Overview

- **Description:** This section will introduce you to the issues encountered with adolescent use of tobacco products.
- **Goal:** To assist the participant in understanding adolescent tobacco use and public health recommendations pertaining to teens.
- **Objectives:**
  - To understand the prevalence of teen tobacco use and second hand smoke & its consequences
  - To become familiar with approaches to prevention and treatment of tobacco use in teens
  - To review current recommendations (CDC, school health policies) for tobacco use in teens

Impact of Tobacco

- Tobacco use is the most preventable cause of disease and death in the United States.
- Despite major efforts to prevent smoking, initiation of tobacco use amongst adolescents remains quite high.
- Tobacco is the only legal substance when used as intended, causes death and disease.
Global youth tobacco surveillance

- Previous estimates of doubling of deaths from smoking (5 million/yr to 10 million/yr by 2020) may be an underestimation due to:
  - High prevalence of smoking among young girls compared to adult females
  - High susceptibility of smoking among never smokers
  - High exposure to 2nd hand smoke
  - Pro-tobacco indirect advertising

MMWR January 25, 2008

Global use

- Among students who had never smoked cigarettes, 19.1% indicated they were susceptible to initiate smoking during the next year.
- Overall, 9.5% of students currently smoked cigarettes.
- One of ten students currently use smokeless tobacco products.
Global indirect pro-tobacco advertising

- 14.9% of students owned an object with a cigarette brand logo on it.
- About 10% of students had been offered free cigarettes by a tobacco-company representative.

Source: Pollay advertising collection

National Youth Tobacco Survey (NYTS) 2002

Overall, a decrease in number of students using tobacco products has been noted:
- 28% adolescents reported use of any tobacco products
- Cigarettes (23%) were most commonly used tobacco product with no difference by sex
- Cigars (11.6%) were second most commonly used
- White high school and middle school males were more likely to use any tobacco product than females

YRBS in Miami-Dade County

- 42% ever tried smoking, even 1 or 2 puffs
- 13% smoked during past month
- 3% smoked on ≥ 20 days during past month
- 5% smoked on school property during past month
- 54% tried to quit smoking during the past year
Other tobacco use

- 2% used smokeless tobacco in past month
- 1% used smokeless tobacco on school property during past month
- 8% smoked cigars, cigarillos, or little cigars during the past month

Smoking Initiation

- Few people initiate smoking or become regular smokers after adolescence.
- The younger a person is on initiating smoking, the more likely that person is to be a current smoker in adulthood.

The Dollars in the US

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>Direct Medical Costs</td>
<td>$260 million</td>
</tr>
<tr>
<td>Lost productivity due to death</td>
<td>$270 million</td>
</tr>
<tr>
<td>Average US smoker spends per year on cigarettes</td>
<td>$1600</td>
</tr>
<tr>
<td>Tobacco industry spending on marketing and promotion</td>
<td>$13.4 billion (2005)</td>
</tr>
</tbody>
</table>
Smoking initiation
- Preparation
- Initiation
- Experimentation
- Nicotine dependence

Factors influencing tobacco use: gender

Eating disorders
- Females more likely to smoke to control weight
- Females who diet frequently more likely to become smokers

http://roswell.tobaccocontrol.net/BarPromoCameal_Promo1/index.htm
Factors influencing tobacco initiation and use: ethnicity

- 35% white
- 26% black
- 21% Hispanic
- 18% Asian

Factors influencing initiation and use: parental factors

- Lower socioeconomic status
- Peer influence
- Single-parent homes
- Perception of social environment
  - Peer pressure > parental influence
- Behavioral factors
  - Independence, maturity, self-esteem
Functional consequences

- Hastening of onset of lung function decline during late adolescence and early adulthood
- Less physical fitness
- More respiratory illnesses
- Impaired lung growth
- Chronic coughing, wheezing
- Appearance / hygiene: staining of teeth, breath, decreased taste

Preventive counseling

- GAPS
  - Guidelines for Adolescent Preventive Services
  - Risk assessment
- Bright Futures: HEADS
  - Home, education, activities, drugs, sexuality, suicide, safety
- Address tobacco use during assessment of vital signs

Prevention

CDC recommendations: a coordinated, multi-component campaign

- School based program
  - Behavioral education
- Community efforts
  - Decreasing access
  - Enforcement of age-t-sales policies
- State and national efforts
  - Increasing prices of tobacco products
  - Tax increases
  - Mass media
Making the diagnosis:
Recommendations of US Public Health Services

Clinicians should screen teens and their parents for tobacco use and provide a strong message regarding the importance of complete abstinence from tobacco use.

Level C

Recommendations of US Public Health Services

Counseling and behavioral interventions shown to be effective with adults should be considered for use with children and adolescents. The content of these interventions should be modified to be developmentally appropriate.

Level C

Recommendations of US Public Health Services

When treating adolescents, clinicians may consider prescriptions for bupropion SR or NRT when there is evidence of nicotine dependence and desire to quit tobacco use.

Level C
Recommendations of US Public Health Services

Clinicians in a pediatric office setting should offer smoking cessation advice and interventions to parents to limit children’s exposure to second-hand smoke.

Level B

Comprehensive TUPE

In both middle and high schools, comprehensive TUPE is presented to a minority of students. Monroe does somewhat better than Dade.

Resources

- 1-800-4-Cancer (Nat’l Cancer Institute)
- School Health Index
- They’re Rich, You’re Dead
- www.cdc.gov
Intervention

5 As:
1. Ask about tobacco use
2. Advise to quit
3. Assess willingness to quit
4. Assist in quit attempt
5. Arrange follow up

Treatment

- Pharmocotherapy has not been studied extensively in adolescent smokers
  - Clinical Practice Guidelines suggest that NRT and bupropion therapy should be considered when there is evidence of nicotine dependence.
  - Consider in the teen who smokes more than 10 cigarettes per day.
- Counseling
- Preventing relapse
  - Most relapses occur in first 3 months

The 5 Rs

1. Relevance
2. Risks
3. Rewards
4. Roadblocks
5. Repetitions
Gateway drug

Teens who smoke are more likely to try other addictive substances.

Second Hand Smoke

- Second-hand tobacco smoke is dangerous to health.
- It causes cancer, heart disease and many other serious diseases in adults.
- Almost half of the world’s children breathe air polluted by tobacco smoke, which worsens their asthma conditions and causes dangerous diseases.

Second Hand Smoke

- Second hand smoke puts children in danger of developing severe respiratory diseases and can hinder the growth of their lungs.
- Exposure to secondhand smoke as a child or adolescent may increase the risk of developing lung cancer as an adult, or worsen existing asthma.
Where are we now?

- School health profiles:
  - 19% of schools require students to take 2 or more health education classes
  - 69% prevented tobacco advertising
  - 52% provided referrals to tobacco cessation programs
  - 96% had a policy prohibiting tobacco use
    - Of these 35% required students caught smoking to take education / cessation program

Remember

- Each day more than 4,000 teens try their first cigarette.
- 1/3 of teens who smoke regularly will die of a tobacco-related illness.
- Few people initiate smoking after adolescence.