



Rx for CHANGE

Clinician-Assisted Tobacco Cessation



TRAINING OVERVIEW

- *Epidemiology of Tobacco Use* module
- *Forms of Tobacco* module
- *Nicotine Pharmacology & Principles of Addiction* module
- *Drug Interactions with Smoking* module
- *Assisting Patients with Quitting* module
- Hands-on workshop
 - *Aids for Cessation* module
 - Tobacco trigger tapes
 - Case scenarios



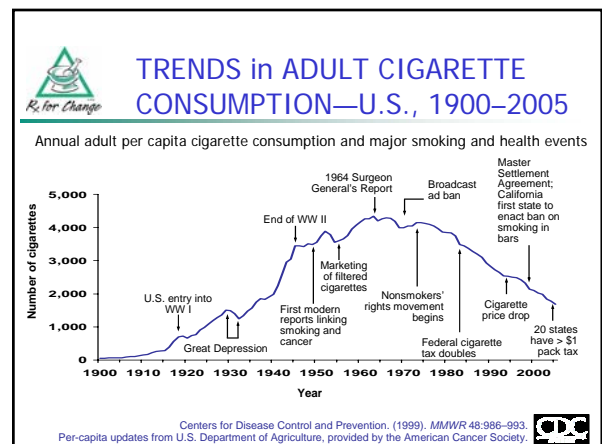
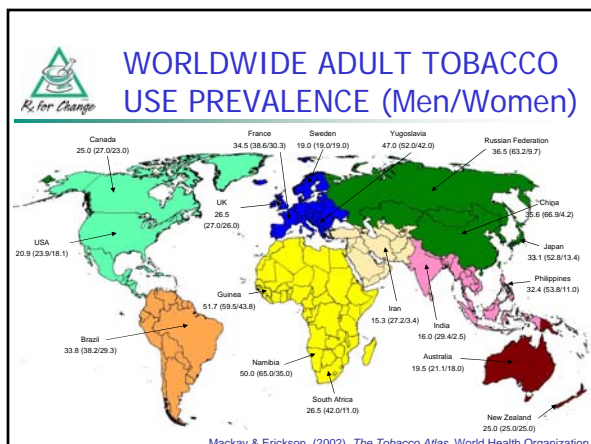
EPIDEMIOLOGY of TOBACCO USE

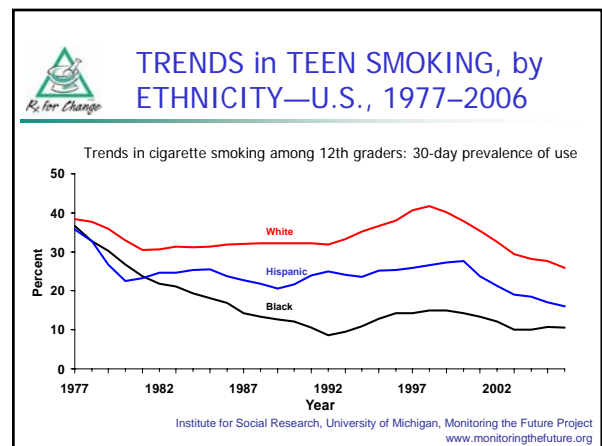
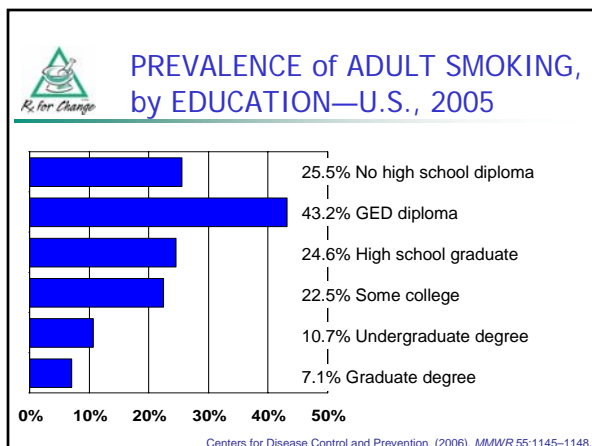
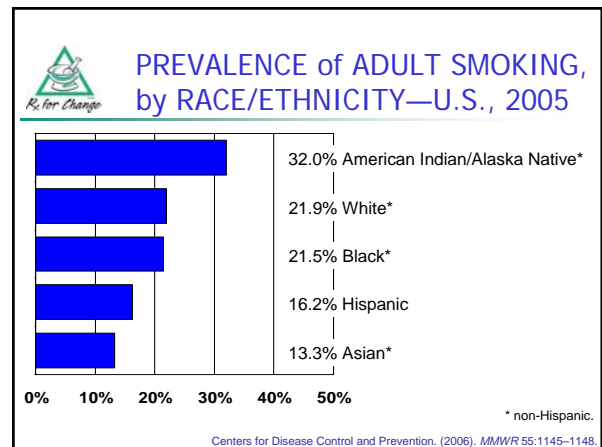
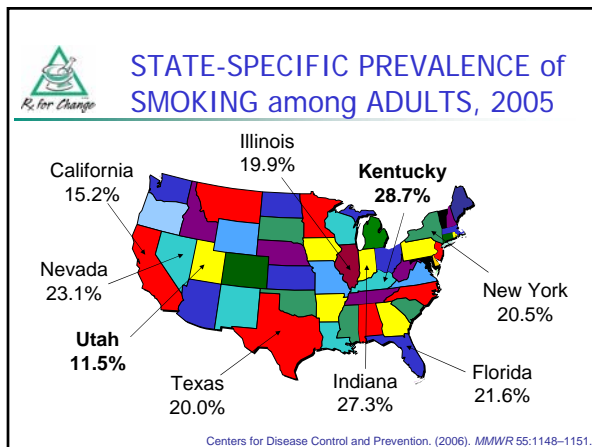
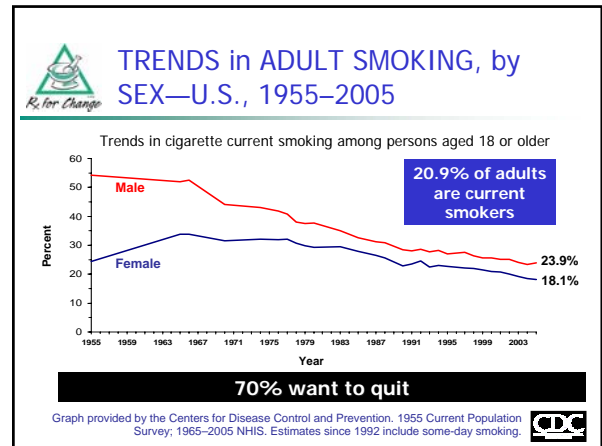
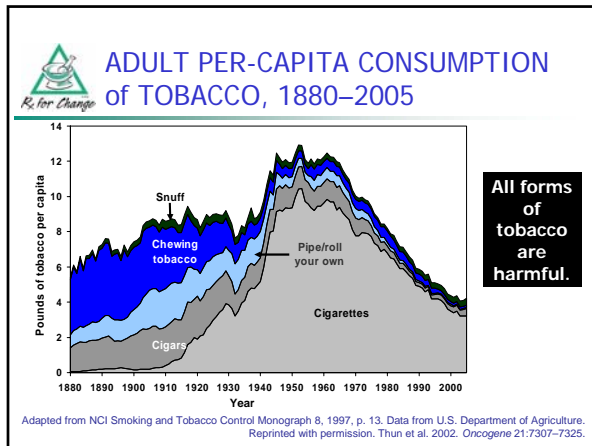


"CIGARETTE SMOKING..."

is the chief, single,
avoidable cause of death
in our society and the most
important public health
issue of our time."

C. Everett Koop, M.D., former U.S. Surgeon General







PUBLIC HEALTH versus "BIG TOBACCO"

The biggest opponent to tobacco control efforts is the tobacco industry itself.

In the U.S., for every \$1 spent on tobacco prevention, the tobacco industry spends \$28 to market its products.



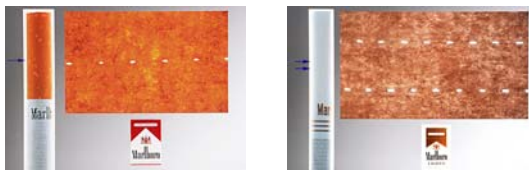
The TOBACCO INDUSTRY

- For decades, the tobacco industry has publicly denied the addictive nature of nicotine and the negative health effects of tobacco.
- April 14, 1994:** Seven top executives of major tobacco companies state, under oath, that they believe nicotine is not addictive.
 - Tobacco industry documents suggest otherwise
 - Documents available at <http://legacy.library.ucsf.edu>
- The cigarette is a heavily engineered product.
 - Designed and marketed to maximize bioavailability of nicotine and addictive potential
 - Profits over people



An EFFECTIVE MARKETING STRATEGY: "LIGHT" CIGARETTES

The difference between Marlboro and Marlboro Lights...



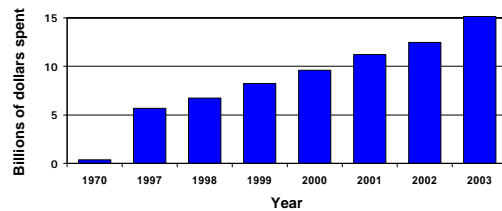
an extra row of ventilation holes

Image courtesy of Mayo Clinic Nicotine Dependence Center - Research Program / Dr. Richard D. Hurt
The Marlboro and Marlboro Lights logos are registered trademarks of Philip Morris USA.



TOBACCO INDUSTRY ADVERTISING

- \$15.15 billion spent in the U.S. in 2003
 - 21.5% increase over 2002 figures
 - 35.0% increase over 2001 figures



Federal Trade Commission. (2005). *Cigarette Report for 2003*.



ANNUAL U.S. DEATHS ATTRIBUTABLE TO SMOKING, 1997-2001

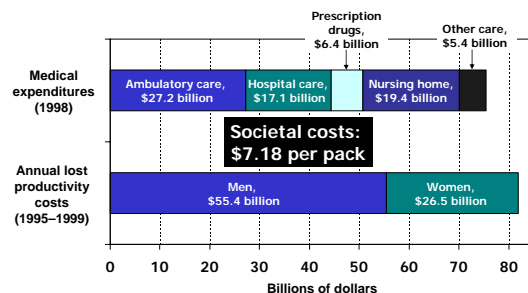
Disease Category	Number of Deaths	Percentage of all smoking-attributable deaths*
Cardiovascular diseases	137,979	32%
Lung cancer	123,836	28%
Respiratory diseases	101,454	23%
Second-hand smoke*	38,112	9%
Cancers other than lung	34,693	8%
Other	1,828	<1%

TOTAL: 437,902 deaths annually

* In 2005, it was estimated that nearly 50,000 persons died due to second-hand smoke exposure.
Centers for Disease Control and Prevention. (2005). *MMWR* 54:625-628.



ANNUAL SMOKING-ATTRIBUTABLE ECONOMIC COSTS—U.S., 1995-1999



Centers for Disease Control and Prevention. (2002). *MMWR* 51:300-303.



COMPOUNDS in TOBACCO SMOKE

An estimated 4,800 compounds in tobacco smoke, including 11 proven human carcinogens

Gases

- Carbon monoxide
- Hydrogen cyanide
- Ammonia
- Benzene
- Formaldehyde



Particles

- Nicotine
- Nitrosamines
- Lead
- Cadmium
- Polonium-210

Nicotine does NOT cause the ill health effects of tobacco.



2004 REPORT of the SURGEON GENERAL: HEALTH CONSEQUENCES OF SMOKING

FOUR MAJOR CONCLUSIONS:

- Smoking harms nearly every organ of the body, causing many diseases and reducing the health of smokers in general.
- Quitting smoking has immediate as well as long-term benefits, reducing risks for diseases caused by smoking and improving health in general.
- Smoking cigarettes with lower machine-measured yields of tar and nicotine provides no clear benefit to health.
- The list of diseases caused by smoking has been expanded.

U.S. Department of Health and Human Services. (2004). *The Health Consequences of Smoking: A Report of the Surgeon General*.



HEALTH CONSEQUENCES of SMOKING

- Cancers**
 - Acute myeloid leukemia
 - Bladder and kidney
 - Cervical
 - Esophageal
 - Gastric
 - Laryngeal
 - Lung
 - Oral cavity and pharyngeal
 - Pancreatic
- Pulmonary diseases**
 - Acute (e.g., pneumonia)
 - Chronic (e.g., COPD)
- Cardiovascular diseases**
 - Abdominal aortic aneurysm
 - Coronary heart disease
 - Cerebrovascular disease
 - Peripheral arterial disease
- Reproductive effects**
 - Reduced fertility in women
 - Poor pregnancy outcomes (e.g., low birth weight, preterm delivery)
 - Infant mortality
- Other effects:** cataract, osteoporosis, periodontitis, poor surgical outcomes

U.S. Department of Health and Human Services. (2004). *The Health Consequences of Smoking: A Report of the Surgeon General*.



2006 REPORT of the SURGEON GENERAL: INVOLUNTARY EXPOSURE to TOBACCO SMOKE

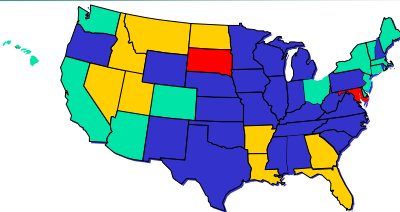
- Second-hand smoke causes premature death and disease in nonsmokers (children and adults)
- Children:
 - Increased risk for sudden infant death syndrome (SIDS), acute respiratory infections, ear problems, and more severe asthma
 - Respiratory symptoms and slowed lung growth if parents smoke
- Adults:
 - Immediate adverse effects on cardiovascular system
 - Increased risk for coronary heart disease and lung cancer
- Millions of Americans are exposed to smoke in their homes/workplaces
- Indoor spaces: eliminating smoking fully protects nonsmokers
 - Separating smoking areas, cleaning the air, and ventilation are ineffective

There is no safe level of second-hand smoke.

USDHHS. (2006). *The Health Consequences of Involuntary Exposure to Tobacco Smoke: Report of the Surgeon General*.



SMOKE-FREE WORKPLACE LAWS



Smoke-free offices, restaurants, and bars: California, Colorado, Connecticut, Delaware, Hawaii, Maine, Massachusetts, New Jersey, New York, Rhode Island, Vermont, Washington

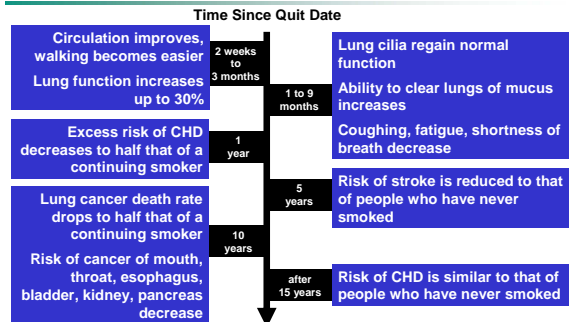
Smoke-free offices and restaurants: Arkansas, District of Columbia (bars in 2007), Florida, Georgia, Idaho, Louisiana, Montana (bars in 2009), Nevada, North Dakota, Utah (bars in 2009)

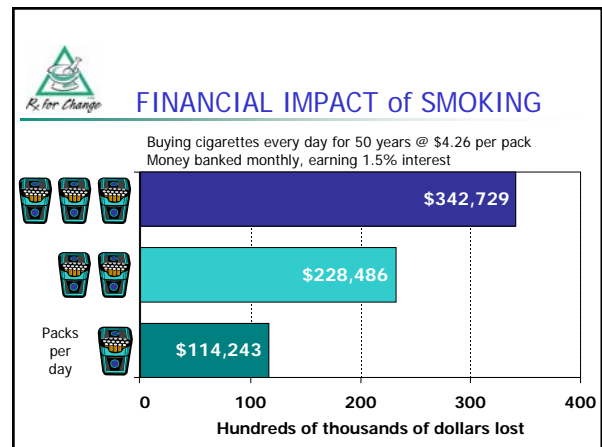
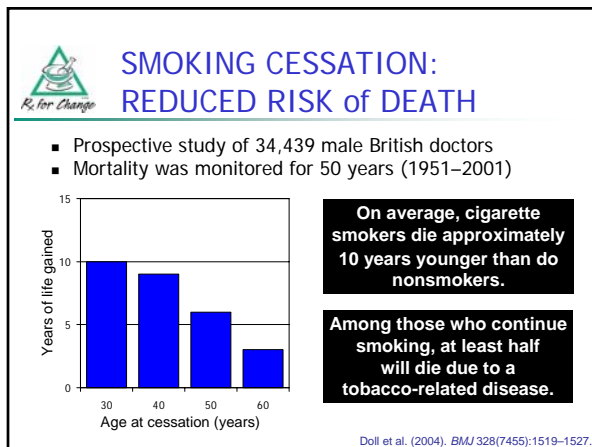
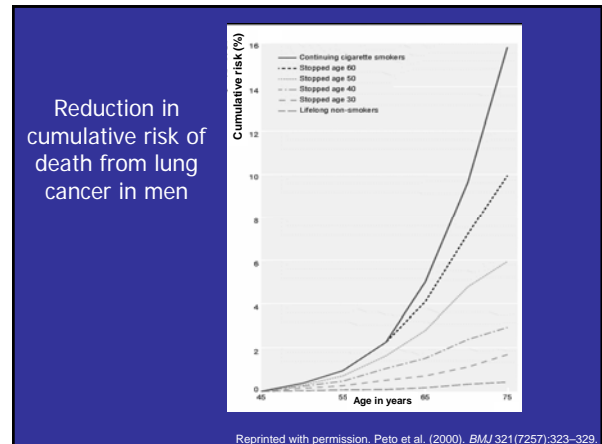
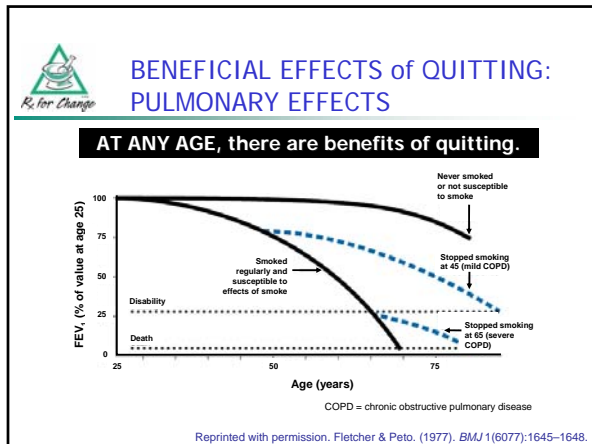
Smoke-free offices: Maryland, South Dakota

Data current as of November 9, 2006.



QUITTING: HEALTH BENEFITS





EPIDEMIOLOGY of TOBACCO USE: SUMMARY

- About one in five adults are current smokers; smoking prevalence varies by sociodemographic characteristics.
- Nearly half a million U.S. deaths are attributable to smoking annually.
- Smoking costs the U.S. \$157.7 billion per year. Lifetime financial costs of smoking can exceed \$300,000 for a heavy smoker.
- At any age, there are benefits to quitting smoking.
- The biggest opponent to tobacco control efforts is the tobacco industry itself.