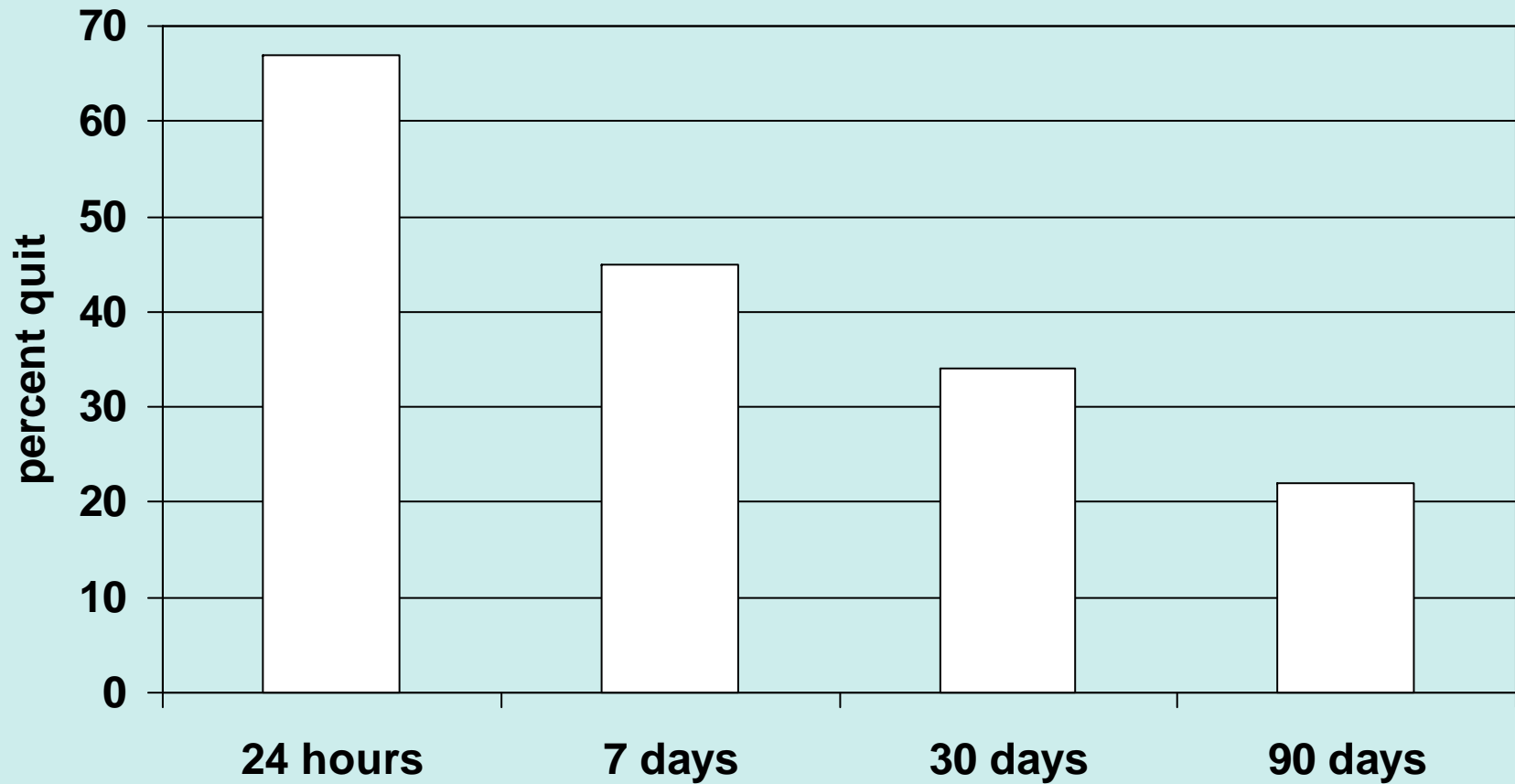


# What Do We Mean by Quit?

- ▶ Need to define this upfront and build appropriate measures into your evaluation plan
- ▶ Quit rate =  $\# \text{ quit} / \# \text{ targeted}$
- ▶ Different definitions can lead to vastly different quit rates. Two main factors:
  - Duration
  - Denominator



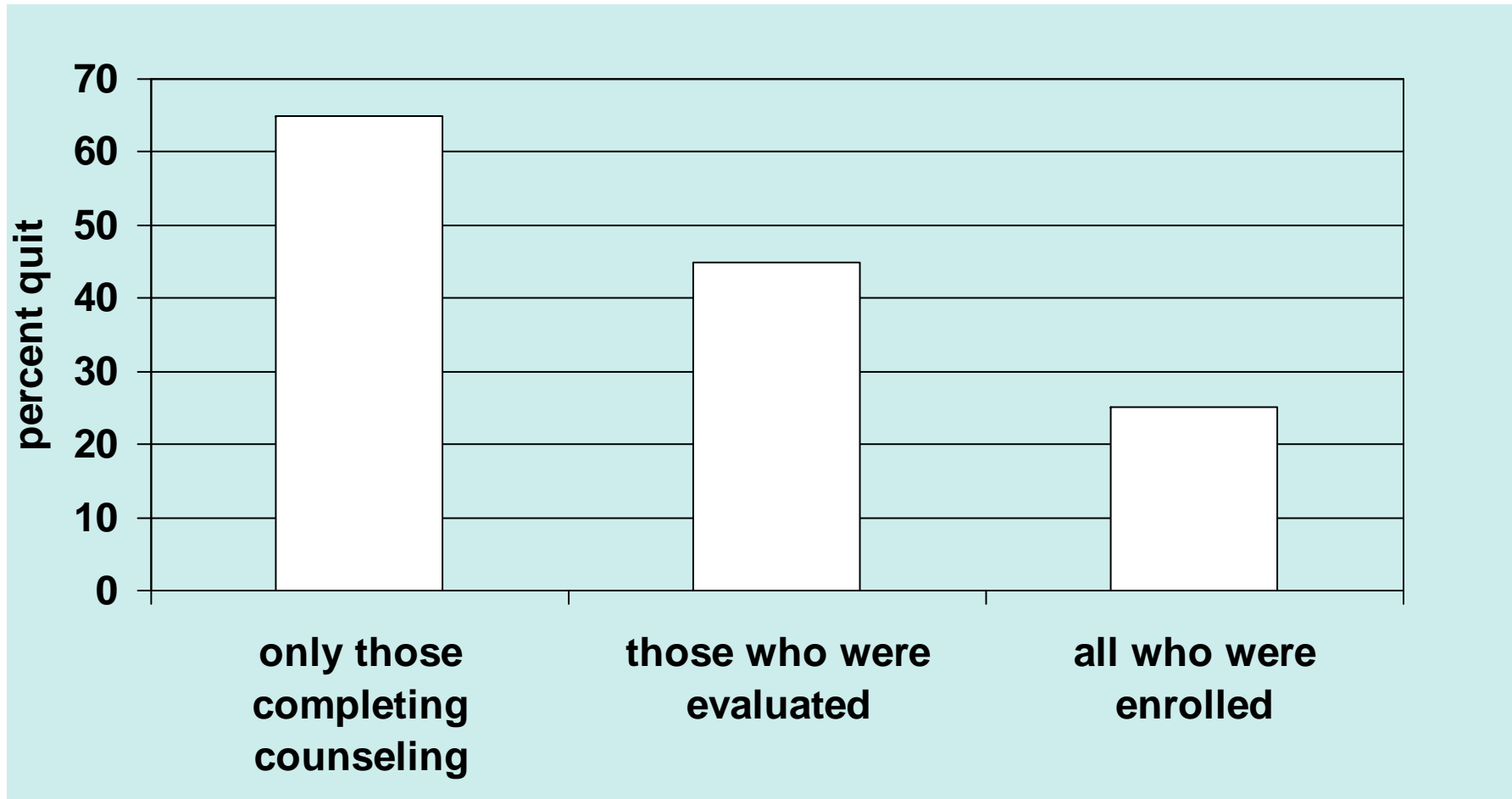
# What Duration is Considered Quit?



Source: Unpublished data from the California Smokers' Helpline 2008



# Who Is Included in the Denominator?



Source: Adapted from McAfee, Free & Clear, NAQC Annual Meeting 2007



# Other Issues Impacting Quit Rates

- ▶ What is the timing of evaluation?
- ▶ Are slips counted as relapse?
- ▶ What method of evaluation do you use?
- ▶ Who is the target of the intervention?



## Example of a Good Definition of Quit

- ▶ At 6 months, 30% of newly diagnosed heart patient program enrollees reported being completely smoke free for 30 days or more
  - **Duration**—30 days or more
  - **Denominator**—all enrollees (intent-to-treat)
  - **Timing**—6 months
  - **Slips**—none allowed (completely smoke free)
  - **Type of evaluation**—self-report
  - **Target**—newly diagnosed heart patients



# Who are the people we're trying to help?

- ▶ 13.3% of California adults smoke ~ 3.8 million smokers\*
- ▶ 1.1% use smokeless tobacco ~ 300,000 chewers\*\*
- ▶ Quit ratio
  - Of those who have ever smoked, 51% have quit\*\*\*

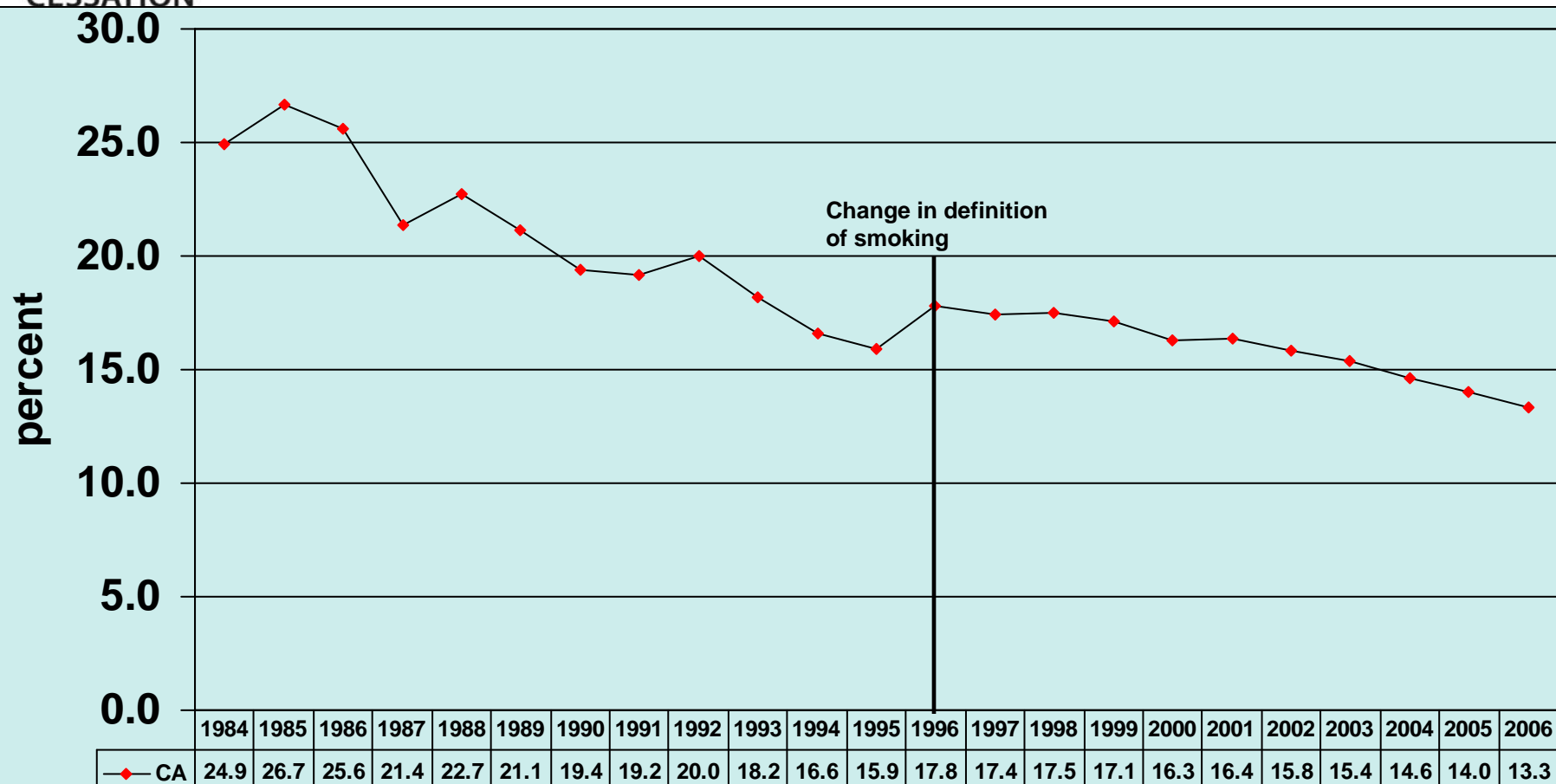
\*Source: Behavioral Risk Factor Surveillance System (BRFFS) 1984-1992, BRFFS and CA Tobacco Survey (CATS) data are combined for 1993-2005. Data are weighted to 2000 CA population.

\*\*Source: California Adult Tobacco Survey 2005

\*\*\*Source: Current Population Survey 2003



# California Adult Smoking Prevalence, 1984-2006



Source: Behavioral Risk Factor Surveillance System (BRFFS) 1984-1992, BRFFS and CA Tobacco Survey (CATS) data are combined for 1993-2005. Data are weighted to 2000 CA population. Note definitional change of smoker in 1996 to include more occasional smokers.



# Who is the proper target of your program / policy / intervention?

- ▶ Tobacco users
  - Setting—inpatient drug/alcohol program, work, clinic
  - Stage of change—motivation & skill
  - Reactive / Proactive
- ▶ Non-smoking proxies
- ▶ Systems
  - Employers
  - Health care providers



# Example

## Group A

- ▶ Highly motivated cardiac patients
- ▶ Used self-help materials only
- ▶ Quit rate = 40%

## Group B

- ▶ Mental health patients
- ▶ Received multiple counseling + medications
- ▶ Quit rate = 15%



# What really helps?

- ▶ What decreases the prevalence of smoking?
  - Demographic shifts
  - Prevention
  - Cessation
- ▶ How do we increase the number of people quitting?
- ▶ The strategies we choose depend on how we conceptualize the problem of smoking
  - Habit
  - Addiction
  - Chronic disease
  - Cost—health and economic
  - Personal problem or societal problem
  - Epidemic



# Helpseeking

- ▶ Most smokers want to quit
- ▶ It takes many attempts to quit for good
- ▶ Most smokers who quit do so on their own

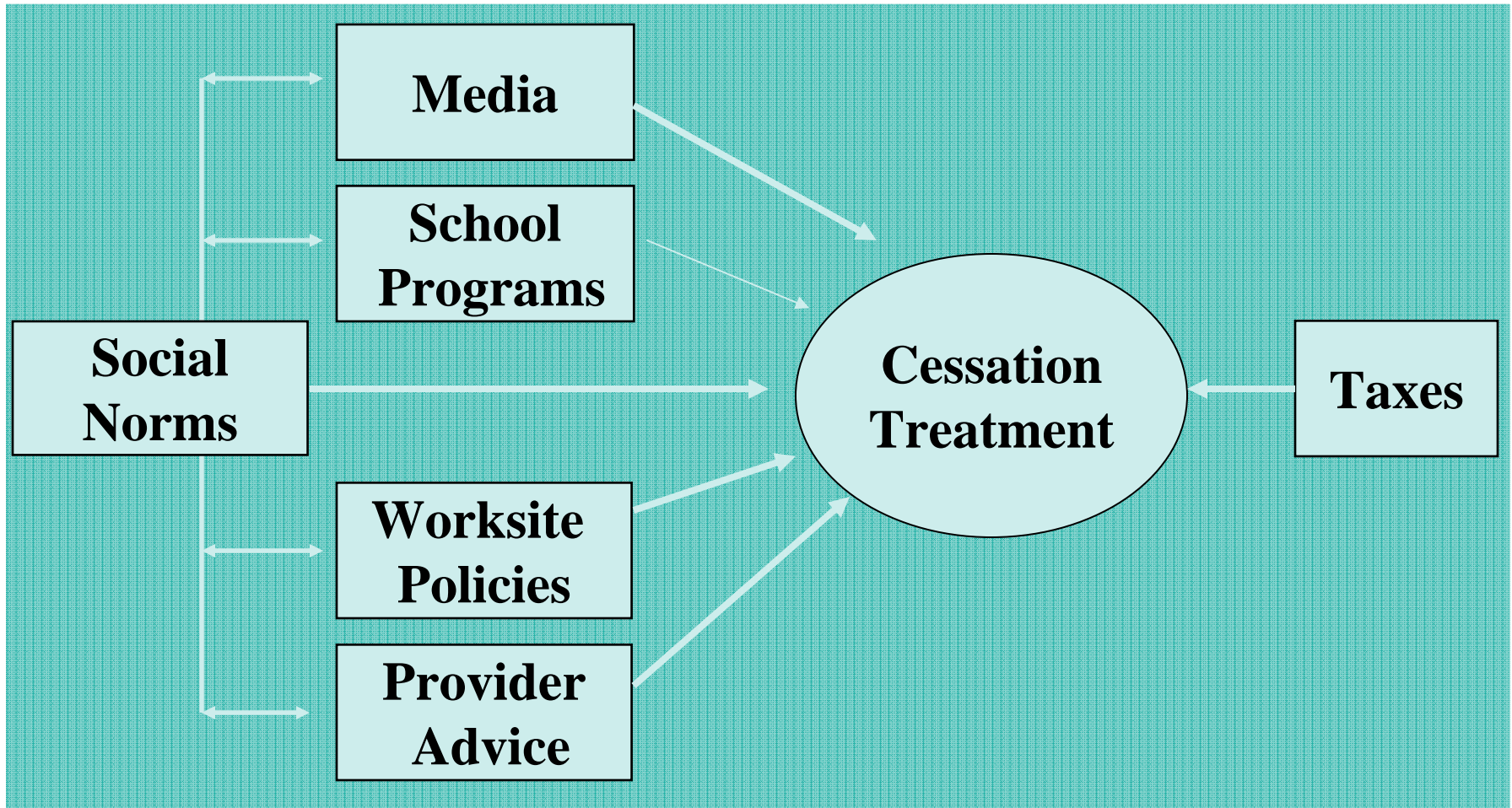


# Drivers of Cessation

- ▶ Smoke free workplaces
- ▶ Other bans, focus on nonsmokers' rights
- ▶ Taxes and other policy issues
- ▶ Anti-tobacco and cessation messages
- ▶ Cessation treatment
  - Pharmacological advances
  - Provision of services (quitline and others)



# Cessation Treatment in the Context of Tobacco Control





# How to Increase Cessation

- ▶ Increase the number of quit attempts
- ▶ Increase probability of staying quit (survival) after an attempt

$$C = A \times S$$

**Cessation = Attempts x Survival**

Source: Zhu, S-H. (2006, July) Increasing cessation in the population: quit attempts vs. successful quit attempts. Paper presented at the 13th World Conference on Tobacco or Health, Washington, D.C.



# Recommendations

- ▶ Carefully define your outcome
- ▶ Evaluate your program
- ▶ Define your target and your intervention
- ▶ Don't try to be everything to everybody
- ▶ Include cessation messages
- ▶ Encourage quit attempts, with or without assistance



Questions?



# Helping Individuals



How might you work with individuals to increase quit attempts, prevent relapse, or both?



## 3 Key Considerations

- ▶ How many contacts?
- ▶ When should they occur?
- ▶ What should happen at each contact?



## How Many Contacts?

- ▶ From a quit attempt standpoint, one contact may do the job.
  - Address the essential elements
  - Lead to a quit date
- ▶ From a relapse prevention standpoint, multiple contacts help.
- ▶ People with fewer resources benefit most from more contact.

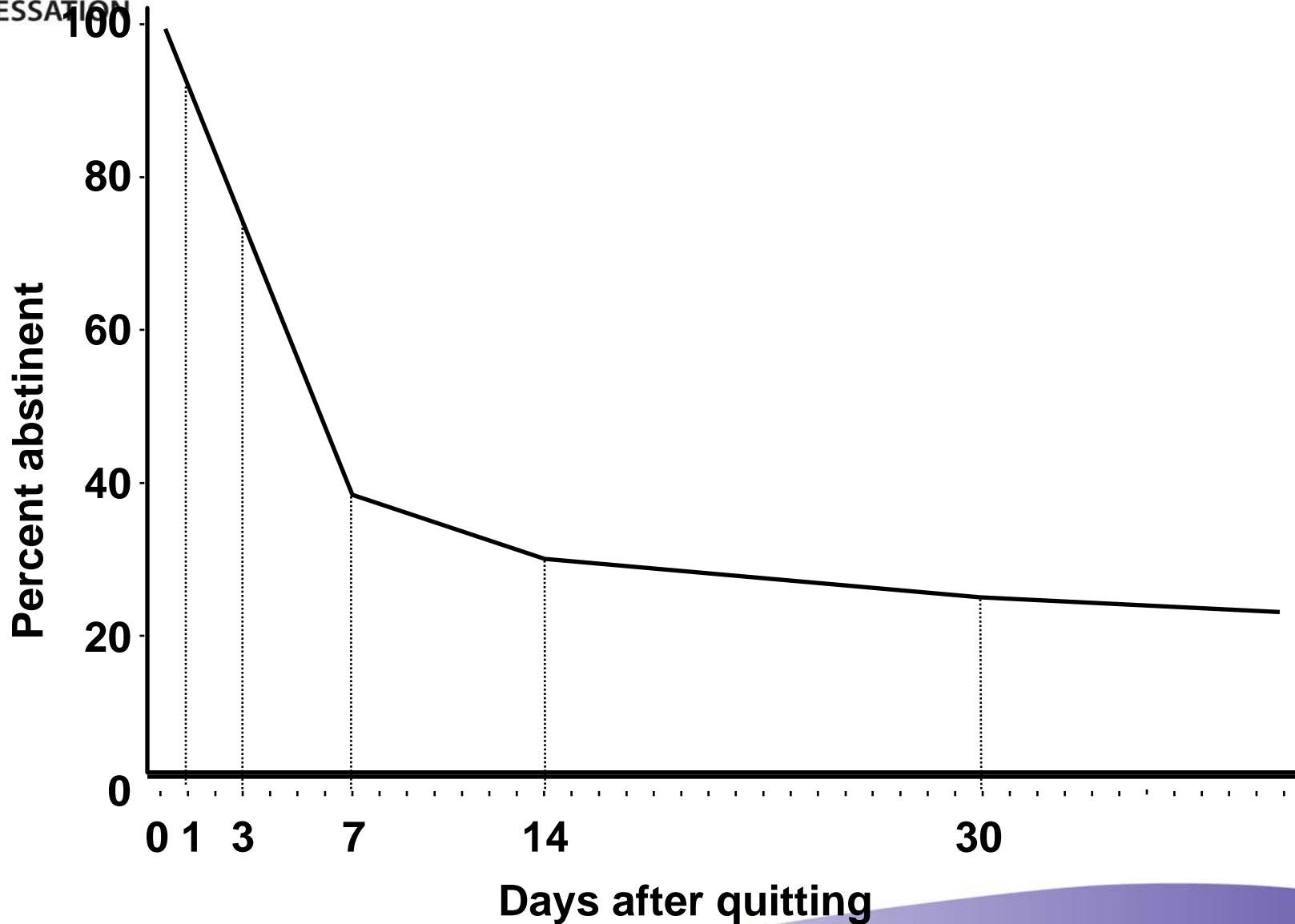


# When Should the Contacts Occur?

- ▶ From a motivation standpoint, strike while the iron is hot.
- ▶ From a relapse prevention standpoint, schedule contacts based on the probability of relapse.



# Relapse-Sensitive Scheduling



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



# When Should the Contacts Occur?

- ▶ From a motivation standpoint, strike while the iron is hot.
- ▶ From a relapse prevention standpoint, schedule contacts based on the probability of relapse.
- ▶ From a recycling standpoint, spread contacts over several months.



# What Should Happen at Each Contact?

- ▶ Increase nonspecific counseling effects
- ▶ Apply specific counseling effects
- ▶ Address appropriate counseling topics



# Nonspecific Effects

- ▶ Instill hope
- ▶ Establish good rapport
- ▶ Increase motivation
- ▶ Boost self-efficacy
- ▶ Encourage social support
- ▶ Address ambivalence & create accountability
  - Proactivity



# Proactivity

- ▶ Addresses client ambivalence
- ▶ Reduces attrition
- ▶ Provides social support
- ▶ Creates accountability



# Specific Effects

- ▶ Share Knowledge
  - Educate about the quitting process
  - Provide facts about tobacco & nicotine
  - Offer a menu of pharmacotherapy options
- ▶ Facilitate Planning
  - Behavioral (e.g., changing habits)
  - Cognitive (e.g., self-image)
  - Mental health & substance use issues
  - Pharmacological



# Pharmacotherapy Options

- ▶ Nicotine Replacement Therapy
  - Nicotine Patch\*
  - Nicotine Gum\*
  - Nicotine Lozenge\*
  - Nicotine Inhaler
  - Nicotine Spray
  
- ▶ Medication
  - Bupropion (Zyban, Wellbutrin S-R)
  - Varenicline (Chantix)

\*Available over the counter



# Nicotine Replacement Therapy

- ▶ Helps smokers get off nicotine slowly. Nicotine is released into the bloodstream, reduces physical withdrawal symptoms.
- ▶ Contraindications:
  - pregnancy or nursing
  - recent heart attack, irregular heart beat, severe or worsening heart pain
  - stomach ulcers
  - overactive thyroid
  - high blood pressure
  - diabetes requiring insulin



# Bupropion (Zyban/Wellbutrin S-R)

- ▶ Non-nicotine drug, a sustained-release form of the antidepressant Wellbutrin.
- ▶ Stimulates dopamine and norepinephrine, brain chemicals that give the sensation of alertness & energy.
- ▶ Reduces withdrawal symptoms such as cravings, irritability & depressed mood.
- ▶ Contraindications:
  - pregnancy or nursing
  - seizure risk higher for those with seizure disorders, anorexia nervosa or bulimia, or who are withdrawing from alcohol
  - Other medications (MAO inhibitors, drugs that contain bupropion hydrochloride)



## Varenicline (Chantix)

- ▶ Non-nicotine drug developed specifically for smoking cessation. Not an antidepressant. Targets nicotinic receptors.
- ▶ Releases dopamine but substantially less than with smoking.
- ▶ Reduces the urge to smoke and reduces the pleasure derived from smoking.



# Varenicline (Chantix)

- ▶ **Contraindications**
  - Pregnancy or nursing
  - Kidney problems or kidney dialysis
  - Other medications (insulin, blood thinners, asthma medicine)
- ▶ There have been post-marketing reports of adverse mood and behavior changes.
  - Causal links have not been established.
  - FDA has issued warnings for patients and providers to closely monitor psychiatric symptoms.
  - Studies are underway to test varenicline in patients with psychiatric health issues.



# Pharmacotherapy Considerations

- ▶ All FDA-approved quitting aids can improve the odds of success.
- ▶ Caveats:
  - Clinical studies included behavioral counseling
  - Risk of smokers thinking they can't quit without pharmacotherapy
  - Not all quitting aids are appropriate for everyone



# Counseling Topics – First Contact

(Example: California Smokers' Helpline protocol)

- ▶ Treatment overview & rationale
- ▶ Motivation & self-efficacy
- ▶ Physical & mental health considerations
- ▶ Smoking & quitting history
- ▶ Quitting methods
- ▶ Environmental considerations
- ▶ Planning
- ▶ Setting a quit date

Source: Zhu et al. 1996. Telephone Counseling for Smoking Cessation: What's in a Call? JCD 75: 93-102.



# Counseling Topics - Follow-up Contacts

- ▶ Quit status
- ▶ Withdrawal review
- ▶ Pharmacotherapy review
- ▶ Challenges & smoking events
- ▶ Motivation & self-efficacy
- ▶ Support
- ▶ Future Plan
- ▶ Self-image

Source: Zhu et al. 1996. Telephone Counseling for Smoking Cessation: What's in a Call? JCD 75: 93-102.



# Counseling Summary

- ▶ **Motivation** - identify a strong reason
- ▶ **Confidence** - bolster belief in ability
- ▶ **Skills** - develop a solid plan
- ▶ **Self-image** - adopt a new view of self
- ▶ **Perseverance** - keep trying



# Recommendations

- ▶ Strike while the iron is hot – capitalize on motivation.
- ▶ Prevent relapse – make contact early and often
- ▶ Recycle if you can – keep checking in over time
- ▶ Reinforce the quit attempt message – people can only succeed if they keep trying



Questions?



# Helping Through Systems



# Population-Based Approaches

- ▶ Media
- ▶ Policy
- ▶ Systems
  - Employers
  - Health Plans
  - Hospitals
  - Clinics
  - Mental Health and Substance Abuse Treatment Centers



# Media

## ▶ Vehicles

- TV
- Radio
- Billboards
- Press releases
- Media interviews
- Bus ads/shelters
- Click-to-call
- Search engine optimization
- Check stubs

## ▶ Messages

- Clear, simple and repetitive
- Second-hand smoke messages work well as cessation motivators

## ▶ Audiences

- Smokers, friends/family, health care providers



# Policy

- ▶ Expanding smoke-free areas
  - Hospitals, cities, beaches, parks, multi-unit housing, cars, prisons
- ▶ Increasing tobacco taxes
  - Every 10% increase reduces consumption by 3-5%, reduces young-adult smokers by 3.5%, and reduces kids who smoke by 6-7%<sup>1</sup>

<sup>1</sup> Source: Lindblom, Campaign for Tobacco-Free Kids, June 11, 2007



# Employers

- ▶ Implement smoke-free campus policies
- ▶ Offer cessation resources
  - On-site classes
  - Web-based tools
  - Promote the Helpline
- ▶ Expand health benefits
  - <http://www.businesscaseroi.org>



# Employers - Example

## ▶ Pitney Bowes

- Created an incentive program
  - Employees earn flex dollars to purchase medical benefits
- Established seven on-site health centers
  - Free NRT and Zyban
  - Counseling (on-site or referred to quitline)
  - Educational material

Source: Pacific Business Group on Health, Tobacco Cessation Benefit Coverage & Consumer Engagement Strategies: A California Perspective, December 2007.



# Health Plans

- ▶ Insurance coverage varies by plan
- ▶ Medi-Cal provides FREE medication with:
  - Certificate of enrollment in behavior-modification, e.g. 1-800-NO-BUTTS
  - Prescription
- ▶ Medicare
  - Prescription drug benefits – Part D
  - Reimburses for cessation counseling – CPT Codes
    - ▶ 99406 (3-10 minute intervention)
    - ▶ 99407 (>10 minute intervention)

**For additional information, visit:**

**<http://www.nobutts.org/quittingaids.shtml>**



# Health Plans - Model Benefit

Healthy People 2010 goal: Increase insurance coverage of evidence-based treatment for nicotine dependency to 100%

- ▶ Screen for tobacco use
- ▶ Offer evidence-based counseling
- ▶ Cover all FDA-approved cessation meds
- ▶ Allow for multiple quit attempts
- ▶ De-link medication & counseling benefits
- ▶ Eliminate, or reduce, co-pay



# Health Plans – Example

## Kaiser Permanente Northern CA

- Instituted Smoking as a Vital Sign
  - ▶ Medical assistant asks during routine intake
  - ▶ Recorded on electronic medical record
  - ▶ Physician assesses readiness and provides resources and advice
- Down to 9.2% prevalence
- 30% increase in HEDIS scores

Source: Pacific Business Group on Health, Tobacco Cessation Benefit Coverage & Consumer Engagement Strategies: A California Perspective, December 2007.



# Hospitals - Current Requirements

- ▶ Joint Commission requirements
  - Must provide cessation advice/counseling for at least 2 of the following conditions:
    - ▶ Acute myocardial infarction
    - ▶ Heart failure
    - ▶ Pneumonia

**To check a hospital in your area, visit:**

<http://www.qualitycheck.org>



# Hospitals – Model System

- ▶ Identify all tobacco users
- ▶ Identify a clinician to deliver in-patient counseling/advice
- ▶ Implement a system to refer to behavior modification programs, e.g. 1-800-NO-BUTTS
- ▶ Expand formularies to include all FDA-approved cessation medications
- ▶ Implement a smoke-free campus



# Health Care Provider Intervention

**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.

\*Provider advice can double the chance a smoker will make a quit attempt.



# Pocket Guide

- ▶ To order pocket guides, contact the Tobacco Education Clearinghouse of California at

[www.tobaccofreecatalog.org](http://www.tobaccofreecatalog.org)





# Clinics

- ▶ Identify a champion in the clinic
- ▶ Implement a tracking system for the Ask, Advise, Refer intervention
- ▶ Educate health care providers
  - Ask, Advise, Refer
  - Medi-Cal and Medicare Coverage



# Mental Health & Substance Abuse Treatment Centers

- ▶ Change existing beliefs
- ▶ 100% of state psychiatric facilities are now smoke-free
  - Napa – 7/08
  - Coalinga – 8/08
  - Atascadero – 11/08
  - Patton – 4/09
  - Metro – 4/09
- ▶ Increase training & supervision for staff



# Recommendations

- ▶ Include cessation messages wherever possible
- ▶ Identify a champion within systems to advocate from within
- ▶ Target health care providers
  - Promote and implement the Ask, Advise, Refer intervention
- ▶ Contact CTC for additional training and/or technical assistance!



# Contact Information

- ▶ Center for Tobacco Cessation
  - [www.centerforcessation.org](http://www.centerforcessation.org)
- ▶ Sharon Cummins
  - [scummins@ucsd.edu](mailto:scummins@ucsd.edu) or 858-300-1046
- ▶ Gary Tedeschi
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  - [k3hansen@ucsd.edu](mailto:k3hansen@ucsd.edu) or 858-300-1012



Questions?