
Tobacco Dependence as a Chronic Disease

Sheila K. Stevens, MSW

The Cigarette Death Epidemic in Perspective in the USA

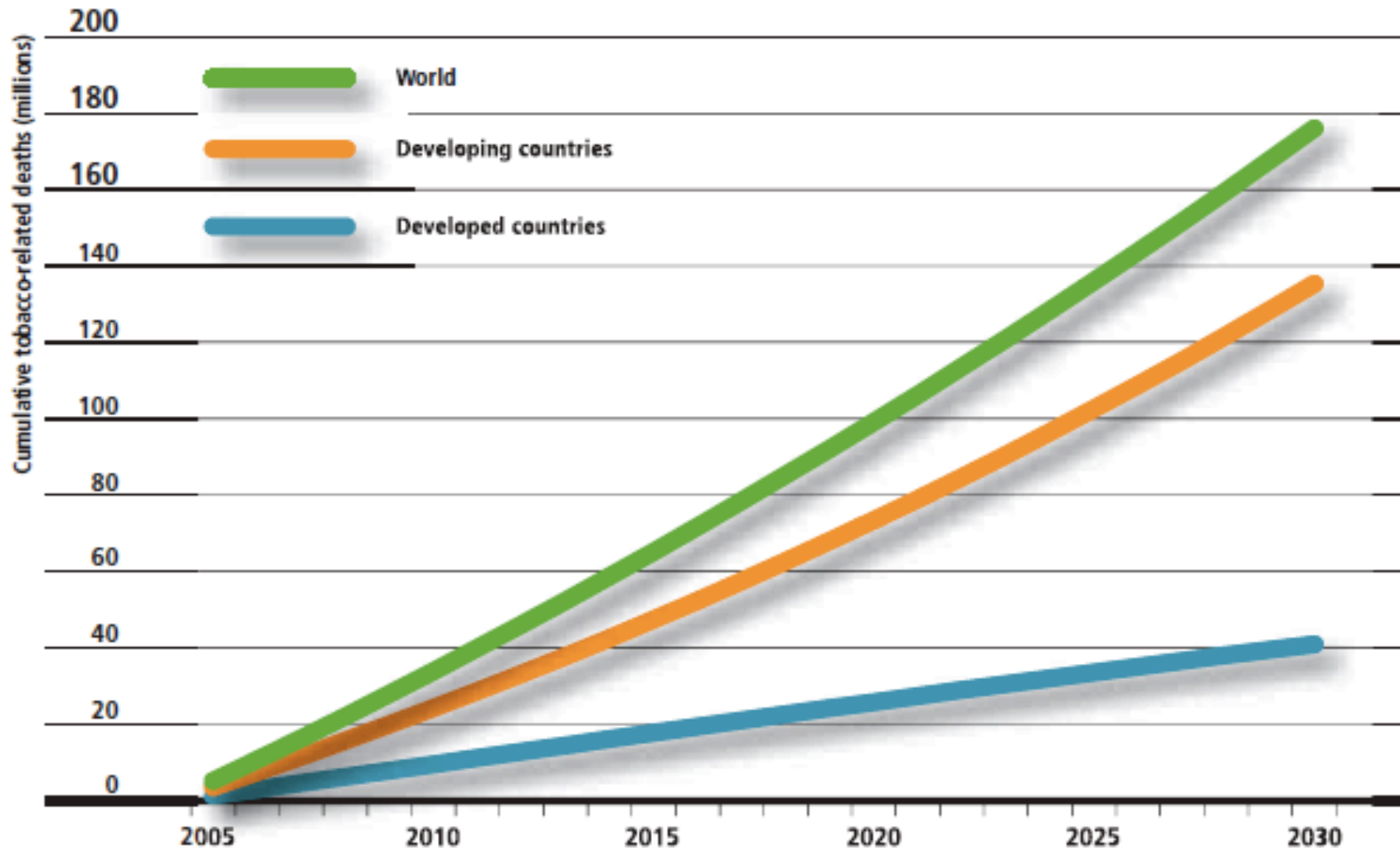


Worldwide

- Currently 5 million deaths per year
- By 2025 projected 10 million deaths per year
- Tobacco use may kill 1 billion people in the world during this century
- Most of those people have not yet started to smoke

TOBACCO WILL KILL OVER 175 MILLION PEOPLE WORLDWIDE BETWEEN NOW AND THE YEAR 2030

Cumulative tobacco-related deaths, 2005–2030



Source: Mathers CD, Loncar D. Projections of global mortality and burden of disease from 2002 to 2030.

PLoS Medicine, 2006, 3(11):e442.

The Tobacco Epidemic

- ◆ **Cigarettes cause nearly one in five deaths in US (Mokdeed et. al. 2004)**
- ◆ **Cigarettes kill one in three beginning smokers (CDC, 2006)**
- ◆ **There are effective treatments for tobacco dependence that are underutilized (Fiore et. al. 2000)**

Native Americans/Alaskan Natives

- Highest prevalence of tobacco use
 - 32.4% (smoking) compared to 20.6% in other populations
 - 7.1% (smokeless tobacco) compared to 3.2 in other populations

Centers for Disease Control and Prevention (CDC). (2002). Annual smoking –attributable mortality, years of potential life lost, and economic costs – United States, 1995-1999. MMWR. Morbidity and Mortality Weekly Report, 51(14), 300-303

PRIMARY
MALIGNANT GROWTHS
OF THE
LUNGS AND BRONCHI

A PATHOLOGICAL
AND CLINICAL STUDY

BY

I. ADLER, A.M., M.D.,

*Professor Emeritus at the New York Polyclinic, Consulting
Physician to the German, Beth-Israel, Har Moriah,
and Peoples Hospitals, and Montefiore
Home and Hospital*

On one point, however, there is nearly complete consensus of opinion, and that is that primary malignant neoplasms of the lungs are among the rarest forms of disease.

LONDON, BOMBAY, AND CALCUTTA

1912

Medical Complications of Tobacco

All cancer

- Cigarette smoking – 30% of all cancer deaths
- Risk of cancer death 2 x higher in smokers and 4 x higher in heavy smokers
- Smoking causally linked to cancers of lung, larynx, oral cavity, esophagus, pancreas, bladder, kidney, stomach, and uterine cervix

US Dept. Health and Human Services, 2004

Health Effects

- ◆ Hip fracture, low bone density
- ◆ Peptic Ulcer disease, Crohns disease
- ◆ Poor surgery outcomes
 - ◆ Diminished wound healing and Bone mending
- ◆ Poor diabetes outcomes
 - ◆ Circulatory problems, insulin resistance and worsened glucose control
- ◆ Impaired medication metabolism
- ◆ Fire



**Bryan of California
with his wife Judy and son, Scott.
He died at age 50 from lung cancer**



—
Johnnie dying from lung cancer.

**Audrey Mae of Mississippi
died from a tobacco-related illness**





Bill on his 75th birthday and the wedding day of his daughter, Donna

Linda started smoking at 12. She died at age 47, leaving behind a husband, daughter, and new grandbaby. She thought smoking would make her thin.



DO YOU INHALE?



A frank discussion at last

on a subject that has long been "taboo"

"LET sleeping dogs lie!" So said the cigarette trade when first we raised the subject of inhaling. But dodging an important issue is not Lucky Strike's policy!

Do you inhale? That question is vitally important... for every smoker inhales—knowingly or unknowingly. Every smoker breathes in some part of the smoke he or she draws out of a cigarette! And the delicate membranes of your throat demand that your smoke be pure, clean—free of certain impurities!

No wonder Lucky Strike dares to raise this vital question! For Luckies bring you the protection you want... because Luckies' famous purifying process removes certain impurities concealed in every tobacco leaf. Luckies created that process. Only Luckies have it!

So, whether you inhale knowingly or unknowingly, safeguard those delicate membranes!

"It's toasted"

Your Protection - against irritation - against cough

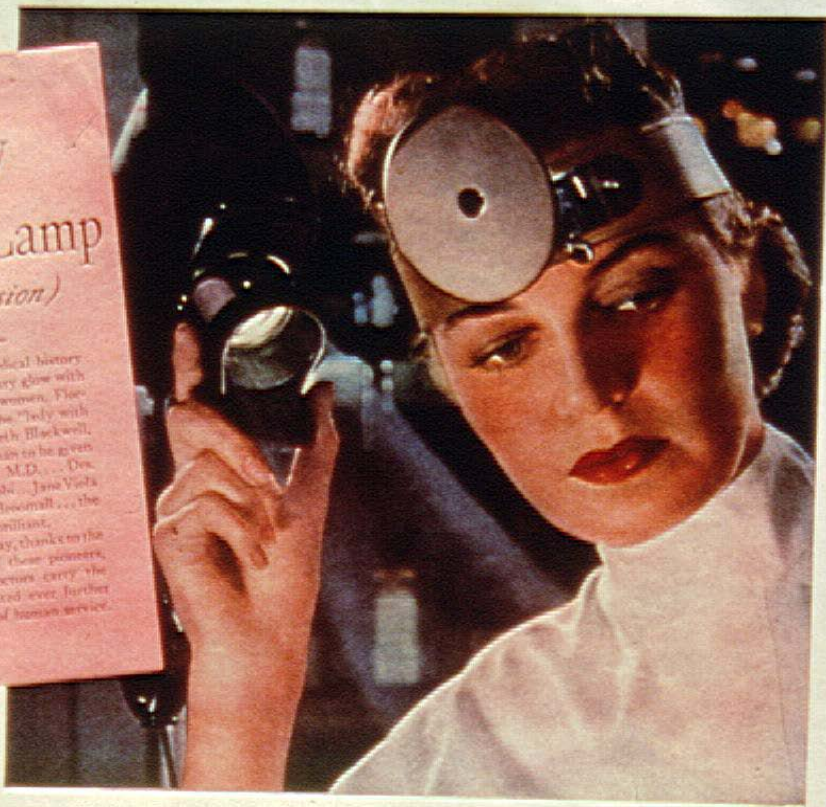
© U. S. AMERICA

TUNE IN ON LUCKY STRIKE — to make contact with the world's most direct solution, and know Lucky Strike's name, Terry Lambert, Thomas and Scholter moving over N. B. C. network.

**Lady
with a Lamp**
(1946 Version)

• The pages of medical history during the last century glow with the names of great women. Florence Nightingale, the "Lady with the lamp"... Elizabeth Blackwell, first American woman to be given the proud degree M.D.... Dr. Mary Pinna Jacob... Jane Viola Meyers... Anna Roosevelt... the list is long. And brilliant.

In America today, thanks to the irrefragal spirit of these pioneers, 7,250 women doctors carry the lamps they lighted over, further along the path of human service.



*According to a recent
Nationwide
survey:*

MORE DOCTORS SMOKE CAMELS THAN ANY OTHER CIGARETTE

• Men and women in every branch of medicine—115,597 in all—were queried in this nationwide study of cigarette preference. Three leading research organizations made the survey. The gist of the query was—What cigarette do you smoke, Doctor?

The brand named most was Camel!

The rich, full flavor and cool mildness of Camel's superb blend of costlier tobaccos seem to have won the same favor in medical circles as with millions of smokers the world around. If you are a Camel smoker, this preference among doctors will hardly surprise you. If you're not—well, try Camels now.



TRY CAMELS ON YOUR "T-ZONE"



That's T for Taste and T for Throat... the most critical "laboratory" for any cigarette. See how your taste responds to the rich, full flavor of Camel's costlier tobaccos. See how your throat reacts to Camel's cool mildness. On the basis of many experiences of many millions of smokers, we believe Camels will suit your "T-Zone" to a "T."

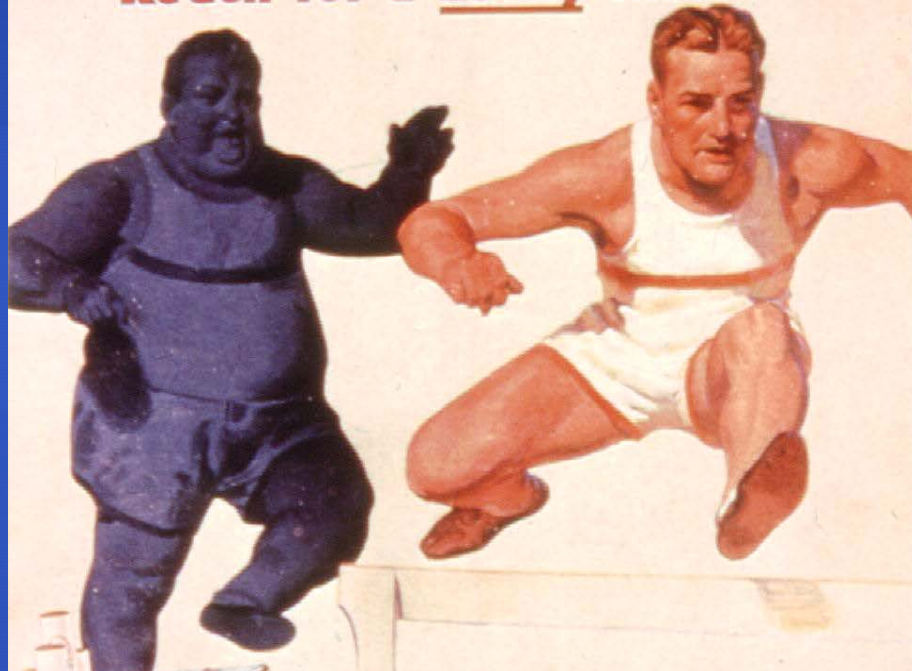
CAMELS *Costlier
Tobaccos*

R. J. REYNOLDS TOBACCO CO.
WELLS, W. VA.

FACE THE FACTS!

When tempted to over-indulge

"Reach for a Lucky instead"



Be moderate—be moderate in all things, even in smoking. Avoid that future shadow* by avoiding over-indulgence, if you would maintain that modern, successful figure. "Reach for a Lucky instead."

Lucky Strike, the finest Cigarette you ever smoked, made of the finest tobacco—The Cream of the Crop—"IT'S TOASTED." **Lucky Strike** has an extra, secret heating process. Everyone knows that heat purifies and so 20,679 physicians say that **Luckies** are less irritating to your throat.

"It's toasted"

Your Throat Protection — against irritation — against cough.

*We do not say smoking **Luckies** reduces flesh. We do say when tempted to over-indulge, "Reach for a **Lucky** instead."

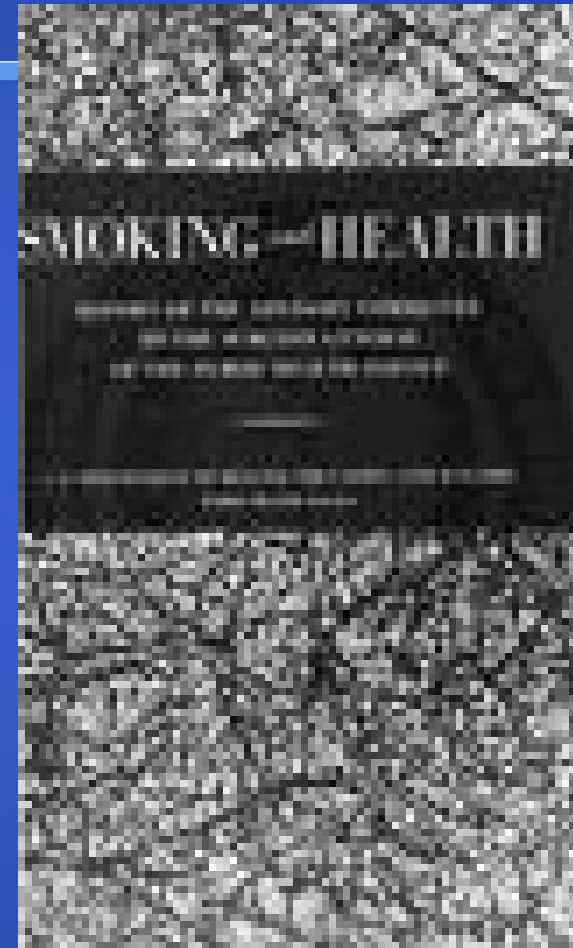
“Frank Statement”

“We accept an interest in people’s health as a basic responsibility, paramount to every other consideration in our business.”

— Tobacco Industry Research Committee
The New York Times, January 4, 1954

1964 Surgeon General's Report

- 10 Advisors to Luther Terry began looking at the evidence in 1962:
- Over 7000 studies reviewed
- Great amount of political/economic pressure





© LITTON 1978

All the
fuss about
smoking
got me
thinking I'd either
quit or smoke True.

I smoke
True.



King Regular: 11 mg. "tar", 0.9 mg. nicotine, 100's Maximo: 13 mg. "tar", 0.9 mg. nicotine, av. per cigarette. FTC Report April, '75.

Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

The low tar, low nicotine cigarette. Think about it.

Equivalent Toxicity but Perceived Health Benefit

- Design of Marlboro Red and Marlboro Lights
 - Nicotine and toxin ingestion equivalent
 - Disease burden virtually the same
 - Most smokers use “lights”, often with the explicit expectation of reduced risk
 - Cigarette market larger because of Lights

NCI, 1998

PHILIP MORRIS U. S. A.
INTER-OFFICE CORRESPONDENCE
RICHMOND, VIRGINIA

To: Mr. Leo F. Meyer Date: September 17, 1975
From: Barbro Goodman
Subject: Marlboro - Marlboro Lights Study Delivery Data

INTRODUCTION

On January 3, 1975 a memo was sent to you concerning smoker profiles collected in the Marlboro - Marlboro Lights study. Since that time we have been able to use the Smoker Simulator in determining a series of TPM deliveries. Included in these smokings were cigarettes from the study above.

DISCUSSION

The smoker profile data reported earlier indicated that

“The smoker profile data reported earlier indicated that Marlboro Lights cigarettes were not smoked like regular Marlboros...”

number of puffs on the cigarette rather than giving equal weight to all puffs. Command tapes for Simulator smokings were based on these averages of puff volumes, puff durations, maximum flow rates and the intervals between puffs. The observed arithmetic means of the smoker parameters are illustrated in Figures 1 - 4 for the first nine puffs on both cigarettes.

The Simulator smokings of production Marlboro 85 and Marlboro Lights cigarettes were divided into three stages:

- A. Command tapes based on data from the entire group of smokers (Tapes #17 and 39).
- B. Command tapes based on data from regular Marlboro 85 smokers only (Tapes #40 and 27).
- C. Command tapes based on data from Marlboro Lights smokers only (Tapes #34 and 35).

202154486

TRIAL EXHIBIT
11,564

Mr. L. B. Meyer

- 3 -

September 17, 1975

Marlboro Lights proportionally. In effect, the Marlboro 85

“In effect, the Marlboro 85 smokers in this study did not achieve any reduction in the smoke intake by smoking a cigarette (Marlboro Lights) normally considered lower in delivery.”

Mr. P. N. Gauvin
✓ Mr. M. F. Kelley
Mr. F. J. Ryan

2021544488



You can switch down to
» lower tar
and enjoy smooth,
satisfying taste.

You can do it!



You've got
MERIT

© Philip Morris Inc. 1997
Ultra: 1 mg "tar," 0.1 mg nicotine—Ultra Lights: 5 mg "tar," 0.4 mg
nicotine—Kings: 8 mg "tar," 0.8 mg nicotine av. per cigarette by FTC method.

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



The important question is whether the harmful aspects, either real or imaginary, will seriously weigh in the public estimation against the benefits. The force of the psychological effects in maintaining smoking are liable to be over-estimated; they are strong if smoking is accepted as a good practice but they are unlikely to be able long to hold the position if smoking were to be condemned on physiological grounds. The important support for smoking comes from the stimulation of the body's stress-resisting mechanisms which, under modern conditions of life, is an essential function. If the absorption of nicotine is made pleasant and attractive this enhances the benefit just as in the case of well prepared and well served food. However, the force of the habit or the strength of addiction is not such as to give any grounds for complacency in the face of alternative methods of stimulating the body to meet stress, and that is just where the danger lies since alternative methods are becoming available. In the last few years there has been a quite remarkable increase in the production of tranquilliser drugs, and while most of these need a doctor's prescription there is already one on free sale in Switzerland [litrium made by Hoffmann La Roche]. If such drugs become more freely available they will compete with nicotine, which is a natural tranquilliser, and will leave smoking primarily dependent on its psychological effects for the maintenance of the habit.

What we need to know above all things is what constitutes the hold of smoking, that is, to understand addiction.

301083826

BAT CO LTD - MINNESOTA TOBACCO LITIGATION



Targeting Native Americans

- Cheaper cigarettes offered to some tribes (since tobacco sales can be an important economic venue)
- Rio, Dorado & American Spirit Cigarettes targeted to Native Americans
- Use of images in marketing such as chief, feathers, pipes, etc.
- Fund cultural events such as powwows and rodeos

Tobacco Addiction

- Addictive disorder usually starting in adolescence
- People 'know smoking is bad' but underestimate both:
 - The true health impact
 - The challenges of addiction
- Effective clinical and public health responses are under-delivered

Greatest Impact upon the Spread of the Tobacco Epidemic

- Smoke free ordinances
- Price increases
- Marketing restrictions
- Truthful and targeted education
- Treatment

Native Americans

- **Most frequent reasons for quitting:**
 - Direct request by family
 - Health
 - Spiritual reasons

- **Least mentioned reasons for quitting:**
 - Cost of cigarettes
 - Policy factors

Choi, W.S., Daley, C. M., James, A. S., Thomas, J., Schupbach, R., Segraves, M. , Barnoskie, R. , and Ahluwalia, J. S. (2006), "Beliefs and Attitudes Regarding Smoking Cessation Among American Indians: A Pilot Study. *Ethnicity of Disease*, 16: 35-40.

Clinical Approaches

- Most people who smoke want to stop
- People who do continue to smoke usually don't feel capable of stopping and living without cigarettes

USPHS Clinical Practice Guideline 2008

CLINICAL PRACTICE GUIDELINE



Treating Tobacco Use And Dependence

AHRQ Publ 00-0032

U.S. Department of Health and Human Services
Public Health Service

USPHS Guidelines

4 Recommendations

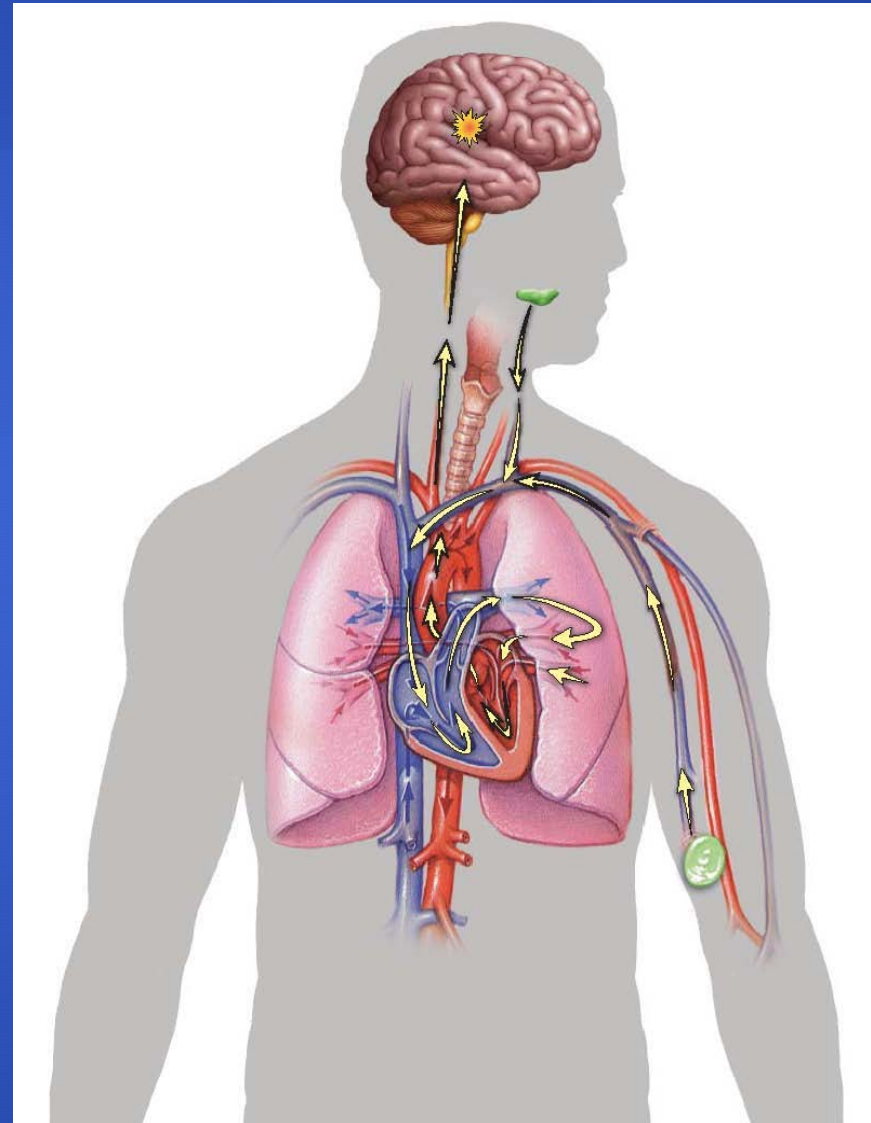
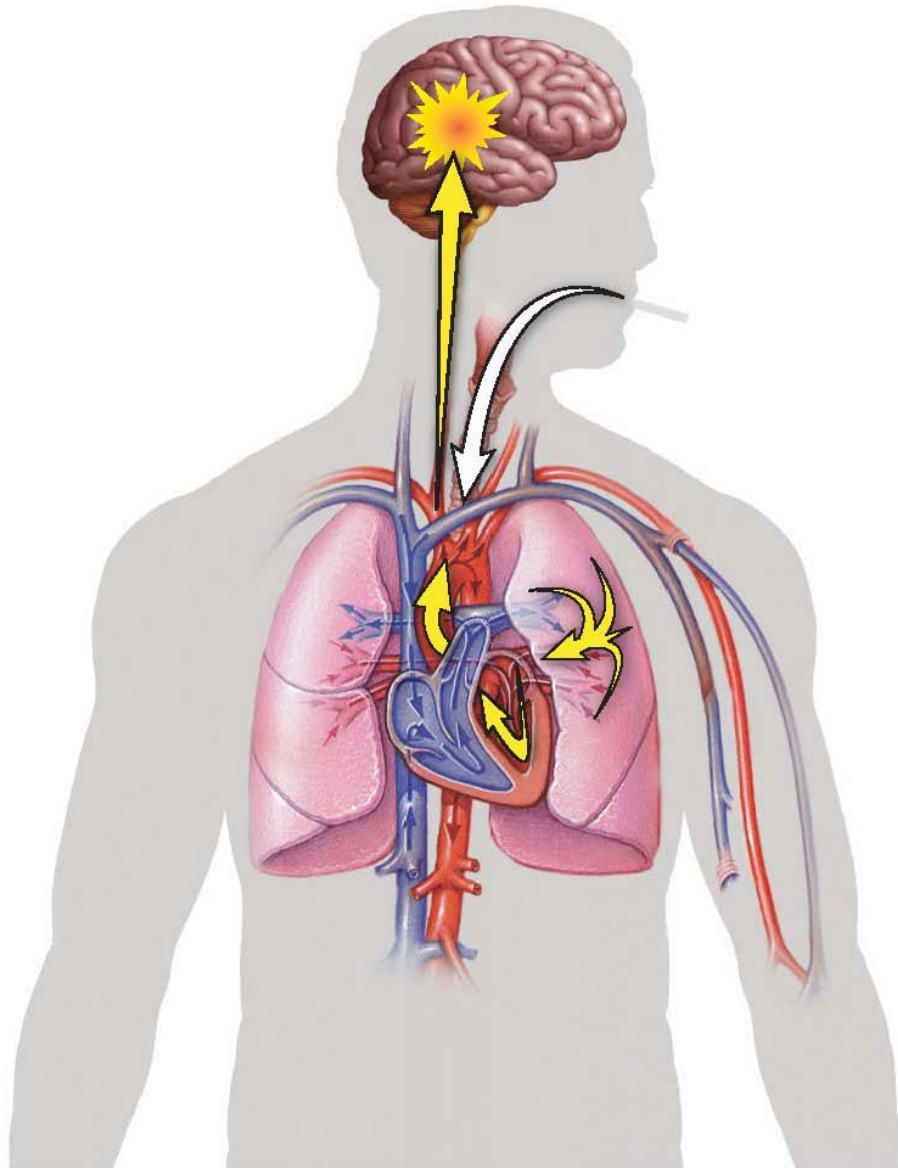
1. Tobacco dependence is a chronic disease prone to relapse and requires repeated interventions.
2. Systems should identify and treat all tobacco users with medication and counseling.
3. Provide individual, group or telephonic treatment. (Brief interventions work.)
4. If a tobacco user currently is unwilling to make a quit attempt, use motivational strategies.

Mayo's Model of Treatment

- Addiction
- Pharmacotherapy
- Cognitive-Behavioral
- Relapse Prevention

Motivational Interviewing

Addiction Education



Cognitive-Behavioral

Thoughts

- “Smoking isn’t an option”
- “I happily see myself as a nonsmoker”
- “I can do this.”

Behaviors

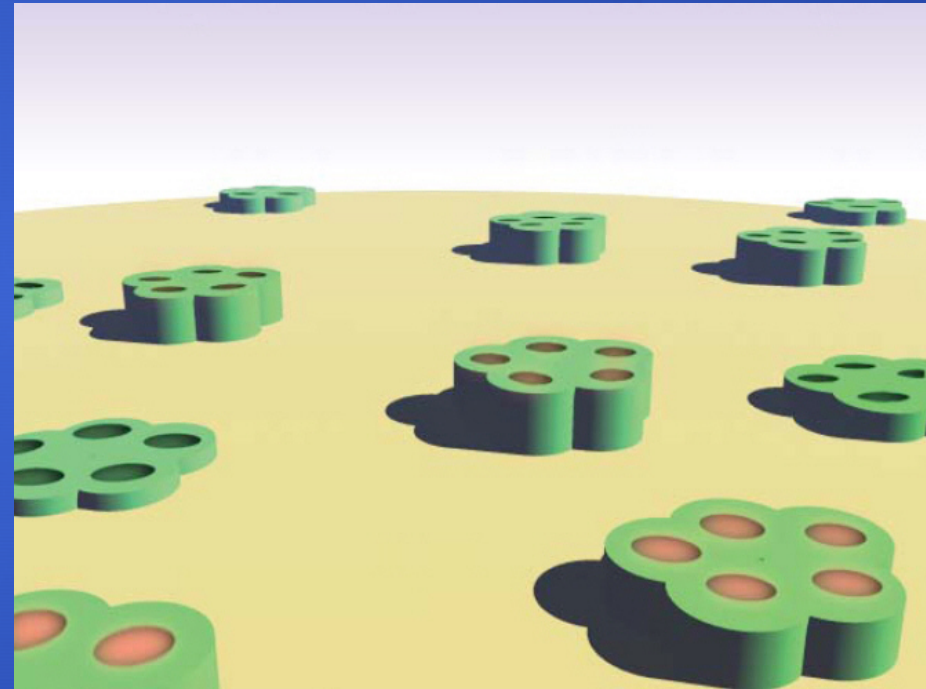
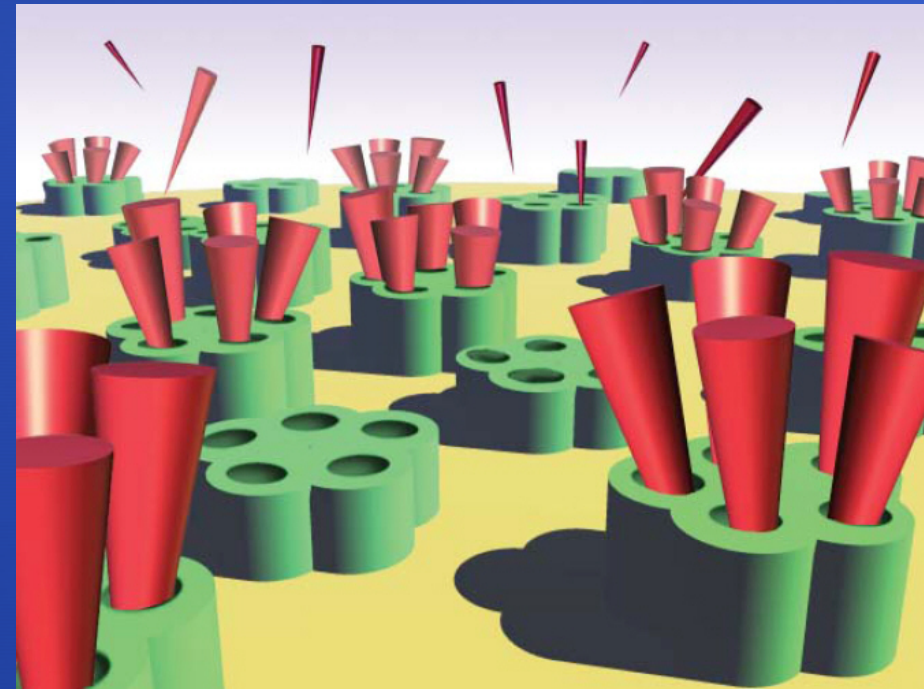
- Behavioral substitutes
- Problem-solving skills
- Alter routines

Relapse Prevention

- Individualized
- Red flags/high risk situations
- Follow-up
- Support
- Stress management

Addiction

Risky Thinking: "Just one"



Summary

- Address the 4 components of treatment:
 - Addiction
 - Pharmacotherapy
 - Cognitive-Behavioral
 - Relapse Prevention
- Utilize evidence-based treatment (refer to USPHS Guidelines)