

Adolescents and Tobacco Cessation

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Goal

- To review current evidence and perspectives on adolescents and tobacco in practice
- To discuss interventions and ways to improve the delivery of systematic advice

100% TOBACCO CIGARETTES

CAMEL

PLEASURE
— TO —
BURN



SURGEON GENERAL'S WARNING: Cigarette
Smoke Contains Carbon Monoxide.

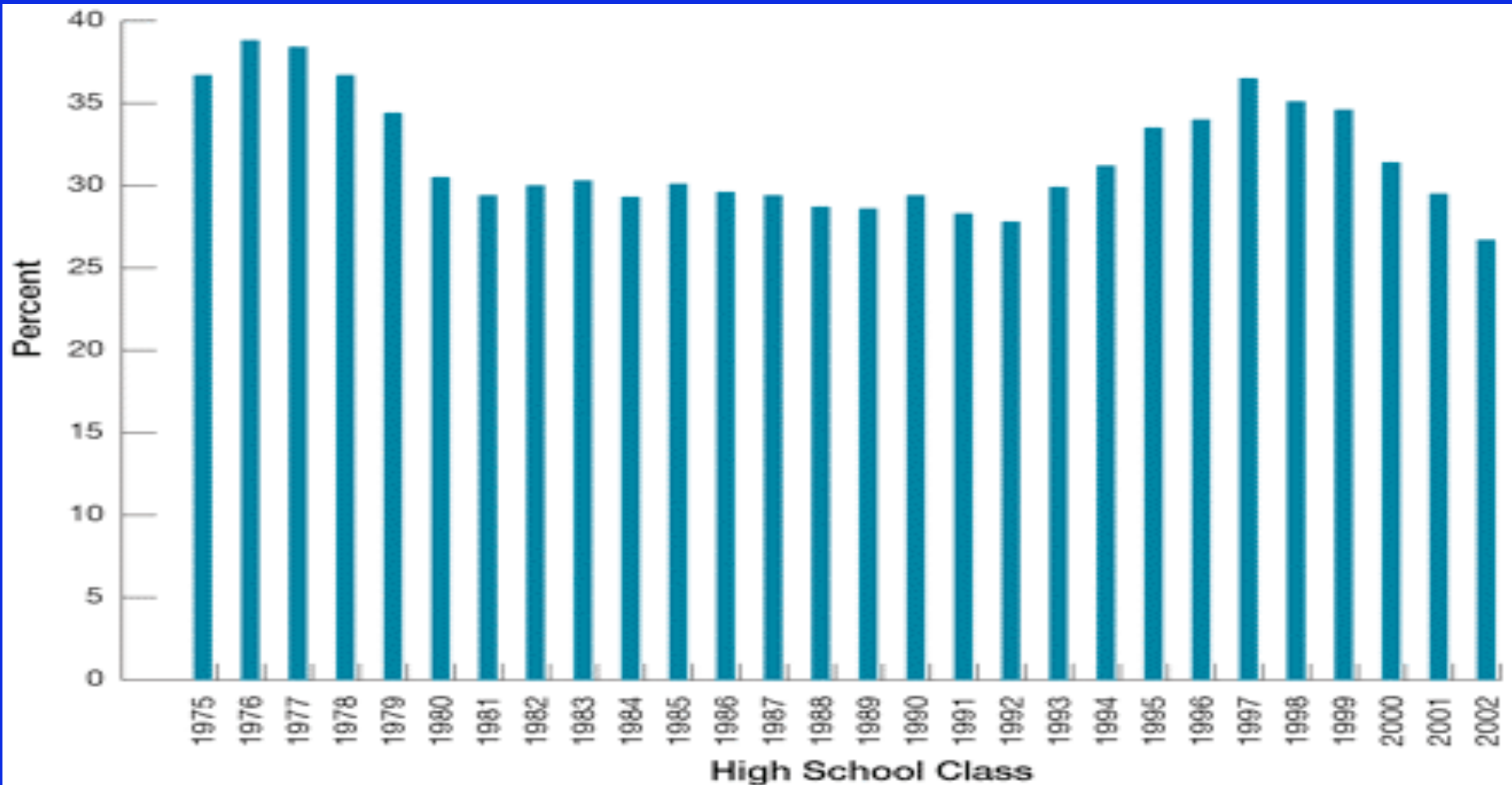


SINCE 1913

Youth and tobacco

- 3 million adolescents smoke
- >2600 children/day start smoking
- 1/3rd will become addicted, smoke through adulthood
- the younger a person starts, the stronger the addiction to nicotine
- 60% of smokers started before age 14
90% before age 19
- 23% report current smoking (CDC, 2005)

Past 30 Day Smoking, 1975-2002



Adapted from Johnston, et al., 2001

Initiation and Addiction

- Exposure to tobacco promotion contributes to initiation of tobacco use
- Dose-response relationship
 - Greater exposure results in greater risk
- Nicotine addiction
 - Characterized by tolerance, craving, withdrawal symptoms, & loss of control
 - 1st symptoms of dependence can appear with days or weeks of **intermittent** tobacco use

Changing Evidence About Nicotine Dependence

- Signs of nicotine dependence often start within two months after onset of smoking
- The median frequency of use at the onset of symptoms was 2 cigarettes, one day per week
- 2/3 of teens report loss of autonomy over tobacco prior to the onset of daily smoking

Unsafe Alternatives

- **Cigars:** 14% past month use
- **Hookahs:** water pipes involving the burning of tobacco mixed with sweetened flavors
- **Bidis:** unfiltered flavored cigarettes
 - higher levels of nicotine
 - Marketed as “herbal”; usually less expensive than cigarettes
- **Kreteks:** Clove cigarettes containing 60 – 70% tobacco
- **Smokeless tobacco:** chewing tobacco, snuff, dip

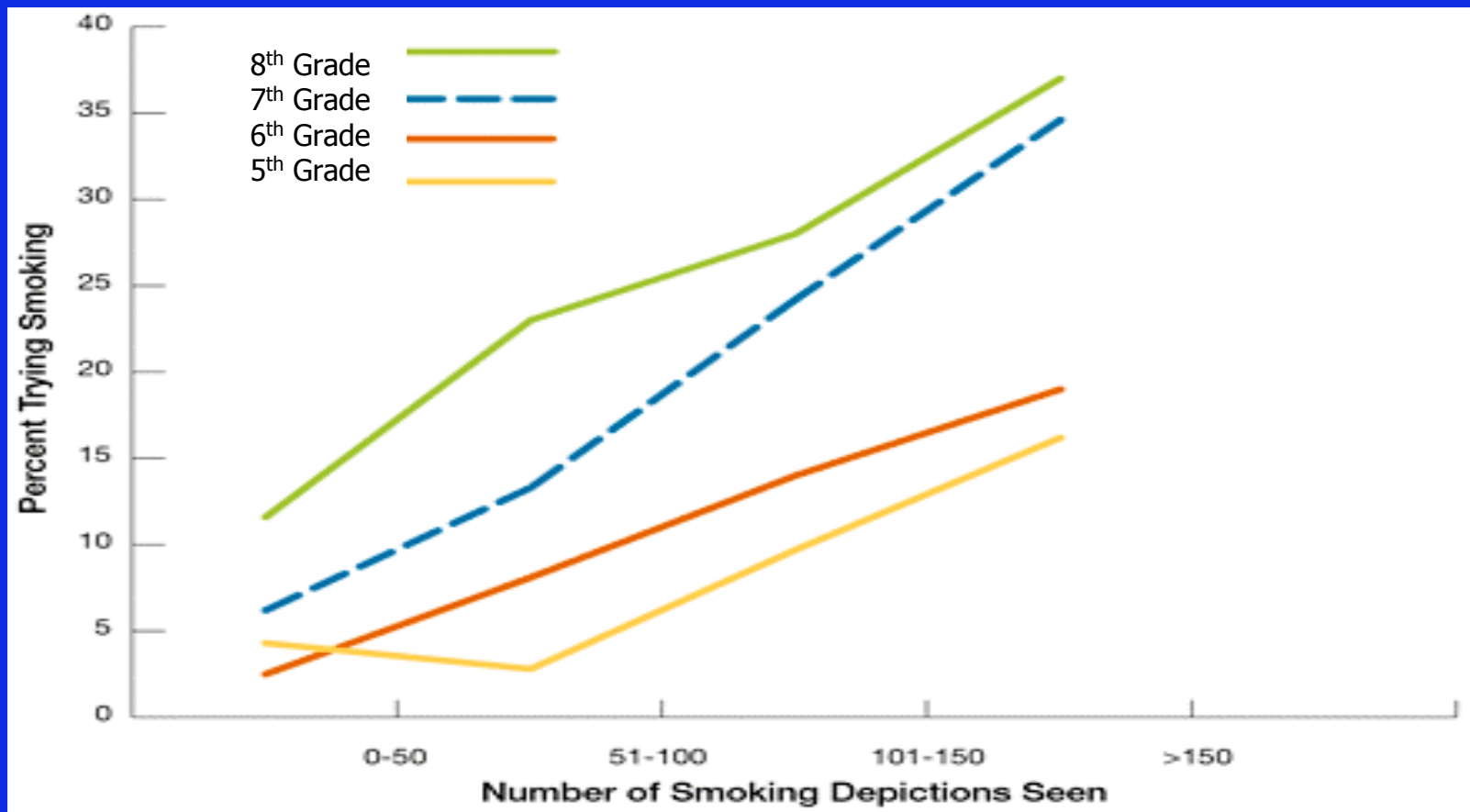
These are all tobacco products containing nicotine and carry similar risks to regular cigarettes



Tobacco Use in Teens

- **Psychosocial influences**
 - Parents, siblings, & peers
 - Social acceptability/attitudes towards smoking
 - Media
 - Availability of tobacco products to youths
- Probable biological reasons for period of increase vulnerability in teens

Exposure to Tobacco Use in Movies and Smoking Among 5th-8th grader



Adapted from Sargent, 2003

Issues for prevention

- “Social inoculation” = effective prevention
- Prevention does not work for cessation
- What is adult ?

Primary care interventions

- Health care provider counseling interventions are effective for adults
 - Attributable effects 7-14%
- Pediatric and adolescent guidelines recommend screening & counseling
- Several trials have established the efficacy of cessation counseling for adults
- Little data on adolescents

Pediatric interventions

- Most (>90%) clinicians report asking about tobacco
- Many report assessing motivation to quit, and discussing health risks
- Few provide handouts, set quit dates, or plan smoking-related follow-up
- < 25% of adolescents report having received counseling

Adolescents and preventive care

- Most teens have and have used a regular source of health care
- More than 40% of adolescents have never spoken to their clinician privately
- 58% of adolescents wanted to discuss tobacco with their clinicians
 - only 30% ever did

Adolescents and cessation

- Adolescent smokers
 - Know they are addicted
 - Want to quit - 75% have thought about quitting and 64% have made a quit attempt
 - Do not think there are resources to help
- Clinicians feel unprepared to help
- Self-help materials help smokers quit
- Adolescents use internet in preference to phone resources
- Pharmacotherapy safe; effectiveness unproven

Clinician and Staff Training

- Interventions
 - Effective counseling techniques
 - NCI 5 “A’s”
 - Stages of change based interventions
 - Use of in office and other adjuncts
 - Eligibility and enrollment in evaluation

Public Health Service 5 A's

- **Ask** - If patient smokes
- **Advise** - Every patient to quit
- **Assess** - Readiness to quit
- **Assist** - In quitting and finding services
- **Arrange** - For cessation services and follow up

Adolescent oriented office materials

- Self-help handouts
 - Targeted to adolescents and to stages of change/motivation
- Trigger questionnaires
- Internet resources

Practices Trained in Cessation Deliver Interventions

	<u>QLater</u>	<u>QNow</u>	
Did you and your doctor discuss cigarettes/smoking?	88	92	p<.05
Did your doctor ask if you smoked?	87	93	p<.001
If smoke, did your doctor ask if you want to quit?	63	76	p<.0005
If smoke, did your doctor hand you anything to help stop?	18	47	p<.0001

Interventions and quitting?

- Cessation among adolescent smokers is half of the adult rate (approx. 4%/yr)
- Smokers aged 16 – 24 yrs rely more on unassisted methods rather than on effective methods recommended by PHS guidelines
- 2 year success with adolescents referred to an intensive expert counseling 'system' after brief primary care advice (OR=2.43) (Hollis et al.)

Best Practices in Tobacco Control

- Increase price of tobacco
- Smoking bans and restrictions
- Availability of treatment for addiction
 - Reduce patient costs for treatment
 - Provider reminder systems
 - Telephone/web counseling and support
- Mass media campaigns

Policy - School curriculum

- **At least 5 session /year over 2 years**
- **Should include**
 - **Social influences**
 - **Short term health effects**
 - **Refusal skills**
- **NOT self-esteem or delay based**
- **Be aware of dilution and confusion strategies by tobacco interests**
- **School policies should reinforce goals**

Policy - Community activism

- **Age of sale enforcement**
- **Advertising limitations**
- **Smokefree Movies**
- **Public Public smoke exposure reduction**
- **Awareness of impact of preemptive efforts**
- **Reducing social acceptability of smoking**

Issues for Practice

- Prenatal Smoking
- Secondhand Smoke/Early Childhood
 - SHS and parent interventions; home and car rules; CEASE materials
- School Age Intervention
 - SHS, short term consequences, social inoculation and refusal skills
- Adolescent Intervention

Pharmacotherapy

- NRT Indications
 - Able to stop smoking, plus
 - Motivated to stop smoking, plus
 - Nicotine addiction
- Patch for baseline
- Gum, inhaler or nasal spray for cravings
- Not labeled for sale to <18 year olds
- Zyban (Wellbutrin)
- Chantix (varenicline)

Efficacy of Pharmacotherapy

	Quit rates	Placebo quit rates	Odds ratio (95% C.I.)
Nicotine patch	17.7%	10.0%	1.9
Nicotine gum	23.7%	17.1%	1.5
N. Lozenge: 2mg	24.2%	14.0%	2.0*
4mg	23.6%	10.2%	2.8
Nicotine spray	30.5%	13.9%	2.7
Nicotine inhaler	22.8%	10.5%	2.5
Bupropion SR	30.5%	17.3%	2.1
Varenicline	35.2%	17.9%	2.6*

Issues for Health Plans

- Choose tobacco control as a QA issue
 - www.AAP.org/RichmondCenter - for web resources
 - Best Practices/Tobacco Champions train-the-trainers
 - State and local initiatives and resources
- Secondhand Smoke
 - Proactive quit-lines allowing pediatric referral
 - Practice resources (ie, CEASE)
 - Support policy advocacy
- Adolescent Interventions
 - Access to phone and web quitting resources
 - Cover pharmacotherapy
 - Improve preventive care delivery for teens
 - Support policy advocacy

Implications

- Minimal intervention - Ask, Advise, Refer
- A 3-5% effectiveness rate would result in 45,000-75,000 new ex-smokers each year

SURGEON GENERAL'S WARNING: Cigarette
Smoke Contains Carbon Monoxide.

16 mg "tar," 1.1 mg nicotine av. per cigarette by FTC method.
© Philip Morris Inc. 1999

**Come to
where the
flavor is.**



A photograph showing the silhouettes of two cowboys riding horses away from the viewer. They are positioned in the center of the frame, with a bright, orange and yellow sunset sky in the background. The cowboys are wearing hats and riding gear. The scene is framed by a thick blue border.

I miss my lung, Bob.

California Department of Health Services,
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