

# **Tobacco Harm Reduction**

**Brad Rodu**

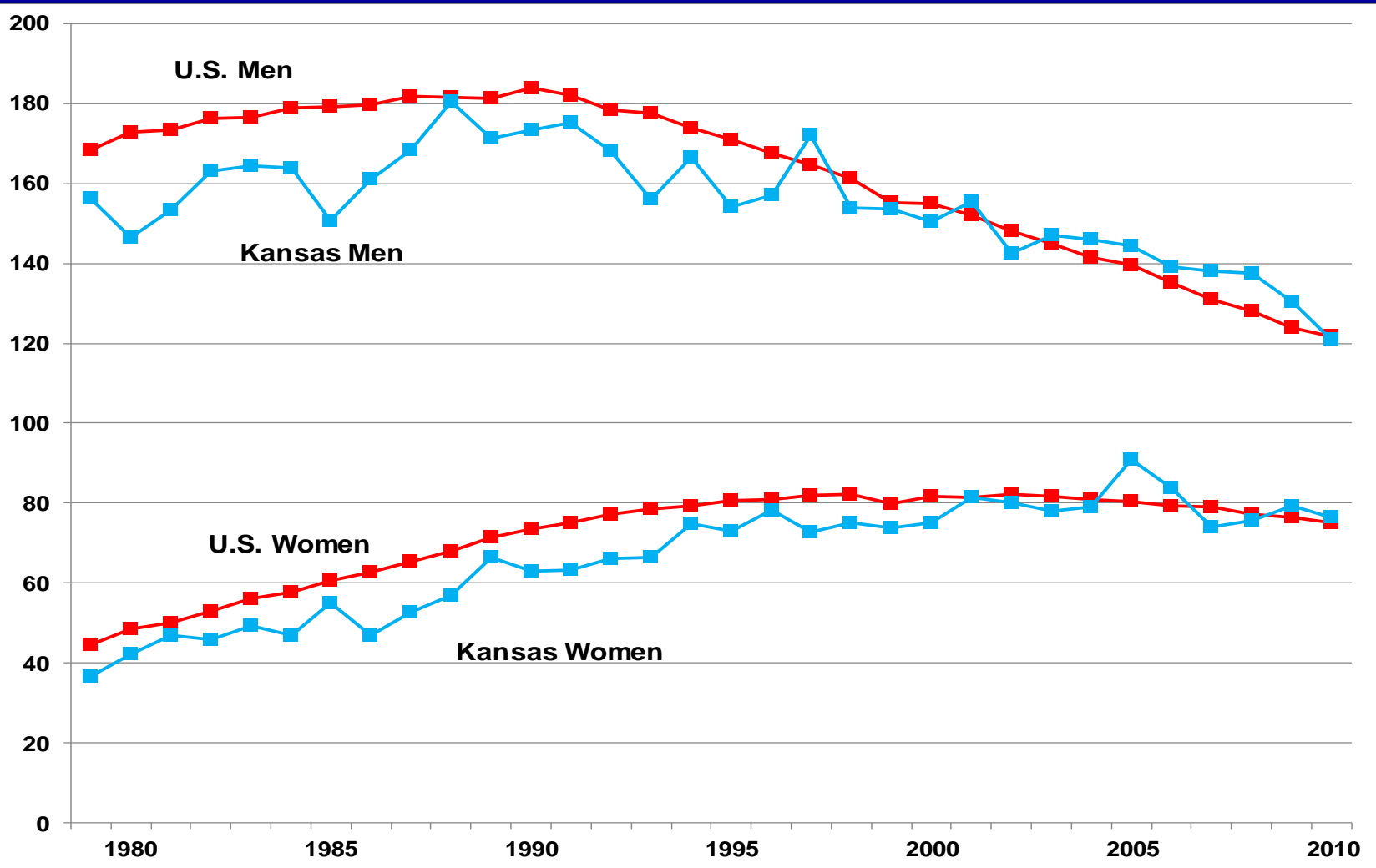
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James Graham Brown Cancer Center  
University of Louisville

# **The Smoking Status Quo: Unacceptable**

- **The American Anti-Smoking Campaign is 45 Years Old**
- **According to the CDC:  
45 million smokers in the U.S.**

**443,000 deaths every year in the U.S.  
3,800 in Kansas**

# Lung Cancer Mortality in Men and Women Age 35+ Years, Kansas and the US, 1979-2010



# **If the Status Quo Continues**

**In the next 20 years:**

- **8 million Americans will die from smoking**

**All are adults over 35 years of age**

**None of them are now children**

# **The Failed Anti-Smoking Campaign**

- **The Campaign's Only Message:**

**Quit Nicotine and Tobacco, or Die**

- **The Campaign's Only Quitting Tactics:**

**Ineffective Behavioral Therapy  
Ineffective Use of Nicotine**

Rodu and Cole. *Technology* 6: 17-21, 1999.

Rodu and Cole. *International J Cancer* 97: 804-806, 2002.

# The Anti-Smoking Campaign- Behavioral Therapy

- NCI Manual for Physicians- Counsel Patients to:
  - "Keep your hands busy- doodle, knit, type a letter"
  - "Cut a drinking straw into cigarette-sized pieces and inhale air"
  - "Keep a daydream ready to go"

Source: How to help your patients stop smoking. NIH Pub. No. 93-3064, 1993

# The Anti-Smoking Campaign- Faulted Use of Nicotine

- **Temporary – 6 to 12 weeks**
- **Expensive – per unit and per box**
- **Very Low Dose – unsatisfying for smokers**
- **7% Success\* – ”Efficacious”, ”Modest”**

\*Hughes et al. Meta-analysis in Tobacco Control, 2003.

# **Comparing Nicotine to Caffeine Addictive Drugs Can Be Used Safely**

## **Properties of Nicotine and Caffeine**

**Pleasurable Effects:** Enhance concentration and performance  
Provide a sense of well being  
Elevate mood

**Powerfully Addictive:** Irreversible for many consumers

**Can be Used Safely:** Do not cause Cancer, Emphysema,  
Heart Diseases

**Delivery Systems:** Caffeine- Coffee, tea, cola drinks  
Nicotine- Smoke versus smokeless



# **Tobacco Harm Reduction Permanent Nicotine Maintenance**

## **Smokeless Tobacco**

- **Nicotine levels comparable to smoking**
- **Vastly safer than smoking (>98%)**
- **Evidence from Sweden – and the U.S. – that smokeless works**
- **Modern products are socially acceptable**

# American Smokeless Tobacco



Moist Snuff



Chewing Tobacco

Powdered  
Dry Snuff



# **Smokeless Tobacco Use is 98% Safer Than Smoking**

- **No risk for emphysema, lung cancer, and heart disease**
- **Mouth cancer risk - Very low in absolute terms\***

\* 22 studies over 50 years: Rodu and Cole, Oral Surgery 2002.

# Smokeless Tobacco and Health: Oral Cancer

## Relative Risks

Smoking	~10
Alcohol Abuse	~4

## American Smokeless Tobacco\*

Chewing tobacco	1.2
Moist snuff	1.0
Powdered Dry Snuff	4.0

Incidence Rate in Long-term ST users (At RR=4):  
26 per 100,000 person-years (py)\*\*

\* Over 20 epidemiologic studies, reviewed in: B Rodu, P Cole. Oral Surgery 93: 511-515, 2002.

\*\*New England Journal of Medicine 304: 745-749, 1981.

# Comparing Risks of Smokeless Tobacco, Automobiles and Cigarettes

Annual Death Rate from:

**Powdered dry snuff<sup>1</sup>                      12 per 100,000 users**

**Automobiles<sup>2</sup>                              11 per 100,000 users**

**Cigarettes<sup>3</sup>                                > 600 per 100,000 users**

1. New England Journal of Medicine, 1981.

2. National Highway Traffic Safety Administration, 2009.

3. American Cancer Society data, 1999.

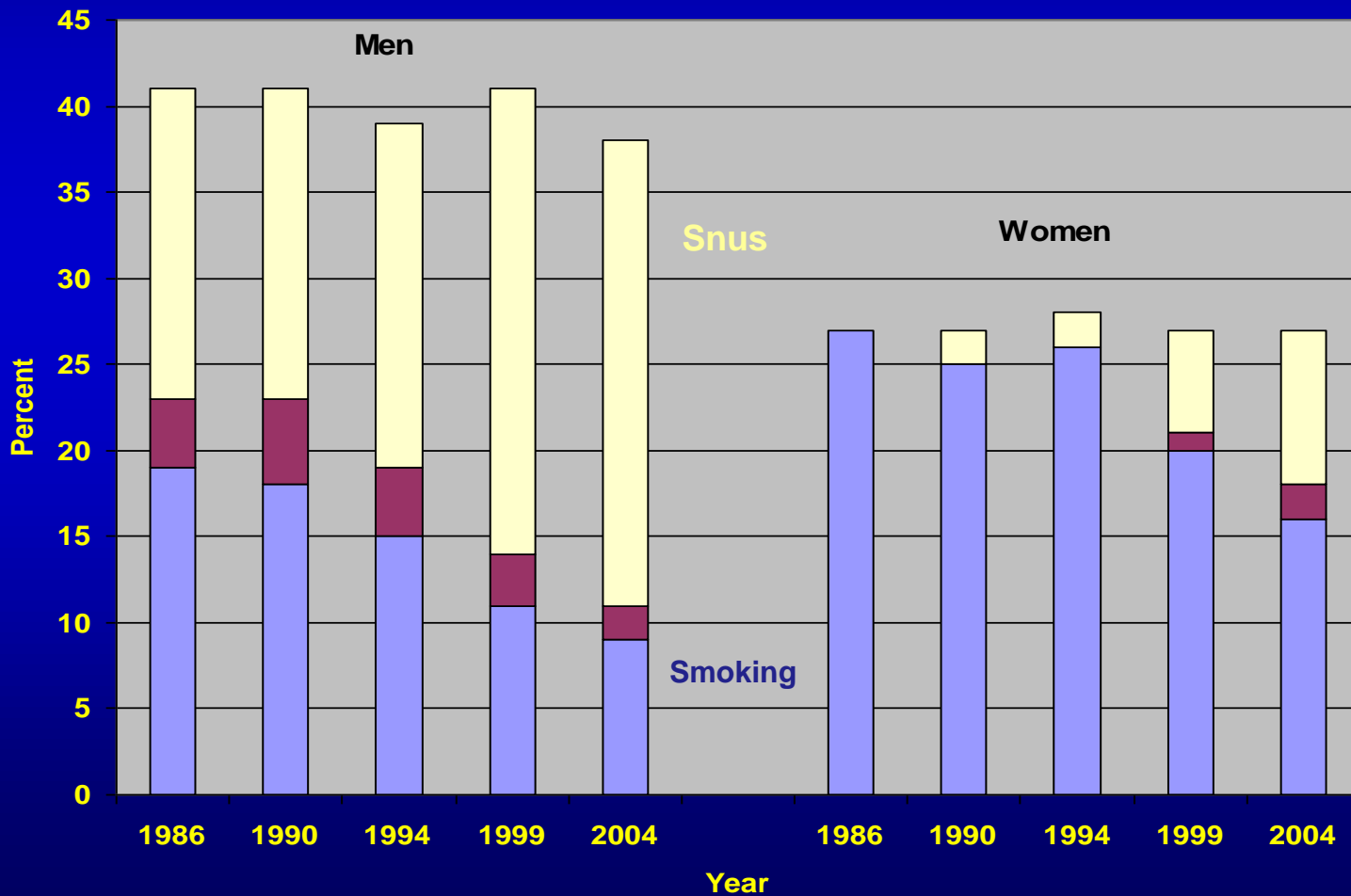
# Smokeless Tobacco Has Worked For Swedish Men For 50 Years

- **High** rate of smokeless tobacco use.
- **Lowest** smoking rate in Europe.
- **Lowest** rate of lung cancer and other smoking-related diseases in Europe
- If EU men smoked at the rate of Swedish men, almost **274,000 lives** per year would be saved\*

\*B Rodu and P Cole. *Scandinavian Journal of Public Health*, 2009.

# Tobacco Use in Northern Sweden

From J Int Med 2002; Scand J Pub Health 2005



# Growing Discussion about Tobacco Harm Reduction

## 2002 Royal College of Physicians Report

”...[smokeless] tobacco...10 to 1,000 times less hazardous than smoking...some manufacturers want to market ST as a harm reduction option...may find support for that in the public health community”

## 2007 Royal College of Physicians Report

Smokers smoke predominantly for nicotine,...nicotine itself is not especially hazardous.

### Harm reduction

- a fundamental component of many aspects of medicine and...everyday life...has not been applied to smoking.
- has the potential to save millions of lives, and deserves consideration.



# **Growing Discussion about Tobacco Harm Reduction**

**2006 *Addictive Behaviors*, NCI Funded**

**“...4 million [American] smokers would switch to the low-carcinogen smokeless tobacco.”**

**American Council on Science and Health**

***Harm Reduction Journal*, 2006 and 2011**

**”....there is a strong scientific and medical foundation for tobacco harm reduction, which shows great potential as a public health strategy to help millions of smokers.”**

# Tobacco Harm Reduction The Owensboro, KY Campaign

**Dump the smoke.**  
**But keep on lovin' the nicotine.**

With cigarettes, **it's the smoke that kills.** Smoke-free products are proven to be the smarter and safer way to enjoy nicotine – and one of the most effective ways to quit cigarettes.\*

[SwitchAndQuitOwensboro.org](http://SwitchAndQuitOwensboro.org)



\* Rodu and Phillips; Harm Reduction Journal 5: 18, 2008



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CAMEL  
SNUS  
frost

FOR ADULT SMOKERS!  
CINNAMON  
SKOAL DRY  
TOBACCO PACKS  
NO SPIT • NO SNIKE

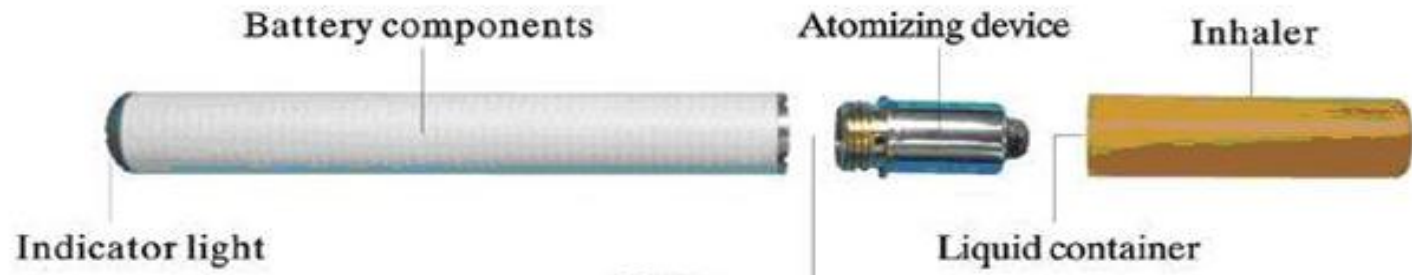
STONEWALL™  
Wintergreen  
STONEWALL™  
20 Hard Snuff  
Spit-Free  
Underage Sale Prohibited. A Smokeless Tobacco Product

Ariva  
Smokefree Satisfaction®  
Ariva  
20 Dissolvable Tobacco Pieces  
Underage Sale Prohibited. A Smokeless Tobacco Product

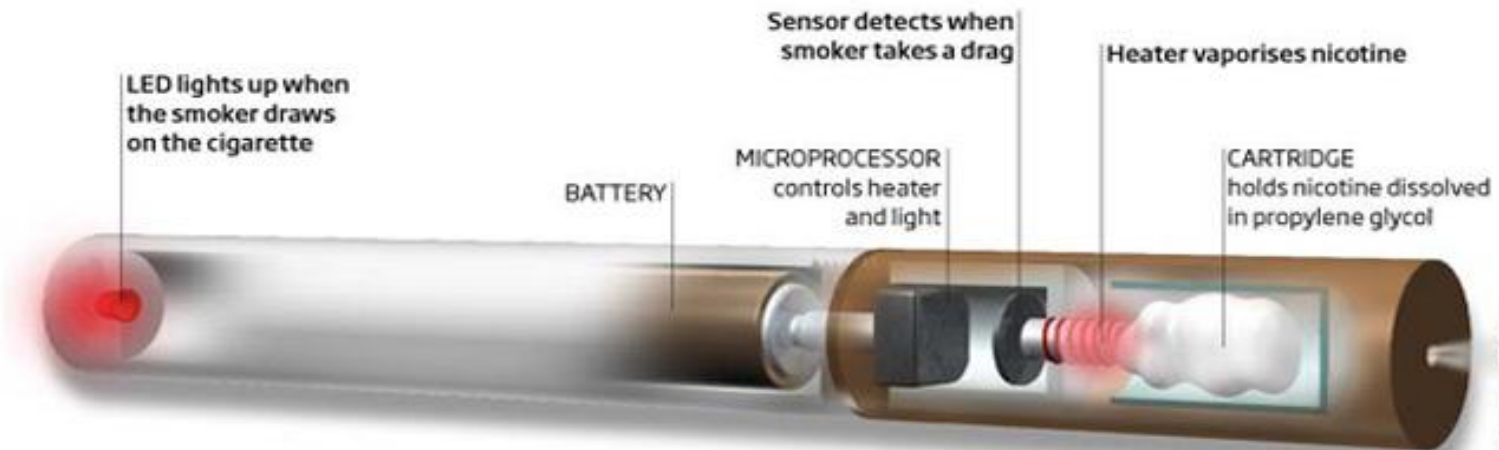
OLIVER  
TWIST  
SUNBERRY  
CHEWING TOBACCO BIFS SINCE 1885

Marl  
boro  
SNUS MINT

# E-cigarettes



**Note:**  
Unscrew by turning to the left  
Screw by turning to the right



## Smoke without fire

Suck on an e-cigarette and it produces a cloud of nicotine-carrying vapour with none of the toxic by-products of burning tobacco

# **Tobacco Harm Reduction: Take-Homes**

- **Eliminate misinformation on state government tobacco web pages such as:  
“smokeless tobacco doesn’t mean harmless tobacco...One can of chew equals about four packs of cigarettes...an almost instant addiction... Smokeless tobacco is not a safe replacement for smoking cigarettes”**
- **Don’t “equalize” taxes on smokeless tobacco with those on cigarettes: it denies smokers affordable options**
- **Smokers who switch save essentially as many health care dollars as smokers who quit: state employees and Medicaid recipients**
- **Set insurance rates that don’t penalize smokers who switch**

# **For More Information**

**[www.smokersonly.org](http://www.smokersonly.org)**

**[Rodutobaccotruth.blogspot.com](http://Rodutobaccotruth.blogspot.com)**

**[www.SwitchandQuitOwensboro.org](http://www.SwitchandQuitOwensboro.org)**