Michael Eriksen
Judith Mackay
Hana Ross

THE TOBACCO ATLAS

FOURTH EDITION

Completely Revised and Updated

American Cancer Society®
WORLD LUNG FOUNDATION
www.TobaccoAtlas.org

Nearly 20% of the world's population smokes cigarettes, including about 800 million men and 200 million women.

An estimated 600,000 individuals die annually from secondhand smoke, and 75% of these deaths are among women and children.

More than half the countries of the world have a female smoking prevalence rate of less than 10%.

Smoking rates between boys and girls differ by less than five percentage points in almost half of the world's countries.

Smokers consumed nearly 5.9 trillion cigarettes in 2009.

Tobacco is grown in 124 countries, occupying 3.8 million hectares of agricultural land.

China grows 43% of the world's tobacco, which is more tobacco than the other top nine tobacco-producing countries combined.

Annual revenues from the global tobacco industry are approaching half a trillion dollars.

Cigarettes account for 92% of the value of all tobacco products sold globally.

The amount of smokeless tobacco sold globally increased by 59% between 2000 and 2010.

If illicit trade were eliminated, governments worldwide would gain at least $31.3 billion a year in tax revenue.

Governments collect nearly $133 billion in tobacco tax revenues each year, but spend less than $1 billion on tobacco control.

WHO recommends that at least 70% of the retail price of tobacco products come from excise taxes.

At least 86% of WHO Member States imposed a tobacco excise tax, and at least 14% use a portion of tobacco tax revenue for health purposes.

Some countries are now envisioning an end game for tobacco, with prevalence targets of under 5%.

The WHO FCTC covers 87.4% of the world population.

Approximately 3.8 billion people are covered by at least one MPOWER measure at the highest level of achievement.

The number of people protected by comprehensive smoke-free laws has doubled from 2008 to 2010.

A comprehensive ban on all tobacco advertising, promotion, and sponsorship could decrease tobacco consumption by about 7%.

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The fourth edition of *The Tobacco Atlas* marks its tenth anniversary.
The Tobacco Atlas can be found online at www.TobaccoAtlas.org.
The online version of the *Atlas* provides additional resources and information unique to the online interactive version.

CONTENTS

CONTENTS

CONTENTS

"The battle is far from being over. Unless the prevalence of smoking is reduced substantially, the number of smokers will increase in the world in the next several decades, mostly due to population expansion in low- and middle-income countries. Measures to tackle the epidemic remain seriously under-funded."

Margaret Chan, Director-General, WHO, 2012

FOREWORDS

The first and pioneering edition of *The Tobacco Atlas* was published by the World Health Organization in 2002. The words of previous WHO Director-General Dr. Gro Harlem Brundtland still resonate today: "Let us all speak out: Tobacco is a killer. It should not be advertised, subsidized or glamorized." Her foreword in the first edition was a clarion call to develop the WHO Framework Convention on Tobacco Control (WHO FCTC), which at the time was several years in the future, and to build a "vibrant alliance with other UN agencies, NGOs, the private sector, academic/research institutions, and donors."

Many of these ambitions have been achieved, for example:

- 2005: The WHO FCTC entered into force.
- Today the WHO FCTC has 174 Parties.
- 2011: The United Nations High-Level Meeting on noncommunicable diseases (NCDs) prevention and control recognized tobacco control as a key factor in reducing the rise of NCDs. WHO provides the secretariat for taking the meeting's Political Declaration forward, liaising with other UN agencies to develop voluntary targets for 2025.

To help countries fulfill some of their WHO FCTC obligations, WHO has highlighted the good and best buys for reducing tobacco use—the *MPOWER* package of six cost-effective measures that reduce the demand for tobacco. As a result of decisive action taken by many countries around the world, 1.1 billion people have become covered over the past two years by at least one of these measures newly applied at the highest level.

All four editions of *The Tobacco Atlas* have utilized published data from WHO sources, especially from the WHO *Report on the Global Tobacco Epidemic*, and the newly available tobacco attributable mortality data. In addition, the atlases contain data from the Global Tobacco Surveillance System (GTSS): the Global Youth Tobacco Survey (GYTS), Global School Personnel Survey (GSPS), Global Health Professions Student Survey (GHPSS), and Global Adult Tobacco Survey (GATS), a joint venture between WHO and the United States Centers for Disease Control and Prevention (CDC)—an example of a successful partnership in monitoring the tobacco epidemic.

The battle is far from being over. Unless the prevalence of smoking is reduced substantially, the number of smokers will increase in the world in the next several decades, mostly due to population expansion in low- and middle-income countries. Measures to tackle the epidemic remain seriously under-funded. As the subtle promotion of their lethal products under the appearance of "socially responsible causes or business practices" is becoming exposed, the tobacco industry has adopted newer and bolder tactics to undermine and counteract tobacco control measures by means of legal challenges to tobacco control legislation, as well as using bilateral trade agreements to challenge strong laws. Big tobacco can afford to hire the best lawyers and PR firms that money can buy. Big money tries to speak louder than any moral, ethical, or public health argument and wants to trample even the most damning scientific evidence. I urge all countries to stand firm together and not to bow to pressure. We must never allow the tobacco industry to get the upper hand.

I would like to see a united world that no longer accepts the detrimental health and economic effects of tobacco, recognizing that tobacco control and the full implementation of the WHO FCTC are good for the health and wealth of nations.

Margaret Chan
Director-General, World Health Organization

> “I encourage advocates, policymakers, health-care professionals, journalists, and commentators to carefully review the contents of *The Tobacco Atlas* and use the information to push for action.”
>
> *Michael Bloomberg, Philanthropist and Mayor of New York City, US, 2012*

Every six seconds, someone somewhere in the world dies because of tobacco use. Unless concerted global action is taken, that rate of death will accelerate. At the recent United Nations High-Level Meeting on noncommunicable diseases (NCDs) in New York City, government leaders acknowledged tobacco use to be the single most preventable cause of death in the modern world, yet no firm targets were set to help tackle this global pandemic.

We must take action now. If we don't, tobacco will claim 1 billion lives during this century. But the good news is that solutions exist to combat this deadly pandemic. The *MPOWER* package of proven measures outlines six effective steps countries can take now to reduce tobacco use. The *MPOWER* policies have been increasingly implemented by governments over the past several years. The *MPOWER* strategy involves: Monitoring tobacco use and prevention policies; Protecting its people from tobacco smoke; Offering help to those who want to quit; Warning about the dangers of tobacco; Enforcing bans on tobacco advertising, promotion, and sponsorship; and Raising taxes on tobacco.

While significant progress has been made in recent years, there is still much more work to be done. Most countries could do much more to inform their citizens adequately about the illness and death caused by tobacco, particularly through the use of mass media and graphic health warnings. Taxes on tobacco products must be increased and plain packaging introduced. These are all proven, cost-effective strategies to help reduce tobacco consumption.

In just five years of the Bloomberg Initiative to Reduce Tobacco Use, we have witnessed extraordinary global progress: 21 countries have passed 100 percent smoke-free laws, there has been a 400 percent increase in the proportion of people protected from secondhand smoke, more than 300 tobacco laws have been drafted or consultations provided, and 7,000 public health professionals have been trained in tobacco control. Bloomberg Philanthropies supports these efforts through partner organizations such as the World Health Organization, the Campaign for Tobacco-Free Kids, the World Lung Foundation, the CDC Foundation, and the Johns Hopkins Bloomberg School of Public Health.

In the global fight against tobacco, information is one of our most powerful weapons. *The Tobacco Atlas* is an invaluable resource for collating our current knowledge about tobacco and demonstrating the true nature of this global pandemic. For example, *The Tobacco Atlas* notes that more than 89 percent of the world's population remain unprotected by comprehensive smoke-free laws. We can use the *Atlas* to educate consumers and health-care professionals about the risks of tobacco use, to rebut misinformation, to share successful tobacco control strategies, and to push for legislation that optimally protects the world's citizens from the harms of tobacco use.

I encourage advocates, policymakers, health-care professionals, journalists, and commentators to carefully review the contents of *The Tobacco Atlas* and use the information to push for action. We can change the course of this pandemic. Effective tobacco control more than any other single measure could help reduce the toll of NCDs and prevent tobacco-related deaths. We can protect our citizens, our economy, our planet, and future generations, but we need to act now.

Michael Bloomberg
Philanthropist and Mayor of New York City, US

> “With the tenth anniversary of *The Tobacco Atlas*, it's a good time to reflect on the accomplishments we've made in this fight and to hone in on ways we can continue to make progress.”
>
> *John R. Seffrin and Peter Baldini, US, 2012*

Tobacco is the only legal product that when used as directed, is lethal. Its influence extends into all corners of the globe, threatening lives and livelihoods and endangering the health and prosperity of developed and developing nations alike. Left unchecked, tobacco is predicted to kill more than 8 million people globally each year by 2030—and to take a staggering 1 billion lives in this century.

The good news is we know how to stop this deadly epidemic—and we have proven successes doing so. We simply must educate, raise awareness, and implement these strategies worldwide. With the tenth anniversary of *The Tobacco Atlas*, it's a good time to reflect on the accomplishments we've made in this fight and to hone in on ways we can continue to make progress. We have seen many tobacco control milestones in the past decade, but there is still much to do, particularly in low- and middle-income countries, home to 85 percent of the world's population.

A substantial victory came in 2003 with the World Health Organization's unanimous adoption of the Framework Convention on Tobacco Control (WHO FCTC). Since then, the majority of eligible countries have taken a stand against tobacco, ratifying this first global public health treaty. Building on this work, WHO in 2008 introduced its *MPOWER* model, offering strategies to implement and manage tobacco control, and providing a proven road map for policymakers, advocates, and public health practitioners.

In September 2011, the tobacco fight took on new prominence as global leaders came together in New York for the first-ever United Nations High-Level Meeting on noncommunicable diseases (NCDs). At this historic gathering, world leaders unanimously approved an action plan for fighting NCDs that has the potential to meaningfully impact the tobacco battle. This plan calls for greater international collaboration and for programs that help combat tobacco, such as tobacco-free workplaces.

These milestones are impressive, yet so are the challenges and opportunities ahead. While smoking rates have been slowly declining in the United States and many other high-income nations during the past 25 years, they have been increasing in low- and middle-income nations, which are also the least prepared to deal with the effects of tobacco-related disease. In 2011, tobacco use killed approximately 6 million people worldwide, with 80 percent of those deaths occurring in low- and middle-income nations. Now is the time for concerted action to save lives and stop this growing plague—we simply cannot wait.

With cross-sector commitment and collaboration, emerging economies can flourish rather than falter, and millions upon millions of lives can be saved, not lost to tobacco-related deaths. This all-new fourth edition of *The Tobacco Atlas* will, we believe, be an essential tool as people worldwide seek to understand—and to help turn back—the rising tide of suffering and death caused by tobacco. In another 10 years, it is our hope we will be telling the story of our greatest victory—a world well on its way to conquering tobacco for good.

John R. Seffrin
CEO, American Cancer Society, US

Peter Baldini
Executive Director, World Lung Foundation, US

SINCE THE RELEASE OF THE FIRST *TOBACCO ATLAS* IN 2002, MUCH PROGRESS HAS BEEN MADE IN GLOBAL EFFORTS TO ADVANCE TOBACCO CONTROL, BUT FAR TOO MUCH REMAINS TO BE DONE. IN FACT, THE 10 YEARS SINCE 2002 HAVE LIKELY BEEN THE MOST PRODUCTIVE PERIOD IN TOBACCO CONTROL HISTORY.

During the past 10 years, there have been significant multilateral, philanthropic, governmental, and civil society successes. For example, in 2002, the World Health Organization Framework Convention on Tobacco Control (WHO FCTC) was still being discussed by the Intergovernmental Negotiating Body and not yet approved by the World Health Assembly. With the support of civil society and especially low- and middle-income countries, a strong WHO FCTC was approved. Today, the WHO FCTC is one of the most widely adopted treaties in United Nations history, with 174 Parties to the Convention covering over 85 percent of the world's population.

In September 2011, the UN held an unprecedented high-level meeting on the prevention and control of noncommunicable diseases, with a clear recognition that combating tobacco use is central to success. Countries agreed that the battle against noncommunicable diseases can never be won unless we succeed in reducing tobacco use—the only risk factor that is common to all four of the major chronic diseases—cancer, heart disease, chronic lung disease, and diabetes. The resultant political declaration from the high-level meeting calls on government leaders to recognize that the economic harm caused by tobacco use is unsustainable, and to implement effective tobacco control interventions consistent with the WHO FCTC.

In 2002, while a few high-income countries were investing domestically in tobacco control, there was very little investment in tobacco control particularly in low-income countries. This situation was dramatically reversed by the investment of $500 million by philanthropists Michael Bloomberg and Bill Gates. Their unprecedented investment was inspired by their belief that implementing effective tobacco control programs could save lives at a level equivalent to or surpassing a similar investment in HIV or malaria programs. Consistent with this investment, effective tobacco control interventions were packaged and promoted globally in the low- and middle-income countries under the rubric of WHO *MPOWER*. Now, there were resources and evidence-based programs in which to invest.

For investments to be sustained and programs refined, there must be systems in place to document the problem and to measure outcomes. Since the time of the first *Tobacco Atlas*, and as part of the Global Tobacco Surveillance System (GTSS), the Global Adult Tobacco Survey (GATS) was established and implemented in the countries with the greatest tobacco burden, and the Global Youth Tobacco Survey (GYTS) was expanded to assess the tobacco-use behaviors of over 2 million children in over 150 countries. The GYTS has now been conducted multiple times in the same countries, so we are now able to monitor important trends in youth tobacco use — something that had previously been lacking.

In addition to these global success stories, there are scores of examples throughout the world in which individual countries have stepped up to implement the provisions of the WHO FCTC, and have, in many instances, surpassed their obligations. Marketing bans, clean indoor-air laws, graphic warning labels, tax increases, and litigation holding the tobacco industry accountable for the harm it has caused are becoming the norm rather than the exception. Perhaps the most notable recent effort has been the Australian government requiring the plain packaging of cigarettes. While this law is being challenged by the tobacco industry, Australia's bold step has invigorated global tobacco control efforts and will likely result in similar plain-packaging efforts throughout the world.

While much has been accomplished, much remains to be done. Tobacco use continues to kill millions of people a year, and the tobacco industry continues to operate in a relatively unfettered manner. Moreover, the success that has been achieved in tobacco control is somewhat uneven among countries, and sustained progress is never guaranteed. The tobacco industry is shrewd and effective in its ability to influence public policy —including legal, economic, and trade tactics—in a way that harms the public health.

It is the authors' hope that the fourth edition of *The Tobacco Atlas* will serve as a tool to remind decision-makers and civil society alike that, while progress has been great, the industry is unrelenting in its efforts to sell more products, irrespective of the harm it inflicts on its customers. We must be equally unrelenting in our efforts to advance tobacco control and, to the extent possible, confine tobacco use to a mistake associated with the 20th century.

Michael Eriksen

Michael Eriksen is a professor in and the founding director of the Institute of Public Health at Georgia State University. He is also director of Georgia State University's Partnership for Urban Health Research and Center of Excellence in Health Disparities Research. Prior to his current positions, Eriksen served as a senior advisor to the World Health Organization in Geneva and was the longest-serving director of the Centers for Disease Control and Prevention's Office on Smoking and Health (1992–2000). Previously, Eriksen was director of behavioral research at the M.D. Anderson Cancer Center. He has recently served as an advisor to the Bill and Melinda Gates Foundation, the Robert Wood Johnson Foundation, the American Legacy Foundation, and the CDC Foundation.

Eriksen has published extensively on tobacco prevention and control and has served as an expert witness of behalf of the US Department of Justice and the Federal Trade Commission in litigation against the tobacco industry. He is editor-in-chief of *Health Education Research* and has been designated as a Distinguished Cancer Scholar by the Georgia Cancer Coalition. He is a recipient of the WHO Commemorative Medal on Tobacco or Health and a Presidential Citation for Meritorious Service, awarded by President Bill Clinton. Eriksen is a past president and Distinguished Fellow of the Society for Public Health Education, and has been a member of the American Public Health Association for over 35 years.

Judith Longstaff Mackay

Judith Longstaff Mackay is a medical doctor based in Hong Kong. She is senior advisor to the World Lung Foundation, senior policy advisor to the World Health Organization, and director of the Asian Consultancy on Tobacco Control. She holds professorships at the Chinese Academy of Preventive Medicine and the Department of Community Medicine at the University of Hong Kong. After an early career as a hospital physician, she moved to public health. She is a Fellow of the Royal Colleges of Physicians of Edinburgh and of London. She has authored or coauthored 10 health atlases, published 200 papers, and addressed more than 450 conferences on tobacco control.

Mackay has received many international awards, including the WHO Commemorative Medal, Royal Awards from the United Kingdom's Queen Elizabeth II and Thailand's King Bhumibol Adulyadej, the Fries Prize for Improving Health, the Luther Terry Award for Outstanding Individual Leadership, the US Surgeon General's Medallion, the Founding International Achievement Award from the Asia Pacific Association for the Control of Tobacco, and the Lifetime Achievement Award from the International Network of Women Against Tobacco. She was selected as one of *Time*'s 60 Asian Heroes (2006) and one of *Time*'s 100 World's Most Influential People (2007), and is the recipient of the British Medical Journal Group's first Lifetime Achievement Award (2009). She has been identified by the tobacco industry as one of the three most dangerous people in the world.

Hana Ross

Hana Ross has more than 12 years' experience in conducting research on the economics of tobacco control and in management of research projects in low- and middle-income countries, including projects funded by the World Bank, the World Health Organization, the Rockefeller Foundation, the Open Society Institute, the Robert Wood Johnson Foundation, the European Commission, the Bloomberg Global Initiative, and the Bill and Melinda Gates Foundation. Ross joined the American Cancer Society's Intramural Research Department in 2006 and currently serves as a managing director of the International Tobacco Control Research Program. She has published more than 50 articles and independent reports on issues related to tobacco taxation, cigarette prices, costs of smoking, illicit trade, youth access laws, and other economic aspects of tobacco control. She also coauthored the third edition of *The Tobacco Atlas*. Her current research projects focus on the economic impact of tobacco control interventions in South-East Asia, the former Soviet republics, Eastern and Central Europe, and Africa. She is also interested in the economic impact of smokeless tobacco use, behavioral economics, and the overall economic impact of noncommunicable diseases. Ross currently supports several capacity-building research projects, primarily focusing on South-East Asia and Africa. She earned her BA and MA at the Prague School of Economics, and in 2000 she received her PhD in economics from the University of Illinois at Chicago.

Many people have helped in the preparation of this *Atlas*.

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15 AFFORDABILITY OF CIGARETTES

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16 GROWING TOBACCO

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25 QUITTING SMOKING

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26 MASS MEDIA CAMPAIGNS

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27 PRODUCT LABELING

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28 MARKETING BANS

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29 TOBACCO TAXES

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30 LEGAL CHALLENGES AND LITIGATION

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31 THE FUTURE

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RESEARCH SAYS:

"...when you strip it down to what matters, there is really only one thing anyone needs to know about tobacco: It kills people."

Arlene King, Chief Medical Officer of Health, Canada, 2010

SINCE THE FIRST EDITION
OF *THE TOBACCO ATLAS* A DECADE AGO,

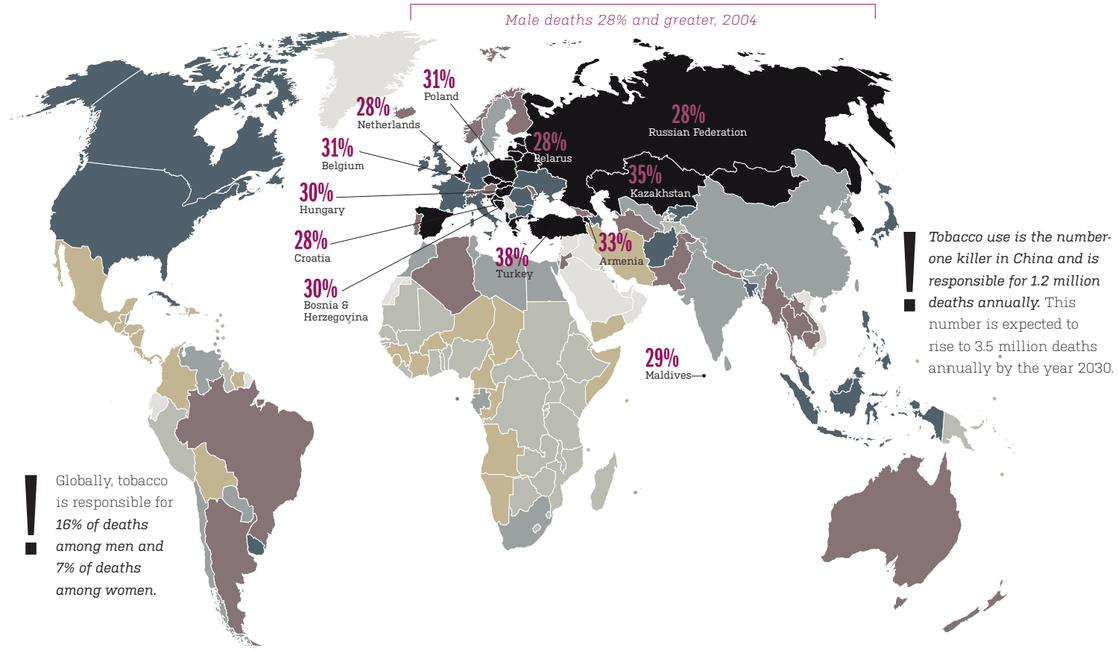
50 Million

ADDITIONAL PEOPLE HAVE BEEN KILLED AS A RESULT OF USING TOBACCO.

1 FACE = 500,000 LIVES

From December 2002 to November 2011

Male Deaths



Globally, tobacco is responsible for *16% of deaths among men and 7% of deaths among women.*

Tobacco use is the number-one killer in China and is responsible for 1.2 million deaths annually. This number is expected to rise to 3.5 million deaths annually by the year 2030.

ADVOCATES SAY:

"Dying from smoking is rarely quick… and never painless."

Anti-smoking campaign, New York City, US, 2011

In 2011, tobacco use killed almost 6 million people, with nearly 80% of these deaths occurring in low- and middle-income countries. Tobacco use in any form is dangerous and is the single most preventable cause of death. Up to half of all lifetime smokers will ultimately die of a disease caused by smoking, and men and women with comparable smoking patterns exhibit similar patterns of death.

Tobacco use is a major risk factor for death from heart attacks and strokes. Worldwide, smoking causes almost 80% of male and nearly 50% of female lung cancer deaths. Smoking increases the risk of tuberculosis (TB) infection, and 40 million smokers with TB are expected to die between 2010 and 2050. By the year 2030, 8 million people will die annually from tobacco use.

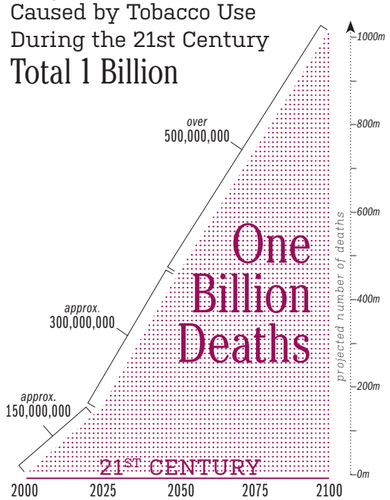
SINCE THE FIRST PUBLICATION OF *THE TOBACCO ATLAS* A DECADE AGO, THE GLOBAL NUMBER OF DEATHS CAUSED BY TOBACCO HAS NEARLY TRIPLED, FROM 2.1 MILLION TO ALMOST 6 MILLION ANNUALLY.

Deaths from smoking are directly related to smoking prevalence and exposure to second-hand smoke. Smoking prevalence is higher among men than women. Smoking rates have the potential to increase among women, particularly young women, and this is a great public health concern. Additionally, women are often the victims of secondhand smoke exposure, illness, and death, particularly in countries with a high male and low female smoking prevalence. Worldwide, approximately

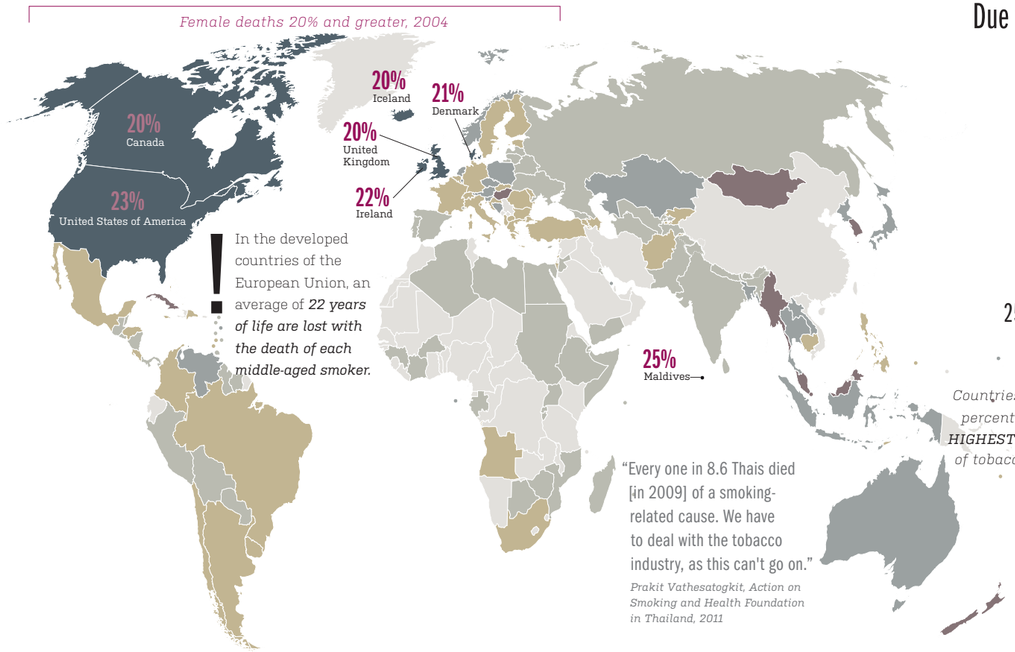
Projected Deaths

Caused by Tobacco Use During the 21st Century

Total 1 Billion



Female Deaths



In the developed countries of the European Union, an average of *22 years of life are lost with the death of each middle-aged smoker.*

"Every one in 8.6 Thais died [in 2009] of a smoking-related cause. We have to deal with the tobacco industry, as this can't go on."

Prakit Vathesatogkit, Action on Smoking and Health Foundation in Thailand, 2011

Percent of Deaths Due to Tobacco

2004

- Below 5%
- 5%–9.9%
- 10%–14.9%
- 15%–19.9%
- 20%–24.9%
- 25% and Above
- No Data

Countries labeled with percentages have the HIGHEST PROPORTION of tobacco-attributable mortality

%

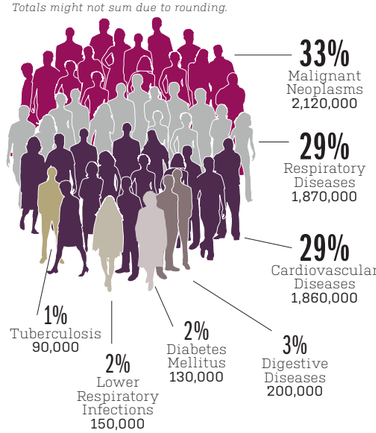
600,000 nonsmokers died in 2011 from involuntary exposure to secondhand smoke. Exposure to secondhand smoke most commonly occurs in the home, workplace, and public areas and is especially risky for infants, children, pregnant women, and fetuses.

TOBACCO CAUSED 100 MILLION DEATHS DURING THE TWENTIETH CENTURY, AND IF CURRENT TRENDS CONTINUE, APPROXIMATELY 1 BILLION PEOPLE WILL DIE DURING THE TWENTY-FIRST CENTURY BECAUSE OF TOBACCO USE. Deaths caused by tobacco use are entirely preventable, and measures must be taken worldwide to prevent one person from dying every six seconds because of tobacco use and exposure.

Projected Global Tobacco-Caused Deaths

By cause, 2015 baseline scenario

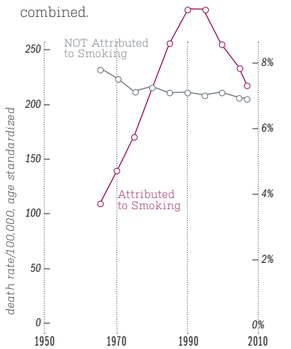
Totals might not sum due to rounding.

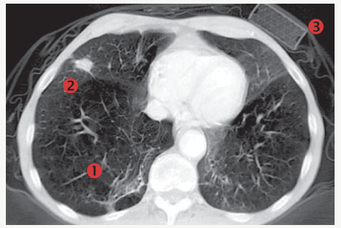


Male Cancer Mortality

Poland, ages 35–69, 1965–2010

In Poland, cancers caused by smoking were responsible for more deaths in middle-aged men than all other cancers combined.





Smoking Causes Lung Cancer
A CAT scan of a patient showing (1) emphysema, (2) a lung cancer tumor, and (3) a pack of cigarettes in his shirt pocket.

Tobacco use diminishes health throughout an individual's lifetime, and these effects accumulate throughout adulthood, resulting in preventable illness and, all too often, premature death. Nicotine is most efficiently delivered through smoking, resulting in death to nearly half of lifetime users. Over the years, other nicotine products have entered the market in a cloud of controversy and debate. Tobacco companies have introduced products marketed in a manner that implies they are "safer," but RESEARCH INDICATES THAT THERE IS NO COMPLETELY SAFE FORM OF TOBACCO. Smoking cigarettes, including cigarettes with low tar as measured by a machine, has been scientifically proven to harm nearly every organ in the body and to increase morbidity and mortality. Smokeless tobacco products increase the risk of oral cancers, and smokers of cigars, pipes, water pipes, kreteks, and bidis also experience serious adverse health consequences.

Smoking is particularly harmful to pregnant women and their fetuses. Smoking during pregnancy is dangerous to the mother and can cause growth retardation, low birth weight, and possibly death of the fetus.

The harm caused by today's tobacco use will extend for decades into the future, which is made more tragic by the fact that the negative effects of tobacco are entirely preventable. Quitting tobacco use greatly reduces illness by immediately providing short-term benefits and lowering the risk of all diseases caused by smoking.

THE INDUSTRY SAYS:

"We recognize that cigarettes are an addictive product. That doesn't mean you can't stop smoking. But nicotine is not the issue. It's the other compounds that are created —they're called volatile compounds— that are created in smoke. They're the ones who create the harm, and they're the ones we're working on in terms of our reduced risk products."

Louis Camilleri, CEO, Philip Morris International, 2011

Deadly Chemicals in Tobacco Smoke

Tobacco smoke contains more than ***7,000 chemicals*** and compounds. Hundreds of these are toxic, and at least ***69 are cancer-causing.***

Tobacco Smoke Includes / *As Found In*

Acetone	Paint Stripper
Acetylene	Welding Torches
Arsenic	Ant Poison
Benzene	Napalm
Butane	Lighter Fluid
Cadmium	Car Batteries
Carbon Monoxide	Car Exhaust Fumes
DDT	Insecticide
Formaldehyde	Embalming Fluid
Hydrogen Cyanide	Lethal Execution by Gas
Lead	Old Paint, Leaded Gasoline
Methanol	Rocket Fuel
Nicotine	Cockroach Poison
Phenol	Toilet-Bowl Disinfectant
Polonium 210	Nuclear Weapons
Toluene	Industrial Solvent
Vinyl Chloride	Plastics

RESEARCH SAYS:

"To date, no tobacco products have been scientifically proven to reduce the risk of tobacco-related disease, improve safety, or cause less harm than other tobacco products."

Food and Drug Administration, US, 2011

How Tobacco Harms You

Eyes
Blindness (macular degeneration)
Cataracts
Stinging, excessive tearing and blinking

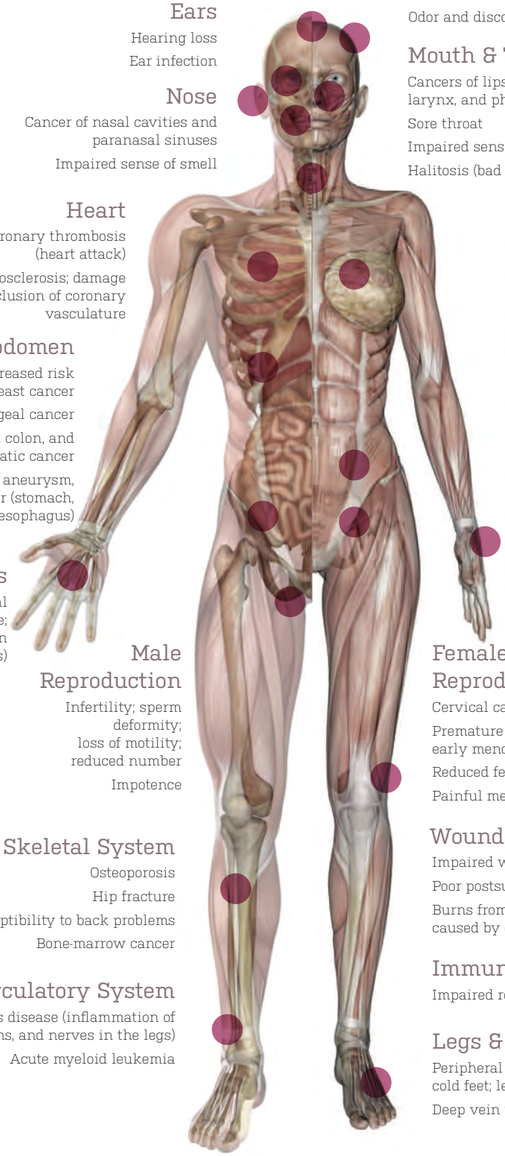
Ears
Hearing loss
Ear infection

Nose
Cancer of nasal cavities and paranasal sinuses
Impaired sense of smell

Heart
Coronary thrombosis (heart attack)
Atherosclerosis; damage and occlusion of coronary vasculature

Chest & Abdomen
Possible increased risk of breast cancer
Esophageal cancer
Gastric, colon, and pancreatic cancer
Abdominal aortic aneurysm, peptic ulcer (stomach, duodenum, and esophagus)

Hands
Peripheral vascular disease; poor circulation (cold fingers)



Male Reproduction
Infertility; sperm deformity; loss of motility; reduced number
Impotence

Skeletal System
Osteoporosis
Hip fracture
Susceptibility to back problems
Bone-marrow cancer

Circulatory System
Buerger's disease (inflammation of arteries, veins, and nerves in the legs)
Acute myeloid leukemia

Brain & Psyche
Stroke (cerebrovascular accident)
Addiction/withdrawal
Altered brain chemistry
Anxiety about tobacco's health effects

Hair
Odor and discoloration

Mouth & Throat
Cancers of lips, mouth, throat, larynx, and pharynx
Sore throat
Impaired sense of taste
Halitosis (bad breath)

Teeth
Periodontal (gum) disease; gingivitis; periodontitis
Loose teeth, tooth loss
Root-surface caries, plaque
Discoloration and staining

Lungs
Lung, bronchus, and tracheal cancer
Chronic obstructive pulmonary disease (COPD); emphysema
Chronic bronchitis
Respiratory infection; influenza; pneumonia; tuberculosis
Shortness of breath; asthma
Chronic cough; excessive sputum production

Liver
Liver cancer

Kidneys & Bladder
Kidney and bladder cancer

Skin
Psoriasis
Loss of skin tone; wrinkling; premature aging

Female Reproduction
Cervical cancer
Premature ovarian failure; early menopause
Reduced fertility
Painful menstruation

Wounds & Surgery
Impaired wound healing
Poor postsurgical recovery
Burns from cigarettes and from fires caused by cigarettes

Immune System
Impaired resistance to infection

Legs & Feet
Peripheral vascular disease; cold feet; leg pain; gangrene
Deep vein thrombosis (DVT)

! Smoking ***increases the risk of tuberculosis*** and is responsible for approximately 20% of global TB incidence.

Smokers with HIV are nearly twice as likely to develop respiratory infections, resulting in poorer health outcomes.

Smoking 25 or more cigarettes a day was found to ***double the risk of type 2 diabetes*** in males in the US.

Risk Factors

Tobacco is the only risk factor shared by all of the four leading noncommunicable diseases.

	Tobacco Use	Unhealthy Diets	Lack of Physical Activity	Harmful Use of Alcohol
CARDIOVASCULAR	☑	☑	☑	☑
DIABETES	☑	☑	☑	☑
CANCER	☑	☑	☑	☑
CHRONIC RESPIRATORY	☑	☐	☐	☐

Health Risks of Smoking During Pregnancy

Mother
Abruptio placentae
Placenta previa
Premature rupture of membranes
Premature birth
Spontaneous abortion/ miscarriage
Ectopic pregnancy

Fetuses, Infants, Children
Stunted gestational development
Stillbirth
Sudden Infant Death Syndrome (SIDS)
Reduced lung function and impaired lung development
Asthma exacerbation
Acute lower respiratory infection; bronchitis; pneumonia
Respiratory irritation; cough; phlegm; wheeze
Childhood cancers
Oral cleft

RESEARCH SAYS:

"…even limited secondhand smoke exposure delivers enough nicotine to the brain to alter its function."

Nora Volkow, Director, National Institute on Drug Abuse, US, 2011

Harm Caused by Secondhand Smoke

ADULTS

SUFFICIENT EVIDENCE

Coronary artery disease; Lung cancer

SUGGESTIVE EVIDENCE

Stroke; Nasal sinus cancer; Breast cancer; Carotid arterial wall thickening; Chronic obstructive pulmonary disease; Pre-term delivery

CHILDREN

SUFFICIENT EVIDENCE

Middle-ear disease; Respiratory symptoms (cough, wheeze, phlegm, breathlessness); Impaired lung function; Sudden Infant Death Syndrome (SIDS); Lower respiratory illness (including infections), Low birth weight

SUGGESTIVE EVIDENCE

Brain tumors; Lymphoma; Leukemia; Asthma

! Preteens who do not smoke but are exposed to secondhand smoke can experience symptoms of nicotine dependence.

THE INDUSTRY WAS TOLD:

"What the smoker does to himself may be his business, but what the smoker does to the nonsmoker is quite a different matter. […] This we see as the most dangerous development to the viability of the tobacco industry that has yet occurred."

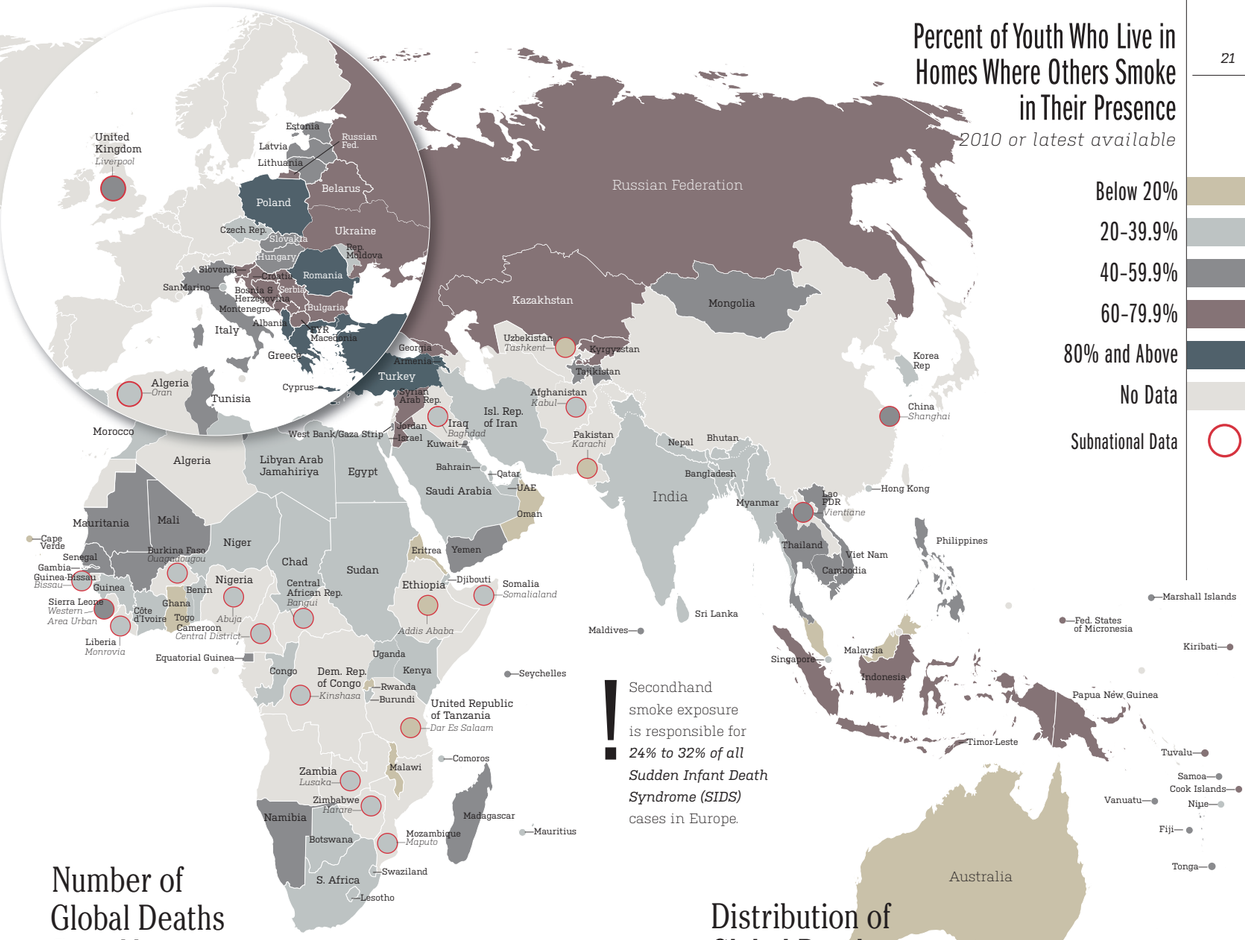
Roper Organization, US, 1978

Secondhand smoke, or "forced smoking," kills even those people who have consciously chosen not to smoke. Secondhand smoke, also known as environmental tobacco smoke, is a mixture of sidestream smoke from the burning tip of a cigarette, cigar, or pipe, and mainstream smoke, which smokers exhale. Sidestream smoke is the major component of secondhand smoke, and it contains higher concentrations of carcinogens than mainstream smoke.

There is no safe level of exposure to secondhand smoke. Globally, about 40% of children and a third of nonsmoking adults were exposed to secondhand smoke in 2004. The Western Pacific region has the highest rate of secondhand smoke exposure, with more than 50% of men, women, and children exposed to secondhand smoke in 2004.

AN ESTIMATED 600,000 INDIVIDUALS DIE ANNUALLY FROM EXPOSURE TO SECONDHAND SMOKE, AND THE MAJORITY OF SECONDHAND SMOKE DEATHS ARE AMONG WOMEN AND CHILDREN. Breathing secondhand smoke causes immediate harm to the cardiovascular and respiratory systems. Long-term exposure to secondhand smoke can even cause lung cancer. Expectant mothers, fetuses, and infants exposed to secondhand smoke are at particularly high risk of adverse health consequences. Sudden Infant Death Syndrome (SIDS), respiratory issues, and behavioral and learning problems can result when infants and children are exposed to secondhand smoke.

Exposure to secondhand smoke remains one of the world's most critical environmental health hazards, and is more harmful than all other indoor-air contaminants. The fact that nonsmokers have been forced to inhale other people's smoke has led to unprecedented citizen mobilization and the demand for tobacco control measures, including clean indoor-air laws, tax increases, restrictions on sales to minors, and advertising, promotion, and sponsorship bans.



Percent of Youth Who Live in Homes Where Others Smoke in Their Presence

2010 or latest available

- Below 20%
- 20–39.9%
- 40–59.9%
- 60–79.9%
- 80% and Above
- No Data
- Subnational Data

! Secondhand smoke exposure is responsible for *24% to 32% of all Sudden Infant Death Syndrome (SIDS)* cases in Europe.

Number of Global Deaths Caused by Secondhand Smoke in Nonsmokers

2004

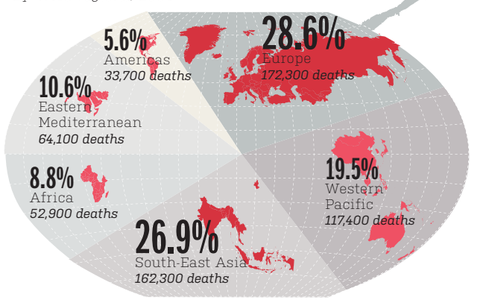
MEN	WOMEN	CHILDREN
26%	47%	28%
156,000	281,000	166,000

Totals might not sum due to rounding

75% of secondhand smoke deaths *occur among women and children*

Distribution of Global Deaths From Exposure to Secondhand Smoke

By WHO regions, 2004



Totals might not sum due to rounding.

RESEARCH SAYS:

"Nobody should cry because of lower consumption of a product that kills half the people who use it."

Danny McGoldrick, Campaign for Tobacco-Free Kids, US, 2007

SINCE THE FIRST EDITION OF *THE TOBACCO ATLAS* A DECADE AGO,

MORE THAN

43 Trillion

CIGARETTES HAVE BEEN SMOKED.

1 BUTT = 10 BILLION CIGARETTES

GOVERNMENT SAYS:

"A jihad is needed against tobacco to tell that consumption of tobacco is dangerous. The whole nation needs to come together against it."

Ghulam Nabi Azad, Union Minister of Health & Family Welfare, India, 2010

Tobacco is used in many different ways around the world, but the global predominance is the use of MANUFACTURED CIGARETTES, WHICH ACCOUNT FOR 96% OF TOTAL WORLDWIDE SALES, and hence involves big business rather than small, local, rural enterprises.

The next largest components are the smoking of bidis in South-East Asia, the chewing of tobacco in India, the smoking of kreteks in Indonesia, and the use of moist snuff, which originated in Sweden but is now becoming global.

New forms of tobacco (and of its component nicotine) are constantly being invented, while older forms historically localized to specific regions of the world (such as the hookah and bidi) are becoming global. For instance, kreteks and moist snuff are currently being marketed to youth in many countries. These regional forms of tobacco sometimes gain footholds in new countries based on their exotic cachet, but to date they have not displaced manufactured cigarettes for a significant market share. Instead, they frequently serve as a gateway to addiction, luring youth and other fad smokers into lifelong dependence on nicotine.

New forms of tobacco may not be covered by existing tobacco control legislation and are thus a challenge to countries seeking to reduce the epidemic (especially to reduce youth uptake).

! Despite the introduction of many new forms of tobacco, ***there is still no safe way of using tobacco—whether inhaled, sniffed, sucked, or chewed;*** whether some of the harmful ingredients are reduced; or whether it is mixed with other ingredients.

SMOKING TOBACCO

Tobacco smoking is the act of burning dried or cured leaves of the tobacco plant and inhaling the smoke. Combustion uses heat to create new chemicals that are not found in unburned tobacco, such as tobacco-specific nitrosamines (TSNAs) and benzopyrene, and allows them to be absorbed through the lungs.

Manufactured cigarettes are the most commonly consumed tobacco products worldwide. They consist of shredded or reconstituted tobacco, processed with hundreds of chemicals and various flavors such as menthol, and rolled into a paper-wrapped cylinder. Usually tipped with a cellulose acetate filter, they are lit at one end and inhaled through the other.
Most prevalent: Worldwide

Kreteks are clove-flavored cigarettes. They may also contain a wide range of exotic flavorings and eugenol, which has an anesthetic effect, allowing for deeper and more harmful smoke inhalation.
Most prevalent: Indonesia

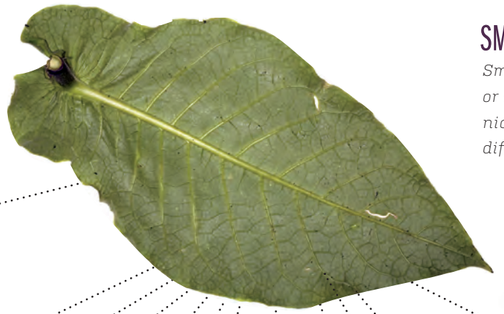
Roll-your-own (RYO) cigarettes are hand-filled by the smoker from fine-cut loose tobacco and a cigarette paper. RYO cigarette smokers are exposed to high concentrations of tobacco particulates, tar, nicotine, and TSNAs, and are at increased risk for developing cancers of the mouth, pharynx, larynx, lungs, and esophagus.
Most prevalent: Europe and New Zealand

Pipes are made of briar, slate, clay, or other substances. Tobacco is placed in the bowl, and the smoke is inhaled through the stem. In South-East Asia, clay pipes known as sulpa, chillum, and hookli are widely used.
Most prevalent: Worldwide

Bidis consist of a small amount of crushed tobacco, hand-wrapped in dried temburni or tendu leaves, and tied with string. Despite their small size, bidis tend to deliver more tar and carbon monoxide than manufactured cigarettes because users must puff harder to keep them lit.
Most prevalent: South Asia (and are the most heavily consumed smoked tobacco products in India)

Sticks are made from sun-cured tobacco and wrapped in cigarette paper—for example, hand-rolled brus.
Most prevalent: Papua New Guinea

Water pipes, also known as shisha, hookah, narghile, or hubble-bubble, operate by water filtration and indirect heat. Flavored tobacco is burned in a smoking bowl covered with foil and coal. The smoke is cooled by filtration through a basin of water and consumed through a hose and mouthpiece.
Most prevalent: North Africa, the Mediterranean region, and parts of Asia, but now spreading around the world



Cigars are made of air-cured and fermented tobaccos rolled in tobacco-leaf wrappers. The long aging and fermentation process produces high concentrations of carcinogenic compounds that are released upon combustion. The concentrations of toxins and irritants in cigars are higher than in cigarettes. Cigars come in many shapes and sizes, from cigarette-size cigarillos to double coronas, cheroots, stumpen, chuttas, and dhumtis. In reverse chutta and dhumti smoking, the ignited end is placed inside the mouth.
Most prevalent: Worldwide

Dry snuff is powdered tobacco that is inhaled through the nose or taken orally. Once widespread, particularly in Europe, the use of dry snuff is in decline.
Most prevalent: Europe

SMOKELESS TOBACCO

Smokeless tobacco is usually consumed orally or nasally, without burning or combustion. Smokeless tobacco increases the risk of cancer and leads to nicotine addiction similar to that produced by cigarette smoking. There are different types of smokeless tobacco: chewing tobacco, snuff, and dissolvables.

Chewing tobacco is an oral smokeless tobacco product that is placed in the mouth, cheek, or inner lip and sucked or chewed. It is sometimes referred to as "spit tobacco" because of the tendency by users to spit out the built-up tobacco juices and saliva.
Most prevalent: Worldwide

There are many varieties of chewing tobacco, including plug, loose-leaf, chimo, toombak, gutkha, and twist. Pan masala or betel quid consists of tobacco, areca nuts (*Areca catechu*), slaked lime (calcium hydroxide), sweeteners, and flavoring agents wrapped in a betel leaf (*Piper betle*). There are many varieties of pan masala, including kaddipudi, hogesoppu, gundi, kadapam, zarda, pattiwala, kiwam, and mishri.
Most prevalent: India

Moist snuff consists of ground tobacco held in the mouth between the cheek and the gum. Manufacturers are increasingly packaging moist snuff into small paper or cloth packets to make the product more convenient. Moist snuff products are known as snus, khaini, shammaah, nass, or naswa. Tobacco pastes or powders are similarly used, placed on the gums or teeth. Fine tobacco powder mixtures are usually inhaled and absorbed through the nasal passages.
Most prevalent: Scandinavia and US but becoming worldwide; banned in several countries

Dissolvable smokeless tobacco products dissolve in the mouth without expectoration; they contain tobacco and numerous added constituents whose purpose is to deliver nicotine to the user via oral mucosal absorption. They are often extensions of well-known cigarette brands, such as Camel Sticks, Strips, and Orbs; Marlboro Sticks; products by Star Scientific (Ariva, Stonewall); and Zerostyle Mint by Japan Tobacco. These newest oral smokeless tobacco products are developed for use by smokers in any situation where they cannot or choose not to smoke.
Most prevalent: High-income nations

RESEARCH SAYS:

"Nicotine is a highly addictive drug, and to make it look like a piece of candy is recklessly playing with the health of children."

Gregory Connolly, Harvard University, US, 2010

With the exception of oral tobacco products, tobacco is typically consumed through combustion, in which tobacco leaves are burned at high temperatures and the resulting smoke is inhaled. Combustion is the most efficient method of delivering nicotine to the brain.

TOBACCO COMPANIES UNDERSTAND THE IMPORTANCE OF NICOTINE AND WANT TO CONTINUE TO BE THE PROVIDERS OF CHOICE FOR NICOTINE PRODUCTS, but they also understand the dangers created by the combustion of tobacco products, most notably that customers routinely die from their use. Therefore, tobacco companies are creating new products to keep individuals addicted to nicotine while reducing toxic exposures caused by combustion. Such products include noncombustible cigarettes (e.g., Eclipse, Premier) and oral tobacco (e.g., lozenges, strips, snus, orbs), some of which are dissolvable. There is an urgent need for research and regulation of these products.

Beginning in the 1970s, pharmaceutical companies began providing nicotine replacement therapy (NRT) to ease nicotine withdrawal symptoms.

Because these products are considered pharmaceuticals, they must undergo rigorous approval to assure their safety and efficacy. NRT doubles smoking quit rates and is currently available through patches, gum, lozenges, and inhalers.

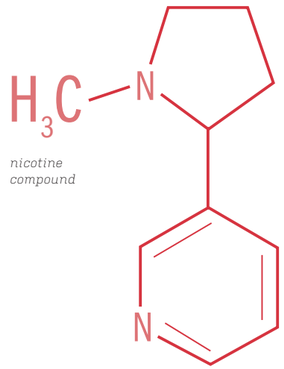
Entrepreneurs have created many novel nicotine delivery products, such as nicotine water, wafers, candy, inhalers, and electronic cigarettes. These products provide nicotine in an innovative yet unregulated manner, and the potential risks are largely unknown.

The arrival of novel nicotine delivery products in the mass market creates a new avenue for individuals to initiate or maintain nicotine addiction, which could result in increased addiction, fewer cessation attempts, increased use of multiple products, and addiction to higher levels of nicotine. However, these products could also potentially play a role in the cessation of combusted tobacco products.

"Snus is less dangerous than cigarettes, for sure, but it is very hard to find anything more dangerous than cigarettes. There is no natural law that says 30 percent of the population should be nicotine addicts."

Goran Pershagen, Karolinska Institute, Sweden, 2007

"If you've decided to quit tobacco use, we support you. But if you're looking for smoke-free, spit-free, drama-free tobacco pleasure, Camel Snus is your answer."



nicotine compound

THE INDUSTRY MUST SAY:

"We told Congress under oath that we believed nicotine is not addictive. We told you that smoking is not an addiction and all it takes to quit is willpower. Here's the truth: Smoking is very addictive. And it's not easy to quit. We manipulated cigarettes to make them more addictive."

One of the US Department of Justice's Proposed Corrective Statements for Cigarette Companies, 2011

Less harmful & heavily regulated — CONTINUUM OF HARM — *More harmful & unregulated*

PHARMACEUTICAL COMPANIES

Pharmaceutical companies sell ***nicotine replacement therapy*** to assist with smoking cessation. These products are heavily regulated and companies are required to demonstrate that they are safe and effective.

Nicotine Patch

Nicotine Gum

SIDE EFFECTS AND CONTINUUM OF HARM:

These products are generally safe when used as directed and are ***heavily regulated.*** Minor side effects include stomach irritation, rash, etc.

ENTREPRENEURS

Entrepreneurs create products to bypass tobacco bans while maintaining nicotine addiction. Examples of products include ***nicotine water, lollipops,*** and ***electronic cigarettes.***

Nicotine Lollipop

Nicotine Water

! Tobacco companies are becoming more interested in nicotine delivery technology ***in an effort to capitalize on the $3.6 billion global market*** for smoking cessation aids.

E-Cigarettes

SIDE EFFECTS AND CONTINUUM OF HARM:

These products are ***unregulated,*** and the side effects and dangers are unknown. Although e-cigarettes are marketed as a "safe" alternative to smoking, laboratory analyses found carcinogens and toxic chemicals in these products.

TOBACCO COMPANIES

Tobacco companies have launched nontraditional products, such as ***snus, orbs,*** and ***lozenges*** in high-income countries to ensure consumers maintain their tobacco addiction. They are also purchasing patents for alternative nicotine delivery systems, such as aerosol technology. Tobacco companies continue to provide traditional combustible cigarettes to consumers, especially those in low- and middle-income countries.

Sticks, Strips, Orbs, and Snus

Combustible Cigarettes

! "In one regular cigarette, the average amount of nicotine the smoker gets ranges between about 1 mg and 2 mg. But the cigarette itself contains more nicotine than this. The amount people actually take in depends on how they smoke, how many puffs they take, how deeply they inhale, and other factors."

American Cancer Society, 2011

SIDE EFFECTS AND CONTINUUM OF HARM:

Combustible cigarettes result in significant morbidity and mortality. This is the most dangerous and harmful way to absorb nicotine, and the products are ***unregulated***. Smokeless tobacco products are known to be addictive and harmful. While less is known about newer products, they likely have some level of harm associated with their use.

RESEARCH SAYS:

"For each 1,000 tons of tobacco produced, about 1,000 people will eventually die."

World Health Organization, Regional Office for the Eastern Mediterranean, undated

NEARLY 20% OF THE WORLD'S ADULT POPULATION SMOKES CIGARETTES. Smokers consumed nearly 5.9 trillion cigarettes in 2009, representing a 13% increase in cigarette consumption in the past decade.

Cigarette consumption historically has been highest in high-income countries, but because of targeted marketing, increased social acceptability, continued economic development, and population increases, consumption is expected to increase in low- and middle-income countries. Cigarette consumption in Western Europe dropped by 26% between 1990 and 2009 but increased in the Middle East and Africa by 57% during the same period. This change has occurred as people in high-income countries increasingly understand the dangers of smoking and governments continue to implement tobacco control policy and legislation. Globally, the increase in cigarette consumption in low- and middle-income countries is significant enough to offset the decrease in high-income countries.

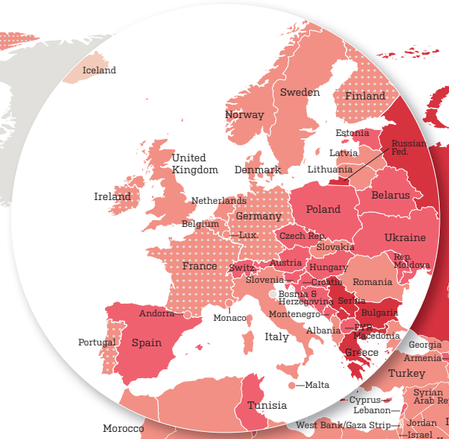
Cigarette consumption is responsible for a significant disease burden. As consumption rates continue to increase in low- and middle-income countries, these countries will experience a disproportionate amount of tobacco-related illness and death—particularly China, as Chinese men smoke a third of the world's cigarettes. If the smoking prevalence among Chinese women increases, global consumption of cigarettes will skyrocket, and the country's economy and health-care systems will be overwhelmed.

While global smoking prevalence is flat or decreasing, the total number of smokers worldwide continues to increase simply due to population growth. While almost 6 trillion cigarettes are consumed annually, the pattern of nicotine consumption may shift in the future as people seek alternative nicotine delivery systems (see Chapter 5 – *Nicotine Delivery Systems*). TOBACCO AND NICOTINE ADDICTION MUST BE TREATED COMMENSURATE WITH THE HARM CAUSED. The World Health Organization's Framework Convention on Tobacco Control (WHO FCTC) has outlined how best to reduce tobacco use, and the time has come to act on this information.

THE INDUSTRY SAYS:

"We believe we can increase the consumption of kretek elsewhere…. We assured ourselves that they are not more or less dangerous than conventional cigarettes."

Louis Camilleri, CEO, Altria, US, 2005



Annual Cigarette Consumption*

Per capita, 2009 (total population) For cigarettes only

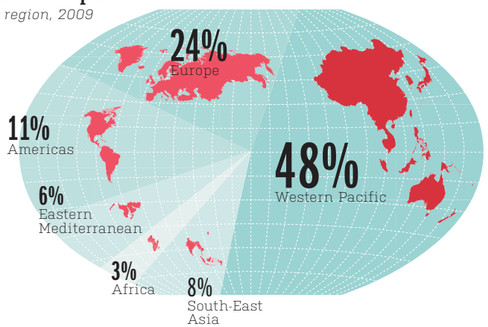
- 1-499
- 500-1,499
- 1,500-2,499
- 2,500 and Above
- No Data

*Selected countries where per capita cigarette consumption has **DECREASED** by at least one-third in the past decade*

**This is an estimate of the legal cigarette market that may be highly influenced by the changes in illicit trade.*

World Cigarette Consumption

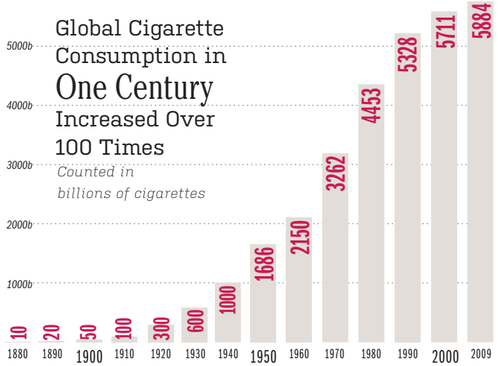
By region, 2009



Global Cigarette Consumption in One Century

Increased Over 100 Times

Counted in billions of cigarettes

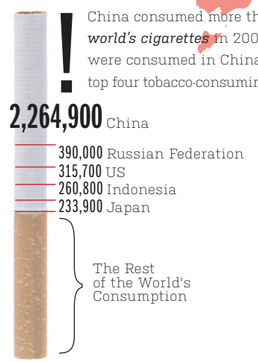


Enough cigarettes were consumed in 2009 for *each man, woman, and child in the world* to have smoked an average of 865 cigarettes or *43 packs.*

Top 5 Cigarette-Consuming Countries

2009, counted in millions of cigarettes

China consumed more than *38% of the world's cigarettes* in 2009. More cigarettes were consumed in China than in the other top four tobacco-consuming countries combined.



THE PUBLIC SAYS:

"When I began smoking, about 80 percent of men were smokers. The advertising phrase was, 'You're healthy when a cigarette tastes so good.'"

Masanobu Mizuno, plaintiff in a suit against Japan Tobacco, Japan, 2009

About 800 million adult men worldwide smoke cigarettes. ALMOST 20% OF THE WORLD'S ADULT MALE SMOKERS LIVE IN HIGH-INCOME COUNTRIES, WHILE OVER 80% ARE IN LOW- AND MIDDLE-INCOME COUNTRIES.

The global tobacco epidemic can be segmented into four stages in which men typically precede women. Stage 1 represents the very beginning of the epidemic when the prevalence of smoking has begun to rise but there is as yet no appreciable smoking attributed mortality. In Stage 2 smoking prevalence increases rapidly but smoking attributed deaths still account for a small proportion (less than 5%) of all deaths. In Stage 3 smoking prevalence is stable or decreasing but smoking attributed mortality increases to a maximum of 20%- 50% of all deaths in middle age (35-69 years). In stage 4 smoking prevalence (and eventually smoking-attributed mortality) decrease towards lower limits that are not yet defined. While countries may have similar prevalence rates, each country's location on the curve is important. Countries on the upslope of the trajectory are in the early stages of the epidemic and experience different challenges than those countries on the downslope.

Tobacco marketing associates male smoking with masculinity, happiness, wealth, virility, and power. In reality, smoking kills nearly 4 million men annually and leads to infertility, health disparities, illness, and premature death. Overall, smoking prevalence rates are declining, but the number of smokers is increasing due to general population growth. Even the most successful tobacco control programs can only desire to cap the number of new tobacco users. People are increasingly using innovative and alternative products, such as oral tobacco, electronic cigarettes, and nicotine replacement therapy, to obtain nicotine. As we continue to monitor smoking rates throughout the world, we must become increasingly cognizant of these alternative manners of maintaining nicotine addiction (see Chapter 5 – *Nicotine Delivery Systems*).

THE INDUSTRY SAYS:

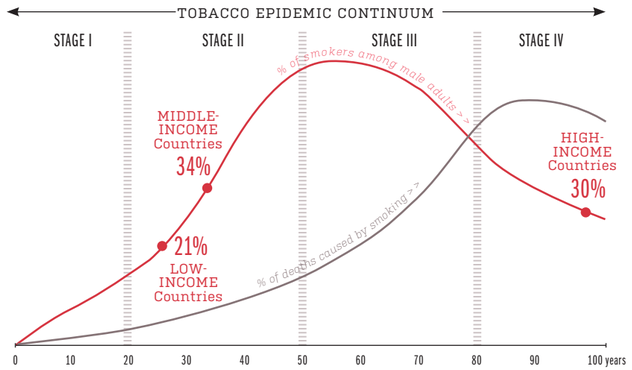
"I'm no cowboy and I don't ride horseback, but I like to think I have the freedom the Marlboro man exemplifies. He's the man who doesn't punch a clock. He's not computerized. He's a free spirit."

George Weissman, Former President and CEO, Philip Morris USA, 1978

! Among the 14 countries where 50% or more of men smoke, *all but one country (Greece) are classified as low- or middle-income.*

Male Smoking Prevalence and Deaths Over a Century

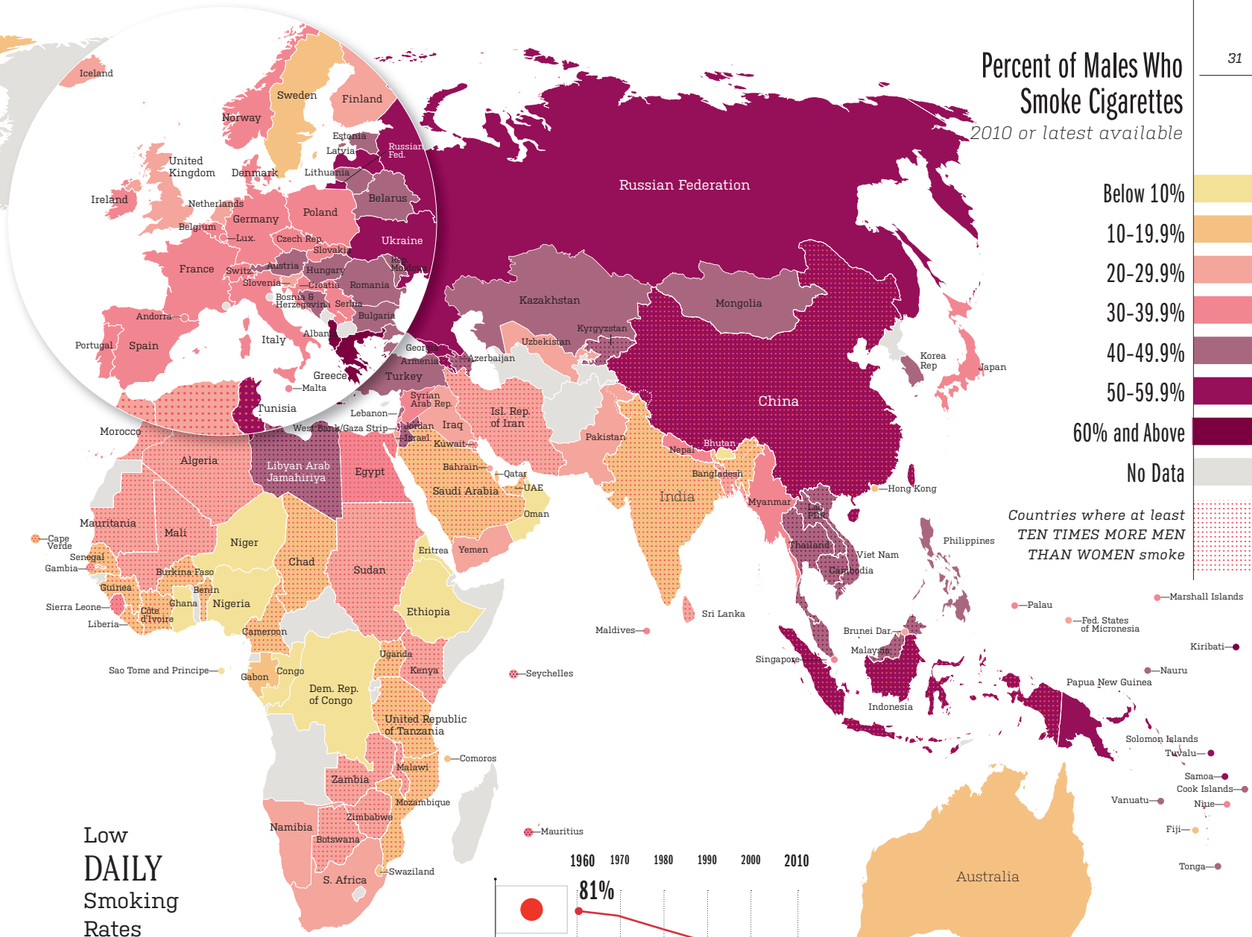
Weighted average of smoking prevalence, 2010



2010 smoking prevalence data overlaid on tobacco epidemic continuum.

Percent of Males Who Smoke Cigarettes

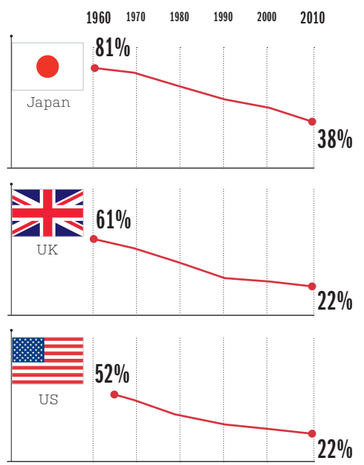
2010 or latest available



Low DAILY Smoking Rates

Among males and females in selected areas, 2010

Hong Kong	11.1%
Canada	13.0%
Iceland	14.3%
Singapore	14.3%
Sweden	14.3%
Australia	15.1%
US	15.1%



Smoking Trends

Adult Male Current Smoking Prevalence

1960–2010 (or latest available)

Data rounded to nearest whole number.
UK includes Great Britain and Northern Ireland.

HISTORY SAYS:

"What Bernays had created [in the 1920s in the United States] was the idea if a women smoked it made her more powerful and independent. An idea that still persists today."

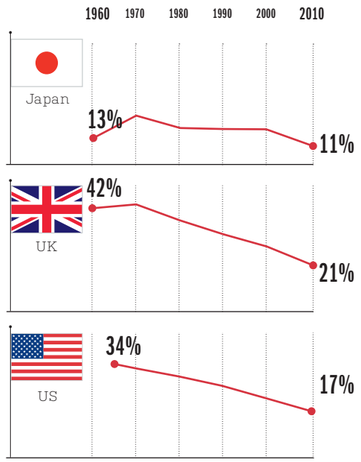
Adam Curtis, Century of the Self, *UK, 2002*

NEARLY 200 MILLION ADULT WOMEN WORLDWIDE SMOKE CIGARETTES. As observed among high-income countries in the 20th century, the first stage of the tobacco epidemic occurred as the rate of smoking among men increased and surpassed 50%. During the next stage, smoking rates decreased among men and increased among women. There is a concern that this pattern may occur in the future in low- and middle-income countries as well. In 2010, half of the world's female smokers were in high-income countries and the remaining half in low- and middle-income countries.

Tobacco companies market directly to women and create an association between smoking and gender equality. This is happening today in many low- and middle-income countries where there are potential new smokers and sparse marketing restrictions, but this practice is not new for tobacco companies. ALMOST A CENTURY AGO, THE AMERICAN TOBACCO COMPANY PURPOSEFULLY LINKED SMOKING WITH WOMEN'S RIGHT TO VOTE, WITH CIGARETTES CALLED "TORCHES OF FREEDOM." This type of forced association between smoking and gender equality can be expected worldwide.

Women are the target of marketing campaigns, specifically ones promoting "light" or "low-tar" cigarettes. Women often choose these cigarettes because of a false assumption that the products are less harmful than full-flavor cigarettes. In reality, all cigarettes contain approximately the same amount of tar and nicotine, but smokers of "light" and "low-tar" cigarettes compensate (e.g., covering ventilation holes, sucking harder, etc.) to more efficiently extract nicotine from the cigarettes. This has resulted in no net benefit for women who continue to smoke and use these "lighter" products.

Smoking decreases fertility in women, combines with oral contraceptives to increase the risk of heart attacks and stroke, and results in poor health outcomes for fetuses and newborns. If women begin smoking at rates equivalent to men, the world will face a public health disaster of enormous proportions.



Smoking Trends

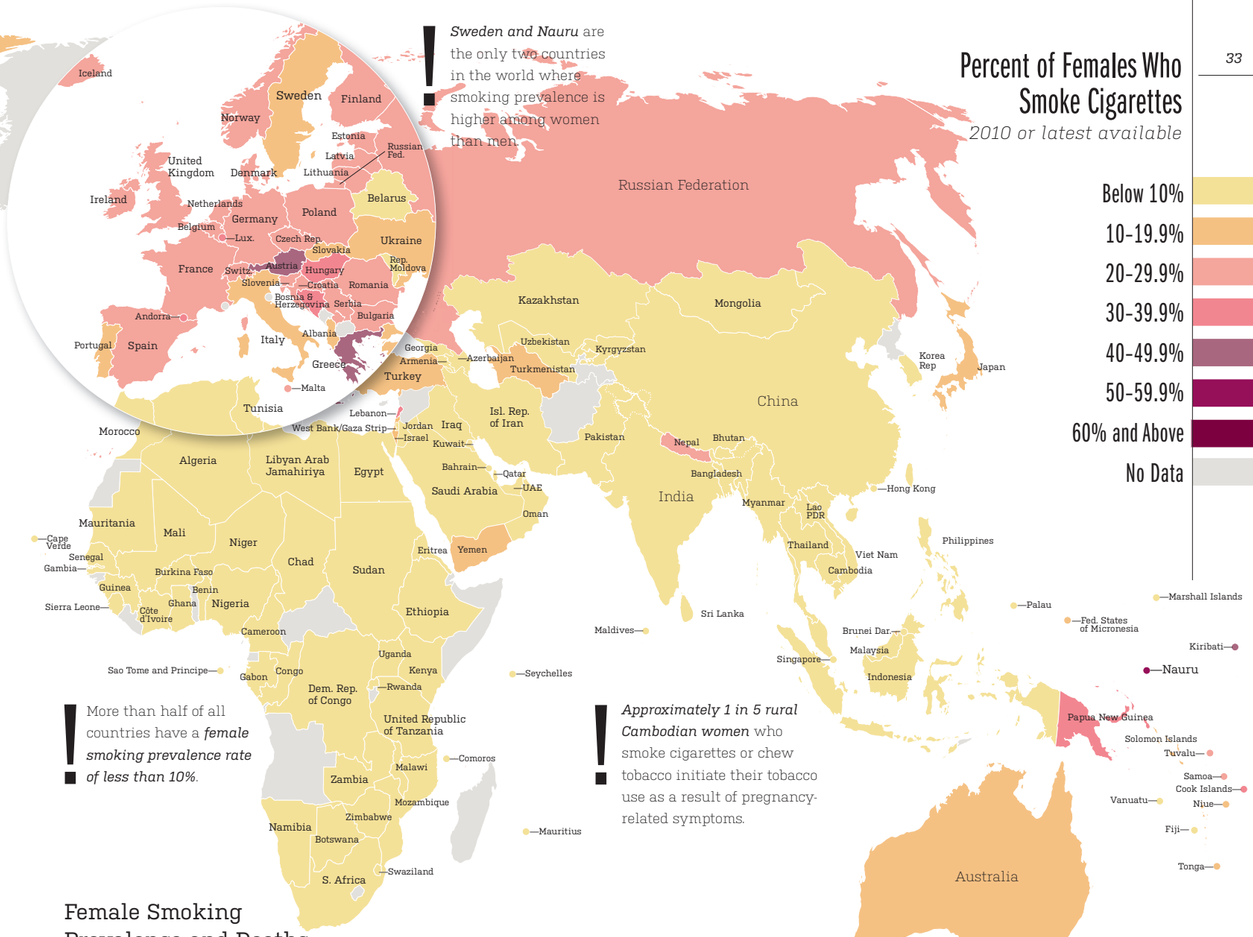
Adult Female Current Smoking Prevalence

1960–2010 (or latest available)

Data rounded to nearest whole number.
UK includes Great Britain and Northern Ireland.

Percent of Females Who Smoke Cigarettes

2010 or latest available



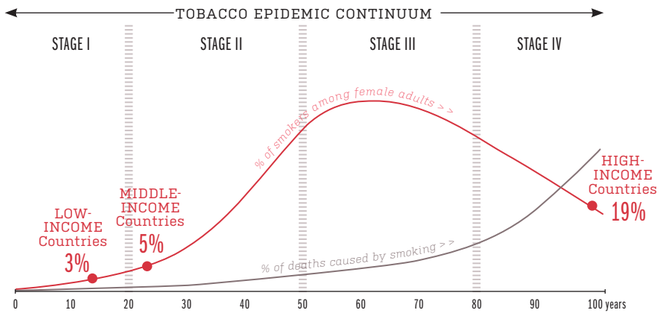
! *Sweden and Nauru* are the only two countries in the world where smoking prevalence is higher among women than men.

! More than half of all countries have a *female smoking prevalence rate of less than 10%.*

! *Approximately 1 in 5 rural Cambodian women* who smoke cigarettes or chew tobacco initiate their tobacco use as a result of pregnancy-related symptoms.

Female Smoking Prevalence and Deaths Over a Century

Weighted average of smoking prevalence, 2010



2010 smoking prevalence data overlaid on tobacco epidemic continuum.

THE INDUSTRY SAYS:

"Cigarettes are like women. The best ones are thin and rich."

American Tobacco Company advertising slogan, US, circa 1970

! The amount of lifetime exposure to tobacco smoke significantly correlates with the thickness of carotid arterial walls in both men and women. *This effect is more than twice as high in women as in men.*

RESEARCH SAYS:

"Kids who see others smoking are more likely to take up the habit because they don't perceive cigarettes as unhealthy."

Simon Racicot, Concordia University, US, 2011

While there are large differences in smoking rates among adults by gender, smoking rates among boys and girls (ages 13–15) vary minimally in many regions of the world. Smoking rates between boys and girls differ by less than five percentage points in almost half of the world's countries. Tobacco companies view youth smoking as an opportunity to secure new smokers at a young age. THE MAJORITY OF SMOKERS BEGIN SMOKING IN THEIR YOUTH. For example, 83% of smokers in the US begin smoking before the age of 18. Even the tobacco industry understands the importance of youth smoking, and a 1984 R.J. Reynolds document stated that "younger adults are the only source of replacement smokers."

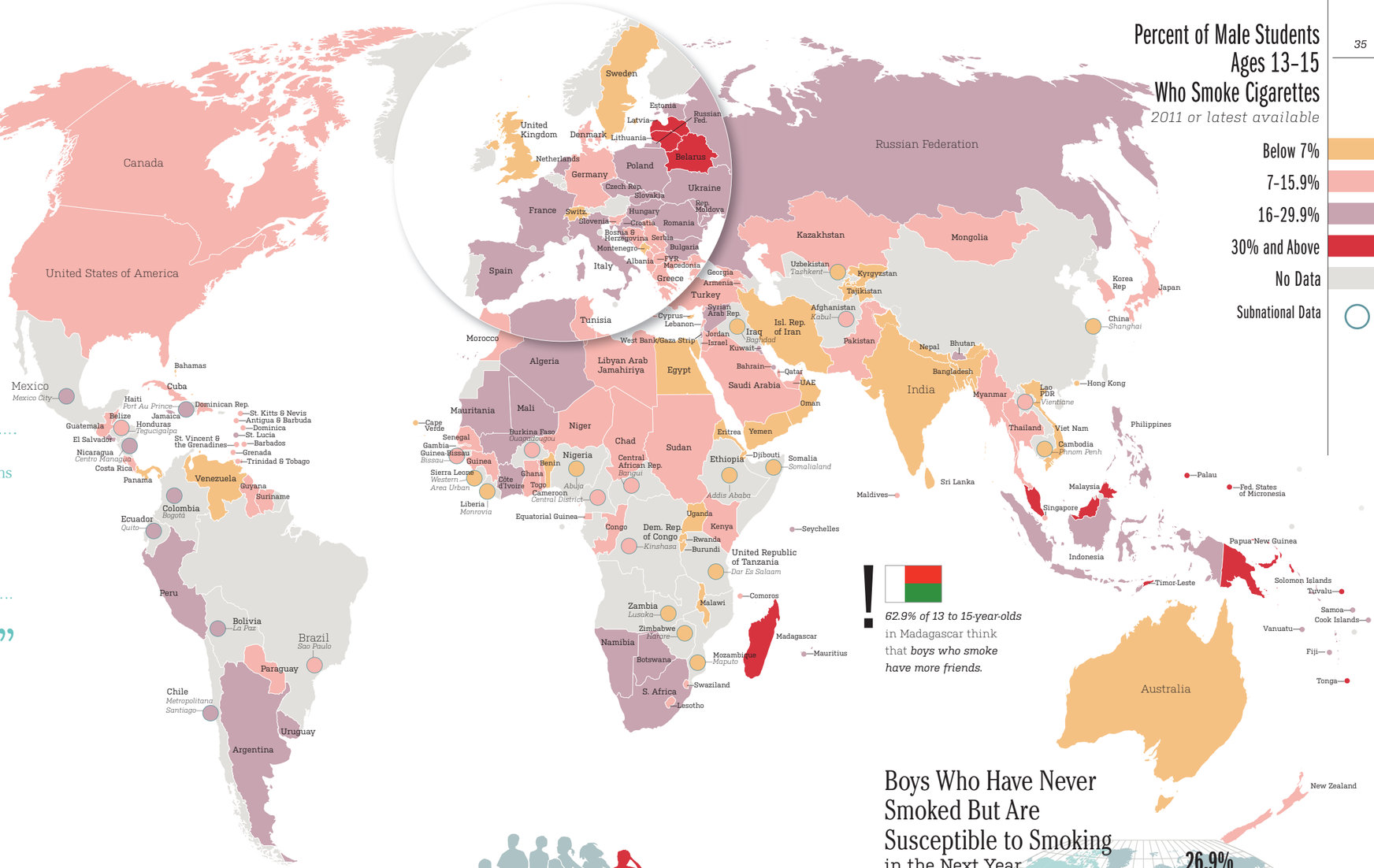
Boys begin smoking during their youth in response to peer pressure, misconceptions that smoking is cool or enhances popularity, easy access to tobacco products, cigarette pricing, and tobacco marketing. Both marketing and pricing of cigarettes are proven to encourage youth initiation of smoking, because marketing makes smoking appealing to youth, and low pricing makes smoking affordable.

Smoking has an immediate harmful impact on boys' health, such as a reduction in stamina, and an increase in respiratory symptoms, mental health visits, and school absenteeism. Smoking endangers health, and the longer an individual smokes, the more severe the repercussions. Youth smokers are entering into an addiction that shortens their life span and increases the likelihood they will die early from diseases caused by smoking.

THE INDUSTRY SAYS:

"It is important to know as much as possible about teenage smoking patterns and attributes. Today's teenager is tomorrow's potential regular customer, and the overwhelming majority of smokers first begin to smoke while still in their teens…. The smoking patterns of teenagers are particularly important to Philip Morris."

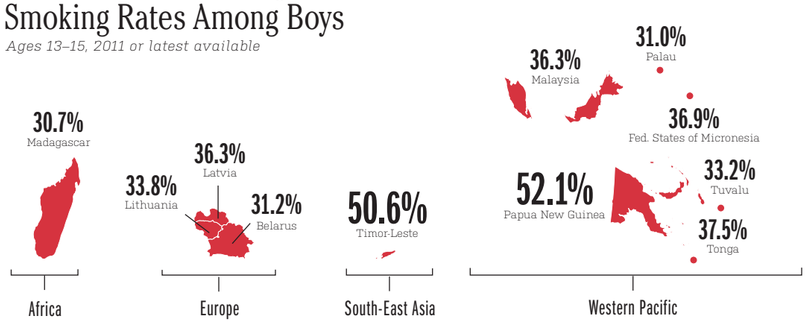
Philip Morris USA, 1981



! *62.9% of 13 to 15-year-olds* in Madagascar think that *boys who smoke have more friends.*

Countries With the Highest Smoking Rates Among Boys

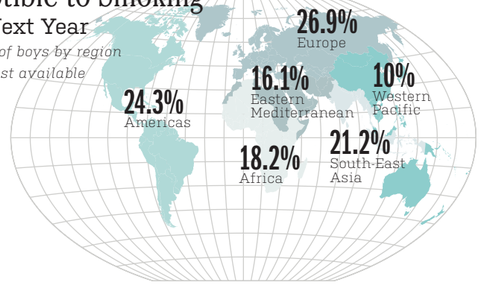
Ages 13–15, 2011 or latest available



! Around one half of persistent lifetime smokers will eventually die from tobacco-related illness and disease.

Boys Who Have Never Smoked But Are Susceptible to Smoking in the Next Year

Percentage of boys by region 2005 or latest available



RESEARCH SAYS:

"There is an important public-health message here that we need to get to teenage girls: Smoking is not going to help you lose weight."

Louise Pilote, McGill University, Canada, 2006

As with boys, most female smokers initiate the habit before reaching adulthood. Girls begin smoking during their youth in response to peer pressure, misconceptions that smoking is cool or enhances popularity, easy access to tobacco products, and tobacco marketing. Both marketing and pricing of cigarettes encourage youth initiation of smoking. Marketing makes smoking appealing to youth, and low pricing makes smoking affordable.

Some girls initiate smoking or continue to smoke due to the belief that smoking will assist with weight loss. This is especially common in cultures where women are subjected to unrealistic body-image goals. The tobacco industry has promoted the adoption of this belief, and a 1982 R.J. Reynolds document stated that "[a] brand which contains a natural appetite suppressant (in tobacco or tipping) will be perceived as controlling weight."

Among today's adults, more men consistently smoke than women. In fact, there are at least 49 countries in which ten times more men than women smoke. The same is not the case for today's teenagers. IN MOST OF THE WORLD, THE DIFFERENCE IN SMOKING RATES BETWEEN GIRLS AND BOYS IS SMALL. In fact, more girls smoke than boys in at least 25 countries. The similarity of today's boys' and girls' smoking rates suggests that, in the future, today's teenage girls may be more likely to smoke than today's adult women. If this pattern continues in the future, the consequences will be deadly.

RESEARCH SAYS:

"...if the movie stars smoke, especially in romance films, they are effectively encouraging young girls to smoke."

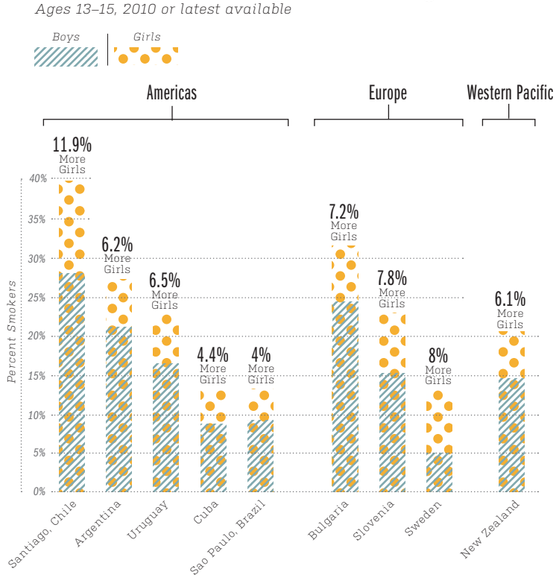
John Pierce et al., University of California, San Diego, US, 2005

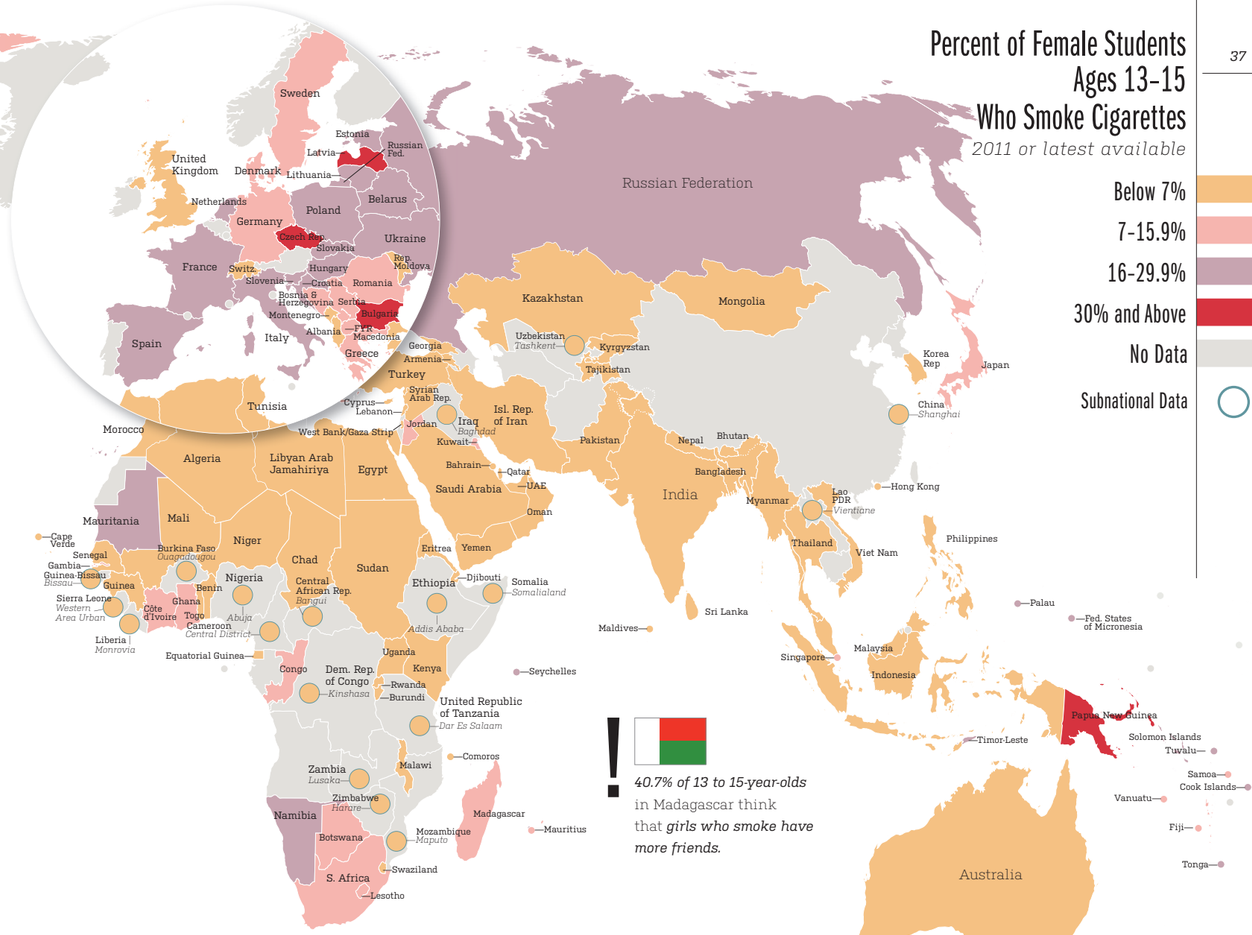
"If you're not allowed it, but you really want it, then you can have it!"

Advertisement slogan for Kiss Cigarettes in Russia, 2011

Places Where Substantially More Girls Than Boys Smoke Cigarettes

Ages 13–15, 2010 or latest available





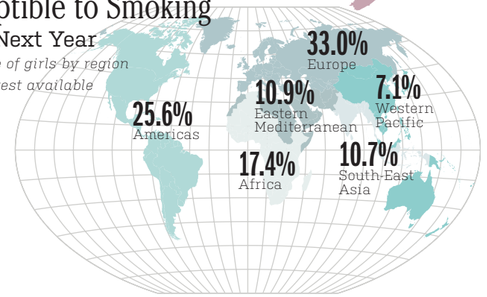
! *40.7% of 13 to 15-year-olds* in Madagascar think that *girls who smoke have more friends.*

Common Reasons Young Women Start Smoking

- Association with others *(parents and friends)* who smoke.
- Concern with *weight, body image, or social acceptance.*
- Interest in *rebelling or stating individuality.*
- Reaction to positive images of smoking in *magazines, movies, and youth culture.*
- Influence from cigarette *marketing campaigns* targeting women.

Girls Who Have Never Smoked but Are Susceptible to Smoking in the Next Year

Percentage of girls by region 2005 or latest available



CONSUMER SAYS:

"*Beta ek gutka khane ka itna shauk hai to ek kaam kar. Ek dost aur banna. Kaandha deney ke kaam aayega.*
Son, if you are so fond of eating gutka [chewing tobacco], make sure you make a friend so that you have someone to help carry your coffin."

Title track from Bollywood movie, Wanted, *India, 2009*

Smokeless tobacco accounts for a significant and growing portion of global tobacco use, especially in South Asia. Over 25 distinct types of smokeless tobacco products are used worldwide, including both commercialized and local or homegrown products, used orally and nasally. Some products combine tobacco with substantial amounts of chemical additives and other plant material that may confer additional risk to the user. Moreover, smokeless tobacco products contain many of the toxins and carcinogens found in cigarettes, and thus result in many of the same diseases caused by smoking. In addition, smokeless tobacco use increases periodontal disease, tooth loss, and precancerous mouth lesions.

Despite the harm from smokeless tobacco use to both individuals and society at large, these products are not sufficiently regulated in many countries. The landscape of smokeless tobacco manufacturing and marketing is rapidly evolving. THE LARGEST AMERICAN, BRITISH, AND JAPANESE CIGARETTE COMPANIES HAVE ENTERED THE SMOKELESS TOBACCO MARKET AND ARE BRANDING THEIR SMOKELESS PRODUCTS AS AN EXTENSION OF CIGARETTE BRANDS, A COMPLEMENT TO BE USED IN SMOKE-FREE ENVIRONMENTS. Understanding this "dual-use" consumption pattern will be essential to developing an appropriate regulatory structure for smokeless tobacco.

Global patterns of smokeless tobacco use vary widely. The import and sale of smokeless tobacco products are banned in 40 countries and areas. In some countries, like Finland and Egypt, men use smokeless tobacco products in much greater numbers than women because such products are perceived as masculine; in countries like South Africa, Thailand, and Bangladesh, women use smokeless tobacco products more than men because they are seen as a discreet way to consume tobacco.

Research addressing smokeless tobacco is limited. Monitoring and surveillance systems are scarce, and significant research gaps exist in identifying ingredients, additives, and toxicities of smokeless tobacco products. Little is known about product pricing, substitution of smokeless tobacco for smoked tobacco, and youth susceptibility to smokeless tobacco use. Policies to control smokeless tobacco are underdeveloped. The integration of smokeless tobacco control measures into the wider framework of tobacco control can help to curb its use.

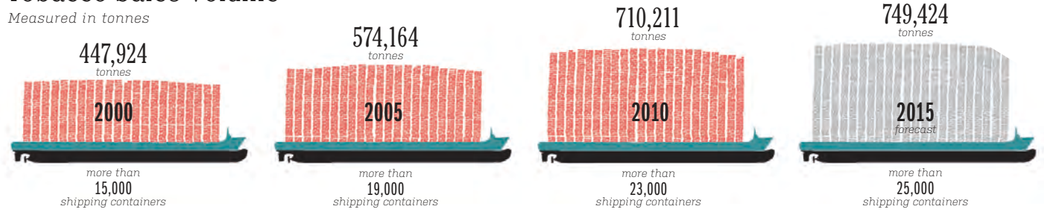
THE INDUSTRY SAYS:

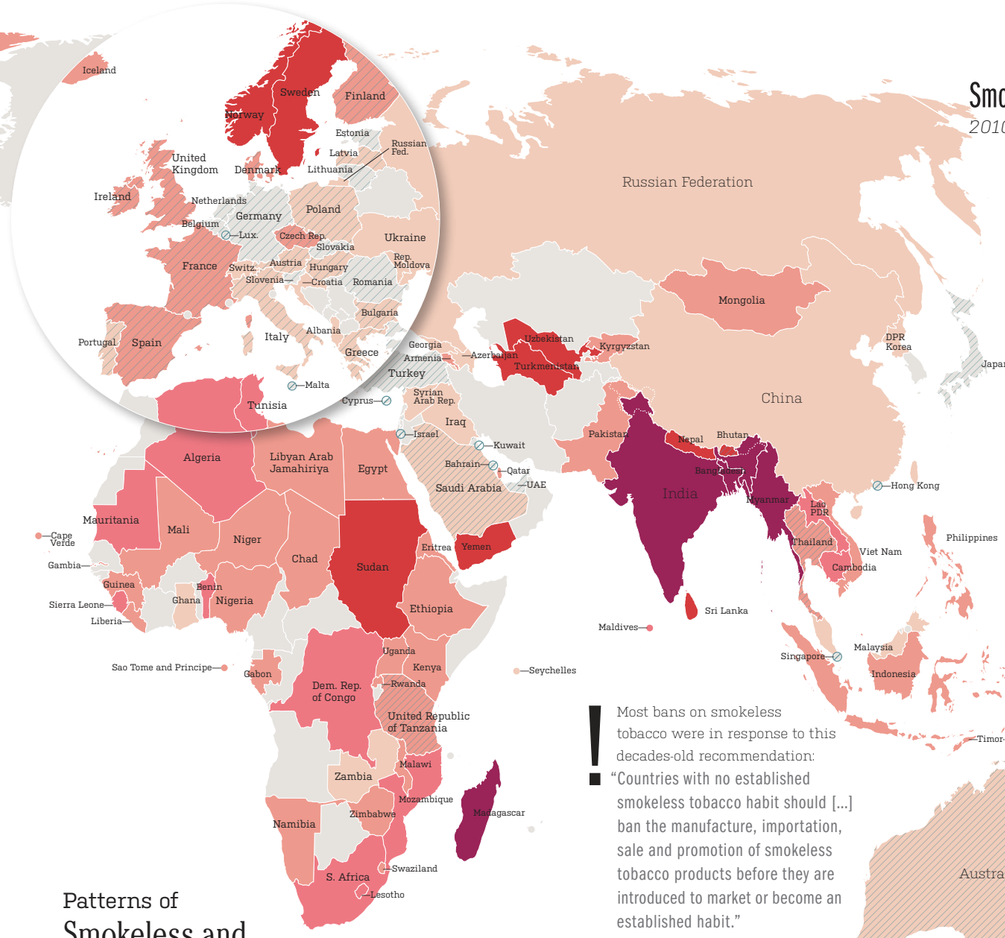
"We adopted our core strategy for growth: and that was to expand the smokeless tobacco category by converting adult smokers to smokeless tobacco."

Daniel Butler, President, U.S. Smokeless Tobacco Company, 2008

Global Smokeless Tobacco Sales Volume

Measured in tonnes





Prevalence of Adult Smokeless Tobacco Use

2010 or latest available

- less than 1%
- 1–4.9%
- 5–9.9%
- 10–19.9%
- 20% and Above
- No Data

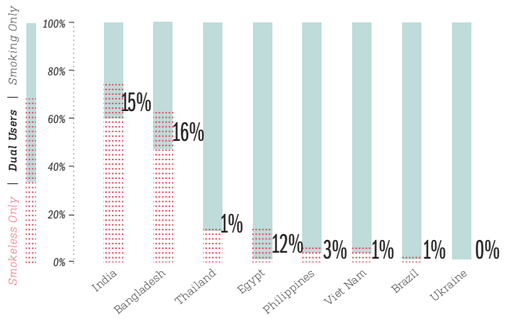
FULL OR PARTIAL BAN
on the manufacture, sale, or import of smokeless tobacco products

Most bans on smokeless tobacco were in response to this decades-old recommendation: "Countries with no established smokeless tobacco habit should [...] ban the manufacture, importation, sale and promotion of smokeless tobacco products before they are introduced to market or become an established habit."

World Health Organization, 1988

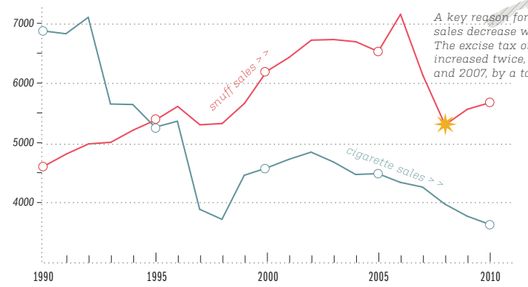
Patterns of Smokeless and Smoking Dual Tobacco Use

Among current tobacco users in selected Global Adult Tobacco Survey (GATS) countries, 2008–2010



Amount of Snuff vs. Cigarettes Sold

Measured in metric tonnes, Sweden, 1990–2010



A key reason for the 2007 snuff sales decrease was tax increases. The excise tax on snuff was increased twice, in January 2006 and 2007, by a total of 173%.

RESEARCH SAYS:

"Doctors and other health-care workers are most effective in assisting patients to quit when they serve as role models by not smoking themselves. Their effectiveness increases further if they are visibly involved in local and national tobacco control activities."

World Health Organization, 2011

! While over 93% of medical students in Hong Kong believe that health professionals should receive training in smoking cessation counseling, *only 38% of students have received formal training.*

Proportion of Countries Providing Cessation Support Services in the Offices of Health Professionals

2010

No data for 3.6% of countries

12.8% Services available in most offices

45.6% Services available in some offices

38.0% Services not available

Worldwide, health professionals are respected and trusted as opinion leaders and trendsetters. They have the ability to affect social norms and have led the charge for smoking cessation in high-income countries. It is important that this also happens in low- and middle-income countries, since overall smoking rates are unlikely to decline until physician rates decrease.

All health professionals have the responsibility to advise patients about life-changing decisions and health matters, such as the importance of quitting smoking and how to quit. Even brief smoking cessation interventions are effective, and cessation support can double quit rates. But health professionals must be educated about how to conduct these conversations. Training and education build confidence among health professionals and increase their ability to discuss smoking cessation with patients, which in turn leads to more cessation success.

Health professionals who are smokers are less likely to advise their patients to quit smoking. The smoking status of health professionals varies throughout the world based on socio-demographic patterns and the stages of the tobacco epidemic.

THE MEDICAL STUDENTS OF TODAY ARE THE DOCTORS OF TOMORROW, AND IT IS IMPORTANT THAT THESE STUDENTS RECEIVE FORMAL SMOKING CESSATION TRAINING AS PART OF THEIR MEDICAL CURRICULUM. Unfortunately, this formal training does not always occur, and in many parts of the world, medical students smoke at rates equal to or higher than those of the general population.

In addition to educating health professionals about tobacco cessation, health facilities, such as hospitals, clinics, and doctors' offices, must adopt smoke-free policies to protect against secondhand smoke exposure. Smoke-free policies should also be adopted in medical schools. In some countries, smoking rates among medical students increase during their schooling, a circumstance that proper policies can help prevent.

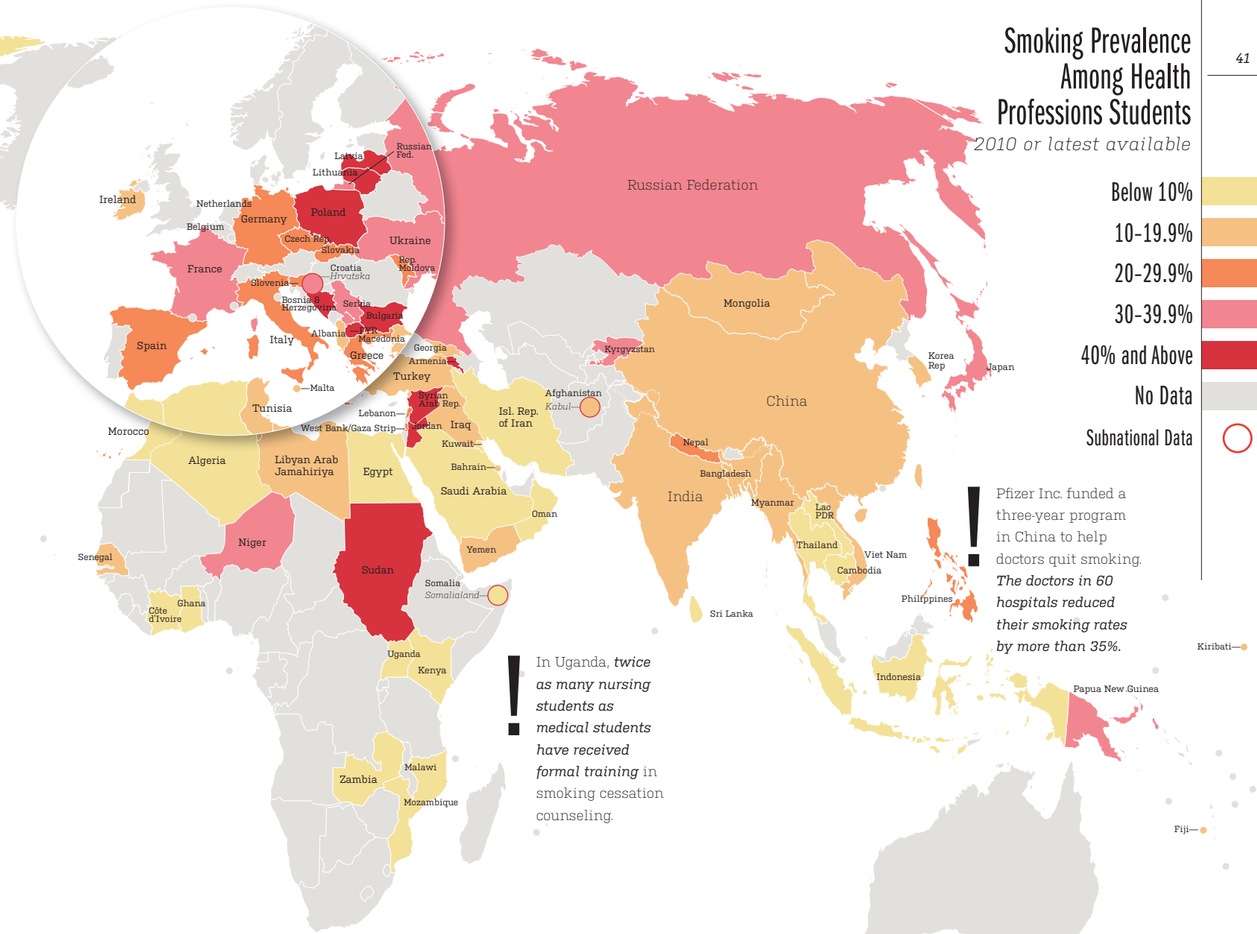
"20,679 physicians say 'Luckies are less irritating.'"

American Tobacco Company, US, 1931

! *Only 5% of medical students in Buenos Aires, Argentina, received formal training* in smoking cessation counseling.

Smoking Prevalence Among Health Professions Students

2010 or latest available

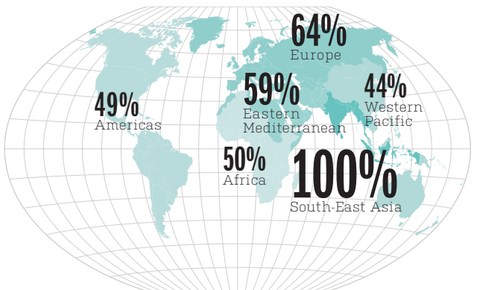


! In Uganda, *twice as many nursing students as medical students have received formal training* in smoking cessation counseling.

! Pfizer Inc. funded a three-year program in China to help doctors quit smoking. *The doctors in 60 hospitals reduced their smoking rates by more than 35%.*

Percent of Countries With Smoke-Free Health Facilities

2010 or latest available



Even Brief Tobacco Cessation Interventions Are Effective

All health professionals should screen patients for tobacco use and follow the five steps below:

1. **ASK** about tobacco use
2. **ADVISE** to quit
3. **ASSESS** interest in quitting
4. **ASSIST** in quitting
5. **ARRANGE** follow-up

RESEARCH SAYS:

"Smokers often do not realize that they pay twice for cigarettes. First with cash out of pocket, then later with their health or [their] lives."

AydaYurekli, World Bank, 2001

BETWEEN 2000 AND 2008,

TOTAL COSTS IN China ATTRIBUTABLE TO TOBACCO USE MORE THAN Quadrupled

2000
$7.2 BILLION

2008
$28.9 BILLION

Values include direct and indirect costs. Direct costs include all health-care expenditures for treating smoking-related illnesses. Indirect costs largely include the value of lost productivity and cost of premature deaths caused by smoking-related illnesses. Measured in US dollars.

RESEARCH SAYS:

"The monetary value of the health damage from a single pack of cigarettes is $35 to an American smoker."

Jonathan Gruber, Massachusetts Institute of Technology, Botond Köszegi, University of California, Berkeley, US, 2008

The Opportunity Costs of Smoking

Every society gives up the opportunity to buy something important when valuable resources are spent treating smoking-related illnesses.

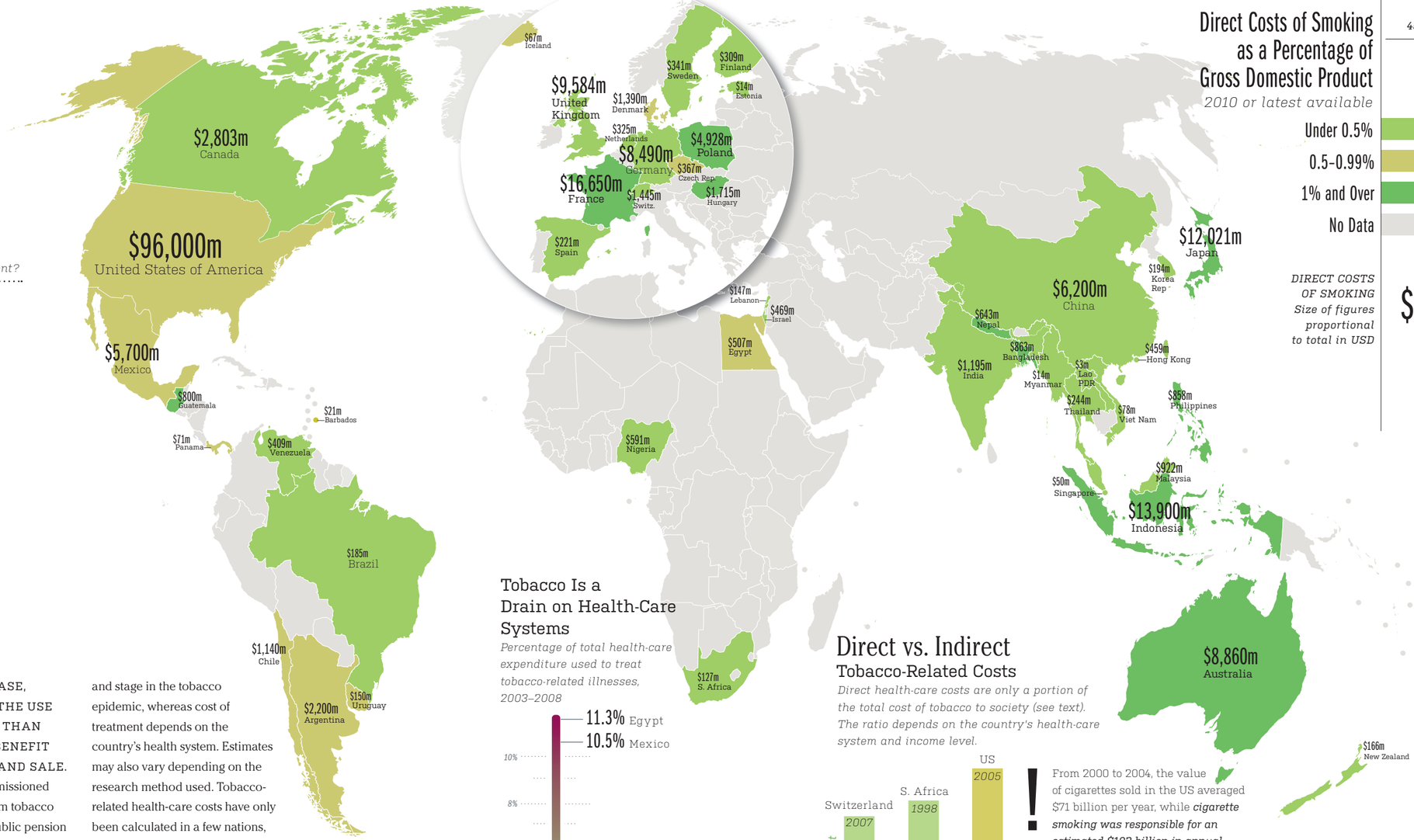
Direct cost of tobacco use in USD		*How else could these resources be spent?*
$9,584 million UK, *2008*	≈	SERVICES OF TRANSPORTATION DEPARTMENT *Government of the United Kingdom, 2010*
$1,140 million Chile, *2008*	≈	PUBLIC SAFETY PROGRAM *Chile Ministry of the Interior, 2008*
$922 million Malaysia, *2008*	≈	RURAL DEVELOPMENT PROGRAM *Government of Malaysia, 2007*
$244 million Thailand, *2006*	≈	SERVICES OF ENERGY DEPARTMENT *Government of Thailand, 2010*
$166 million New Zealand, *2004*	≈	ANNUAL SCHOOL CONSTRUCTION *New Zealand Ministry of Education, 2009*

This map reflects estimates of both private and public direct medical costs of treating tobacco-related illnesses, which are only a portion of the total cost of tobacco to society. Indirect costs such as losses in labor productivity, cigarette butt littering, fire damage, environmental harm from destructive farming practices, and the intangible suffering of the victims and their families are not included. These losses further strengthen the argument that tobacco consumption has serious economic consequences.

Tobacco companies insist that their business is essential for global and local economies, ignoring the enormous resource drain that the use of tobacco products has on society as a whole.

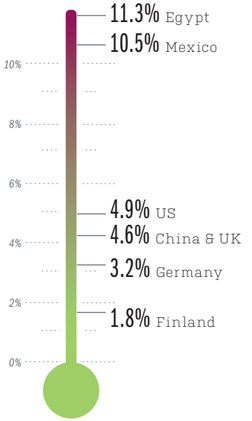
THE BURDEN OF DEATH, DISEASE, AND DISABILITY CAUSED BY THE USE OF TOBACCO PRODUCTS MORE THAN OUTWEIGHS ANY ECONOMIC BENEFIT FROM THEIR MANUFACTURE AND SALE. The tobacco industry has even commissioned studies that claim early mortality from tobacco use eases the financial burden on public pension funds—an argument never advanced to combat prevention efforts against HIV/AIDS, tuberculosis, or diabetes. This grim conclusion is not only immoral, but also incorrect.

The direct cost of tobacco-related illnesses is determined by both the number of persons being treated and the cost of treatment. The number of patients depends on a country's population and stage in the tobacco epidemic, whereas cost of treatment depends on the country's health system. Estimates may also vary depending on the research method used. Tobacco-related health-care costs have only been calculated in a few nations, primarily due to limited or poor-quality data, dearth of research funding, and absence of research capacity. As health systems of low- and middle-income countries develop along with their economies, the medical costs of tobacco-related diseases will continue to grow, and so will the need to evaluate these costs.



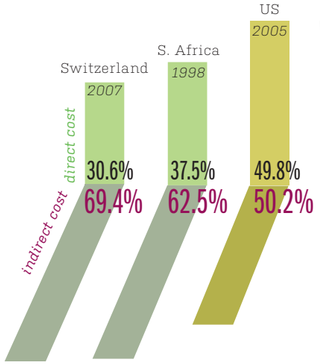
Tobacco Is a Drain on Health-Care Systems

Percentage of total health-care expenditure used to treat tobacco-related illnesses, 2003–2008



Direct vs. Indirect Tobacco-Related Costs

Direct health-care costs are only a portion of the total cost of tobacco to society (see text). The ratio depends on the country's health-care system and income level.



From 2000 to 2004, the value of cigarettes sold in the US averaged $71 billion per year, while ***cigarette smoking was responsible for an estimated $193 billion in annual health-related economic losses*** ($96 billion in direct medical costs and approximately $97 billion in lost productivity).

Direct Costs of Smoking as a Percentage of Gross Domestic Product

2010 or latest available

Under 0.5%
0.5–0.99%
1% and Over
No Data

DIRECT COSTS OF SMOKING Size of figures proportional to total in USD

$

CONSUMERS SAY:

"Eggs? Where will the money come from to buy them?"

Hasan, a rickshaw puller from Bangladesh who could feed each of his three children an egg a day if he bought eggs instead of tobacco, 2001

Money spent on tobacco often reduces resources available for basic necessities, such as nutrition, health care, and education. These opportunity costs impose a significant burden on tobacco users and their families, burying many of them in a vicious cycle of poverty that can span generations. SPENDING ON TOBACCO PRODUCTS DIVERTS RESOURCES FROM ESSENTIAL GOODS AND SERVICES, INCLUDING EDUCATION, FOOD, CLOTHING, SHELTER, AND TRANSPORTATION. Expenditures on tobacco inhibit progress toward UN Millennium Development Goals.

The retail price of a pack of cigarettes varies among and within nations. Cigarette prices are influenced by many factors, including the tobacco market structure (a monopoly, oligopoly, or competitive market) and tobacco tax system (the size and structure of the excise tax—see Chapter 29 – *Tobacco Taxes*). Significant price differentials may exist between so-called premium cigarette brands and economy brands, a result of a tobacco industry strategy to target specific segments of the population, or of the tax structure favoring ad-valorem over specific tax. Specific tax, established as a fixed amount of money collected by the government per cigarette, would result in more uniform cigarette prices, reducing the price gap between cheap and premium brands. This would encourage smokers to quit or lower consumption as opposed to simply switching to cheaper cigarette brands. Making the prices of all tobacco products more homogeneous would limit consumers' option to substitute other tobacco products to avoid price or tax increases. Therefore, efforts should be made to equalize taxes across different tobacco products.

! In striving for greater profits, *the big tobacco firms have pushed the average price of cigarettes up in rich countries,* such as Britain — where 20 cigarettes now cost more than £6 a pack — *while hammering down the price paid to tobacco growers in poorer countries,* such as India and Malawi.

In Viet Nam, *smokers spent 3.6 times more on tobacco than on education, 2.5 times more than on clothing,* and *1.9 times more than on health care* in 2003.

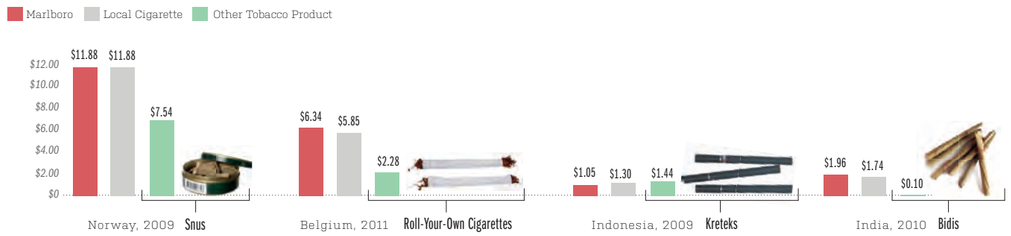
Tobacco consumption *impoverished roughly 15 million people in India in 2004.*

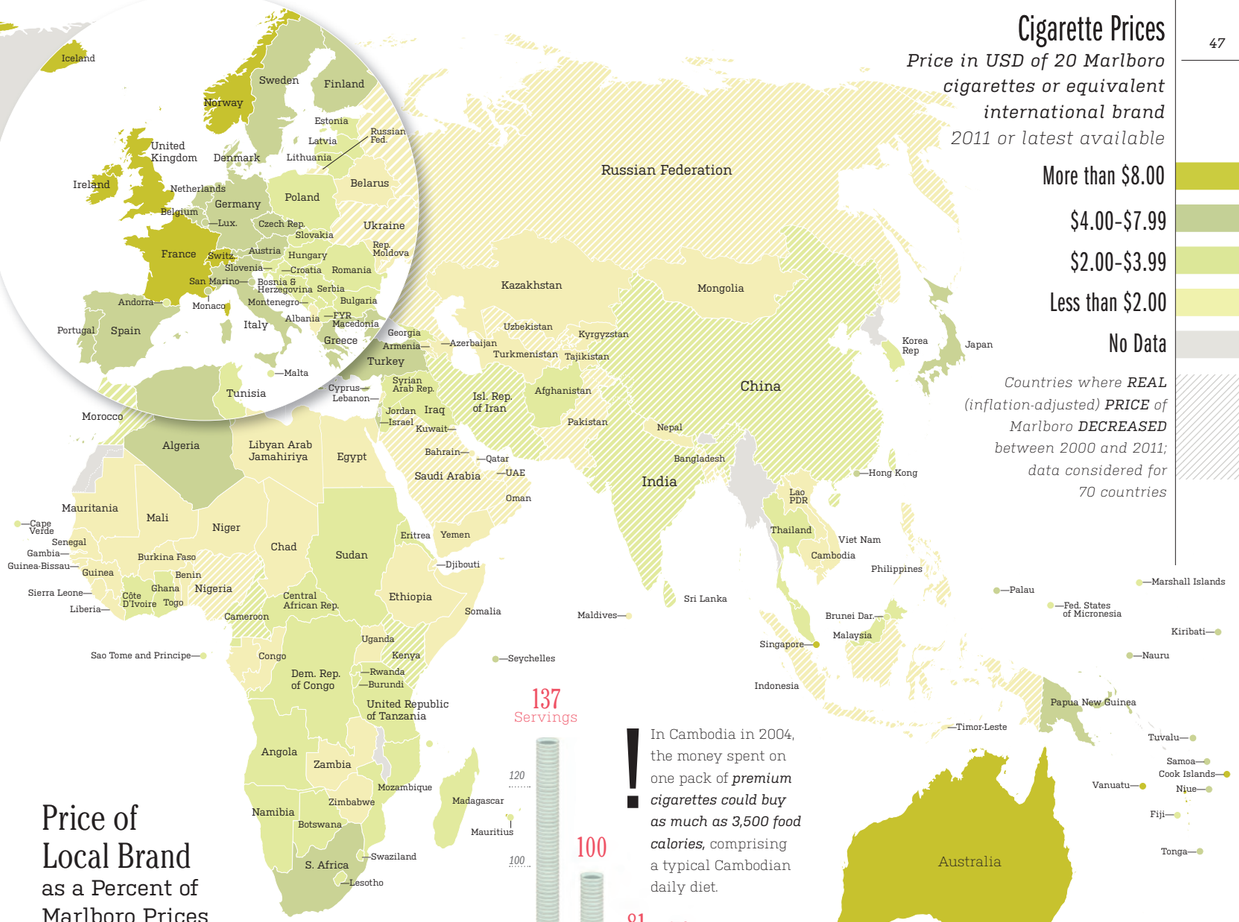
Students in *Niger spent 40% of their income on cigarettes in 2003.*

Price of Other Tobacco Products

Compared to Cigarettes

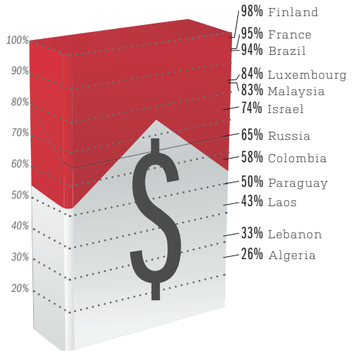
per 20 sticks/units in USD





Price of Local Brand as a Percent of Marlboro Prices

The greater the difference in cigarette prices, the easier for the smoker to switch to a cheaper brand (downtrade).



Cigarette Prices

Price in USD of 20 Marlboro cigarettes or equivalent international brand

2011 or latest available

More than $8.00

$4.00-$7.99

$2.00-$3.99

Less than $2.00

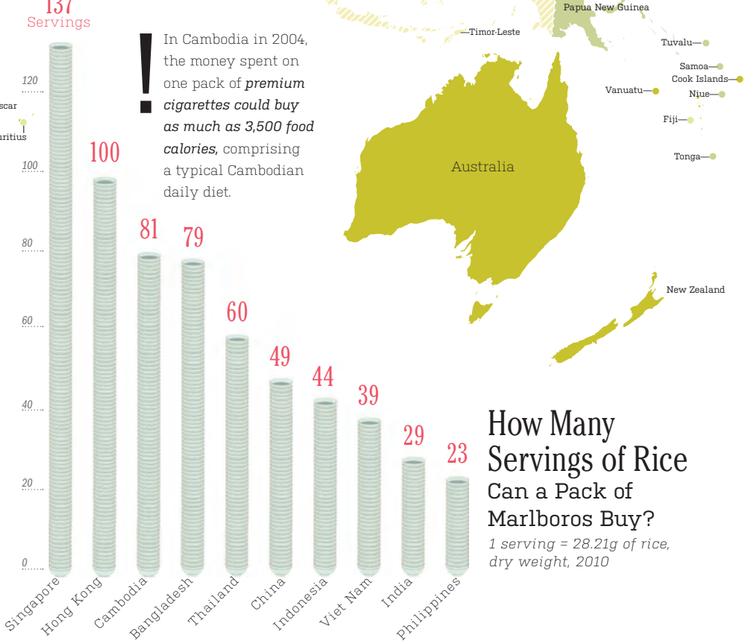
No Data

*Countries where **REAL** (inflation-adjusted) **PRICE** of Marlboro **DECREASED** between 2000 and 2011; data considered for 70 countries*

! In Cambodia in 2004, the money spent on one pack of *premium cigarettes could buy as much as 3,500 food calories,* comprising a typical Cambodian daily diet.

How Many Servings of Rice Can a Pack of Marlboros Buy?

1 serving = 28.21g of rice, dry weight, 2010



RESEARCH SAYS:

> "If real cigarette prices do not rise faster than consumer purchasing power, tobacco becomes relatively more affordable and consumption increases."
>
> *World Health Organization, WHO Report on the Global Tobacco Epidemic, 2011*

In recent decades, many low- and middle-income countries have achieved unprecedented economic growth. The economies of many countries in Asia, Eastern Europe, and South America have grown at annual rates of 6% or more. Rapid growth increases consumers' purchasing power, and people discover that many things, including cigarettes, become more affordable. Therefore, fast-growing countries face greater tobacco control challenges.

Consumers' decisions to buy cigarettes are influenced by their available income and the price of cigarettes. Economists call this combination "affordability," expressed as the percentage of a worker's income or duration of work time required to buy a product. The more income required to purchase cigarettes or the more one must work to earn enough money for cigarettes, the less affordable cigarettes are.

Despite cigarette prices being much higher in high-income countries, cigarettes are on average more affordable in those countries. For example, in 2009 THE MEDIAN EMPLOYED PERSON IN KENYA HAD TO WORK ALMOST AN HOUR TO BUY A PACK OF THE CHEAPEST CIGARETTES, WHILE THE CHEAPEST CIGARETTES COST JUST OVER 11 MINUTES OF LABOR FOR THE MEDIAN WORKER IN JAPAN. In low- and middle-income countries, cigarettes are generally becoming more affordable as economies develop, with the highest increase in affordability within the last decade being observed in China, Libya, and the Russian Federation.

The growth in average income significantly affects the affordability of cigarettes, and in that sense is bad for public health efforts to reduce consumption by making tobacco products less affordable. But tobacco control policymakers cannot argue against economic growth. The best way to make cigarettes less affordable is to increase tobacco taxes and prices (see Chapter 29 – *Tobacco Taxes*). To the extent that tobacco control is a priority for government and policymakers, tobacco taxes and prices should be adjusted to reduce affordability.

Minutes of Labor

Required to Purchase a Pack of Cigarettes

At median wage in 2009

Cigarette Affordability

Relative Income Price (RIP), 2009*

< < HIGHLY AFFORDABLE | LESS AFFORDABLE > >

- 10% and Above
- 7.5–9.99%
- 5–7.49%
- 2.5–4.99%
- Under 2.5%

No Data

Countries where cigarettes became at least ***TWICE AS AFFORDABLE*** *between 2000 and 2010, more than a 50% drop in RIP*

Change in Affordability

2000–2010

By Country Income

10.1%
High-Income Countries

< < INCREASE in RIP > >

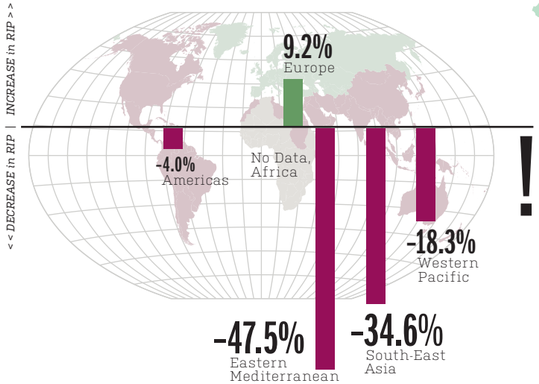
Cigarettes Became LESS AFFORDABLE

Cigarettes Became MORE AFFORDABLE

< < DECREASE in RIP

-21.7%
Low- and Middle-Income Countries

By WHO Region



In China, cigarettes have become much more affordable over the last 10 years. In 2000 nearly 14% of the average annual per capita income was needed to buy 100 packs of the cheapest cigarettes. In 2010 this number dropped to less than 3%.

*Relative Income Price (RIP) = Percentage of annual per capita income, measured by per capita GDP, needed to purchase 100 packs of cheapest cigarettes.

RESEARCH SAYS:

"Tobacco use is unlike other threats to global health. Infectious diseases do not employ multinational public relations firms. There are no front groups to promote the spread of cholera. Mosquitoes have no lobbyists."

WHO Zeltner Report, 2000

BETWEEN 2000 AND 2010,
WORLD CIGARETTE PRODUCTION INCREASED BY 12%.

TODAY, CIGARETTE COMPANIES PRODUCE NEARLY 6 Trillion CIGARETTES PER YEAR.

1 PACK =
30 BILLION
CIGARETTES

ADVOCATES SAY:

"…they cheated the farmers. Tobacco farmers have families, they run businesses, they work real hard on the land…. I think they are the innocent people in this."

Harvey Strosberg, Lawyer, Canada, 2010

Tobacco is known to be grown in at least 124 countries, occupying 3.8 million hectares of agricultural land. There are only 5 countries in which tobacco is not grown, and it is unknown whether or not tobacco is grown in the remaining countries of the world. World tobacco production peaked in 1997 at over 9 million tonnes and has since declined by almost a quarter to 7.1 million tonnes in 2009.

Tobacco is primarily grown in low- and middle-income countries, where it is a contributor to undernourishment, because the land is used to grow tobacco rather than food. IN 2009, SIX OF THE TOP TEN TOBACCO-PRODUCING COUNTRIES HAD UNDERNOURISHMENT RATES BETWEEN 5% AND 27%. In 2008 in Malawi, a top tobacco-producing country with 27% undernourishment, each hectare of land devoted to tobacco produced 1 tonne of tobacco leaf; a hectare of land growing potatoes produced 14.6 tonnes in the same year.

Tobacco farming negatively affects the environment. Deforestation results from wood being needed for the curing process and for hanging leaves to dry. Each year, 20,000 hectares of forests are cleared to cure tobacco. Tobacco leaches the soil of many nutrients, so fertilizers and pesticides are heavily used in tobacco production. These chemicals endanger workers and create runoff that pollutes the environment.

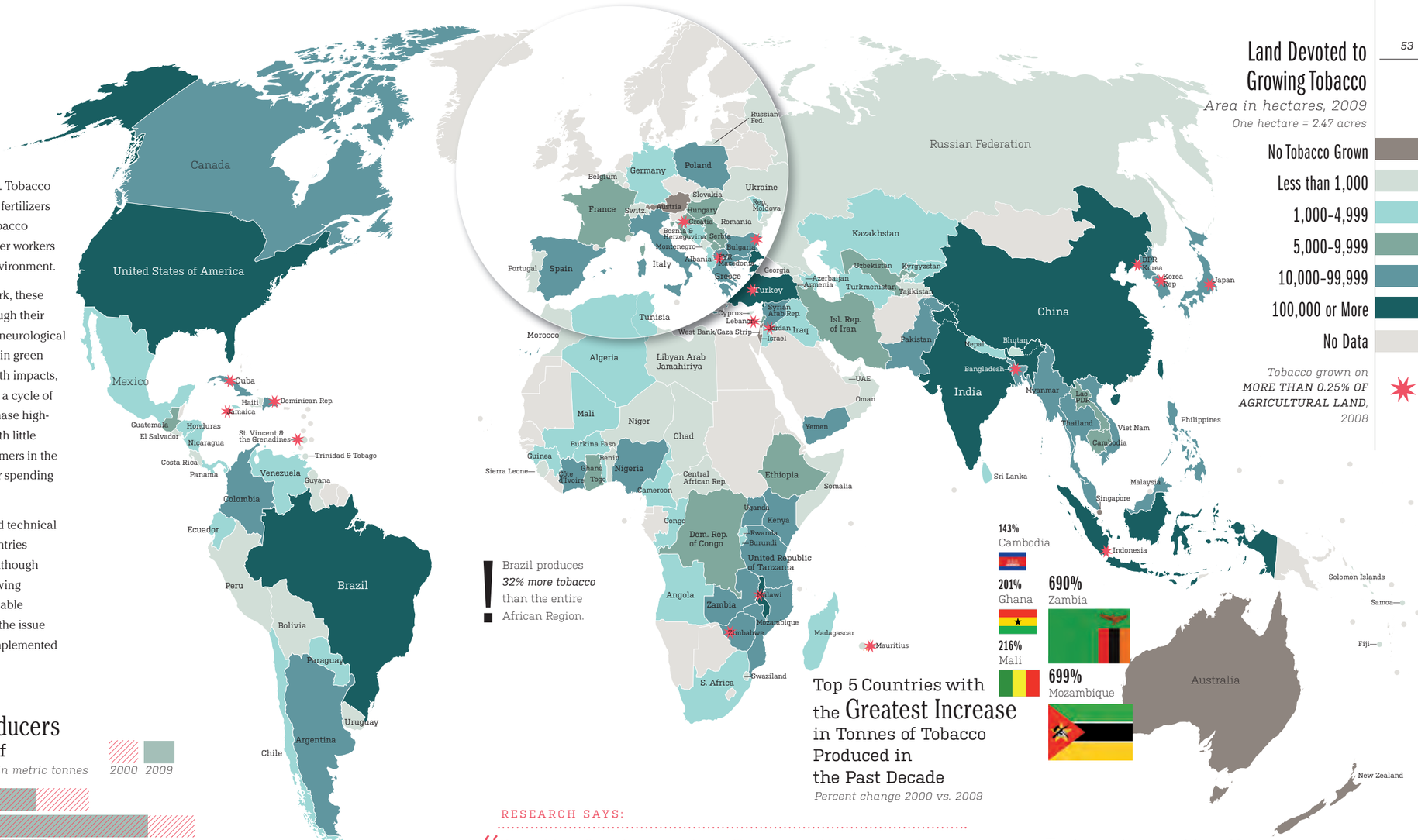
No matter where tobacco farmers work, these individuals experience illnesses through their exposure to pesticides (which cause neurological damage) and nicotine (which results in green tobacco sickness). In addition to health impacts, many tobacco farmers are trapped in a cycle of poverty, as they are required to purchase high-cost equipment and infrastructure with little profit remaining. In 2003, tobacco farmers in the US received less than 1% of consumer spending on tobacco.

The WHO FCTC calls for financial and technical assistance to tobacco growers in countries dependent on tobacco agriculture. Although shifting from growing tobacco to growing economically and environmentally viable alternatives, such as food, addresses the issue of malnutrition, few countries have implemented such measures.

Land Devoted to Growing Tobacco

Area in hectares, 2009

One hectare = 2.47 acres



No Tobacco Grown
Less than 1,000
1,000–4,999
5,000–9,999
10,000–99,999
100,000 or More
No Data

Tobacco grown on ***MORE THAN 0.25% OF AGRICULTURAL LAND****, 2008*

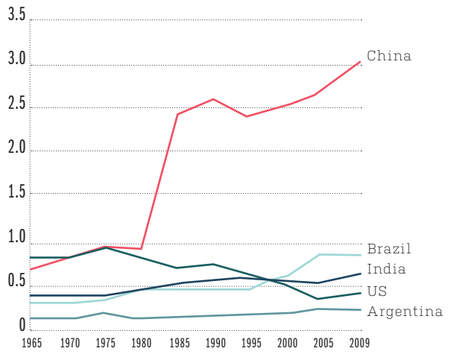
Brazil produces *32% more tobacco* than the entire African Region.

Top 5 Countries with the Greatest Increase in Tonnes of Tobacco Produced in the Past Decade

Percent change 2000 vs. 2009

Trend in Tobacco Production

Production quantity in million metric tonnes for selected countries, 1965–2009



Leading Producers of Tobacco Leaf

Production quantity in metric tonnes 2000 2009

RESEARCH SAYS:

"You can't just tell people not to smoke, just like you can't tell farmers to stop planting. You need to show them a different way."

Zhao Yaqiao, Yunnan Agricultural University, China, 2011

China produces 43% of the world's tobacco, which is *more tobacco than the other top nine tobacco-producing countries combined.*

RESEARCH SAYS:

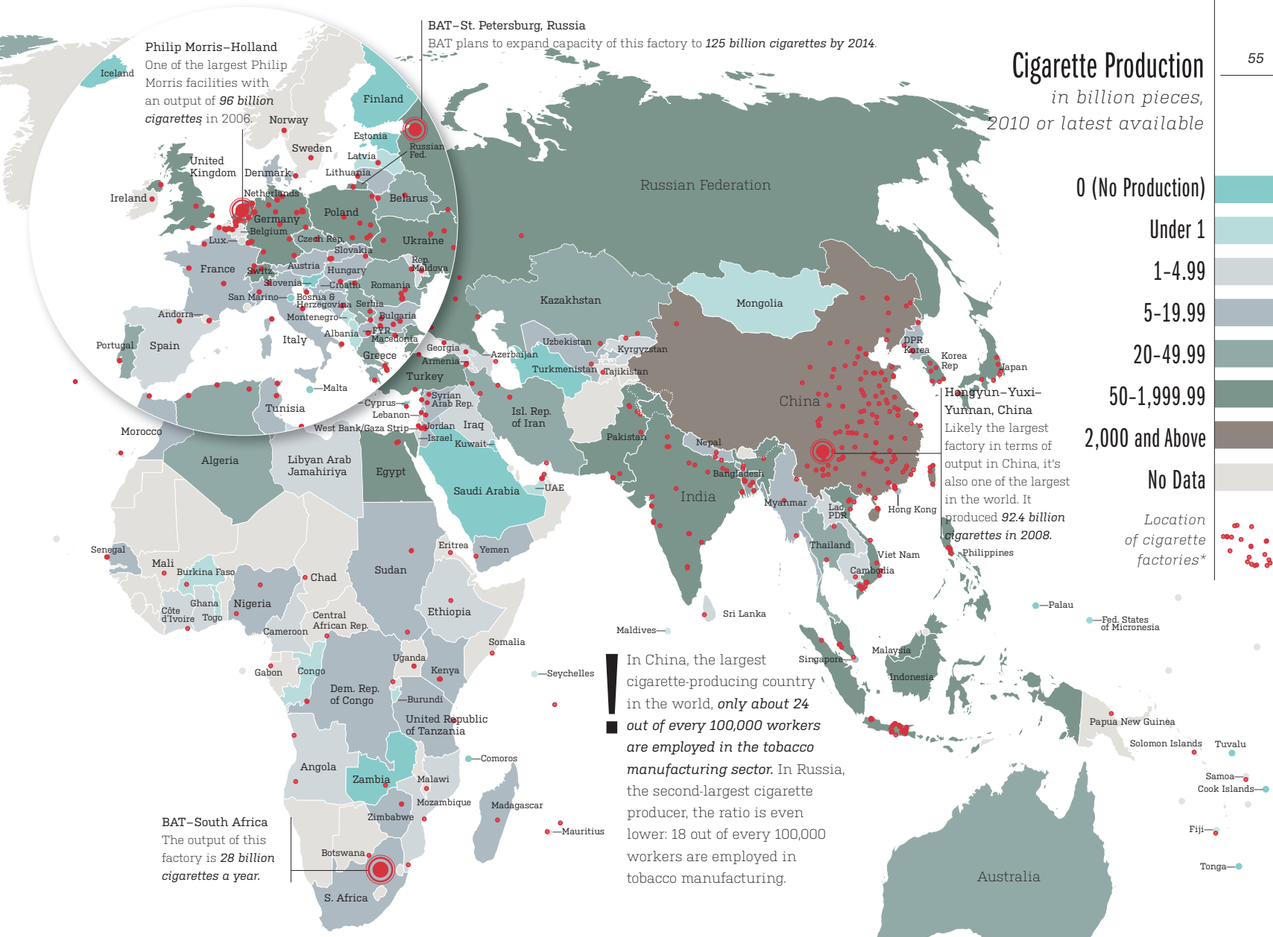
"Cigarettes are being extruded – and therefore smoked – at a rate of more than 300 million miles per year, which is about 34,000 miles per hour, 24 hours a day."

Robert Proctor, Stanford University, US, 2011

There are well over 500 cigarette factories spread around the globe, each responsible for thousands of premature deaths and massive, avoidable costs to society. THESE FACTORIES COLLECTIVELY PRODUCE NEARLY 6 TRILLION CIGARETTES EVERY YEAR, ROUGHLY 12% MORE THAN A DECADE AGO. In 2010, cigarettes were produced in the majority of countries worldwide, and about a million cigarettes were manufactured every five seconds. That year, 41% of the world's cigarettes were produced in China, followed by Russia (7%), the US (6%), Germany (4%), and Indonesia (3%).

Where are these cigarettes manufactured, wrapped, and boxed for shipment? Cigarette factories are located in every corner of the world, concentrated in Europe and China, and new ones are still being built. These factories are often hidden from sight behind high walls, given vague titles like "manufacturing facility" or "production center," and serviced by unmarked trucks. That is not true in China, however, where smoking is much more socially acceptable than in other countries; factories are highly visible and prominently featured in their communities.

With advances in satellite imaging technology, projects such as Stanford University's Cigarette Citadels now make it possible to locate hundreds of these factories online. For instance, Internet users can view one of the world's largest cigarette factories in Bergen op Zoom, near the Hague, Netherlands. This facility, built by Philip Morris in the 1980s, currently manufactures about 96 billion cigarettes annually, with most exported to other European countries and Japan. About 90,000 people could die prematurely every year as a result of consuming cigarettes manufactured in this single facility.



Cigarette Production

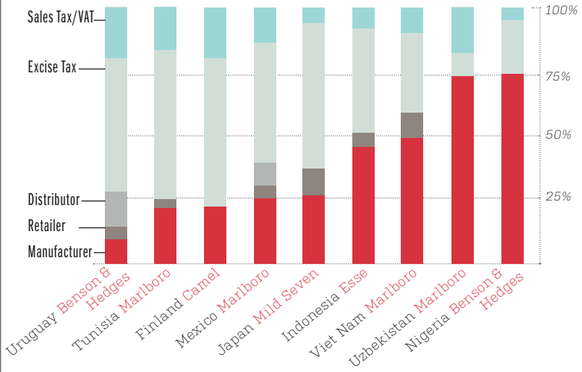
in billion pieces, 2010 or latest available

- 0 (No Production)
- Under 1
- 1–4.99
- 5–19.99
- 20–49.99
- 50–1,999.99
- 2,000 and Above
- No Data

*Location of cigarette factories**

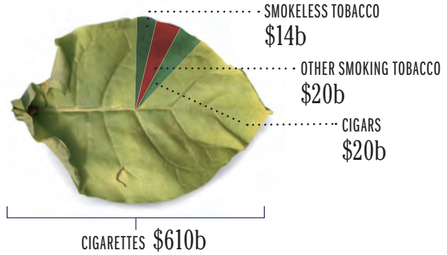
Who Is Getting the Money Spent on a Cigarette?

Distribution of value of a premium cigarette, 2009–2010



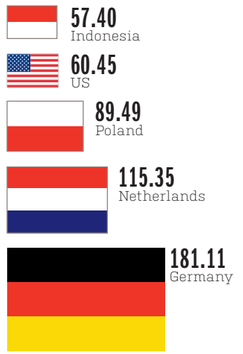
Cigarettes Dominate, but Are Not the Only Tobacco Product of the Tobacco Industry

Value of global tobacco industry production measured at retail sales price (all taxes included) in 2010, in billions, USD



Top 5 Cigarette-Exporting Countries

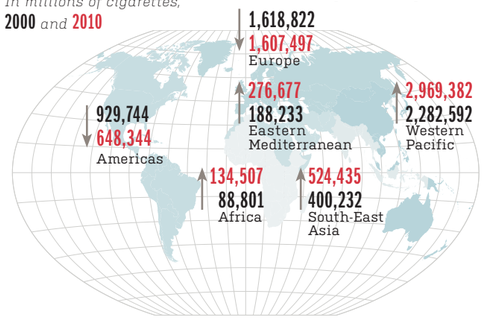
Number of cigarettes produced in the country that were exported in 2010, in billions



Global Cigarette Production

In millions of cigarettes, **2000** *and* **2010**

Between 2000 and 2010, cigarette production noticeably shifted from the western to the eastern part of Europe.



*http://tobaccoresearch.stanford.edu

RESEARCH SAYS:

"These companies remain some of the most profitable in the world. This is thanks in part to their endless inventive ways of undermining and circumventing regulation."

Anna Gilmore, University of Bath, UK, 2011

In recent years, publicly traded tobacco companies have consolidated through privatization and mergers. Today there are five major private tobacco companies: Philip Morris International, Altria/Philip Morris USA, Japan Tobacco International, British American Tobacco, and Imperial Tobacco. In addition to these corporations, there are sixteen state-owned tobacco companies that are the leading cigarette manufacturers in specific countries. CHINA NATIONAL TOBACCO CORPORATION IS THE LARGEST STATE-OWNED TOBACCO COMPANY, PRODUCING MORE CIGARETTES THAN ANY OTHER COMPANY IN THE WORLD. In 2008 CNTC manufactured 2.1 trillion of the 5.9 trillion cigarettes produced worldwide.

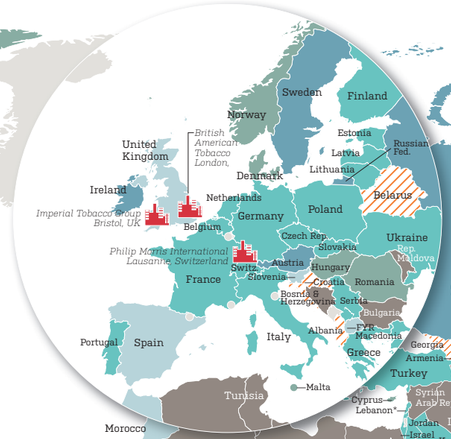
As the tobacco market has consolidated under a few major companies, the direction of these companies is beginning to change. Traditionally, company buyouts took place in order to consolidate and expand cigarette market share. Now tobacco companies are branching out into other areas of tobacco products and technology. In recent years, the major tobacco companies have purchased corporations that produce oral tobacco, such as snus. In 2011 Philip Morris International bought patent rights to a technology that delivers nicotine-infused aerosol. In the same year, British American Tobacco established Nicoventures, a separate company dedicated to creating alternative nicotine products that offer the same experience expected from cigarettes without some of the risks of smoking.

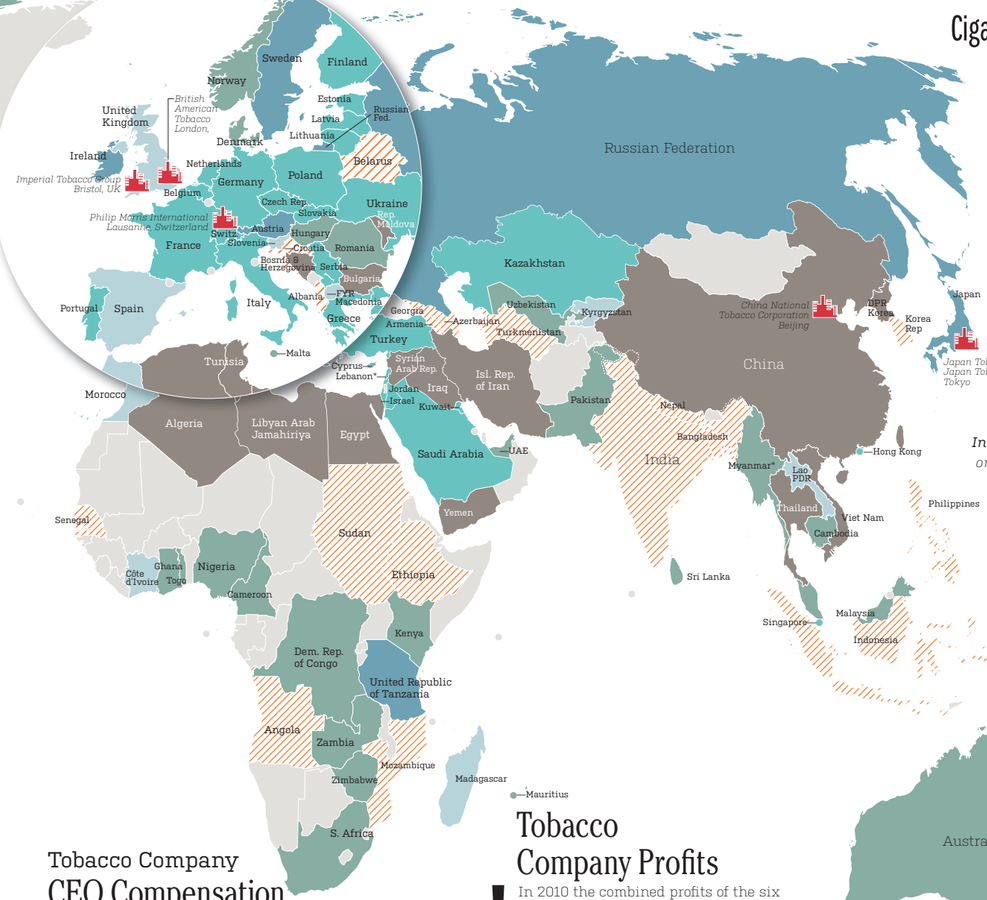
Estimates of revenues from the global tobacco industry vary widely but are likely approaching half a trillion dollars annually. Although tobacco is ultimately a financial burden on the governments and health-care systems of countries, it is also a source of government revenue, through tobacco taxes and additional profit for those countries with state-owned tobacco companies. Each year the tobacco industry in China contributes over 7% of the central government's total revenue. If Big Tobacco were a country, it would have a gross domestic product (GDP) similar to that of Poland and Sweden.

THE INDUSTRY SAYS:

"Altria Group has outperformed the S&P 500 every year since 2000 and has increased its dividend 44 times in the last 42 years. Its scale, balance sheet strength and improved operational focus make the company a compelling consumer products investment opportunity, and enable the company to have large-scale economic impact."

Altria website, US, 2011





Cigarette Market Share

by country, 2008

- Philip Morris USA/ Philip Morris International
- British American Tobacco
- Imperial Tobacco Group
- Japan Tobacco/ Japan Tobacco International
- State-Owned Tobacco Company
- Other
- No Data

International Headquarters or Operations Centers, 2011

**Myanmar and Lebanon have state-owned tobacco companies, but as of 2008 the state-owned companies were not the leading tobacco manufacturer in those countries*

Global Cigarette Market Share

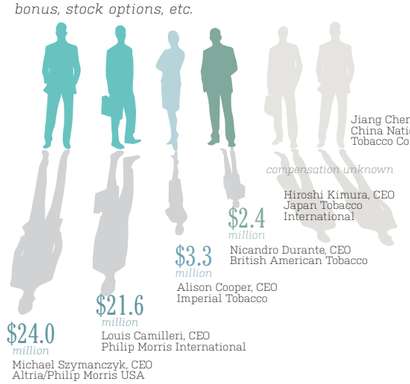
Percent of total number of cigarettes produced, 2000 and 2008

Totals might not sum due to rounding.

Philip Morris International leads the cigarette market in volume of cigarettes and is "the most profitable publicly traded tobacco company in the world."

Tobacco Company CEO Compensation

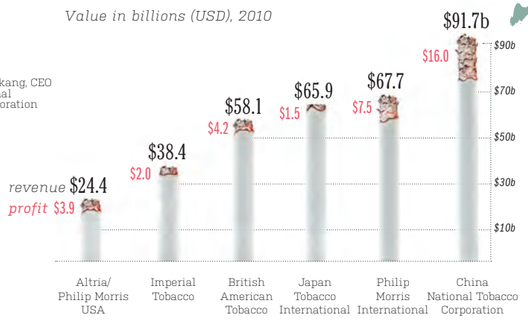
2010 compensation includes annual salary, bonus, stock options, etc.



Tobacco Company Profits

In 2010 the combined profits of the six leading tobacco companies was *$35 billion.* This was equal to the combined profits of Coca-Cola, Microsoft, and McDonald's in 2010.

Value in billions (USD), 2010



Total Revenue, for top 6 companies

$346.2 billion

Total Profit (ash) for top 6 companies

$35.1 billion

Profit equals net earnings after taxes and dividends

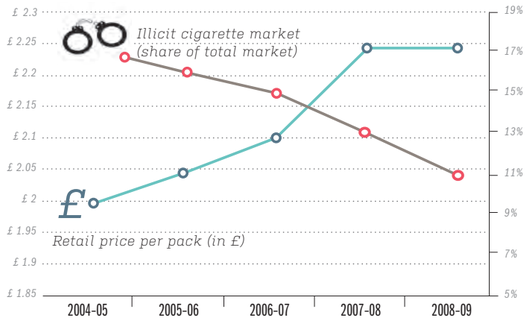
RESEARCH SAYS:

"Smuggling of cigarettes gives opportunities for organized crime networks to survive and may increase the general level of corruption in a country."

WHO, Western Pacific Regional Office, 2000

Cigarette Prices and Illicit Cigarette Trade in the UK

Contrary to tobacco industry claims, the increase in retail price has not led to any corresponding increase in illicit trade.



If illicit trade were eliminated, governments worldwide would gain at least *$31.3 billion a year in tax revenue,* and from 2030 onward, *more than 164,000 premature deaths would be avoided annually due to higher average cigarette prices.*

The share of the illicit cigarette trade in the global cigarette market (estimated at 9–11%) has remained relatively stable since 2000, even though some countries have managed to reduce the penetration of illicit cigarettes within their markets (e.g., UK). On average, this percentage is significantly higher in low- and middle-income countries than in high-income countries.

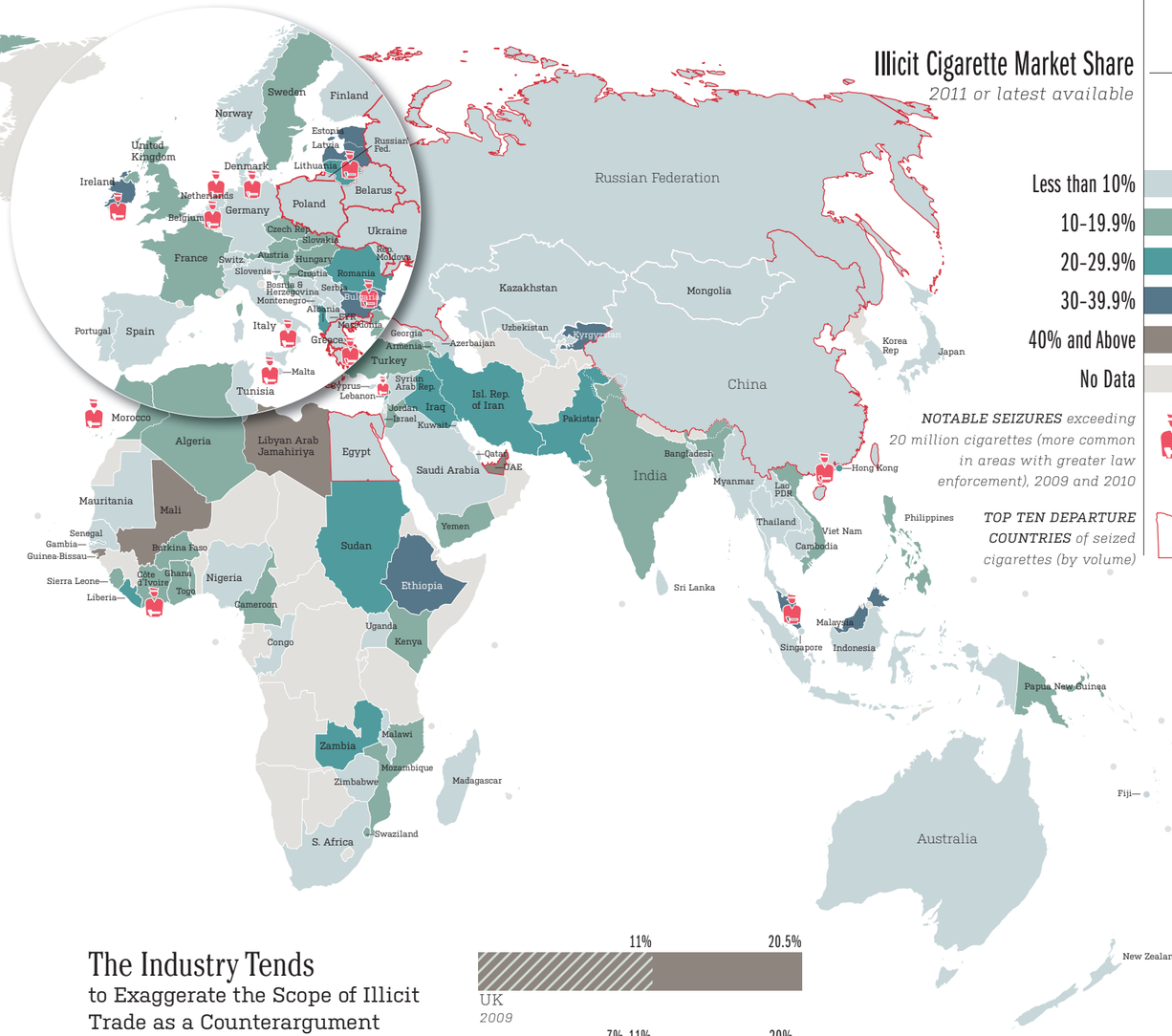
Illicit trade in tobacco products has serious health, economic, and social implications. Circumventing tobacco taxes undermines tax and price policies, which are among the most effective mechanisms to control tobacco use, as well as other tobacco control measures, such as youth access laws or mandatory health-warning labels. Tobacco smuggling can also lead to higher levels of corruption. Illicit cigarette trade is highly profitable for the transnational tobacco companies, allowing them to circumvent tobacco taxation. In Canada, the industry was found guilty of organizing illicit trade and paid billions of dollars in penalties.

The illicit tobacco trade is addressed by Article 15 of the WHO Framework Convention on Tobacco Control (WHO FCTC). Parties to the Convention are negotiating a protocol that builds upon the original treaty and aims to strengthen international cooperation in fighting the illicit tobacco trade. Despite the irreconcilable conflicts of interest between the tobacco industry and the public health community, the industry is seeking to enter WHO FCTC illicit trade protocol negotiations and national-level illicit trade control activities. In many parts of the world, the tobacco industry works closely with governments to combat illicit trade. This collaboration involves many risks and conflicts with Article 5.3 of the WHO FCTC.

THE TOBACCO INDUSTRY HAS CONSISTENTLY ARGUED THAT TOBACCO TAX INCREASES CREATE MORE ILLICIT TRADE. HOWEVER, NO RESEARCH EVIDENCE SUPPORTS THIS CLAIM. On the contrary, evidence shows that factors other than tax and price are more important determinants of illicit tobacco trade, and that illicit trade is generally lesser where cigarette prices are higher. Policies that can decrease illicit trade include licensing all participants in the tobacco business, introducing enhanced tax stamps and higher trafficking penalties, and tracking tobacco product packages.

Illicit Cigarette Market Share

2011 or latest available

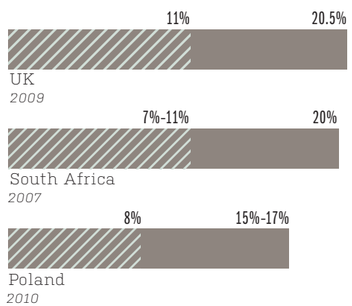


The Industry Tends

to Exaggerate the Scope of Illicit Trade as a Counterargument Against Tobacco Control Measures

Estimates of illicit cigarette trade from the tobacco industry vs. the estimates from academic studies

As a percent of total consumption

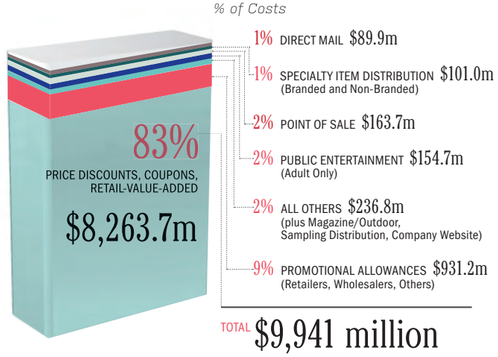


INDUSTRY SAYS:

> "If you can market a product that kills people, you can sell anything."
>
> *Chris Reiter, R.J. Reynolds Campaign Program Manager, US, 2003*

Cigarette Marketing Expenditures

2008, in millions (USD)



THE TOBACCO INDUSTRY CLAIMS THAT IT DOES NOT MARKET TO CHILDREN AND THAT THE PURPOSE OF ITS ADVERTISING IS ONLY TO ENCOURAGE ADULT SMOKERS TO SWITCH BRANDS. US Federal Judge Gladys Kessler found this argument baseless, and concluded that tobacco advertising contributes to youth smoking. Despite increasing restrictions on marketing and advertising, tobacco companies continue to spend billions of dollars annually to maintain brand loyalty among current smokers, to influence young people to use tobacco, and to keep smokers addicted.

In 2008, $9.9 billion was spent on cigarette advertising and promotion in the US alone, and an additional $548 million was spent on smokeless tobacco marketing. This equated to more than $34 being spent on tobacco marketing for every man, woman, and child in the US that year.

Mass media tobacco advertising is banned in many countries, but tobacco companies are utilizing other marketing techniques to attract and retain smokers. In some countries these methods include advertisements at the point of sale, promotional allowances paid to retailers to facilitate product placement, promotions such as "buy one, get one free," and price discounts. Price discounts include the costs that cigarette companies incur when they pay cigarette retailers and wholesalers to reduce the overall price of cigarettes. In the US in 2008, price discounts, coupons, and retail-value-added promotions accounted for 83% of all tobacco marketing expenditures.

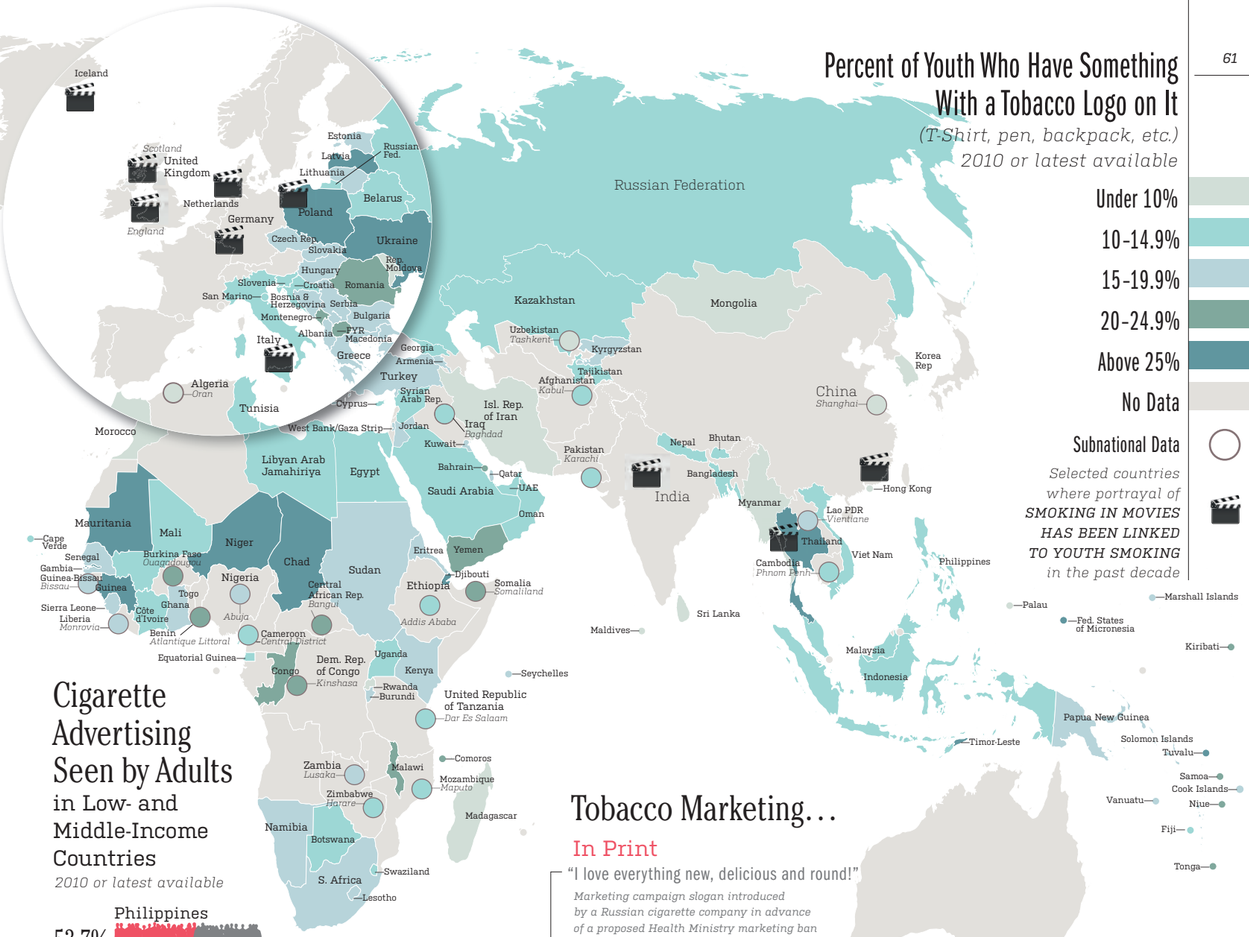
In addition to these techniques, tobacco companies are actively engaged in brand-stretching and other strategies to avoid regulation and marketing bans. They also utilize the Internet and other new media. The Internet allows participation and engagement unlike any other form of media, and has great potential for tobacco advertising. Additional attention must be paid to the use of the Internet in cigarette marketing, particularly social media sites.

Continued implementation of the WHO FCTC and its provisions will increase comprehensive tobacco advertising, marketing, promotion, and sponsorship bans throughout the world.

! *British American Tobacco and Philip Morris researched the Chinese culture of gift giving* and subsequently marketed cigarettes to strengthen the image of their brands while promoting the acceptability of cigarettes as a present and the social norm of giving gifts.

Percent of Youth Who Have Something With a Tobacco Logo on It

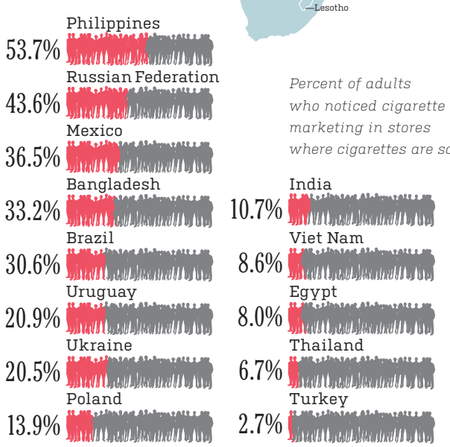
(T-Shirt, pen, backpack, etc.)
2010 or latest available



Cigarette Advertising Seen by Adults in Low- and Middle-Income Countries

2010 or latest available

Percent of adults who noticed cigarette marketing in stores where cigarettes are sold



Advertising was noticed in the 30 days prior to the survey.

Tobacco Marketing…

In Print

"I love everything new, delicious and round!"

Marketing campaign slogan introduced by a Russian cigarette company in advance of a proposed Health Ministry marketing ban on cigarettes, 2011

On Billboards

"Dying is better than leaving a friend; Sampoerna is a cool friend."

Indonesian billboard campaign by the tobacco company PT Sampoerna, 2011

In Films

"Smoking in films encourages children to take up smoking. And that's no surprise. That is why tobacco advertising was banned, because showing images of people, particularly glamorous young people, smoking encourages children to smoke."

Deborah Arnott, Action on Smoking and Health, UK, 2011

Online

"The Internet and social media websites are potentially the next frontier in tobacco company advertising strategy."

Campaign for Tobacco-Free Kids, US, 2011

THE INDUSTRY SAYS:

"Portray the debate as one between the anti-smoking lobby and the smoker, instead of 'pro-health and public citizens' versus the tobacco industry."

Philip Morris USA, 1992

TOBACCO COMPANIES SPEND UNTOLD MILLIONS OF DOLLARS ANNUALLY TO INFLUENCE PUBLIC POLICY AND LEGISLATION. Reporting of tobacco industry political contributions is not required in most countries, so the complete picture of the tobacco industry's investment is not fully understood. In 2010, nineteen companies with tobacco interests spent $16.6 million and employed 168 lobbyists in an effort to directly influence political decisions in the US.

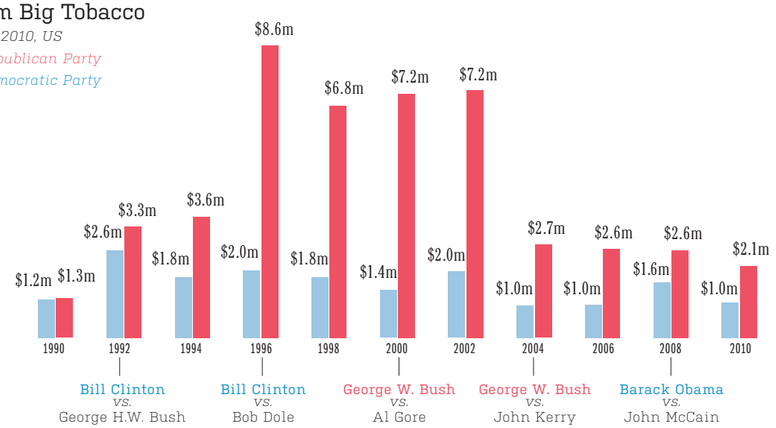
In addition to political influence, tobacco companies make charitable contributions under the guise of corporate social responsibility (CSR). Often these donations and efforts do more to benefit the image of tobacco companies than to benefit humanitarian efforts. In 2010 Philip Morris International contributed a fraction of a percent of the company's net profits in global charitable donations ($25 million in donations and $7.5 billion in profits).

Parties to the WHO FCTC are warned to "be alert to any efforts by the tobacco industry to undermine or subvert tobacco control efforts" and are obligated to protect their public health policies from commercial and other vested interests of the tobacco industry. The influence of the tobacco industry is monumental, and tobacco companies' contributions to socially responsible causes are of great concern. Not only are CSR contributions a form of tobacco advertising and promotion, but such contributions allow tobacco companies to legitimize themselves with policymakers and the public and counter the negative attention surrounding their deadly products.

The tobacco industry exerts undue influence through partnerships with other organizations, such as convenience stores, advertising, and farmers' associations, and the hospitality industry. Tobacco companies fund front groups and think tanks to promote tobacco or oppose tobacco legislation. While these organizations appear to be independent, governments must be wary of their involvement with Big Tobacco.

Total Federal Election Contributions From Big Tobacco

1990–2010, US
to Republican Party
to Democratic Party



United States of America

In 2011, Lorillard, the largest producer of menthol cigarettes in the US, ***hired a former Food and Drug Administration employee*** who was a science and regulations expert. At the time of the hire, the FDA was considering restricting menthol cigarette sales.

In 2010, Altria Group/Philip Morris USA spent over ***$10 million in lobbying expenditures*** in the US. This is more than all other tobacco companies spent combined.

"One thing the tobacco industry has done is stay out of the public view and disguise its efforts in politics...With the rise of this undisclosed money, it is hard to know what they're doing."

Stanton Glantz, University of California, San Francisco, US, 2011

United Kingdom

BAT, Japan Tobacco International, and Imperial Tobacco ***contributed funds to the Tobacco Retailers Alliance***, a front group that orchestrated the "Save Our Shop" campaign in 2008. ***Members of Parliament were inundated with postcards*** requesting they not support the Department of Health's proposed ban on cigarette display advertising.

China

China National Tobacco Corporation has sponsored at least 69 elementary schools, and thousands of students are exposed daily to pro-tobacco propaganda, names, and messages. School signage reads: ***"Genius comes from hard work / Tobacco helps you to be successful."***

ADVOCATES SAY:

"We need to be alert and firm in protecting our tobacco control policies from the commercial and vested interests of the tobacco industry."

Evita Ricafort, lawyer with HealthJustice, Philippines, 2011

Philippines

Baguio City announced its intention to have smoke-free festivals in 2009. ***Philip Morris International responded by offering the mayor mechanized ashtrays,*** smoking tents, and recommendations on the number of designated smoking areas that should be allowed.

Indonesia

Sampoerna/Philip Morris International, Indonesia's largest tobacco company, sponsored a rescue camp on the slopes of Mount Merapi, a volcano that erupted in Central Java in 2010. Staff members at the camp wore uniforms with company logos and drove response vehicles and trucks with the same logos.

Malawi

In the early 1990s, a tobacco company consultant published a journal featuring articles criticizing the World Health Organization. One article from the Chief of Health Services in Malawi, who owned a tobacco farm, stated that "the list of economic benefits of tobacco is a long one. ***Tobacco-related deaths and illnesses are primarily problems of affluent societies.***" Philip Morris distributed thousands of copies of the journal.

Australia

Australia passed legislation to package all tobacco products in plain, olive-colored packages by July 2012. ***Fourteen members of the World Trade Organization raised concerns that plain packages would restrict the trade of tobacco.***

"Ninety-seven percent of British American Tobacco's money is spent here on two parties: the Liberal Party and the National Party. And they are asking us to [believe] this has no influence on their decision on whether they are going to support plain packaging or not."

Nicola Roxon, Former Minister of Health and Ageing, Australia, 2011

RESEARCH SAYS:

"Recent attempts by large tobacco companies to represent themselves as socially responsible have been widely dismissed as image management."

Gary Fooks et al., University of Bath, UK, 2011

RESEARCH SAYS:

"We hold in our hands the solution to the global tobacco epidemic… The cure for this devastating epidemic is dependent not on medicines or vaccines, but on the concerted actions of government and civil society."

Margaret Chan, Director-General, World Health Organization, 2008.

THE NUMBER OF PEOPLE COVERED BY AT LEAST ONE *MPOWER* MEASURE AT THE HIGHEST LEVEL OF ACHIEVEMENT INCREASED BY 1.1 BILLION PEOPLE TO 3.8 BILLION BETWEEN 2008 AND 2010.

THIS MEANS THAT

More Than Half

OF THE WORLD'S POPULATION IS COVERED BY AT LEAST ONE *MPOWER* MEASURE.

See Glossary for details on MPOWER

WISDOM SAYS:

"Salus populi suprema est lex.
The welfare of the people is the ultimate law."

Cicero, Italy, 106–43 BCE

Fifteen or more treaties touch upon issues related to tobacco control, such as health and human rights; poverty; economic development; gender; safe working environments; tobacco farming, land reform, and indebtedness; food insecurity; child labor; environmental degradation; and the behavior of industry. Evaluating these treaties is difficult because of the lack of precedence and rulings in relation to tobacco control. Even where public health provisions exist within treaties, it is uncertain whether their interpretation will always result in the implementation of effective tobacco control measures, although many do.

Additionally, some UN agencies have made recommendations that are short of being treaties. For example, in 1992 the International Civil Aviation Organization initiated measures to encourage its member states to restrict smoking on all air travel, then adopted resolutions urging states and airlines to act to prohibit smoking on all flights.

Some UN agencies have no treaty or codes of practice on tobacco. Among the International Labor Organization's nearly 200 treaties on worker and workplace safety, there is not one provision on smoke-free workplaces.

Most World Health Organization Member States have ratified the main treaty on tobacco, the WHO Framework Convention on Tobacco Control (WHO FCTC), MAKING IT ONE OF THE MOST RAPIDLY EMBRACED INTERNATIONAL TREATIES OF ALL TIME. The Conference of Parties' secretariat has been established and is currently developing protocols and guidelines.

Not surprisingly, the tobacco industry was and is against a strong, legally binding WHO FCTC. The industry prefers voluntary agreements and self-regulating market mechanisms, which are essentially ineffective in reducing tobacco use.

Contrary to tobacco industry arguments, implementing tobacco control measures will not harm national economies. The WHO FCTC has mobilized resources, rallied hundreds of nongovernmental organizations (NGOs), encouraged government action, led to the political maturation of health ministries, and raised tobacco control awareness in other government ministries and departments. A human-rights-based approach to tobacco control helps to expand the discussion of the harm caused by tobacco use.

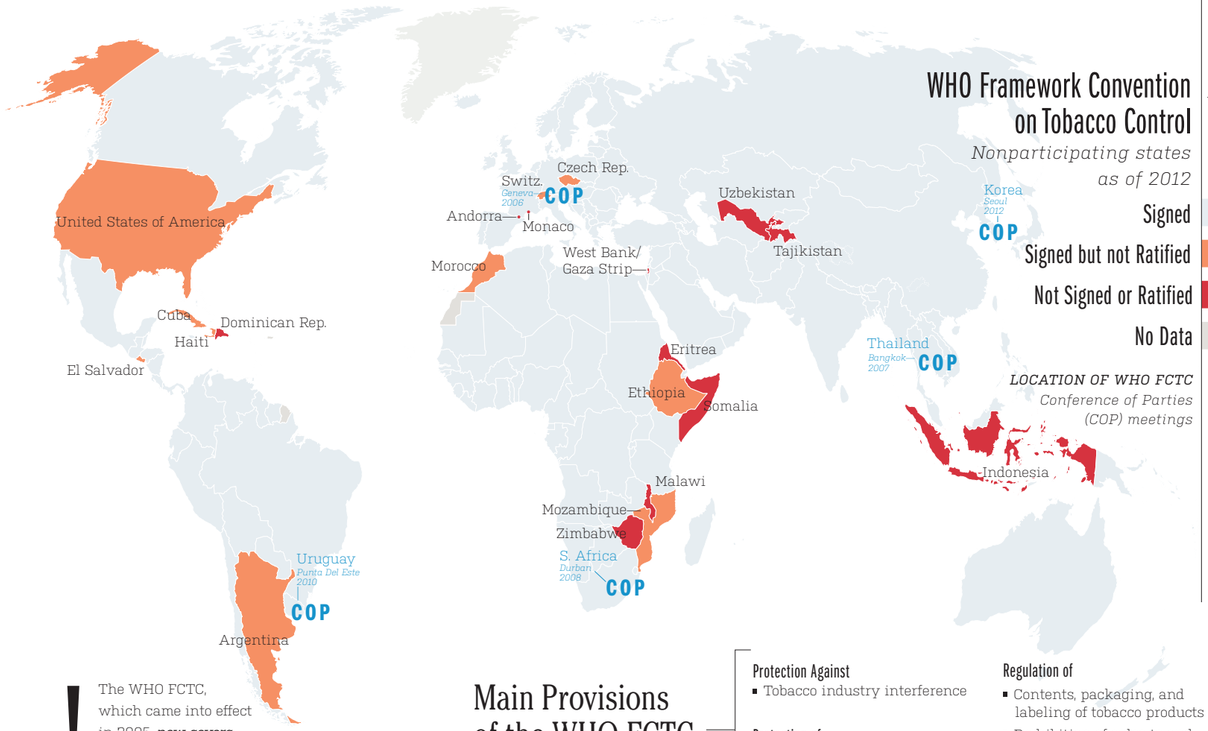
UN High-Level Meeting on Noncommunicable Diseases *(NCDs)*

2011

- Only 28 such special sessions since 1945, and just one previously on health (AIDS).
- 34 world leaders attended the meeting.
- An agreement to tackle the world's major NCDs was approved by all member nations.
- The NCD Alliance formed of four federations uniting more than 2,000 organizations.

Next steps:

- WHO, as Secretariat, to prepare next steps (including recommendations for global targets, plans to liase with other UN agencies, etc.) by the end of 2012.
- Countries to develop NCD policies by 2013.
- Civil society to support in myriad ways.



The WHO FCTC, which came into effect in 2005, *now covers 87.4% of the world's population*. Efforts are needed to enforce and implement all the WHO FCTC provisions.

Main Provisions of the WHO FCTC

Protection Against
- Tobacco industry interference

Protection of
- The environment and health of tobacco workers

Research, Surveillance, and Exchange of Information

Support for
- Economically viable alternative activities
- Legislative action to deal with liability

Regulation of
- Contents, packaging, and labeling of tobacco products
- Prohibition of sales to and by minors
- Illicit trade in tobacco products
- Smoking at work and in public places

Reduction in Consumer Demand by
- Price and tax measures
- Comprehensive ban on tobacco advertising, promotion, and sponsorship
- Education, training, raising public awareness, and assistance with quitting

WHO FCTC Parties

2002
First Edition
WHO FCTC: 0

2006
Second Edition
WHO FCTC: 109

2009
Third Edition
WHO FCTC: 162

2012
Fourth Edition
WHO FCTC: 174

International Treaties, Conventions, and Agreements
That Directly or Indirectly Address Tobacco Issues

1948
UN UNIVERSAL DECLARATION ON HUMAN RIGHTS
Article 25: Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family.

1957
TREATY OF ROME
European community is mandated to pursue a high degree of public health protection.

1959
UN CONVENTION ON THE RIGHTS OF THE CHILD
Defends children's right to health.

1976
INTERNATIONAL COVENANT ON ECONOMIC, SOCIAL, AND CULTURAL RIGHTS
References the right to safe and healthy working conditions.
INTERNATIONAL COVENANT ON CIVIL AND POLITICAL RIGHTS (ICCPR)
Article 19: Defends the curtailments of freedom of speech in the interests of public health.

1979
CONVENTION TO ELIMINATE DISCRIMINATION AGAINST WOMEN (CEDAW)
Article 11: Defends the right to health for women, including the right to protection of health and to safety in working conditions.

1995
WORLD TRADE ORGANIZATION (WTO)
Preamble: Replaced the 1947 General Agreement on Tariffs and Trade (GATT). In general, trade liberalization, without safeguards, has increased tobacco usage in low- and middle-income countries. The following five treaties entered into force with the establishment of the WTO.

WTO AGREEMENT ON THE TRADE-RELATED ASPECTS OF INTELLECTUAL PROPERTY RIGHTS (TRIPS)
Recognizes that WTO Members may adopt measures necessary to protect public health.

WTO AGREEMENT ON TECHNICAL BARRIERS TO TRADE (TBT AGREEMENT)
Requires WTO Members to ensure that all technical regulations are not more trade-restrictive than necessary to achieve a legitimate objective such as the protection of human health.

WTO GENERAL AGREEMENT ON TRADE AND SERVICES (GATS)
States that nothing shall be construed to prevent the adoption or enforcement of measures necessary to protect human, animal, or plant life or health.

WTO AGREEMENT ON AGRICULTURE
Covers all agricultural products including tobacco, and addresses market access, domestic support, and export subsidies.

WTO AGREEMENT ON SUBSIDIES AND COUNTERVAILING MEASURES (SCM)
Addresses subsidies for raw tobacco and provides WTO Members a channel to seek elimination of a subsidy or to charge countervailing duties.

2003
THE UN NORMS ON THE RESPONSIBILITIES OF TRANSNATIONAL CORPORATIONS AND OTHER BUSINESS ENTERPRISES WITH REGARD TO HUMAN RIGHTS
Transnational corporations and other business enterprises shall not "produce, distribute, market, or advertise harmful or potentially harmful products for use by consumers."

2005
WHO FRAMEWORK CONVENTION ON TOBACCO CONTROL
Only treaty devoted entirely to tobacco control.

1945 — 1955 — 1965 — 1975 — 1985 — 1995 — 2000 — 2005

HISTORY SAYS:

"Measure the distances. Estimate the expenses. Evaluate the forces. Assess the possibilities. Plan for victory."

General Sun Tzu, Art of War, *China, Circa 500 BCE*

Tobacco control has evolved over the last 30 years from sporadic acts by activists and isolated action by some governments to a mainstream public health issue, with known, proven, cost-effective measures. Needed now is a coherent public health strategy designed to reduce tobacco consumption, involving international, regional, national, and local actors involved in strategic planning, policy-oriented research, capacity building, funding, enforcement, and evaluation.

Surveillance is essential to support sound policy. Almost half of all countries have monitoring systems enhanced by research initiatives such as GYTS, GATS, and STEPS. Yet research on tobacco continues to be underfunded throughout the world.

Field worker administers the Global Adult Tobacco Survey, Russia, 2009.

CORE FUNDING FOR THE DEVELOPMENT AND IMPLEMENTATION OF PUBLIC HEALTH POLICY MUST COME FROM GOVERNMENTS THEMSELVES. In addition to academic research, various philanthropic organizations have funded policy-oriented research and tobacco control projects. As of press time, Bloomberg Philanthropies has funded many projects in more than 40 countries. Philanthropist Michael Bloomberg and the Bill and Melinda Gates Foundation's commitment of $500 million over seven years (2006–2013) more than triples the available resources to control tobacco in low- and middle-income countries.

The UN High-Level Meeting on noncommunicable diseases in 2011 offered a unique opportunity to move tobacco forward strategically in the framework of other NCD issues, such as cancer, diabetes, heart disease, chronic lung disease, physical activity, alcohol, and unhealthy diets (see Chapter 22 – *Rights and Treaties*).

"If you can't measure it, you can't manage it."
Marketing maxim

Public Health Strategy

To mobilize public action on priority health issues, those involved with the process must identify several points:

The problem and the scale of the problem. Monitoring and surveillance, including prevalence, health, economic impact, actions taken, experience, and lessons learned from other countries.

The public health objectives, and how these should be framed.

The key decision makers, to whom they answer, if they can be influenced, and how.

Groups or individuals to be involved (inside and outside government) and how these may be most effectively used; whether there should be a coalition and how it could be managed; whether anyone should not be included; what roles are assigned to the leaders; what budget is required; and who should oversee it.

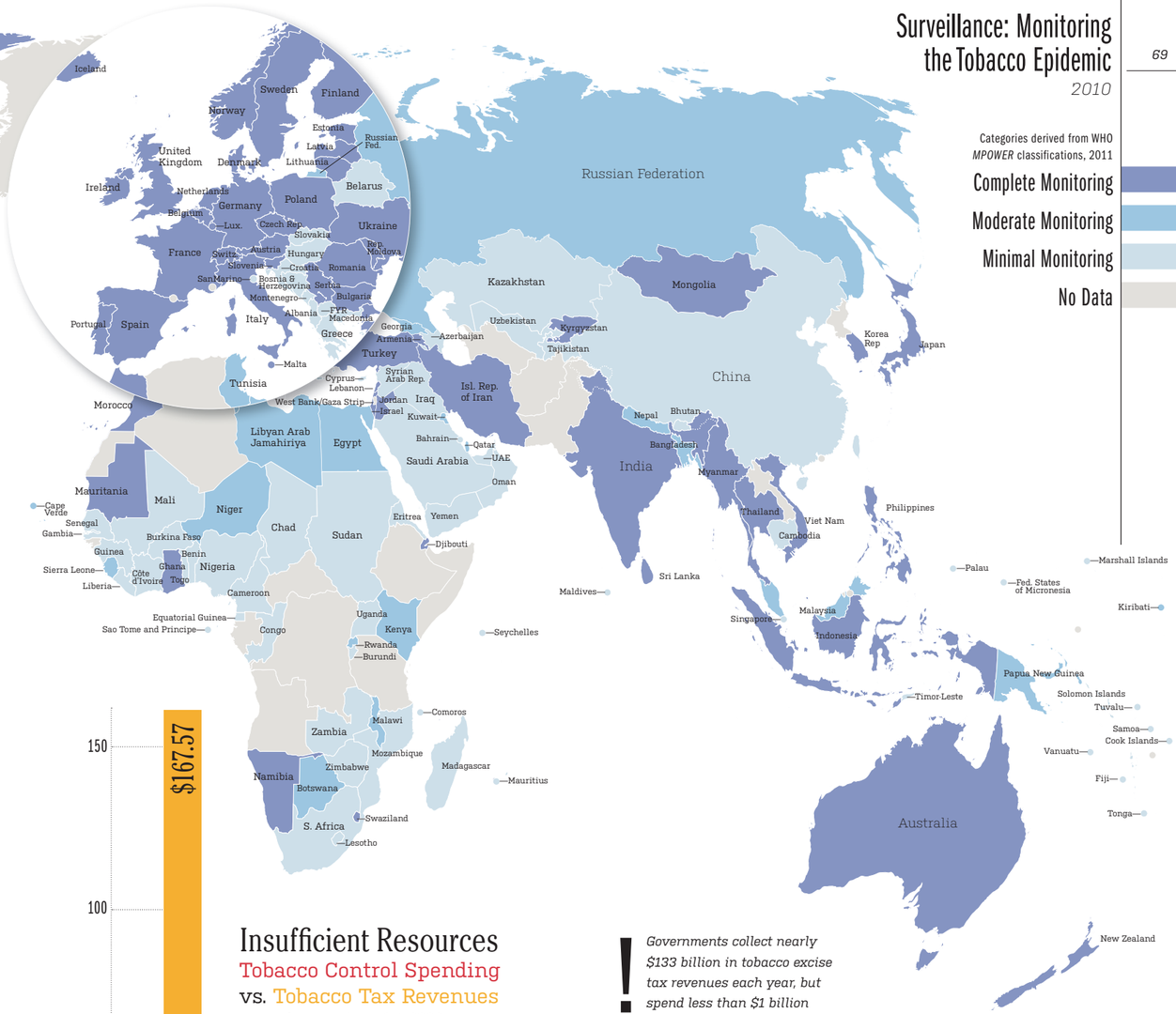
Obstacles to the public health objectives and how to overcome or circumvent them.

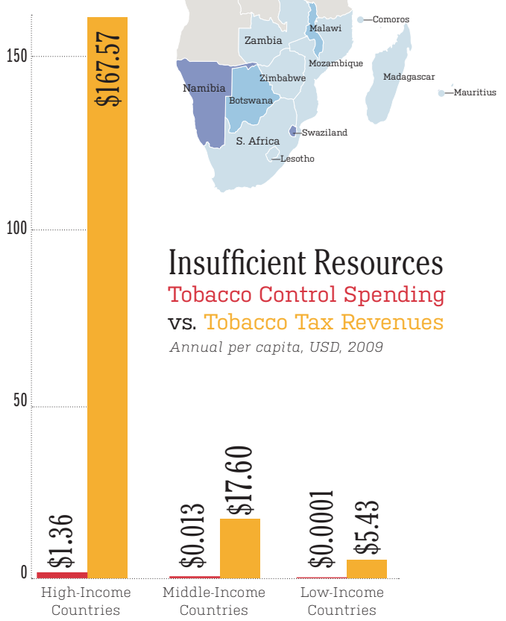
Strengths and weaknesses of **the opposition's position** and how to respond to it.

Media advocacy objectives.

Surveillance: Monitoring the Tobacco Epidemic

2010





Insufficient Resources

Tobacco Control Spending vs. Tobacco Tax Revenues

Annual per capita, USD, 2009

Governments collect nearly $133 billion in tobacco excise tax revenues each year, but spend less than $1 billion combined on tobacco control.

THE PUBLIC SAYS:

"A few weeks before the [smoking] ban came into force in Ireland, Dublin banker Jimmy Fogarty asked the barman at his local pub: 'What are you going to do when the ban comes in?' 'Breathe,' the barman replied."

Bulletin of the World Health Organization, Ireland, 2006

BECAUSE THERE IS NO SAFE LEVEL OF EXPOSURE TO SECONDHAND SMOKE, SMOKE-FREE AREAS ARE THE ONLY WAY TO COMPLETELY PROTECT NONSMOKERS FROM THE HARM OF SECONDHAND SMOKE. When smoke-free areas are created, levels of smoke exposure are more than 90% lower than they are where smoking is permitted. When indoor smoking areas are allowed, ventilation is inadequate to eliminate secondhand smoke, and the reduction in smoking among smokers is less.

A 2010 Cochrane literature review assessed 31 studies measuring exposure to secondhand smoke after smoking bans, with 19 studies including biomarkers. The review concluded there is "CONSISTENT EVIDENCE THAT SMOKING BANS REDUCED EXPOSURE TO SECONDHAND SMOKE IN WORK-PLACES, RESTAURANTS, PUBS, AND PUBLIC PLACES."

Some countries have now banned smoking in outdoor areas, such as those of restaurants and bars, and in beaches, parks, and campuses, on the rationale that smoking may expose workers, nonsmokers, patrons, and children to significant levels of secondhand smoke and readily preventable risks to health.

Public support is high for smoking bans in public places, including crowded outdoor areas. In regions where smoking bans have been mandated by law, employees, customers, and business owners report high compliance and satisfaction with the results, and compliance with smoke-free regulations increases over time. Independent studies consistently show no drop in employment or tax receipts.

Smoking bans, relatively inexpensive to implement, can produce immediate economic benefits to employers in the form of reduced accidental fire risk, lower insurance premiums, higher productivity, and less employee absenteeism.

Current challenges are how to decrease smoking in the home, and how to regulate smoking in multifamily homes and in vehicles with small children.

! Brazil to become the largest country in the world to go *completely smoke-free.*

Smoke-Free Areas

2010

Categories derived from WHO *MPOWER* classifications, 2011

ALL Public Places
completely smoke-free OR at least 90% of the population covered by complete sub-national smoke-free legislation

6 to 7 Public Places
completely smoke-free

3 to 5 Public Places
completely smoke-free

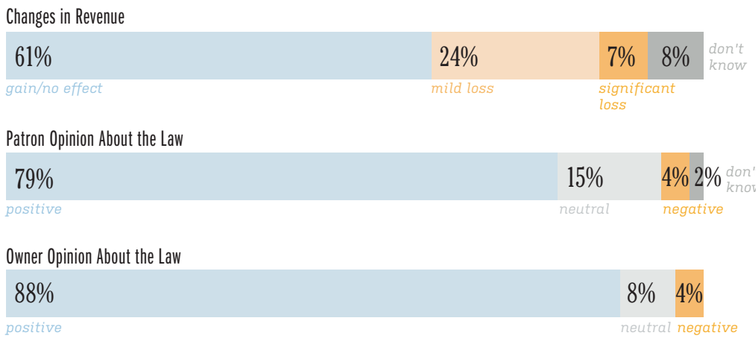
Up to 2 Public Places
completely smoke-free

No Data

! The number of *people protected by comprehensive smoke-free laws* has doubled from 2008 to 2010, but still *89% of the world's population remains unprotected.*

Smoke-Free Policies Tend to Be Received Positively One Year Post-Ban

Impact, as reported by restaurant and bar owners, Italy, 2007



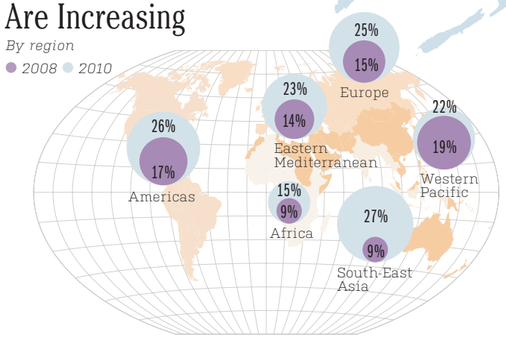
No Loss of Restaurant Sales

Total restaurant receipts in Hong Kong before and after ban, in millions, USD

Smoking Bans in Restaurants Are Increasing

By region

2008 *2010*



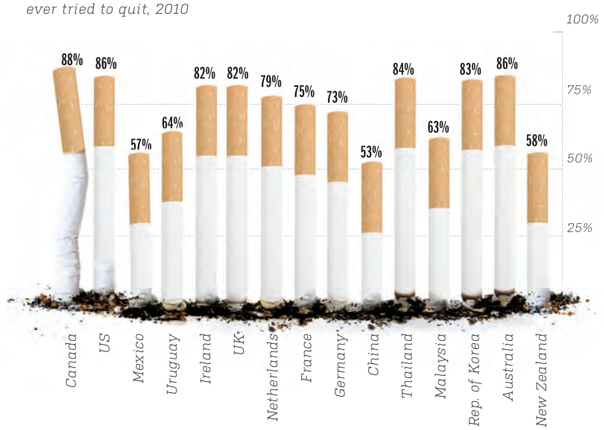
RESEARCH SAYS:

"States can reduce death and disease by reducing smoking prevalence. It's that simple."

Gary Giovino, University of Buffalo, US, 2009

Quit Attempts

Percent of current smokers who have ever tried to quit, 2010



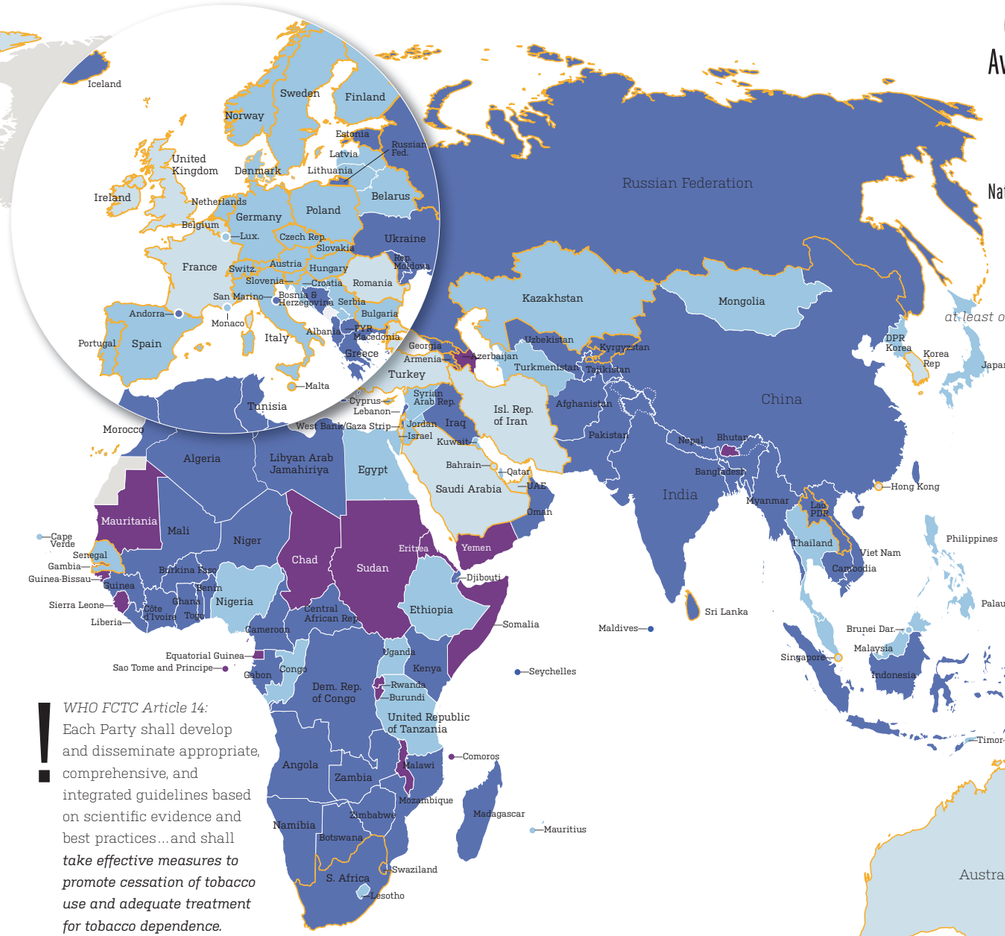
A 2000 survey in Kuwait of 4,000 participants found 47% of all smokers stated that they wanted to stop smoking, and about 56% had attempted to quit. *The biggest perceived barrier to quitting was uncertainty about "how to quit."*

There are only two ways to reduce tobacco use: prevent youth from starting to use tobacco and encourage and help users to quit. TO MAKE A SIGNIFICANT REDUCTION IN GLOBAL TOBACCO-RELATED DEATHS, CURRENT SMOKERS MUST QUIT. UNLESS THEY DO, TOBACCO DEATHS WILL RISE DRAMATICALLY OVER THE NEXT 40 YEARS, IRRESPECTIVE OF WHETHER YOUTH UPTAKE IS REDUCED.

Some improvement of health is seen soon after quitting, and much of the harm can be eliminated over time, even for lifelong smokers.

General tobacco control policies, such as disseminating health information, mandating smoke-free areas, and implementing tax increases, can encourage smokers to quit. Most ex-smokers quit successfully on their own ("cold turkey"), but an increasing number of programs and aids are available to help smokers stop, some more effective than others. Nicotine replacement therapies (gum, patch, and inhaler) and pharmacologic agents such as bupropion, varenicline, and newer agents such as cystisine are now available in many countries. Some jurisdictions, such as Hong Kong, have even introduced quitting services for teens. Many people change their health behaviors easily, while others struggle through a difficult cycle of addiction.

Communication technologies—such as telephone quit lines, text messaging, online counseling, and social media—offer support. Psychological and behavioral therapies, particularly behavior modification, but also less-tested modalities such as hypnosis, meditation, and acupuncture, also have been employed.



Quitting Resources Available by Country

2010

Categories derived from WHO *MPOWER* classifications, 2011

- National Quit Line, and Both NRT and Some Cessation Services *cost-covered*
- NRT and/or Some Cessation Services *at least one of which is cost-covered*
- NRT and/or Some Cessation Services *neither cost-covered*
- None
- No Data

Countries with QUIT LINES

WHO FCTC Article 14: Each Party shall develop and disseminate appropriate, comprehensive, and integrated guidelines based on scientific evidence and best practices…and shall *take effective measures to promote cessation of tobacco use and adequate treatment for tobacco dependence.*

National Tobacco Dependence Treatment Services

36 sampled countries, 2007

Percentage of countries surveyed that have the following in place to address tobacco dependence:

National Policy and System	
Official written policy on treatment	44%
Specialized national treatment system	19%
Help easily available in general-practice settings	24%

Doctors' Settings	
Nicotine replacement therapy available	94%
Bupropion available	75%
Varenicline available	69%
"General Sale" of NRT (non-pharma settings)	40%
Fully reimbursed brief quitting advice	45%
Fully reimbursed intensive specialist support	29%
Mandatory recording of patients' smoking status in medical notes	31%

Quitting Calendar

The Benefits of Stopping Smoking

1 week later — *Heart, blood pressure, circulation, breathing show improvement*

1 year later — Excess *risk of coronary heart disease is half* that of a continuing smoker

5-15 years later — *Risk of a stroke is reduced* to that of never-smokers

10 years later — *Risk of lung cancer is reduced* to less than half that of continuing smokers; risk of many other cancers decrease

15 years later — *Risk of coronary heart disease is similar to that of never-smokers,* and the overall risk of death is almost the same, especially if the smoker quits before illness develops

RESEARCH SAYS:

"Mass-media campaigns about the harms of tobacco can induce quitting and prevent young people from taking up the habit, especially if implemented as part of a comprehensive tobacco-control program."

Sandra Mullin, World Lung Foundation, US, 2011

Legislative and tax interventions for tobacco control are unlikely to reduce smoking rates without public awareness and support. Mass communication, health education, and reliable information are essential elements for tobacco control success. SUSTAINED USE OF MASS MEDIA CAMPAIGNS CONTRIBUTES TO POPULATION-LEVEL DECREASES IN SMOKING PREVALENCE BY INCREASING KNOWLEDGE ABOUT THE HARM OF TOBACCO USE, ENCOURAGING QUIT ATTEMPTS, AND IMPROVING QUIT RATES.

Funding for mass media campaigns is often cited as a barrier, yet mass media is a cost-efficient way to reduce smoking, because it reaches large segments of the population. Countries can save time and resources by adapting campaigns that have performed well in other jurisdictions for use in their own, subject to appropriate local pretesting. Of the 23 countries reporting at least one best-practice campaign, 16 were low- or middle-income, suggesting that mass media need not be a tool of only high-income countries.

Public education is a core provision of the WHO Framework Convention on Tobacco Control. Yet, as shown by the WHO Report on the Global Tobacco Epidemic 2011, most countries should be doing more to inform their citizens adequately about the illnesses and deaths caused by tobacco. In nearly 150 countries surveyed, including 110 low- and middle-income countries, there is a paucity of anti-tobacco public education via mass media.

The scale of the tobacco epidemic warrants that governments give priority to implementing strong and effective campaigns.

Ads With Visceral Images Are the Most Effective

TV is the preferred medium for anti-tobacco advertising, but in low-income countries, where TV has minimal coverage, radio is an alternative, albeit less effective option.

Mukesh, India, 2009

Sponge, Produced by Cancer Institute, New South Wales, Australia

"Lungs are like sponges. If you could wring out the cancer-producing tar that goes into the lungs of a pack-a-day smoker every year, this is how much you would get."

Cigarettes Are Eating Your Baby Alive, US and Various Countries

Say No to Secondhand Smoke, Philippines, 2009

Gift-Giving, China, 2009

Anti-Tobacco Mass Media Campaigns

Duration of at least three weeks, Jan 2009–Aug 2010

Categories derived from WHO *MPOWER* classifications, 2011

Campaign implemented with ALL appropriate characteristics*

Campaign implemented with 5-6 appropriate characteristics*

Campaign implemented with 1-4 appropriate characteristics*

NO campaign implemented

No Data

More appropriate characteristics suggest a stronger campaign.

Adults Who Noticed Anti-Smoking Information on TV or Radio

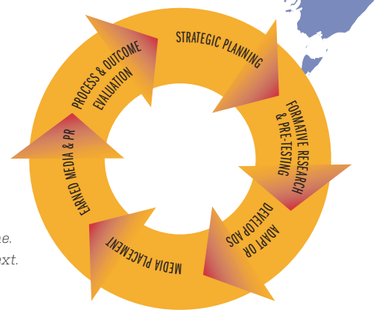
2008–2010 or latest available

Turkey	89%	Brazil	67%
Mexico	87%	Ukraine	66%
Viet Nam	87%	India	63%
Philippines	80%	Poland	60%
Egypt	79%	China	46%
Thailand	74%	Russian Federation	42%
Uruguay	72%	Bangladesh	41%

Information was noticed in the 30 days prior to the survey.

The Wheel of Mass Media Communications in Tobacco Control

Campaign planning and implementation process for mass media advertising campaigns. Behavior change happens with multiple campaigns, sustained over time. Each campaign informs the next.



*APPROPRIATE CHARACTERISTICS are based on whether the campaign was part of a comprehensive tobacco control program; whether research informed an understanding of the target audience; and whether materials were pretested; as well as how the campaign was promoted, placed, and publicized; and the extent to which campaigns were evaluated.

GOVERNMENT SAYS:

"Plain packaging means that the glamour is gone from smoking."

Nicola Roxon, Former Minister of Health and Ageing, Australia, 2011

Health warnings on the packaging of all tobacco products have progressed from simple, small, weak text warnings 30 years ago to strong, graphic warnings introduced by Canada in 2001. CURRENTLY, PICTORIAL WARNINGS HAVE BEEN ADOPTED BY ABOUT ONE-QUARTER OF COUNTRIES, WITH SEVERAL IN THEIR SECOND ROUND OF SUCH WARNINGS.

Health messages on cigarette packaging deliver important information directly to smokers. The message is repeated and reinforced every time a smoker reaches for a cigarette.

In one of its strongest provisions, Article 11 of the World Health Organization Framework Convention on Tobacco Control compels Parties, within three years of becoming a Party, to require tobacco product health warnings that cover at least 30%, and preferably 50%, of the visible area on a cigarette pack. Warnings should be extended to all forms of smoking and smokeless tobacco.

In 2012, plain packaging—specifically, the standardization of cigarette packaging that removes all product advertising including colors, logos, and brand imagery, and enforces restrictions on font size and type—is a major battleground between the industry and governments.

Australia was the first country to adopt legislation to require plain packaging, and did so in the face of bitter opposition from the tobacco industry, including legal threats.

Action on Smoking and Health UK, a tobacco control advocacy group, explained, "Of all the laws on tobacco control, there are few the tobacco industry fears more than plain or standardized packaging. Even where tobacco advertising is banned, the pack is the tobacco's silent salesman, calling out from retailers' shelves and displayed by smokers 20 times a day. The ad men don't simply use the pack to tell us which brand is for women and which for men, or which brands are youthful and which are sophisticated. They can also use them to send out misleading, illegal signals giving the impression that one is less harmful or less addictive than another."

THE INDUSTRY SAYS:

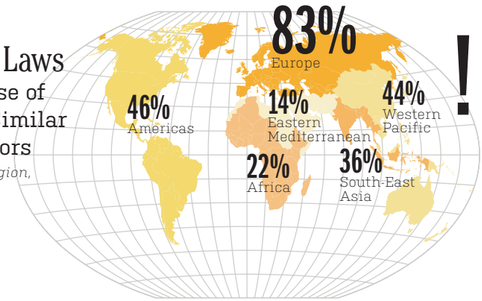
"BAT Australia is opposed to the introduction of plain packaging. It is unfair and unworkable and will inevitably bring with it significant unintended consequences."

David Crow, CEO, BAT Australia, 2011

Product Labeling Laws

Prohibition of the Use of "Light," "Mild," and Similar Misleading Descriptors

Percentage of countries by region, 2010

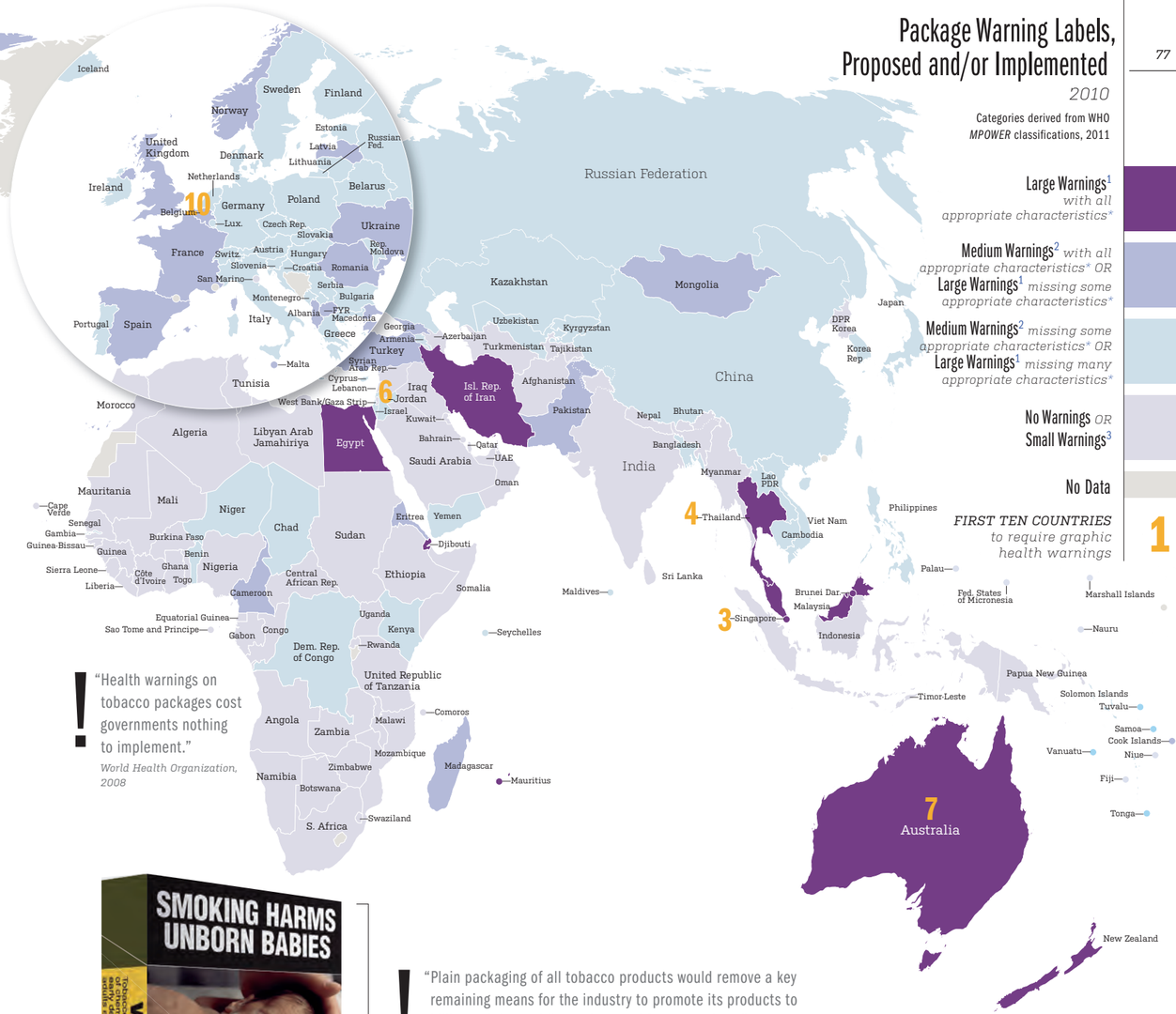


In *2006 about 70% of Chinese smokers,* irrespective of age, income, and education, *believed "light"/"low tar" cigarettes are less harmful* compared with "full flavor" cigarettes.

Package Warning Labels, Proposed and/or Implemented

2010

Categories derived from WHO *MPOWER* classifications, 2011



"Health warnings on tobacco packages cost governments nothing to implement."

World Health Organization, 2008

"Plain packaging of all tobacco products would remove a key remaining means for the industry to promote its products to billions of the world's smokers and future smokers."

Becky Freeman, Simon Chapman, and Matthew Rimmer, University of Sydney, Australia, 2008

Example of Australian tobacco plain packaging as required by 2011 Australian law. © Commonwealth of Australia

[1]LARGE WARNING = Average of front and back of the package is at least 50%. [2]MEDIUM WARNING = Average of front and back of package is between 30 and 49%. [3]SMALL WARNING = Average of front and back of package is less than 30%.
*APPROPRIATE CHARACTERISTICS are based on percentage of package covered; whether warnings are mandated; whether they appear on packets and external packaging; whether they describe specific harm; are large, clear, visible, and legible; rotate; are written in principal language of country; and include pictures.

LEGAL JUDGMENT SAYS:

"Defendants have marketed and sold their lethal products with zeal, with deception, with a single-minded focus on their financial success, and without regard for the human tragedy or social costs that success exacted."

US District Judge Gladys Kessler, 2006

Over 60% of countries have imposed some restriction on tobacco marketing. ONLY COMPREHENSIVE BANS ON ALL FORMS OF TOBACCO ADVERTISING, MARKETING, SPONSORSHIP, AND PROMOTION ARE EFFECTIVE AT REDUCING POPULATION SMOKING RATES. Partial restrictions are ineffective in reducing smoking because tobacco companies redirect their marketing efforts to other available venues. Voluntary agreements are also inadequate because they are unenforceable.

In the face of broadening advertising bans, tobacco companies have become ever more creative in their attempts to lure new consumers into addiction. Use of new media, brand-stretching, event promotion, retailer incentives, sponsorship and advertising through international media, cross-border advertising, and promotional packaging are some of the ways that the tobacco industry circumvents the intent of advertising bans. An example of this is the SHANGHAI TOBACCO COMPANY, WHICH CREATED A BRAND CALLED "I LOVE CHINA." The slogan was then used on generic billboards and advertisements and may not be directly considered to be tobacco advertising.

Shanghai Tobacco Company, 2011

Bans deny the tobacco industry one of its tools to recruit new tobacco users to replace those who have quit or died, to maintain or increase use among current users, to reduce tobacco users' willingness to quit, and to encourage former users to start using tobacco again.

Comprehensive bans protect youth from the onslaught of tobacco marketing in sports, music venues, the Internet, and elsewhere. Advertising bans also help reduce the social acceptability of smoking and tobacco use.

Parents can also do their part at the individual level by protecting children from exposure to depictions of smoking in various contexts, including in movies and television and online.

THE INDUSTRY SAYS:

"[Following advertising bans, marketing] evolved to a more focused, direct one-to-one approach. Philip Morris uses the database to target smokers for discount coupons and even chances to win a vacation in 'experiential programs.' The Marlboro brand is often associated with Marlboro Country, and the great outdoors and the West. We own a ranch, and Marlboro smokers can win an opportunity to visit that ranch and experience Marlboro Country."

Bill Phelps, Altria, US, 2008

PUBLIC STATEMENTS BY BIG TOBACCO deny that their marketing targets youth or affects youth smoking incidence and initiation, despite overwhelming evidence to the contrary.

Excerpts From Marketing Findings Against the Tobacco Industry

Kessler trial summary, 2006

EXCERPTS

- Tobacco marketing is a substantial contributing factor to youth smoking initiation.
- Tobacco marketing employs themes that resonate with youth and successfully reach youth.
- The industry has continually increased its investment in marketing.
- The industry markets to youth through direct mail and an array of retail promotions and other means that attract youth.
- Industry-sponsored Youth Smoking Prevention Programs are not designed to effectively prevent youth smoking.

Direct and Indirect Advertising Bans

2010

Categories derived from WHO *MPOWER* classifications, 2011

Ban on ALL FORMS
of direct† and indirect‡ advertising

Ban on NATIONAL TV, RADIO, AND PRINT MEDIA
as well as on some but not all other forms of direct† and/or indirect‡ advertising

Ban on NATIONAL TV, RADIO, AND PRINT MEDIA only

Complete ABSENCE OF BAN
or ban that does not cover national TV, radio, and print media

No Data

! By 2010, *55 countries had banned direct advertising on the Internet.*

New Media
May Circumvent Ad Bans

163 tobacco brand–related videos analyzed on YouTube, 2010

! One pro-smoking music video was viewed over *2 million times.*

71% Pro-Tobacco Content

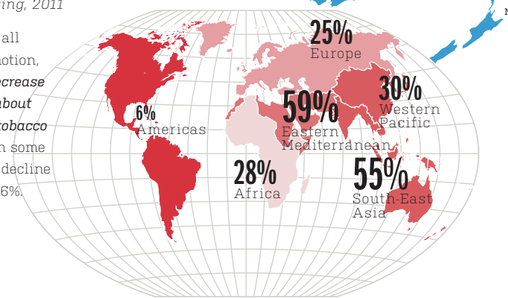
4% Anti-Tobacco Content

25% *Complex, unclear, and neutral tobacco messages*

Point-of-Sale
Advertising Bans

Percent of countries by region with bans on point-of-sale advertising, 2011

! A comprehensive ban on all tobacco advertising, promotion, and sponsorship could *decrease tobacco consumption by about 7%, independent of other tobacco control interventions,* with some countries experiencing a decline in consumption of up to 16%.



† DIRECT ADVERTISING includes television, radio, magazine, direct mail, email, telemarketing, coupons, sweepstakes, brand loyalty programs, and other methods to promote tobacco products directly to consumers. ‡ INDIRECT ADVERTISING uses brand names, trade names, trademarks, emblems, etc., to indirectly promote tobacco products through "brand stretching" (where tobacco brand names are used as part of other product names), event sponsorships, product placement in television and films, and other methods.
*Between 2008 and 2010, three additional countries–Chad, Colombia, and Syria–banned tobacco advertising, promotion, and sponsorship.

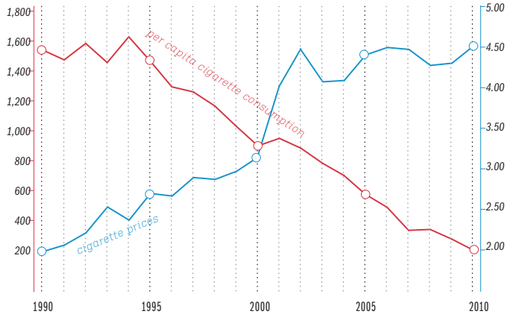
FUNDERS SAY:

"Among the revenue proposals I have examined, tobacco taxes are especially attractive because they encourage smokers to quit and discourage people from starting to smoke, as well as generate significant revenues. It's a win-win for global health."

Bill Gates, G20 Summit, France, 2011

Cigarette Consumption Goes Down as Tobacco Taxes Go Up

Real (inflation-adjusted) price of a pack of cigarettes in 1990 Shekels (NIS) in Israel. Increases in cigarette prices were driven by tax increases.



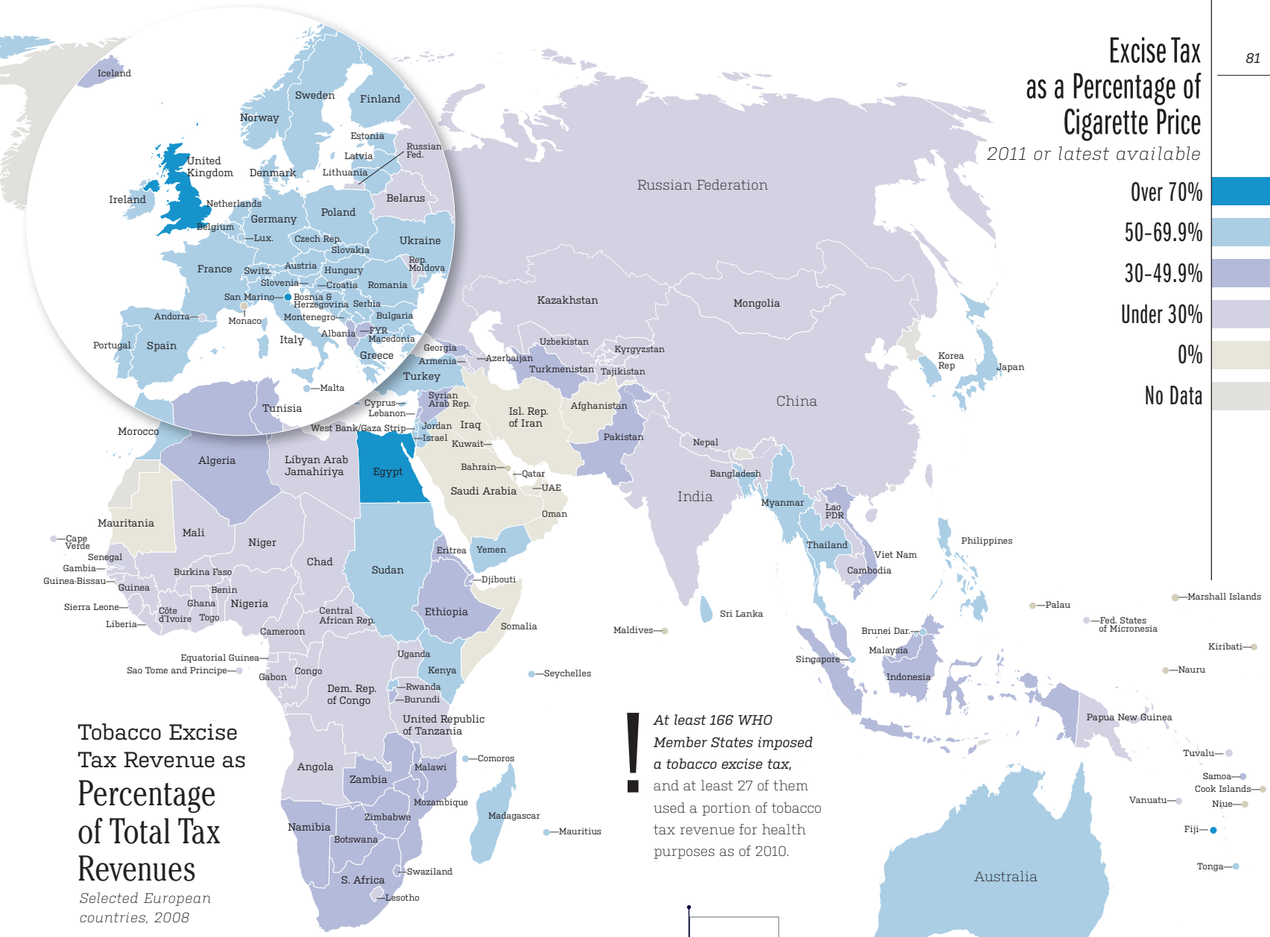
When administered correctly, tobacco tax increases are among the most effective and important tobacco control policies. INCREASES IN TOBACCO TAXES THAT LEAD TO HIGHER CIGARETTE PRICES ENCOURAGE SMOKERS TO QUIT, INCREASE SUCCESSFUL QUIT ATTEMPTS, REDUCE THE NUMBER OF CIGARETTES SMOKED PER PERSON, AND PREVENT INITIATION AMONG YOUTH. A 10% increase in cigarette prices reduces cigarette demand by 2–6% in high-income countries and by 2–8% in low- and middle-income countries. Youth, minorities, and low-income smokers are more likely than others to quit or smoke less in response to cigarette price increases. Because cigarette prices influence youth smoking initiation, increases in price significantly reduce long-term trends in cigarette consumption.

In addition to reducing cigarette consumption, higher tobacco taxes increase tax revenues, which can be used to implement and enforce tobacco control measures or to pay for tobacco-related health-care services or other social programs. On the other hand, tax cuts allow the industry to raise their profit margins.

Excise taxes have been shown to reduce tobacco consumption throughout the world. Other taxes that have been levied on tobacco, including import duties and sales taxes, apply to a wide variety of other goods and services. There are two types of excise taxes: specific and ad valorem. The decision to choose one or both types of tax has implications for government revenue, the retail prices of tobacco products, the tobacco industry's profits, and public health. Understanding the mechanisms of these economic tools is crucial to implementing effective, evidence-based tobacco control policy.

The WHO Framework Convention on Tobacco Control obligates signatories to adopt tax and price policies that reduce tobacco consumption. Furthermore, the World Health Organization recommends that AT LEAST 70% OF THE RETAIL PRICE OF TOBACCO PRODUCTS COMES FROM EXCISE TAXES. ONLY FIVE NATIONS HAVE ACHIEVED THIS BEST-PRACTICE STANDARD.

! Japan Tobacco urged Serbia to align excise taxes on cigarettes with the European Union levels and increase these taxes in a "predictable and stable way." However, this is designed to have as little effect on cigarette consumption as possible. The small tax increases can be easily absorbed by the industry or eroded by inflation and income growth over time.



Excise Tax as a Percentage of Cigarette Price

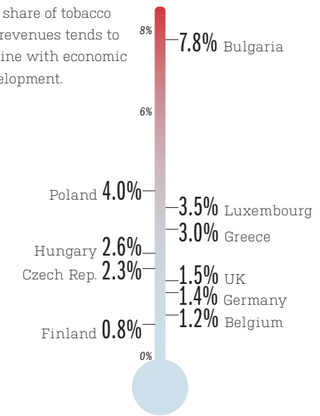
2011 or latest available

- Over 70%
- 50-69.9%
- 30-49.9%
- Under 30%
- 0%
- No Data

Tobacco Excise Tax Revenue as Percentage of Total Tax Revenues

Selected European countries, 2008

The share of tobacco tax revenues tends to decline with economic development.

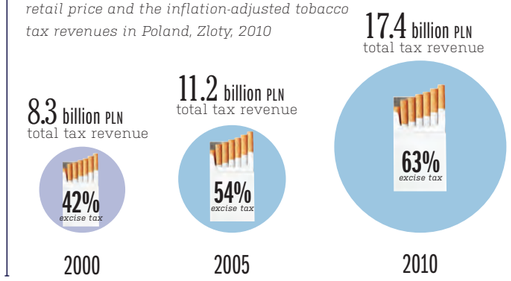


! The state of New Hampshire reduced its cigarette excise tax by 10 cents per pack, and immediately thereafter the tobacco companies raised their prices by the same amount, thereby ***shifting revenue from the state government to the tobacco industry.*** It is estimated that the cut will cost the state $14 million in lost revenues over a two-year period.

! *At least 166 WHO Member States imposed a tobacco excise tax,* and at least 27 of them used a portion of tobacco tax revenue for health purposes as of 2010.

Tax Revenue Goes Up as Tobacco Taxes Go Up

Total tobacco excise tax as a percentage of retail price and the inflation-adjusted tobacco tax revenues in Poland, Zloty, 2010



THE INDUSTRY SAYS:

"We will continue to use all necessary resources … and where necessary litigation, to actively challenge unreasonable regulatory proposals."

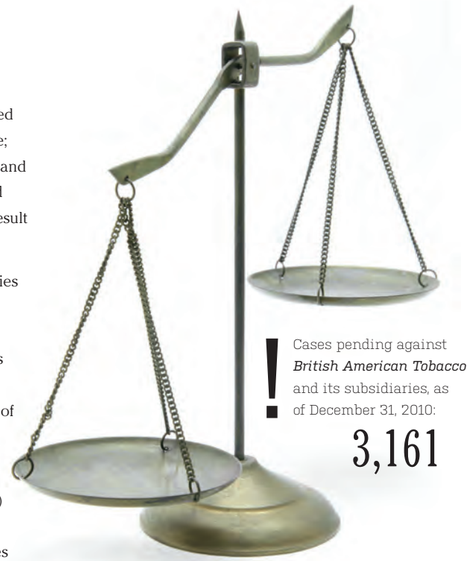
Louis Camilleri, Chairperson and CEO, Philip Morris International, 2010

Litigation against the tobacco industry has been based on grounds such as "health harms, wrongful death, health-care costs, involvement in smuggling, racketeering, conspiracy, defective product, concealment of scientific evidence, fraud, deception, misconduct, failure to warn consumers adequately of the dangers of tobacco smoke, negligence, and exposing the public to unreasonable danger." THE WORLD HEALTH ORGANIZATION ENCOURAGES INDIVIDUALS AND GOVERNMENTS TO TAKE LEGAL ACTION FOR THE PURPOSE OF TOBACCO CONTROL.

Litigation puts the industry on the political defensive, forces tobacco companies to the bargaining table, and may result in large settlements. Beyond dollar amounts, other effects of awards or settlements may include the release of internal industry documents; agreements from the industry to restrict marketing; the channeling of settlement money to public health; increased media attention to the problem of tobacco use; decreased youth access to tobacco products; and improvements in protection from secondhand smoke. However, policy changes as a direct result of litigation have been limited.

Increasingly, tobacco companies and their allies are challenging effective legislative measures adopted by countries seeking to protect the health of their citizens. These legal challenges are expensive to defend and invariably delay implementation of laws passed in the interest of public health.

In November 2010 the WHO Framework Convention on Tobacco Control (WHO FCTC) Conference of Parties adopted the Punta del Este Declaration in support of FCTC Parties that are facing legal attacks for implementing the treaty and its guidelines.



! Cases pending against *British American Tobacco* and its subsidiaries, as of December 31, 2010:

3,161

! Smokers' rights and neo-libertarian groups, funded by the tobacco industry, are being used globally to challenge tobacco control legislation.

History of Tobacco Tort Litigation

Strategies in the US

Individual plaintiffs vs. tobacco companies

Legal Strategies Employed

The industry used three arguments:
(a) smoking could not be proven to have caused plaintiffs' individual injuries;
(b) if smoking is dangerous, the industry didn't know it when they made the cigarettes the plaintiffs smoked;
(c) if the victims changed brands over time, there could be no proof their product had caused the claimed harm.

1950 — WAVE I — 1970

Results

Plaintiffs lost all cases.

As an outgrowth of the concerns about smoking initiated by the 1964 Surgeon General's Report and the subsequent law requiring warning labels, the tobacco industry used the presence of such labels as a defense in the claims brought by smokers. While continuing to deny a causal link between smoking and plaintiffs' illnesses, tobacco companies also began to claim that, because of the warning labels and publicity about the claimed dangers of smoking, smokers knew as much as they did, a strategy known as the "assumption of risk" defense.

1980 — WAVE II — 1990

Plaintiffs lost all cases.

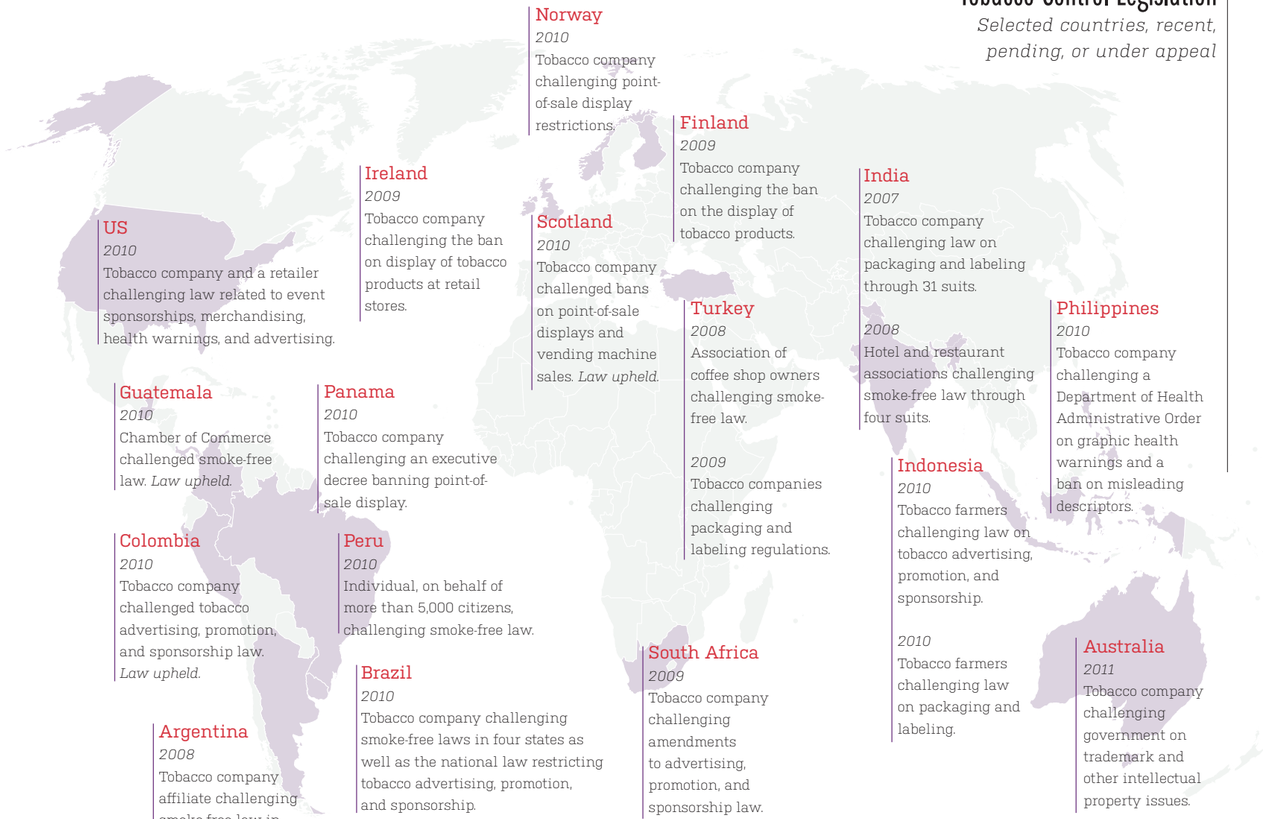
In 1998, 6 million confidential tobacco industry documents became available to the public as a result of legal action, providing damning evidence that the industry had long known about the harms of smoking. Plaintiffs now argued that the industry had covered up the reality of the dangers of smoking at a time when the general public was unaware of this danger, suggesting negligence, product liability, fraud, and intentional misrepresentation on the industry's part. Claimants began arguing that the industry also hid the fact that smoking was highly addictive, and that the industry deliberately marketed to minors.

1998 — WAVE III — Present

In 1998, in the historic Master Settlement Agreement, cigarette companies agreed to pay *46 US States $206 billion over 25 years, to settle litigation on the cost of smoking-related health care.*

Legal Challenges Against Tobacco Control Legislation

Selected countries, recent, pending, or under appeal



US
2010
Tobacco company and a retailer challenging law related to event sponsorships, merchandising, health warnings, and advertising.

Ireland
2009
Tobacco company challenging the ban on display of tobacco products at retail stores.

Norway
2010
Tobacco company challenging point-of-sale display restrictions.

Scotland
2010
Tobacco company challenged bans on point-of-sale displays and vending machine sales. *Law upheld.*

Finland
2009
Tobacco company challenging the ban on the display of tobacco products.

India
2007
Tobacco company challenging law on packaging and labeling through 31 suits.

2008
Hotel and restaurant associations challenging smoke-free law through four suits.

Turkey
2008
Association of coffee shop owners challenging smoke-free law.

2009
Tobacco companies challenging packaging and labeling regulations.

Philippines
2010
Tobacco company challenging a Department of Health Administrative Order on graphic health warnings and a ban on misleading descriptors.

Indonesia
2010
Tobacco farmers challenging law on tobacco advertising, promotion, and sponsorship.

2010
Tobacco farmers challenging law on packaging and labeling.

Australia
2011
Tobacco company challenging government on trademark and other intellectual property issues.

Guatemala
2010
Chamber of Commerce challenged smoke-free law. *Law upheld.*

Panama
2010
Tobacco company challenging an executive decree banning point-of-sale display.

Colombia
2010
Tobacco company challenged tobacco advertising, promotion, and sponsorship law. *Law upheld.*

Peru
2010
Individual, on behalf of more than 5,000 citizens, challenging smoke-free law.

Argentina
2008
Tobacco company affiliate challenging smoke-free law in Santa Fe province.

Brazil
2010
Tobacco company challenging smoke-free laws in four states as well as the national law restricting tobacco advertising, promotion, and sponsorship.

Uruguay
2010
Tobacco companies challenging packaging regulations at the International Centre for Settlement of International Disputes (ICSID) using a bilateral investment agreement between Switzerland and Uruguay.

South Africa
2009
Tobacco company challenging amendments to advertising, promotion, and sponsorship law.

THE GOVERNMENT SAYS:

"It is fair to say that we are being targeted by what can only be described as subversive and disgraceful tactics by the tobacco industry, including using every available vehicle and opportunity to try and intimidate and/or threaten us to withdraw the legislation."

Jane Halton, Secretary of the Department of Health and Ageing, Australia, 2011

THE OPTIMIST SAYS:

"In years to come, people will shake their heads in disbelief that there was ever smoking in homes where children live, eat, sleep and breathe."

Jonathan Winickoff, Harvard Medical School, US, 2010

In July 2011, the World Health Organization suggested a target of a 40% relative reduction in prevalence of current daily tobacco smoking among adults over 15 years of age by 2025 (from a 2010 baseline). This does not include smokeless tobacco or some of the new forms of tobacco. The reduction has yet to be adopted by Member States, but it is a start in encouraging countries to set targets within the overall parameter.

The future is mixed. On the one hand, many nations are beginning to take even stronger measures, and smoking prevalence is forecast to reach single figures, below 5 percent in 2040—the "2040 end game." On the other hand, even if smoking prevalence rates decline and youth uptake is reduced, the number of smokers in the world will most likely rise for the foreseeable future, due principally to world population growth in low- and middle-income countries.

One major future issue is that of smokeless products and alternative nicotine delivery systems. Tobacco companies are shifting from marketing traditional cigarettes to marketing alternative products, and this will have an effect on current tobacco control strategies, such as clean indoor-air policies. Will e-cigarettes be allowed in previously smoke-free areas, and will tax rates be modified to encourage non-combustible products?

Many countries, including low-income ones, have shown that tobacco can be controlled and smoking rates can be reduced. These successes can be reproduced by any responsible nation, but only through concerted, comprehensive, and sustained governmental and community action. It is clear that preventing youth initiation and encouraging cessation require steadfast political will to tackle the tobacco industry and allocate appropriate resources proportional to the health and economic magnitude of the tobacco problem.

THE MEANS TO CURB THIS PANDEMIC ARE CLEAR AND WITHIN REACH.

Future Policy Directions

Since the first edition of *The Tobacco Atlas*, huge strides have been made in the global effort to reduce smoking prevalence and harm, with many countries experiencing a reduction in smoking prevalence in the past 10 years. Nevertheless, it is projected that smoking will still cause 1 billion deaths in the 21st century (see Chapter 1 – *Deaths*). As overwhelming evidence about the great costs of tobacco use to human health and life, as well as to the global economy, continue to emerge and be disseminated, countries will need to become increasingly engaged in strategies to reduce the burden of tobacco use—and it is also likely the tobacco industry will continue to resist and obstruct such measures.

Recommended Future Policies and Actions

1 WHO FCTC
All countries that have not signed or ratified the World Health Organization Framework Convention on Tobacco Control should do so immediately. Those that have ratified it should implement all the Articles forthwith. This includes the whole range of legislative, tax, and other measures.

2 MILLENNIUM DEVELOPMENT GOALS
Given the evidence and global consensus on the negative impact of tobacco on a broad range of health and economic outcomes, tobacco control goals and targets should be included in the second round of the Millennium Development Goals in 2015.

3 UN HIGH-LEVEL MEETING
Following the UN High-Level Meeting on noncommunicable diseases, tobacco issues should be strategically placed in national policies and action plans on NCDs.

4 FUNDING
Government funding for health research, surveillance, and action still lags behind the enormity of the problem of tobacco as a health issue (see Chapter 23 – *Public Health Strategies*). Substantially increased funding—ideally from a percentage of tobacco tax—at country level is needed to reflect the burden that tobacco poses to health and economies, and particularly to combat the issue in geographic areas where the number of tobacco users is increasing.

5 TOBACCO INDUSTRY REGULATIONS
Given the wealth of evidence showing that nicotine is a highly addictive drug, governments should move to regulate the tobacco industry, as well as any other industry producing nicotine products, as rigorously as possible, including licensing nicotine as an addictive drug.

THE REALIST SAYS:

"My prediction for the 2020s is that most of the types of cancer that were killing many people in 2010 will still be killing many people, and that the trends in premature death from cancer will be driven mainly by the extent to which people choose to stop smoking, rather than by improvements in treatment."

Sir Richard Peto, University of Oxford, UK, 2010

6 TOBACCO TAXES
National tobacco taxes serve as a major deterrent to initiating and maintaining a smoking habit (see Chapter 29 – *Tobacco Taxes*). Countries that have yet to implement rigorous tobacco tax policies should seek to increase excise taxes to at least 70% of the retail price. 'Duty-free' tobacco, currently sold worldwide in the international terminals of airports and elsewhere, should be prohibited.

7 HEALTH PROFESSIONALS
Based on the high level of smoking among health-care professionals (see Chapter 12 – *Health Professionals*) and the need for health professionals to set an example, they should not smoke; medical and other health professions schools should be smoke-free; and teaching on tobacco control should be systematically introduced into the health-care curriculum.

8 QUITTING
Research supports that most people who smoke want to quit (see Chapter 25 – *Quitting Smoking*), but many find it difficult to do so, and quitting rates remain low. Support for individual efforts to quit must be improved. Future quitting incentives may include monetary savings through rebates and lower health-insurance premiums.

9 MESSAGING
Health education messages and mass media campaigns have been shown to be replicable and effective in a range of cultural contexts. These messages should continue to be developed and disseminated more effectively.

10 NEW TOBACCO PRODUCTS
Research reflects a general confusion among the public about a range of tobacco products and their true harm (see Chapter 5 – *Nicotine Delivery Systems*). As the tobacco industry introduces novel products, often purporting that these products reduce harm, awareness campaigns and media attention are sorely needed to inform the public about the true dangers of these products and reiterate that there is no safe way to use tobacco.

11 TOBACCO FARMING
Economies with large tobacco-farming sectors need assistance and support in diversifying crops. New, commercially profitable uses for tobacco that contribute to, rather than harm, human health should be pursued.

12 HOT SPOTS
Media and advocates should partner to bring increased attention and assistance to rapidly expanding geographic "tobacco hot spots," particularly when litigation is being pursued and statements, legislation, taxation, and other tobacco control action is being challenged.

13 TOBACCO INDUSTRY BEHAVIOR
The tobacco industry has recently and increasingly taken to using legal and trade challenges to national legislation. A global strategy and support for countries that find themselves under legal threat need to be developed (see Chapter 30 – *Legal Challenges and Litigation*). In addition, the industry has introduced corporate social responsibility programs promoting voluntary measures as an effective way to address tobacco control, create an illusion of being a "changed" company, and establish partnerships with health interests. It has also employed the use of seemingly independent front groups to challenge science and action funded business analysts to make its legislative case, and engaged in political lobbying. The behavior of the industry must be exposed and regulated, and the industry should have no place in discussions of tobacco control at any level.

14 POLITICAL WILL
What works in reducing smoking rates has been known for decades. Political will is needed to implement such policies, to protect the public from Big Tobacco, to permit victims of the industry to protect themselves from products that are highly addictive and enormously harmful, and to seek legal remedies against the manufacturers of these products.

BCE–19th Century

Tobacco spreads around the world as a commercial crop.

6000 BCE
Americas First cultivation of the tobacco plant.

Circa 1 BCE
Americas Indigenous Americans begin smoking tobacco and using tobacco enemas.

Americas Huron Indian myth: "In ancient times, when the land was barren and the people were starving, the Great Spirit sent forth a woman to save humanity. As she traveled over the world everywhere her right hand touched the soil, there grew potatoes. And everywhere her left hand touched the soil, there grew corn. And in the place where she had sat, there grew tobacco."

1493
Christopher Columbus and his crew return to Europe from the Americas with the first tobacco leaves and seeds ever seen on the continent. A crew member, Rodrigo de Jerez, is seen smoking and is imprisoned by the Inquisition, which believes he is possessed by the devil.

Early 1500s
Middle East Tobacco is introduced to Egypt by Turkish traders.

1530-1600
China Tobacco is introduced via Japan or the Philippines.

1558
Europe Tobacco plant is brought to Europe. Attempts at cultivation fail.

1560
Africa Portuguese and Spanish traders introduce tobacco to Sub-Saharan Africa.

France Diplomat Jean Nicot, Lord of Villemain, introduces tobacco from Portugal. Queen Catherine de Medici uses it to treat her migraines.

1577
Europe European doctors recommend tobacco as a cure for toothaches, falling fingernails, worms, halitosis, lockjaw, and cancer.

1592-1598
Korea The Japanese Army introduces tobacco to Korea.

Circa 1600
India Tobacco is first introduced.

1600s
China Philosopher Fang Yizhi points out that long years of smoking "scorches one's lung."

1603
Japan Use of tobacco is well-established.

1604
England King James I writes *A Counterblaste to Tobacco:* "Smoking is a custom loathsome to the eye, hateful to the nose, harmful to the brain, dangerous to the lungs, and in the black, stinking fume thereof nearest resembling the horrible Stygian smoke of the pit that is bottomless."

1608-1609
Japan Ban on smoking is introduced to prevent fires.

1612
Americas Tobacco is first grown commercially.

1614
England Seven thousand tobacco shops open following the first sale of Virginia tobacco.

1633
Turkey Death penalty is imposed for smoking.

1634
China Qing dynasty decrees a smoking ban, during which a violator is executed. The ban is not to protect health, but to address the inequality of trade with Korea.

1650s
South Africa European settlers grow tobacco and use it as a form of currency.

1692 & 1717
Korea Bans on smoking in Choson are introduced to reduce fire risk.

1700s
Africa/Americas African slaves are forced to work in tobacco fields.

Europe Snuff becomes the most popular mode of tobacco use.

Circa 1710
Russia Peter the Great encourages his courtiers to smoke tobacco and drink coffee, which is seen as fashionable and pro-European.

1719
France Smoking is prohibited in many places.

1753
Sweden Botanist Carolus Linnaeus names the plant genus *Nicotiana* and describes two species, *Nicotiana rustica* and *Nicotiana tabacum.*

1761
England John Hill conducts the first study of the malignant effects of tobacco, showing that snuff users could contract nasal polyps.

1769
New Zealand Captain James Cook arrives smoking a pipe, and is promptly doused in case he is a demon.

1771
France A French official is condemned to be hanged for admitting foreign tobacco into the country.

1788
Australia Tobacco arrives with the First Fleet, 11 ships that sailed from England carrying mostly convicts and crew.

1795
Germany Samuel Thomas von Soemmerring reports cancers of the lip afflicting pipe smokers.

1800
Canada Tobacco is first grown commercially.

1833
UK Phosphorus friction matches are introduced on a commercial scale, making smoking more convenient.

1840
France Frederic Chopin's mistress, the Baroness de Dudevant, becomes one of the first women to smoke in public (in Paris).

1847
England Philip Morris, Esq., a tobacconist and importer of fine cigars, opens a shop in London selling hand-rolled Turkish cigarettes.

1854
England Philip Morris begins making his own cigarettes. Old Bond Street soon becomes the center of Britain's retail tobacco trade.

1858
China Treaty of Tianjin allows cigarettes to be imported into China duty-free.

1862
US First federal tobacco tax is introduced to help finance the Civil War.

1876
Korea Foreign cigarettes and matches are introduced.

1880s
England Richard Benson and William Hedges open a tobacco shop near Philip Morris's in London.

1881
US First practical cigarette-making machine is patented by James Bonsack, producing 100,000 cigarettes a day, replacing the labor of 50 people. Production costs plummet, and cigarette smoking begins its explosive growth.

Circa 1890s
Indonesia Clove cigarette, the kretek, is invented.

Pre-1900
Lung cancer is still extremely rare.

20th Century

As tobacco becomes big business, science finds evidence of tobacco-related illness.

1900-1910

China, Japan, and Korea BAT introduces cigarettes, using films as a promotional vehicle.

1901-1902

England Imperial Tobacco Company Limited (ITL) and British American Tobacco (BAT) are founded.

1903

Brazil Tobacco company Souza Cruz is founded.

1911

US American Tobacco empire is broken up by exercise of the Sherman Antitrust Act.

1913

US Birth of the "modern" blended cigarette: R.J. Reynolds launches Camel brand.

1915

Japan At Tokyo University, cancer is induced in laboratory animals by applying coal tar to the skin of rabbits.

1921

Korea Korea Ginseng Corporation becomes Korea Tobacco and Ginseng, and a monopoly is formed.

1924

US Philip Morris introduces Marlboro as a women's cigarette—"mild as May."

US Reader's Digest publishes "Does Tobacco Injure the Human Body," launching a campaign by the magazine to make people think before starting to smoke.

1929

US Edward Bernays mounts a "freedom march" of smoking debutantes/fashion models who walk down New York City's Fifth Avenue during the Easter parade holding aloft their Lucky Strike cigarettes as "torches of freedom."

Germany Fritz Lickint of Dresden publishes the first formal statistical evidence of a lung cancer–tobacco link, based on a case series showing that lung cancer sufferers are likely to be smokers.

1931

Argentina Angel Roffo of Buenos Aires contributes to a growing body of evidence on the harms of smoking, showing that tobacco tars rubbed onto the ears of rabbits produce tumors.

1936

Germany Fritz Lickint first uses the term *Passivrauchen* (passive smoking) in his *Tabakgenuss und Gesundheit*.

1938

US Dr. Raymond Pearl, from the Medical School and the School of Hygiene and Public Health of Johns Hopkins University, publishes a paper in *Science* describing the premature deaths of heavy smokers as compared to nonusers and moderate smokers.

1939

US Tobacco companies are found in violation of price-fixing laws.

Germany Franz Herman Müller of Cologne City Hospital launches the field of case-control epidemiology, showing that smokers are far more likely to suffer from lung tumors than nonsmokers. Abstract of his work is published in *JAMA*.

US Alton Ochsner and Michael DeBakey report an association between smoking and lung cancer.

1947

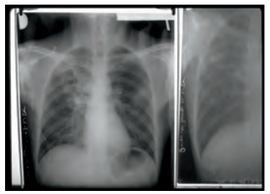
Canada Norman Delarue compares 50 patients with lung cancer with 50 patients hospitalized with other diseases, finding that over 90% of the first group—but only half of the second—were smokers. Delarue predicts that by 1950, no one will be smoking.

1950s

China State monopoly takes control of the tobacco business, and foreign tobacco companies leave China. BAT, almost half of whose revenues came from China, is especially hurt.

1950

US The link between smoking and lung cancer is reconfirmed. "Tobacco Smoking as a Possible Etiologic Factor in Bronchogenic Carcinoma" by E. L. Wynder and Evarts Graham is published in *JAMA*; the same issue features a full-page ad for Chesterfields with the actress Gene Tierney and golfer Ben Hogan. *JAMA* accepts tobacco ads until 1953; some state medical journals accept ads into the late 1960s.



UK Richard Doll and A. Bradford Hill publish a case-control study linking smoking and lung cancer. Doll and Hill also launch a large-scale prospective study.

1953

US Ernst Wynder, Evarts Graham, and Adele Croninger show that tumors can be produced by painting tobacco tars on the shaved skins of mice; tobacco stocks plummet in response, and the tobacco industry faces its biggest crisis in decades.

US Tobacco executives meet at the Plaza Hotel in New York City to organize a campaign to respond to recent scientific data indicating health harms from cigarettes. Public relations firm Hill & Knowlton is hired to orchestrate denialist campaign.

1954

US Tobacco Industry Research Committee places nationwide full-page ad, "A Frank Statement to Cigarette Smokers," reassuring them that it is safe to smoke.

US St. Louis factory worker Ira C. Lowe files first product liability action against a tobacco company on behalf of her smoker husband, who died from cancer. The tobacco company wins this, and the next couple of hundred cases filed against it.

US The Marlboro cowboy is created for Philip Morris by Chicago ad agency Leo Burnett.

1957

Vatican Pope Pius XII suggests that the Jesuit order give up smoking.

1958

US Tobacco Institute is formed in Washington as a trade organization by US cigarette manufacturers, with a broad mission to put out good news about tobacco, especially economic news to attack scientific studies by casting doubt on them rather than by rebutting them directly, and to lobby Congress.

1960

US Framingham Heart Study is published finding cigarette smoking to increase the risk of heart disease.

1962

UK First report of the Royal College of Physicians of London on Smoking and Health is published.

1963

World Tobacco and *Tobacco Journal International*, tobacco industry trade journals, first published.

1964

US First US Surgeon General's report on smoking and health announces that smoking causes lung cancer in men.

1965

WHO establishes International Agency for Research on Cancer (IARC) in Lyon, France.

UK Cigarette advertising on TV is banned.

1967

US First World Conference on Smoking and Health held in New York.

1969

US Surgeon General's report confirms link between maternal smoking and low birth weight. Philip Morris President and CEO Joseph Cullman claims shortly thereafter that "some women would prefer having smaller babies."

1971

UK Action on Smoking and Health (ASH) UK establishes national tobacco control organization.

US Cigarette manufacturers agree to put health warnings on advertisements. This agreement is later made law.

1972

Marlboro becomes the best-selling cigarette in the world.

International Association for the Study of Lung Cancer is inaugurated.

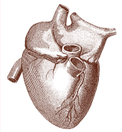
1974

France Joe Camel is born—and used in French poster campaign for Camel cigarettes.

1976

US Shimp v. New Jersey Bell Telephone Co. is the world's first lawsuit claiming damages from secondhand smoke. The office worker is granted an injunction to ensure a smoke-free area in her workplace.

1977



Italy The Martignacco Project community-prevention trial results in a reduction of coronary heart disease.

US First Great American Smokeout is held nationally, during which smokers quit smoking on the third Thursday of November.

1978

Australia The three-year community study North Coast Healthy Lifestyle Programme shows a significant reduction in smoking.

US A Roper Report prepared for the Tobacco Institute concludes that the nonsmokers' rights movement is "the most dangerous development to the viability of the tobacco industry that has yet occurred."

Switzerland Nicorette chewing gum is approved for use as nicotine replacement therapy.

1979

The Freedom Organization for the Right to Enjoy Smoking Tobacco (FOREST) is formed.

US Tobacco Control Resource Center and its Tobacco Products Liability Project are formed.

Australia Activist group BUGA UP (Billboard Utilising Graffitists Against Unhealthy Promotions) is formed, re-facing tobacco and alcohol billboards.

20th Century

Government agencies and international organizations act to protect public health.

1981

Japan Professor Takeshi Hirayama publishes first report linking passive smoking and lung cancer in the nonsmoking wives of men who smoked.

1983

Europe ERC Group Plc, an independent market research group, publishes first European Tobacco Market Report.

1984

US FDA approves nicotine gum as prescription medicine, following efforts to suppress its use by Philip Morris.

1985

US Lung cancer surpasses breast cancer as number-one cancer killer of women.

By 1985, 73% of the world's tobacco is grown in low- and middle-income countries.

US Washington, D.C.: First International Summit of Smoking Control Leaders is organized by the American Cancer Society.

1987

US Smoke-free Educational Services is founded, advocating the right of all employees to work in a safe, healthy, smoke-free environment.

1988

First WHO report on the effects of smokeless tobacco is published.

US Framingham Heart Study finds cigarette smoking increases risk of stroke.

First WHO World No Tobacco Day, subsequently an annual event on May 31, with different annual themes and awards of commemorative medals.

1989

Asia The Asia Pacific Association for the Control of Tobacco (APACT) is established by David Yen of the John Tung Foundation in Taiwan, China.

Thailand U.S. Trade Representative (USTR) launch a petition under section 301 of the 1975 Trade Act. The General Agreement on Tariffs and Trade (GATT) panel rules that an import ban on foreign cigarettes was not justified, but Thailand could raise its tobacco tax, impose laws (e.g. advertising bans, labelling, ingredient disclosure) if imported products were given equal treatment.

1990s

Cigars become fashionable again in high-income countries.

1990

Western Pacific Region First five-year WHO Action Plan on Tobacco or Health is published.

GLOBALink, the international interactive website and marketplace founded by the International Union Against Cancer, is inaugurated for the international tobacco control community.

International Network of Women Against Tobacco (INWAT) is formed.

China Chinese Association on Smoking and Health is inaugurated, changing its name to the Chinese Association on Tobacco Control in 2004.

Tobacco control in the Third World: A resource atlas, edited by Simon Chapman and Wong Wai Leng, is published by the International Organisation of Consumers Unions, Penang, Malaysia.

1991

UK International Agency on Tobacco and Health (IATH) is formed to act as an information and advisory service for low-income countries. IATH ceases its operations in 2007 in view of the fact that so many new, similar resources have become available, mostly as a result of the WHO FCTC.

Geneticists determine that chemicals in cigarette smoke switch on a gene that makes lung cells vulnerable to the chemicals' cancer-causing properties.

International Network Towards Smoke-free Hospitals is inaugurated.

1992

Tobacco Control is founded by the British Medical Journals group. This is the first international peer-reviewed journal on tobacco control.

Northern Ireland First conference on women and tobacco is initiated by the UICC (International Union Against Cancer), the Ulster Cancer Foundation, and the Health Promotion Agency of Northern Ireland.

Thailand Major comprehensive tobacco control laws come into effect, including first ingredient disclosure provisions.

1993

US Environmental Protection Agency (EPA) declares cigarette smoke a Class-A carcinogen.

South Africa Tobacco Products Control Amendment Act is passed.

Europe European Network on Young People and Tobacco (ENYPAT) is founded.

1994

US Society for Research on Nicotine and Tobacco is founded.

US Cigarette executives testify before Congress that in their opinion nicotine is not addictive.

US Confidential internal tobacco industry documents are leaked to Professor Stan Glantz.

Austria First TABEXPO held in Vienna. TABEXPO stages exhibitions and congresses for the international tobacco industry.

International Non Governmental Coalition Against Tobacco (INGCAT) is founded.

First international "Quit & Win" campaign is run, with successful quitters competing for a monetary award.

Canada Research for International Tobacco Control (RITC) is inaugurated, with a major focus on low- and middle-income countries.

US State of Mississippi files first lawsuit by a health authority for reimbursement of money expended to treat smokers with smoking-caused illnesses. It ends with an out-of-court settlement.

1995

US Smokescreen.org (later Smokefree.net) is inaugurated. Focusing on the right to breathe clean air, this is the first web-based advocacy site that enables visitors to send faxes directly to their elected officials. Mainly used by US citizens, but also by 10,000 international participants.

Italy The Bellagio Statement that tobacco is a major threat to sustainable and equitable development is issued by members of a retreat at the Rockefeller Foundation's Bellagio Study and Conference Centre.

International Council of Nurses publishes a position statement on tobacco.

US Federal Drug Administration declares cigarettes to be "drug delivery devices." Restrictions are proposed on marketing and sales to reduce smoking by young people.

FORCES International (Fight Ordinances and Restrictions to Control and Eliminate Smoking), an ostensibly grassroots pro-tobacco organization, is established.

US "Marlboro Man" David McLean dies of lung cancer.

1996

US First smoking cessation guidelines are issued by the federal Public Health Service.

1997

Europe European Network for Smoking Prevention is created.

Scotland Doctors and Tobacco: Tobacco Control Resource Centre is formed by the European Forum Medical Associations, based at the British Medical Association in Edinburgh.

US Congress passes a bill prohibiting the Departments of State, Justice, and Commerce from promoting the sale or export of tobacco.

1998

Studies confirm the harmfulness of smoking fewer than 10 cigarettes a day.

WHO's Tobacco Free Initiative is established.

United Nations Foundation funds its first tobacco control project.

Australia Tobacco Control Supersite website is inaugurated, enabling exploration of internal, previously private tobacco industry documents, and providing access to a wide range of information relevant to smoking prevention and control in Australia.

US Master Settlement Agreement between attorneys general of 46 states and five territories with tobacco companies to settle lawsuits.

1999

US Network for Accountability of Tobacco Transnationals (NATT) is founded by Corporate Accountability International (formerly Infact), comprising environmental, consumer, human rights, and corporate accountability organizations working together to prevent life-threatening abuses by transnational corporations.

Global Youth Tobacco Surveys (GYTS) commence by the US Centers for Disease Control and Prevention. These are followed by the Global School Personnel Surveys (GSPS) started in 2000, the Global Health Professions Student Survey (GHPSS) started in 2005, and the Global Adult Tobacco Survey (GATS) started in 2007.

World Bank report "Curbing the Epidemic: Governments and the Economics of Tobacco Control" is published.

Sweden Swedish International Development Cooperation Agency first supports tobacco control projects.

UK Britain's royal family orders the removal of its seal of approval and royal crest from Gallaher's Benson and Hedges cigarettes by 2000.

US US Justice Department sues the tobacco industry to recover billions of government dollars spent on smoking-related health care, accusing cigarette makers of "fraud and deceit."

21st Century

Serious efforts are undertaken to reduce the global harm caused by tobacco use.

2000

Framework Convention Alliance (FCA) of NGOs is formed to support the WHO Framework Convention on Tobacco Control (WHO FCTC) and related protocols.

US First Luther L. Terry Awards are given for contributions to tobacco control.

Global Partnerships for Tobacco Control is founded by Essential Action to help support and strengthen international tobacco control activities at the grassroots level.

International Tobacco Evidence Network (ITEN) is established, with the goal of expanding global research.

Rockefeller Foundation International Health Research Awards are established for "Trading Tobacco for Health" in selected Association of South-East Asian Nations countries.

South Africa Tobacco Products Control Amendment Act comes into effect, strictly regulating smoking and advertising.

2001

US A new report, *Clearing the Smoke: Assessing the Science Base for Tobacco Harm Reduction*, from the Institute of Medicine (IOM) is released.

WHO publishes *Tobacco & the Rights of the Child.*

Czech Republic Philip Morris releases a report to the government concluding that smokers save the state money by dying early.

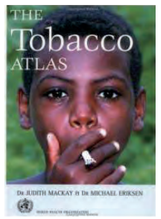
Thailand ThaiHealth Promotion Foundation is established, funded by a percentage of tobacco taxation. The Southeast Asia Tobacco Control Alliance (SEATCA) is also established for regional and sustainable funding of tobacco control activity in SE Asia.

2002

TobaccoPedia, the online tobacco encyclopedia, is inaugurated.

US Global Tobacco Research Network is founded by the Institute for Global Tobacco Control at Johns Hopkins University.

Switzerland WHO publishes the first edition of *The Tobacco Atlas*, made available by Myriad Editions.



US Fogarty International Center, National Institutes of Health, allocates funding for tobacco research projects.

2003

World Medical Association launches the Doctors' Manifesto for Global Tobacco Control.

Treatobacco web-based database and educational resource for treatment of tobacco dependence established by the Society for Research on Nicotine and Tobacco.

The Global Network of Pharmacists Against Tobacco is launched.

2004

Ireland Workplace smoking ban, including pubs and restaurants, is implemented, showing significantly reduced salivary cotinine concentrations among nonsmoking staff.

First textbook for health professionals on tobacco is published by Oxford University Press: *Tobacco: Science, Policy and Public Health.*

Europe The EU Commission publishes the ASPECT report, "Tobacco or Health in the European Union: Past, Present and Future," the first comprehensive overview of tobacco control in the 25 EU member countries plus Norway, Iceland, and Switzerland.

Uganda Environment Minister Kahinda Otafiire announces a ban on smoking in restaurants, educational institutions, and bars.

Canada Non-Smokers' Rights Association, the first such association, celebrates its 30th anniversary.

WHO's Code of Practice on Tobacco Control for Health Professional Organizations is launched.

IARC Monograph on Tobacco Smoke and Involuntary Smoking is released, conclusively refuting extensive tobacco industry disinformation by classifying secondhand smoke as a carcinogen.

India Complete ban on tobacco advertising and promotion comes into effect.

2005

World Dental Federation (FDI) launches *Tobacco or Oral Health* publication.

WHO Framework Convention on Tobacco Control (WHO FCTC), initiated by Ruth Roemer in 1993, comes into force, using international law to reduce tobacco use.

2006

US United States v. Philip Morris. Racketeer Influenced and Corrupt Organizations (RICO) case is the largest litigation ever undertaken by the US government, and Judge Gladys Kessler finds tobacco companies guilty of racketeering and defrauding the American public.

US Second edition of *The Tobacco Atlas* is published by the American Cancer Society and launched at the 13th World Conference on Tobacco or Health in Washington, D.C.

US Bloomberg Initiative to Reduce Tobacco Use in low- and middle-income countries is launched with $125 million donation from Bloomberg Philanthropies.

2007

The Global Adult Tobacco Survey, launched in February, is designed to produce standardized data on adult tobacco use, including exposure to secondhand smoke and quit attempts among adults.

2008

The Global Smokefree Partnership is formed to promote effective smoke-free air policies worldwide.

The first WHO *MPOWER* report on the global status of the tobacco epidemic is published, and published every two years thereafter.

The Bill and Melinda Gates Foundation and Bloomberg Philanthropies jointly pledge additional financial resources to reduce tobacco use in low- and middle-income countries, bringing the total outlay to $500 million over seven years, 2006–2013.

2009

India Third edition of *The Tobacco Atlas* is published by the American Cancer Society and World Lung Foundation and launched at the 14th World Conference on Tobacco or Health in Mumbai.

2011

US First UN High-Level Meeting on noncommunicable diseases includes tobacco as a major risk factor for the four main NCDs (cancer, cardiovascular disease, chronic lung disease, and diabetes).

2012

Singapore Fourth edition of *The Tobacco Atlas* is published by the American Cancer Society and World Lung Foundation and launched at the 15th World Conference on Tobacco or Health in Singapore.

> "Never let the future disturb you. You will meet it, if you have to, with the same weapons of reason which today arm you against the present."
>
> *Marcus Aurelius Antoninus, Roman emperor (AD 121–180)*

ADDICTION

Physiological or psychological dependence on a substance characterized by neurochemical changes, compulsive drug-seeking behaviors, dose tolerance, withdrawal symptoms, uncontrolled cravings, and self-destructive behaviors. Common addictive drugs include alcohol, stimulants, cocaine, heroin, and nicotine.

ADVERTISING

Any commercial effort to promote tobacco consumption, including the display of trademarks, brand names, and manufacturer logos; marketing of tobacco products; sponsorship of sports and other social and cultural activities; and other methods.

BCE

Before the Common Era.

BILLION

1,000 million, or 1,000,000,000.

BRAND STRETCHING

A marketing approach by tobacco companies in which cigarette brand names are attached to advertisements for nontobacco products (such as clothing).

BUPROPION

An antidepressant pharmaceutical used as a smoking-cessation aid. Brand names include Wellbutrin and Zyban.

CANCER

A type of disease in which abnormal cells divide uncontrollably. Cancer cells can invade nearby tissue and spread through the bloodstream and lymphatic system to other parts of the body. Tobacco consumption significantly increases the risk of developing many types of cancers, especially lung and oral cancers. Tobacco is also associated with cancers of the pharynx, larynx, esophagus, pancreas, kidney, bladder, and other organs.

CARCINOGEN

A substance that causes cancer. Tobacco contains many potent chemical carcinogens, including tobacco-specific nitrosamines (TSNs), polyaromatic hydrocarbons (PAHs), and volatile organic compounds (VOCs).

CHRONIC BRONCHITIS

Inflammation of the bronchial mucus membrane over a long period of time, characterized by cough, hypersecretion of mucus, and expectoration of sputum; associated with increased vulnerability to bronchial infection.

CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)

A chronic lung disease, such as asthma or emphysema, in which breathing becomes slowed or forced. See also *Chronic bronchitis*.

CONSUMPTION

Total cigarette consumption is the number of cigarettes sold annually in a country, usually in millions of sticks. Total cigarette consumption is calculated by adding a country's cigarette production and imports and subtracting exports.

Per adult cigarette consumption is calculated by dividing total cigarette consumption by the total population of those ages 15 years and older. Smuggling may account for inaccuracies in these estimates.

CORONARY ARTERY DISEASE

The narrowing or blockage of the coronary arteries (blood vessels that carry blood and oxygen to the heart) usually caused by atherosclerosis (a buildup of fatty material [cholesterol] and plaque inside the coronary arteries). Also known as *coronary heart disease*.

COSTS

Macroeconomic costs associated with tobacco use.

Direct costs: Health costs related to diseases caused by tobacco, including health-service costs, such as hospital services, physician and outpatient services; prescription drugs; nursing home services; home health care and allied health care; and changed expenditures due to increased utilization of services.

Indirect costs: Productivity costs caused by tobacco-related illness or premature death; loss of productivity and earnings.

Total costs: The sum of direct and indirect tobacco-attributable costs to society.

COTININE

Nicotine's major metabolite, which has a significantly longer half-life than nicotine. Cotinine measurement is often used to estimate a smoker's tobacco/nicotine usage prior to quitting, and to confirm abstinence self-reports during follow-up. Also, cotinine is commonly used as an indicator of exposure to secondhand smoke among nonsmokers. Cotinine is commonly measured in blood serum, urine, and saliva.

E-CIGARETTE (ELECTRONIC CIGARETTE)

An electrical device that attempts to simulate the act of cigarette smoking by producing an inhaled mist bearing the physical sensation, appearance, and often the flavor and nicotine content of inhaled cigarette smoke.

ELECTRONIC NICOTINE DELIVERY SYSTEMS (ENDS)

Scientific term describing electronic cigarettes and other products that deliver nicotine without combustion.

EMPHYSEMA

A pathological condition of the lungs marked by an abnormal increase in the size of the air spaces, resulting in labored breathing and an increased susceptibility to infection. It can be caused by irreversible expansion of the alveoli or by the destruction of alveolar walls. See *Chronic obstructive pulmonary disease (COPD)*.

ENVIRONMENTAL TOBACCO SMOKE (ETS)

See *Secondhand smoke (SHS)*.

EXCESS MORTALITY

Absolute difference between two rates of mortality. The amount by which death rates for a given population group (e.g., smokers) exceeds that of another population group chosen as a reference or standard (e.g., nonsmokers).

FRAMEWORK CONVENTION ON TOBACCO CONTROL

The World Health Organization Framework Convention on Tobacco Control (WHO FCTC) is the first treaty negotiated under the auspices of the WHO. WHO FCTC establishes the international public health and legal template for national tobacco control activities.

GLOBAL TOBACCO SURVEILLANCE SYSTEM (GTSS)

The World Health Organization (WHO) and the US Centers for Disease Control and Prevention (CDC) developed these surveys to track tobacco use using a common methodology and core questionnaire. The GTSS includes the Global Youth Tobacco Survey (GYTS), Global School Personnel Survey (GSPS), Global Health Professional Student Survey (GHPSS), and Global Adult Tobacco Survey (GATS).

HARM REDUCTION

A public health philosophy that seeks to mitigate health hazards by replacing high-risk products with lower-risk products or activities. In tobacco control, harm reduction is proposed for smokers who do not want to stop smoking or are unable to do so despite many attempts. Harm reduction seeks to reduce the adverse health effects of smoking by removing harmful constituents or encouraging smokers to switch to alternative modes of tobacco consumption that are considered less harmful than smoking—e.g., smokeless tobacco. Some consider the approach controversial and believe the main focus should be on smoking cessation.

HEALTH PROFESSIONALS

Dentists, health science practitioners, hospital staff, medical doctors, nurses, pharmacists, ancillary medical staff, and students in these disciplines.

HEALTH WARNINGS

Government-mandated medical statements or graphic images placed on tobacco products, packaging, or advertisements.

INGREDIENT

Every component of the tobacco product that is smoked, chewed, or inhaled, including all genetically modified, blended, and introduced components, additives, flavorings, and other constituents, including paper, ink, adhesives, hardening agents, filters, and other materials used in the manufacturing process and present in the finished product in burned or unburned form.

MARKETING

A range of activities aimed at identifying, anticipating, and satisfying customer requirements profitably.

MPOWER

To make the WHO Framework Convention on Tobacco Control (WHO FCTC) a reality, WHO introduced the *MPOWER* measures, intended to assist in country-level implementation of effective interventions to reduce the demand for tobacco. Measures are:

Monitor tobacco use and prevention policies;
Protect people from tobacco smoke;
Offer help to quit tobacco use;
Warn about the dangers of tobacco;
Enforce bans on tobacco advertising, promotion, and sponsorship; and
Raise taxes on tobacco.

NICOTIANA TABACUM

The tobacco plant. Its leaves contain high levels of the addictive chemical nicotine and many cancer-causing chemicals, especially polyaromatic hydrocarbons (PAHs). The leaves may be smoked (in cigarettes, cigars, and pipes), used orally (as dipping and chewing tobacco), or inhaled (as snuff).

NICOTINE

An addictive, poisonous alkaloid chemical found in tobacco that acts as a stimulant, increasing heart rate and use of oxygen by the heart. Also used as an insecticide. The lethal dose for an adult is about 50mg.

NICOTINE REPLACEMENT THERAPY (NRT)

A type of smoking cessation treatment that provides a low dose of nicotine to ease cravings experienced by addicted smokers. NRTs include devices such as transdermal patches, nicotine gum, nicotine nasal sprays, and inhalers.

NOVEL NICOTINE PRODUCTS

Newly marketed products including items such as nicotine water, wafers, candy, and e-cigarettes. These products deliver nicotine to consumers in an innovative yet unregulated manner, and the side effects and potential benefits and dangers are largely unknown.

OPPORTUNITY COST

The cost associated with the lost opportunity of using resources in an alternative way. For example, the resources used for treating smoking-related illnesses could be used to build schools.

PASSIVE SMOKING

Inhaling cigarette, cigar, or pipe smoke produced by another individual. See also *Secondhand smoke (SHS)*.

POLYAROMATIC HYDROCARBON (PAH)

A type of organic compound composed of several benzene rings. PAHs, many of which are carcinogenic, are produced during charbroiling of meat, incomplete combustion of fossil fuels, and the burning of tobacco. Tobacco smoke is the most common source of human exposure.

PREVALENCE

Smoking prevalence is the percentage of smokers in the total population. Prevalence of current smokers and prevalence of current daily smokers are two common point estimates of prevalence. Meanwhile, the prevalence of ever-smokers is a measure of lifetime prevalence. Commonly, estimates of prevalence are presented separately by groups of age, gender, and location (urban/rural), although overall estimates also are informative. Adult smoking prevalence is usually defined as the percentage of smokers among those ages 15 years and older.

PROMOTION
Includes special offers, gifts, price discounts, coupons, company websites, specialty item distribution, and telephone advertising used to facilitate the sale or placement of any tobacco product. Also includes allowances paid to retailers, wholesalers, full-time company employees, or any other persons involved in tobacco distribution.

RELATIVE INCOME PRICE (RIP) OF CIGARETTES
A percentage of annual per capita income (measured by per capita GDP) required for purchase of 100 packs of cigarettes. The lower the RIP, the more affordable cigarettes are.

RETAILER
A person engaged in a business that includes the sale of tobacco products to consumers.

RISK
The probability of incurring a particular event or circumstance (e.g., risk of disease measures the chances of an individual contracting a disease).

SECONDHAND SMOKE (SHS)
Smoke resulting from the combustion of tobacco products. SHS is composed of mainstream smoke (exhaled by smokers) and side-stream smoke (from the tip of the cigarette, cigar, or pipe). Secondhand smoke contains the same harmful chemicals that smokers inhale. Also known as environmental tobacco smoke (ETS).

SMOKE-FREE AREA
Area where smoking or holding a lighted cigarette, cigar, or pipe is banned, and where it is expected that no evidence of SHS will be found, if measured.

SMOKELESS TOBACCO
Includes snuff and chewing tobacco; not a safe alternative to smoking. Smokeless tobacco is as addictive as smoking and can cause cancers of the gum, cheek, lip, mouth, tongue, and throat.

SMOKER
Someone who smokes any tobacco product either daily or occasionally.

STROKE
A condition in which a blood vessel in the brain bursts or is clogged by a blood clot. This leads to an inadequate blood supply to the brain and to the death of brain cells, and usually results in temporary or permanent neurological deficits. Smoking significantly increases the risk of stroke.

SUFFICIENT EVIDENCE
Term used by the US Surgeon General to indicate that current available evidence strongly supports the inference of a causal relationship between smoking and specific health outcomes.

SUGGESTIVE EVIDENCE
Term used by the US Surgeon General to indicate that current available evidence, although indicative, is not sufficient to infer a causal relationship between smoking and specific health outcomes.

TAR
The raw anhydrous nicotine-free condensate of smoke.

TAR AND NICOTINE YIELD
The amount of tar and nicotine in one cigarette, as determined by a machine designed to measure the chemical content of cigarette smoke. Machine yields of cigarette tar and nicotine levels do not reflect the actual level of exposure experienced by smokers. See also *Tobacco smoke condensate (TSC)*.

TOBACCO-ATTRIBUTABLE MORTALITY
The number of deaths attributable to tobacco use within a specific population.

TOBACCO CONTROL ORGANIZATION
An organization with a goal of reducing tobacco consumption and/or protecting nonsmokers from the effects of secondhand smoke, as well as monitoring compliance with legislation and reporting tobacco industry maneuvers.

TOBACCO INDUSTRY DOCUMENTS
Previously secret internal industry records that are now available in the public domain as a result of court rulings.

TOBACCO PRODUCT
Any product manufactured wholly or partly from tobacco that is ingested by smoking, inhalation, chewing, sniffing, or sucking.

TOBACCO PRODUCTION
The volume of actual tobacco leaves harvested from the field, excluding harvesting and threshing losses and any part of the unharvested tobacco crop.

TOBACCO SMOKE CONDENSATE (TSC)
Sticky particles comprising thousands of chemicals created by burning tobacco.

TOBACCO-SPECIFIC NITROSAMINE (TSN OR TSNA)
A group of toxic chemicals found only in tobacco products. The most carcinogenic include
- N'-nitrosonornicotine (NNN)
- (4-methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK)
- N-oxide, 4-(methylnitrosamino)-1-(3-pyridylN-oxide)-1-butanol (NNAL; a metabolic product of NNK).

TOBACCO EXCISE TAX
A tax levied specifically on tobacco products. There are two basic types of tobacco excise tax:

Specific tax: set as a specific amount of money per unit (e.g., cigarette, pack, etc.) or per weight (e.g., gram) of tobacco.

Ad valorem tax: set as a percentage markup on some determined value (tax base), usually the retail selling price or the wholesale (ex-factory) price of tobacco products.

Excise taxes are often differentiated according to the type of tobacco product (e.g., filtered vs. nonfiltered cigarettes, pipe tobacco vs. cigars).

In addition to the excise tax, other taxes may apply (e.g., VAT, sales tax), but these are not tobacco-product-specific taxes.

TOBACCO TAX AVOIDANCE
Legal methods of circumventing tobacco taxes.

Cross-border shopping involves individual tobacco users residing in higher-tax jurisdictions purchasing tobacco products in nearby lower-tax jurisdictions for their own consumption within the customs constraints.

Tourist shopping is similar to cross-border shopping, but involves the purchase of tobacco products in more distant jurisdictions.

Duty-free shopping involves the purchase of tax-free tobacco products purchased in airports, on airplanes, and in other travel-related venues. Most governments impose limits on how much an individual can purchase and bring home from duty-free sources.

Industry reformulation and/or repositioning refers to strategies of tobacco companies to reduce the tax imposed on their products—for example, by increasing the length of cigarettes when the taxes are based on quantity.

TOBACCO TAX EVASION
Illegal methods of circumventing tobacco taxes.

Small-scale smuggling involves the purchase, by individuals or small groups, of tobacco products in low-tax jurisdictions in amounts that exceed the limits set by customs regulations, for smuggling or resale in high-tax jurisdictions.

Large-scale smuggling involves the illegal transportation, distribution, and sale of large quantities of tobacco products that generally avoid all taxes.

Illicit manufacturing refers to the production of tobacco products contrary to law.

Counterfeiting involves the production and distribution of products bearing a trademark without the approval of the trademark owner.

TOBACCO USE
The consumption of tobacco products by burning, chewing, inhaling, or other forms of ingestion.

VARENICLINE
A smoking cessation aid that works by blocking nicotine receptors so nicotine is not needed for dopamine release. Brand name: Chantix in the US, Champix in Europe and Canada.

VOLATILE ORGANIC COMPOUND (VOC)
An organic (carbon-containing) compound that evaporates at room temperature. VOCs contribute significantly to indoor air pollution and respiratory disease.

WORLD HEALTH ORGANIZATION REGIONS
WHO Member States are grouped into six regions:
- African Region (AFRO)
- Region of the Americas (AMRO)
- Eastern Mediterranean Region (EMRO)
- European Region (EURO)
- South-East Asia Region (SEARO)
- Western Pacific Region (WPRO)

Data from these regions are included throughout *The Tobacco Atlas*.

COUNTRY	WHO REGION	World Bank Income Group^	DEATHS HARM		SECONDHAND SMOKE	CIGARETTE CONSUMPTION	MALE TOBACCO USE PRODUCTS & THEIR USE					FEMALE TOBACCO USE PRODUCTS & THEIR USE					TOTAL (MALE AND FEMALE) CRUDE TOBACCO USE			BOYS' & GIRLS' TOBACCO USE			COUNTRY
			Male Deaths	Female Deaths	Youth Exposed to Secondhand Smoke in Home	Per Capita Consumption	Current Cigarette Use	Currently Smoking ANY Tobacco Product	Type of Tobacco Use	Age Group	Crude Male Prevalence	Current Cigarette Use	Currently Smoking ANY Tobacco Product	Type of Tobacco Use	Age Group	Crude Female Prevalence	Type of Tobacco Use	Age Group	Crude Male and Female Prevalence	Boys' Current Cigarette Use	Girls' Current Cigarette Use	Total Current Cigarette Use	
			% 2004, Due to Tobacco (Estimates)		% Ages 13–15	Cigarettes Per Person	% 2009, Male Age Standardized (or country-specific data)		Male Crude, Latest Available	years	%	% 2009, Female Age Standardized (or country-specific data)		Female Crude, Latest Available	years	%	Total Crude, Latest Available	years	% Total	% Ages 13–15			
Afghanistan	EMRO	Low	24	6	38.8**	61	–	–	–	–	–	–	–	–	–	–	–	–	–	7.6**	–	4.8**	Afghanistan
Albania	EURO	Middle	25	8	84.8	1,116	60.1	60.1	Current tobacco smoking	15+	60.1	19.4	19.4	Current tobacco smoking	15+	18.3	Current tobacco smoking	15+	40.2	11.9	5.8	8.5	Albania
Algeria	AFRO	Middle	17	0	33.2**	775	28.8	–	Current tobacco smoking	15+	33.9	0.2	–	Current tobacco smoking	15+	2.4	Current tobacco smoking	15+	19.3	18.0	1.4	9.2	Algeria
Andorra	EURO	High	–	–	–	784	38.4	38.4	Current tobacco smoking	15+	42.2	32.3	32.3	Current tobacco smoking	15+	30.2	Current tobacco smoking	15+	–	–	–	–	Andorra
Angola	AFRO	Middle	9	5	–	414	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	Angola
Antigua and Barbuda	AMRO	Middle	2	3	18.0	375	–	–	–	–	–	–	–	–	–	–	–	–	–	8.2	6.1	7.4	Antigua and Barbuda
Argentina	AMRO	Middle	19	6	54.7	1,042	31.2	31.7	Current cigarette smoking	18+	32.4	20.1	21.7	Current cigarette smoking	18+	22.4	Current cigarette smoking	18+	27.1	21.1	27.3	24.5	Argentina
Armenia	EURO	Middle	33	8	89.8	1,620	50.9	50.9	Current tobacco smoking	20–60	55.7	2.1	2.1	Current tobacco smoking	20–60	2.9	Current tobacco smoking	20–60	28.3	10.3	0.9	5.0	Armenia
Australia	WPRO	High	17	14	17.2	1,034	19.9	22.3	Daily tobacco smoking	14+	18.0	16.3	19.0	Daily tobacco smoking	14+	15.2	Daily tobacco smoking	14+	16.6	3.0	4.6	3.8	Australia
Austria	EURO	High	19	10	–	1,650	47.4	47.4	Current tobacco smoking	14–99	48.0	45.1	45.1	Current tobacco smoking	14–99	47.0	Current tobacco smoking	14–99	47.0	–	–	–	Austria
Azerbaijan	EURO	Middle	22	7	–	1,877	41.2	41.2	Current cigarette smoking	–	49.6	0.6	–	Current cigarette smoking	–	–	Current cigarette smoking	–	–	–	–	–	Azerbaijan
Bahamas	AMRO	High	6	5	21.6	288	–	–	–	–	–	–	–	–	–	–	–	–	–	6.2	3.7	5.2	Bahamas
Bahrain	EMRO	High	14	14	38.7	661	28.8	34.3	Current tobacco smoking	20–64	33.4	6.8	8.1	Current tobacco smoking	20–64	7.0	Current tobacco smoking	20–64	19.9	17.5	3.9	10.6	Bahrain
Bangladesh	SEARO	Low	24	12	34.7	154	28.3	46.4	Current tobacco smoking	15+	44.7	<1	2.0	Current tobacco smoking	15+	1.5	Current tobacco smoking	15+	23.0	2.9	1.1	2.0	Bangladesh
Barbados	AMRO	High	4	0	25.9	344	13.1	13.4	Current tobacco smoking	25+	14.2	1.2	1.4	Current tobacco smoking	25+	1.6	Current tobacco smoking	25+	7.5	14.3	9.3	11.6	Barbados
Belarus	EURO	Middle	28	0	75.3	2,266	48.9	48.9	Current tobacco smoking	16+	52.3	8.8	8.8	Current tobacco smoking	16+	9.3	Current tobacco smoking	16+	27.5	31.2	21.7	26.5	Belarus
Belgium	EURO	High	31	8	–	1,455	30.0	30.0	Current tobacco smoking	15+	28.6	22.0	22.0	Current tobacco smoking	15+	20.7	Current tobacco smoking	15+	24.5	–	–	–	Belgium
Belize	AMRO	Middle	10	1	25.7	367	23.2	23.2	Current cigarette smoking	20+	17.7	2.8	2.8	Current cigarette smoking	20+	1.4	Current cigarette smoking	20+	10.2	11.7	4.4	7.7	Belize
Benin	AFRO	Low	3	–	21.5	71	11.4	15.2	Current tobacco smoking	25–64	15.8	<1	1.4	Current tobacco smoking	25–64	1.4	Current tobacco smoking	25–64	8.7	3.3	1.6	2.8	Benin
Bhutan	SEARO	Middle	13	1	31.9	120	8.7	–	Current tobacco smoking	25–74	8.4	4.9	–	Current tobacco smoking	25–74	4.7	Current tobacco smoking	25–74	6.8	18.3	6.3	12.1	Bhutan
Bolivia (Plurinational State of)	AMRO	Middle	8	2	34.3**	179	41.7	41.7	Current cigarette smoking	15+	40.7	17.8	17.8	Current cigarette smoking	15+	18.3	Current cigarette smoking	15+	–	20.3**	12.0**	16.3**	Bolivia (Plurinational State of)
Bosnia and Herzegovina	EURO	Middle	30	10	77.3	2,278	46.5	46.5	Current tobacco smoking	18+	54.2	35.6	35.6	Current tobacco smoking	18+	34.2	Current tobacco smoking	18+	44.0	14.3	9.4	11.7	Bosnia and Herzegovina
Botswana	AFRO	Middle	3	0	38.5	336	20.1	–	Current tobacco smoking	25–64	32.8	1.5	–	Current tobacco smoking	25–64	7.8	Current tobacco smoking	25–64	19.7	18.1	10.9	14.3	Botswana
Brazil	AMRO	Middle	15	6	35.5**	504	21.6	21.6	Current tobacco smoking	15+	21.6	13.1	13.0	Current tobacco smoking	15+	13.1	Current tobacco smoking	15+	17.2	9.2**	13.2**	11.6**	Brazil
Brunei Darussalam	WPRO	High	–	–	–	751	27.3	31.9	Current tobacco smoking	9+	31.8	3.2	4.4	Current tobacco smoking	9+	2.9	Current tobacco smoking	9+	–	–	–	–	Brunei Darussalam
Bulgaria	EURO	Middle	22	5	63.9	2,822	47.5	47.5	Current tobacco smoking	15+	50.3	26.9	26.9	Current tobacco smoking	15+	28.2	Current tobacco smoking	15+	38.8	24.4	31.6	28.2	Bulgaria
Burkina Faso	AFRO	Low	6	2	32.9**	109	12.6	18.2	Current tobacco smoking	18+	23.6	<1	8.0	Current tobacco smoking	18+	11.1	Current tobacco smoking	18+	16.9	14.1**	2.4**	8.4**	Burkina Faso
Burundi	AFRO	Low	3	0	33.9	137	–	–	–	–	–	–	–	–	–	–	–	–	–	5.8	3.2	4.6	Burundi
Cambodia	WPRO	Low	17	8	47.0	452	41.0	41.6	Current tobacco smoking	15+	39.1	3.3	3.4	Current tobacco smoking	15+	3.4	Current tobacco smoking	15+	19.5	0.5**	–	0.2**	Cambodia
Cameroon	AFRO	Middle	5	–	23.4**	93	11.2	13.8	Current tobacco smoking	15+	12.7	<1	1.6	Current tobacco smoking	15+	2.0	Current tobacco smoking	15+	6.3	8.8**	3.0**	5.7**	Cameroon
Canada	AMRO	High	23	20	–	809	19.1	23.8	Current tobacco smoking	15+	23.0	15.8	16.8	Current tobacco smoking	15+	16.0	Current tobacco smoking	15+	19.5	13.0	14.0	14.0	Canada
Cape Verde	AFRO	Middle	3	–	13.9	339	10.1	13.5	Current tobacco smoking	25–64	15.9	<1	3.4	Current tobacco smoking	25–64	4.0	Current tobacco smoking	25–64	9.9	3.7	3.1	3.5	Cape Verde
Central African Republic	AFRO	Low	4	–	35.2**	102	–	–	–	–	–	–	–	–	–	–	–	–	–	10.4**	4.3**	8.1**	Central African Republic
Chad	AFRO	Low	6	–	33.9	86	17.8	22.3	Current tobacco smoking	25–64	20.2	1.5	2.8	Current tobacco smoking	25–64	1.2	Current tobacco smoking	25–64	11.2	8.4	4.3	7.5	Chad
Chile	AMRO	Middle	11	8	51.7**	860	36.9	37.5	Current cigarette smoking	15+	44.2	30.2	33.2	Current cigarette smoking	15+	37.1	Current cigarette smoking	15+	40.6	28.0**	39.9**	34.2**	Chile
China	WPRO	Middle	12	–	47.0**	1,711	50.4	51.2	Current tobacco smoking	15+	52.9	2.1	2.2	Current tobacco smoking	15+	2.4	Current tobacco smoking	15+	28.1	2.7**	0.8**	1.7**	China
Colombia	AMRO	Middle	9	8	27.6**	412	–	–	Current cigarette smoking	12–65	23.8	–	–	Current cigarette smoking	12–65	11.1	Current cigarette smoking	12–65	17.0	28.6**	30.7**	29.9**	Colombia
Comoros	AFRO	Low	3	–	35.2	583	19.2	24.0	Current tobacco smoking	18+	27.8	3.5	9.4	Current tobacco smoking	18+	17.0	Current tobacco smoking	18+	22.3	13.5	6.9	9.6	Comoros
Congo	AFRO	Middle	7	–	22.8	–	8.1	9.5	Current tobacco smoking	18+	13.0	<1	<1	Current tobacco smoking	18+	1.3	Current tobacco smoking	18+	6.6	15.0	8.1	11.4	Congo
Congo (Democratic Republic of)	AFRO	Low	4	–	30.2**	105	8.8	10.5	Current tobacco smoking	15+	14.2	<1	1.8	Current tobacco smoking	15+	1.2	Current tobacco smoking	15+	6.4	11.7**	3.6**	8.2**	Congo (Democratic Republic of)
Cook Islands	WPRO	Middle	6	5	61.9	–	43.0	43.0	Current tobacco smoking	25–64	46.6	31.2	31.2	Current tobacco smoking	25–64	41.1	Current tobacco smoking	25–64	43.9	19.9	19.4	19.7	Cook Islands
Costa Rica	AMRO	Middle	6	6	21.6	529	24.0	24.0	Current tobacco smoking	15–70	23.0	7.8	7.8	Current tobacco smoking	15–70	8.6	Current tobacco smoking	15–70	15.8	10.4	8.4	9.5	Costa Rica
Côte d'Ivoire	AFRO	Middle	9	0	33.1	148	12.9	17.3	Current tobacco smoking	15–64	22.4	<1	3.6	Current tobacco smoking	15–64	7.3	Current tobacco smoking	15–64	13.6	19.3	7.1	13.6	Côte d'Ivoire
Croatia	EURO	High	28	8	73.4	1,621	36.5	36.5	Daily tobacco smoking	18+	33.8	29.6	29.6	Daily tobacco smoking	18+	21.7	Daily tobacco smoking	18+	27.4	21.7	25.6	24.1	Croatia
Cuba	AMRO	Middle	21	18	51.5	1,261	42.9	–	Current tobacco smoking	15+	31.1	29.4	–	Current tobacco smoking	15+	16.4	Current tobacco smoking	15+	23.7	8.7	13.1	10.6	Cuba
Cyprus	EURO	High	14	2	96.1	1,620	–	–	Daily tobacco smoking	15+	38.1	–	–	Daily tobacco smoking	15+	10.5	Daily tobacco smoking	15+	23.9	3.7	4.2	3.9	Cyprus
Czech Republic	EURO	High	26	10	38.0	2,125	35.6	42.9	Current tobacco smoking	15–64	42.5	22.7	30.9	Current tobacco smoking	15–64	30.1	Current tobacco smoking	15–64	36.3	29.8	32.7	31.1	Czech Republic
Denmark	EURO	High	23	21	–	1,413	30.0	30.0	Current tobacco smoking	15+	28.0	27.6	27.6	Current tobacco smoking	15+	26.0	Current tobacco smoking	15+	26.0	13.0	14.0	13.5	Denmark
Djibouti	EMRO	Middle	2	0	39.5	309	–	–	Daily tobacco smoking	15+	41.1	–	–	Daily tobacco smoking	15+	9.2	Daily tobacco smoking	15+	25.4	3.7	2.8	3.3	Djibouti

** Subnational data used ^ Countries classified as "middle low income" or "middle high income" by World Bank are classified here as "middle" † See male/female crude data for age range

COUNTRY	WHO REGION	World Bank Income Group^	DEATHS — HARM — Male Deaths	DEATHS — HARM — Female Deaths	SECONDHAND SMOKE — Youth Exposed to Secondhand Smoke in Home	CIGARETTE CONSUMPTION — PRODUCTS & THEIR USE — Per Capita Consumption	MALE TOBACCO USE — PRODUCTS & THEIR USE — Current Cigarette Use	MALE TOBACCO USE — PRODUCTS & THEIR USE — Currently Smoking ANY Tobacco Product	MALE TOBACCO USE — PRODUCTS & THEIR USE — Type of Tobacco Use	MALE TOBACCO USE — PRODUCTS & THEIR USE — Age Group	MALE TOBACCO USE — PRODUCTS & THEIR USE — Crude Male Prevalence	FEMALE TOBACCO USE — PRODUCTS & THEIR USE — Current Cigarette Use	FEMALE TOBACCO USE — PRODUCTS & THEIR USE — Currently Smoking ANY Tobacco Product	FEMALE TOBACCO USE — PRODUCTS & THEIR USE — Type of Tobacco Use	FEMALE TOBACCO USE — PRODUCTS & THEIR USE — Age Group	FEMALE TOBACCO USE — PRODUCTS & THEIR USE — Crude Female Prevalence	TOTAL (MALE AND FEMALE) CRUDE TOBACCO USE — Type of Tobacco Use	TOTAL (MALE AND FEMALE) CRUDE TOBACCO USE — Age Group	TOTAL (MALE AND FEMALE) CRUDE TOBACCO USE — Crude Male and Female Prevalence	BOYS' & GIRLS' TOBACCO USE — Boys' Current Cigarette Use	BOYS' & GIRLS' TOBACCO USE — Girls' Current Cigarette Use	BOYS' & GIRLS' TOBACCO USE — Total Current Cigarette Use	COUNTRY
			% 2004, Due to Tobacco (Estimates)		% Ages 13–15	Cigarettes Per Person	% 2009, Male Age Standardized (or country-specific data)		Male Crude, Latest Available	years	%	% 2009, Female Age Standardized (or country-specific data)		Female Crude, Latest Available	years	%	Total Crude, Latest Available	years	% Total	% Ages 13–15			
Dominica	AMRO	Middle	9	13	26.3	339	10.2	10.6	Current tobacco smoking	15–64	12.2	3.4	3.5	Current tobacco smoking	15–64	3.2	Current tobacco smoking	15–64	10.2	11.8	9.6	11.5	Dominica
Dominican Republic	AMRO	Middle	9	8	33.1	234	15.6	17.1	Current tobacco smoking	18+	17.2	10.8	13.0	Current tobacco smoking	18+	12.5	Current tobacco smoking	18+	14.9	7.3	5.8	6.6	Dominican Republic
Ecuador	AMRO	Middle	–	–	28.9**	227	23.4	–	Current cigarette smoking	18+	36.3	5.8	–	Current cigarette smoking	18+	8.2	Current cigarette smoking	18+	22.7	23.2**	18.1**	20.5**	Ecuador
Egypt	EMRO	Middle	10	1	38.7	1,104	33.1	39.7	Current tobacco smoking	15+	37.6	<1	<1	Current tobacco smoking	15+	0.5	Current tobacco smoking	15+	19.4	5.9	1.4	4.0	Egypt
El Salvador	AMRO	Middle	1	0	14.8	209	–	–	Current tobacco use	12–64	21.5	–	–	Current tobacco use	12–64	3.4	Current tobacco use	12–64	11.7	18.4	10.9	14.0	El Salvador
Equatorial Guinea	AFRO	High	6	–	47.5	391	–	–	–	–	–	–	–	–	–	–	–	–	–	9.9	3.4	7.0	Equatorial Guinea
Eritrea	AFRO	Low	3	–	18.4	74	8.8	10.5	Current tobacco smoking	15–64	–	<1	1.8	Current tobacco smoking	15–64	–	Current tobacco smoking	15–64	8.0	2.0	0.6	1.6	Eritrea
Estonia	EURO	High	26	7	41.1	1,523	45.7	45.7	Current tobacco smoking	15+	46.0	22.8	22.8	Current tobacco smoking	15+	25.3	Current tobacco smoking	15+	34.1	28.2	26.2	27.2	Estonia
Ethiopia	AFRO	Low	2	1	14.9**	42	7.5	8.1	Current tobacco smoking	18+	6.3	<1	<1	Current tobacco smoking	18+	0.5	Current tobacco smoking	18+	3.3	2.5**	0.7**	1.9**	Ethiopia
Fiji	WPRO	Middle	–	–	47.1	530	17.7	17.7	Daily tobacco smoking	15–85	26.0	3.0	3.0	Daily tobacco smoking	15–85	3.9	Daily tobacco smoking	15–85	–	16.2	7.4	11.7	Fiji
Finland	EURO	High	16	6	–	671	28.1	28.1	Current tobacco smoking	15–64	29.8	21.5	21.5	Current tobacco smoking	15–64	21.4	Current tobacco smoking	15–64	25.1	–	–	–	Finland
France	EURO	High	22	5	–	854	35.6	35.6	Current tobacco smoking	12–75	33.3	27.4	27.4	Current tobacco smoking	12–75	26.5	Current tobacco smoking	12–75	29.9	19.1	20.2	19.6	France
Gabon	AFRO	Middle	10	0	–	501	15.5	18.9	Current tobacco smoking	15–64	21.0	1.8	3.3	Current tobacco smoking	15–64	4.6	Current tobacco smoking	15–64	–	–	–	–	Gabon
Gambia	AFRO	Low	7	–	45.8	85	25.4	31.3	Current tobacco smoking	25–64	31.3	<1	2.7	Current tobacco smoking	25–64	1.0	Current tobacco smoking	25–64	15.6	12.7	8.6	10.8	Gambia
Georgia	EURO	Middle	16	1	62.7	1,039	56.6	56.6	Current tobacco smoking	18–64	55.5	5.7	5.7	Current tobacco smoking	18–64	4.8	Current tobacco smoking	18–64	30.3	15.2	2.8	8.6	Georgia
Germany	EURO	High	22	9	–	1,045	34.8	–	Current tobacco smoking	15+	30.5	27.3	24.8	Current tobacco smoking	15+	21.2	Current tobacco smoking	15+	25.7	14.0	12.0	12.9	Germany
Ghana	AFRO	Middle	3	–	19.1	44	7.6	10.6	Daily cigarette smoking	15–59	7.3	<1	2.6	Daily cigarette smoking	15–49	0.2	Daily cigarette smoking	see †	–	10.1	7.4	8.9	Ghana
Greece	EURO	High	25	7	89.8	2,795	63.0	63.0	Current cigarette smoking	18–89	51.0	41.4	41.4	Current cigarette smoking	18–89	39.0	Current cigarette smoking	18–89	–	11.3	9.0	10.4	Greece
Grenada	AMRO	Middle	10	5	27.3	229	–	–	–	–	–	–	–	–	–	–	–	–	–	7.0	3.0	4.7	Grenada
Guatemala	AMRO	Middle	7	4	23.1	235	21.7	21.7	Current tobacco smoking	18+	23.9	3.9	3.9	Current tobacco smoking	18+	3.4	Current tobacco smoking	18+	11.2	13.7	9.1	11.4	Guatemala
Guinea	AFRO	Low	9	1	27.7	9	19.7	25.1	Current tobacco smoking	15–64	23.2	<1	1.9	Current tobacco smoking	15–64	2.0	Current tobacco smoking	15–64	12.8	11.6	1.6	7.1	Guinea
Guinea–Bissau	AFRO	Low	4	–	31.0**	97	–	–	–	–	–	–	–	–	–	–	–	–	–	7.2**	3.0**	5.1**	Guinea–Bissau
Guyana	AMRO	Middle	3	1	33.4	49	26.4	26.7	Current cigarette smoking	15–49	29.4	5.3	5.6	Current cigarette smoking	15–49	3.2	Current cigarette smoking	15–49	–	11.0	5.4	8.1	Guyana
Haiti	AMRO	Low	2	–	32.3**	100	–	–	Current tobacco smoking	15–49	–	–	–	Current tobacco smoking	15–49	4.4	Current tobacco smoking	15–49	–	17.2**	17.7**	17.6**	Haiti
Honduras	AMRO	Middle	9	7	29.6**	217	–	–	Current cigarette smoking	15–49	–	3.4	3.4	Current cigarette smoking	15–49	2.3	Current cigarette smoking	15–49	–	14.4**	14.1**	14.2**	Honduras
Hungary	EURO	High	30	18	43.0	1,518	42.7	42.7	Current tobacco smoking	18+	42.5	33.5	33.5	Current tobacco smoking	18+	31.3	Current tobacco smoking	18+	36.5	21.5	23.6	23.2	Hungary
Iceland	EURO	High	16	20	–	477	27.4	27.4	Daily tobacco smoking	15–89	20.1	20.8	20.8	Daily tobacco smoking	15–89	15.0	Daily tobacco smoking	15–89	17.6	–	–	–	Iceland
India	SEARO	Middle	12	1	26.6	96	10.7	26.2	Current tobacco smoking	15+	24.3	1.1	3.6	Current tobacco smoking	15+	2.9	Current tobacco smoking	15+	14.0	5.4	1.6	3.8	India
Indonesia	SEARO	Middle	20	12	64.7	1,085	57.2	61.3	Daily tobacco smoking	10+	46.8	3.7	5.1	Daily tobacco smoking	10+	3.1	Daily tobacco smoking	10+	24.2	23.9	1.9	11.8	Indonesia
Iran (Islamic Republic of)	EMRO	Middle	7	–	35.4	657	20.7	25.8	Current tobacco smoking	15–64	22.1	<1	1.7	Current tobacco smoking	15–64	1.3	Current tobacco smoking	15–64	11.8	5.1	0.9	3.0	Iran (Islamic Republic of)
Iraq	EMRO	Middle	–	–	32.3**	864	25.8	30.8	Current tobacco smoking	12+	26.5	3.0	4.5	Current tobacco smoking	12+	2.9	Current tobacco smoking	12+	14.8	3.3**	2.7**	3.2**	Iraq
Ireland	EURO	High	22	22	–	1,006	31.0	–	Current cigarette smoking	18+	31.0	26.0	–	Current cigarette smoking	18+	27.0	Current cigarette smoking	18+	29.0	–	–	–	Ireland
Israel	EURO	High	14	8	–	1,037	28.6	28.6	Current cigarette smoking	20+	28.4	12.7	12.7	Current cigarette smoking	20+	12.6	Current cigarette smoking	20+	20.9	–	–	–	Israel
Italy	EURO	High	24	7	48.5	1,475	32.8	32.8	Current tobacco smoking	11+	29.5	19.2	19.2	Current tobacco smoking	11+	17.0	Current tobacco smoking	11+	23.0	19.4	21.6	20.7	Italy
Jamaica	AMRO	Middle	12	6	32.5	283	20.5	–	Current tobacco smoking	15–74	22.9	9.2	–	Current tobacco smoking	15–74	7.5	Current tobacco smoking	15–74	15.1	20.6	10.9	15.4	Jamaica
Japan	WPRO	High	22	12	–	1,841	38.2	41.8	Current tobacco smoking	20+	38.2	10.9	12.4	Current tobacco smoking	20+	10.9	Current tobacco smoking	20+	23.4	12.1	8.5	10.3	Japan
Jordan	EMRO	Middle	18	2	66.0	1,372	41.8	46.9	Daily tobacco smoking	18+	49.6	3.4	5.5	Daily tobacco smoking	18+	5.7	Daily tobacco smoking	18+	29.0	13.2	7.1	10.3	Jordan
Kazakhstan	EURO	Middle	35	12	67.1	1,934	40.2	40.2	Current tobacco smoking	18+	52.2	8.6	8.6	Current tobacco smoking	18+	9.6	Current tobacco smoking	18+	29.9	12.7	6.6	9.4	Kazakhstan
Kenya	AFRO	Low	3	–	24.7	144	22.5	25.5	Current tobacco smoking	18+	–	<1	1.5	Current tobacco smoking	18+	1.9	Current tobacco smoking	18+	–	11.2	5.2	8.2	Kenya
Kiribati	WPRO	Middle	8	2	68.3	22	71.0	71.0	Current tobacco smoking	15–64	74.1	42.9	42.9	Current tobacco smoking	15–64	43.1	Current tobacco smoking	15–64	58.0	–	–	–	Kiribati
Korea (Democratic People's Republic of)	SEARO	Low	13	11	–	650	–	–	Current tobacco smoking	16+	52.3	–	–	Current tobacco smoking	16+	–	Current tobacco smoking	16+	–	–	–	–	Korea (Democratic People's Republic of)
Korea (Republic of)	WPRO	High	26	15	37.6	1,958	49.3	49.3	Current cigarette smoking	–	47.7	6.6	6.6	Current cigarette smoking	–	7.3	Current cigarette smoking	–	27.7	10.8	6.3	8.8	Korea (Republic of)
Kuwait	EMRO	High	4	2	44.4	1,812	29.9	35.1	Current tobacco smoking	20–64	42.3	1.7	3.5	Current tobacco smoking	20–64	4.4	Current tobacco smoking	20–64	23.6	23.7	7.5	15.9	Kuwait
Kyrgyzstan	EURO	Low	22	5	72.5	942	44.8	44.8	Current cigarette smoking	15+	41.7	1.9	1.9	Current cigarette smoking	15+	1.5	Current cigarette smoking	15+	20.2	6.8	2.2	4.4	Kyrgyzstan
Lao People's Democratic Republic	WPRO	Middle	18	14	43.2**	435	46.8	51.4	Current tobacco smoking	25–64	43.2	2.9	3.8	Current tobacco smoking	25–64	2.0	Current tobacco smoking	25–64	19.0	10.2**	0.7**	5.5**	Lao People's Democratic Republic
Latvia	EURO	Middle	27	4	51.1	785	50.1	50.1	Current tobacco smoking	15–64	48.9	22.3	22.3	Current tobacco smoking	15–64	20.4	Current tobacco smoking	15–64	32.4	36.3	30.2	32.9	Latvia
Lebanon	EMRO	Middle	–	–	–	2,138	45.6	46.4	Current cigarette smoking	25–64	46.8	30.7	30.7	Current cigarette smoking	25–64	31.5	Current cigarette smoking	25–64	38.5	11.8	5.6	8.6	Lebanon
Lesotho	AFRO	Middle	4	–	36.9	62	–	–	Current tobacco smoking	15+	47.9	–	–	Current tobacco smoking	15+	34.2	Current tobacco smoking	15+	39.3	11.8	7.5	10.1	Lesotho

** Subnational data used ^ Countries classified as "middle low income" or "middle high income" by World Bank are classified here as "middle" † See male/female crude data for age range

COUNTRY	WHO REGION	World Bank Income Group^	DEATHS HARM		SECONDHAND SMOKE	CIGARETTE CONSUMPTION	MALE TOBACCO USE PRODUCTS & THEIR USE					FEMALE TOBACCO USE PRODUCTS & THEIR USE					TOTAL (MALE AND FEMALE) CRUDE TOBACCO USE			BOYS' & GIRLS' TOBACCO USE			COUNTRY
			Male Deaths	Female Deaths	Youth Exposed to Secondhand Smoke in Home	Per Capita Consumption	Current Cigarette Use	Currently Smoking ANY Tobacco Product	Type of Tobacco Use	Age Group	Crude Male Prevalence	Current Cigarette Use	Currently Smoking ANY Tobacco Product	Type of Tobacco Use	Age Group	Crude Female Prevalence	Type of Tobacco Use	Age Group	Crude Male and Female Prevalence	Boys' Current Cigarette Use	Girls' Current Cigarette Use	Total Current Cigarette Use	
			% 2004, Due to Tobacco (Estimates)		% Ages 13–15	Cigarettes Per Person	% 2009, Male Age Standardized (or country-specific data)		Male Crude, Latest Available	years	%	% 2009, Female Age Standardized (or country-specific data)		Female Crude, Latest Available	years	%	Total Crude, Latest Available	years	% Total	% Ages 13–15			
Liberia	AFRO	Low	4	–	23.6**	113	10.9	14.4	Current cigarette smoking	15–49	15.2	–	–	Current cigarette smoking	15–49	–	Current cigarette smoking	15–49	–	2.0**	1.2**	2.1**	Liberia
Libyan Arab Jamahiriya	EMRO	Middle	11	0	37.8	818	41.6	47.2	Current tobacco smoking	25–64	49.6	<1	<1	Current tobacco smoking	25–64	0.8	Current tobacco smoking	25–64	25.1	7.7	0.9	4.6	Libyan Arab Jamahiriya
Lithuania	EURO	Middle	25	3	43.1	804	49.9	49.9	Current tobacco smoking	20–64	41.0	22.0	22.0	Current tobacco smoking	20–64	17.4	Current tobacco smoking	20–64	27.7	33.8	25.9	29.6	Lithuania
Luxembourg	EURO	High	25	10	–	928	38.8	–	Current tobacco smoking	15+	28.0	30.4	–	Current tobacco smoking	15+	21.0	Current tobacco smoking	15+	24.0	–	–	–	Luxembourg
Macedonia (The former Yugoslav Republic of)	EURO	Middle	24	5	67.5	1,934	–	–	–	–	–	–	–	–	–	–	–	–	–	9.7	9.8	9.8	Macedonia (The former Yugoslav Republic of)
Madagascar	AFRO	Low	4	0	49.5	260	–	–	Current tobacco smoking	25–64	–	–	–	Current tobacco smoking	25–64	–	Current tobacco smoking	25–64	17.6	30.7	10.2	19.3	Madagascar
Malawi	AFRO	Low	2	–	10.4	48	22.8	26.0	Current tobacco smoking	25–64	25.9	1.7	3.7	Current tobacco smoking	25–64	2.9	Current tobacco smoking	25–64	14.1	5.9	3.8	4.9	Malawi
Malaysia	WPRO	Middle	22	15	11.5	539	45.6	50.3	Current tobacco smoking	18+	46.4	1.9	2.4	Current tobacco smoking	18+	1.6	Current tobacco smoking	18+	21.5	36.3	4.2	20.2	Malaysia
Maldives	SEARO	Middle	29	25	48.3	170	36.1	43.4	Current tobacco smoking	25–64	37.5	6.6	11.5	Current tobacco smoking	25–64	11.8	Current tobacco smoking	25–64	–	15.0	3.6	9.1	Maldives
Mali	AFRO	Low	3	–	48.5	127	22.2	28.5	Current tobacco smoking	15–64	30.8	<1	2.2	Current tobacco smoking	15–64	2.0	Current tobacco smoking	15–64	13.5	17.4	2.5	10.4	Mali
Malta	EURO	High	22	1	–	1,378	30.1	30.1	Current tobacco smoking	15–79	31.0	21.1	21.1	Current tobacco smoking	15–79	21.4	Current tobacco smoking	15–79	25.7	–	–	–	Malta
Marshall Islands	WPRO	Middle	13	13	52.1	–	35.8	35.8	Occasional tobacco smoking	15–64	4.9	7.0	7.0	Occasional tobacco smoking	15–64	1.8	Occasional tobacco smoking	15–64	3.3	–	–	–	Marshall Islands
Mauritania	AFRO	Middle	4	–	42.7	86	23.6	29.4	Occasional tobacco smoking	15–64	1.4	<1	4.1	Occasional tobacco smoking	15–64	0.9	Occasional tobacco smoking	15–64	1.1	17.2	16.8	17.0	Mauritania
Mauritius	AFRO	Middle	11	4	36.1	787	30.5	30.5	Current tobacco smoking	20–74	35.9	1.6	1.6	Current tobacco smoking	20–74	5.1	Current cigarette smoking	20–74	18.0	20.3	7.7	13.7	Mauritius
Mexico	AMRO	Middle	7	6	46.2**	371	23.9	24.3	Current tobacco smoking	15+	24.8	7.4	7.7	Current tobacco smoking	15+	7.8	Current tobacco smoking	15+	15.9	26.3**	27.1**	27.1**	Mexico
Micronesia (Federated States of)	WPRO	Middle	0	–	60.7	–	29.9	29.9	Current tobacco smoking	25–64	42.0	17.7	17.7	Current tobacco smoking	25–64	21.0	Current tobacco smoking	25–64	31.6	36.9	19.8	28.3	Micronesia (Federated States of)
Moldova (Republic of)	EURO	Middle	19	5	20.3	2,479	43.0	43.0	Current tobacco smoking	15–59	51.1	5.2	5.2	Current tobacco smoking	15–49	7.1	Current tobacco smoking	see †	28.0	18.5	5.6	11.3	Moldova (Republic of)
Monaco	EURO	High	21	4	–	1,038	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	Monaco
Mongolia	WPRO	Middle	27	18	54.4	555	48.2	48.2	Current tobacco smoking	15–64	48.0	5.9	5.9	Current tobacco smoking	15–64	6.9	Current tobacco smoking	15–64	27.7	9.2	2.0	5.4	Mongolia
Montenegro	EURO	Middle	–	–	76.8	2,157	–	–	–	–	–	–	–	–	–	–	–	–	–	5.7	4.4	5.1	Montenegro
Morocco	EMRO	Middle	14	–	27.1	500	28.4	32.7	Daily tobacco smoking	18+	30.3	2.0	2.4	Daily tobacco smoking	18+	0.2	Daily tobacco smoking	18+	15.1	7.4	2.3	5.2	Morocco
Mozambique	AFRO	Low	0	0	22.5**	200	16.5	18.2	Current tobacco smoking	25–64	36.0	1.1	2.3	Current tobacco smoking	25–64	6.4	Current tobacco smoking	25–64	18.7	4.5**	1.2**	2.7**	Mozambique
Myanmar	SEARO	Low	19	18	34.1	189	35.5	40.2	Current tobacco smoking	15–64	44.7	5.5	8.0	Current tobacco smoking	15–64	7.8	Current tobacco smoking	15–64	21.9	8.5	1.3	4.9	Myanmar
Namibia	AFRO	Middle	6	–	40.3	534	27.5	30.5	Current cigarette smoking	15–49	20.9	7.8	9.1	Current cigarette smoking	15–49	5.3	Current cigarette smoking	15–49	–	21.9	16.1	18.8	Namibia
Nauru	WPRO	Middle	5	17	–	626	48.6	48.6	Current tobacco smoking	15–64	49.7	50.0	50.0	Current tobacco smoking	15–64	56.0	Current tobacco smoking	15–64	52.9	–	–	–	Nauru
Nepal	SEARO	Low	15	2	35.3	420	30.4	35.9	Current tobacco smoking	15–64	34.5	28.4	28.6	Current tobacco smoking	15–64	15.9	Current tobacco smoking	15–64	26.3	5.7	1.9	3.9	Nepal
Netherlands	EURO	High	28	14	–	801	28.1	31.4	Current tobacco smoking	15+	29.5	22.1	26.2	Current tobacco smoking	15+	25.9	Current tobacco smoking	15+	–	19.1	20.8	20.0	Netherlands
New Zealand	WPRO	High	18	16	36.0	579	26.8	26.8	Current tobacco smoking	15+	21.1	23.7	23.7	Current tobacco smoking	15+	18.8	Current tobacco smoking	15+	19.9	14.5	20.6	17.6	New Zealand
Nicaragua	AMRO	Middle	7	3	43.7**	377	–	–	Current tobacco smoking	15–49	–	5.3	–	Current tobacco smoking	15–49	5.3	Current tobacco smoking	15–49	–	25.6**	17.4**	21.2**	Nicaragua
Niger	AFRO	Low	8	–	30.3	52	7.2	8.9	Current tobacco smoking	15–64	8.7	<1	<1	Current tobacco smoking	15–64	1.0	Current tobacco smoking	15–64	–	11.7	1.1	6.3	Niger
Nigeria	AFRO	Middle	2	–	21.7**	116	8.0	10.5	Current cigarette smoking	15–59	9.0	<1	2.6	Current cigarette smoking	15–49	0.2	Current cigarette smoking	see †	–	5.6**	1.3**	3.5**	Nigeria
Niue	WPRO	Middle	6	5	34.9	–	37.5	–	–	–	–	14.5	–	–	–	–	–	–	–	–	–	10.5	Niue
Norway	EURO	High	17	13	–	534	31.2	31.2	Current tobacco smoking	16–74	31.0	28.4	28.4	Current tobacco smoking	16–74	28.0	Current tobacco smoking	16–74	30.0	–	–	–	Norway
Oman	EMRO	High	–	–	13.9	852	9.1	11.7	Current tobacco smoking	20+	13.4	<1	<1	Current tobacco smoking	20+	0.5	Current tobacco smoking	20+	7.0	3.5	1.2	2.3	Oman
Pakistan	EMRO	Middle	15	1	16.1**	468	27.7	34.5	Current tobacco smoking	18+	32.4	2.8	6.2	Current tobacco smoking	18+	5.7	Current tobacco smoking	18+	19.1	9.9	1.0	6.3	Pakistan
Palau	WPRO	Middle	8	9	–	–	37.2	37.2	Current tobacco smoking	35–64	60.3	9.5	9.5	Current tobacco smoking	35–64	27.0	Current tobacco smoking	35–64	44.0	31.0	22.6	26.7	Palau
Panama	AMRO	Middle	8	3	21.9	197	–	17.4	Current tobacco smoking	15+	17.4	–	3.6	Current tobacco smoking	15+	4.0	Current tobacco smoking	15+	9.4	5.9	2.8	4.3	Panama
Papua New Guinea	WPRO	Middle	1	–	73.9	670	57.7	57.7	Current tobacco smoking	15–64	60.3	30.8	30.8	Current tobacco smoking	15–64	27.0	Current tobacco smoking	15–64	44.0	52.1	35.8	43.8	Papua New Guinea
Paraguay	AMRO	Middle	13	1	32.5	619	29.4	30.1	Current tobacco smoking	18+	41.6	12.6	13.9	Current tobacco smoking	18+	13.3	Current tobacco smoking	18+	27.3	11.3	5.5	8.3	Paraguay
Peru	AMRO	Middle	4	4	25.5	137	42.6	–	Current cigarette smoking	15–49	–	8.8	9.1	Current cigarette smoking	15–49	6.9	Current cigarette smoking	15–49	–	22.9	11.9	17.3	Peru
Philippines	WPRO	Middle	22	8	54.5	838	46.8	47.4	Current tobacco smoking	15+	47.6	9.9	10.2	Current tobacco smoking	15+	9.0	Current tobacco smoking	15+	28.3	16.0	6.4	11.0	Philippines
Poland	EURO	High	31	12	86.7	1,586	36.2	36.4	Current tobacco smoking	15+	36.9	25.1	25.3	Current tobacco smoking	15+	24.4	Current tobacco smoking	15+	30.3	19.6	17.1	18.6	Poland
Portugal	EURO	High	17	3	–	1,114	31.8	31.8	Daily tobacco smoking	15+	27.6	15.8	15.8	Daily tobacco smoking	15+	10.6	Daily tobacco smoking	15+	18.7	–	–	–	Portugal
Qatar	EMRO	High	–	–	35.7	281	19.9	–	Daily tobacco use	18+	19.9	2.2	–	Daily tobacco use	18+	2.2	Daily tobacco use	18+	11.1	13.4	2.3	6.5	Qatar
Romania	EURO	Middle	24	6	90.4	1,404	45.5	45.5	Current tobacco smoking	15+	40.3	24.1	24.1	Current tobacco smoking	15+	25.1	Current tobacco smoking	15+	32.4	21.5	14.3	17.6	Romania
Russian Federation	EURO	Middle	28	4	76.4	2,786	58.6	59.4	Current tobacco smoking	15+	60.2	23.9	24.3	Current tobacco smoking	15+	21.7	Current tobacco smoking	15+	39.1	26.9	23.9	25.4	Russian Federation
Rwanda	AFRO	Low	1	0	19.2	94	–	–	Current cigarette smoking	15–49	–	0.3	–	Current cigarette smoking	15–49	0.3	Current cigarette smoking	15–49	–	3.0	0.9	1.8	Rwanda

** Subnational data used ^ Countries classified as "middle low income" or "middle high income" by World Bank are classified here as "middle" † See male/female crude data for age range

COUNTRY	WHO REGION	World Bank Income Group^	DEATHS HARM: Male Deaths	DEATHS HARM: Female Deaths	SECONDHAND SMOKE: Youth Exposed to Secondhand Smoke in Home	CIGARETTE CONSUMPTION PRODUCTS & THEIR USE: Per Capita Consumption	MALE TOBACCO USE PRODUCTS & THEIR USE: Current Cigarette Use	MALE TOBACCO USE PRODUCTS & THEIR USE: Currently Smoking ANY Tobacco Product	MALE TOBACCO USE PRODUCTS & THEIR USE: Type of Tobacco Use	MALE TOBACCO USE PRODUCTS & THEIR USE: Age Group	MALE TOBACCO USE PRODUCTS & THEIR USE: Crude Male Prevalence	FEMALE TOBACCO USE PRODUCTS & THEIR USE: Current Cigarette Use	FEMALE TOBACCO USE PRODUCTS & THEIR USE: Currently Smoking ANY Tobacco Product	FEMALE TOBACCO USE PRODUCTS & THEIR USE: Type of Tobacco Use	FEMALE TOBACCO USE PRODUCTS & THEIR USE: Age Group	FEMALE TOBACCO USE PRODUCTS & THEIR USE: Crude Female Prevalence	TOTAL (MALE AND FEMALE) CRUDE TOBACCO USE: Type of Tobacco Use	TOTAL (MALE AND FEMALE) CRUDE TOBACCO USE: Age Group	TOTAL (MALE AND FEMALE) CRUDE TOBACCO USE: Crude Male and Female Prevalence	BOYS' & GIRLS' TOBACCO USE: Boys' Current Cigarette Use	BOYS' & GIRLS' TOBACCO USE: Girls' Current Cigarette Use	BOYS' & GIRLS' TOBACCO USE: Total Current Cigarette Use	COUNTRY
			% 2004, Due to Tobacco (Estimates)		% Ages 13–15	Cigarettes Per Person	% 2009, Male Age Standardized (or country-specific data)		Male Crude, Latest Available	years	%	% 2009, Female Age Standardized (or country-specific data)		Female Crude, Latest Available	years	%	Total Crude, Latest Available	years	% Total	% Ages 13–15			
Saint Kitts and Nevis	AMRO	Middle	4	0	16.5	287	12.0	12.4	Current tobacco smoking	25–64	16.2	2.2	2.4	Current tobacco smoking	25–64	1.1	Current tobacco smoking	25–64	–	7.0	1.9	4.6	Saint Kitts and Nevis
Saint Lucia	AMRO	Middle	4	2	25.2	249	24.3	27.7	Current cigarette smoking	25+	37.3	9.2	12.1	Current cigarette smoking	25+	5.6	Current cigarette smoking	25+	19.9	17.0	9.6	12.7	Saint Lucia
Saint Vincent and the Grenadines	AMRO	Middle	10	8	31.5	351	18.3	18.3	Current cigarette smoking	19+	26.4	6.0	6.0	Current cigarette smoking	19+	3.5	Current cigarette smoking	19+	13.5	14.8	9.5	12.0	Saint Vincent and the Grenadines
Samoa	WPRO	Middle	4	1	59.1	34	58.0	58.0	Current tobacco smoking	25–64	56.9	23.0	23.0	Current tobacco smoking	25–64	21.8	Current tobacco smoking	25–64	–	16.0	12.7	15.2	Samoa
San Marino	EURO	High	24	7	32.9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	San Marino
Sao Tome and Principe	AFRO	Middle	16	10	–	69	8.2	9.3	Current tobacco smoking	25–64	9.7	<1	1.5	Current tobacco smoking	25–64	1.7	Current tobacco smoking	25–64	5.5	–	–	–	Sao Tome and Principe
Saudi Arabia	EMRO	High	–	–	29.5	809	19.2	23.6	Current tobacco smoking	15–64	20.2	<1	1.3	Current tobacco smoking	15–64	1.4	Current tobacco smoking	15–64	–	13.0	5.0	8.9	Saudi Arabia
Senegal	AFRO	Middle	3	–	47.6	398	12.0	15.6	Current tobacco smoking	18+	22.2	<1	<1	Current tobacco smoking	18+	1.7	Current tobacco smoking	18+	11.6	12.1	2.7	7.5	Senegal
Serbia	EURO	Middle	–	–	76.9	2,861	37.6	37.6	Daily tobacco smoking	20+	32.5	27.2	27.2	Daily tobacco smoking	20+	23.7	Daily tobacco smoking	20+	27.7	9.3	8.9	9.3	Serbia
Seychelles	AFRO	Middle	7	2	42.3	565	21.1	24.3	Daily cigarette smoking	25–64	30.8	2.0	4.6	Daily cigarette smoking	25–64	3.9	Daily cigarette smoking	25–64	17.4	23.2	20.0	21.5	Seychelles
Sierra Leone	AFRO	Low	7	–	43.9**	177	30.3	38.6	Current tobacco smoking	25–64	43.1	1.1	8.2	Current tobacco smoking	25–64	10.5	Current tobacco smoking	25–64	25.8	6.3**	4.6**	5.4**	Sierra Leone
Singapore	WPRO	High	24	18	35.1	547	33.2	35.2	Current cigarette smoking	18+	25.2	5.3	5.9	Current cigarette smoking	18+	4.2	Current cigarette smoking	18+	14.5	10.5	7.5	9.1	Singapore
Slovakia	EURO	High	26	6	44.9	1,403	38.6	38.6	Current tobacco smoking	18+	40.8	19.1	19.1	Current tobacco smoking	18+	23.0	Current tobacco smoking	18+	30.5	26.5	23.4	25.0	Slovakia
Slovenia	EURO	High	27	11	62.8	2,369	29.8	29.8	Daily tobacco smoking	18+	23.1	21.7	21.7	Daily tobacco smoking	18+	15.9	Daily tobacco smoking	18+	19.4	15.2	23.0	20.3	Slovenia
Solomon Islands	WPRO	Middle	4	–	–	18	45.8	45.8	Current tobacco smoking	15–64	56.1	18.9	18.9	Current tobacco smoking	15–64	26.1	Current tobacco smoking	15–64	41.4	28.3	18.4	24.0	Solomon Islands
Somalia	EMRO	Low	7	1	29.1**	67	–	–	–	–	–	–	–	–	–	–	–	–	–	4.9**	4.5**	5.8**	Somalia
South Africa	AFRO	Middle	11	5	32.1	459	21.2	23.6	Current tobacco smoking	15+	35.1	7.2	8.4	Current tobacco smoking	15+	10.2	Current tobacco smoking	15+	–	17.9	10.6	13.6	South Africa
Spain	EURO	High	25	2	–	1,757	36.2	36.2	Current tobacco smoking	16+	35.4	27.2	27.2	Current tobacco smoking	16+	24.6	Current tobacco smoking	16+	29.9	17.0	20.8	18.9	Spain
Sri Lanka	SEARO	Middle	13	0	35.4	195	21.2	26.9	Current tobacco smoking	15–64	29.9	<1	<1	Current tobacco smoking	15–64	0.4	Current tobacco smoking	15–64	15.0	1.6	0.9	1.2	Sri Lanka
Sudan	EMRO	Middle	1	0	27.5	75	20.5	23.8	Current tobacco smoking	25–64	29.1	1.2	2.1	Current tobacco smoking	25–64	3.5	Current tobacco smoking	25–64	14.0	10.2	2.1	6.0	Sudan
Suriname	AMRO	Middle	9	4	49.7	57	17.0	–	Current cigarette smoking	12–65	38.4	2.8	–	Current cigarette smoking	12–65	9.9	Current cigarette smoking	12–65	–	12.5	8.6	10.4	Suriname
Swaziland	AFRO	Middle	4	–	23.0	303	13.7	15.7	Current tobacco smoking	25–64	12.9	1.6	1.8	Current tobacco smoking	25–64	2.2	Current tobacco smoking	25–64	7.1	8.9	3.2	5.6	Swaziland
Sweden	EURO	High	10	9	–	715	12.8	–	Current tobacco smoking	16–84	25.0	15.7	–	Current tobacco smoking	16–84	23.0	Current tobacco smoking	16–84	24.0	5.0	13.0	9.0	Sweden
Switzerland	EURO	High	17	8	–	1,722	30.5	30.5	Current tobacco smoking	14–65	31.0	20.6	20.6	Current tobacco smoking	14–65	23.0	Current tobacco smoking	14–65	27.0	35.7	29.6	32.7	Switzerland
Syrian Arab Republic	EMRO	Middle	–	–	60.1	1,013	35.5	41.5	Current cigarette smoking	18–65	62.0	–	–	Current cigarette smoking	18–65	21.0	Current cigarette smoking	18–65	–	16.2	4.8	10.6	Syrian Arab Republic
Tajikistan	EURO	Low	4	3	51.5	1,046	–	–	–	–	–	–	–	–	–	–	–	–	–	1.1	0.6	0.9	Tajikistan
Tanzania (United Republic of)	AFRO	Low	4	–	19.4**	132	17.4	21.4	Daily cigarette smoking	25–64	23.0	1.2	2.9	Daily cigarette smoking	25–64	1.3	Daily cigarette smoking	25–64	–	4.6**	0.7**	2.6**	Tanzania (United Republic of)
Thailand	SEARO	Middle	16	11	49.0	560	45.0	45.1	Current tobacco smoking	15+	45.6	2.7	3.0	Current tobacco smoking	15+	3.1	Current tobacco smoking	15+	23.7	15.8	2.4	8.8	Thailand
Timor–Leste	SEARO	Middle	17	8	63.2	–	–	–	Current cigarette smoking	–	30.5	–	–	Current cigarette smoking	–	1.3	Current cigarette smoking	–	23.4	50.6	17.3	32.4	Timor–Leste
Togo	AFRO	Low	3	–	20.2	307	–	–	–	–	–	–	–	–	–	–	–	–	–	9.1	1.7	6.2	Togo
Tonga	WPRO	Middle	7	8	56.9	48	43.7	43.7	Current tobacco smoking	15–64	45.8	12.9	12.9	Current tobacco smoking	15–64	12.0	Current tobacco smoking	15–64	28.7	37.5	21.1	31.1	Tonga
Trinidad and Tobago	AMRO	High	10	1	40.1	1,106	25.3	27.4	Current tobacco smoking	15+	29.8	10.0	11.2	Current tobacco smoking	15+	5.1	Current tobacco smoking	15+	21.1	14.7	10.3	12.9	Trinidad and Tobago
Tunisia	EMRO	Middle	12	–	51.9	1,628	52.7	58.4	Daily tobacco smoking	35–70	53.1	3.6	5.3	Daily tobacco smoking	35–70	6.6	Daily tobacco smoking	35–70	29.6	12.7	2.7	7.5	Tunisia
Turkey	EURO	Middle	38	6	89.3	1,399	46.4	46.6	Current tobacco smoking	15+	47.9	14.5	14.5	Current tobacco smoking	15+	15.2	Current tobacco smoking	15+	31.2	9.4	3.5	6.9	Turkey
Turkmenistan	EURO	Middle	19	3	–	135	–	–	–	–	–	19.5	–	–	–	–	–	–	–	–	–	–	Turkmenistan
Tuvalu	WPRO	Middle	16	12	76.6	29	50.8	50.8	Daily tobacco smoking	15+	54.6	20.1	20.1	Daily tobacco smoking	15+	22.7	Daily tobacco smoking	15+	37.9	33.2	22.1	26.6	Tuvalu
Uganda	AFRO	Low	2	0	20.0	24	15.0	16.2	Current tobacco smoking	15–54	25.2	1.4	2.9	Current tobacco smoking	15–49	3.3	Current tobacco smoking	see †	–	6.6	4.0	5.5	Uganda
Ukraine	EURO	Middle	24	2	70.1	2,401	50.0	50.3	Current tobacco smoking	15+	50.0	13.1	13.2	Current tobacco smoking	15+	11.3	Current tobacco smoking	15+	28.8	27.6	20.6	24.0	Ukraine
United Arab Emirates	EMRO	High	–	–	25.3	583	14.9	18.7	Current tobacco smoking	18+	28.1	<1	1.7	Current tobacco smoking	18+	2.4	Current tobacco smoking	18+	20.5	15.6	5.8	9.8	United Arab Emirates
United Kingdom	EURO	High	22	20	44.9**	750	22.0	24.8	Current cigarette smoking	16–100	22.0	21.0	23.4	Current cigarette smoking	16–100	21.0	Current cigarette smoking	16–100	21.0	4.0	6.0	5.0	United Kingdom
United States of America	AMRO	High	23	23	12.0	1,028	21.6	32.8	Current tobacco smoking	15+	31.2	17.4	24.7	Current tobacco smoking	15+	23.0	Current tobacco smoking	15+	27.0	9.7	7.9	8.8	United States of America
Uruguay	AMRO	Middle	24	5	50.5	770	30.9	31.3	Current tobacco smoking	15+	30.7	21.9	21.9	Current tobacco smoking	15+	19.8	Current tobacco smoking	15+	25.0	16.4	22.9	20.2	Uruguay
Uzbekistan	EURO	Middle	10	3	17.3**	449	22.3	22.3	Current cigarette smoking	15+	20.0	3.5	3.5	Current cigarette smoking	15+	1.1	Current cigarette smoking	15+	10.0	2.4**	1.2**	1.8**	Uzbekistan
Vanuatu	WPRO	Middle	9	7	59.3	43	41.7	43.0	Current tobacco smoking	15–64	46.5	6.3	7.6	Current tobacco smoking	15–64	10.1	Current tobacco smoking	15–64	26.2	28.2	11.4	18.2	Vanuatu
Venezuela (Bolivarian Republic of)	AMRO	Middle	11	11	43.5	496	31.6	–	Current tobacco smoking	15+	22.6	26.5	–	Current tobacco smoking	15+	13.6	Current tobacco smoking	15+	18.0	6.0	8.4	7.4	Venezuela (Bolivarian Republic of)
Viet Nam	WPRO	Middle	–	–	58.5	1,001	40.0	48.2	Current tobacco smoking	15+	47.4	1.3	1.5	Current tobacco smoking	15+	1.4	Current tobacco smoking	15+	23.8	5.9	1.2	3.3	Viet Nam
Yemen	EMRO	Middle	9	1	44.9	402	29.6	35.0	Current tobacco smoking	15+	34.5	10.2	10.8	Current tobacco smoking	15+	12.8	Current tobacco smoking	15+	23.7	4.2	1.6	3.9	Yemen
Zambia	AFRO	Middle	4	–	23.1**	74	21.9	24.3	Current cigarette smoking	15–49	23.2	1.8	3.8	Current cigarette smoking	15–49	0.7	Current cigarette smoking	15–49	–	6.7**	6.8**	6.8**	Zambia
Zimbabwe	AFRO	Low	3	1	20.9**	189	24.8	29.8	Current cigarette smoking	15–49	21.3	2.0	4.3	Current cigarette smoking	15–49	0.4	Current cigarette smoking	15–49	–	4.8**	1.5**	3.2**	Zimbabwe

** Subnational data used ^ Countries classified as "middle low income" or "middle high income" by World Bank are classified here as "middle" † See male/female crude data for age range

COUNTRY	SMOKELESS TOBACCO — PRODUCTS & THEIR USE	HEALTH PROFESSIONALS — PRODUCTS & THEIR USE		CIGARETTE PRICES — PRICES	AFFORDABILITY OF CIGARETTES — PRICES	MANUFACTURING CIGARETTES — TOBACCO INDUSTRY	ILLICIT CIGARETTES — TOBACCO INDUSTRY	TOBACCO TAXES — TOBACCO INDUSTRY	GROWING TOBACCO — TOBACCO INDUSTRY		TOBACCO MARKETING								COUNTRY
	Adult Smokeless Tobacco Use	Smoking Prevalence of Health Professional Students	Student Type	Cigarette Prices	Relative Income Price	Production	Illicit Share of the Total Cigarette Market	Excise Tax as % of Cigarette Price	Tobacco Area Harvested		Tobacco Area Harvested	Percent Change in Tobacco Area Harvested	Tobacco Production	Tobacco Production	Percent Change in Tobacco Production	Agricultural Land on Which Tobacco Is Grown	Youth Who Have an Object With a Tobacco Logo on It			Population	
	%	%		*per pack in USD*	*2010*	*in billion pieces*	%	%	*hectares, 2000*		*hectares, 2009*	*2000–2009*	*tonnes, 2000*	*tonnes, 2009*	*2000–2009*	*2008, % of total agricultural land*	*% Boys, Ages 13–15*	*% Girls, Ages 13–15*	*% Youth, Ages 13–15*	*as of 2009, in thousands*	
Afghanistan	–	18.3**	Medical	2.25	8.46	–		0.0	–		–	–	–	–	–	–	11.7**	9.4**	11.4**	28,150	Afghanistan
Albania	0.9	10.2	Dental	1.91	2.35	0.10	23.0	33.3	5,700		1,200	-78.9	6,200	1,600	-74.2	0.09	19.4	16.2	17.7	3,155	Albania
Algeria	5.7	9.0	Medical	4.15	2.58	30.12	14.6	40.2	6,450		4,594	-28.8	7,153	7,668	7.2	0.01	10.6**	8.8**	9.8**	34,895	Algeria
Andorra	–	–	–	3.13	–	–	–	2.5	–		–	–	–	–	–	–	–	–	–	86	Andorra
Angola	–	–	–	2.68	–	3.90	–	16.0	3,473		4,170	20.1	3,300	5,805	75.9	0.01	–	–	–	18,498	Angola
Antigua and Barbuda	–	–	–	2.31	1.87	–	–	0.0	–		–	–	–	–	–	–	10.7	11.9	11.8	88	Antigua and Barbuda
Argentina	–	35.5	Medical	1.67	1.47	39.67	4.6	68.8	59,612		74,546	25.1	114,509	159,495	39.3	0.07	13.6	10.7	12.1	40,276	Argentina
Armenia	1.3	45.6	Medical	1.42	5.17	3.30	15.6	18.1	2,528		297	-88.3	4,577	1,055	-76.9	0.01	17.5	14.2	15.6	3,083	Armenia
Australia	0.6	–	–	12.14	1.73	24.46	3.4	54.7	3,185		0	-100.0	7,762	4,315	-44.4	0.00	–	–	–	21,293	Australia
Austria	0.2	–	–	6.20	1.09	10.00	13.6	58.9	111		0	-100.0	230	0	-100.0	–	–	–	–	8,364	Austria
Azerbaijan	0.1	–	–	1.88	1.45	2.19	7.9	9.3	8,177		1,200	-85.3	17,258	2,609	-84.9	0.02	–	–	–	8,832	Azerbaijan
Bahamas	–	2.6	Nursing	5.49	1.23	–	–	31.2	–		–	–	–	–	–	–	16.2	14.3	15.6	342	Bahamas
Bahrain	–	10.9	Medical	1.84	0.91	–	–	0.0	–		–	–	–	–	–	–	24.8	21.7	23.3	791	Bahrain
Bangladesh	27.2	19.5	Medical	1.68	10.06	23.68	4.4	53.0	31,161		29,869	-4.1	35,000	40,265	15.0	0.31	15.3	10.9	12.8	162,221	Bangladesh
Barbados	0.3	2.0	Nursing	6.00	3.84	–	5.9	34.2	–		–	–	–	–	–	–	19.4	12.3	15.7	256	Barbados
Belarus	–	–	–	0.84	1.44	25.10	1.4	10.0	–		–	–	–	–	–	–	17.2	9.8	13.5	9,634	Belarus
Belgium	–	–	–	6.97	1.42	–	5.0	59.5	400		64	-84.0	1,200	153	-87.3	0.00	–	–	–	10,647	Belgium
Belize	–	15.2	Nursing	2.50	6.01	0.01	2.6	10.0	–		–	–	–	–	–	–	8.7	10.4	9.6	307	Belize
Benin	9.2	–	–	1.98	14.68	–	–	25.4	1,007		143	-85.8	679	93	-86.3	0.02	19.1**	20.8**	20.0**	8,935	Benin
Bhutan	19.4	–	–	–	–	–	–	–	110		97	-11.8	144	128	-11.1	0.02	11.9	9.2	10.5	697	Bhutan
Bolivia (Plurinational State of)	–	41.2	Medical	1.56	4.64	1.97	45.0	29.0	1,060		916	-13.6	975	1,284	31.7	0.00	15.9**	14.5**	15.3**	9,863	Bolivia (Plurinational State of)
Bosnia and Herzegovina	–	47.0	Medical	2.66	3.61	5.68	7.9	55.2	3,204		1,614	-49.6	3,277	2,424	-26.0	0.09	22.1	15.9	18.9	3,767	Bosnia and Herzegovina
Botswana	–	–	–	2.52	3.48	–	–	39.1	–		–	–	–	–	–	–	12.3	9.6	10.7	1,950	Botswana
Brazil	0.4	16.9**	Medical	2.73	2.10	96.97	16.0	26.3	309,989		442,397	42.7	578,451	863,079	49.2	0.16	6.9**	5.4**	6.2**	193,734	Brazil
Brunei Darussalam	–	–	–	2.36	0.47	–	–	63.2	–		–	–	–	–	–	–	–	–	–	400	Brunei Darussalam
Bulgaria	0.0	45.0	Medical	3.29	2.56	17.25	34.0	68.9	28,523		27,870	-2.3	32,296	51,322	58.9	0.49	17.2	15.4	16.4	7,545	Bulgaria
Burkina Faso	–	–	–	1.39	24.03	0.73	19.0	6.9	1,000		1,098	9.8	500	791	58.2	0.01	22.1**	23.6**	23.0**	15,757	Burkina Faso
Burundi	–	–	–	3.25	36.09	0.47	–	36.3	705		1,497	112.3	762	1,209	58.7	0.04	17.6	13.0	15.3	8,303	Burundi
Cambodia	7.3	6.4	Medical	1.03	4.06	4.50	5.0	10.7	9,669		9,269	-4.1	7,665	18,599	142.6	0.17	16.3**	11.7**	13.8**	14,805	Cambodia
Cameroon	–	–	–	2.03	25.73	1.22	15.2	9.2	3,400		4,173	22.7	4,700	7,112	51.3	0.04	14.4**	12.6**	13.5**	19,522	Cameroon
Canada	1.3	6.0	Medical	10.51	1.60	23.38	14.0	58.0	23,800		16,414	-31.0	53,010	45,991	-13.2	0.02	–	–	–	33,573	Canada
Cape Verde	4.6	–	–	2.95	7.62	–	–	4.9	–		–	–	–	–	–	–	15.7	10.2	12.5	506	Cape Verde
Central African Republic	–	–	–	3.84	14.48	–	–	13.3	750		715	-4.7	652	759	16.4	0.01	15.8**	32.8**	24.3**	4,422	Central African Republic
Chad	1.2	–	–	1.98	13.17	–	–	13.5	145		221	52.4	184	237	28.8	0.00	28.9	33.7	30.3	11,206	Chad
Chile	–	28.4	Medical	3.80	1.82	20.19	1.6	60.4	3,508		1,652	-52.9	10,521	5,626	-46.5	0.01	9.9**	8.6**	9.3**	16,970	Chile
China	0.5	11.9	Medical	2.25	2.93	2356.27	7.6	26.2	1,441,537		1,391,703	-3.5	2,563,850	3,067,928	19.7	0.25	10.8**	8.3**	9.5**	1,353,311	China
Colombia	–	–	–	1.75	1.60	17.25	17.6	40.3	14,692		12,768	-13.1	27,767	21,048	-24.2	0.03	11.9**	9.4**	10.5**	45,660	Colombia
Comoros	–	–	–	2.64	16.56	0.00	–	54.4	–		–	–	–	–	–	–	22.2	18.1	20.1	676	Comoros
Congo	–	–	–	1.98	3.39	0.01	1.0	16.3	600		1,029	71.5	200	460	130.0	0.01	24.3	18.8	21.7	3,683	Congo
Congo (Democratic Republic of)	9.1	–	–	3.33	59.19	6.50	–	24.9	7,958		7,800	-2.0	4,210	5,628	33.7	0.04	19.8**	23.8**	21.9**	66,020	Congo (Democratic Republic of)
Cook Islands	–	–	–	8.80	–	0.00	–	0.0	–		–	–	–	–	–	–	14.2	18.0	16.2	20	Cook Islands
Costa Rica	0.5	32.8	Medical	1.53	1.94	1.69	47.5	44.2	117		44	-62.4	187	62	-66.8	0.00	11.4	7.3	9.3	4,579	Costa Rica
Côte d'Ivoire	–	1.9	Medical	2.13	15.62	3.60	15.0	21.4	20,000		17,799	-11.0	10,200	10,171	-0.3	0.10	15.6	11.4	13.7	21,075	Côte d'Ivoire
Croatia	0.4	36.6**	Medical	3.95	2.39	12.50	17.6	53.0	5,678		6,062	6.8	9,714	13,348	37.4	0.46	15.2	13.3	14.3	4,416	Croatia
Cuba	–	29.5**	Medical	3.11	–	14.40	–	87.1	45,323		24,861	-45.1	32,237	25,200	-21.8	0.35	9.1	10.8	10.0	11,204	Cuba
Cyprus	–	–	–	6.13	1.33	0.97	5.0	64.5	76		10	-86.8	374	323	-13.6	0.09	18.3	8.2	13.0	871	Cyprus
Czech Republic	2.1	21.6	Medical	4.33	1.86	27.80	10.0	62.0	–		–	–	–	–	–	–	17.1	16.6	16.9	10,369	Czech Republic
Denmark	2.0	–	–	6.94	1.17	12.00	1.0	60.9	–		–	–	–	–	–	–	–	–	–	5,470	Denmark
Djibouti	–	–	–	1.13	8.14	–	–	30.7	–		–	–	–	–	–	–	23.9	27.4	25.5	864	Djibouti

*** Subnational data used*

COUNTRY	SMOKELESS TOBACCO — PRODUCTS & THEIR USE	HEALTH PROFESSIONALS — PRODUCTS & THEIR USE		CIGARETTE PRICES — PRICES	AFFORDABILITY OF CIGARETTES — PRICES	MANUFACTURING CIGARETTES — TOBACCO INDUSTRY	ILLICIT CIGARETTES — TOBACCO INDUSTRY	TOBACCO TAXES — TOBACCO INDUSTRY	GROWING TOBACCO — TOBACCO INDUSTRY							TOBACCO MARKETING				COUNTRY
	Adult Smokeless Tobacco Use	Smoking Prevalence of Health Professional Students	Student Type	Cigarette Prices	Relative Income Price	Production	Illicit Share of the Total Cigarette Market	Excise Tax as % of Cigarette Price	Tobacco Area Harvested		Tobacco Area Harvested	Percent Change in Tobacco Area Harvested	Tobacco Production	Tobacco Production	Percent Change in Tobacco Production	Agricultural Land on Which Tobacco Is Grown	Youth Who Have an Object With a Tobacco Logo on It			Population	
	%	%		*per pack in USD*	*2010*	*in billion pieces*	%	%	*hectares, 2000*		*hectares, 2009*	*2000–2009*	*tonnes, 2000*	*tonnes, 2009*	*2000–2009*	*2008, % of total agricultural land*	*% Boys, Ages 13–15*	*% Girls, Ages 13–15*	*% Youth, Ages 13–15*	*as of 2009, in thousands*	
Dominica	–	–	–	3.83	2.51	–	–	12.6	–		–	–	–	–	–	–	15.9	14.6	16.0	67	Dominica
Dominican Republic	0.8	–	–	3.24	6.23	1.95	29.5	43.3	13,250		11,000	-17.0	17,229	11,800	-31.5	0.36	11.4	9.5	10.7	10,090	Dominican Republic
Ecuador	–	–	–	2.50	5.02	3.10	14.8	53.6	4,174		3,903	-6.5	5,080	8,087	59.2	0.06	16.9**	8.7**	12.6**	13,625	Ecuador
Egypt	2.6	7.9	Medical	1.69	2.92	82.00	0.3	73.8	–		–	–	–	–	–	–	15.2	10.0	13.2	82,999	Egypt
El Salvador	–	–	–	2.25	4.73	0.00	11.7	43.3	580		781	34.7	1,050	1,496	42.5	0.04	11.0	7.9	9.1	6,163	El Salvador
Equatorial Guinea	–	–	–	2.12	–	–	–	19.4	–		–	–	–	–	–	–	11.2	9.8	10.6	676	Equatorial Guinea
Eritrea	2.9	–	–	3.90	98.12	–	–	44.6	–		–	–	–	–	–	–	19.1	16.5	18.1	5,073	Eritrea
Estonia	–	–	–	3.33	1.88	0.00	36.2	67.8	–		–	–	–	–	–	–	18.1	16.7	17.3	1,340	Estonia
Ethiopia	1.3	–	–	1.57	15.48	3.40	38.0	43.0	4,700		6,224	32.4	3,300	4,820	46.1	0.01	15.2**	10.2**	12.6**	82,825	Ethiopia
Fiji	–	11.3	Medical	2.70	–	0.04	4.7	76.9	300		650	116.7	313	343	9.6	0.12	12.0	14.3	13.1	849	Fiji
Finland	2.0	–	–	7.61	1.49	0.00	5.8	60.1	–		–	–	–	–	–	–	–	–	–	5,326	Finland
France	1.4	34.6	Medical	8.31	1.68	18.42	12.8	64.3	9,282		6,707	-27.8	25,252	17,838	-29.4	0.02	–	–	–	62,343	France
Gabon	1.0	–	–	1.99	2.31	–	–	6.6	–		–	–	–	–	–	–	–	–	–	1,475	Gabon
Gambia	1.1	–	–	1.05	5.93	–	14.0	30.0	–		–	–	–	–	–	–	28.4	31.9	31.4	1,705	Gambia
Georgia	0.6	17.1	Medical	2.71	2.74	2.55	9.0	46.2	1,801		700	-61.0	1,855	100	-94.6	0.03	18.4	11.2	14.6	4,260	Georgia
Germany	–	27.5	Medical	6.86	1.53	225.00	8.4	60.7	4,576		3,091	-32.5	10,985	8,223	-25.1	0.02	–	–	–	82,167	Germany
Ghana	0.8	4.3	Medical	2.78	10.66	1.50	10.0	14.0	3,950		6,015	52.3	1,350	4,069	201.4	0.04	17.4	13.2	15.4	23,837	Ghana
Greece	0.6	28.8	Medical	5.21	1.46	31.25	7.0	65.0	61,000		15,700	-74.3	136,593	27,501	-79.9	0.35	23.0	15.8	19.6	11,161	Greece
Grenada	–	2.5	Nursing	4.14	4.33	–	–	34.0	–		–	–	–	–	–	–	16.6	7.9	11.6	104	Grenada
Guatemala	–	73.0	Medical	1.89	5.54	3.77	13.9	46.0	8,374		8,376	0.0	18,630	20,158	8.2	0.23	–	–	–	14,027	Guatemala
Guinea	1.4	–	–	0.98	7.75	–	–	11.1	3,470		2,196	-36.7	3,851	2,863	-25.7	0.02	30.1	25.6	28.6	10,069	Guinea
Guinea–Bissau	–	–	–	1.00	11.93	–	85.0	16.1	–		–	–	–	–	–	–	20.0**	19.0**	19.5**	1,611	Guinea–Bissau
Guyana	2.5	3.8	Medical	3.16	5.13	–	1.8	16.3	91		115	26.4	90	119	32.2	0.01	14.1	11.4	13.0	762	Guyana
Haiti	1.3	–	–	1.66	–	–	–	–	400		518	29.5	550	605	10.0	0.03	17.6**	14.9**	15.9**	10,033	Haiti
Honduras	–	–	–	1.59	7.06	6.18	–	25.9	11,214		4,189	-62.6	5,035	6,098	21.1	0.14	11.8**	13.6**	12.8**	7,466	Honduras
Hungary	0.6	–	–	3.56	1.82	5.99	12.4	60.6	5,764		5,918	2.7	10,485	6,679	-36.3	0.10	15.9	15.1	15.8	9,993	Hungary
Iceland	2.9	–	–	8.23	1.66	0.00	–	36.1	–		–	–	–	–	–	–	–	–	–	323	Iceland
India	25.9	13.4	Medical	2.03	13.22	100.00	10.0	27.7	433,400		390,000	-10.0	520,000	620,000	19.2	0.21	–	–	–	1,198,003	India
Indonesia	1.3	8.6	Medical	1.40	4.56	180.50	8.1	45.7	168,300		232,160	37.9	146,100	181,319	24.1	0.41	14.3	6.8	10.3	229,965	Indonesia
Iran (Islamic Republic of)	–	5.6	Medical	2.03	1.56	28.00	28.7	0.0	19,685		7,993	-59.4	20,980	8,826	-57.9	0.02	9.9	8.8	9.3	74,196	Iran (Islamic Republic of)
Iraq	0.9	19.2	Medical	2.56	2.50	4.40	22.9	0.0	2,400		2,320	-3.3	2,250	2,156	-4.2	0.03	15.0**	10.8**	13.2**	30,747	Iraq
Ireland	1.3	12.0	Dental	10.92	2.25	–	33.2	61.6	–		–	–	–	–	–	–	–	–	–	4,515	Ireland
Israel	–	–	–	5.26	1.28	1.59	2.8	68.0	0		0	–	0	0	–	–	–	–	–	7,170	Israel
Italy	0.6	20.0	Medical	6.48	1.48	13.29	2.4	58.3	38,788		30,743	-20.7	129,937	119,119	-8.3	0.24	15.4	11.0	13.2	59,870	Italy
Jamaica	–	6.7	Medical	8.73	13.21	–	7.7	36.2	1,163		1,305	12.2	1,920	1,893	-1.4	0.26	15.4	11.9	14.0	2,719	Jamaica
Japan	–	38.0	Nursing	5.34	0.80	158.50	0.1	58.3	23,991		15,800	-34.1	60,803	36,600	-39.8	0.36	–	–	–	127,156	Japan
Jordan	–	43.9	Nursing	2.39	4.07	16.09	11.0	61.2	3,069		2,667	-13.1	2,668	1,961	-26.5	0.30	17.2	18.9	18.6	6,316	Jordan
Kazakhstan	–	–	–	1.09	0.65	24.26	1.1	16.0	8,900		4,000	-55.0	16,160	9,000	-44.3	0.00	15.8	9.7	12.6	15,637	Kazakhstan
Kenya	1.7	9.8	Medical	3.01	28.10	15.24	12.0	50.0	14,160		17,000	20.1	17,960	13,605	-24.2	0.05	17.1	17.2	17.6	39,802	Kenya
Kiribati	–	16.7	Nursing	7.19	48.33	–	–	0.0	–		–	–	–	–	–	–	28.3	21.0	24.2	98	Kiribati
Korea (Democratic People's Republic of)	0.0	–	–	–	–	15.50	–	–	44,000		48,795	10.9	63,000	80,324	27.5	1.53	–	–	–	23,906	Korea (Democratic People's Republic of)
Korea (Republic of)	–	17.5	Medical	2.24	1.05	124.63	0.4	52.9	24,300		13,222	-45.6	68,198	42,075	-38.3	0.83	8.1	6.6	7.4	48,333	Korea (Republic of)
Kuwait	–	5.3	Medical	1.79	0.45	0.00	0.9	0.0	–		–	–	–	–	–	–	17.7	14.3	16.0	2,985	Kuwait
Kyrgyzstan	3.4	36.6	Medical	0.74	6.04	3.60	31.8	7.6	14,465		4,850	-66.5	34,613	12,005	-65.3	0.05	17.2	19.1	18.2	5,482	Kyrgyzstan
Lao People's Democratic Republic	7.9	6.0	Medical	1.40	6.00	2.73	8.8	20.4	6,700		5,513	-17.7	39,926	25,966	-35.0	0.25	15.6**	14.4**	15.0**	6,320	Lao People's Democratic Republic
Latvia	0.8	40.3	Medical	3.33	2.68	0.02	35.3	63.2	–		–	–	–	–	–	–	31.2**	24.9**	27.8	2,249	Latvia
Lebanon	–	28.2	Medical	1.50	1.49	0.56	22.5	36.6	8,726		8,217	-5.8	10,800	9,010	-16.6	1.24	–	–	–	4,224	Lebanon
Lesotho	5.4	–	–	3.82	45.65	–	–	27.5	–		–	–	–	–	–	–	16.7	14.3	16.3	2,067	Lesotho

*** Subnational data used*

COUNTRY	SMOKELESS TOBACCO PRODUCTS & THEIR USE	HEALTH PROFESSIONALS PRODUCTS & THEIR USE		CIGARETTE PRICES PRICES	AFFORDABILITY OF CIGARETTES PRICES	MANUFACTURING CIGARETTES TOBACCO INDUSTRY	ILLICIT CIGARETTES TOBACCO INDUSTRY	TOBACCO TAXES TOBACCO INDUSTRY	GROWING TOBACCO TOBACCO INDUSTRY							TOBACCO MARKETING				COUNTRY
	Adult Smokeless Tobacco Use	Smoking Prevalence of Health Professional Students	Student Type	Cigarette Prices	Relative Income Price	Production	Illicit Share of the Total Cigarette Market	Excise Tax as % of Cigarette Price	Tobacco Area Harvested		Tobacco Area Harvested	Percent Change in Tobacco Area Harvested	Tobacco Production	Tobacco Production	Percent Change in Tobacco Production	Agricultural Land on Which Tobacco Is Grown	Youth Who Have an Object With a Tobacco Logo on It			Population	
	%	%		*per pack in USD*	*2010*	*in billion pieces*	%	%	*hectares, 2000*		*hectares, 2009*	*2000–2009*	*tonnes, 2000*	*tonnes, 2009*	*2000–2009*	*2008, % of total agricultural land*	*% Boys, Ages 13–15*	*% Girls, Ages 13–15*	*% Youth, Ages 13–15*	*as of 2009, in thousands*	
Liberia	2.4	–	–	1.04	30.52	–	23.0	6.8	–		–	–	–	–	–	–	16.0**	16.5**	16.3**	3,955	Liberia
Libyan Arab Jamahiriya	1.2	10.1	Medical	1.97	0.71	4.30	80.0	2.0	666		598	–10.2	1,500	1,416	–5.6	0.00	13.9	8.6	11.3	6,420	Libyan Arab Jamahiriya
Lithuania	–	67.7	Medical	3.35	2.64	18.10	25.0	60.4	–		–	–	–	–	–	–	20.7	12.2	16.2	3,287	Lithuania
Luxembourg	–	–	–	6.20	0.43	4.25	–	57.2	–		–	–	–	–	–	–	–	–	–	486	Luxembourg
Macedonia (The former Yugoslav Republic of)	–	72.5	Medical	2.87	2.42	6.89	7.7	39.0	22,785		17,800	–21.9	22,175	24,122	8.8	1.59	26.5	21.5	24.1	2,042	Macedonia (The former Yugoslav Republic of)
Madagascar	22.1	–	–	2.30	23.73	5.36	4.4	59.6	2,807		2,720	–3.1	2,204	1,952	–11.4	0.00	4.7	7.5	6.2	19,625	Madagascar
Malawi	3.5	–	–	–	–	–	1.9	37.3	118,752		183,052	54.1	98,675	208,155	111.0	2.95	20.8	20.5	20.6	15,263	Malawi
Malaysia	0.6	–	–	3.30	2.88	52.10	39.9	47.5	9,129		14,406	57.8	7,172	14,445	101.4	0.17	18.5	11.0	14.7	27,468	Malaysia
Maldives	6.8	–	–	1.56	2.54	0.00	–	0.0	–		–	–	–	–	–	–	9.6	6.4	8.1	309	Maldives
Mali	2.7	–	–	0.99	20.47	–	40.0	5.9	372		1,188	219.4	446	1,410	216.1	0.00	15.4	11.8	13.9	13,010	Mali
Malta	–	15.3	Medical	3.08	2.69	0.00	6.0	61.9	–		–	–	–	–	–	–	–	–	–	409	Malta
Marshall Islands	65.1	–	–	3.50	–	–	–	0.0	–		–	–	–	–	–	–	13.8	20.6	17.6	62	Marshall Islands
Mauritania	9.0	–	–	1.51	12.14	–	6.0	0.0	–		–	–	–	–	–	–	30.4	24.8	27.8	3,291	Mauritania
Mauritius	–	–	–	3.31	3.21	–	–	58.7	397		238	–40.1	563	314	–44.2	0.26	–	–	–	1,288	Mauritius
Mexico	0.3	35.3	Medical	2.50	1.74	43.70	6.1	48.9	22,674		4,312	–81.0	45,164	7,822	–82.7	0.01	23.3**	19.0**	20.9**	109,610	Mexico
Micronesia (Federated States of)	11.4	–	–	2.25	–	0.00	–	25.0	–		–	–	–	–	–	–	28.8	21.7	25.1	111	Micronesia (Federated States of)
Moldova (Republic of)	0.0	23.0	Nursing	1.38	4.46	4.96	3.9	13.5	23,537		2,517	–89.3	25,306	4,400	–82.6	0.11	10.2	6.1	8.0	3,604	Moldova (Republic of)
Monaco	–	–	–	7.30	–	–	–	0.0	–		–	–	–	–	–	–	–	–	–	33	Monaco
Mongolia	1.7	19.9	Medical	1.18	5.00	0.00	0.0	21.7	–		–	–	–	–	–	–	12.2	7.9	9.9	2,671	Mongolia
Montenegro	–	–	–	2.29	–	0.24	5.5	50.4	–		126	–	–	272	–	0.03	22.6	18.0	20.2	624	Montenegro
Morocco	–	8.7	Medical	3.98	3.95	13.70	11.8	50.6	4,570		795	–82.6	5,333	2,000	–62.5	0.01	11.1	7.8	9.7	31,993	Morocco
Mozambique	6.9	3.4	Medical	2.05	9.88	2.01	10.4	45.8	9,000		60,000	566.7	9,470	75,660	698.9	0.07	16.3**	11.9**	14.3**	22,894	Mozambique
Myanmar	29.6	13.4	Medical	–	11.00	9.47	7.0	50.0	33,185		12,000	–63.8	50,900	18,000	–64.6	0.17	9.5	7.7	8.6	50,020	Myanmar
Namibia	2.1	–	–	3.95	6.51	–	–	33.2	–		–	–	–	–	–	–	16.6	15.2	16.0	2,171	Namibia
Nauru	–	–	–	4.46	–	–	–	0.0	–		–	–	–	–	–	–	–	–	–	10	Nauru
Nepal	18.6	23.7	Medical	1.21	16.68	13.10	–	17.2	4,283		2,542	–40.6	3,809	2,497	–34.4	0.06	12.9	8.0	10.7	29,331	Nepal
Netherlands	–	–	–	7.12	1.35	115.30	9.5	62.7	–		–	–	–	–	–	–	–	–	–	16,592	Netherlands
New Zealand	–	–	–	10.35	2.73	0.94	3.2	61.2	0		0	–	0	0	–	–	–	–	–	4,266	New Zealand
Nicaragua	–	–	–	1.50	11.62	0.10	10.0	16.1	934		1,841	97.1	1,479	2,952	99.6	0.04	15.1**	10.1**	12.5**	5,743	Nicaragua
Niger	1.9	37.7	Medical	1.98	26.54	–	–	10.1	6,200		789	–87.3	4,422	913	–79.4	0.00	28.3	31.6	29.9	15,290	Niger
Nigeria	2.1	–	–	1.43	9.66	17.00	6.7	15.9	37,000		20,358	–45.0	22,000	14,103	–35.9	0.02	18.1**	13.8**	16.1**	154,729	Nigeria
Niue	–	–	–	7.21	–	–	–	0.0	–		–	–	–	–	–	–	–	–	22.3	1	Niue
Norway	10.0	–	–	15.11	1.51	–	4.1	52.3	–		–	–	–	–	–	–	–	–	–	4,812	Norway
Oman	–	2.3	Nursing	1.67	0.91	–	–	0.0	270		268	–0.7	1,300	1,314	1.1	0.02	11.9	12.5	12.4	2,845	Oman
Pakistan	4.9	–	–	1.23	9.09	70.00	27.5	47.9	56,400		49,676	–11.9	107,700	104,996	–2.5	0.20	8.9**	14.5**	11.4**	180,808	Pakistan
Palau	–	–	–	4.50	–	0.00	–	0.0	–		–	–	–	–	–	–	9.5	9.7	9.6	20	Palau
Panama	–	58.8	Medical	3.25	4.28	0.00	28.6	42.4	1,100		1,428	29.8	1,800	2,627	45.9	0.07	8.7	4.5	6.4	3,454	Panama
Papua New Guinea	–	34.9	Nursing	4.86	–	–	11.6	26.3	–		–	–	–	–	–	–	20.3	18.0	18.9	6,732	Papua New Guinea
Paraguay	7.5	25.7**	Medical	1.34	2.26	26.40	5.0	7.4	3,235		3,250	0.5	4,486	5,688	26.8	0.01	15.3	8.4	11.8	6,349	Paraguay
Peru	–	34.9**	Medical	2.53	3.07	0.00	18.8	31.1	4,900		521	–89.4	12,249	2,205	–82.0	0.00	7.6	11.1	9.5	29,165	Peru
Philippines	2.0	20.6	Medical	0.74	2.65	93.81	19.9	52.0	41,051		26,100	–36.4	49,479	36,383	–26.5	0.19	12.4	10.0	11.1	91,983	Philippines
Poland	0.5	76.8	Medical	3.93	2.55	142.86	8.5	66.1	14,057		16,900	20.0	29,545	39,293	33.0	0.11	29.5	23.7	26.5	38,074	Poland
Portugal	0.0	–	–	5.35	2.22	25.00	6.3	63.0	2,118		600	–71.7	6,135	1,375	–77.6	0.01	–	–	–	10,707	Portugal
Qatar	4.0	–	–	1.79	0.23	–	1.1	0.0	–		–	–	–	–	–	–	18.8	14.5	16.8	1,409	Qatar
Romania	–	–	–	3.79	4.13	28.54	26.3	62.6	11,300		850	–92.5	10,900	1,566	–85.6	0.01	22.5	21.2	21.8	21,275	Romania
Russian Federation	0.6	38.9	Medical	1.74	0.93	402.70	0.5	19.7	1,840		1	–99.9	1,440	3	–99.8	0.00	18.2	11.1	14.7	140,874	Russian Federation
Rwanda	2.6	–	–	2.04	15.25	–	–	50.8	3,634		4,459	22.7	3,800	6,278	65.2	0.15	11.2	7.5	9.6	9,998	Rwanda

*** Subnational data used*

COUNTRY	SMOKELESS TOBACCO — PRODUCTS & THEIR USE	HEALTH PROFESSIONALS — PRODUCTS & THEIR USE		CIGARETTE PRICES — PRICES	AFFORDABILITY OF CIGARETTES — PRICES	MANUFACTURING CIGARETTES — TOBACCO INDUSTRY	ILLICIT CIGARETTES — TOBACCO INDUSTRY	TOBACCO TAXES — TOBACCO INDUSTRY	GROWING TOBACCO — TOBACCO INDUSTRY							TOBACCO MARKETING				COUNTRY
	Adult Smokeless Tobacco Use	Smoking Prevalence of Health Professional Students	Student Type	Cigarette Prices	Relative Income Price	Production	Illicit Share of the Total Cigarette Market	Excise Tax as % of Cigarette Price	Tobacco Area Harvested		Tobacco Area Harvested	Percent Change in Tobacco Area Harvested	Tobacco Production	Tobacco Production	Percent Change in Tobacco Production	Agricultural Land on Which Tobacco Is Grown	Youth Who Have an Object With a Tobacco Logo on It			Population	
	%	%		*per pack in USD*	*2010*	*in billion pieces*	%	%	*hectares, 2000*		*hectares, 2009*	*2000–2009*	*tonnes, 2000*	*tonnes, 2009*	*2000–2009*	*2008, % of total agricultural land*	*% Boys, Ages 13–15*	*% Girls, Ages 13–15*	*% Youth, Ages 13–15*	*as of 2009, in thousands*	
Saint Kitts and Nevis	0.1	–	–	5.38	2.50	–	–	5.0	–		–	–	–	–	–	–	20.5	15.6	17.6	52	Saint Kitts and Nevis
Saint Lucia	–	–	–	2.21	4.25	–	–	0.0	–		–	–	–	–	–	–	19.0	9.1	13.1	172	Saint Lucia
Saint Vincent and the Grenadines	–	–	–	5.00	3.83	–	–	1.7	50		81	62.0	86	109	26.7	0.70	14.9	10.4	12.4	109	Saint Vincent and the Grenadines
Samoa	0.6	–	–	5.23	–	–	–	48.3	40		50	25.0	140	207	47.9	0.08	26.0	16.9	21.5	179	Samoa
San Marino	–	–	–	5.44	–	0.00	–	74.2	–		–	–	–	–	–	–	15.3	5.9	10.6	31	San Marino
Sao Tome and Principe	2.8	–	–	2.65	–	–	–	8.7	–		–	–	–	–	–	–	–	–	–	163	Sao Tome and Principe
Saudi Arabia	0.8	8.2	Medical	1.57	0.79	0.00	1.2	0.0	–		–	–	–	–	–	–	11.8	12.0	12.3	25,721	Saudi Arabia
Senegal	–	10.2	Medical	1.29	9.29	8.25	4.4	26.3	–		–	–	–	–	–	–	17.4	19.6	18.9	12,534	Senegal
Serbia	–	34.7	Medical	2.03	2.19	22.06	5.1	56.9	–		6,103	–	–	9,847	–	0.14	18.4	13.8	16.1	9,850	Serbia
Seychelles	0.1	–	–	5.43	5.74	0.04	–	67.6	–		–	–	–	–	–	–	16.8	15.9	16.2	84	Seychelles
Sierra Leone	7.8	–	–	1.03	12.32	–	18.0	18.3	40		48	20.0	20	27	35.0	0.00	20.3**	17.6**	19.5**	5,696	Sierra Leone
Singapore	–	–	–	9.29	1.82	7.50	5.7	60.7	0		0	–	0	0	–	–	–	–	–	4,737	Singapore
Slovakia	–	26.0	Medical	3.66	1.98	5.05	15.0	65.0	1,134		19	-98.3	1,870	2	-99.9	0.00	21.1	13.6	17.3	5,406	Slovakia
Slovenia	–	21.0	Medical	3.91	1.40	0.00	8.1	60.6	–		–	–	–	–	–	–	13.7	11.6	13.3	2,020	Slovenia
Solomon Islands	–	–	–	–	–	–	–	–	100		100	0.0	85	88	3.5	0.12	21.3	14.4	17.2	523	Solomon Islands
Somalia	–	5.6**	Medical	0.85	–	–	–	0.0	250		344	37.6	100	173	73.0	0.00	22.4**	13.3**	20.1**	9,133	Somalia
South Africa	6.6	–	–	4.14	4.87	19.67	9.0	40.7	15,600		3,562	-77.2	29,700	25,015	-15.8	0.01	20.0	14.4	16.7	50,110	South Africa
Spain	2.5	21.1	Medical	5.99	1.49	2.95	1.0	64.6	14,078		10,000	-29.0	42,908	30,400	-29.2	0.04	–	–	–	44,904	Spain
Sri Lanka	15.8	4.2	Medical	3.62	13.80	4.16	9.0	59.2	4,480		2,210	-50.7	5,400	3,810	-29.4	0.08	6.0	5.5	5.7	20,238	Sri Lanka
Sudan	12.2	45.8	Medical	2.40	7.41	5.00	25.0	58.9	–		–	–	–	–	–	–	18.3	17.8	18.0	42,272	Sudan
Suriname	–	17.4	Nursing	3.65	3.13	–	–	40.8	–		–	–	–	–	–	–	22.2	15.2	18.5	520	Suriname
Swaziland	1.6	–	–	3.47	11.90	–	15.0	32.5	194		310	59.8	71	130	83.1	0.02	11.4	9.1	10.0	1,185	Swaziland
Sweden	17.0	–	–	7.74	1.36	–	15.4	56.5	–		–	–	–	–	–	–	–	–	–	9,249	Sweden
Switzerland	0.1	–	–	8.28	0.97	69.12	5.0	55.4	681		556	-18.4	1,182	953	-19.4	0.03	–	–	–	7,568	Switzerland
Syrian Arab Republic	0.0	66.3	Medical	2.36	2.24	14.19	8.0	33.0	18,100		12,674	-30.0	26,112	19,881	-23.9	0.10	15.9	9.8	12.9	21,906	Syrian Arab Republic
Tajikistan	–	–	–	1.81	9.25	–	–	3.2	3,702		130	-96.5	7,186	190	-97.4	0.00	11.1	9.4	10.2	6,952	Tajikistan
Tanzania (United Republic of)	1.4	–	–	2.90	34.09	5.68	–	10.9	44,000		41,000	-6.8	26,384	55,400	110.0	0.10	15.1**	12.7**	13.7**	43,739	Tanzania (United Republic of)
Thailand	3.9	2.1	Medical	2.56	3.67	27.63	2.6	62.2	31,363		30,836	-1.7	74,200	72,229	-2.7	0.20	42.5	41.1	42.0	67,764	Thailand
Timor-Leste	2.2	–	–	1.50	21.24	–	–	–	–		–	–	–	–	–	–	39.4	29.8	34.3	1,134	Timor-Leste
Togo	–	–	–	1.98	24.26	0.00	16.8	15.0	4,000		4,289	7.2	1,800	2,788	54.9	0.11	24.3	26.0	24.8	6,619	Togo
Tonga	–	–	–	4.93	10.51	0.00	–	54.8	–		–	–	–	–	–	–	29.4	12.9	23.5	104	Tonga
Trinidad and Tobago	–	5.7	Nursing	2.82	–	4.86	1.6	20.7	60		159	165.0	90	203	125.6	0.24	13.2	10.0	11.8	1,339	Trinidad and Tobago
Tunisia	5.4	17.6	Medical	2.95	2.83	12.15	3.9	49.6	3,231		1,266	-60.8	3,436	1,600	-53.4	0.03	13.9	6.6	10.1	10,272	Tunisia
Turkey	–	17.9	Medical	4.38	2.88	94.00	15.7	63.0	236,569		139,431	-41.1	200,280	85,000	-57.6	0.38	18.6	10.3	15.6	74,816	Turkey
Turkmenistan	12.0	–	–	1.89	3.03	0.00	–	31.4	1,600		1,297	-18.9	3,220	2,723	-15.4	0.00	–	–	–	5,110	Turkmenistan
Tuvalu	–	–	–	5.39	–	0.00	–	14.3	–		–	–	–	–	–	–	30.4	22.7	25.9	10	Tuvalu
Uganda	3.3	2.8	Medical	1.76	14.76	–	2.4	29.3	13,712		14,000	2.1	22,837	18,846	-17.5	0.15	12.4	11.6	12.3	32,710	Uganda
Ukraine	0.2	33.1	Medical	1.26	5.84	101.78	1.5	53.6	3,600		120	-96.7	3,000	110	-96.3	0.00	29.0	23.3	26.0	45,708	Ukraine
United Arab Emirates	–	–	–	1.91	0.23	0.04	45.1	0.0	52		40	-23.1	660	811	22.9	0.01	13.7	8.8	11.4	4,599	United Arab Emirates
United Kingdom	1.1	–	–	10.99	2.56	65.00	11.0	73.5	–		–	–	–	–	–	–	–	–	–	61,565	United Kingdom
United States of America	3.5	3.3	Medical	6.36	1.32	338.23	6.4	39.9	189,970		143,275	-24.6	477,753	373,440	-21.8	0.03	13.1	11.6	12.3	314,659	United States of America
Uruguay	0.0	32.3	Medical	3.61	2.58	4.97	22.6	54.3	830		789	-4.9	2,800	2,811	0.4	0.01	13.9	8.4	10.7	3,361	Uruguay
Uzbekistan	11.3	–	–	1.20	3.65	10.23	8.8	13.0	6,700		5,347	-20.2	19,000	15,402	-18.9	0.02	7.4**	6.1**	6.9**	27,488	Uzbekistan
Vanuatu	–	–	–	8.03	23.60	–	–	12.3	–		–	–	–	–	–	–	21.0	15.7	17.8	240	Vanuatu
Venezuela (Bolivarian Republic of)	–	–	–	4.66	4.66	28.50	14.0	67.6	5,362		3,254	-39.3	8,755	5,054	-42.3	0.01	16.6	13.4	14.9	28,583	Venezuela (Bolivarian Republic of)
Viet Nam	1.3	11.2	Medical	1.66	5.61	116.50	15.2	32.5	24,400		20,729	-15.0	27,100	38,500	42.1	0.19	13.3	9.5	11.3	88,069	Viet Nam
Yemen	10.7	10.9	Medical	1.25	6.40	13.80	14.5	53.5	5,347		10,169	90.2	11,613	22,577	94.4	0.04	22.8	20.2	22.1	23,580	Yemen
Zambia	0.6	5.5	Nursing	1.83	13.62	0.00	25.0	30.9	9,000		68,007	655.6	9,533	75,335	690.3	0.20	16.6**	20.0**	18.6**	12,935	Zambia
Zimbabwe	1.2	–	–	1.80	6.73	6.00	2.3	38.6	90,769		79,917	-12.0	227,726	96,367	-57.7	0.32	16.6**	13.0**	14.8**	12,523	Zimbabwe

*** Subnational data used*

01 DEATHS

Main Map

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The calculation of tobacco-attributed mortality starts with the number of lung cancer deaths in the country. For countries that had very low lung cancer deaths, the proportion is 0.0%, which indicates low mortality rates rather than no data. Tobacco-attributed mortality data provides estimates that may be influenced by environmental factors. Data excludes deaths caused by secondhand smoke exposure, but this cannot always be controlled for and may be included in the total for some countries.

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02 HARM FROM SMOKING

Main Image: How Tobacco Harms You

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03 SECONDHAND SMOKING

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When regional Global Youth Tobacco Survey (GYTS) data were used, the country was color-coded using data from the capital city. If data were not available for the capital city, the largest city was selected. The use of regional data is indicated on the map with a circle next to the city whose data were used.

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07 MALE TOBACCO USE

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West Bank and Gaza Strip (Palestine) World Health Organization. (2010). Country profile: Palestine. Smoking prevalence among adults age 15+, 2007. http://www.emro.who.int/emrinfo/index.aspx?Ctry=pal. Accessed November 2, 2011.

METHODS
WHO Report on the Global Tobacco Epidemic (RGTE) age-standardized prevalence data were the primary data source for 2009 male smoking prevalence for all countries unless otherwise listed above.

Symbol
World Health Organization. (2011). *WHO report on the global tobacco epidemic, 2011: Warning about the dangers of tobacco.* Geneva: World Health Organization.

Smoking Trends
SOURCES
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US Centers for Disease Control and Prevention. (2011). National Health Interview Survey, 2010: Early release of selected estimates. http://www.cdc.gov/nchs/data/nhis/earlyrelease/201106_08.pdf. Accessed August 25, 2011.

METHODS
National data sources were used for the 2010 estimate for the US and for the 2009 estimates of Japan and UK.

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SOURCES
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Lopez A, Collishaw N, Piha T. (1994). A descriptive model of the cigarette epidemic in developed countries. *Tobacco Control 3*: 242–247.

Data derived from World Health Organization. (2011). *WHO report on the global tobacco epidemic, 2011. Warning about the dangers of tobacco.* Geneva: World Health Organization.

METHODS
This is an estimate of the average smoking prevalance among males. Countries with prevalence data from the WHO RGTE 2011 were used for this analysis. Population estimates came from 2010 World Bank estimates. An average smoking prevalance was used for countries without prevalence data. The percentages provided represent a weighted average of the prevalence rates for adult male smokers in low-, middle-, and high-income countries.

Low Daily Smoking Rates
Australia Australian Institute of Health and Welfare. (2011). 2010 National Drug Strategy Household Survey Report. http://tobacco.health.usyd.edu.au/assets/pdfs/2010-NDSHS-Report.pdf. Accessed October 5, 2011.

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US Centers for Disease Control and Prevention. (2011). Current smoking, adults, early release. http://www.cdc.gov/nchs/data/nhis/earlyrelease/201106_08.pdf. Accessed November 2, 2011. Current smokers 18+, 2010.

Low- and Middle-Income Countries With High Prevalence
World Health Organization. (2011). WHO Report on the Global Tobacco Epidemic, 2011: Warning about the dangers of tobacco.

Quote: Mizuno
Kageyama Y. (2009). Japan's smoking habit runs into court challenge. *Japan Times.* August 7. http://search.japantimes.co.jp/cgi-bin/nn20090807f3.html. Accessed August 25, 2011.

Quote: Weissman
Martin D. (2009). George Weissman, leader at Philip Morris and in the arts in New York, dies at 90. *New York Times.* July 28. http://www.nytimes.com/2009/07/28/business/28weissman.html?scp=4&sq=smoking&st=nyt. Accessed August 28, 2011.

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Mathers C. (2011). Personal communication.

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8 FEMALE TOBACCO USE

Main Map
SOURCES
World Health Organization. (2011). *WHO report on the global tobacco epidemic, 2011: Warning about the dangers of tobacco.* Geneva: World Health Organization.

ALTERNATE DATA SOURCES
Algeria, Azerbaijan, Cuba, Ecuador, Jamaica, Luxembourg, Suriname, Turkmenistan, Venezuela World Health Organization. (2010). World health statistics 2010. http://www.who.int/whosis/whostat/EN_WHS10_Full.pdf. Accessed November 2, 2011. Prevalence of smoking any tobacco product among adults age 15+, 2006.

Australia Australian Institute of Health and Welfare. (2011). 2010 National Drug Strategy Household Survey Report. http://tobacco.health.usyd.edu.au/assets/pdfs/2010-NDSHS-Report.pdf. Accessed November 2, 2011. Data reflect a combination of daily and weekly, and less than weekly smoking status of adults age 14+, 2010.

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Niue World Health Organization (2011). WHO Global Infobase: Tobacco use prevalence, Niue. Current cigarette users age 15–100, 2002.

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UK World Health Organization (2011). *WHO report on the global tobacco epidemic,* 2011, cites National Health Service General Lifestyle Survey. Current cigarette users age 16–100, 2009.

US Centers for Disease Control and Prevention. (2011). Current smoking, adults, early release. http://www.cdc.gov/nchs/data/nhis/earlyrelease/201106_08.pdf. Accessed November 2, 2011. Current smokers 18+, 2010.

West Bank and Gaza Strip (Palestine) World Health Organization. (2010). Country profile: Palestine. Smoking prevalence among adults age 15+, 2007. http://www.emro.who.int/emrinfo/index.aspx?Ctry=pal. Accessed November 2, 2011.

METHODS
WHO report on the global tobacco epidemic (RGTE) age-standardized prevalence data were the primary data source for 2009 female smoking prevalence for all countries unless otherwise listed above.

Symbol
Swedish National Institute of Public Health. (2009). Public health 2009: Open comparisons.

World Health Organization. (2011). *WHO report on the global tobacco epidemic, 2011.*

Smoking Trends
Japan and UK World Health Organization. (2011). *WHO report on the global tobacco epidemic, 2011.*

US Centers for Disease Control and Prevention. (2011). National Health Interview Survey, 2010: Early release of selected estimates. http://www.cdc.gov/nchs/data/nhis/earlyrelease/201106_08.pdf. Accessed August 25, 2011.

METHODS
National data sources were used for the 2010 estimate for the US and for the 2009 estimates of Japan and UK.

Average Smoking Prevalence Along Tobacco Epidemic Continuum
Source: Data derived from World Health Organization. (2011). *WHO report on the global tobacco epidemic, 2011.*

METHODS
This is an estimate of the average smoking prevalence rate among females. Countries with prevalence data from the WHO RGTE 2011 were used for this analysis. Population estimates came from 2010 World Bank estimates. An average smoking prevalence was used for countries without prevalence data. The percentages provided represent a weighted average of the prevalence rates for adult female smokers in low-, middle-, and high-income countries.

Cambodian Women
Singh P, Yel D, Sin S, Khieng S, Lopez J, Job J, Ferry L, Knutsen S. (2009). *Bulletin of the World Health Organization 2009, 87*: 905–912. http://www.who.int/bulletin/volumes/87/12/08-058917/en/index.html. Accessed August 25, 2011.

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Thun M, Peto R, Boreham J, Lopez AD. (2012). Stages of the Cigarette Epidemic on Entering Its Second Century. Tobacco Control 21(2), 96–101.

World Health Organization. (2011). *WHO report on the global tobacco epidemic, 2011.*

09 BOYS' TOBACCO USE

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SOURCES
Centers for Disease Control and Prevention. (2011). Global Tobacco Surveillance System: Global Youth Tobacco Survey.

Centers for Disease Control and Prevention and World Health Organization. (2011). Global School Based Student Health Survey. http://www.who.int/chp/gshs/en/. Accessed April 26, 2012.

ALTERNATE DATA SOURCES
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Canada Health Canada. (2010). Canadian Tobacco Use Monitoring Survey. http://www.hc-sc.gc.ca/hc-ps/tobac-tabac/research-recherche/stat/_ctums-esutc_2010/w-p-1_sum-som-eng.php. Accessed October 10, 2011. Considers current smokers age 15–19.

Denmark Health Behavior in School-age Children. (2011). School Children Survey 2010. http://www.hbsc.dk/rapport.php?file=HBSC-Rapport-2010.pdf. Accessed October 10, 2011. Considers daily smokers age 15.

France Godeau E, Vignes C, Navarro F, Monéger M-L. (2004). Consumptions of cannabis, tobacco and alcohol by French 15-year-olds: Results of the international HBSC survey. *Courrier des addictions, 6*(3): 117–120. http://www.hbsc.org/countries/downloads_countries/France/Godeau_Focus2004.pdf. Accessed October 10, 2011. Considers daily smokers age 15.

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Japan Osaki Y, Tanihata T, Ohida T, Kanda H, Kaneita Y, Minowa M, Suzuki K, Wada K, Hayashi K. (2008). Decrease in the prevalence of smoking among Japanese adolescents and its possible causes: Periodic nationwide cross-sectional surveys. *Environmental Health Prevention Medicine, 13*: 219–226. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2698236/pdf/12199_2008_Article_33.pdf. Accessed October 11, 2011. Considers current smokers in 8th and 9th grades.

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Sweden National Institute of Public Health, Sweden. (2004). Reduced use of tobacco: How far have we come? Statistics, December 2004. http://www.fhi.se/PageFiles/3137/reduceduseoftobacco0412.pdf. Accessed October 10, 2011. Considers everyday / almost everyday smokers age 15–16.

Switzerland Health Behavior in School-age Children. (2011). School Children Survey 2010. http://www.hbsc.ch/pdf/hbsc_bibliographie_197.pdf. Accessed October 10, 2011. Considers daily and weekly smokers ages 13–15.

UK National Health Service. (2011). Smoking, drinking and drug use among young people in England in 2010. http://www.ic.nhs.uk/webfiles/publications/003_Health_Lifestyles/Smoking%20drinking%20drug%20use%202010/Smoking_drinking_and_drug_use_among_young_people_in_England_2010_Full_report.pdf. Accessed October 10, 2011. Considers regular smokers (at least one time per week) age 11–15.

US Centers for Disease Control and Prevention. (2010). National Youth Tobacco Survey. Data provided by CDC, December 2011 and reanalyzed for current smokers ages 13–15 to correspond with GYTS data.

METHODS
Centers for Disease Control and Prevention's Global Youth Tobacco Survey (GYTS) data were the primary data source for Boys' smoking prevalence for all countries (unless otherwise noted above).

Data from the Centers for Disease Control and Prevention's Global School-based Health Survey (GSHS) were used when it provided more recent data or national-level data, or when GYTS data were not available. Both surveys consider youth age 13–15.

GSHS data were used for:
Algeria, Antigua and Barbuda, Benin, Cook Islands, Costa Rica, Djibouti, Fiji, Grenada, Jamaica, Kuwait, Malawi, Maldives, Mauritania, Mongolia, Morocco, Pakistan, Peru, Philippines, Solomon Islands, Suriname, Syrian Arab Republic, Tajikistan, Thailand, Tunisia, United Arab Emirates, and West Bank and Gaza Strip.

When only subnational data were available, the capital city was selected. If the capital city was not available, the most populated city was used. The use of subnational data is indicated on the map with a circle next to the city whose data were used.

Countries With the Highest Smoking Rates Among Boys
Centers for Disease Control and Prevention. (2011). Global Tobacco Surveillance System: Global School-based Health Survey.

Centers for Disease Control and Prevention. (2011). Global Tobacco Surveillance System: Global Youth Tobacco Survey.

Percentage of Boys Susceptible to Smoking
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Madagascar Smokers
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US Department of Health and Human Services. (1994). *Youth and tobacco: Preventing tobacco use among young people: A report of the Surgeon General.* Rockville, MD: US Department of Health and Human Services, Office of the Surgeon General.

US Department of Health and Human Services. (2004). *The health consequences of smoking: A report of the Surgeon General.* Rockville, MD: US Department of Health and Human Services, Office of the Surgeon General.

Warren C. (2006). Patterns of global tobacco use in young people and implications for future chronic disease burden in adults. *Lancet, 367*: 749–753.

10 GIRLS' TOBACCO USE

Main Map
SOURCES
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Centers for Disease Control and Prevention and World Health Organization. (2011). Global School Based Student Health Survey. http://www.who.int/chp/gshs/en/. Accessed April 26, 2012.

ALTERNATE DATA SOURCES
Australia Australian Institute of Health and Welfare. (2011). 2010 National Drug Strategy Household Survey Report. http://tobacco.health.usyd.edu.au/assets/pdfs/2010-NDSHS-Report.pdf. Accessed November 2, 2011. Considers daily, weekly, and less-than-weekly smokers age 12–17.

Canada Health Canada. (2010). Canadian Tobacco Use Monitoring Survey. http://www.hc-sc.gc.ca/hc-ps/tobac-tabac/research-recherche/stat/_ctums-esutc_2010/w-p-1_sum-som-eng.php. Accessed October 10, 2011. Considers current smokers age 15–19.

Denmark Health Behavior in School-age Children. (2011). School Children Survey 2010. http://www.hbsc.dk/rapport.php?file=HBSC-Rapport-2010.pdf. Accessed October 10, 2011. Considers daily smokers age 13–15.

France Godeau E, Vignes C, Navarro F, Monéger M-L. (2004). Consumptions of cannabis, tobacco and alcohol by French 15-year-olds: Results of the international HBSC survey. *Courrier des addictions, 6*(3): 117–120. http://www.hbsc.org/countries/downloads_countries/France/Godeau_Focus2004.pdf. Accessed October 10, 2011. Considers daily smokers age 15.

Germany Federal Ministry of Health. (2011). Drugs and addiction report: May 2011. https://www.bundesgesundheitsministerium.de/fileadmin/dateien/Publikationen/Drogen_Sucht/Broschueren/Drogen_und_Suchtbericht_2011_110517_Drogenbeauftragte.pdf. Accessed October 10, 2011. Considers current smokers age 12–17.

Hong Kong Tobacco Control Office Department of Health. (2010). Infostation: Statistics. http://www.tco.gov.hk/textonly/english/infostation/infostation_sta_01.html. Considers daily smokers age 15–19.

Japan Osaki Y, Tanihata T, Ohida T, Kanda H, Kaneita Y, Minowa M, Suzuki K, Wada K, Hayashi K. (2008). Decrease in the prevalence of smoking among Japanese adolescents and its possible causes: Periodic nationwide cross-sectional surveys. *Environmental Health Prevention Medicine, 13*: 219–226. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2698236/pdf/12199_2008_Article_33.pdf. Accessed October 11, 2011. Considers current smokers in 8th and 9th grades.

Netherlands Health Behavior in School-age Children. (2011). School Children Survey 2009. http://www.hbsc-nederland.nl/uploads/publicaties/openbaar/HBSC_Rapport_2010.pdf. Accessed October 10, 2011. Considers daily smokers age 13–15.

Spain Health Behavior in School-age Children. (2011). School Children Survey 2006. http://www.msps.es/profesionales/saludPublica/prevPromocion/promocion/saludJovenes/docs/Divulgativo_completo_HBSC2006.pdf. Accessed October 10, 2011. Considers daily and weekly smokers age 11–18.

Sweden National Institute of Public Health, Sweden. (2004). Reduced use of tobacco: How far have we come? Statistics, December 2004. http://www.fhi.se/PageFiles/3137/reduceduseoftobacco0412.pdf. Accessed October 10, 2011. Considers everyday and almost-everyday smokers age 15–16.

Switzerland Health Behavior in School-age Children. (2011). School Children Survey 2010. http://www.hbsc.ch/pdf/hbsc_bibliographie_197.pdf. Accessed October 10, 2011. Considers daily and weekly smokers age 13–15.

UK National Health Service. (2011). Smoking, drinking and drug use among young people in England in 2010. http://www.ic.nhs.uk/webfiles/publications/003_Health_Lifestyles/Smoking%20drinking%20drug%20use%202010/Smoking_drinking_and_drug_use_among_young_people_in_England_2010_Full_report.pdf. Accessed October 10, 2011. Considers regular smokers (at least one time per week) age 11–15.

US Centers for Disease Control and Prevention. (2010). National Youth Tobacco Survey. Data provided by CDC, December 2011 and reanalyzed for current smokers ages 13–15 to correspond with GYTS data.

METHODS

Centers for Disease Control and Prevention's Global Youth Tobacco Survey (GYTS) data were the primary data source for girls' smoking prevalence for all countries (unless otherwise noted above).

Data from the Global School-based Health Survey (GSHS) were used when it provided more recent data or national-level data, or when GYTS data were not available. Both surveys consider youth age 13–15.

GSHS data were used for: **Algeria, Antigua and Barbuda, Benin, Cook Islands, Costa Rica, Djibouti, Fiji, Grenada, Jamaica, Kuwait, Malawi, Maldives, Mauritania, Mongolia, Morocco, Pakistan, Peru, Philippines, Solomon Islands, Suriname, Syrian Arab Republic, Tajikistan, Thailand, Tunisia, United Arab Emirates, and West Bank and Gaza Strip.**

When only subnational data were available, the capital city was selected. If the capital city was not available, the most populated city was used. The use of subnational data is indicated on the map with a circle next to the city whose data were used.

Countries Where More Girls Than Boys Smoke

Data derived from sources listed in the Main Map.

Percentage of Girls Susceptible to Smoking

Warren C, Jones N, Eriksen M, Asma S. (2006). Patterns of global tobacco use in young people and implications for future chronic disease burden in adults. *Lancet, 367*: 749–753.

Common Reasons Young Women Start Smoking

US Department of Health and Human Services. (2001). *Women and smoking: A Report of the Surgeon General*. Rockville, MD: US Department of Health and Human Services, Public Health Service, Office of the Surgeon General.

Madagascar Smokers

WHO. Madagascar (ages 13–15) Fact Sheet, GYTS. 2008. http://apps.nccd.cdc.gov/gtssdata/Ancillary/DataReports.aspx?CAID=1. Accessed December 27, 2011.

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Louise Pilote, McGill University, Canada, 2006.

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11 SMOKELESS TOBACCO

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Australia Australian Institute of Health and Welfare. (2005) *National drug strategy household survey: Detailed findings*. Canberra: Australian Institute of Health and Welfare.

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Azerbaijan State Statistical Committee (SSC) [Azerbaijan] and Macro International Inc. (2008). Azerbaijan Demographic and Health Survey 2006. Calverton, MD: State Statistical Committee and Macro International Inc.

Bangladesh, Egypt, India, Mexico, Philippines, Poland, Russian Federation, Thailand, Ukraine, Uruguay Centers for Disease Control and Prevention. (2011). Global Adult Tobacco Survey. www.cdc.gov/tobacco/global/gtss/. Accessed September 1, 2011.

Barbados, Benin, Bhutan, Cape Verde, Chad, Gambia, Georgia, Guinea, Libyan Arab Jamahiriya, Malawi, Mali, Micronesia (Federated States of), Mongolia, Myanmar, Saint Kitts and Nevis, Sao Tome and Principe, Saudi Arabia, Sri Lanka, Swaziland STEPwise Approach to Surveillance via WHO. (2011). *WHO report on the global tobacco epidemic, 2011. The* MPOWER *package*. Geneva: World Health Organization.

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If male and female prevalence were reported separately, a weighted average prevalence was calculated based on adult gender distribution (age 15–64) using data from:

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Symbol

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Snuff and Cigarettes Sold in Sweden

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12 HEALTH PROFESSIONALS

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When only subnational data were available, the capital city was selected. If the capital city was not available, the most populated city was used. The use of subnational data is indicated on the map with a circle next to the city whose data were used.

Data were used for medical students when available. If medical student data were not available, nursing student data, and then dental student data were used. Nursing student data were used instead of medical student data in the following countries due to a substantially larger sample size among the nursing student survey: **Oman, Papua New Guinea, Suriname, Trinidad and Tobago, West Bank** (not including Gaza Strip), **Zambia.**

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13 COSTS TO SOCIETY

Main Map and Symbol

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Estimates of the direct costs of smoking derived from:

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Tobacco Is a Drain on Health-Care Systems
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Mexico Waters H et al. (2010). The economics of tobacco and tobacco taxation in Mexico.

UK Allender S et al. (2009). The burden of smoking-related ill health in the UK, 262.

US Centers for Disease Control and Prevention. (2008). Smoking-attributable mortality, years of potential life lost, and productivity losses—United States, 2000–2004.

TOTAL HEALTH-CARE SPENDING
World Bank. (2011). World databank. http://databank.worldbank.org. Accessed October 17, 2011.

Estimate of Direct Costs
Centers for Disease Control and Prevention. (2008). Smoking-attributable mortality, years of potential life lost, and productivity losses—United States, 2000–2004.

Cigarette Market Value
Euromonitor International. (2011). Passport Database. Accessed October 1, 2011.

Quote: Gruber
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14 CIGARETTE PRICES

Main Map

SOURCES

Data derived from:

Afghanistan, Albania, Andorra, Angola, Antigua and Barbuda, Bahamas, Barbados, Belarus, Belize, Benin, Bolivia (Plurinational State of), Bosnia and Herzegovina, Botswana, Burkina Faso, Burundi, Cape Verde, Central African Republic, Chad, Comoros, Congo, Congo (Democratic Republic of) , Croatia, Cuba, Djibouti, Dominica, Dominican Republic, El Salvador, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Gabon, Gambia, Georgia, Ghana, Grenada, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Iraq, Jamaica, Kiribati, Kyrgyzstan, Lesotho, Liberia, Madagascar, Maldives, Mali, Mauritania, Mauritius, Moldova (Republic of), Monaco, Montenegro, Mozambique, Namibia, Nauru, Nicaragua, Niger, Palau, Rwanda, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, Sao Tome and Principe, Senegal, Sierra Leone, Slovenia, Somalia, Suriname, Tajikistan, Tanzania (United Republic of), Timor-Leste, Togo, Tonga, Trinidad and Tobago, Turkmenistan, Tuvalu, Uganda, Vanuatu, Yemen, World Health Organization (2012) Tobacco Control Country Profiles. http://who.int/tobacco/surveillance/policy/country_profile/en/index.html. Accessed April 5, 2012.

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METHODS

If the estimate was provided in currency other than US dollars, the price was converted to US dollars using average yearly exchange rates from:

OANDA. (N.d.). Average exchange rates. http://www.oanda.com/currency/average.

If prices were collected in multiple cities in a country, an average of those prices was used.

Symbol

Cigarette Prices: Economist Intelligence Unit. (2011). World Cost of Living Survey.

Inflation: International Monetary Fund. (2011). World economic outlook database. April.

A total of 70 countries with data on both 2000 and 2010 cigarette prices have been investigated: **Argentina, Australia, Austria, Bahrain, Bangladesh, Belgium, Brazil, Cameroon, Canada, Chile, China, Colombia, Cote d'Ivoire, Czech Republic, Denmark, Ecuador, Egypt, Finland, France, Germany, Greece, Guatemala, Hong Kong, Hungary, Iceland, India, Indonesia, Iran (Islamic Republic of), Ireland, Israel, Italy, Japan, Kenya, Kuwait, Luxembourg, Malaysia, Mexico, Morocco, Netherlands, New Zealand, Nigeria, Norway, Oman, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Qatar, Russian Federation, Saudi Arabia, Singapore, South Africa, Spain, Sri Lanka, Sweden, Switzerland, Taiwan Province of China, Thailand, Tunisia, UK, Ukraine, United Arab Emirates, Uruguay, US, Uzbekistan, Viet Nam**

Price of Other Tobacco Products Compared to Cigarettes

CIGARETTE PRICES

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PRICES OF OTHER TOBACCO PRODUCTS

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How Much Rice Can a Pack of Marlboro Buy?

MARLBORO CIGARETTE AND RICE PRICES

Economist Intelligence Unit. (2011). World Cost of Living Survey.

KILOGRAMS OF RICE WERE CONVERTED TO SERVINGS USING: Batres-Marquez SP et al. (2005) Rice consumption in the US: New evidence from food consumption surveys. Center for Agricultural and Rural Development, Iowa State University, Ames, IA.

Price of Local Brand as a Percent of Marlboro Prices

Marlboro cigarette and local cigarette prices: Economist Intelligence Unit. (2011). World Cost of Living Survey.

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15 AFFORDABILITY

Main Map

PER CAPITA GDP DERIVED FROM: International Monetary Fund. (2011). World economic outlook database. April. http://www.imf.org/external/pubs/ft/weo/2011/02/weodata/index.aspx. Accessed May 4, 2011.

CIGARETTE PRICES DERIVED FROM: Economist Intelligence Unit. (2011). World Cost of Living Survey.

World Health Organization. (2011). *WHO report on the global tobacco epidemic, 2011: Warning about the dangers of tobacco*. http://www.who.int/tobacco/mpower/en/. Accessed August 1, 2011.

METHODS

Relative income price (RIP) calculated as a percentage of annual per capita income, measured by per capita GDP, needed to purchase 100 packs of cheapest cigarettes. Methodology from:

Blecher E, van Walbeek C. (2009). Cigarette affordability trends: An update and some methodological comments. *Tobacco Control, 18*(3): 167–175.

Symbol

Countries with more than a 50% drop in relative income price between 2000 and 2010; a total of 75 countries with data on both 2000 and 2010 RIP have been investigated: **Argentina, Australia, Austria, Azerbaijan, Bahrain, Bangladesh, Belgium, Brazil, Cameroon, Canada, Chile, China, Colombia, Costa Rica, Cote d'Ivoire, Croatia, Czech Republic, Denmark, Ecuador, Egypt (Arab Republic of), Finland, France, Gabon, Germany, Greece, Guatemala, Hungary, Iceland, India, Indonesia, Iran (Islamic Republic of), Ireland, Israel, Italy, Japan, Jordan, Kenya, Korea (Republic of), Kuwait, Libya, Luxembourg, Malaysia, Mexico, Morocco, Netherlands, New Zealand, Nigeria, Norway, Pakistan, Panama, Paraguay, Peru, Philippines, Poland, Portugal, Romania, Russian Federation, Saudi Arabia, Senegal, Singapore, South Africa, Spain, Sri Lanka, Sweden, Switzerland, Thailand, Tunisia, Turkey, UK, United Arab Emirates, Uruguay, US, Venezuela, Viet Nam, Zimbabwe**

Methodology and sources the same as in the main map.

Minutes of Labor

Affordability measured as the percentage of daily wage required to buy a pack of cigarettes. The median net wage calculated based on the lowest-paid half of the occupations surveyed by Union Bank of Switzerland: Union Bank of Switzerland. (N.d.). Prices and earnings: A comparison of purchasing power around the globe. http://www.ubs.com/1/e/ubs_ch/wealth_mgmt_ch/research.html.

CIGARETTE PRICES

Economist Intelligence Unit. (2011). World Cost of Living Survey.

Change in Cigarette Affordability Between 2000 and 2010

Methodology and sources the same as in the main map.

China Affordability

Methodology and sources the same as in the main map.

Quote

World Health Organization. (2011). *WHO report on the global tobacco epidemic, 2011: Warning about the dangers of tobacco.*

Text Panel

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16 GROWING TOBACCO

Main Map

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Australia Scollo, MM and Winstanley, MH [editors]. *Tobacco in Australia: Facts and Issues*. Third Edition. Melbourne: Cancer Council Victoria; 2008. Available from: http://www.tobaccoinaustralia.org.au. Accessed March 26, 2012.

Symbol

Data derived from Food and Agricultural Organization. (2011b). FAOSTAT data, agricultural area, 2008. http://faostat.fao.org/site/377/DesktopDefault.aspx?PageID=377. Accessed October 10, 2011.

Food and Agricultural Organization. (2011a). FAOSTAT data, tobacco unmanufactured: Area harvested, 2008.

Leading Tobacco Leaf Producers

Data derived from Food and Agricultural Organization. (2011c). FAOSTAT data, tobacco unmanufactured: Production quantity, 2000, 2009. http://faostat.fao.org/site/567/DesktopDefault.aspx?PageID=567#ancor. Accessed October 10, 2011.

Trend in Production

Food and Agricultural Organization. (2011d). FAOSTAT data, tobacco unmanufactured: Production quantity, 1965–2009. http://faostat.fao.org/site/567/DesktopDefault.aspx?PageID=567#ancor. Accessed October 10, 2011.

Top 5 Countries

Data derived from Food and Agricultural Organization. (2011e). FAOSTAT data, tobacco unmanufactured: Area harvested, 2000, 2009. http://faostat.fao.org/site/567/DesktopDefault.aspx?PageID=567. Accessed October 10, 2011.

Brazil vs. Africa Production

Data derived from Food and Agricultural Organization. (2011f). FAOSTAT data, tobacco unmanufactured: Production quantity, 2009. http://faostat.fao.org/site/567/DesktopDefault.aspx?PageID=567#ancor. Accessed May 23, 2011.

China Production

Data derived from Food and Agricultural Organization. (2011f). FAOSTAT data, tobacco unmanufactured: Production quantity, 2009.

Quote: Strosberg

Blackwell T. (2010). Farmers sue tobacco firms for $150M. *National Post*. http://www.parliament.nz/NR/rdonlyres/24E903B3-4D13-4913-BB54-BC02269D9129/145695/49SCMA_EVI_00DBSCH_INQ_9591_1_A55117_Smokefree Coal.pdf. Accessed December 28, 2011.

Zhao Yaqiao

Wan W. (2011). Ban on public smoking has little effect, and that's the way China wants it. *Washington Post*. July 10. http://m.southcoasttoday.com/apps/pbcs.dll/article?AID=/20110710/NEWS02/107100301/-1/WAP06&template=wapart8m_section. Accessed August 2, 2011.

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Food and Agricultural Organization. (2011g). FAOSTAT data, tobacco unmanufactured: Production quantity, 2009.

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METHODS

Top tobacco-producing countries with undernourishment rates between 5% and 27% include **Malawi** (27%), **Pakistan** (25%), **India** (19%), **Indonesia** (13%), **China** (10%), and **Brazil** (6%).

17 MANUFACTURING

Main Map

Albania, Algeria, Angola, Argentina, Armenia, Australia, Austria, Azerbaijan, Bangladesh, Belarus, Bolivia (Plurinational State of), Bosnia and Herzegovina, Brazil, Bulgaria, Cambodia, Cameroon, Canada, Chile, China, Colombia, Congo (Democratic Republic of), Costa Rica, Cote D'Ivoire, Croatia, Cuba, Cyprus, Czech Republic, Denmark, Dominican Republic, Ecuador, Egypt, El Salvador, Estonia, Ethiopia, Finland, France, Georgia, Germany, Ghana, Greece, Guatemala, Honduras, Hong Kong, Hungary, India, Indonesia, Iran (Islamic Republic of), Iraq, Israel, Italy, Japan, Jordan, Kazakhstan, Kenya, Korea (Democratic People's Republic of), Korea (Republic of), Kuwait, Kyrgyzstan, Lao People's Democratic Republic, Latvia, Lebanon, Libyan Arab Jamahiriya, Lithuania, Macedonia (former Yugoslav Republic of), Madagascar, Malaysia, Malta, Mauritius, Mexico, Moldova (Republic of), Morocco, Mozambique, Myanmar, Nepal, Netherlands, New Zealand, Nicaragua, Nigeria, Pakistan, Panama, Paraguay, Peru, Philippines, Poland, Portugal, Romania, Russian Federation, Saudi Arabia, Senegal, Serbia, Singapore, Slovakia, Slovenia, South Africa, Spain, Sri Lanka, Sudan, Switzerland, Syrian Arab Republic, Tanzania (United Republic of), Thailand, Togo, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, UK, Ukraine, United Arab Emirates, Uruguay, US, Uzbekistan, Venezuela (Bolivarian Republic of), Viet Nam, Yemen, Zambia, Zimbabwe ERC. (2010). World cigarette reports, 2010. Suffolk, UK: ERC Group Ltd.

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18 TOBACCO COMPANIES

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Estimates of the total tobacco market value vary greatly between 400 and 500 billion USD annually, depending on at which point in the distribution channel (manufacturer vs. retail) the value is measured.

19 ILLICIT CIGARETTES

Main Map

Estimates of the illicit share of the total cigarettes market:

Albania, Argentina, Bolivia (Plurinational State of), Bosnia and Herzegovina, Brazil, Bulgaria, Costa Rica, Côte d'Ivoire, Cyprus, Czech Republic, Ecuador, El Salvador, Estonia, Ghana, India, Iraq, Jordan, Kenya, Kyrgyzstan, Lebanon, Libyan Arab Jamahiriya, Malta, Morocco, Nicaragua, Nigeria, Pakistan, Paraguay, Russian Federation, Saudi Arabia, Slovakia, Spain, Sri Lanka, Sudan, Sweden, Switzerland, Syrian Arab Republic, Togo, Venezuela (Bolivarian Republic of), Yemen, Zambia ERC. (2010). World cigarette reports 2010. Suffolk, UK: ERC Group Ltd.

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Please note that the categories used on this map correspond with the following MPOWER *categories from the "Monitoring" data:*

"No Data" corresponds with the MPOWER *category, "No known data or no recent data or data that are not both recent and representative"*

"Minimal Monitoring" corresponds with the MPOWER *category, "Recent and representative data for either adults or youth"*

"Moderate Monitoring" corresponds with the MPOWER *category, "Recent and representative data for both adults and youth"*

"Complete Monitoring" corresponds with the MPOWER *category, "Recent, representative and periodic data for both adults and youth"*

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History

Baroness de Dudevant (aka George Sand): Print collection, Miriam and Ida D. Wallach Division of Art, Prints and Photographs, The New york Public Library, Astor, Lennox and Tilden Foundations.

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Marlboro cowboy: Illustration by Kakha Begiashvili

Cigarette executives: Associated Press

WHO FCTC poster: World Health Organization, WHO Make every day World No Tobacco Day

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INDEX

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