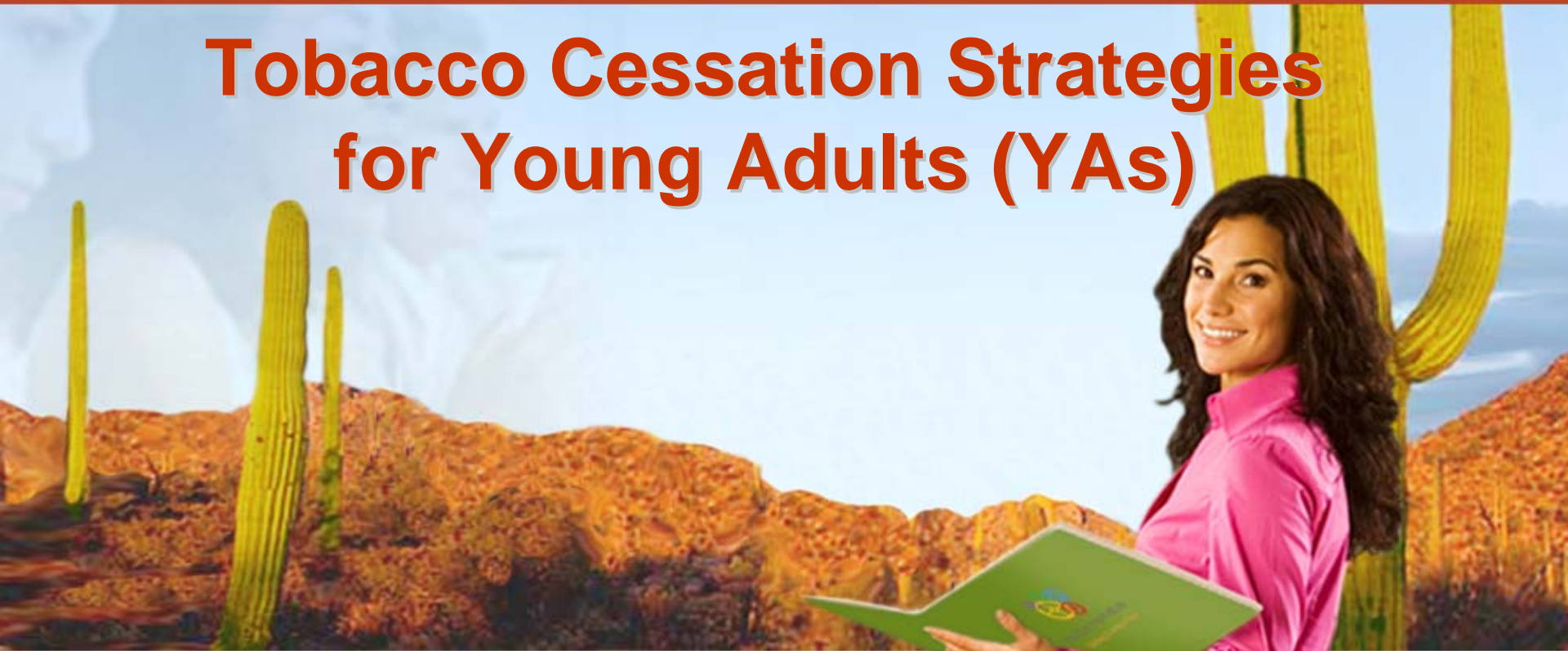


# Tobacco Cessation Strategies for Young Adults (YAs)



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## ***Strategies for Reducing Tobacco Use Among Young Adults***

Developed by

Dianne Barker, MHS

Amy Sporer, MS

Ann Malarcher, PhD



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# Best Practices for Comprehensive Tobacco Control Programs



- **State and community interventions**
- **Health communication interventions**
- **Cessation interventions**
- **Surveillance and evaluation**
- **Administration and management**

[www.cdc.gov/tobacco/tobacco\\_control\\_programs/stateandcommunity/best\\_practices](http://www.cdc.gov/tobacco/tobacco_control_programs/stateandcommunity/best_practices)



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# The Guide to Community Preventive Services Increasing Tobacco Use Cessation



- **Increase unit price of tobacco**
- **Reduce client out of pocket costs for effective treatments**
- **Provide telephone counseling**
- **Conduct mass media campaigns combined with other interventions**
- **Implement health care reminder systems, with or without provider education**

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



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# SHS Effects on Smoking Cessation among YAs



- **7 studies**
- **Home Bans: May prevent relapse**
  - YA less likely to relapse in future if live in smoke-free home (Gilpin, et. al., *Nicotine Tob Res*, 2005)
- **University Bans: May increase quit attempts and reduce consumption**
  - YA state smoke less (Apel et al., *J Am College Health*, 1997)
  - Increase in quit attempts (Etter et al., *J Epid Community Health*, 1999)



# SHS Effects on Smoking Cessation among YAs

- **Workplace Bans: Mixed results, 100% bans may increase quitting; may be gender-related**
  - State-level bans increase quitting among YA females (Tauras & Chaloupka, *NBER*, 1999)
  - After controlling for census division, state-level bans no effect on YA quitting (Tauras, *Health Policy*, 2004)
  - Self-reported 100% bans no effect on YA relapse in future (Gilpin et. al., *Nicotine Tob Res*, 2005)
  - Self-reported 100% bans increase quitting, no effect of partial bans (Macy et. al., *AJPH*, 2007)



# SHS Effects on Smoking Cessation among YAs



- **Restaurant Bans: May not affect YA quitting**
  - State-level bans no effect on YA quitting (Tauras, *Health Policy*, 2004)
- **Public Place Bans: May not affect YA quitting**
  - After controlling for census division, state-level bans no effect on YA quitting (Tauras, *Health Policy*, 2004)



# Price Effects on Smoking Cessation among YAs



- **2 studies**
- **Cigarette Price: May increase quitting**
  - 10% price increase, 11% men & 12% women increase in quitting (Tauras & Chaloupka, *NBER*, 1999)
  - 10% price increase, 3.5% increase in quitting (Tauras, *Health Policy*, 2004)
  - Increases initial quitting and subsequent quitting (Tauras, *NBER*, 1999)



# Media Effects on Smoking Cessation among YAs



- **7 studies**
- Pregnant women (15-24 yrs): Awareness high, may decrease consumption
  - 1992 English campaign 50% aware, no difference in quitting but significant drop in % smoking 20+ cigs per day (Campion et al., *Addiction*, 1994)



# Media Effects on Smoking Cessation among YAs



- **Young Adults: Ads appear to help quit, and may increase intention to quit**
  - (<22 yrs) YA more likely to quit due to ads (Ho, *J Soc Psychol*, 1998)
  - (18-40 yrs) Among those seeing 2001 Australian anti-smoking ads
    - 6% quit at follow-up compared to 4% for those who did not see the ads
    - 30% planned to quit in next 30 days compared to 20% planning to quit (Borland & Balmford, *Tob Control*, 2003)
  - (18-30 yrs) TV ads helped quit more than conventional quitting aids or no help, compared to other age groups (Biener et al., *Am J Prev Med*, 2006)



# Media Effects on Smoking Cessation among YAs



- Higher levels of awareness of quitlines from California media campaigns among YA smokers (58.1%) over a 14-year period than older adults (44.3%)  
(Cummins et al, *AJPH*, 2007)
- In New York City, following implementation of a media campaign in 2006 within a multi-pronged anti-tobacco policy initiative began in 2002, young adult smoking decreased by 17.4%, with an overall significant decrease of 34.9% between 2002-2006  
(Ellis et al., *MMWR*, 2007).
  - Later analysis indicated that young adult women accounted for most of the decline between 2002 and 2005  
(Ellis et al., *AJPH*, 2008).





## Other Policies

<p>Out of Pocket Costs: ? Quitting</p>	<ul style="list-style-type: none"><li>•Availability of college clinics (Wechsler et. al., <i>J Am College Health</i>, 2001)</li><li>•YA less likely to access free NRT compared to NYC heavy smokers, had similar quitting rates except those 65+ (Miller et al., <i>Lancet</i>, 2005)</li><li>•YA women more likely than YA men to use free NRT -- once enrolled, likelihood of using patch high, more likely than other age groups (Ellis et al., <i>AJPH</i>, 2008)</li></ul>
<p>Provider Reminders/Training: ? Quitting</p>	<p>Training:</p> <ul style="list-style-type: none"><li>•Orthodontic clinics (Russo et. al., <i>Prev Medicine</i> 1999)</li><li>•College campuses (Halperin &amp; Rigotti, <i>J Am College Health</i>, 2003)</li><li>•Pediatric clinics (Pbert et. al, <i>Pediatrics</i>, 2006)</li></ul>
<p>Telephone Support: May increase quitting</p>	<ul style="list-style-type: none"><li>•YA increases cessation rates (Rabius et. al., <i>Health Psychology</i>, 2004)</li><li>•YA daily smokers well-represented in calling CA Helpline &amp; more likely to hear about Helpline from media than OA (Cummins et. al., <i>AJPH</i>, 2007)</li><li>•(16-24 yrs) Higher state media exposure, more quitline awareness (Emery et. al., unpublished)</li></ul> <p>Barker et al., 2008, under review</p>

# Other Policies

Tobacco-Free Schools	None
Product Sales and Distribution	<p>Focus Groups (Bader et al., <i>AJPH</i>, 2007)</p> <ul style="list-style-type: none"><li>• <b>Less prominent placement in stores</b></li><li>• <b>Designated stores</b></li></ul>
Provider Packaging & Labeling	None
Tobacco Industry Advertising & Promotion Bans	<ul style="list-style-type: none"><li>• Aggressive ad campaigns targeting YA in bars (Sepe et al., <i>AJPH</i>, 2002)</li><li>• 50% of Boston clubs frequented by YA have cigarette promotions (Biener et al., <i>Tob Control</i>, 2004)</li><li>• (18-30 yrs) YA more receptive to cig marketing, and more frequent patrons of bars and clubs (Biener &amp; Albers, <i>AJPH</i>, 2004)</li><li>• (18-29 yrs) 20% YA exposed to tobacco advertising and promotion in bars and clubs in CA (Gilpin et al., <i>Tob Control</i>, 2005)</li></ul> <p>Barker et al., 2008, under review</p>

# Best Practices for Comprehensive Tobacco Control Programs



- **State and community interventions**
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# Public Health Service Clinical Guidelines Treating Tobacco Use and Dependence: 2008

- **Updated from 1996 and 2000 Guidelines**
- **New evidence indicating effectiveness of counseling for adolescents...but no recommendations specifically for young adults**
- **Rely on adult recommendations**



# PHS Clinical Guidelines 2008

## Adult Recommendations



- **Brief Intervention: The 5A's Model**
  - Ask, Advise, Assess, Assist, Arrange
- **Medication**  
(all smokers trying to quit, except in presence of contradictions)
  - Bupropion SR (Zyban®)
  - Nicotine gum
  - Nicotine inhaler
  - Nicotine lozenge
  - Nicotine nasal spray
  - Nicotine patch
  - Varenicline (Chantix®)



# PHS Clinical Guidelines 2008 Adult Recommendations



- **Intensive Counseling**

- Individual, group, proactive telephone
- Strong dose response: multiple (4+), long (> 10 minutes) sessions
- Problem-solving, skills training, relapse prevention, stress management



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# PHS Clinical Guidelines 2008

## Adult Recommendations



- Provide motivational intervention for those unwilling to quit
  - General principles:
    - Express empathy
    - Develop discrepancy
    - Roll with resistance
    - Support self efficacy
  - Content areas:
    - 5R's : Relevance, risks, rewards, roadblocks, repetition
- Did not recommend acupuncture, hypnosis, aversive smoking therapy or extra-treatment social support



# Young Adults Differ...



***Compared to older smokers, young adults are:***

- **More likely to make a serious quit attempt in the past year**
- **Less likely to have health insurance (46% work full time)**
- **Less likely to visit a health care professional**
- **Less likely to be asked about smoking during this visit**
- **Less likely to use behavioral treatment or pharmacotherapy (19.6% vs. 33.5%)**



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# Young Adults Differ...



## Quitting

*“should be something you tell yourself to do,”  
not something  
“you have to get help for.”*

**- California student, 2002**



# Young Adults Differ...



*“I have been wanting to quit for awhile now and I would seek help but I just don't really have an outlet to seek help with. I'm one of the people that doesn't go to the doctor regularly. So I don't know anyone who really offers anything.”*

– *Young adult smoker, 2007*

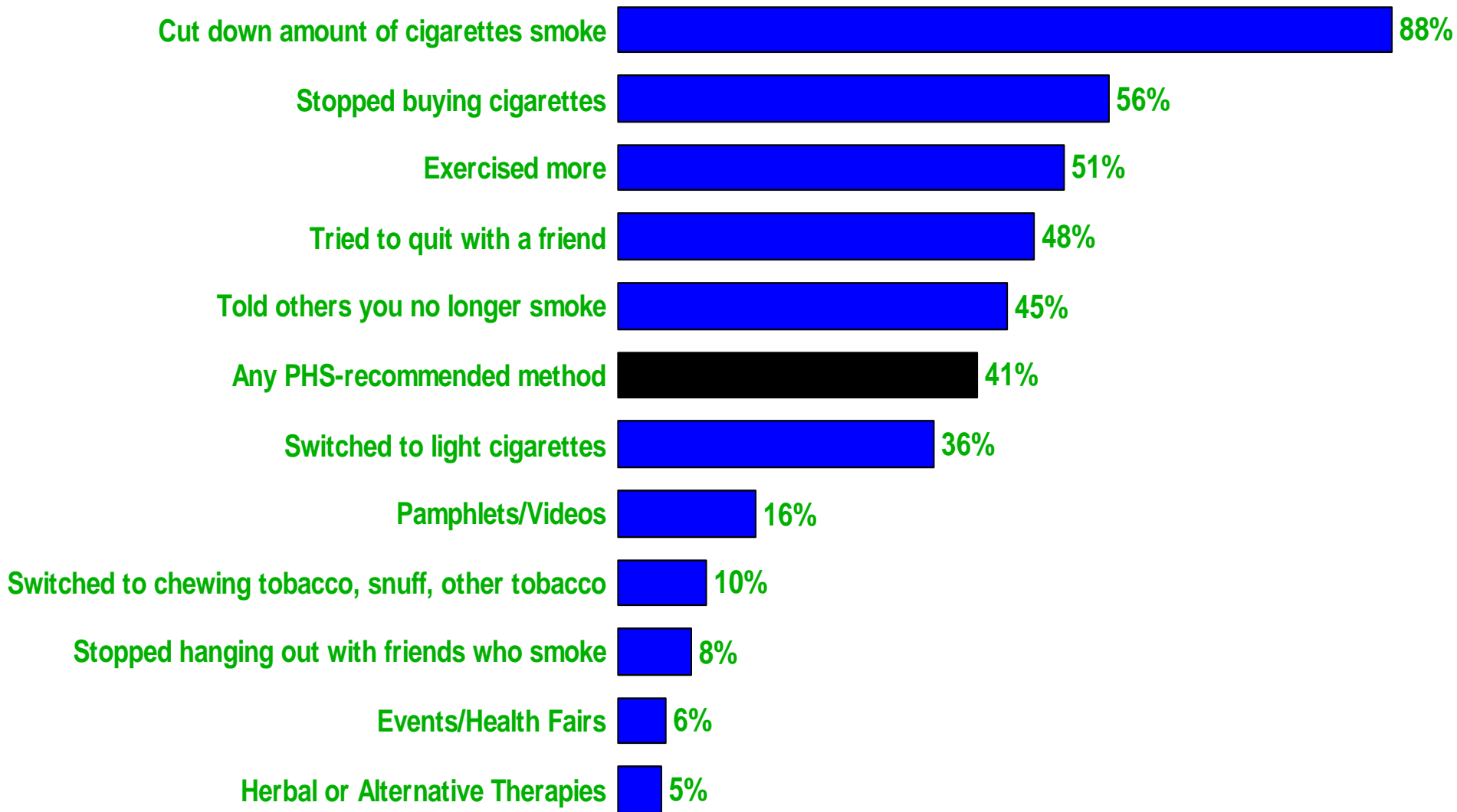
*Balch, Young Adult Focus Groups for UIC, 2007*



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# Ever Use of Quitting Methods (16-24 yrs.)

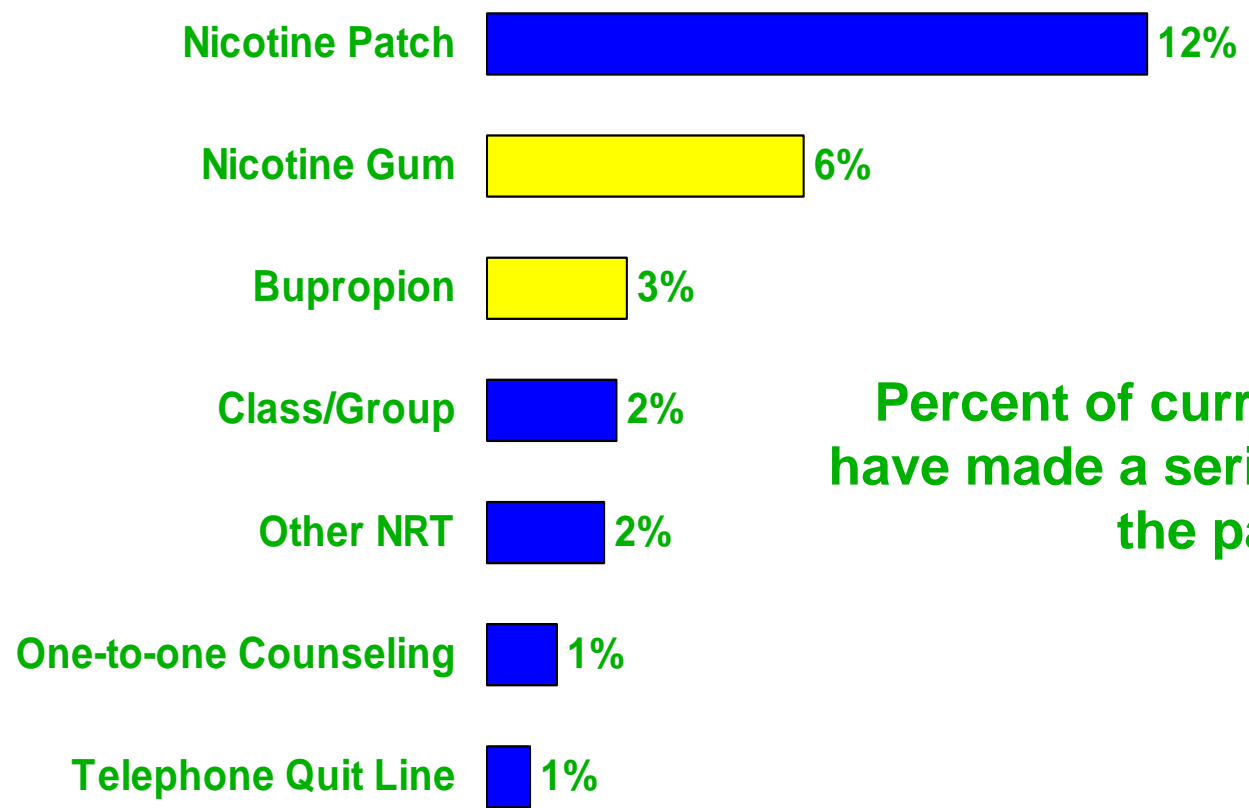


**Percent of baseline smokers 100+ cigs who have tried to quit at least once (n=1827)**

*National Youth Smoking Cessation Baseline Survey, Weighted to the CPS-TUS 2001-2002  
Barker, et al.. MMWR, 2006.*



# One-Year Use of PHS-Recommended Quitting Methods 18-24 year olds



**Percent of current smokers who  
have made a serious quit attempt in  
the past year**

# Correlates of PHS-Method Use



## ***Pharmacotherapy*** (Curry et al., AJPH, 2007)

- Receiving advice to quit from health care provider
- Heavier smoking
- Higher educational attainment
- Ethnic background (non-Hispanic Whites > non-Whites)

## ***Talking with a Health Professional*** (Davis et al., unpublished)

- Having family member with a serious illness from smoking
- Ethnic background (non-Hispanic Whites > non-Hispanic Blacks & Hispanics)





# Quitline Usage among Young Adults



## *California Smokers' Helpline* (Cummins et al., AJPH, 2007)

- **Almost all daily smokers, heavier smokers than general population**
- **More likely to be women**
- **Ethnic minorities and low income/education pop well-represented**
- **More likely to hear about quitline from media than older adults**



# Quitline Usage among Young Adults



## *American Cancer Society Quitline* (Rabius et al., *Health Psychology*, 2004)

- **Higher abstinence among those using quitline + self-help booklets than self-help booklets alone**
- **Counseling increased recommended medication use**
- **Use of NRT increased 6-month cessation rates**



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# NRT Usage among Young Adults

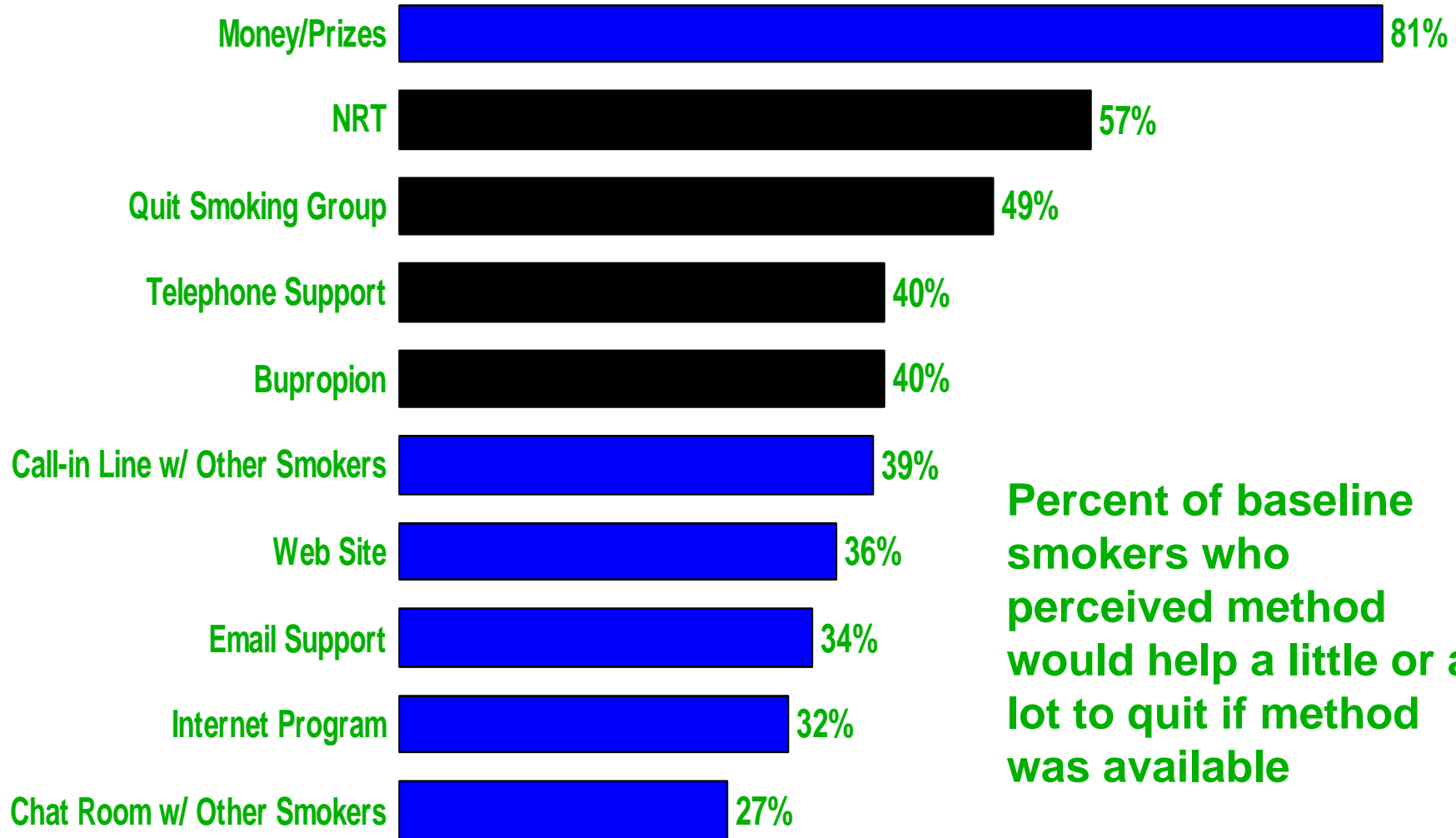


## *New York City Free Patch Distribution* (Ellis et al., AJPH, 2008)

- **5-point tobacco control program**
  - Smoking declined from 23.8% to 18.8% btw 2002-2005
  - Explained entirely by decline by young women
- **More young women enrolled in free patch than men (e.g., very low enrollment among young Asian men)**
- **Once enrolled, likelihood of using patch high---more likely than other age groups**



# Perception of Quitting Aids 16-24 year olds



Percent of baseline smokers who perceived method would help a little or a lot to quit if method was available



# Misconceptions about NRT



***Nicotine replacement products, like the patch or gum...***

**% Agree**

**Are just as harmful as cigarettes**

**37%**

**Are just as addictive as cigarettes**

**62%**

**Help you quit by making you feel  
nauseous/sick if take them & smoke  
at same time**

**61%**



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*National Youth Smoking Cessation Baseline Survey, Weighted to the CPS-TUS 2003*



# Ignorance about Quitlines



*“I don't know what kind of service they offer. I don't know if it's just a one time thing. Like it would be nice if this person would almost be like your phone mentor and let you know that like ‘I'm here to help you and I will call you. **Let's talk once a week** ... let's see how you're doing. Let's see what your improvement is. Let's talk about what you're doing differently and keep progressing from there’...”*



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Balch, Young Adult Focus Groups for UIC, 2007

# Ignorance about Quitlines



*“...But, to me, I get the feeling that if I call I'm going to get connected with some random operator and they're just there and they have a list of questions and help quotes or whatever. It doesn't feel genuine, I guess.”*

– *Young Adult Smoker, 2007*



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# RealU Case Study



## RealU Web Site Randomized Trial

*University of Minnesota, Twin Cities (An et al., Prev Med, 2008)*

- **RealU: online college life magazine with personalized smoking cessation messages and peer email support**
  - \$10 weekly incentives to intervention group for 20-week intervention
- **Recruitment: Fall, 2004, email messages to a random sample of undergraduates, asking to complete online health survey**
- **Retention: 18.9/20 weekly visits, on average**
- **30-day abstinence 41% vs. 23% ( $p < .001$ ) at week 30, CO testing (no difference for 6-month prolonged abstinence)**



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# What Young Adults Want



## ***6 Focus Groups in Ontario, Canada:***

- **Negative perceptions of existing methods**
- **Need for accurate information**
- **Concerned about cost---want free services**
- **Need services to be convenient and accessible, no appts (outside medical establishments)**



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*Bader et al., AJPH, 2007*

# What Young Adults Want

- **Request counselors be ex-smokers, be interactive, supportive & emphasis benefits of quitting**
- **Want innovative, not conventional methods**
- **Little interest in web or text messaging**



# What Young Adults Want



## ***6 Focus Groups in U.S.:***

- **Largely unaware of options**
- **Skeptical of seeking help for smoking, or anything else**
- **Think tobacco companies mandated to provide treatment as part of master settlement**



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Curry et al., unpublished, 2008 *or Gear*

# What Young Adults Want



- **Personal interaction**
- **Seeking credible sources (ex-smokers)**
- **Mixed opinions about pharmacotherapy**



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# A Good Program is...



*“ ...Just being able to be around people... It's like meetings....”*

*“There's different things you talk about. You don't have to just talk about cigarettes. You can talk about yourself ... talk about the things you like. Even talk about things that have happened to you in the past.”*

*Young Adult Smokers, 2007*

*Balch, Young Adult Focus Groups for UIC, 2007*



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***“After the meeting was over you would have numbers of different people that you can call and talk to. And they would talk you through it over the phone.”***

***“It's like a big family, pretty much, all quitting at once.”***

*Young Adult Smokers, 2007*



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# Recommendations: Increasing Consumer Demand Among Young Adult Smokers



## *Treatment*

- **Increase access (affordability/availability)**
- **Treat co-morbidities (alcohol + tobacco use)**
- **Encourage communal quitting (parents/friends)**
- **Add financial incentives?**
- **Help for lighter smokers?**



# Recommendations



## *Marketing*

- **Depict successful young quitters**
- **Dispel NRT myths**

## *Advocacy*

- **Regulate additives---make cigarettes more harsh**
- **Ban bar promotions**
- **Promote smoke-free bans and higher excise taxes**



# Resources



- [www.youthtobaccocessation.org](http://www.youthtobaccocessation.org)
  - *The Youth Tobacco Cessation Collaborative: National Blueprint for Action*
  - *American Journal of Public Health*
- [www.helpingyoungsmokersquit.org](http://www.helpingyoungsmokersquit.org)
  - *American Journal of Health Behavior*



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