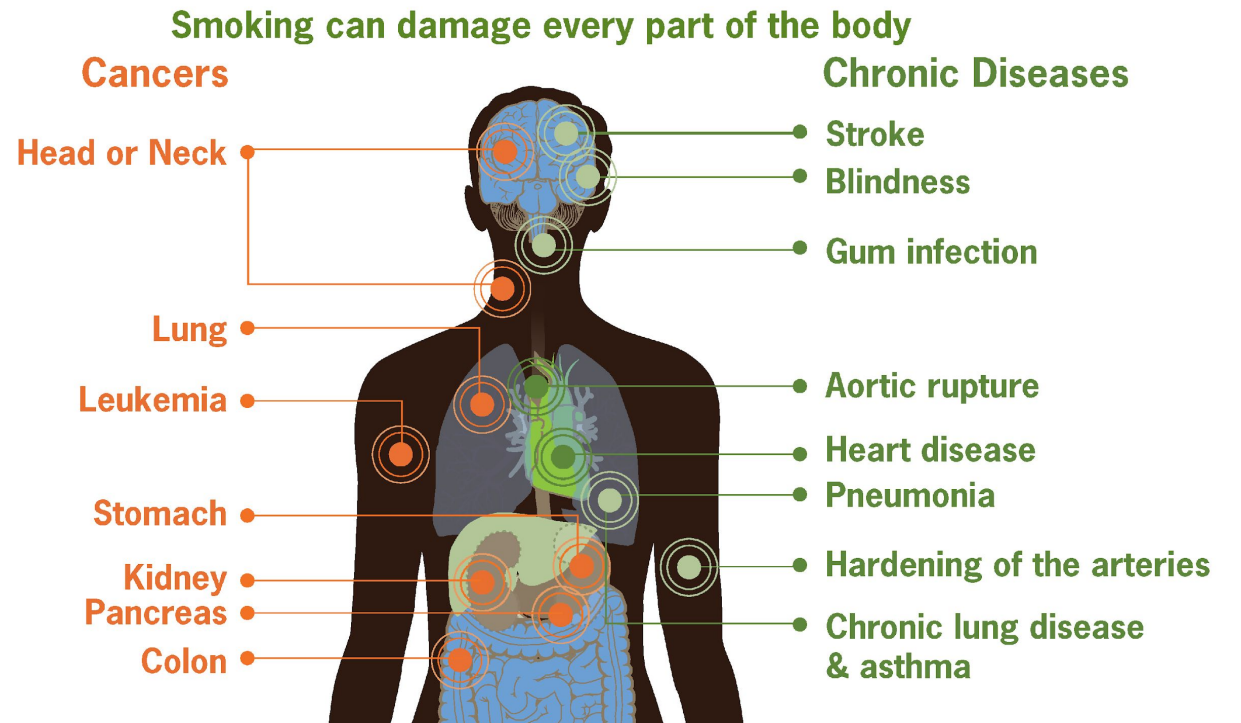


Heat Not Burn: Big Tobacco's plans for discontinuing conventional cigarettes

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Learning Objectives

- Summarize the vaping/smoking epidemic
- What's happening with Big Tobacco
- Introduce HnB products
- Debunk the “facts”
- Next steps



Cigarette Smoking: An Epidemic

- Leading cause of preventable disease and death in the US
- Accounts for more than 480,000 deaths every year
- 14 of 100 adults currently smoke cigarettes (this number is dropping slowly)
- Youth smoking rates are still high
- 31.1% smoking prevalence among persons below the federal poverty level



E-cigarettes Epidemic

- E-cigarettes are associated with creating a new generation of smokers by causing youth nicotine dependence
- The Monitoring the Future survey showed that vaping prevalence more than doubled in 12th-, 10th-, and 8th- grades
- In 2019, the prevalence of use during the previous 30 days was more than 1 in 4 students in the 12th grade



Big Tobacco's plan

- [Philip Morris International](#) says it will stop selling Marlboro [cigarettes](#) in Britain within a decade as it called on the UK government to ban the sale of its [tobacco products](#) by 2030.
- “We understand that a complete and successful transformation is one that allows our company’s business to move from a value proposition, centered on doing less harm, toward one where we can have a net positive impact on society. ”
- “In 10-15 years, we think cigarettes can be out of the market entirely – people will quit, or if they’re using nicotine, it will be in a non-combustible way.” – Martin King, CEO Philip Morris International America
- “We can help smokers switch to better alternatives (after PMI has spent \$8.1 billion dollars in this research)” – Dr Moira Gilchrist, VP of Strategic and Scientific Communications, PMI
- How will they do this?

IQOS Product

- Tobacco in a cigarette burns at $>600\text{ C}$ which generates harmful chemicals
- THS (tobacco heating systems) heat tobacco leaves at 350 C without combustion, fire, ash or smoke
 - “Levels of harmful chemicals are significantly reduced”





Impact: According to studies conducted by researchers at PMI

- Generates no combustion or smoke (so no secondhand smoke)
- Aerosol has lower levels of harmful and potentially harmful constituents
- 'Studies' showed less exposure to HPHCs (harmful and potentially harmful constituents)
- Negligible interest in THS among people who have never smoked or who have quit smoking and substantial potential for full switching among adult smokers – boasting 70% full conversion

Claims from PMI

Does not generate combustion or smoke

Contains aerosol that has an average of 95% lower levels of harmful constituents and is much less toxic than cigarette smoke

Reduces exposure to harmful constituents to users who switch to IQOS

Facts

IQOS smoke contains elements from pyrolysis and thermogenic degradation[5]

IQOS aerosol was found to have volatile organic compounds, polycyclic aromatic hydrocarbons and carbon monoxide. It may or may not be less toxic than cigarette smoke as side-by-side studies have not been done

Calculated lifetime cancer risk of HnB products is higher when compared to e-cigarettes[19]

Will have a positive impact on a smoker's health

With high levels of nicotine delivery and other harmful constituents, it is unlikely that there will be a positive impact on smokers

Does not adversely affect indoor-air quality according to indoor air-quality tests and is not a source of second-hand smoke

IQOS should fall under the same indoor-smoking bans as conventional cigarettes and e-cigarettes

Encourages the potential for full switching among adult smokers, but does not encourage people who have never smoked.

Studies have shown that users who have not smoked before are actually more willing to try these products than ex-smokers

Nicotine levels are 'lower' in HnB products.

Nicotine levels in HnB are 15.2 mg/g, which is similar to levels of nicotine in cigarettes. Nicotine levels are more than doubled in HnB than in e-cigarettes in short puffs.

What does this mean to us here in the USA?

- FDA: April 30, 2019: authorized the marketing of IQOS (reviewed/updated their stance on 07/07/2020)
- Placed stringent marketing restrictions on the products in an effort to prevent youth access and exposure
- HOWEVER:
 - “The agency determined that authorizing these products for the U.S. market is appropriate for the protection of the public health because, among several key considerations, the products produce fewer or lower levels of some toxins than combustible cigarettes”
 - ““A modified risk tobacco product,” with reduced exposure” (MRTPs)

Philip Morris sees cigarette-less future

Marlboro maker's CEO discusses big push to get smokers to switch to heated tobacco products

An exclusive interview between an LA times reporter and PMI sheds more insight into this new product and its ultimate goal of creating nicotine dependence for PMI

When asked, “how much safer are IQOS,” He answered with this...

There are some constituents — like carbon monoxide, which comes from burning — which are eliminated completely. But the overall tends to be around 90% to 95% reduction [in harmful chemicals] from a combustible cigarette comparison. Those are indicators that there should be a significant health benefit. Any properly made noncombustible, whether it's an e-cigarette or heat-not-burn or an oral product, has the potential to be greatly reduced in exposure because there's no combustion.

It's hard to say what that will result in as far as tobacco-related disease reduction. And that's the part that we continue to develop the science on. The only way to be really certain is to watch what happens to real people, with real usage over time. That's something we may not have an answer for in the near future.

Biden Administration Considering Rule to Cut Nicotine in Cigarettes

Policy could be paired with proposal to ban menthols; FDA must decide whether to pursue menthol ban by April 29

The administration was considering requiring companies to lower nicotine levels to “levels no longer addictive.”

April 29th, 2021:

-The FDA says it will ban all menthol cigarettes and flavored cigars

-However, no statement about nicotine levels

-It's not clear when the ban will go into effect. An FDA press release announcing the decision did not include an effective date for the ban. Instead, it promised that it will work toward developing a regulation banning these products “within the next year.”

-With no word from the FDA regarding banning cigarettes, it seems like PMI will continue to push their agenda.