

Tobacco Harm Reduction: The Case for Smokeless Tobacco

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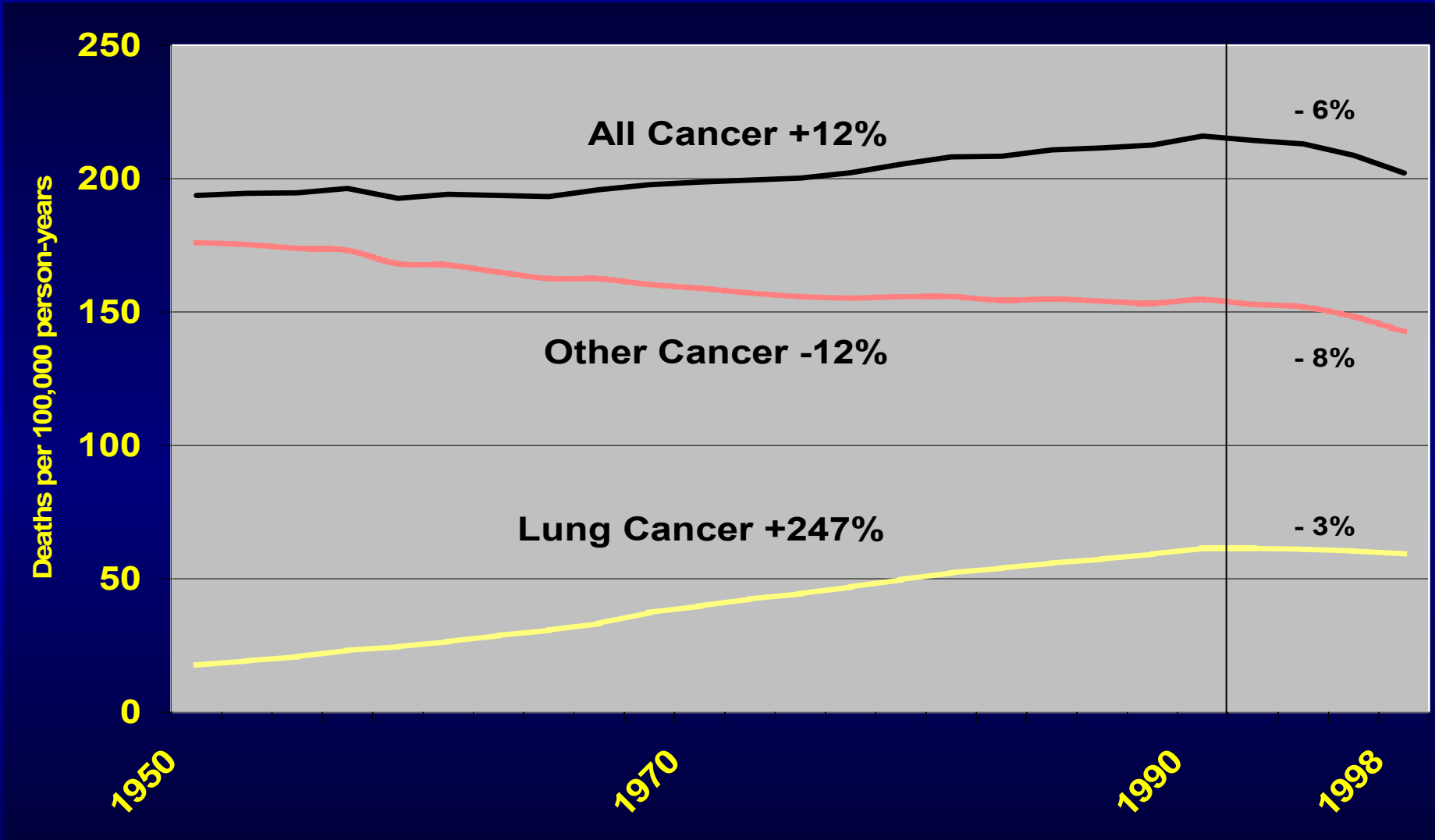
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The American Anti-Smoking Campaign Has Failed Adult Inveterate Smokers

- **440,000 Deaths Per Year**
- **American “Cancer” Epidemic
Misnamed**
- **Epidemic of One Disease- Lung
Cancer**

Cancer in the US, 1950-1998

Adapted from Rodu and Cole, Journal of Clinical Oncology, 2001



The Campaign Has Failed to Help Inveterate Smokers

- Up to 24 million in the US
- Will not **quit** – half will **die** from smoking
- They do not respond to:
 - Behavioral Therapy
 - Temporary 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.

Our Strategy: Harm Reduction Permanent Nicotine Maintenance

Smokeless Tobacco

- **Nicotine levels comparable to smoking**
- **Vastly safer than smoking (98%)**
- **Modern products socially acceptable**
- **Evidence that smokeless works**

Smokeless Tobacco Provides Nicotine Comparable to Smoking

(Adapted from N Benowitz. NEJM 319: 1318-1330, 1988)



Comparing Nicotine to Caffeine, An Addictive Drug Used Safely

Source:	Both are derived from plants
Addiction:	Both are Addictive
Central Nervous:	Both are stimulants that enhance concentration, performance, provide a sense of well being, and elevate mood
Circulatory:	Both raise the heart rate and blood pressure during use
Diseases:	Neither Causes Cancer Neither Causes Emphysema Neither Causes Heart Diseases

Smokeless Tobacco is Vastly Safer Than Smoking

- **No risk for emphysema, lung cancer, and heart disease**
- **Mouth cancer risk less than half that of smoking - Very low in absolute terms***

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

Smokeless Tobacco is Vastly Safer Than Smoking

How low is mouth cancer risk from long-term smokeless use?

Death Rate from:

Smokeless Use 12 per 100,000 users

Automobile Use 15 per 100,000 users

Modern products are getting safer

Smokeless Tobacco Use is 98%* Safer than Smoking

Deaths Among 46 Million:	<u>Smokers</u>	<u>Smokeless Users</u>
Heart Diseases	180,000	---
Cancer	151,000	6,000
Emphysema	85,000	---
Other	<u>3,000</u>	<u>---</u>
Total	419,000	6,000*
Average Loss of Life	8 years	15 days

Adapted from

Rodu, American Journal of Medical Sciences 1994

Rodu and Cole, Nature 1994.

Smokeless Tobacco Products Are Socially Acceptable

- **Modern products are invisible in use**
 - They are not "chewed"
 - They require no "spitting"
- **The "Spitting image"**
 - Single biggest challenge to the adoption of smokeless products by inveterate smokers, especially women

Smokeless Tobacco Has Worked For Swedish Men For 50 Years

- Europe's **highest** per capita consumption of smokeless tobacco
- Among the **lowest** oral cancer mortality in Europe
- **Lowest** cigarette consumption in Europe
- **Lowest** lung cancer mortality in Europe
- **Lowest** percentage of smoking-related deaths among developed countries

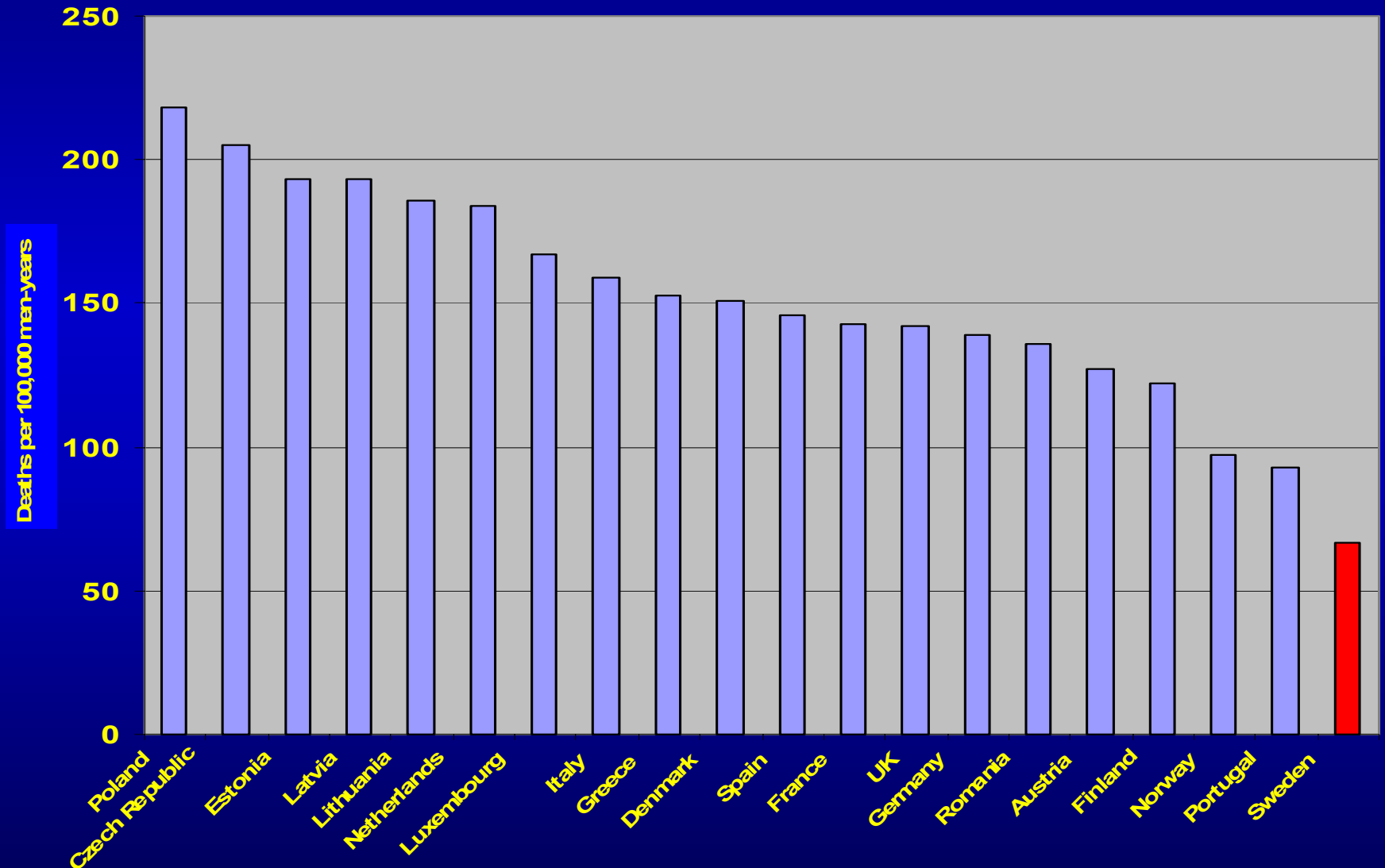
Percentage of Smoking-Related Deaths Among Men Age 35+ Years

USA	30	Greece	25
Finland	27	Austria	22
Spain	26	Romania	20
Germany	26	Portugal	18
Switzerland	26	Norway	16
France	25	Sweden	12

Lancet 339: 1268-1278, 1992

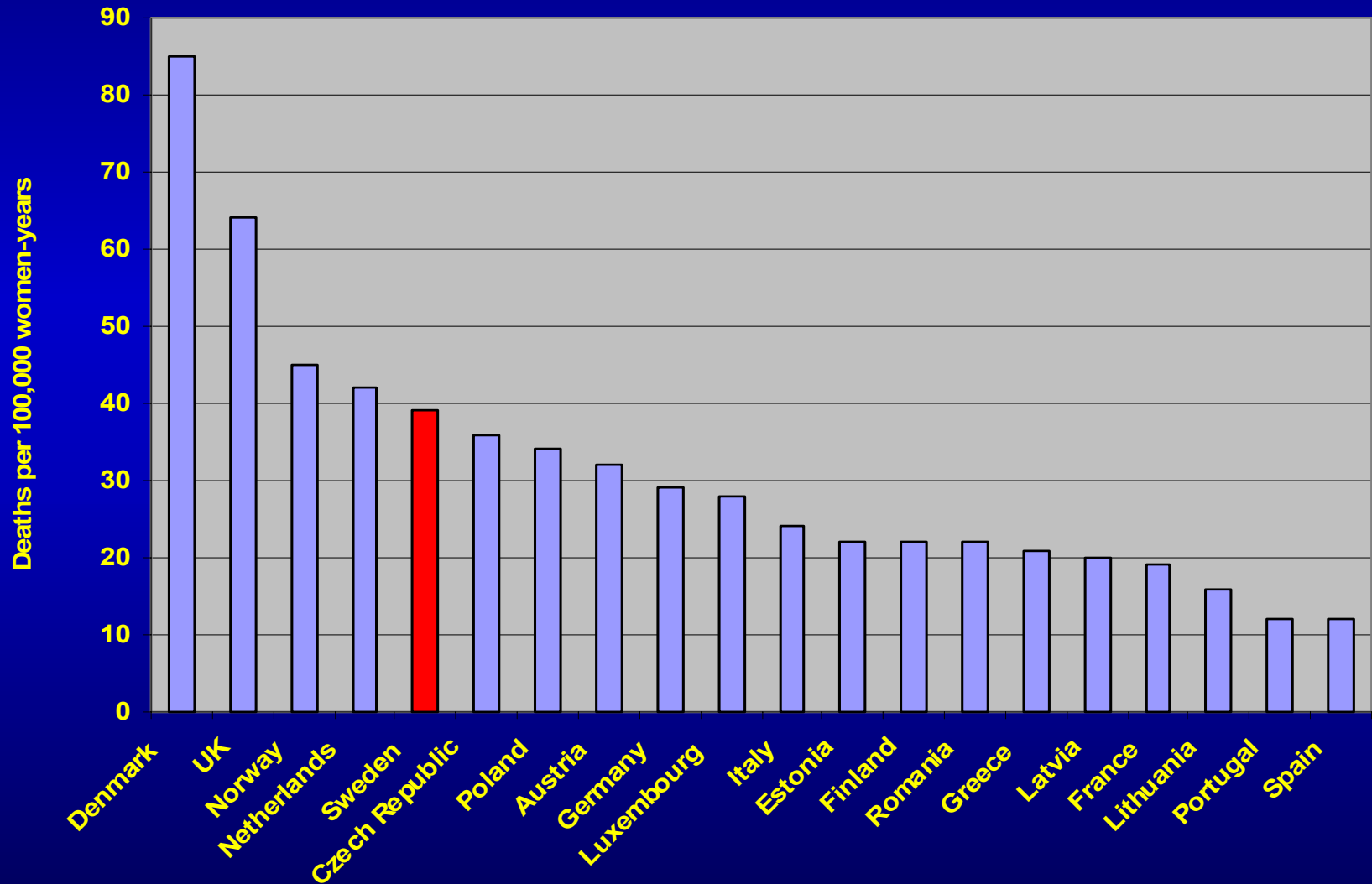
Lung Cancer Deaths, Men Age 40+, Europe 1996

WHO-IARC Worldwide Cancer Mortality Database



Lung Cancer Deaths, Women Age 40+, Europe 1996

WHO-IARC Worldwide Cancer Mortality Database

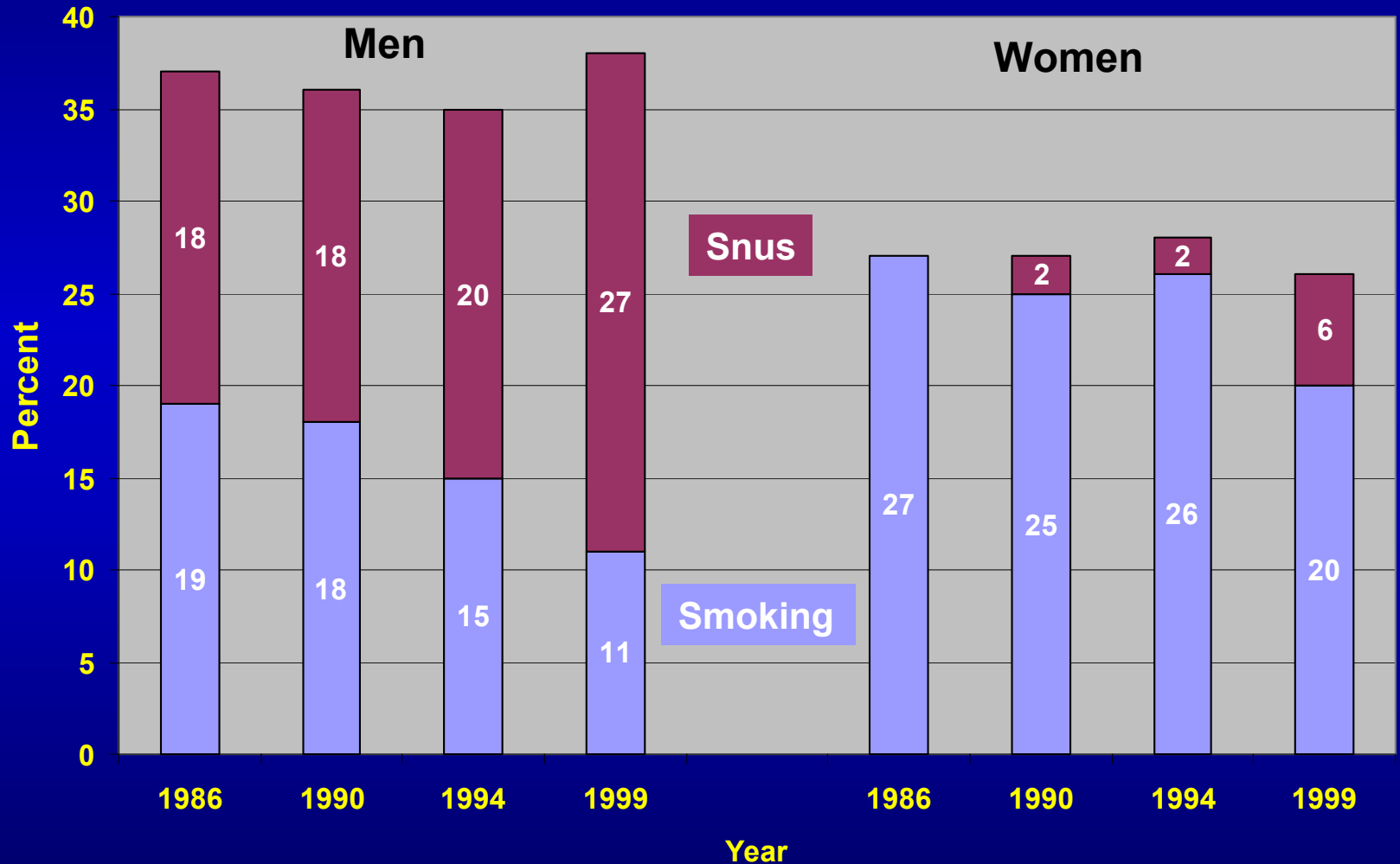


Tobacco Use In Northern Sweden, 1986-1999

- **World Health Organization Database**
- **Northern Sweden**
- **1986, 1990, 1994 and 1999**
- **Men and Women age 25 to 64**
- **Population based**

Tobacco Use in Northern Sweden

Adapted from Rodu et al, Journal of Internal Medicine 2002 and 2003



Tobacco Use in Northern Sweden

- **Men**

Overall Tobacco Use Stable:	~40%
Smoking down:	19% to 11%
Snus Use up:	18% to 27%

- **Women**

Smoking dominant:	~26%
Snus Use:	~1%
In 1999 Smoking at 20% with Snus use at 6%	

- **In All Years Women smoked more than men**

Growing Discussion about Tobacco Harm Reduction

- **Institute of Medicine Report, 2001**
- **Action on Smoking and Health (UK)
Seminar, May 02**
- **American Council on Science and Health
Debate, June 02**
- **British Royal College of Physicians
Report, December 2002**

Growing Discussion about Tobacco Harm Reduction

- **Royal College of Physicians Report**
 - **Consumption of smokeless 10 to 1,000 times less hazardous than smoking**
 - **Manufacturers may market products as harm reducing; they may find support in the public health community**

Growing Discussion about Tobacco Harm Reduction

- **Leading European Tobacco Researchers
EU Policy Paper, February 03**
- **UK Parliament Press Conference, February 03**
- **House Subcommittee Hearing, June 03**
- **American Enterprise Institute, June 03**

Tobacco Harm Reduction Conclusions

- **The anti-smoking campaign (quit-or-die) has failed to help adult inveterate smokers**
- **Smokers have a right to information about safer tobacco alternatives***
- **Withholding information has no public health justification and may be unethical***

***Kozlowski, Nicotine & Tobacco Research, 2002; Public Health Reports, 2003**