The Past, Present, and Future of the Global Tobacco and Nicotine Epidemic: How History can Guide Policy

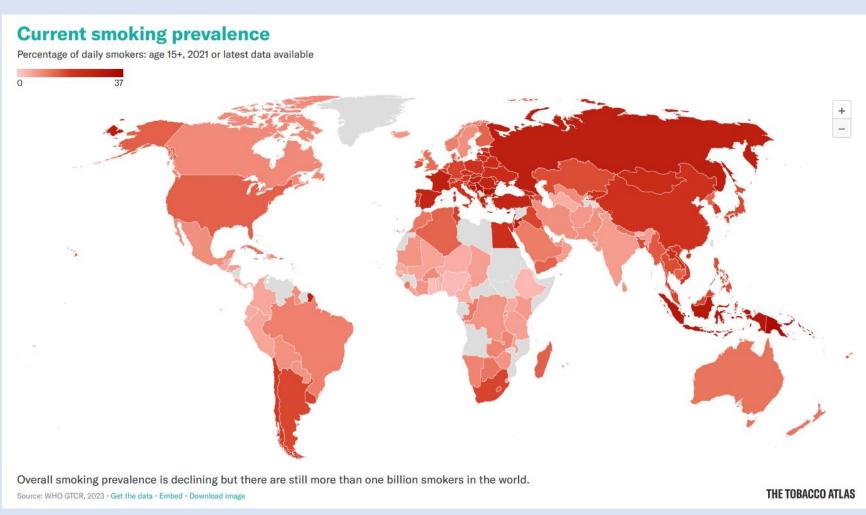
Louis M. Kyriakoudes, Ph.D.

Director, Albert Gore Research Center

Middle Tennessee State University

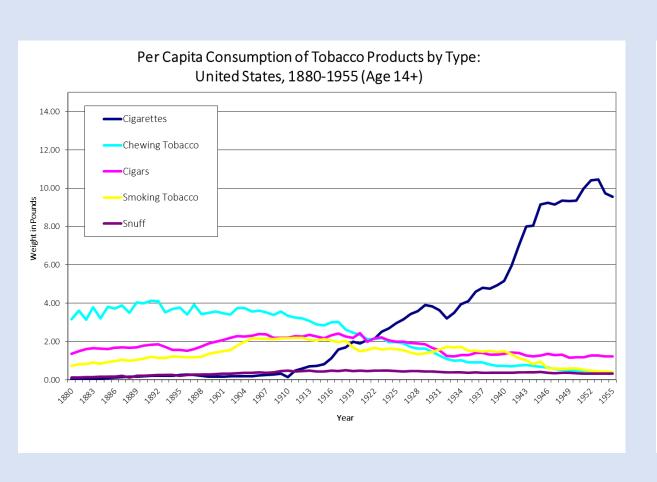
First, the Global tobacco epidemic is not over.

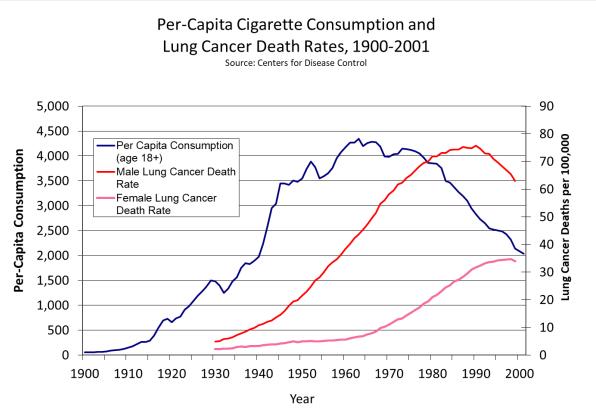
- 1.3 Billion smokers
 - 1. China (341 million)
 - 2. India (131 million)
 - 3. Indonesia (61 million)
 - 4. USA (45 million)
- 80% of smokers live in low/middle income nations.
- 8.67 million annual deaths
 - The deadliest product ever devised by humankind.



Source: The Tobacco Atlas, https://tobaccoatlas.org/challenges/prevalence/

The history of the tobacco epidemic in two charts

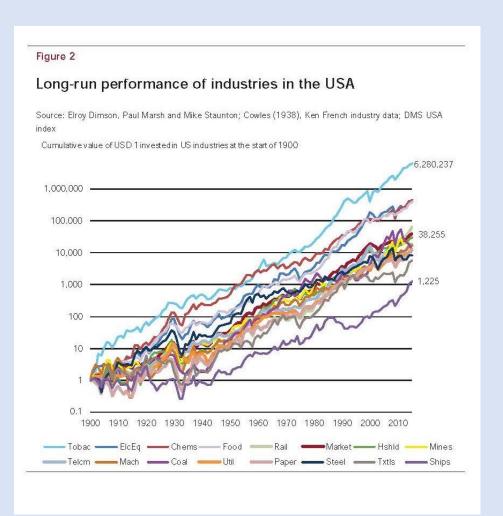




Four themes from tobacco history and why they matter today

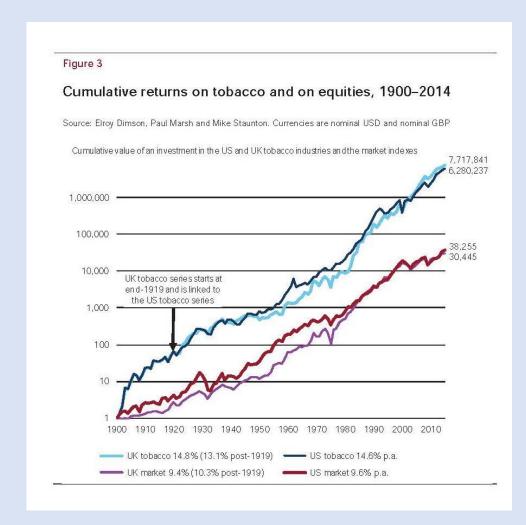
- 1. The Tobacco Industry is enormously profitable. This gives it power.
- 2. The Tobacco Industry has always understood its business as *nicotine* addiction, and it has always sought innovative ways to deliver nicotine. It is doing so now with eCigarettes and vaping devices
- Marketing to children has always been the foundation of the business.
 Very few individuals develop nicotine dependence as adults.
- 4. The Tobacco (Nicotine) Industry conceals, conspires, corrupts, and coopts. It has successfully defrauded and coopted regulatory, public health, and civil society organizations to advance its business interests.

1. The Tobacco (Nicotine) Industry has outperformed all sectors of modern industrial capitalism



\$1 invested in U.S.
 Tobacco sector in
 1900, yielded \$6.3
 million in 2010

£1 invested in U.K.
 Tobacco sector in
 1900 yielded £7.7
 million in 2010



Source: Elroy Dimson, et al. Credit Suisse Global Investment Returns Yearbook 2015 (Credit Suisse Research Institute, 2015).

Philip Morris promises a "Smoke Free future" of reduced harm products?



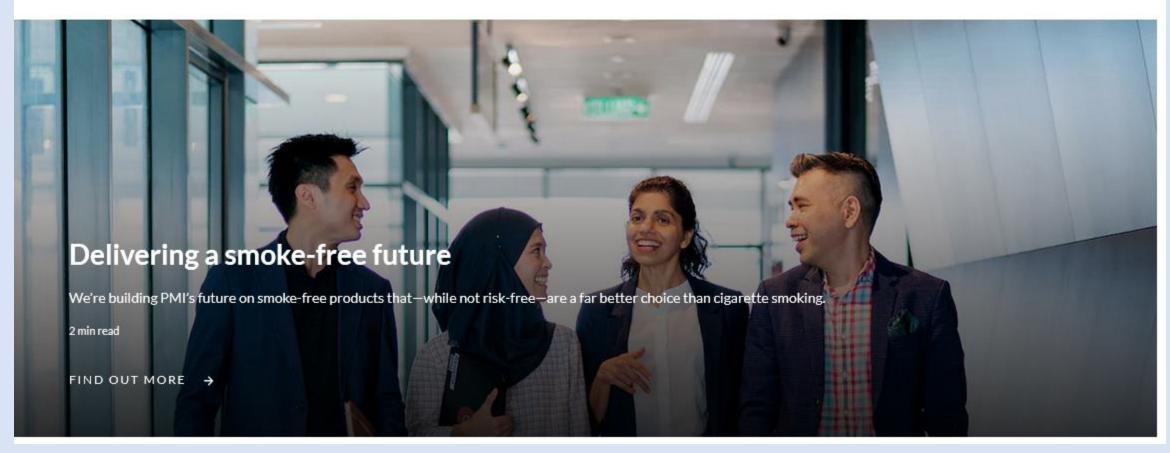
Delivering a Smoke-Free Future

ABOUT US OUR BUSINESS

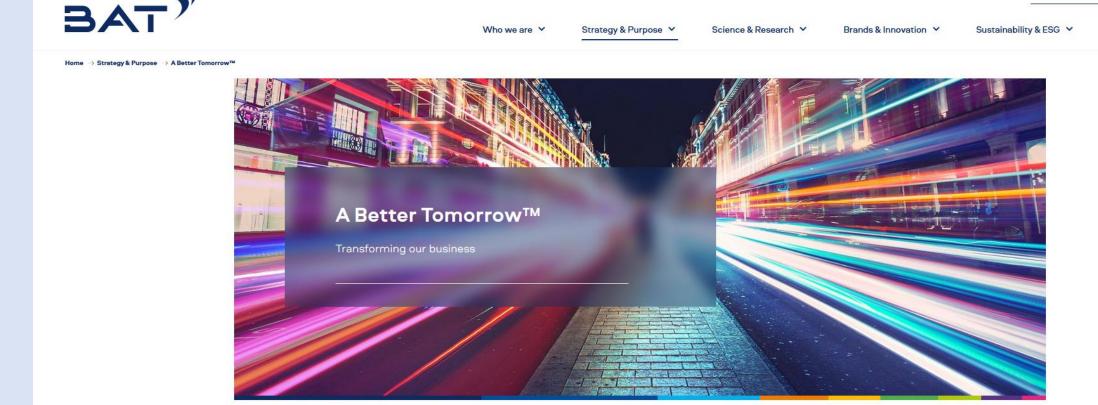
OUR TRANSFORMATION

OUR SCIENCE INVESTOR RELATIONS SUSTAINABILITY

CAREERS



BAT will build a "A Better Tomorrow™"?

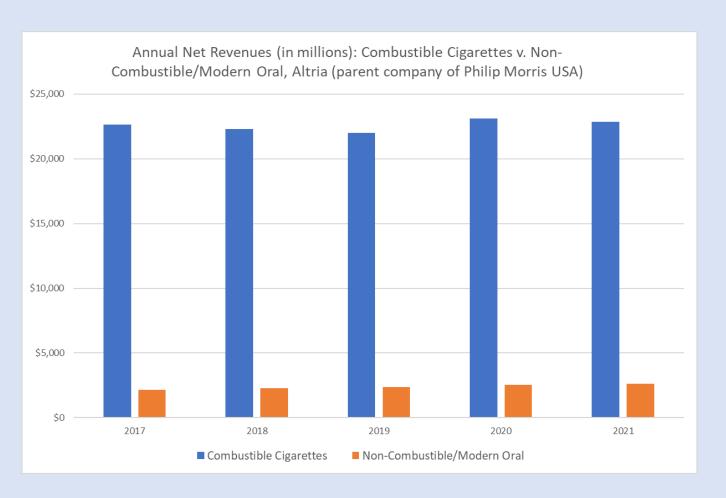


We have a clear purpose to build A Better Tomorrow[™] by reducing the health impact of our business. Put simply, smokers must have access to better choices.

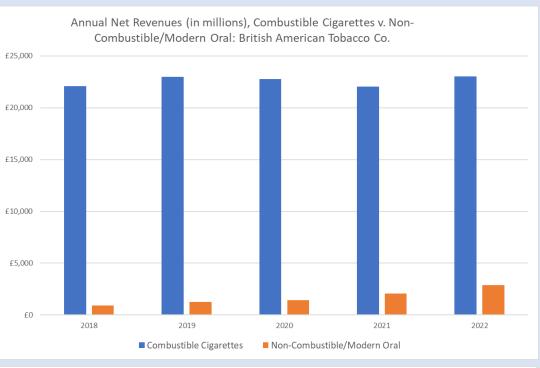
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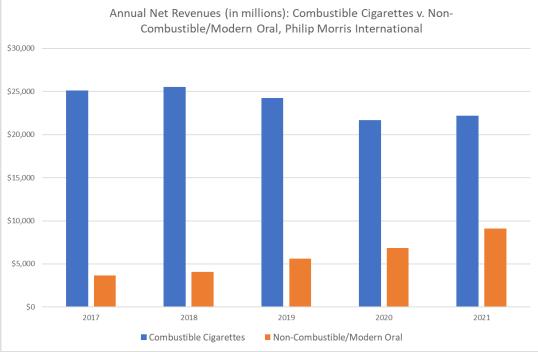
Investors & Reporting Y

Is the future really "smoke free"? Let's look at their revenues.



Sources: Annual Reports and SEC Form 20-F filings (BAT)





2. The Tobacco (Nicotine) Industry has always understood its business as nicotine addiction.



RESEARCH PLANNING MEMORANDUM

ON

THE NATURE OF THE TOBACCO BUSINESS AND THE CRUCIAL

ROLE OF NICOTINE THEREIN

MEMORANDUM:

In a sense, the tobacco industry may be thought of as being a specialized, highly ritualized and stylized segment of the pharmaceutical industry. Tobacco products, uniquely, contain and deliver nicotine, a potent drug with a variety of physiological effects. Related alkaloids, and probably other compounds,

and the like. Thus a tobacco product is, in essence, a vehicle for delivery of nicotine, designed to deliver the nicotine in a generally acceptable and attractive form. Our Industry is then based upon design, manufacture and sale of attractive dosage forms of nicotine, and our Company's position in our Industry is determined by our ability to produce dosage forms of nicotine which have more overall value, tangible or intangible, to the consumer than those of our competitors.

Claude Teague, R.J. Reynolds. "Research Planning Memorandum on the Nature of the Tobacco Business and the Role of Nicotine Therein" (1972) http://legacy.library.ucsf.edu/tid/ryb77a00/pdf.

Innovation in nicotine delivery technologies has always been the pathway to profit.

Controlled Nicotine Process

Goa

To develop a viable process for the total control of nicotine in product, in conjunction with the "REST" process without affecting smoking performance other than attributes connected to nicotine. Basic development and process specifications are to be completed by the end of 1991.

Basis

We are for RJR purchas significa

Status

. 1

We are basically in the nicotine business. It is in the best long term interest for RJR to be able to control and effectively utilize every pound of nicotine we purchase. Effective control of nicotine in our products should equate to a significant product performance and cost advantage.

- Process evaluation of several alternative solvents is in progress: HFC-134A, Heptane, Pentane, and non-flammable high molecular weight alcohols.
- Evaluation will include limited sensory comparisons with product made with F-11 to assure no significant variation from product already extensively tested.
- Tests with pentane have shown acceptable processing characteristics, with nicotine removal efficiency similar to F-11, and much higher selectivity.
- As of today, our solvent of choice, considering all known factors; such toxicity, flammability, production and capital costs, and process performance, is pentane.

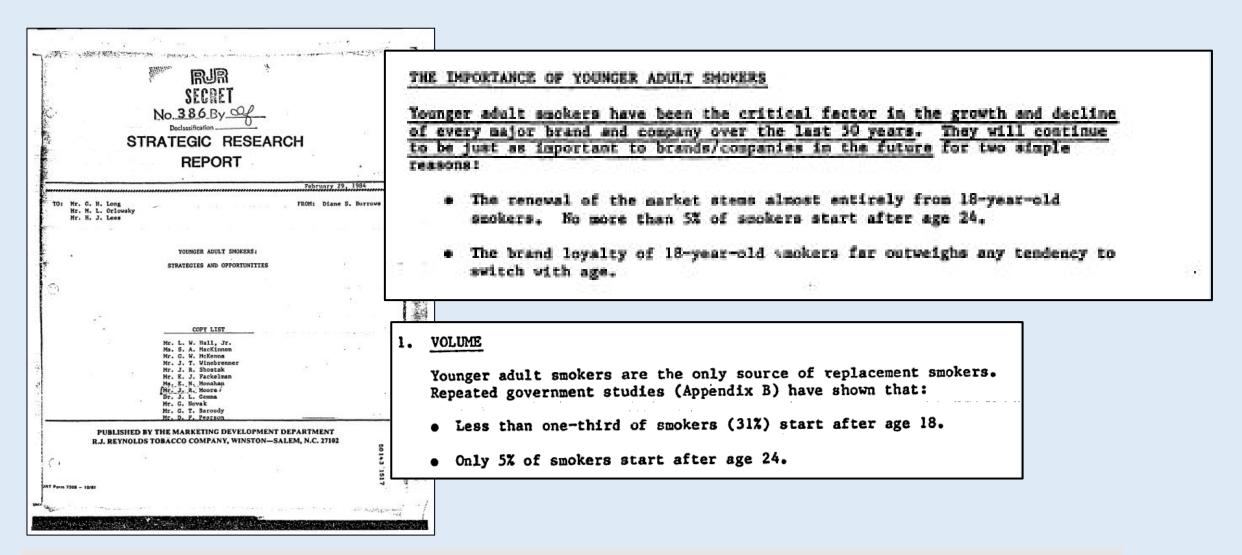
Haberkern, R.G. "REST Program Review." (1991)

R.J. Reynolds, http://legacy.library.ucsf.edu/tid/khs56b00/pdf

Timeline of Tobacco (Nicotine) Industry drug delivery innovations

- 1830s, Flue Curing of tobacco makes smoke easily inhalable.
- 1880s, mass production replaces hand rolling of cigarettes lowering cost of production.
- 1913, R.J. Reynolds introduces the Camel cigarette, an especially mild blend high in nicotine and easily inhaled.
- 1920s, menthol cigarettes first introduced. In the 1960s demand explodes.
- 1950s, Filters widely promoted as health protective devices.
- 1960s, Philip Morris introduces ammoniated tobacco to its Marlboro brand to free base nicotine.
- 1960s, Light and low tar cigarettes promoted as healthier.
- 1970s-1980s, Ultra-light cigarettes promoted as healthier.
- 1988, R.J Reynolds develops and introduces Premier, the first "heat not burn" non-combustible nicotine delivery device or eCigarette.
- 2013, RJR introduces VUSE eCigarettes.
- 2014, Philip Morris International introduces IQOS eCigarettes.
- 2017 JUUL introduced. Its youth marketing creates an epidemic of pediatric nicotine vaping. In 2018, Altria invests \$12.8 billion in JUUL.

3. Marketing to children has always been the foundation of the business.



Source: Burrows, Diane. "Young Adult Strategies and Opportunities." R.J. Reynolds http://legacy.library.ucsf.edu/tid/ftc49d00.

Will we allow the Tobacco (Nicotine) Industry to create yet another nicotine epidemic in our own time?

Many young will people migrate to traditional combustible cigarettes

HOW JUUL CREATED A TEEN VAPING **EPIDEMIC**

Juul Labs' internal documents and statements by its founders reveal the e-cigarette manufacturer lifted trade secrets from Big Tobacco to market its highly addictive vaping products to youths as young as 8.

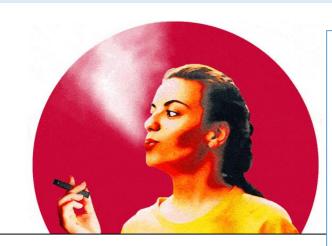
The company's deliberate marketing doubling the size of the U.S. vaping competitors in just three years.



Written by Terry Turner,

Learn About the Experts F

https://www.drugwatch.co m/featured/juul-createdteen-vaping-epidemic/



Vaping in adolescents and young adults: it's time to act

On June 23, 2022, the US Food and Drug Administration or vaping, product use associated lung inju (FDA) denied Juul Labs marketing approval for all JUUL (EVALI) was noted in e-cigarette users, with close products that are marketed in the USA. JUUL is an 3000 cases reported in the USA by Feb 18, 2020, a

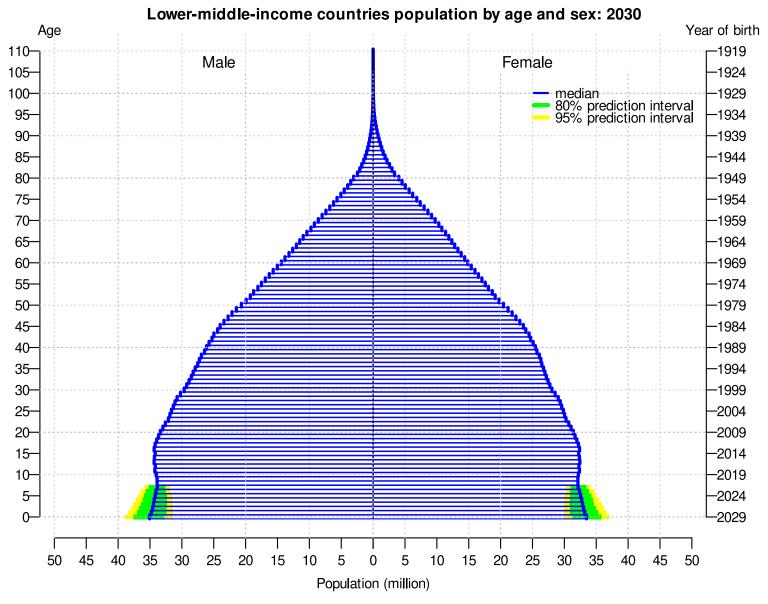
electronic nicotine-delivery system (ENDS) that has 68 deaths. Many cases were thought to be associated higher nicotine content than many other devices and with tetrahydrocannabinol (THC)-containing products has therefore become a public health target for health- and vitamin E acetate. More recently, Hariri and

Teen vaping: Did the EU get it wrong on e-cigarettes?

An explosion in vaping rates among kids is prompting Europe to rethink its approach to regulation.



regulation-tobacco-industry/

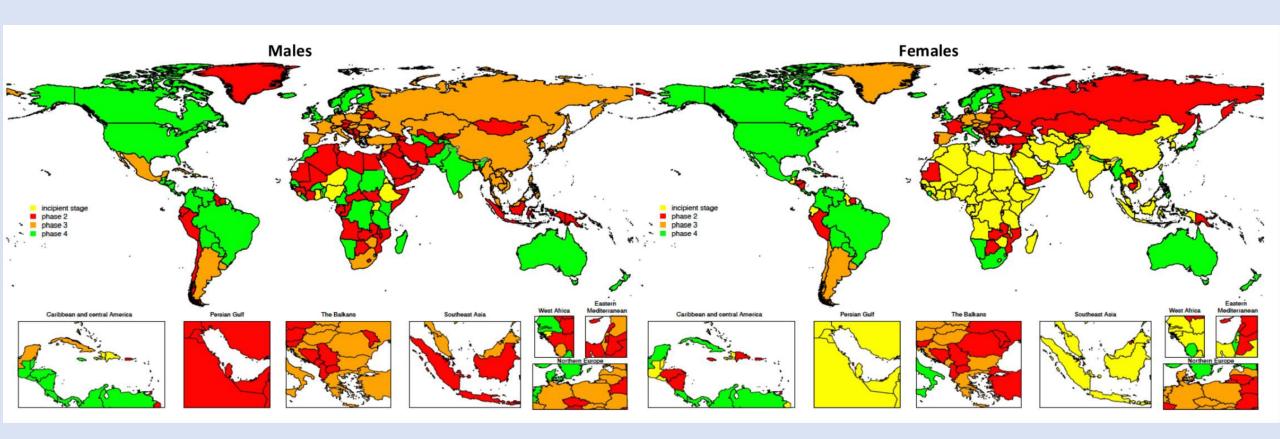


© 2022 United Nations, DESA, Population Division. Licensed under Creative Commons license CC BY 3.0 IGO. United Nations, DESA, Population Division. *World Population Prospects 2022*. http://population.un.org/wpp/

Let's think like market analysts:

Future industry growth points to where the youth are, in low- and middle-income nations

Nations where there are gender disparities in smoking prevalence are at risk.



Source: Dai X, et al. «Evolution of the global smoking epidemic over the past half century: strengthening the evidence base for policy action," <u>Tob Control</u> 2022;31:129–137. doi:10.1136/tobaccocontrol-2021-056535

4. The Tobacco Industry coopts scientific, civil society groups to advance its interests.

July 29, 1993

MEMORANDUM

O: The Members of the Executive Committee

FROM: Samuel D. Chilcote, Jr.

RE: Liberals Attack the ACLU

1993: American Civil Liberties Union accepts \$500,000 from Tobacco Industry to advance industry's freedom to smoke propaganda

The American Civil Liberties Union (ACLU) is not telling it members that it receives a significant level of funding fro tobacco interests, according to former <u>Washington Post</u> writ Morton Mintz.

In a report published by the Advocacy Institute and release press conference this morning in Washington, D.C., Mintz at the ACLU for accepting \$500,000 from Philip Morris. He als noted that R.J. Reynolds and The Tobacco Institute make fin contributions to the ACLU, but at a lower level of support. Presenting the story as one of a "conflict of interest," Micalled on the ACLU to discontinue soliciting financial support from the tobacco industry.

A letter being delivered this morning to ACLU President Nad Strossen cites Mintz's report and asks the ACLU to "disasso itself completely from this industry by rejecting corporate contributions from tobacco companies." The communique is d

signed by Michael Jacobson, the Center for Science in the Public Interest; Scott Ballin, the Coalition on Smoking OR Health; Ralph Nader; Joan Claybrook, Public Citizen; and Andy McGuire, The Trauma Foundation.

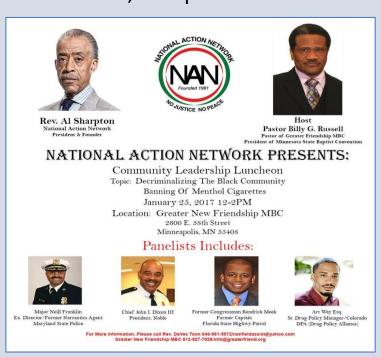
Nader, Ballin and Sidney Wolfe joined Mintz at today's press conference. A copy of the Mintz report and statements from the other participants are enclosed. Several major newspapers covered the event, including the New York Times, the Wall Street Journal, the Chicago Tribune. A reporter from the National Journal also covered the press conference.

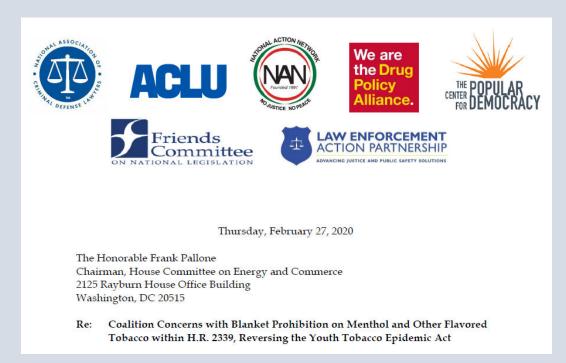
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ACLU and some civil/community rights organizations oppose menthol ban.

- The Tobacco Industry's targeted marketing of menthol to of African Americans is well documented
- Black men suffer from elevated rates of lung cancer in the USA.
- National Action Network has received funding from R. J. Reynolds, the manufacturer of the U.S.'s leading menthol brand, Newport.





Harm reduction strategies attracting support from anti-tobacco activists.



A Look Back at 25 Years of Underage Tobacco Prevention

April 2023 marked 25 years of an official, formalized Underage Tobacco Prevention strategy here at Altria and its companies. Learn more about the progress we've made, lessons learned and what's to come to keep underage tobacco use low in a conversation between Jennifer Hunter and Dave Dobbins.



Jennifer Hunter Senior Vice President Corporate Citizenship & Chief Sustainability Officer Altria Client Services



Going back to 1998...

Jennifer: "At the time it was Philip Morris USA that established a Youth Smoking Prevention department, we were part of a larger company, and we knew that in order to maintain our license to operate that we really needed to address the youth smoking issue. And, when you also think about the landscape, it was a time where marketing of cigarettes was pretty prevalent, and cigarettes were widely available."

Dave: "There had been substantial declines until the 90s and then there was a big uptick in youth smoking. One lesson from that is what goes down, can go up and public policy is going to be a big element of seeing what happens."

Jennifer: "In the late 90s when youth smoking rates reached peak levels, they were at 28.3%. According to the 2022 Monitoring the Future study, they're at 2.1%. So, a lot has changed over 25 years, but I think 1998 was a significant shift in the way tobacco was marketed in the United States and in a way that has benefited youth in preventing underage use of tobacco products broadly."

Dave Dobbins, former Truth Initiative COO, signs on to Altria's youth smoking initiatives

"In my heart of hearts, I believe in the mission of harm reduction. . . This decision has been the result of extensive discussions and considerable soul searching, and I truly believe in the company's desire for transformation mostly because it simply makes economic sense." Dave Dobbins, former COO, Truth Initiative on his work with Philip Morris USA parent company, Altria.

[Source,, Aiden Semmens, "Altruistic Altria, or why an anti-tobacco activist has taken up the giants' cause,"

https://ecigintelligence.com/altruistic-altria-or-why-an-anti-tobacco-activist-has-taken-up-the-giants-cause/]

Foundation for a Smoke-Free World appoints Cliff Douglas, prominent tobacco control activist, CEO (Oct, 2023)





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Tobacco Around The World





Foundation For A Smoke-Free World Names Clifford Douglas CEO As Global Voice In Smoking Cessation Work

MEET OUR NEW CEO

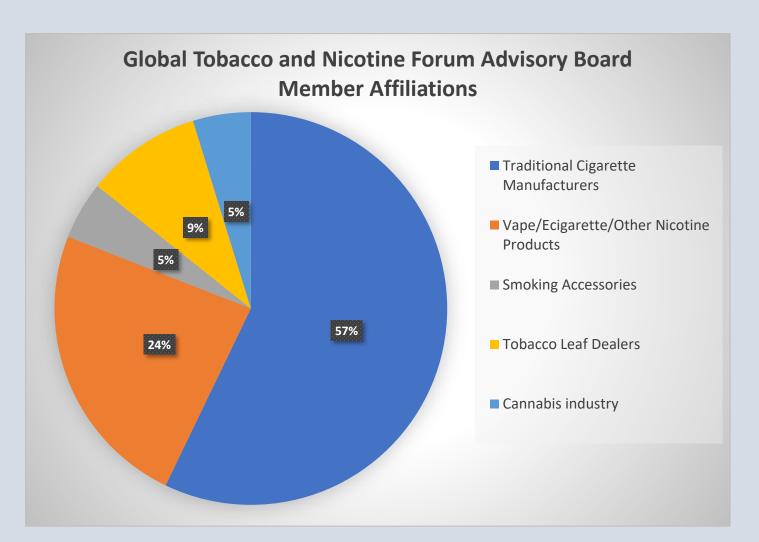
New York City, October 12, 2023: The Foundation for a Smoke-Free World has named Clifford E. Douglas as President and Chief Executive Officer. Douglas has most recently served as Director of the University of Michigan Tobacco Research Network and as Adjunct Professor in the Department of Health Management and Policy at the University of Michigan School of Public Health. Prior to that he was the American Cancer Society Vice President for Tobacco Control. Early in his career Douglas worked to eliminate smoking on airline flights and was an attorney and advisor in landmark lawsuits against tobacco manufacturers.

Douglas has also managed a \$6 million campaign to eliminate smoking on college campuses, and worked to help Americans understand the relationship between smoking and Covid-19. Douglas has served as the Assistant Director of the Coalition on Smoking and Health; he was also the Associate Director of the American Lung Association national public affairs office and has been the tobacco control advisor to the US Assistant Secretary for Health and the US Surgeon General.

Pam Parizek, Chair of the Foundation Board of Directors said, "For decades Cliff Douglas has been a strong and influential voice in the work to eliminate smoking in America and globally. He understands both the science and societal elements of tobacco issues. His credentials are exceptional, and we are pleased he will lead our foundation effort to fund meaningful research and engage in evidence-based education efforts that help those at greatest risk stop smoking."

The Foundation is a nonprofit, independent grantmaking organization, dedicated to ending the illness and death caused by smoking, which remains the leading preventable cause of death around the world. Its charitable mission is to accelerate the decline in smoking and the harm it causes everywhere.

Tobacco Industry has an advocacy infrastructure: Global Tobacco and Nicotine Forum to promote industry interests



Tobacco Industry and allies advocate for continued nicotine sales with minimal regulation

Is cooperation with public health advocates cooptation?

Will the nicotine addiction epidemic continue under the guise of "reduced risk products"?

Source: Calculated from biographical sketches of GTNF Advisory Board members, https://www.gtnf.org/about-gtnf (as of November 1, 2023), N=21.

Tobacco Industry continues to oppose public health measure that would limit their profits

- In the USA, Industry has successfully obstructed implementation of key public health provisions of the Tobacco Control Act (2009) through lobbying and litigation.
 - Industry opposes proposed FDA menthol ban.
 - Industry opposes reducing nicotine levels to non-addictive levels in combustible cigarettes
 - Industry opposes graphic warning labels on cigarette packaging.
- In the EU
 - Industry undermines menthol bans, smoking bans in EU states, UK
- In Asia
 - Limited tobacco control policies in China, with local governments heavily dependent upon tobacco taxes. Weak state regulatory structures in other Southeast Asian states.

Final thoughts

- Harm reduction is real but only for those who use combustible cigarettes and cannot quit.
 - Regulatory policy should limit noncombustible products to established smokers.
- Will we allow the young people of today and tomorrow to be ensnared by nicotine addiction?
- Will the cigarette-nicotine epidemic recreate itself in the developing world. What forms tobacco control will develop in Sub-Saharan Africa, Latin America, the Middle East, Central Asia as rising incomes makes these areas attractive markets for cigarettes?

Interview

15:20 10.10.2023

Our priority now is the opening of the new plant -**Managing Director Philip** Morris Ukraine

15 min read













Exclusive interview of Philip Morris Ukraine **Managing Director** Maksym Barabash with Interfax-Ukraine

News Agency

- In mid-June, Philip Morris International (PMI) announced the investment of more than \$30 million in a new production facility in the Lviv region. The plant was to launch the new facility in the first quarter of 2024 – how is the project progressing now?

And still, Philip Morris International manufactures cigarettes, even in Ukraine, during war.