Population-level Strategies to Prevent and Reduce Tobacco Use – Success and Challenge

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New York State Department of Health
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Learning objectives

Participants will understand:

1. Review best practices for broad-based prevention and promotion of tobacco use cessation.
2. Discuss current and historical view of cigarette use in NYS focusing on the promise of generational change.
3. Describe use of other tobacco products by youth
4. Explain the need for aggressive tobacco dependence treatment within the healthcare setting.

Disclosure statement: I have no real or perceived vested interests that relate to this presentation nor do I have any relationships with pharmaceutical companies, and/or other corporations whose products or services are related to pertinent therapeutic areas.
More than 40% of New Yorkers suffer from a chronic disease such as arthritis, asthma, stroke, heart disease, diabetes, or cancer.

These diseases are largely preventable.

Source: 2011 New York State Behavioral Risk Factor Surveillance System
Chronic diseases are responsible for approximately 60% of deaths and 22% of hospitalizations in NYS.

Source: NYS Biometrics Vital Statistics, 2010 and Statewide Planning and Research Cooperative System (SPARCS), 2011
Causes of Death in NYS, 2010

- Non-chronic disease deaths (38%)
- Chronic disease deaths (62%)

Heart disease (31%)
- Cancer (24%)
- Stroke (4%)
- Diabetes (3%)
- Asthma (0.4%)
- Arthritis (0.2%)

Source: NYS Biometrics Vital Statistics, 2010
Hospitalizations in NYS, 2011

Non-chronic disease hospitalizations (78%)

Chronic disease hospitalizations (22%)

Heart disease (9%)
Arthritis (5%)
Cancer (3%)
Stroke (2%)
Diabetes (2%)
Asthma (1%)

Source: Statewide Planning and Research Cooperative System (SPARCS), 2011
Rates of chronic disease and mortality are disproportionately high among vulnerable populations.
80% of heart disease and stroke
80% of type 2 diabetes
40% of cancer cases

Stop smoking
Eat healthy
Get moving

CDC estimates:

Could be prevented if Americans:
Tobacco Use Prevention and Control

Tobacco Control Program established in 1999 following MSA.

Comprehensive Tobacco Control based on CDC Best Practices.

Comprised of:

- Community Action
- Health Systems Interventions
- Telephone Quitline
- Health Communications – Paid and earned media
- Evaluation
Program Focus

Strong Population-level Policy and Systems Change Approach
• Clean Indoor Air Act
• Maintain High Cost of Tobacco Products
• Medicaid Coverage for Tobacco Dependence Treatment

Well-funded TCP
• Strong Media Presence
• Strong Community Presence
• Strong Evaluation/Feedback System
Key Trends in Tobacco control

What Has Been Accomplished?

A LOT!
PERCENTAGE OF NEW YORK ADULTS WHO CURRENTLY SMOKE, BRFSS 2000-2012

2017 Prevention Agenda Goal - 15%
PERCENTAGE OF NEW YORK HIGH SCHOOL STUDENTS WHO CURRENTLY SMOKE
YTS 2000-2012

2000: 27.1%
2002: 20.4%
2004: 18.5%
2006: 16.3%
2008: 14.7%
2010: 12.6%
2012: 11.9%

2013 Goal: 10%
Adult Smoking Prevalence by Age Group

Source: Behavioral Risk Factor Surveillance System
Average Daily Cigarette Consumption by Current Smokers

**ATS 2003-2011, NATS 2011**

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Number</th>
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</thead>
<tbody>
<tr>
<td>2003</td>
<td>14.7</td>
</tr>
<tr>
<td>2007</td>
<td>12.1</td>
</tr>
<tr>
<td>2011</td>
<td>10.6</td>
</tr>
<tr>
<td>2011</td>
<td>11.9</td>
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</table>

**New York**

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>14.7</td>
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<td>12.1</td>
</tr>
<tr>
<td>2011</td>
<td>10.6</td>
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**Rest of United States**

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Number</th>
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<tbody>
<tr>
<td>2011</td>
<td>11.9</td>
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Note: Statistically significant difference between 2003 and 2007 and between 2003 and 2011 among New York adult smokers.

Source: New York and National Comparison Adult Tobacco Surveys
Observed and predicted admissions for acute myocardial infarction as a function of a statewide comprehensive smoking ban: New York, 1995-2006

Figure 6b. Time trend in incidence of selected smoking-related cancers in New York State, New York City, and New York State exclusive of New York City, 1976-2010
Cancer of the lung

Source of data: New York State Cancer Registry
Continued Burden

There are still 2.4 million adult smokers in New York.
- 330,000 of them are young adults.

100,000 high school age youth smoked a cigarette in the last 30 days.
- 4 percent smoked on 20 or more days in the past month.

Economic Costs of tobacco related chronic disease are staggering.
- $8.2 billion are tobacco related health care costs annually.
- $2.7 billion are Medicaid costs borne by the state.
## Trends in Smoking by Demographic Groups

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<thead>
<tr>
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<tbody>
<tr>
<td>Overall</td>
<td>20.8%</td>
<td>16.7%</td>
<td>−20%</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>21.5%</td>
<td>17.2%</td>
<td>−20%</td>
</tr>
<tr>
<td>African American</td>
<td>23.3%</td>
<td>17.2%</td>
<td>−26%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>18.3%</td>
<td>16.3%</td>
<td>−11%</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; High school</td>
<td>27.5%</td>
<td>25.5%</td>
<td>−7%</td>
</tr>
<tr>
<td>High school or GED</td>
<td>27.0%</td>
<td>22.1%</td>
<td>−18%</td>
</tr>
<tr>
<td>Some college</td>
<td>21.9%</td>
<td>20.1%</td>
<td>−8%</td>
</tr>
<tr>
<td>College graduate or higher degree</td>
<td>12.5%</td>
<td>9.4%</td>
<td>−25%</td>
</tr>
</tbody>
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Bold font signifies a statistically significant change.

## Trends in Smoking by Demographic Groups

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<tbody>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than $25,000</td>
<td>26.9%</td>
<td>24.3%</td>
<td>−10%</td>
</tr>
<tr>
<td>$25,000–$49,999</td>
<td>23.2%</td>
<td>19.7%</td>
<td>−15%</td>
</tr>
<tr>
<td>$50,000–$74,999</td>
<td>20.1%</td>
<td>16.3%</td>
<td>−19%</td>
</tr>
<tr>
<td>$75,000 and more</td>
<td>14.3%</td>
<td>11.6%</td>
<td>−19%</td>
</tr>
<tr>
<td><strong>Mental Health in Past Month</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>19.2%</td>
<td>15.2%</td>
<td>−21%</td>
</tr>
<tr>
<td>Not good</td>
<td>35.6%</td>
<td>30.9%</td>
<td>−13%</td>
</tr>
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Bold font signifies a statistically significant change

Source: Behavioral Risk Factor Surveillance System and New York Adult Tobacco Survey
NYS DOH Prevention Agenda for 2013 to 2017 focus on tobacco.

2.1 Prevent Initiation
2.2 Promote Cessation
2.3 Eliminate Exposure to Secondhand Smoke
Health Systems Change and the "Analogy of the Mole"
TCP Health Systems Strategies

RFA – Health Systems for a Tobacco Free New York

*PHS Clinical Guidelines for Tobacco Dependence Treatment Systems Strategies*

1 Tobacco User Identification System
2 Training, resources, and feedback to ensure delivery of effective treatments
3 Tobacco care coordination and performance evaluations
4 Hospital policies that support and provide tobacco dependence services
5 Effective tobacco dependence treatments are widely available (counseling and approved medications) as covered services.
Evidence Based Tobacco Use Interventions

What constitutes Aggressive Care?

For the Patient Willing to Quit:
Ask, Advise, Assess, Assist, Arrange

For the Patient Unwilling to Quit:
Relevance, Risks, Rewards, Roadblocks, Repetition
Assist = Medication

**Nicotine Replacement Therapies**
- Nicotine Gum
- Nicotine Patch
- Nicotine Inhaler
- Nicotine Lozenge
- Nicotine Nasal Spray

**Prescription Medications**
- Bupropion SR
- Varenicline
Assist = Counseling

Counseling Motivational Interviewing (5 Rs)
Brief Counseling
Increasing Social Support
Problem Solving/Skills Training
Behavioral Techniques – Aversive Smoking and Rapid Smoking

Combining Counseling with Medications is particularly effective. The more sessions the better.
Assist = Referral

Referral to dedicated tobacco dependence treatment specialist
Referral to NYS Smokers’ Quitline (1-866-NYQUITS)
Arrange follow-up visits

Prepare to Treat and ReTreat
Nicotine Addiction/Dependence

Relapse

- Nicotine dependence is a chronic condition that usually requires repeated interventions
- On average, smokers make between 8-11 quit attempts before successfully quitting
- Most untreated smokers relapse within eight days after trying to quit
  - 24-51% are abstinent at one week
  - 15-28% are abstinent at one month
  - 10-20% are abstinent at 3 months
Challenges

Use of other tobacco products by youth

- Smokeless tobacco products
- Waterpipes/hookah

Non-tobacco nicotine delivery devices

- Are electronic-cigarettes boon or bane?
References

http://www.ahrq.gov/professionals/clinicians-providers/guidelines-recommendations/tobacco/clinicians/reference/tobaqrg.pdf

PHS Treating Tobacco Use and Dependence Clinical Practice Guideline (2008 Update)
Thank You

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