# Tax and Price Policies for Tobacco Control

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### Overview

IARC HANDBOOKS OF CANCER PREVENTION

**Tobacco Control** 



International Agency for Research on Cancer
World Health Organization

Volume 14

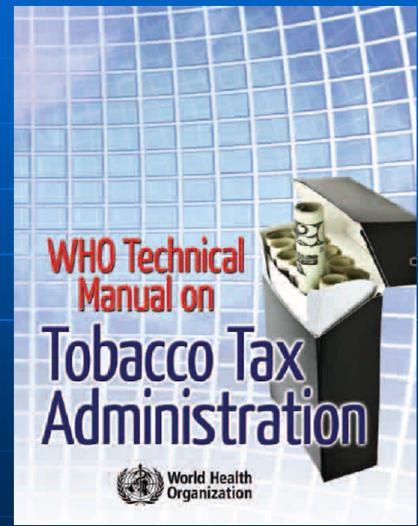
Effectiveness of Tax and Price Policies for Tobacco Control

IARC 2011



This Handbook was produced within the EC-funded grant (HEALTH-F2-2009-223323): Pricing Policies and Control of Tobacco in Europe (PPACTE)





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#### Outline of Handbook volume 14

- Chapter 1: Introduction
- Chapter 2: Overview of Tobacco Taxation
- Chapter 3: Industry Pricing Strategies and Other Pricing Policies
- Chapter 4: Tax, Price and Aggregate Demand for Tobacco
- Chapter 5: Tax, Price and Adult Tobacco Use
- Chapter 6: Tax Price and Tobacco Use Among Young People
- Chapter 7: Tax, Price and Tobacco Use among the Poor
- Chapter 8: Tax Avoidance and Tax Evasion
- Chapter 9: Economic and Health Impact of Tobacco Taxation
- Chapter 10: Summary (Working Group of Experts)
- Chapter 11: Evaluation (Working Group of Experts)
- Chapter 12: Recommendations for Research (Working Group of Experts)

### Handbook 14 Working Group

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#### **Evaluation Criteria**

- Sufficient evidence: An association has been observed in studies in which chance, bias and confounding can be ruled out with reasonable confidence. The association is highly likely to be causal.
- Strong evidence: There is consistent evidence of an association but evidence of causality is limited by the fact that chance, bias or confounding have not been ruled out with reasonable confidence. However, explanations other than causality are unlikely.
- Limited evidence: There is some evidence of association between the intervention under consideration and a given effect, but alternative explanations are possible.

#### **Evaluation Criteria**

- Inadequate/No Evidence: There are no available methodologically sound studies showing an association; the available studies are of insufficient quality, consistency or statistical power to permit a conclusion regarding the presence or absence of a causal association between the intervention and a given effect. Alternatively, this category is used when no studies are available
- Evidence of No Effect: Methodologically sound studies consistently demonstrate the lack of an association between the intervention under consideration and a given effect.

### **Evaluation Statements**

Increases in tobacco excise taxes that increase prices result in a decline in overall tobacco use.





Increases in tobacco excise taxes that increase prices reduce the prevalence of adult tobacco use.

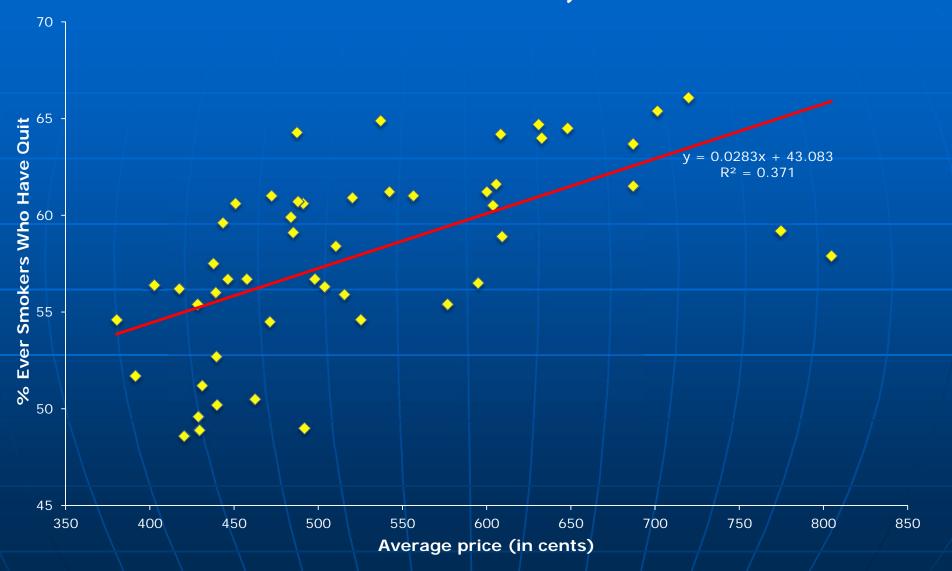
# Cigarette Prices and Adult Smoking Prevalence, United States, 1970-2010



Source: Tax Burden on Tobacco, 2011, National Health Interview Survey, and author's calculations

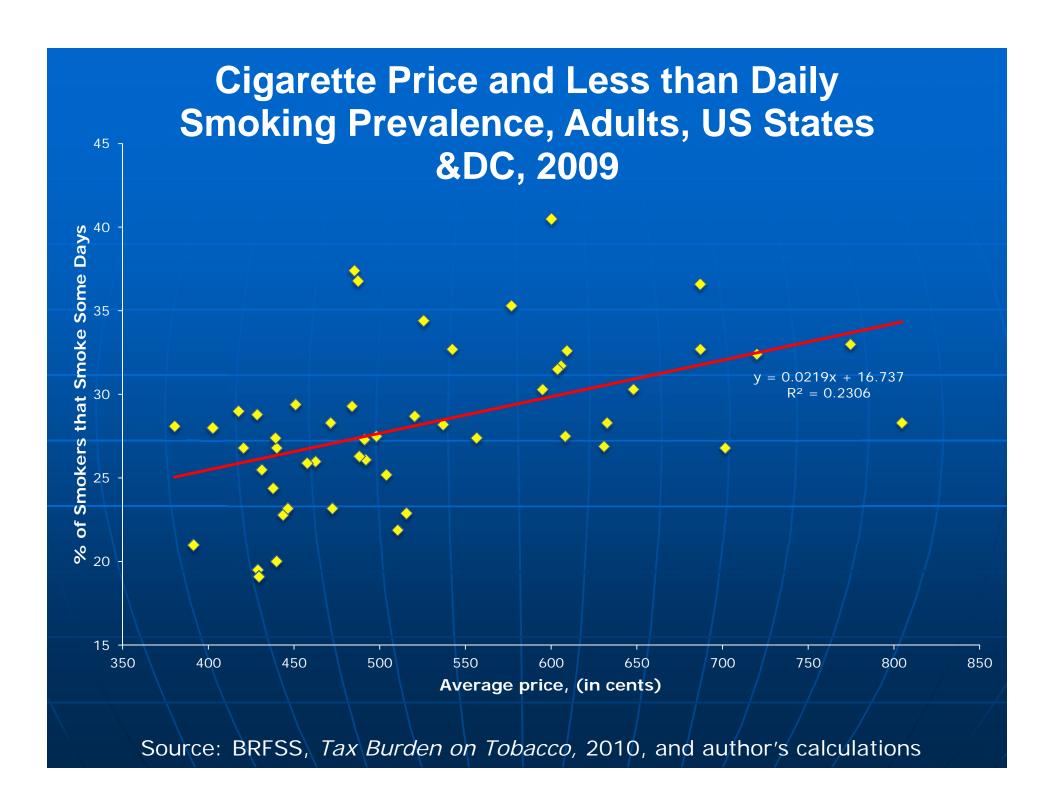
Increases in tobacco excise taxes that increase prices induce current tobacco users to quit.

# Cigarette Prices and Cessation US States & DC, 2009



Source: BRFSS, Tax Burden on Tobacco, 2010, and author's calculations

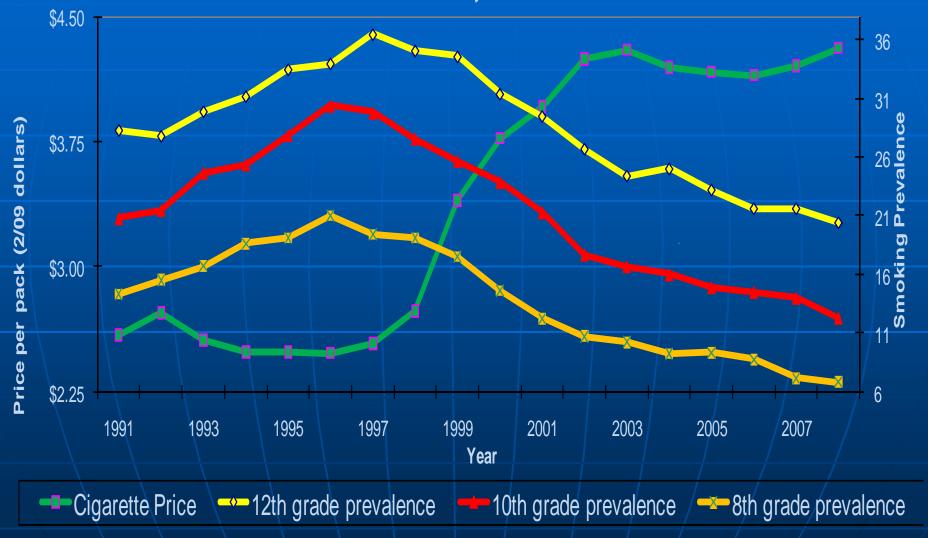
Increases in tobacco excise taxes that increase prices lower the consumption of tobacco products among continuing users.



Increases in tobacco excise taxes that increase prices reduce the initiation and uptake of tobacco use among young people, with a greater impact on the transition to regular use.

Tobacco use among young people responds more to changes in tobacco product taxes and prices than does tobacco use among adults.

#### Cigarette Price and Youth Smoking Prevalence, United States, 1991-2008



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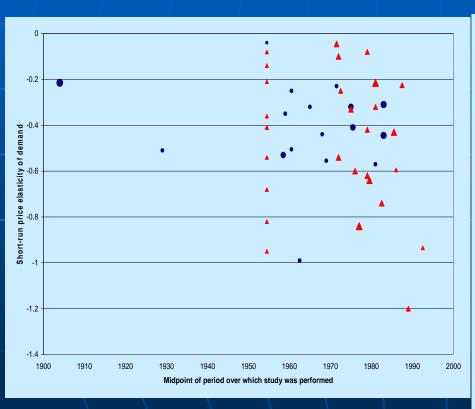
Source: MTF, Tax Burden on Tobacco, 2009, and author's calculations

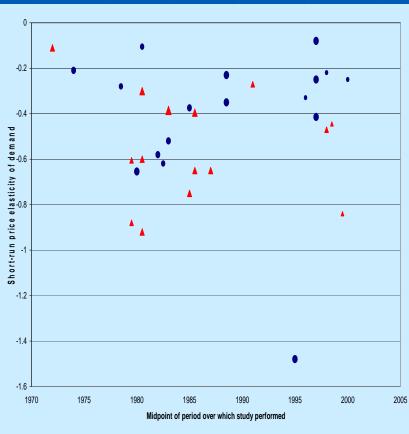
#### Limited Evidence that:

The demand for tobacco products in low-income countries is more responsive to price than is the demand for tobacco products in high-income countries.

# Elasticity Estimates Aggregate Demand Studies

High-Income, Non-US Low/Middle-Income





Source: IARC Handbook 14, forthcoming

## Strong Evidence that:

In high-income countries, tobacco use among lower-income populations is more responsive to tax and price increases than is tobacco use among higher-income populations.

#### Limited Evidence that:

In low- and middle-income countries, tobacco use among lower-income populations is more responsive to tax and price increases than is tobacco use among higher-income populations.

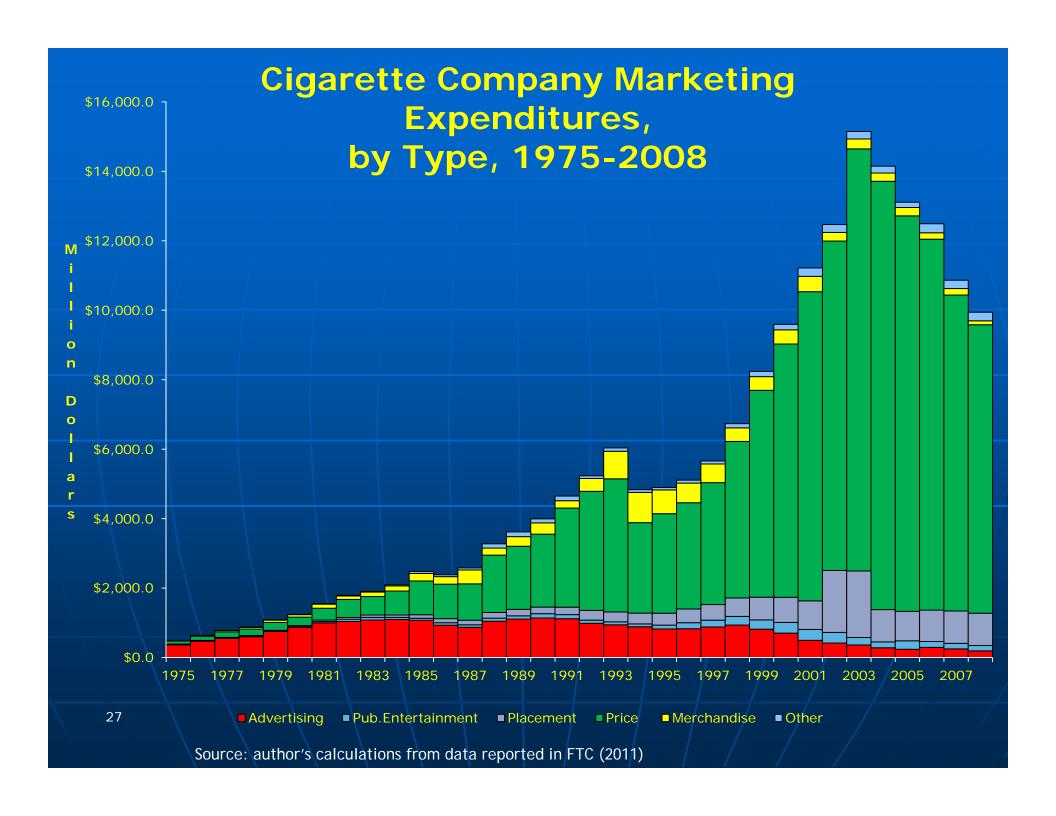
## Strong Evidence that:

Changes in the relative prices of tobacco products lead to some substitution to the products for which the relative prices have fallen.

Tobacco industry price discounting strategies, price-reducing marketing activities, and lobbying efforts mitigate the impact of tobacco excise tax increases.

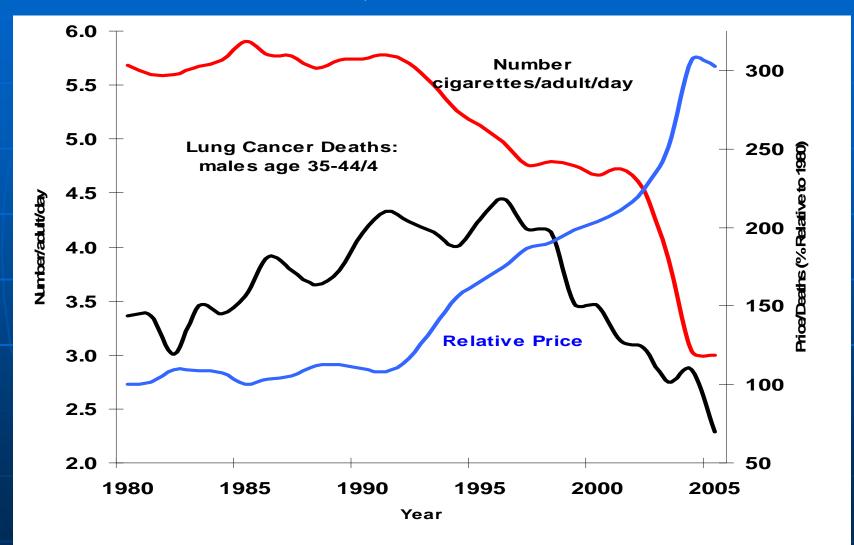
## Price-Reducing Marketing:





Tobacco tax increases that increase prices improve population health

# France: smoking, tax and male lung cancer, 1980-2000



Higher and more uniform specific tobacco excise taxes result in higher tobacco product prices and increase the effectiveness of taxation policies in reducing tobacco use.

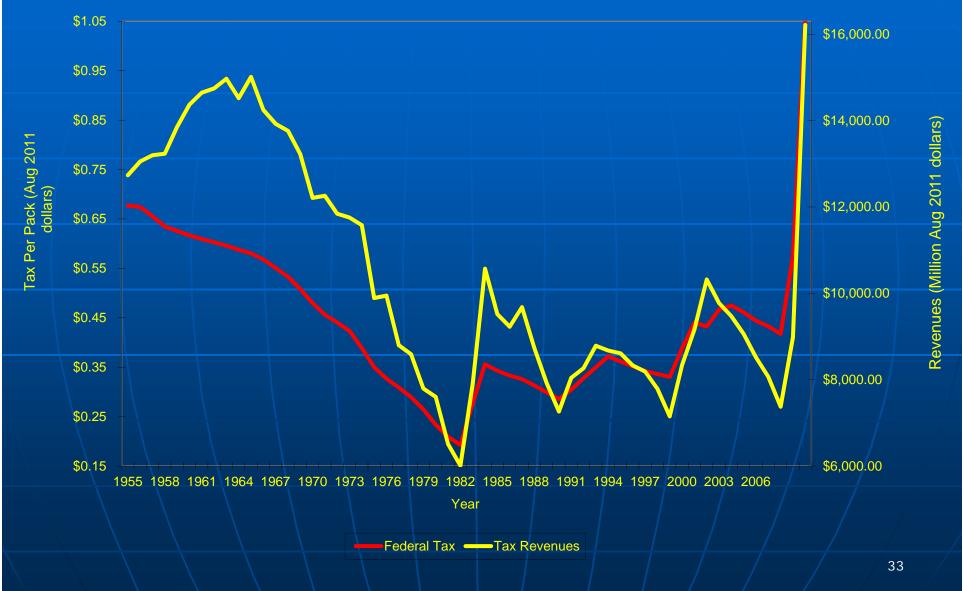
#### **Cigarette Taxation Globally**

	Excise System on Cigarettes				
Income	Only	Only	Both specific	No Excise	Total countries
Group	specific	ad valorem	and		*
/ /			ad valorem		
High	11	2	25	7	45
Upper	16	11	9	6	42
Middle					
Lower	18	19	12	3	52
Middle					
Low	10	28	2	3	43
By Region					
AFRO	14	29	1	2	46
AMRO	13	16	2	3	34
EMRO	1	7	5	7	20
EURO	10	3	36	0	49 /
SEARO	3	2	2	1	8 /
WPRO	14	3	2	6	25
All	55	60	48	19	182
Countries					31

<sup>\*</sup> Countries for which data are available Source: WHO calculations using WHO GTCR 2009 data

Tobacco tax increases increase tobacco tax revenues.

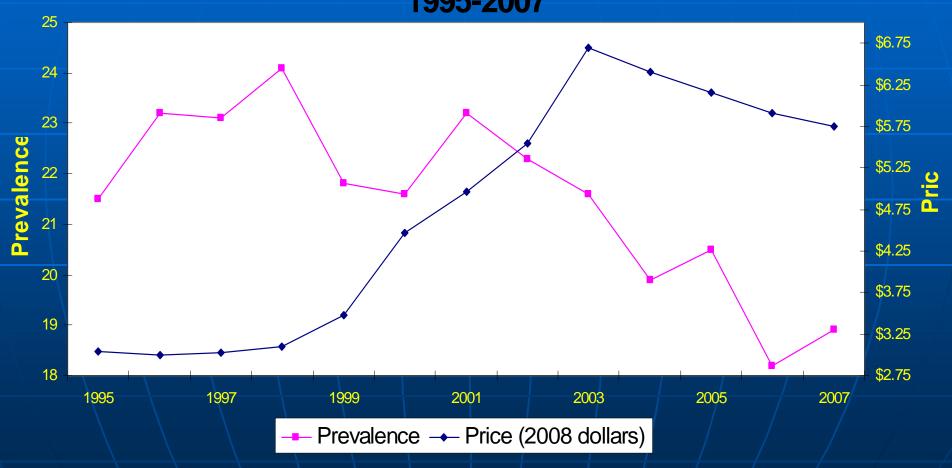
# Federal Cigarette Tax and Tax Revenues Inflation Adjusted, 1955-2010



Tax avoidance and tax evasion reduce, but do not eliminate, the public health and revenue impact of tobacco tax increases.

# Tax Avoidance & Evasion Do NOT Eliminate Health and Revenue Impact of Higher Taxes

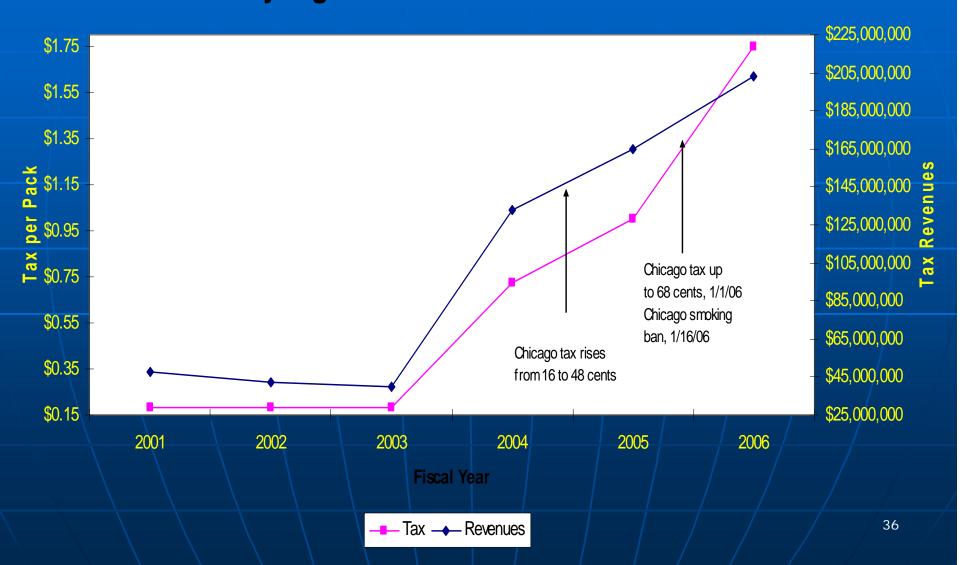
Cigarette Prices and Adult Prevalence, New York, 1995-2007



Source: Tax Burden on Tobacco, 2008 and BRFSS

#### Tax Increases and Tax Avoidance

**Cook County Cigarette Tax and Tax Revenues - FY01-FY06** 



#### Strong Evidence that:

A coordinated set of interventions that includes international collaborations, strengthened tax administration, increased enforcement, and swift, severe penalties reduces illicit trade in tobacco products

#### Strong Evidence that:

Tobacco tax increases do not increase unemployment.

#### WG14 Recommendations

In order to improve public health by reducing tobacco use, governments should adopt relatively simple tobacco excise tax structures that emphasize specific taxes and that include regular tax increases that outpace growth in general price levels and incomes.

#### WG14 Recommendations

Governments should use tobacco tax revenues to fund comprehensive tobacco control programs and other health promotion activities, given that such programs lead to further reductions in tobacco use and improvements in population health.

#### WG14 Recommendations

A multi-national surveillance and monitoring system should be implemented that regularly collects data on tobacco use among adults and young people, tobacco product taxes and prices, price-reducing marketing and lobbying efforts of tobacco companies, tax avoidance and evasion, and tax administration and enforcement activities.

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#### Effectiveness of tax and price policies in tobacco control

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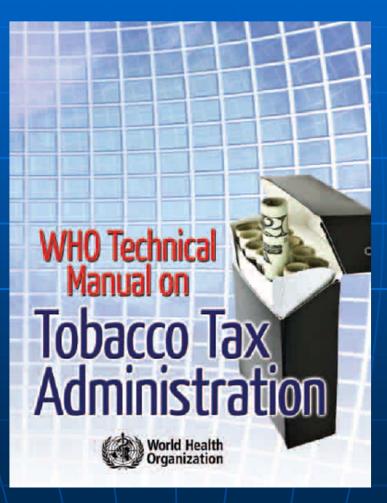
P<P Published online November 29, 2010 in advance of the print journal.

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Notes

service

**Email alerting** 



- Use tobacco excise tax increases to achieve the public health goal of reducing the death and disease caused by tobacco use
  - As called for in Article 6 of the WHO FCTC
  - Additional benefit of generating significant increases in tobacco tax revenues in short to medium term

#### Simpler is better

- Complex tax structures more difficult to administer
- Greater opportunities for tax evasion and tax avoidance under complex tax structures
- Where existing structure is more complex, simplify over time with goal of achieving single uniform tax

- Rely more on specific tobacco excises as the share of total excises in prices increases
  - Greater public health impact of specific excises given reduced opportunities for switching down in response to tax/price increases
  - Sends clear message that all brands are equally harmful
  - Where existing tax is ad valorem, adopt a specific tax and increase reliance on specific tax over time

- Automatically adjust specific tobacco taxes for inflation
  - Unless adjusted, real value falls over time, as does the real value of revenues generated by tax
  - Ensures the public health impact of tax is maintained
  - To date, not widely done (Australia, New Zealand)

- Adopt comparable taxes and tax increases on all tobacco products
  - Maximizes public health impact of tobacco tax increases by minimizing opportunities for substitution
  - Harm reduction?

- Set tobacco excise tax levels so that they account for at least 70 percent of the retail prices for tobacco products
  - Update of World Bank 'yardstick' of any taxes accounting for 2/3 to 4/5 of retail prices
  - Well above where most countries are currently
  - Further increases in countries that do reach this target

- Increase tobacco taxes by enough to reduce the affordability of tobacco products
  - In many low/middle income countries, positive relationship between income and tobacco use
  - Implies consumption increases even as taxes increase if increases in income larger
    - Depends on relative price, income elasticity
  - Increasing affordability will result in increasing tobacco use and its consequences

- Earmark a portion of tobacco tax revenues for related/other tobacco control and/or health promotion efforts
  - Maximizes the health impact of tobacco tax increases
  - Increases public support for tax increases

#### Tobacco Taxes

Economic Impact - Myths & Facts

- Do not allow concerns about employment impact to prevent tobacco tax increases
  - Tobacco employment often declining even where tobacco product consumption rising
  - Reductions in tobacco-dependent employment are offset by increases in other sectors
  - Where concerns are significant, use tax revenues to support transition from tobacco farming/manufacturing to other activities

- Do not allow concerns about the inflationary impact of higher tobacco taxes to deter tax increases
  - If concerns about inflationary impact on pension and other payments tied to consumer price index, use a price index that excludes tobacco products

- Eliminate tax or duty free sales of tobacco products
  - As called for in Article 6 of FCTC
  - Reduces opportunities for individual tax avoidance
  - Maximizes public health and revenue impact of taxes/tax increases

- Adopt new technologies to strengthen tobacco tax administration and minimize tax avoidance and evasion
  - Sophisticated tax stamps
  - Tracking and tracing technologies
  - Production monitoring technologies

- Strengthen tax administrators' capacity by licensing all involved in tobacco product manufacturing and distribution
  - Facilitates identification of those engaged in illegal trade
  - Enhances ability to penalize those engaged in illegal trade
    - License suspension, revocation

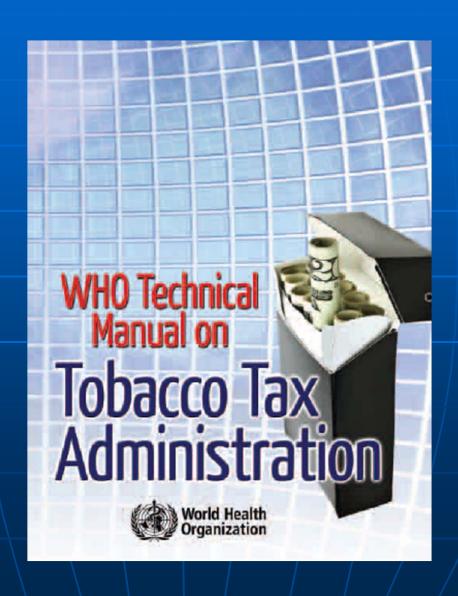
- Ensure certain, swift and severe penalties for those caught engaging in illicit trade in tobacco products
  - Increased the expected costs of engaging in illicit trade
  - Administrative sanctions coupled with licensing

- Strengthen tax administrators' capacity to monitor tobacco product markets and evaluate the impact of tobacco tax increases
  - "Trust but verify"
  - Monitoring of tobacco production and distribution
  - Physical control over tobacco products
  - Periodic audits
  - Capacity to estimate impact of tax changes on consumption, revenues

- Do not view low taxes and prices for some tobacco products as a "propoor" policy
  - High tobacco taxes on all tobacco products will result in greater reductions in tobacco use among the poor
  - Results in a progressive distribution of the health and economic benefits that result – a truly "pro-poor" policy

- Do not allow concerns about the regressivity of higher tobacco taxes to prevent tobacco tax increases
  - Regressive impact often overstated
  - Concerns about impact on the poor can be offset by using new revenues to support efforts to help poor tobacco users quit, health promotion efforts targeting poor and/or other poverty alleviation programs

#### www.who.int/tobacco/publications/tax\_administration



# For more information: fjc@uic.edu