



**TOBACCO AND OUR KIDS**  
**FLORIDA ASSOCIATION OF SCHOOL NURSES**  
February 5, 2010

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# DISCLOSURE

- There may be off label discussion.
- I have not received any reimbursements from Pharmaceutical Companies.

# Objectives

- The impact of tobacco.
- Tobacco: a KIDS disease.
- Factors associated with tobacco use.
- E.T.S: Second and third hand smoke
- The addiction
- Solutions

# ***Tobacco Myths***

- ***Myth: Clove cigarettes are less harmful than regular cigarettes.***
- ***Myth: Cigars are safe.***
- ***Myth: It's OK to smoke as long as it's a "natural" cigarette.***
- ***"Smokeless tobacco products are safer alternatives to cigarettes.***
- ***You cant get addicted with only several a week.***
- ***Many youth believe that quitting tobacco is not difficult and does not warrant professional assistance***

# Senator Brown, (D) Ohio

- “If you are a tobacco executive, you think about this: You have lost 400,000 customers every year and you need to replenish your customer base.....you aim your marketing campaign at the young men and women sitting in front of me, .... 14, 15, 16, 17, 18 years old.

# STATS

- In 2007, 20% of high school students in the United States were current cigarette smokers.
- 19% of females and 21% of males.<sup>1</sup>
- 23% of white, 17% of Hispanic, and 12% of African American high school students 2007<sup>1</sup>
- Centers for Disease Control and Prevention. [Cigarette Use Among High School Students—United States, 1991–2007](#). Morbidity and Mortality Weekly Report [serial online]. 2008; 57(25):686–688 [accessed 2009 Jan 10].
- Centers for Disease Control and Prevention. [2006 National Youth Tobacco Survey and Key Prevalence Indicators](#). (PDF–90 KB) [accessed 2009 Jan 10].
- Substance Abuse and Mental Health Services Administration. [2007 National Survey on Drug Use and Health](#). (PDF–1.28 MB) (Office of Applied Studies, NSDUH Series H-27, DHHS Publication No. SMA 05–4061) [accessed 2009 Jan 10]. Rockville, MD.

# STATS

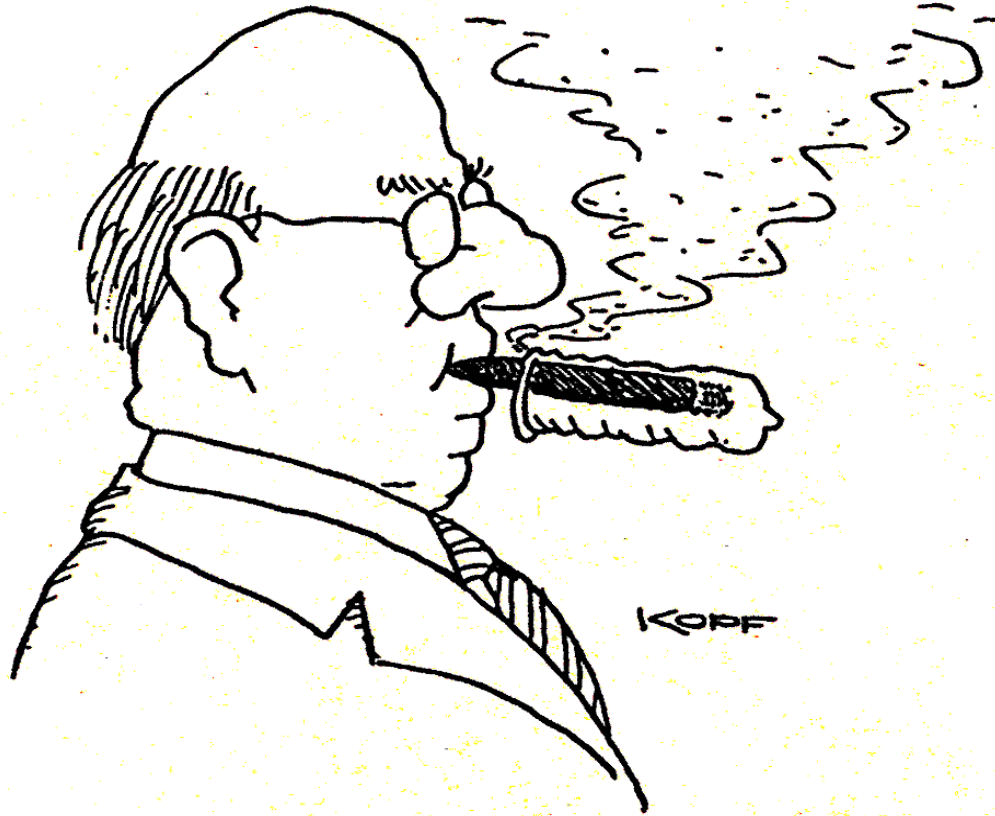
- In 2006, approximately 6% of middle school students in this country were current cigarette smokers<sup>2</sup>
- 7% of white, 7% of Hispanic, 6% of African American, and 3% of Asian American middle school students were current cigarette smokers in 2006.<sup>2</sup>

# STATS

- Each day approximately 3,600 young people between the ages of 12 and 17 years initiate cigarette smoking
- Estimated 1,100 young people become daily cigarette smokers.<sup>3</sup>

S M O K I N G

SAFE SMOKING



KOPF

# WHY DO THIS?

Almost 90 percent of adult smokers began at or before age 18.

**SMOKERS ARE VICTIMS**



Heads of the nation's largest cigarette companies, being sworn in before a House Energy subcommittee in April 1994 are (from left) Robert Sprinkle III (American Tobacco), Donald Johnston (American), Thomas Sand fur Jr. (Brown and Williamson), Edward Horrigan Jr. (Liggett), Andrew Tisch (Lorillard), Joseph Taddeo (U.S. Tobacco), James Johnston (Reynolds) and William Campbell (Philip Morris). (AP Photo)

All swore, under oath that nicotine was not an addictive drug!

**...tobacco is the only legally  
available consumer product  
which kills people when it is used  
entirely as intended.**

The Oxford Medical Companion (1994)

# CALL IT WHAT YOU'D LIKE

Charles Harper, R.J. Reynolds Chairman  
"RJR Wins Fight", USA Today: B1, April 18, 1996

"If children don't like to be in a smoky room, they'll leave." When asked by a shareholder about infants, who can't leave a smoky room, Harper stated, "At some point, they begin to crawl."

# Tobacco Industry Youth Smoking Prevention Programs 1980s

- The industry started programs to forestall legislation that would restrict industry activities. ...fail to discuss how tobacco advertising promotes smoking ,the health dangers of smoking, or that nicotine is addictive.
- Tobacco industry youth programs do more harm than good for tobacco control. The tobacco industry should not be allowed to run or directly fund youth smoking prevention programs.

DiFranza JR, McAfee T. The Tobacco Institute: Helping youth say “yes” to tobacco .*J Fam Pract.* 1992;34:694–696.

Anne Landman, et al: American Journal of Public Health | June 2002, Vol 92, No. 6

# Youth Cessation: Why Bother?

- ***Most kids are unaware of programs, strategies, and resources (including their own doctors)***
  - Resource issues.
  - Twice as likely to succeed if enrolled in a program
  - Most who try to quit are motivated by concern about their health and future

# Youth Cessation: Why Bother?

- **82% are thinking about quitting (11-19 y.o.)**
- **75% have tried to quit and failed**
- **70% wish they had never started**

Many intermittent smokers will become daily smokers following high school graduation, as parental, legal and other restrictors on their smoking are lifted.

# Addiction and Adolescents

Dr. DiFranza, U. of Mass.

- ***Dire warning to all adolescents: You can get “hooked from the first cigarette.” Very soon after that first cigarette, adolescents can experience a loss of autonomy over tobacco.”***



# “Dependence-Related Tolerance

- Phenomenon - how long after smoking a cigarette you can go before you need to smoke another one”. Long thought to be the same for adolescents and adults.
- **Brains of adolescents can become tolerant to nicotine after smoking fewer cigarettes than one a day, and it is tolerance that then drives them to smoke more often.**
- “The typical adult smoker begins to crave the next cigarette in 45 minutes to an hour after smoking,” he said. “But kids can be addicted and not need to smoke again for days, even weeks.”

# When is it Addiction?

Three or more of the following:

- Preoccupation with getting tobacco
- Compulsive use
- Difficulty with controlling intake
- Persistent, even with health problems
- Relapse
- Tolerance
- Withdrawal

World Health Organization- Diagnostic and Statistical  
Manual - IV (DSM-IV)

# **Factors Associated with Tobacco Use among Youth**

# **Factors Associated with Tobacco Use among Youth**

- Smoking by parents or guardians.
- Socioeconomic status.
- Use/approval of tobacco use by peers or siblings.
- Accessibility, availability and price of tobacco products.
- A perception that tobacco use norm.
- Lack of parental support or involvement.

# Factors Associated with Tobacco Use among Youth

- Risk-taking kids.
- Anxious/depressed kids.
- Lacking in self-confidence.
- ADHD kids.
- Exposed to pro-tobacco media.
- Kids with parents who smoke.

# Factors Associated with Tobacco Use among Youth

- Low levels of academic achievement
- Lack of skills to resist influences.
- Lower self-image/esteem-weight issues
- Belief in functional benefits of use.
- Lack of self-efficacy to refuse offers of tobacco.
- Psychological-ADD

- Tobacco use in adolescence is associated with many other health risk behaviors, including higher risk sexual behavior and use of alcohol or other drugs.

# Factors Associated with Tobacco Use among Youth

- As pre-adolescent and younger children age, and are exposed to more smokers and smoking environments, they may notice that many of their smoking peers seem to get pleasure from smoking and show no evidence of harmful consequences.
- Negatively affects their perception of the harms of smoking and a need to quit

# Factors Associated with Tobacco Use among Youth

- “Perceived use” of cigarettes among friends, “perceived peer approval” of smokers and “overestimation of the prevalence of peer smoking habits” can negatively influence quit rates.

**Most significant predictor of youth smoking is parental tobacco use.**

Adolescents in households with at least 1 parent smoking were least likely to quit.

# ENVIRONMENTAL TOBACCO SMOKE

“(E.T.S.)”

# KIDS AND E.T.S.

- Secondhand smoke, also known as environmental tobacco smoke (ETS), is a mixture of the smoke given off by the burning end of tobacco products and the smoke exhaled by smokers
- Contains a complex mixture of more than 4,000 chemicals, more than 60 of which are cancer-causing agents
- Associated with an increased risk for lung cancer and coronary heart disease in non smoking adults.

# KIDS AND E.T.S.

- ETS exposure is a leading cause of childhood morbidity and mortality.
- Major \$\$\$\$ as a result spent.

# KIDS AND E.T.S.

- Children exposed to ETS have higher rates of:
  - o lower respiratory infections,
  - o asthma,
  - o middle ear effusions,
  - o behavior problems,
  - o sudden infant death syndrome

# KIDS AND E.T.S.

- Almost 60% of US children 3 to 11 years of age (approximately 22 million children) are exposed to environmental tobacco

# Exposure to Environmental Tobacco Smoke in Infancy Linked to Allergic Reactions

December 18, 2007: *Thorax*.

- Children exposed to environmental tobacco smoke in early infancy have a higher incidence of allergic reactions to food and indoor inhalants.

# SECONDHAND SMOKE & KIDS

***No safe levels of exposure to SHS smoke.***

# Secondhand smoke:



# THIRD HAND SMOKE

- Term being used to describe the invisible yet toxic brew of gases and particles clinging to smokers' hair and clothing, cushions and carpeting, that lingers long after smoke has cleared from a room.

# The New York Times

January 3, 2009

A New Cigarette Hazard: 'Third-Hand Smoke'

By RONI CARYN RABIN

- Parents who smoke often open a window or turn on a fan to clear the air of [second-hand smoke](#), but experts now have identified another [smoking](#)-related threat to children's health that isn't as easy to get rid of: third-hand smoke.
- Residue of heavy metals, carcinogens and even radioactive materials.
- PEDIATRICS Vol. 123 No. 1 January 2009, pp. e74-e79 **Beliefs About the Health Effects of "Thirdhand" Smoke and Home Smoking Bans: Jonathan P. Winickoff, MD, MPH<sup>a,b</sup>,**

# PEDIATRICS

## JAN. 2009

- Beliefs about the health effects of third hand smoke are independently associated with home smoking bans.
- That THS harms the health of children may be an important element in encouraging home smoking bans.

**GETTING HOOKED**

## **Adolescent Nicotine Effects**

**There is a biological basis for the  
susceptibility  
of the adolescent brain to  
nicotine addiction**

# How Youth Get Hooked on Tobacco

Susceptibility to Nicotine

Dependence/Addiction:

- **Genetic factors** (and prenatal exposure)
- **Pleasant initial sensitivity**
- Rapid onset of symptom(s)
- Difficulty quitting, failed attempt(s)

# How Youth Get Hooked on Tobacco

## **Nicotine's Effects on the Brain**

- **Psychoactive ingredients in tobacco**
- **Activates reward/pleasure pathways**

# When is it Addiction?

Three or more of the following:

- Preoccupation with getting tobacco
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World Health Organization- Diagnostic and Statistical  
Manual - IV (DSM-IV)

# Stages-of-Change in Tobacco-Use

## Initiation and Dependence

- 1) **Preparation / contemplation**
  - knowledge, beliefs, attitudes, normative expectations are formed
- 2) **Initial trying** – usually family or peer associated
- 3) **Experimentation** – irregular use over time
- 4) **Regular use** – often associated with alcohol use
- 5) **Nicotine dependence/addiction**
  - often associated with use of 10 or more cigarettes/day
  - dependence-producing dose varies considerably among individuals
  - signs of dependence may occur at a smoking rate of as little as 2 cigarettes/week
  - addiction typically develops within 2 years of first use
  - signs of dependence may appear within two months of first use

# Physical Addiction

- Has Withdrawal Symptoms
  - Irritable
  - restless
  - impatient
  - anxious
  - depressed-due to decreased dopamine
  - Headache is **NOT** a w/d symptom

**SMOKING IS A VERY  
EFFECTIVE DELIVERY SYSTEM  
OF TOXIC MATERIALS**

What's in tobacco?

# Poisons In Tobacco

- Dozens of carcinogens—about 60.
- 4200 chemicals.
- Tobacco-specific nitrosamines.
- Radioactive Materials
- Multiple Irritants- Formaldehyde
- Carbon Monoxide

# Smokeless Tobacco

# SMOKELESS TOBACCO

- With more cities and states regulating where a smoker can lite up, the tobacco companies are using this as a marketing strategy to get smokers to switch to smokeless tobacco.

# SMOKELESS TOBACCO

- **Smokeless tobacco contains 28 cancer-causing agents (carcinogens). It is a known cause of human cancer.**
- Smokeless tobacco use can lead to nicotine addiction and dependence.
- Precancerous lesions
- Adolescents who use smokeless tobacco are more likely to become cigarette smokers.

# SMOKELESS TOBACCO

- An estimated 8% of high school students are current smokeless tobacco users.
- Smokeless tobacco is more common among males (13.6%) than female high school students (2.2%).
- 10.2% for white, 5.1% for Hispanic, and 1.7% for African-American high school students.<sup>1</sup>

1-Centers for Disease Control and Prevention. [Tobacco Use, Access, and Exposure To Tobacco in Media Among Middle and High School Students—United States, 2004](#). MMWR 2005;54(12):297-301.

2-Centers for Disease Control and Prevention. [Youth Risk Behavior Surveillance—United States, 2005](#). CDC Surveillance Summaries 2005;55(SS05):1–108.

# SMOKELESS TOBACCO

- **Smokeless tobacco delivers quantities of nicotine comparable to those typically absorbed from cigarette smoke**

# SMOKELESS TOBACCO

- A perception is that smokeless is less harmful than smoking.
- Even if it is as harmful, the user is only affecting themselves.
- Not harming others from secondhand smoke.

# SMOKELESS TOBACCO

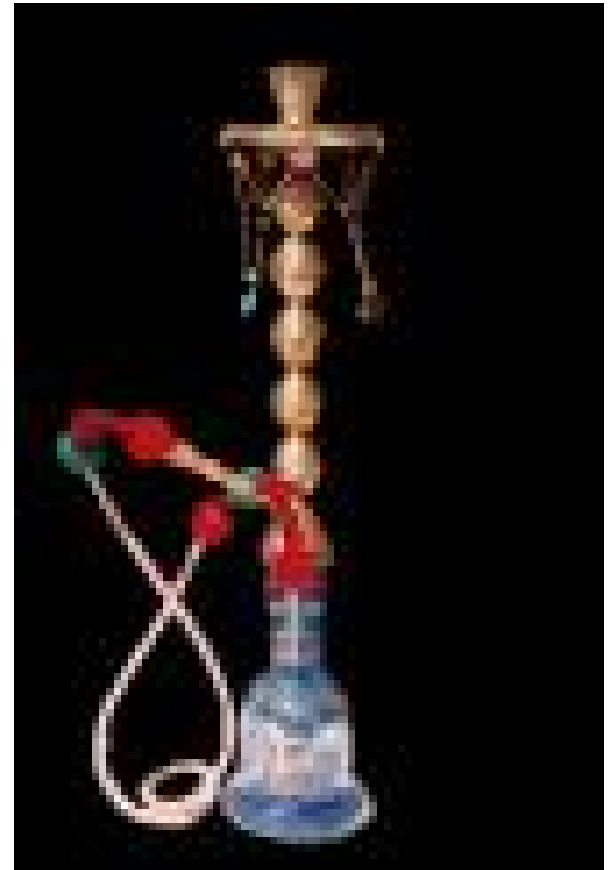
- Smokeless tobacco comes in two forms: a ground or shredded tobacco called Snuff and loose leaf called Chewing Tobacco.
- Chewing tobacco is sold in loose leaf, twist and plug forms. Snuff comes in moist, dry and sachet forms.
- The most popular form of ST today is moist snuff which has the highest levels of nicotine. Smokeless manufacturers manipulate the pH of their product because the higher the pH level, the more alkaline the tobacco which increases absorption.

# SMOKELESS TOBACCO

- Nicotine is absorbed more slowly, at a higher amount and stays in the blood system longer than smoking a cigarette.
- One average size pinch or pouch, held in the mouth for 30 minutes delivers the same nicotine as 3 - 4 cigarettes.

# Hookahs:

- ***Not safer than regular tobacco smoke.***
- ***Causes the same diseases.***
- ***Raises the risk of lip cancer.***
- ***Users ingest about 100 times more lead from hookah smoke than from a cigarette.***



# Bidis (pronounced "bee-dees")

- Small, thin hand-rolled cigarettes imported to the United States primarily from India and other Southeast Asian countries. Tobacco wrapped in a tendu or temburni leaf (plants native to Asia), and may be secured with a colorful string at one or both ends.
- Bidis can be flavored (e.g., chocolate, cherry, and mango) or unflavored.<sup>1</sup> They have higher concentrations of nicotine, tar, and carbon monoxide than conventional cigarettes sold in the United States.<sup>1,3</sup>
- Centers for Disease Control and Prevention. [Bidi Use Among Urban Youth—Massachusetts, March–April 1999](#). MMWR Weekly Report [serial online]. 1999;48(36):796–799

# Is a Bidi a safe alternative to cigarette?

- Studies have shown that bidis are higher in carbon monoxide, tar, and nicotine than cigarettes. CDC: "An unfiltered bidi releases 3 to 5 times more tar and nicotine than a regular cigarette despite containing less tobacco."
- Bidi smokers are at risk of developing oral cancer, lung cancer, and other health problems similar to those of cigarette smokers.

SNUS

# SNUS

## What is Snus?

- Snus is the Swedish word for snuff, which was fashionable to inhale before cigarettes superseded it. Snus is “A finely ground moist tobacco, either loose or in tiny sachets—a bit like tiny teabags—that are placed under the upper lip and typically held in the mouth for about 30 minutes before being discarded.”

# SNUS

- Nicotine levels obtained from Snus are about twice as high as those obtained from nicotine replacement therapy, which does not induce dependence.

# Camel Snus



Source: Reynolds

# What is snus? Is it safe?

- Snus (sounds like "snoose") is a type of moist snuff first used in Sweden.
- It is flavored with spices or fruit, usually packaged in thin bags much like tea bags. It is also sold loose, as a moist powder. Like snuff and other spit tobaccos, snus is held between the gum and mouth tissues where the juice is absorbed into the body.
- Because it is heated during processing, Swedish snus **has fewer tobacco-specific nitrosamines** that are known to cause cancer.
- Snus users in Sweden have lower rates of several types of cancer than Swedish smokers. Because of this, some people believe snus is "safe." **However, snus users have a higher risk of cancer of the pancreas than non-users.**
- They also get sores or spots in the mouth (lesions) where the snus is held. It appears that snus users may have mouth cancer more often than non-users, though more study needs to be done to confirm this.

# Skoal and Copenhagen (UST)

**The year to stop smoking is here.**

**“Giving up the smoke while still enjoying tobacco is a pleasant surprise.”**

**“A refreshing resolution.”**

Dry, discreet packs in unique flavors

**No spit. No smoke. No boundaries.**

**SAVE WITH COUPON ON BACK.**

**NEW FOR ADULT SMOKERS!**  
REGULAR  
**SKOAL DRY**  
TOBACCO PACKS

**NEW FOR ADULT SMOKERS!**  
CINNAMON  
**SKOAL DRY**  
TOBACCO PACKS  
NO SPIT • NO SMOKE

**NEW FOR ADULT SMOKERS!**  
MENTHOL  
**SKOAL DRY**  
TOBACCO PACKS  
NO SPIT • NO SMOKE

**WARNING**  
THIS PRODUCT MAY CAUSE MOUTH CANCER

**NOT FOR SALE TO MINORS**

**SkoalDry.com**

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# Electronic Cigarettes



# Electronic Cigarette

## **Smoking Everywhere E-Cigarette looks like a real cigarette:**

Smoking Everywhere E-Cigarette has been designed to look and feel like a traditional cigarette. We use the best quality of materials and technology to create our product and we stand behind it with ONE YEAR (12 months) replacement warranty.



# Electronic Cigarettes

- **Smoking Everywhere Cartridges comes in the following flavors:**

Tobacco flavor (just like real cigarette)

Apple

Cherry

Strawberry

Chocolate

Vanilla

Coffee

Mint

# **Tobacco 'ORBs' melt in mouth**

## **By Wendy Koch, USA TODAY**

- The release this January of the first dissolvable tobacco product by a major company has some public health officials concerned.
- For smokers who can't light up in the office or at a restaurant, a new aspirin-sized tablet, called "Camel Orb," will let tobacco melt in their mouth.
- "It's meeting the needs of smokers," says Rob Dunham, of R.J. Reynolds, maker of Orb and Camel cigarettes. With lozenge-like Orb, he says there's no smoke, no spit, no litter.

# W/D from Smokeless

- When quitting smokeless tobacco, the same withdrawal symptoms is seen as with quitting cigarettes.
- Nicotine replacement products have not been shown to be effective when quitting but this is possibly due to receiving an under dose replacement due to the high nicotine content of smokeless and may need to use more nicotine replacement.
- For a 3 can a week user, a 21 mg. patch may not be enough to avoid withdrawals, where two - 21 mg. patches may provide relief.

**SOLUTIONS**

**EDUCATION-  
THE FACTS DO HELP**

# The 3 D's of Tobacco Prevention

- DEGLAMORIZE
- DELEGITIMIZE
- DENORMALIZE

- Young people are more likely to quit smoking if their parents quit smoking.

# AN OPPORTUNITY

- Youth that believed that second-hand smoke was harmful were more than two times as likely to stop or plan to stop smoking.

# AN OPPORTUNITY

- Compared with other smokers, young adult smokers were less likely to have received advice to quit from a health care provider (49% vs 60%).

# AN OPPORTUNITY

- Screen patients for tobacco use.
- Provide a strong message about totally abstaining from tobacco use.

***OFFER referrals***

# AN OPPORTUNITY

- Smoking-cessation interventions by more than one type of health professional have the potential to substantially increase quitting and readiness to quit in the population.

**Impact of smoking-cessation intervention by multiple health professionals. An LC, Foldes SS, et al Am J of Prev Med. 2008 Jan;34(1):54-6**

# Opportunities for Intervention!!

- 70% teens see doctor annually
- Youth tobacco use status identified in 72% of office visits
- Counseling provided at only 17% of clinic visits
- 16% pediatricians, 12% dentists advise teens to quit

WHAT WORKS???

# Smoking Cessation: What Works?

Strong evidence for:

- Increasing price (reduces both prevalence and amount consumed)
- Mass media campaigns when combined with other interventions (TRUTH)
- Provider reminders with provider education
- Quitlines when combined with other interventions (e.g., medications or tailored print materials)

# Smoking Cessation: What Works?

Strong evidence for:

- Brief advice from a primary care physician
- Behavioral support with multiple counseling sessions (individual or group)
- Nicotine replacement therapies (NRT)
- FDA-approved non-nicotine pharmacotherapies:
  - Bupropion (Zyban)
  - Varenicline (Chantix)

# Youth-Related Considerations

- A review of cessation interventions for adolescents found that young people were twice as likely to succeed in quitting smoking when enrolled in a smoking cessation program as those not enrolled in a program.
- Unfortunately, the vast majority of young people are not seeking this kind of assistance.

# Other Youth-Related Considerations

- One study using a **teen-based clinic** for tobacco use cessation found that **creating a talk show or television program** to discuss ways to quit smoking is an effective method of tobacco use cessation.

# PHARMACOTHERAPY

# NICOTINE REPLACEMENT

- **Nicotine replacement therapy is the only pharmacologic intervention that has been extensively studied in kids.**

# N.J. MEDICAID TESTIMONY

J. Foulds, Ph.D. UMDNJ, Coll of Med, New Brunswick N.J.  
Director Tobacco Program

- *CO-confirmed prolonged abstinence rates of **18%** for the active patch group, **6.5%** for the active gum group, and **2.5%** for the placebo group; the difference between the active-patch and placebo arms was statistically significant.”*

Moolchan ET, Robinson ML, Ernst M, Cadet JL, Pickworth WB, Heishman SJ, Schroeder JR. Safety and efficacy of the nicotine patch and gum for the treatment of adolescent tobacco addiction. Pediatrics. 2005 Apr;115(4):e407-14.

# **N.J. MEDICAID TESTIMONY**

**J. Foulds, Ph.D. UMDNJ, Coll of Med, New  
Brunswick N.J.**

**Director Tobacco Program**

- **The transdermal nicotine patch has the best evidence of efficacy and safety in adolescents.**
- **...It has practical advantages for use during school hours,**
- **...“ Recommend that it should be covered by NJ  
M Caide for 13-17 year-olds who smoke at least 10  
cigarettes/day**
- **...Coverage of other medications for smoking cessation in adolescents should await more evidence on safety and efficacy in this population.**

# Three Important Points:

1. **Nicotine does not cause Cancer!**

2. **Nicotine does not cause  
Heart Disease!**

3. **Nicotine does not cause  
Lung Disease!**

# Why Pharmacotherapy?

## *Alleviates withdrawal*

- NRT: Maintains nicotine serum concentration at or above patient's comfort level
- Eliminates the immediate reinforcing effect of administering nicotine through smoking
- Gives patients the time to more comfortably break their habits/routines

# **Pediatric Practice-Based Intervention Effective Against Adolescent Smoking**

A pediatric practice-based intervention delivered by pediatric providers and older peer counselors was feasible and effective in discouraging smoking initiation and increasing abstinence rates among smokers



Almost ten years after the 1998 state tobacco settlement, kids are still feeling targeted by tobacco companies and still find it easy to buy tobacco products. Recent research also shows that tobacco company marketing and promotions in the retail environment (point of purchase marketing/POP) have increased dramatically and impact kids.

# The Hooked on Nicotine Checklist (HONC)

1. Have you ever tried to quit, but couldn't?
2. Do you smoke now because it is really hard to quit?
3. Have you ever felt like you were addicted to tobacco?
4. Do you ever have strong cravings to smoke?
5. Have you ever felt like you really needed a cigarette?
6. Is it hard to keep from smoking in places where you are not supposed to, like school?

# The Hooked on Nicotine Checklist (HONC)

When you have tried to stop smoking, or when you haven't used tobacco for a while

7. Did you find it hard to concentrate because you couldn't smoke?
8. Do you smoke now because it is really hard to quit?
9. Did you feel more irritable because you couldn't smoke?
10. Do you feel a strong need or urge to smoke?
11. Did you feel nervous, restless, or anxious because you couldn't smoke?

# SUMMARY

- This as an addiction and needs to be treated as such.
- Family support/peer support is important.
- Promote professional interventions
- Price/taxes/non smoking campuses
- Counseling
- Pharmacotherapy

# Any Questions?



Dennis Penzell, D.O., M.S., F.A.C.P

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**University of South Florida: College of Medicine**

*Compiled using photos, facts and extensive quotations from an October 1985 Reader's Digest article by Jack Fincher, entitled "Sean Marsee's Smokeless Death," located at pages 107 through 112.*

*Compiled by John R. Polito, Founder WhyQuit.com, June 2000*



**Talihina High School's most outstanding athlete, Sean Marsee had won 28 track medals in the 400 meter relay while running the anchor leg. His classmates honored him with a walnut plaque. After a ten month battle with rapidly spreading cancer that started on his tongue, Sean Marsee died at age 19.**