

## 專訪華裔控煙學者方德智 籲擴煙包警示

# 控煙更有力 港可成模範



設計圖片

告的力度須與產品的危害程度相匹配，「沒有另一種消費產品會令一半的經常使用者死亡……不是出於意外，而是有意識地長期吸煙」。

### 麥龍詩迪：擬煙盒印戒煙熱線

麥龍詩迪補充指，除了增加圖像面積之外，政府還計劃將警示圖像的式樣從6個增至12個，以及在盒上印有戒煙求助熱線。加拿大、荷蘭和新西蘭的經驗顯示，印有求助熱線後，當局接獲煙民求助的數字大增。

由此可見，擴大警告圖像早已有海外成功事例所支持，也是國際社會通行的做法。方德智舉例指，泰國、印度和巴基斯坦的圖像覆蓋率都是85%，尼泊爾更已通過法案實施90%覆蓋率。

### 煙草業提訴 圖拖延控煙

然而，煙草業強烈反對擴大警告圖像。麥龍詩迪透露，煙草業以往的慣常做法是針對主張控煙的人，她自己就曾遭受死亡恐嚇，現在業界改變策略，訴諸法律手段直接挑戰政府，「這在全球每個嘗試控煙的地區都有發生，但(煙草業)幾乎全都失敗收場」。

既然成事機會不高，為何業界還是不斷採取行動？方德智說，這是為了令政府窮於應付官司，從而拖延推行新控煙措施，並藉此威懾實力較弱的政府，不敢與財雄勢大的煙草業作對，形成「監管的寒蟬效應」(regulatory chilling effect)。所以若香港在擴大煙包警示圖像一役失利，「受影響的遠不止於香港及其七百萬人口」，其他地區可能更加不敢嘗試。

無論如何，方德智讚揚香港政府嘗試修例擴大煙盒圖像，已是走出正確、強而有力的一步，而且是基於大量證據支撐和外國的成功經驗，相信有助改善向煙民和潛在煙民(尤其是青少年)傳遞控煙訊息。

全球各地政府一直致力於推行更有效的控煙政策和措施，香港也不例外，政府計劃修例擴大煙包裝上的健康忠告圖像覆蓋率，由目前50%增至85%。近日訪港的加拿大華裔控煙學者方德智(Geoffrey T. Fong)接受本報專訪時表示，警告圖像愈大、愈能宣揚吸煙的危害，而香港可在全球控煙事業上，擔任領導者和模範者的角色。

香港文匯報記者 李鍾洲

方德智研究控煙政策多年，為世界衛生組織和多地政府提供諮詢。今次他與「亞洲反吸煙諮詢所」總監麥龍詩迪一起受訪。方德智一開始就向記者指出，吸煙是「頭號可預防的死亡原因」，流行病學研究顯示，一半至三分之二的煙民可能死於吸煙相關疾病。目前在香港15歲以上的吸煙者有70萬人，與吸煙有關的死亡數字則是每年7,000宗，他估計世界各地會有1億人因為吸煙導致的疾病而死亡。

### 政策成控煙最關鍵手段

因此，學界對於減少煙草產品使用的研究更形重要，當中最關鍵的控煙手段，正是透過政府實施政策。方德智解釋，公共政策影響一整個國家或地區的人口，可充分發揮效用，例如在煙盒印有警示圖像或室內禁煙措施，都可影響所有煙民的行為。這也是世衛2005年生效的《煙草控制框架公約》(FCTC)的着重點，中國是簽約國之一，因此條約在香港和澳門地區也適用，公約裡包含各項控煙政策的條款。

方德智與同僚創立「國際煙草控制政策評估計劃」(ITC Project)，這是全球首個涉及控煙政策的「世代研究」(cohort study)。該計劃從2002年開始，長期追蹤政策如何改變煙民行為，讓政府得知各項政策的成效。

### 警告圖像效果勝文字

方德智指出，他們的研究證實，煙盒警告圖像的效果好過警告文字。加拿大於2001年推出煙盒警告圖像，是全球首例，當時煙盒兩面都是各佔一半面積，即50%覆蓋率，到了2012年才修訂至75%。方德智稱，當煙民多年來看着同一款警告圖像，會失去警示效用，FCTC的指引是每兩至三年修訂一次。加拿大修訂後，煙民對警告的注意程度有所回升。

香港在2007年引入煙盒警告圖像，也是兩面各佔50%。在當時，還有11個國家或地區有同樣警示，如今十年過去，它們都已作出修訂擴大覆蓋率，只有香港未曾修訂。方德智慨嘆香港在這方面已是落後於人，政府有責任作出警告，而且警



第一、二排分別是英國及澳洲的煙包警告圖像。第四排是香港現今煙包警告圖案的大小，第三排是計劃擴大的圖像。香港文匯報記者李鍾洲攝

方德智

## 世衛控煙公約：政府無須受業界左右

世衛《煙草控制框架公約》(FCTC)於2003年通過，兩年後生效，共有180個簽署成員，是聯合國歷史上迅速獲最廣泛接受的條約之一，旨在應對煙草流行的全球化，重申所有人有權享受最高的健康標準，是促進公眾健康方面的里程碑，為國際衛生合作提供了新的法律層面。

據FCTC文件第5.3條明確指出，「煙草業的利益與公共衛生政策之間存在根本和無法和解的衝

突」，因此各締約方制訂和實施煙草控制方面的公共衛生政策時，應根據法律採取行動，防止這些政策受煙草業和其他既得利益者的影響。

### 業界施壓「令人覺得受威脅」

方德智表示，這意味政府制訂控煙政策時，不應諮詢煙草商的意見。他補充道，FCTC第5.3條並非不許煙草商表達意見，「它們有權發聲，就像普羅大眾一樣」，但政府無須與它們坐在一起商議政策，受它們左右。

麥龍詩迪表示，對於擴大煙盒警告圖像，業界屢屢指責政府諮詢不足，她強調，政府在過去兩年已做了充足的諮詢工作，況且立法會容許煙草商代表出席會議，已是作出太大的讓步。她引述一名立法會資深議員透露，煙草業在立法會游說和施壓反對政府修例，其猛烈程度是該議員前所未見，「令人覺得受威脅」，也令支持控煙的人士不敢發聲。麥龍詩迪指這極不尋常，畢竟政府不是要推出新法案，而只是修訂現有措施，卻招致如此惡鬥，她也大為驚訝。

## 「尖叫法則」揭政策成敗

要衡量一項政策是否有效，控煙界有一條不太為外人熟知的「尖叫法則」(scream test)，所指的是煙草商會判斷哪些是對它們影響最大的控煙政策，並提出猛烈反對，即「尖叫」得最厲害；相反若業界不作聲、甚至還支持，就意味該政策沒作用。

舉例指，當政府禁止向18歲以下人士出售香煙，煙草業沒有反對，它們深知這措施成效有限，畢竟青少年可從長輩身上獲取香煙。又例如學校推行反吸煙的衛生教育，煙草業也不屑一顧。相反，會引起煙草業「尖叫」的包括加煙

稅、室內禁煙區和煙盒警告圖像，證明這些舉措可有效降低煙草使用量，因此不得不極力抗議。

麥龍詩迪表示，煙草業往往以職位流失等經濟理由反對控煙，但她指出這與事實剛好相反。以香港的食肆為例，研究顯示在室內禁煙後，政府從飲食業所得的稅收在兩年內下跌反升32%。加州大學學者李瀆對內地雲南省458個農戶的研究亦指出，從種植煙草改為其他作物的四年後，農戶收入增加21%至120%，可見禁煙不僅減少吸煙帶來的經濟和生產力損失，還有效增加政府和平民的收入。



## 赴美加展研究之路 父母來自北京

方德智父母來自北京，1948年至1949年遷往美國，他於俄亥俄州長大，10歲時舉家移居三藩市灣區。他在斯坦福大學畢業後，於密歇根攻讀心理學碩士，1988年赴加拿大滑鐵盧大學任教至今，現為該校心理學教授，以及公共健康和衛生系統學系教授。

方德智在2000年左右對控煙政策產生興趣，後來，滑鐵盧大學一名同事告訴方德智，加拿大正考慮推出煙盒警告圖像，促使他投入這方面的探索。他結合心理學

理論研究方式和傳統流行病學調查，評估控煙政策對國家或地區整體人口的影響。他亦研究傳媒對吸煙的描述如何影響公眾對吸煙的觀感，以及煙草產品對空氣造成的污染。

他創立的「國際煙草控制政策評估計劃」(ITC Project)與全球衛生組織和28個國家或地區政府合作，在每個地方進行「世代研究」，評估控煙政策在各方面的成效，包括控煙法例、煙盒警告圖像、煙商廣告、煙草稅和戒煙支援措施等等。

## 助年輕人抗煙 加稅最有效

方德智表示，相比學校教育和禁售香煙，提高煙稅直接增加煙草價格，最能夠解決年輕人吸煙問題，令他們難以負擔昂貴的煙草產品費用。

### 澳洲每年加12.5%

現時有六個國家制訂了控煙「終局計劃」(end-game plan)，希望在二十年內將吸煙率大幅降至5%，例如澳洲每年增加煙稅12.5%。法國在二、三十年前，也曾經大幅提高煙稅，效果在加稅七年後逐漸顯現，包括患癌率下降。

與擴大煙盒警告圖像一樣，加煙稅也面臨煙草業的大力阻撓，業界利用跨國游說集團施壓。麥龍詩迪表示，總部位於華盛頓的「國際稅務和投資中心」(ITIC)極力反對各地政府加煙稅，聲稱這會增加走私香煙，但麥龍詩迪指這說法完全失實，加煙稅和私煙問題並無必然關係。她表示ITIC雖號稱獨立、非牟利研究組織，但背後其實有煙草業提供資金，部分政府與ITIC談判時，根本是蒙在鼓裡，不知道對方是煙草商的傳聲筒。她形容ITIC勢力龐大，招攬一些已卸任的政府財長和貿易部長加入，「甚至曾在英國上議院舉行會議」。



法國也曾大幅提高煙稅。圖為煙民反對警告圖像加大。網上圖片



麥龍詩迪指加煙稅和私煙問題並無必然關係。網上圖片

## 菲公共場所全禁煙 違者囚4個月

菲律賓衛生部長烏維亞爾前日證實，總統杜特爾特已簽署行政命令，在全國公共場所禁煙，違者將被處以最高4個月監禁及5,000披索(約780港元)罰款，禁令將在登報60天後生效，衛生部已開始擬訂執行規則。

行政命令指出，凡是向公眾開放或集體使用的場地，均屬禁煙範圍，並適用於飛機、輪船、火車、巴士、的士等各類公共交通工具。部分公共場所內可設置吸煙區，但須距離出入口10米以外，並安裝通風設備，吸煙區面積不可超過10平方米。

菲衛生部前年統計顯示，該國約有1,590萬名煙民，成年男性吸煙比例超過40%。杜特爾特擔任菲南達沃市市長時，曾推行嚴格禁煙法令，就任總統後已多次表示將在全國實施禁煙。



## Standardised packaging for cigarettes

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## Undressing a pack of wolves in sheep's clothing

Tobacco industry products are responsible for six million deaths every year,<sup>1</sup> equating to 100 million deaths in the 20th century and a projected 21 billion deaths in the 21st century.<sup>2</sup> All of these deaths—from cancer, cardiovascular diseases, respiratory diseases, and other causes<sup>3</sup>—**are completely preventable**. This global epidemic has gone on for far too long.

## No magic bullet

There is no magic bullet to end the tobacco epidemic. We need a comprehensive approach tackling the problem from multiple angles, with the floor set by the Framework Convention on Tobacco Control<sup>4</sup>: higher prices, smoke-free environments, no tobacco advertising or promotion, warning the public about the dangers from these products, and reducing the attractiveness of the pack itself.

Pharmaceutical products, which are intended to help us, include a paper insert that details the possible side effects. But nothing like this exists for a product that kills half of its long term users. Instead, cigarettes are placed in alluring packs, with ever changing pack design features and a broad host of marketing devices.<sup>56</sup> We and others have been studying the features used to increase the appeal of tobacco packaging (such as imagery or words highlighting femininity, flavours, nature, patriotism, or sports) in countries across the globe<sup>789</sup> (see [www.globaltobaccocontrol.org/tpackss](http://www.globaltobaccocontrol.org/tpackss) for an archive of pack photos from 14 countries), and we invite readers to share compelling photos of packs from around the world at [www.globaltobaccocontrol.org/tpackss/share-pack](http://www.globaltobaccocontrol.org/tpackss/share-pack) .

**This work shows that tobacco companies are maximising their use of all the pack real estate they can.**

## Standardised packaging

One approach to diffuse the alluring nature of cigarette packs—and have them better represent the deadly product inside—is called standardised (or plain) packaging. Standardised packaging has several components and can include a uniform pack shape, size, opening style, and material; a uniform background colour where there is no health warning; a uniform colour, font, and font size for the brand name; no additional colours, logos, crests, designs, or words; and no advertising or promotion inside or attached to the pack. There may also be requirements on cigarette length, circumference, colour, and branding.

Australia was the first country to implement standardised packaging for cigarettes, which took full effect in **December 2012. France (January 2017) and the UK (May 2017) also now require standardised packs on store shelves, and other countries have lined up to follow suit.**

As it has done with other tobacco control interventions, the tobacco industry has been fighting hard against standardised packaging. British American Tobacco, Imperial Tobacco, Japan Tobacco, and Philip Morris challenged the legality of Australia's Tobacco Plain Packaging Act; **the law was upheld by the Australian High Court in August 2012.** The trade challenge by Philip Morris Asia under a bilateral investment treaty between Australia and Hong Kong culminated in a unanimous decision in December 2015 that the tribunal had no jurisdiction to hear the claim and that **the claim was an abuse of the trade process.**

Cuba, the Dominican Republic, Honduras, Indonesia, and Ukraine also brought a set of World Trade Organisation disputes in 2013, arguing that Australia's law breached the WTO's Agreement on Technical Barriers to Trade (TBT) and the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS). In May 2015, Ukraine suspended its WTO proceedings. And in May 2017 it was reported that the WTO dispute settlement panel had issued an interim decision in favour of Australia.[10](#) **Such a ruling would affirm countries' rights to protect the health of their citizens.**

**Tobacco companies have been similarly unsuccessful in their challenges to standardised packaging in France, Ireland, and the UK. Last year the European Court of Justice upheld the EU Tobacco Products Directive and indicated that member states could introduce standardised packaging.**

### Consistent evidence

A recent Cochrane review found consistent evidence that people find standardised packs less appealing than branded packs.[11](#) It also found that **people pay more attention to the health warnings on standardised packs than to warnings on branded packs.** Evidence on behavioural outcomes is limited since only Australia had standardised packs at the time of the review, but the authors conclude that the available evidence suggests that **standardised packaging may reduce the prevalence of smoking.**[11](#)

The US National Cancer Institute concluded in 2008 that a causal relation exists between tobacco advertising and promotion and increased tobacco use, **including increased smoking initiation and tobacco consumption.**[12](#) As more countries implement standardised tobacco packaging, the body of evidence will expand, and we will learn more about its longer term effects on tobacco use.

By removing words, images, colours, designs, and other marketing devices that are attractive, misleading, and draw attention away from **essential health warnings**, we will move closer to packaging that is more commensurate with the harm caused by the product inside. **Tolerating attractive packaging of a deadly product is indefensible.**

### Footnotes

- Competing interests: I have read and understood BMJ policy on declaration of interests and have no relevant interests to declare.
- Provenance: Commissioned; not peer reviewed.

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Health

Why cigarette packs are the 'silent salesmen'



Nick Triggles Health correspondent

3 April 2014 Health



Make no mistake, the move to introduce plain packaging is just the latest front in the war against smoking.

Over the past decade, there has been a ban on smoking in public places and moves to restrict displays in shops.

But one of the issues that has been concerning health experts and ministers is the number of people who continue to take up smoking, particularly young people.

More than 200,000 under-16s start in the UK each year - helping ensure a viable market remains for manufacturers once the number of people quitting and dying is taken into account.

In countries like the UK where there is a ban on advertising, the pack remains the last major vehicle for promotion.



Sir Cyril Chantler: "Branding of a packet is part of the appeal to the smoker or potential smoker"

Hence the detail and care taken in the design of the packets with their laminated and special print effects, foil decorations and slide openings and bevelled edges.

It should come as no surprise therefore to learn that they have become known as the "silent salesman" and "mobile billboard" within the industry. They are that important.

'Not plausible'

Manufacturers argue this is only about getting existing smokers to switch brands.

This is illustrated by the evidence which British American Tobacco's head of corporate and regulatory affairs Ronald Ridderbeekx gave to the Chantler Review.

He pointed out that his company only has 8.2% of the UK market, leaving over 90% for it to "shoot for". He said this was "quite enough".

But of course that ignores the fact that if people do not take up smoking the market will disappear eventually.

So it was no surprise to see the review dismissing such claims. Sir Cyril described the industry's case as "not plausible".

Other arguments against plain packaging (although unbranded is perhaps more accurate given that the plan is for them to retain the text and picture warnings) include suggestions it could lead to a fall in price or increase in the illicit market. Again Sir Cyril rejected the criticisms.

But plain packaging is about more than just stopping people taking up smoking.

Research by Stirling University - published in 2012 for the government when it was last considering this move - showed it also helped to reinforce health messages.

Picture and text warnings become more credible and memorable, while plain, darker colours (which is why olive green as opposed to white is the favoured colour for plain packaging here and elsewhere) are more likely to be perceived as harmful, the research concluded.

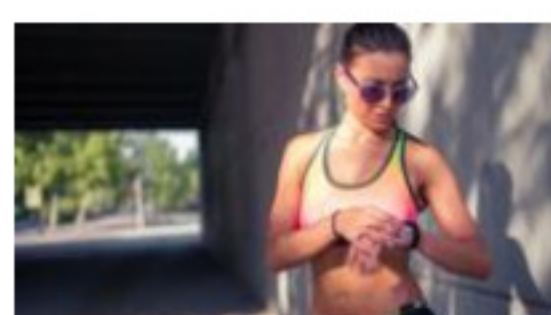
So what impact would plain packaging have?

Australia is the only country to have introduced it - at the start of 2012 - but it is thought to be too early and too difficult (the move was accompanied by tax rises) to accurately measure the impact.

So Sir Cyril said the only thing was to rely on "reasonable" estimates, which had come up with the 2% figure quoted in Parliament by ministers.

That may sound on the low side, but Sir Cyril said it was still "significant if smoking is to become denormalised".

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Hong Kong needs to heed COSH repeat advice and at least double the cost of local tobacco.

It is too affordable.

By 2020 Australia will mandate AUD 40 per pack of cigarettes.

Attachments:

HKG-cig-too-cheap.pdf



## Media Centre -Tobacco

Fact sheet

Updated May 2017

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**Key facts** <http://www.who.int/mediacentre/factsheets/fs339/en/>

- Tobacco kills up to half of its users.
  - Tobacco kills more than 7 million people each year. More than 6 million of those deaths are the result of direct tobacco use while around 890 000 are the result of non-smokers being exposed to second-hand smoke.
  - Nearly 80% of the world's more than 1 billion smokers live in low- and middle-income countries.
- 

### Leading cause of death, illness and impoverishment

The tobacco epidemic is one of the biggest public health threats the world has ever faced, killing more than 7 million people a year. More than 6 million of those deaths are the result of direct tobacco use while around 890 000 are the result of non-smokers being exposed to second-hand smoke.

Nearly 80% of the more than 1 billion smokers worldwide live in low- and middle-income countries, where the burden of tobacco-related illness and death is heaviest.

**Tobacco users who die prematurely deprive their families of income, raise the cost of health care and hinder economic development.**

In some countries, **children from poor households are frequently employed in tobacco farming to provide family income. These children are especially vulnerable to "green tobacco sickness"**, which is caused by the nicotine that is absorbed through the skin from the handling of wet tobacco leaves.

### Surveillance is key

Good monitoring tracks the extent and character of the tobacco epidemic and indicates how best to tailor policies. Only 1 in 3 countries, representing one third of the world's population, monitors tobacco use by repeating nationally representative youth and adult surveys at least once every 5 years.

### Second-hand smoke kills

Second-hand smoke is the smoke that fills restaurants, offices or other enclosed spaces when people burn tobacco products such as cigarettes, *bidis* and water-pipes. **There are more than 4000 chemicals in**



**tobacco smoke, of which at least 250 are known to be harmful and more than 50 are known to cause cancer.**

**There is no safe level of exposure to second-hand tobacco smoke.**

- In adults, second-hand smoke causes serious cardiovascular and respiratory diseases, including coronary heart disease and lung cancer. In infants, it causes sudden death. In pregnant women, it causes low birth weight.
- Almost half of children regularly breathe air polluted by tobacco smoke in public places.
- Second-hand smoke causes more than 890 000 premature deaths per year.
- **In 2004, children accounted for 28% of the deaths attributable to second-hand smoke.**

Every person should be able to breathe tobacco-smoke-free air. Smoke-free laws protect the health of non-smokers, are popular, do not harm business and encourage smokers to quit. Over 1.3 billion people, or 18% of the world's population, are protected by comprehensive national smoke-free laws.

**Tobacco users need help to quit**

**Studies show that few people understand the specific health risks of tobacco use.** For example, a 2009 survey in China revealed that only 38% of smokers knew that smoking causes coronary heart disease and only 27% knew that it causes stroke. Among smokers who are aware of the dangers of tobacco, most want to quit. Counselling and medication can more than double the chance that a smoker who tries to quit will succeed. National comprehensive cessation services with full or partial cost-coverage are available to assist tobacco users to quit in only 24 countries, representing 15% of the world's population. There is no cessation assistance of any kind in one quarter of low-income countries.

**Picture warnings work**

**Hard-hitting anti-tobacco advertisements and graphic pack warnings – especially those that include pictures – reduce the number of children who begin smoking and increase the number of smokers who quit.**

**Graphic warnings** can persuade smokers to protect the health of non-smokers by smoking less inside the home and avoiding smoking near children. **Studies carried out after the implementation of pictorial package warnings in Brazil, Canada, Singapore and Thailand consistently show that pictorial warnings significantly increase people's awareness of the harms of tobacco use.**

Only 42 countries, representing 19% of the world's population, meet the best practice for pictorial warnings, which includes the warnings in the local language and cover an average of at least half of the front and back of cigarette packs. Most of these countries are low- or middle-income countries. Mass media campaigns can also reduce tobacco consumption by influencing people to protect non-smokers and convincing youths to stop using tobacco. Over half of the world's population live in the 39 countries that have aired at least 1 strong anti-tobacco mass media campaign within the last 2 years.





## Ad bans lower consumption

Bans on tobacco advertising, promotion and sponsorship can reduce tobacco consumption.

- A comprehensive ban on all tobacco advertising, promotion and sponsorship could decrease tobacco consumption by an average of about 7%, with some countries experiencing a decline in consumption of up to 16%.
- Only 29 countries, representing 12% of the world's population, have completely banned all forms of tobacco advertising, promotion and sponsorship.
- Around 1 country in 3 has minimal or no restrictions at all on tobacco advertising, promotion and sponsorship.

## Taxes discourage tobacco use

**Tobacco taxes are the most cost-effective way to reduce tobacco use, especially among young and poor people. A tax increase that increases tobacco prices by 10% decreases tobacco consumption by about 4% in high-income countries and about 5% in low- and middle-income countries.**

Even so, high tobacco taxes is a measure that is rarely implemented. Only 33 countries, with 10% of the world's population, have introduced taxes on tobacco products so that **more than 75% of the retail price is tax. Tobacco tax revenues are on average 269 times higher than spending on tobacco control, based on available data.**

## Illicit trade of tobacco products must be stopped

The illicit trade in tobacco products poses major health, economic and security concerns around the world. It is estimated that 1 in every 10 cigarettes and tobacco products consumed globally is illicit. The illicit market is supported by various players, ranging from petty peddlers to organized criminal networks involved in arms and human trafficking.

Tax avoidance (licit) and tax evasion (illicit) undermine the effectiveness of tobacco control policies, particularly higher tobacco taxes. These activities range from legal actions, such as purchasing tobacco products in lower tax jurisdictions, to illegal ones such as smuggling, illicit manufacturing and counterfeiting.

**The tobacco industry and others often argue that high tobacco product taxes lead to tax evasion. However, the evidence shows that non-tax factors including weak governance, high levels of corruption, poor government commitment to tackling illicit tobacco, ineffective customs and tax administration, and informal distribution channels for tobacco products are often of equal or greater importance.**

There is broad agreement that control of illicit trade benefits tobacco control and public health and result in broader benefits for governments. Critically, this will reduce premature deaths from tobacco



use and raise tax revenue for governments. Stopping illicit trade in tobacco products is a health priority, and is achievable. But to do so requires improvement of national and sub-national tax administration systems and international collaboration. **The WHO FCTC Protocol to Eliminate the Illicit Trade of Tobacco Products (ITP) is the key supply side policy to reduce tobacco use and its health and economic consequences.**

**While publicly stating its support for action against the illicit trade, the tobacco industry's behind-the-scenes behaviour has been very different. Internal industry documents released as a result of court cases demonstrate that the tobacco industry has actively fostered the illicit trade globally. It also works to block implementation of tobacco control measures, such as tax increases and pictorial health warnings, by misleadingly arguing they will fuel the illicit trade.**

**Experience from many countries demonstrate that illicit trade can be successfully addressed even when tobacco taxes and prices are raised,** resulting in increased tax revenues and reduced tobacco use. Implementing and enforcing strong measures to control illicit trade enhances the effectiveness of significantly increased tobacco taxes and prices, as well as strong tobacco control policies, in reducing tobacco use and its health and economic consequences.

#### **WHO response**

**WHO is committed to fighting the global tobacco epidemic.** The WHO Framework Convention on Tobacco Control (WHO FCTC) **entered into force in February 2005** and has today 180 Parties covering more than 90% of the world's population.

**The WHO FCTC is a milestone in the promotion of public health. It is an evidence-based treaty that reaffirms the right of people to the highest standard of health, provides legal dimensions for international health cooperation and sets high standards for compliance.**

In 2008, WHO introduced a practical, cost-effective way to scale up implementation of the main demand reduction provisions of the WHO FCTC on the ground: MPOWER. Each MPOWER measure corresponds to at least 1 provision of the WHO Framework Convention on Tobacco Control.

The 6 MPOWER measures are:

- **M**onitor tobacco use and prevention policies
- **P**rotect people from tobacco use
- **O**ffer help to quit tobacco use
- **W**arn about the dangers of tobacco
- **E**nforce bans on tobacco advertising, promotion and sponsorship
- **R**aise taxes on tobacco.

For more details on progress made for tobacco control at global, regional and country level, please refer to the series of WHO reports on the global tobacco epidemic.



World Health  
Organization

- [WHO report on the global tobacco epidemic 2015](#)

The Protocol to Eliminate Illicit Trade in Tobacco Products requires a wide range of measures **relating to the tobacco supply chain**, including the licensing of imports, exports and manufacture of tobacco products; **the establishment of tracking and tracing systems** and **the imposition of penal sanctions on those responsible for illicit trade**. It would also criminalize illicit production and cross-border smuggling. The Protocol to Eliminate Illicit Trade in Tobacco Products, the first Protocol to the Convention, was adopted in November 2012 at the fifth session of the Conference of the Parties in Seoul, Republic of Korea, and is currently open for ratification, acceptance, approval, or accession by the Parties to the WHO FCTC.

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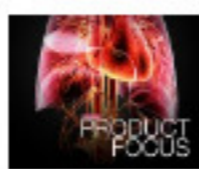
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Cigarette Brand	Price/Pack	Excise % of retail
DOUBLE HAPPINESS	48	79.41%
ZHONG NAN HAI	51	74.74%
NEXT	52	73.30%
Basic	52	73.30%
PALL MALL (Winfield)	52	73.30%
More	52	73.30%
Winston	52	73.30%
Lucky Strike	55	69.30%
Viceroy	55	69.30%
Hilton	55	69.30%
Marlboro	57	66.87%
KENT	57	66.87%
Camel	57	66.87%
Mevius	57	66.87%
Salem	57	66.87%
ESSE	57	66.87%
VIRGINIA	60	63.53%
CAPRI	60	63.53%
DAVIDOFF	62	61.48%
CHUNGWA	65	58.64%
Duty per pack HK\$ 38.12	HK\$	
Source: COSH 31/5/2017		
Hong Kong retail prices May 31 2017		
<b>WHO - tax to be more than 75% of retail price</b>		
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TOBACCO USE

## WHO: Countries Must Raise Tobacco Tax to 75% of Retail Price

Published on July 7, 2015



In a new report, the World Health Organization strongly urges governments to raise taxes on tobacco in a global effort to reduce the number of deaths from tobacco-related disease.

The solution proposed by the WHO is to raise taxes to more than 75% of the retail price. The organization claims this is "among the most effective and cost-effective tobacco control interventions," costs little to implement and increases government revenues.

The report also contains guidelines on how to implement price and tax measures to reduce the demand for tobacco.

Despite the effectiveness of this high-tax intervention, the report notes that only a few countries have taken this step. By 2014, 33 countries had implemented high-tax measures, but still only 10% of the world's population live in countries with tobacco taxes that WHO consider to be sufficiently high.

[Read more at www.medicalnewstoday.com](http://www.medicalnewstoday.com)

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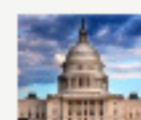
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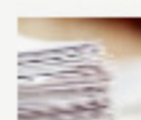
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## public health



19.05.17

### NHS could save £67m per year by reducing smoker numbers

The NHS could create savings of £67m per year if the number of people who smoked was cut down to 5% by 2035, a new study has claimed.

If the health service could reach this target, around 100,000 cases of smoking-related disease, including 35,900 cancers, would be avoided, saving huge amounts of cash from health and social care budgets.

The study conducted by the UK Health Forum, commissioned by Cancer Research UK, also warned that if today's trends continue then around 15% of people from the most deprived groups are predicted to **smoke** in 2035 compared to just 2.5% from wealthier groups.

"This study highlights the huge burden that smoking places on our society, particularly on the poorest and least advantaged groups," said Professor Paul Lincoln, UK Health Forum chief executive.

Prof Lincoln added that unless more was done to prevent the demand on the NHS from **preventable smoking**, it will be difficult to continue to provide sustainable healthcare for everyone who needs it.

"We hope that by showing the clear benefits of this tobacco free ambition, we can inform tobacco control policy in the UK and even worldwide," he concluded.

Alison Cox, Cancer Research UK's director of cancer prevention, said that bold and ambitious targets were needed to save the thousands of lives and millions of pounds of NHS money lost to tobacco.

"We want the next government to share our ambition for the next generation of children to grow up tobacco-free", she said. "This target should be at the heart of a new strategy to **tackle smoking**."

"Measures like sustained funding for Stop Smoking Services, mass media campaigns and increased tax on tobacco all have the potential to help smokers to stop, and create much-needed revenue to support programmes that will reduce the burden on our health service."

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# public health



26.05.17

## BMA calls on government to aim for smoke-free society by 2035

Doctors have today called on the government to introduce a 'Tobacco Control Plan' to replace the outdated strategy on **smoking** in order to drive towards a tobacco-free society by 2035.

This was the message sent this week by **the BMA** after the government announced standardised cigarette packaging would come into force to cut down on people smoking.

The packaging will mean that all tobacco products will be coloured green, carry bigger health warnings and will only be sold in larger packs – measures that the government hope will deter younger people from taking up smoking.

This also follows a new study last week that revealed that the NHS could save a **huge £67m per year through reducing smoking numbers** down to 5% of the population.

"Smoking is a leading cause of preventable death in the UK, accounting for around 80,000 deaths a year in England alone. The introduction of standardised packaging this weekend, which the BMA lobbied in favour of for many years, is a significant step forward and will save lives," stated Professor Parveen Kumar, chair of the BMA's board of science.

However, the BMA board chair also said that regulation on smoking shouldn't stop there. "Doctors want to see a tobacco-free society by 2035, and the BMA is calling on the next government to introduce a new 'Tobacco Control Plan', replacing the current, outdated strategy on smoking, and a 'polluter pays' levy on tobacco companies," she added.

"This would generate funding to support smoking cessation programmes, and would see many more smokers kicking the habit."

**Cancer Research UK's** director of prevention Alison Cox added: "Smoking is still the single largest preventable cause of death in the UK and kills around 96,000 people every year – this cannot continue."

Cox also supported the BMA's call to go even further with the regulation of cigarettes and tobacco products.

"But there's still a lot more to do," she said. "There is a real opportunity for the next government to help the UK's 9 million smokers quit for good."

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“As NHE went to press, many of us were still recovering from the chancellor's unexpected health announcements in his last Spring Budget. While the sector welcomed Philip Hammond's revelations, centered on capital funding for advanced sustainability and transformation plans (STPs) and A&E triage schemes (page 24), the government failed to address the funding gap still facing the NHS. Even the £2bn social care windfall, which Treasury has... [read more >](#)”

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Vivek Kotecha, research officer at the Centre for Health and the Public Interest (CHPI), explains why the charging of foreign patients distracts from our home-grown NHS issues. [The Depart more >](#)

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### comment

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Jackie Smith, chief executive at the Nursing and Midwifery Council (NMC), t... [more >](#)

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## NICOTINE ADDICTION

Secret Tobacco Document Quotes – see what this heinous industry admits about its products

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See Also:

[TOBACCO EXPLAINED: THE TRUTH ABOUT THE TOBACCO INDUSTRY IN ITS OWN WORDS](#)

UK ASH has a great guided tour through the "secret" documents.

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*THE COURT: Counsel -- counsel, I wonder if for the benefit of the jury you could explain what a Bates number is.*

...

*MR. CIRESI: A Bates number is a number that's applied to a document when it's discovered in litigation so that you know where the document came from and what number it is. So if I were producing documents on behalf of the state of Minnesota, or any of the defendants' lawyers were producing documents on behalf of the defendants, we put a Bates number on that so we can track that document as to when it was produced. And if we want to go up and retrieve it, we're able to go to retrieve that numbered page. So if it was a ten-page document, let's assume, and we were just starting, it might be page -- the Bates number may be one through ten, the last three digits. And you'll also see for some of the defendants there will be initials in front of it, so some defendants put their initials in front, and we'll identify those for you as we go through so you know what those are when you see them on the documents.*

*THE COURT: Thank you, counsel.*

*MR. CIRESI: Thank you, Your Honor.*

*--Minnesota trial transcript, [Jan. 28, 1998](#)*

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## NICOTINE

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**"Cigarette Smoking Termed Lethal Habit With Some Addiction Involved."**

1957 RJR memo (503270819) which Special Master Gehan said RJR is trying to keep confidential [LA Times 03/08/98](#)

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**"destroying the nicotine habit in a large number of consumers and preventing it ever being acquired by new smokers"**  
1959 report by British American Tobacco Co. expressed this fear [LA Times 04/07/98](#)

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**"nicotine addicts"**  
1961 report by BATCO scientist Sir Charles Ellis applied this term to smokers

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**"Emotional judgments are often the basis for national thinking. And since a national attitude to smoking may be building up, it is essential for us to consider what are the components of this emotion. The most important is the word `cancer.' Now, most people cease to be able reason once it is mentioned. The smoker's cough is a real phenomenon and obvious to everyone, and we should recognize that it is a factor in the emotional buildup. Lastly, smoking is a habit of addiction that is pleasurable. Many people, therefore, find themselves subconsciously prepared to believe that it must be wrong."**  
February 13th, 1962 BAT memo, "The Smoking and Health Problem," Paper presented at Research Conference, Southampton, England, pp. 15-16 [Trial Exhibit #11938](#) Also, Sir Charles Ellis, "The Smoking and Health Problem," [Smoking and Health--Policy on Research](#)

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**"We now possess a knowledge of nicotine far more extensive than exists in published scientific literature"**  
February 13, 1962 BATCo Report, "The Effects of Smoking" [Trial Exhibit 11938](#)

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**"One result of the recent public discussions on smoking and health must have been to make each of us examine whether smoking is just a habit or addiction or has any positive effects. It is my conviction that nicotine is a very remarkable beneficent drug that both helps the body to resist external stress and also can as a result show a pronounced tranquilizing effect. You are all aware of the very great increase in the use of artificial controls, stimulants, tranquilizers, sleeping pills and it is a fact that under modern conditions of life people find that they cannot depend just on their subconscious reactions to meet the various environmental strains with which they are confronted, they must have drugs available which they can take when they feel the need. Nicotine is not only a very fine drug, but the techniques of administration by smoking has considerable psychological advantages and a built-in control against excessive absorption. It is almost impossible to take an overdose of nicotine in the way it is only too easy to do with sleeping pills"**  
February 13th, 1962 BAT memo, "The Smoking and Health Problem," Paper presented at Research Conference, Southampton, England, pp. 15-16 [Trial Exhibit #11938](#)

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**"We now possess a knowledge of the effects of nicotine far more extensive than exists in published scientific literature. . . for good reasons the results of Battelle's work have been kept at a high level of secrecy."**  
February 13th, 1962 BAT memo, "The Effects Of Smoking, Proposal For Further Research Contracts With Battelle," by Sir Charles Ellis, director of research. [The Wall Street Journal 05/11/98](#) This document, which also discusses MAD HATTER II, MAD HATTER III, HIPPO I, HIPPO II, and ARIEL, is [Trial Exhibit #11938](#)

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**"These experiments are encouraging since they are beginning to elucidate what may be termed the basic effect of nicotine, but it is important to note that this cannot be responsible for addiction because it all occurs in too short a time. The stimulation to resist stress occurs almost immediately on absorption of nicotine, and the effect--that is, the extra supply of cortico steroids in the blood--falls off markedly within a matter of thirty minutes. Addiction is something quite different from this since it is well known that the craving for nicotine in a confirmed smoker who stops smoking persists for ten, twenty or thirty days. We believe that we have found possible reasons for addiction in two other phenomena that accompany steady absorption of nicotine"**  
February 13th, 1962 BAT memo, "The Effects Of Smoking, Proposal For Further Research Contracts With Battelle," by Sir Charles Ellis, director of research. [Trial Exhibit #11938](#).



**"If the absorption of nicotine is made pleasant and attractive this enhances the benefits just as in the case of well prepared and well served food. However, the force of the habit or the strength of addiction is not such as to give any grounds for complacency in the face of alternative methods of stimulating the body to meet stress, and that is just where the danger lies since alternative methods are becoming available. In the last few years there has been a quite remarkable increase in the production of tranquilizer drugs, and while most of these need a doctor's prescription there is already one on free sale in Switzerland. If such drugs become more freely available they will compete with nicotine, which was a -- which is a natural tranquilizer, and will leave smoking primarily dependent on its psychological effects for the maintenance of the habit."**

February 13th, 1962 BAT memo, "The Effects Of Smoking, Proposal For Further Research Contracts With Battelle," by Sir Charles Ellis, director of research. [Trial Exhibit #11938](#).

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**"By far the most important effect [of nicotine] is that of mobilising the resources of the body to resist stress. That this occurs has been known from the earliest days of smoking but no explanation exists in the published literature. Battelle have now carried out experiments which are beginning to show how nicotine enters into the mechanism of this vital reaction. . . Battelle . . . have recently been able to show in experiments on rats that the administration of nicotine subcutaneously immediately enhances the release of the adreno-cortico-tropic hormone which ultimately increases the amount of the cortico steroids in the blood. This is important information on the mechanism of what has so long been known in a general way that nicotine stimulates the body to resist stress. However, this is only the first step . . . "**

February 13th, 1962 BAT memo, "The Effects Of Smoking, Proposal For Further Research Contracts With Battelle," by Sir Charles Ellis, director of research. [Trial Exhibit #11938](#).

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**"The undesirable effects of smoking appear to rise from the combustion process and are due to the products of pyrolysis. The pipe or cigarette is a remarkably neat device for distilling off nicotine from tobacco and getting it absorbed on the particles of an aerosol in such a way that the absorption of nicotine is controllable, but some device which delivered the nicotine in an acceptable form without the harmful combustion products would be possibly more desirable. At first sight this looks improbable; the cigarette is such a simple entity that it is difficult to imagine anything replacing its psychological, social and physiological effects. Difficult this certainly is but not necessarily impossible, hence the other aim of this group of researches is to attempt to make such a device."**

February 13th, 1962 BAT memo, "The Effects Of Smoking, Proposal For Further Research Contracts With Battelle," by Sir Charles Ellis, director of research. [Trial Exhibit #11938](#).

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**"Thus we have already greatly increased our knowledge of the manifold ways in which nicotine affects the body and, in particular, have identified and studied separately the stress resisting mechanism and the other effect on the liver which we believe is responsible for addiction."**

February 13th, 1962 BAT memo, "The Effects Of Smoking, Proposal For Further Research Contracts With Battelle," by Sir Charles Ellis, director of research. [Trial Exhibit #11938](#).

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**"What we need to know above all things is what constitutes the hold of smoking, that is, to understand the addiction. We wish to be able to set up a reasonable picture of the interplay of the various effects of smoking because only by knowing in detail the performance of our own product can we appreciate the strength and vulnerability of our position"**

February 13th, 1962 BAT memo, "The Effects Of Smoking, Proposal For Further Research Contracts With Battelle," by Sir Charles Ellis, director of research. [Trial Exhibit #11938](#).

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#### **"Addictive Aspects in Heavy Cigarette Smoking"**

1962 paper, funded by a TIRC grant and published by Boston University investigator Peter Knapp. Use of the word "Addictive" was strongly discouraged by TIRC officials, according to Knapp. His grant was not renewed.

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**"Nicotine is by far the most characteristic single constituent in tobacco, and the known physiological effects are positively correlated with smoker response"**

**1963 British American Tobacco document**

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**"It should be recognized that nicotine and sugar levels are not the only things important in determining smoking quality. It should be emphasized that these are but two constituents in a very complex tobacco leaf and that there are other materials in the leaf which must affect smoking quality. I am certain that when these have been identified, ways can be found to control their level just as we can control nicotine and sugar levels and we will some days achieve the goal of precision manufacture."**

1963 Brown & Williamson Tobacco Corp letter from R.B. Griffith to John Kirwan

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**"It may be well to remind you, however, that we have a research program in progress to obtain, by genetic means, any level of nicotine desired."**

1963 memo by B&W researcher, R.B. Griffith

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**"In a chronic smoker the normal equilibrium in the corticotropin releasing system can be maintained only by continuous nicotine intake. . . A body left in this unbalanced state craves for renewed drug intake in order to restore the physiological equilibrium. This unconscious desire explains the addiction of the individual to nicotine."**

May 30, 1963 report prepared under contract by researchers in Switzerland for British-American Tobacco/B&W and withheld by B&W from the U.S. Surgeon General [Philip J. Hiltz, "Tobacco Maker Studied Risk But Did Little About Results , " New York Times , June 17, 1994, p. A1.]

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**"In the meantime (we say) here is our triple, or quadruple or quintuple filter, capable of removing whatever constituent of smoke is currently suspect while delivering full flavor - and incidentally - a nice jolt of nicotine. . . And if we are the first to be able to make and sustain that claim, what price Kent?"**

**"Moreover, nicotine is addictive. We are, then, in the business of selling nicotine, an addictive drug effective in the release of stress mechanisms."**

July 17, 1963 report by Brown & Williamson general counsel/vice president Addison Yeaman, *Implications of Battelle Hippo I and II and the Griffith Filter*, 1963, 17 July, Memo (1802.05).

B&W Priv. 689033412

Bates # 2023191002 Text excerpts of the document are on the [PBS Website](#)

The memo is at the [B&W Papers](#).

And at the following URL at Michael Tacosky's documents site:

[Bates # 2023191002](#)

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**"The hypothalamo-pituitary stimulation of nicotine is the beneficial mechanism which makes people smoke; in other words, nicotine helps people to cope with stress. In the beginning of nicotine consumption, relatively small doses can perform the desired action. Chronic intake of nicotine tends to restore the normal physiological functioning of the endocrine system, so that ever-increasing dose levels of nicotine are necessary to maintain the desired action. Unlike other dopings, such as morphine, the demand for increasing dose levels is relatively slow for nicotine"**

**"In a chronic smoker the normal equilibrium in the corticotropin releasing system can be maintained only by continuous nicotine intake. It means that those individuals are but slightly different in their aptitude to cope with stress in comparison**

with a non-smoker. If nicotine intake, however, is prohibited to chronic smokers, the corticotropin-releasing ability of the hypothalamus is greatly reduced, so that these individuals are left with an unbalanced endocrine system. A body left in this unbalanced status craves for renewed drug intake in order to restore the physiological equilibrium. This unconscious desire explains the addiction of the individual to nicotine."

May 30, 1963 report, *A Tentative Hypothesis on Nicotine Addiction* produced for Brown & Williamson's sister company, the British-American Tobacco Company (Batco) by C. Haselbach and O. Libert of the Battelle Memorial Institute in Geneva [Trial Exhibit 13433](#)

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"Dr. Seevers [Chairman of the AMA-ERF Committee for Research on Tobacco and Health] informed us that he had specifically told the Director of Research of American Tobacco Company that it was important to keep up the nicotine content of the smoke, while reducing anything that ought to be reduced. Dr. Seevers' recommendation was that AT Co. should add nicotine in cut tobacco and then reduce both nicotine and tar by filter and porous paper as in Carlton"

October, 1964: ["Reports on Policy Aspects of the Smoking and Health Situations in U.S.A."](#) Prepared by Philip J. Rogers and Geoffrey F. Todd, Tobacco Research Council (United Kingdom)

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"In view of its preeminent importance, the pharmacology of nicotine should continue to be kept under review and attention paid to the possible discovery of other substances possessing the desired features of brain stimulation and stress-relief without direct effects on the circulatory system. The possibility that nicotine and other substances together may exert effects larger than either separately (synergism) should be studied and if necessary the attention of Marketing departments should be drawn to these possibilities. . . Smoking is then seen as a personal tool used by the smoker to refine his behavior and reactions to the world at large. It is apparent that nicotine largely underpins those contributions through its role as a generator of central physiological arousal effects which express themselves as changes in human performance and psychological well-being."

1968 presentation by Rob Ferris, a manager for Batco's psychology group, at a research conference held by Batco on Hilton Head Island, South Carolina. [Cigarette Confidential](#) Fahs, 1996

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"I would be more cautious in using the pharmonic-medical model--do we really want to tout cigarette smoke as a drug? It is, of course, but there are dangerous F.D.A. implications to having such conceptualization go beyond these walls. . . Perhaps this is the key phrase: the reinforcing mechanism of cigarette smoking. If we understand it, we are potentially more able to upgrade our product."

Feb. 19, 1969 Philip Morris memo from William L. Dunn to researcher Dr. Helmut Wakeham. [Trial Exhibit 10539](#)

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"We are presently unable to predict whether a trier will become a smoker. This overlaps with some of the above proposals, since in effect we would be in search of the mechanism of habit reinforcement. Perhaps this is the key phrase: the reinforcing mechanism of cigarette smoking. If we understand it, we are potentially more able to upgrade our product."

Feb. 19, 1969 Philip Morris memo from William L. Dunn to researcher Dr. Helmut Wakeham. [Trial Exhibit 10539](#)

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"In the past, we at R&D [research and development] have said the we're not in the cigarette business, we're in the smoke business. It might be more pointed to observe that the cigarette is the vehicle of smoke, smoke is the vehicle of nicotine and nicotine is the agent of a pleasurable body response."

Fall, 1969 Philip Morris draft report by William Dunn,, then VP of Research and Development, to the board of directors. "Why One Smokes." Minnesota Trial Exhibit 3681 Bates # [1003287036-48](#) (Quote is on 1003287837)

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**"Long after the adolescent preoccupation with self-image has subsided, the cigarette will pre-empt even food in time of scarcity on the smokers' priority list."**

"Smoker Psychology Research" by Helmut Wakeham, Presented to the PM Board of Directors November 26, 1969. Minnesota Trial Exhibit 10299 [Bates # 1000273741](#)

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**"We have , then, as our first premise, that the primary motivation for smoking is to obtain the pharmacological effect of nicotine."**

Fall, 1969 Philip Morris draft report by Thomas Osdene, then VP of Research and Development, to the board of directors, "Why One Smokes." Minnesota Trial Exhibit 3681 Bates # 1003287036-48

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**"Intravenously injected nicotine was found to be an acceptable substitute for smoking in a study with 35 smokers (Johnson, 1942).1"**

Fall, 1969 Philip Morris draft report by Thomas Osdene, then VP of Research and Development, to the board of directors, "Why One Smokes." Minnesota Trial Exhibit 3681 Bates # 1003287036-48

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**"The cigarette should not be construed as a product but a package. The product is nicotine. . . Think of a puff of smoke as the vehicle of nicotine."**

Early 1970s Philip Morris memo by William Dunn

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**"We are in a nicotine rather than a tobacco industry"**

British American Tobacco Co. senior executive, as quoted in the minutes from a 1971 meeting of executives.

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**"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."**

1972 memo, "The nature of the tobacco business and the crucial role of nicotine therein," by R.J. Reynolds Tobacco Co. scientist Claude E. Teague (1972)

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**"Happily for the tobacco industry, nicotine is both habituating and unique in its variety of physiological actions"**

1972 research planning memo by R.J. Reynolds Tobacco Co. researcher Claude Teague

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**"Although more people talk about 'taste,' it is likely that greater numbers smoke for the narcotic value that comes from the nicotine"**

1972 memo from Philip Morris

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**"I believe that for the typical smoker nicotine satisfaction is the dominant desire, as opposed to flavor and other satisfactions."**

1972 R.J. Reynolds Tobacco Co. marketing memo [AP 02/26/98](#)

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**"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."**

1972 Claude Teague memo "RJR Confidential Research Planning Memorandum on the Nature of the Tobacco Business and the Crucial Role of Nicotine Therein." A 1995 NY Times article by Phil Hilts citing this quote may have been the deciding factor in Clinton's full commitment to tobacco regulation. [Washington Post 03/31/98](#)

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**"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."**

1972 Claude Teague memo "RJR Confidential Research Planning Memorandum on the Nature of the Tobacco Business and the Crucial Role of Nicotine Therein." [The Tobacco Wars \(11/14/95\)](#)

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**"If, as claimed by some anti-tobacco critics, the alleged health hazard of smoking is directly related to the amount of 'tar' to which the smoker is exposed per day, and the smoker bases his consumption on nicotine, then a present 'low tar, low nicotine' cigarette offers zero advantage to the smoker over a 'regular' filter cigarette"**

1972 memo by RJR researcher Claude Teague Jr. [AP 04/03/98](#)

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**"A tobacco product is in essence a vehicle for the delivery of nicotine, a potent drug with a variety of physiological effects."**  
Claude Teague, RJR research scientist, in a 1972 memo which was read to Broin jurors September 4, 1997

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**"[A]ny desired additional nicotine 'kick' could be easily obtained through ph regulation."**

1973 R.J. Reynolds memo from Frank G. Colby to RA Blevins, Jr. - "Cigarette Concept to Assure RJR a Larger Segment of the Youth Market"

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**"[C]lassification of tobacco as a drug should be avoided at all costs"**

1974 British American Tobacco memo

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**"There is little doubt that if it were not for the nicotine in tobacco smoke, people would be little more inclined to smoke than they are to blow bubbles or to light sparklers."**

M.A.H. Russell, "The Smoking Habit and Its Classification." The Practitioner 212 (1974), p. 794

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**"Forecasts based upon the emergence of a rival to the cigarette are rare, but the use of marijuana and nicotine-containing chewing-gum . . . have been suggested . . . Nearly ten years ago, a French paper discussed numerous plants which might replace tobacco. The only material which has received a lot of attention is marijuana, and the controversy on whether or not to legalise soft drugs has been frequently aired . . . in the illicit use of marijuana, relatively large doses of the active principal are involved. If the use of such drugs was legalised, one avenue for exploitation would be the augmentation of cigarettes with near subliminal levels of the drug."**

March 1976 British-American Tobacco Co. report entitled "The Product in the Early 1980s"

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**"How many times have you decided to give up smoking? Nobody these days is telling you not to give up smoking. But if you've given it up more times than you'd like to remember, the chances are you enjoy it too much to want to give it up at all. If you're like a lot of smokers these days, it probably isn't smoking that you want to give up. It's some of that 'tar' and nicotine you've been hearing about"**

Vantage (B&W) ad, Newsweek, February 2, 1976. Minnesota [Trial Exhibit #TE10539](#)

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**"foul, rotten rubber . . . Strong Tongue Sting and Throat Grab . . . Nicotine is definitely an irritant in smoke and its taste must be blended out or modified by other constituents in the TPM to make the smoke acceptable."**

From "Taste of Nicotine" (C.E. Rlx), a section of the 10-Page "Nicotine Research" memo (Nov. 9, 1976), written by W.M. Henley, and addressed to Dr. D.H. Piehl, which summarized an Oct. 25, 1976 "discussion" of nicotine [Trial Exhibit #TE10539](#)> [Trial Exhibit #12673](#)

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**"Participants in this work now feel that a satisfactory low tar smoking article might be achieved by the addition of much less nicotine than was previously thought necessary. By spraying the blend with a small amount of nicotine it might be possible to get the impact of a higher tar and nicotine cigarette. This might be achieved without actually changing the tar and nicotine figures one would get from untreated tobacco."**

June 16th, 1976 Lorillard memo, "Progress Report on Nicotine Augmentation Project," from H. J. Minnemeyer, the director of research, to Dr. A. W. Spears, who was then senior vice-president of operations, and later became CEO [Trial Exhibit #TE 10014](#)

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**"nicotine enrichment project.. . Tobacco scientists know that physiological satisfaction is almost totally related to nicotine intake. The objective of the Research Department in this project has been to find how the nicotine delivery of the new product could be maximized."**

April 13, 1977 Lorillard memo from Harry J. Minnemeyer to Alexander Spears

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**"Consideration of nicotine delivery necessary to achieve long-term use and satisfaction by the consumer dictate that we should continue to pursue the concept of nicotine enhancement"**

July 22, 1977 Lorillard memo from vice president for research and development, Fred Schultz to Alexander Spears

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**"[M]arket an ADDICTIVE PRODUCT in an ETHICAL MATTER"**

A 1977 memo from a New York City advertising agency on behalf of Brown & Williamson Tobacco Co. [Minneapolis-St. Paul Star Tribune 02/26/98](#)

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**"I don't know of any smoker who at some point hasn't wished he didn't smoke. If we could offer an acceptable alternative for providing nicotine, I am 100 percent sure we would have a gigantic brand."**

1977 Lorillard letter discussing new products [AP 02/26/98](#)

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**"I have given Carolyn [Levy] approval to proceed with this study. If she is able to demonstrate, as she anticipates, no withdrawal effects of nicotine, we will want to pursue this avenue with some vigor. If, however, the results with nicotine are similar to those gotten with morphine and caffeine, WE WILL WANT TO BURY IT. Accordingly, there are only two copies of this memo, the one attached and the original which I have."**

1977 Philip Morris memo by "nicotine kid" William L. Dunn, to Thomas Osdene

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**"10,000 times more addictive than morphine"**

etorphine, a narcotic that scientists in 1977 debated adding to BAT's cigarettes " [The Wall Street Journal 04/23/98](#)

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**"The most direct solution to the problem of increasing nicotine delivery in the new product would be to add nicotine alkaloid directly to the tobaccos used in the new blend. The direct approach involves determining at which point in the manufacturing process the nicotine could be added, and secondly, determining where the necessary quantity of nicotine to support a major brand could be obtained. The direct approach involves some serious problems, mainly centering around the intensely poisonous nature of nicotine alkaloid"**

April 13, 1977, report by Lorillard official H.J. Minnemeyer

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**"Tobacco scientists know that physiological satisfaction is almost totally related to nicotine intake"**

April 13, 1977 Lorillard memo from researcher Harry J. Minnemeyer to Alexander Spears. The memo discussed "the nicotine enrichment project." [Greensboro News & Record 06/28/98](#)

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**"[Development of such a product] would put tobacco companies out of business."**

1978 memo from a meeting that was held in the New York office of the Council for Tobacco Research-U.S.A. Inc. to discuss a grant aimed at making a clinically accepted "antagonist" to nicotine

**"Very few consumers are aware of the effects of nicotine, i.e., its addictive nature and that nicotine is a poison"**

1978 B&W memo signed by H.D. Steele

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**"Dr. Seligman brought up the grant by Dr. Abood in which one of the stated aims was to make a clinically acceptable antagonist to nicotine. This goal would have the potential of putting the tobacco manufacturers out of business."**

January 10, 1978 memo from T.S. Osdene in regards to a1/5/78 meeting at the CTR in NYC with Drs. Seligman, Holtzman, Gardner, Hockett, and Mr. Hoyt. [Trial Exhibit #TE10227](#)

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**"The first is concerned with the ethical question: 'Is it morally permissible to develop a safe method for administering a habit-forming drug when, in so doing, the number of addicts will increase?'"**

1978 Liggett Group memo about the problems in developing a less hazardous cigarette [AP 02/26/98](#)



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**"Nicotine is the most pharmacologically active constituent in tobacco smoke and is probably the most usual factor responsible for the maintenance of the smoking habit"**

1978 internal British-American Tobacco Co. document by D.E. Creighton [AP 04/03/98](#)

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**"We are searching explicitly for a socially acceptable addictive product. The essential constituent is most likely to be nicotine or a direct' substitute for it"**

August 1979 memo by BAT on the search for a potential replacement for cigarettes

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**"We have to satisfy the 'individual' who is either about to give up or has just done so... We are searching explicitly for a socially acceptable addictive product involving:**

- **A pattern of repeated consumption.**
- **A product which is likely to involve repeated handling.**
- **The essential constituent is most likely to be nicotine or a "direct" substitute for it.**
- **The product must be non-ignitable (to eliminate inhalation of combustion products and passive smoking)."**

August 1979, 'Key Areas - Product Innovation Over Next 10 Years for Long Term Development' (BAT) [The Guardian 02/15/98](#)

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**"In a world of increased government intervention, B.A.T. should learn to look at itself as a drug company rather than as a tobacco company"**

April 1980 report, "Brainstorming II."

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**"I believe the thing we sell most is nicotine"**

August 1980 memo by a top Philip Morris scientist

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**"A cigarette is the perfect type of a perfect pleasure. It is exquisite and it leaves one unsatisfied. What more can one want."**

Oscar Wilde's 1891 novel, "The Picture of Dorian Gray," quoted by BATCO researcher, Colin C. Greig

**"Let us provide the exquisiteness and hope that they, our consumers, continue to remain unsatisfied. All we would want then is a larger bag to carry the money to the bank."**

BATCO researcher, Colin C. Greig, in a document thought to date from the early 80s

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**"Sweets or confectioneries containing nicotine carry the danger of over-dosage - nicotine is an acute poison."**

**"It does not follow that future alternative 'Product X' would sustain a profit level above most other product/ business activities unless, like tobacco, it was associated with dependence."**

"The Product in the Early 1980s," which discusses rival products if cigarettes become 'socially undesirable'

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**"Goal--Determine the minimum level of nicotine that will allow continued smoking. We hypothesize satisfaction cannot be compensated for by psychological satisfaction. At this point smokers will quit, or return to higher T&N brands."**

February 13, 1980 Lorillard memo on the RT Information Task Force from Richard E. Smith to Alexander Spears. Minnesota [Trial Exhibit #TE10170](#)

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**"The psychopharmacology of nicotine is a highly vexatious topic. It is where the action is for those doing fundamental research on smoking, and from where most likely will come significant scientific developments profoundly influencing the industry. Yet it is where our attorneys least want us to be, for two reasons. It is important to have these two reasons expressed and distinguished one from another. The first reason is the oldest and is implicit in the legal strategy employed over the years in defending corporations within the industry from the claims of heirs and estates of deceased smokers: 'We within the industry are ignorant of any relationship between smoking and disease. Within our laboratories no work is being conducted on biological systems.' That posture has moderated considerably as our attorneys of have come to acknowledge that the original carte blanche avoidance of all biological research is not required in order to plead ignorance about any pathological relationship between smoke and smoker. This is an important distinction that has been made which is -- it is well to articulate: The acute, transient, short-lived effects of nicotine upon a physiological system (among which are those effects or that effect sought by the smoker) are wholly independent of those alleged, cumulative, long-term contributions of smoke compounds to disease processes. We are now being allowed to conduct research on the immediate effects of nicotine because of this distinction."**

March 21, 1980 Philip Morris memo from William L. Dunn to then-research chief Robert B. Seligman [Trial Exhibit 26227](#) The introduction of the memo may be seen in the [April 15, 1998 Minnesota trial transcript](#)

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**"It was agreed that efforts should not be spent on designing a cigarette which, through its construction, denied the smoker the opportunity to compensate or oversmoke to any significant degree"**

1981 internal BATCo memo [AP 04/10/98](#)

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**"Higher nicotine levels can be achieved by decreasing Oriental, and the stem and tobacco sheet, and increasing the Burley and upper stalk positions of both the Flue-cured and the Burley tobacco. . . current research is directed toward increasing the nicotine levels while maintaining or marginally reducing the tar deliveries"**

1981 article by Lorillard's Alexander Spears. The article was presented to the 35th Tobacco Chemists Research Conference

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**"Let's face facts: Cigarette smoke is biologically active. Nicotine is a potent pharmacological agent. Every toxicologist, physiologist, medical doctor and most chemists know that. It's not a secret."**

1982 Memo by Philip Morris researcher Thomas Osdene

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**"Contrary to the view that PM 'lucked' into the highly successful Marlboro, many of us here hold the view that the Marlboro was a systemically designed cigarette incorporating all the results from the basic biomedical, behavioral and product research PM has conducted over a period of many years"**

1983 written draft of a presentation prepared by two R.J. Reynolds Tobacco Co. scientists [St. Paul Pioneer Press 03/13/98](#)

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**"Nicotine is the addicting agent in cigarettes"**

1983 B&W memo from A.J. Mellman

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"Raleigh and Belair smokers are addicted to smoking. . . They smoke primarily to reduce negative feeling states rather than for pleasure. Given their low income, smoking represents a financial drain on family resources. Saving coupons for household items helps reduce guilt associated with smoking"

1983 Brown & Williamson memo

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"Irrespective of the ethics involved, we should develop alternative designs [that do not invite obvious criticism] which will allow the smoker to obtain significant enhanced deliveries should he so wish"

1984 BATCo memo

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"Irrespective of the ethics involved, we should develop alternative designs (that do not invite obvious criticism) which will allow the smoker to obtain significant enhanced deliveries should he so wish."

1984 memo by scientists at the British-American Tobacco Co.

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"What we need to know above all things is what constitutes the hold of smoking, that is, to understand addiction."

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"People begin smoking

1. Peer pressure
2. To rebel/assert independence
3. To appear grown up
4. To experiment"

"Cigarette market in a kind of equilibrium

- Fed at one end by new smokers coming into the market each year as they reach smoking age
- And diminished each year by those quitting or aging out of the market"

"Believe most smokers do not smoke for 'taste'

- rather the habitual cluster of sensations they have become used to"

"Direction of switching generally in direction of lower tar

- 75% of switchers switch to a lower tar category"

"Change in tar/nicotine levels (overall strength) cause discomfort

- weaker hits leave smokers unsatisfied
- stronger hits often "taste" too strong/harsh"

Excerpts from "The Cigarette Consumer" (Philip Morris, March 20, 1984) [Trial Exhibit 11899](#) This document was discussed in the Minnesota trial on [Jan. 29, 1998](#)



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**"The report is the first in a series of studies designed to identify and characterize how nicotine derived from cigarette smoke can interact with the body, and in particular the active centers of the brain. This specific interaction is believed to form an essential element of a smoker's satisfaction. The report describes in detail the development and application of techniques to identify and characterize regions within brain tissue where nicotine can bind and elicit a pharmacological response. The general programme of study is intended to develop our understanding of the pharmacological role of nicotine within the context of human smoking behaviour. This research approach will enable us to relate smoking behaviour to the whole body distribution of nicotine and hence its subsequent pharmacological properties. The findings will be used as appropriate in the process of developing lower tar product with full smoking characteristics. No executive action is required."**

March 22, 1984 BATCo R&D report, "Receptors For Nicotine In The Central Nervous System, I RADIOLIGAND BINDING STUDIES." [Trial Exhibit 13534](#) This document was discussed in the Minnesota trial on [April 9, 1998](#) and on [January 28, 1998](#) Issued by C. I. Ayers. Author: Wilma W. Templeton. Went to: group leader G. A. Read. Distribution list included a number of other individuals at B.A.T, including doctors and others in their laboratories.

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**"[Nicotine] is considered to be the most toxic of all poisons . . . [It] is too dangerous to health to expose fire fighters."**  
Feb. 21, 1986, report by a Philip Morris USA safety official

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**"The secret of Marlboro is ammonia."**  
Scientist in 1989 Brown & Williamson Tobacco report

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**"We have shown that there are optimal nicotine deliveries for producing the most favorable physiological and behavioral responses. . . Our laboratory has demonstrated that all forms of nicotine are not behaviorally or physiologically equal. This observation is important for evaluating research cigarettes, where the addition of nicotine is necessary"**  
1990 Philip Morris research memorandum [The New York Times 03/01/98](#)

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**"there are optimal cigarette nicotine deliveries for producing the most favorable physiological and behavioral responses"**  
November 1990 memo from PM's electrophysiological studies [Richmond Times-Dispatch 05/09/98](#)

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**"We are basically in the nicotine business. . . . Effective control of nicotine in our products should equate to a significant product performance and cost advantage"**  
May 1991 R.J. Reynolds report

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**"We do not set nicotine levels for particular brands of cigarettes. ... Nicotine levels follow the tar levels. . . The correlation is an essentially perfect correlation between tar and nicotine and shows there is no manipulation of nicotine."**  
March 25, 1994 testimony before Congress by Lorillard's Alexander Spears [Greensboro News & Record 06/28/98](#)

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**"The most ill-informed are aware that tobacco is an agricultural commodity ...Manufacturers blend tobacco to try to achieve taste acceptance, brand distinction and preference within the smoker franchise."**  
April, 1994: Lorillard CEO Alexander Spears, responding to Rep. Henry Waxman's release of the article

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**Q. Are cigarettes without nicotine not successful in the marketplace for a particular reason in your view?**

**A. They don't have the taste and flavor that people desire in a cigarette."**

[Deposition of John H. Hager](#) June 28, 1997

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[Nicotine](#) / [Health](#) / [Youth](#) / [Public Suasion](#) / [Documents](#) / [Research](#) / [Legal](#) / [Government](#)

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## HEALTH

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**"Some women would prefer having smaller babies."**

Joseph Cullman, then Chairman of the Board of Philip Morris, Inc., on CBS "Face the Nation" on Jan 3, 1971. The interviewers asked Cullman if he was aware of a massive study [which] showed that babies of smoking mothers were had a greater incidence of low birth weight than non-smoking mothers, that smoking mothers had an increased risk of stillbirth and infant death within 28 days of birth. Cullman said he was aware of the study and its results.

Bates #: [1005081714/1732](#)

[Some women like it](#) PM, Jan 3, 1971

☐ 99/01/05br>

Partial transcript of a His response . . . "" . . Many of the questions asked of Cullman in this interview are still pertinent today, such as why Philip Morris continues to market promote smoking among women through the Virginia Slims tennis tournament, all the while knowing that smoking can hurt fetuses of pregnant women.

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**"[W]e have developed a cigarette system which produces smoke of reduced biological activity. The activity referred to in this context relates primarily to tumorigenicity of smoke in the skin of the mouth [of the test animal]. The animal test procedures used conform to accepted practices by investigators across the world in a number of research laboratories and institutes and are in accordance with protocols established by the National Cancer Institute. . : [O]ur experimental cigarette consists of a blend of commercial tobaccos treated with small amounts of two additives. one of these is a normal component of tobacco, especially burley tobacco, and the other is used extensively to purify automobile exhaust. Our results indicate that when these two additives are used in combination, the overall effect is greater than can be achieved with either one independently."**

July 28, 1977, memo on the palladium project by Dr. Kallianos of Liggett to Dr. Mold. The quote is contained in an August 1, 1992 Shook, Hardy document, *Draft Memorandum Between Joint Defense Members Regarding Ets Media Statement* [Bates #s 2021382482-95](#) on Page 5, [Bates # 2021382486](#) (LINKS DEAD)

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**"Starting [date], all cigarettes exported by Philip Morris contained health warnings. To the extent that those warnings are not required by local law, we have placed the rotating United States Surgeon General's warnings which are required under U. S. law. The warnings are set forth in the language of the country to which the cigarettes are being shipped."**

October 22, 1991 PM memo from Murray Bring to Michael Miles, proposing language regarding voluntary warning labels. Bates #s [2023003853](#) and [20230038534](#). The Text is [here](#)

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**"It was noted that Ammonia treatment was now being used increasingly widely. For security reasons, it was suggested that, in future, the treatment should be referred to by a code name."**

Minutes of the Tobacco Strategy Review Team (BAT) meeting held on September 17, 1990. This and other documents relating to Y-1 are [here](#)



"Y-1 Tobacco : Mr. Pritchard reported that Brown & Williamson had 2 million pounds of Y-1 tobacco and would be consumer testing cigarettes with a low tar : nicotine ratio during the Autumn. Mr. Herter reported that BATCF had samples of Y-1 which were being used in product development. Souza Cruz were testing ventilated and non-ventilated products including Y-1 and would repeat these tests after ageing Y-1 for twelve months."

Minutes of the Tobacco Strategy Review Team (BAT) meeting held on May 18, 1990. This and other documents relating to Y-1 are [here](#)

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"We tend to suffer from the sternly repressed [underscored] fear that our opponents are right and we are wrong on the health question and that we are thus devoting our business lives to the propagation of lung cancer"

"BENZPYRENE MUST GO.

This compound must be removed from Marlboro and Parliament or sharply reduced. We do this not because we think it is harmful but simply because those who are in a better position to know than ourselves suspect it may be harmful. Other ingredients that might be harmful must also go, but benzpyrene should go first because it is the one that seems to be under most suspicion at the moment. . . Act on the doctrine of uncertainty and get the benzpyrene, etc., out of the cigarettes."

April 1958 Philip Morris memorandum from CFO J.E. Lincoln to President and Vice Chairman Ross Millhiser [Trial Exhibit 10686](#)

"Chemical Carcinogens" ... "Lung Cancer: Smoking Studies" ... "Lip Cancer: Smoking Studies" ... "Chemical and Biological Investigations of Tobacco Tar and Smoke"

Titles of some reports by Alan Rodgman, a former top scientist at RJRT. [The Wall Street Journal 04/22/98](#) The reports are due to be released on the [House Commerce site](#)

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"With one exception, (H.S.N. Greene) the individuals whom we met believed that smoking causes lung cancer if by "causation" we mean any chain of events which leads finally to lung cancer and which involves smoking as an indispensable link. . . We found disagreement however as to the likely \_mechanism\_ by which smoking may cause lung cancer. . . Otherwise we found general acceptance of the view that the most likely means of causation is that tobacco smoke contains carcinogenic substances present in sufficient quantity to provide lung cancer when acting for a long time in a sensitive individual"

1958, *Report on Visit to U.S.A. and Canada, 17th April - 12th May 1958*, by H.R. Bentley, D.G.I. Felton, W.W. Reid [Trial Exhibit #TE11028](#)

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"There are biologically active materials present in cigarette tobacco. These are: a) cancer causing b) cancer promoting c) poisonous d) stimulating, pleasurable, and flavorful."

1961 "Confidential" memorandum from the consulting research firm hired by Liggett to do research for the company

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"The aim of this work is to produce a device resembling a conventional cigarette from which a human smoker can obtain a satisfying dose of nicotine without accompanying undesirable pyrolysis and combustion products."

June, 1962 BAT document, "Physical Chemical Aspects of Proposed Artificial Cigarettes" First Report of Project Ariel, by D.V.S. Williamson and H. Schachner, [Trial Exhibit 10554](#)

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"It is my conviction that nicotine is a very remarkable, beneficent drug that both helps the body to resist external stress and also can, as a result, show a pronounced tranquilizing effect. You're all aware of the very great increase in the use of artificial controls, stimulants, tranquilizers, sleeping pills, and it is a fact that under modern conditions of life people find that they cannot depend just on their subconscious reactions to meet the various environmental strains with which they are

confronted. They must have drugs available which they can take when they feel the need. Nicotine is not only a very fine drug, but the technique of administration by smoking has considerable psychological advantages"  
1962 B&W report, Sir Charles Ellis, "The Smoking and Health Problem," [Smoking And Health - Policy On Research, Research Conference, Southampton, 1962](#) McCormick, A. D. (Chairman)

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"It has been repeatedly stated that some scientists discount the cigarette smoke- lung cancer theory. This is true. But it should be noted that many of those quoted in this regard are on record with contrasting views."

"Members of the Research Department have studied in detail the cigarette smoke composition. . . Some of the findings have been published . . . However, much data remain unpublished because they are concerned with carcinogenic or cocarcinogenic compounds."

"Although the major part of the sales of this Company consists of cigarettes, what the Company sells is cigarette smoke. To maintain our first- place position against any eventuality, we should be first in acquisition of information concerning the composition and physiologic effects of cigarette smoke."

"The Evidence to Date . . . Obviously the amount of evidence accumulated to indict cigarette smoke as a health hazard is overwhelming. The evidence challenging such an indictment is scant"

1962 RJR report by Alan. Rodgman, *The Smoking and Health Problem - a critical and objective appraisal of.* [Trial Exhibit 18187](#)  
This document was discussed in the Minnesota trial on [Jan. 29, 1998](#) on [March 6, 1998](#), on [March 30, 1998](#), on [March 31, 1998](#)

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"During the past two decades, cigarette smoke has been the target of a host of studies relating to ill-health and particularly to lung cancer. The majority of these studies incriminate cigarette smoke from a health viewpoint."

"Members of this Research Department have studied in detail cigarette smoke composition. Some of these findings have been published. However, much data remains unpublished because they are concerned with carcinogenic and cocarcinogenic compounds. This raises an interesting question about the former compounds. If a tobacco company pled 'Not guilty' or 'Not proven' to the charge that cigarette smoke (or one of its constituents) is an etiological factor in the causation of lung cancer or some other disease, can the company justifiably assume the position that publication of data pertaining to cigarette smoke composition or physiologic properties should be withheld because such data might affect adversely the company's economic status when the company has already implied in its plea that no such etiologic effect exists?"

1962 RJR report by Alan. Rodgman, *The Smoking and Health Problem - a critical and objective appraisal of.* (Page 13) [Trial Exhibit](#) This document was discussed in the Minnesota trial on [Jan. 29, 1998](#)

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"Basically, we accept the inference of a causal relationship between the chemical properties of ingested tobacco smoke and the development of carcinoma, which is suggested by the statistical association shown in the studies of Doll and Hill, Horn, and Dorn with some reservations and qualifi- cations and even estimate by how much the incidence of cancer may possibly be reduced if the carcino- genic matter can be diminished, by an appropriate filter, by a given percentage"

1963 memorandum from the consulting research firm hired by Liggett to do research for the company

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"Wakeham [Dr. Helmut H. Wakeham, Philip Morris Vice-President and Director of Research & Development] said that there was an association between chewing tobacco and cancer of the mouth in U.S.A. and India. Therefore the carcinogens in smoke might not all be the result of pyrolysis. Moore was looking into the carcinogens present in tobacco"

"Mice painted with nil nicotine cigarettes and neutral fraction lived longer, owing to reduced toxicity. L&M preferred not to reveal how they produced nil nicotine cigarettes on the grounds that it was a "commercial process"



"The charcoal filter, according to Darkis [Dr. Fred R. Darkis, former VP and Director of Research, now part-time adviser for Liggett & Myers], does nothing for cancer but in general, the reduction in gas it effects could not but be good for health"

"Mr. Coulson [D.L. Coulson of the Imperial Tobacco Co.] said that tobacco was not included in the Miller Act (and its amendments) that regulated the issue of labels for food and cosmetic additives. Endrin(sp?) has had disastrous effects: drainage of this from land into rivers had killed fish. Its use on tobacco had been discontinued. A Committee had been formed to deal with additives to tobacco and in particular to determine residues and their carcinogenicity."

*Visit to USA Sept.-Oct. 1964; Report on Research into Smoking and Health*, Philip J. Rogers and Geoffrey F. Todd, Tobacco Research Council (United Kingdom) (1964) [Trial Exhibit #TE11027](#)

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"Instituting a biological program today will be argued to be an implied admission that the company believes it has not in the past been doing all it could and should have been doing to find the scientific facts respecting tobacco use and health"  
1965 memo to Cyril Hesco, vice president and general counsel for American Tobacco by attorney Janet Brown [St. Paul Pioneer Press 02/11/98](#)

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"The animals received up to 500 cigarettes and emphysema was produced"  
1969 Philip Morris memo quoting a Reynolds research executive [Minneapolis-St. Paul Star Tribune 03/13/98](#)

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"One of the striking features of the Auerbach experiment was that practically every dog which smoked suffered significantly from the effects of the smoke either in terms of severe irritation and bronchitis, pre-cancerous changes or cancer."

"[W]e believe that the Auerbach work proves beyond reasonable doubt that fresh whole cigarette smoke is carcinogenic to dog lungs and therefore it is highly likely that it is carcinogenic to human lungs"

"[T]he results of the research would appear to us to remove the controversy regarding the causation of human lung cancer although it does not help us directly with the problem of how to modify our cigarettes."

April 3, 1970 Gallaher memo by company research manager to the head of Gallaher Ltd., American Tobacco 's British-based sister company.

[Trial Exhibit 21,905.](#)

The memo is the subject of [Amid Millions Of Tobacco Documents, A Single One Stands Out](#) Minneapolis-St. Paul Star Tribune [Electronic Telegraph 03/16/98](#)  
[PA 03/15/98](#)

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"I would say that the experiment is a crude one but effective in that carcinoma in dogs has been produced. . . The crux of the situation is whether there is general agreement by qualified pathologists that carcinoma, squamous cell carcinoma has indeed been produced. And even if the cancer-production is invalidated the obvious emphysema produced cannot be denied."

Feb. 25, 1970 Philip Morris memo, "Auerbach's Smoking Beagles," by R. Fagan [Trial Exhibit](#) TE10387

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"[A]ll of you should be aware that an organization with strong scientific credentials is putting abroad a theory which links the presence of Freon and the heat from burning cigarettes with lung poisoning."

"Legionnaires' Disease and Cigarettes Dec. 17, 1976" [The Wall Street Journal 04/28/98](#)

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"I have become more and more convinced that we should not conduct any longevity studies with animals. It appears to me that even positive results would be meaningless in light of the human experience where statistical evidence indicates that longevity is adversely affected by smoking"

December 21, 1976 PM document, "Longevity Study with Animals," from Dr. Seligman to Jett Lincoln [Trial Exhibit 11470](#)

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"The trend toward low tar cigarettes necessitates that ways be found to maintain nicotine satisfaction for the smokers of these new brands. We feel that alternatives to nicotine enrichment of the tobacco need to be explored. One method--air dilution filters--has already proven of value. Another approach would be to add to tobacco bases having a greater base strength than nicotine. Such a tobacco treatment might be useful if it resulted in either a greater efficiency of nicotine delivery or an increased smoke pH. An increased smoke pH would liberate nicotine free base from its salts to give a greater chest impact. The present work has been directed towards the use of gaseous ammonia for such a tobacco treatment. Gaseous ammonia is an advantage over non-gaseous treatment of tobacco in that it could be introduced easily during cigarette manufacture through the Vacudyne unit used to condition tobacco before blending and cutting."

April 18th, 1977 Lorillard memo, "Gas Phase Ammoniation of Tobacco," by Paul D. Schickendantz, with a carbon copy to Dr. Minnemeyer [Trial Exhibit #TE 10101](#)

"Techniques are needed for adequately (sic) estimating the amount of ammonia to be added to the tobacco, as well as a method for determining the amount actually retained by the tobacco. Weighing by difference before and after ammoniation might be used."

April 18th, 1977 Lorillard memo, "Gas Phase Ammoniation of Tobacco," by Paul D. Schickendantz, with a carbon copy to Dr. Minnemeyer [Trial Exhibit #TE 10101](#)

"An estimate of a reasonable level of ammonia to add can be determined, for a start, from the optimum amount of free nicotine which might be acceptable in the smoke, an assumed pH target, and a known relationship between ammonia content and smoke pH. From Table 1, it can be seen for a number of competitive cigarette brands that the smoke pH ranges from 6.35 to 8.00 while the free nicotine is between 0.01 and 0.16 mg/cigarette."

April 18th, 1977 Lorillard memo, "Gas Phase Ammoniation of Tobacco," by Paul D. Schickendantz, with a carbon copy to Dr. Minnemeyer [Trial Exhibit #TE 10101](#)

"The promising report from the group flavor panel with the highly ammoniated (1.3%) Burley tobacco gives credence to the argument that the undesirable taste previously associated with ammoniated tobacco are a result of the ammonia-sugar reaction with sugar containing tobaccos. In view of this, more studies are needed to determine the relationship between the ammonia level, smoke pH and smoke nicotine for various types of tobacco. Such information would be useful in preparing cigarettes which have a high enough but not too high level of free nicotine in the smoke. The same arguments that were given for using ammonia to increase the smoke pH and nicotine effectiveness hold just as well for strongly basic alkylamines. Some alkylamines, which are even stronger bases than ammonia and should have even less of the free base in the smoke to give an unpleasant taste, include: methylamine, di-methylamine, dipropylamine and diisopropylamine."

April 18th, 1977 Lorillard memo, "Gas Phase Ammoniation of Tobacco," by Paul D. Schickendantz, with a carbon copy to Dr. Minnemeyer [Trial Exhibit #TE 10101](#)

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Let's face the facts:

1. Cigarette smoke is biologically active.

- A. Nicotine is a potent pharmacological agent. Every toxicologist, physiologist, medical doctor and most chemists know that. It's not a secret.
- B. Cigarette smoke condensate applied to the backs of mice cause tumors.
- C. Hydrogen cyanide is a potent inhibitor of cytochrome oxidase--a crucial enzyme in the energy metabolism of all cells.
- D. Oxides of nitrogen are important in nitrosamine formation. Nitrosamines as a class are potent carcinogens.
- E. Tobacco-specific nonvolatile nitrosamines are present in significant amounts in cigarette smoke.
- F. Acrolein is a potent eye irritant and is very toxic to cells. Acrolein is in cigarette smoke.
- G. Polonium-210 is present in cigarette smoke.



**H. We know very little about the biological activity of sidestream smoke.**

**I. We do not know enough about the biological activity of additives which have been in use for a number of years.**

February 23, 1982 B&W memo, *Comments on "Future Strategies for the Changing Cigarette"* from J. L. Charles, manager of the biochemistry group/vice-president of research, to Thomas Osdene, director of research. [Trial Exhibit #TE10523](#)

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**"In addition to these effects noted in the animal studies, it is considered that the respiratory and cardiovascular evidence from humans gives rise for considerable concern"**

1984 memorandum from BAT Co. [Minneapolis-St. Paul Star Tribune 04/02/98](#)

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**"It is recommended that the use of Freon 11 in tobacco products should be phased out as quickly as practicable"**

March 1984 B.A.T Co. Ltd document

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**"A few whiffs of the vapor could cause death. . . Also vapor or liquid could be fatal on penetrating clothing. . . The material should be stored in a cool, well-ventilated place, out of direct sun rays, away from areas of high fire hazard, and should be periodically inspected and monitored."**

Feb. 21, 1986, report by a Philip Morris USA safety official

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**"L-phellandrene Reported skin tumor promoter in rodents, reported to produce allergic reactions and reported mutagen."**

April 8, 1987 RJR document, ["Priority Ingredients"](#) from Dr. Scott Appleton to Ms. Suzanne Jowdy. "The document appears to be the first to surface in which a cigarette maker has linked specific additives to potential health problems." [The Wall Street Journal 06/09/98](#)

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**"An excessive quantity of tomato juice would have done that, as I recall . . . "**

August 19, 1997. American Tobacco Co. CEO Donald Johnston on Wynder's 1953 study in which tobacco tars, painted on the backs of mice, produced tumors in 44% of the animals.

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[Nicotine](#) / [Health](#) / [Youth](#) / [Public Suasion](#) / [Documents](#) / [Research](#) / [Legal](#) / [Government](#)

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## YOUTH

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☞ 07/12/98 [Hot Quotes: Youth Marketing Quotes \(From Documents Submitted directly to the Jury March 13, 1998\)](#) MN AG site

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**"We have never raised any objection to the use of our labels feeling, for your more or less private information, that it is not too bad an advertisement"**

1946 letter from then-B&W lawyer Addison Yeaman to a candy-cigarette manufacturer. The document surfaced in the Iowa suit. [The Wall Street Journal 07/17/98](#)

**"[T]he base of our business are high school students."**

Lorillard Tobacco memo

**"Given their age and environmental/economic conditions, target young adult smokers have limited disposable incomes"**  
Camel Brand Promotional Opportunities

**"The studies reported on youngsters' motivation for starting, their brand preferences, etc., as well as the starting behavior of children as young as 5 years old. . . The studies examined examination [sic] of young smokers' attitudes towards 'addiction,' and contain multiple references to how very young smokers at first believe they cannot become addicted, only to later discover, to their regret, that they are."**

"Apparently Problematic Research," a B&W document which Judge FitzPatrick said was placed in an advertising category, instead of one relating to minors [Minneapolis-St. Paul Star Tribune 03/08/98](#)

**"[Jack Daniels' merchandizing campaign is] an example of a viable positioning executed in a 'nonstandard' but authentic and unpretentious way, which not only reached [younger adult] consumers, but converted [younger adults] into walking billboards."**

RJR report on how to increase Camel's market share [Minneapolis-St. Paul Star Tribune 03/25/98](#)

**"starting [smoking] behavior of children as young as 5 years old"**

Undated company document describing such research [LA Times 04/07/98](#)

**"The industry does not . . . concede that cigarettes are unreasonably dangerous to anyone, young or old. The position in effect merely says that, out of a decent respect for the opinions of persons concerned about children taking up controversial habits, the industry does not direct cigarette promotions at people under 21"**

BAT memo from senior vice president and general counsel Ernest Pepples

**"Unlike the anti-smoking zealots, I am unwilling to assume that a significant correlation necessarily implies causality, but given that there is such a thing as a 'sensation-seeking personality,' and that cigarette smoking has been a characteristic of that personality type, it seems not unreasonable that impressionable high school students could consider drugs to be a viable alternative to cigarettes. If this is the case, the major beneficiaries of the anti-smoking campaigns would appear to be the drug pushers."**

"Trends in Smoking Among High School Seniors," a 27-page Philip Morris memo by Myron Johnston [St. Paul Pioneer Press 04/25/98](#)

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**"We are not suggesting that the effect of nicotine is responsible for the initiation of the habit. To the contrary. The first cigarette is a noxious experience to the novice (sic). To account for the fact that the beginning smoker will tolerate the unpleasantness we must invoke a psychosocial motive. Smoking a cigarette for the beginner is a symbolic act. The smoker is telling his world, "This is the kind of person I am." Surely that there are many variations of the theme, 'I am no longer my mother's child, I'm tough, I am an adventurer[? Nearest guess to corrected draft], I'm not square.' Whatever the individual intent, the act of smoking remains a symbolic declaration of personal identity. . . As the force from the psychological symbolism subsides, the pharmacological effect takes over to sustain the habit, augmented by the secondary gratifications."**  
Fall, 1969 Philip Morris draft report by Thomas Osden, then VP of Research and Development, to the board of directors, "Why One Smokes." Minnesota Trial Exhibit 3681 Bates # 1003287036-48

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**"It's a well-known fact that teen-agers like sweet products. Honey might be considered"**

1972 Brown & Williamson memo, among documents released by U.S. Rep. John Conyers in Feb., 1998

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**"[C]omic strip type copy might get a much higher readership among younger people than any other type of copy."**

April, 1973 RJR marketing memo. [Trial Exhibit 24144](#)

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"KOOL has shown little or no growth in share of users in the 26+ age group. Growth is from 16-25 year olds . . . at the present rate, a smoker in the 16-25 year age group will soon be three times as important to KOOL as a prospect in any other broad age category."

1973 Brown & Williamson memo [Washington Post 02/05/98](#)

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"Because brands of the new type continue to show vigorous growth in sales; because a high proportion of beginning smokers are learning to like Marlboro, the leading brand of the new type; and because we have no current brand in this newly identified, major segment of the market; it has become appropriate for us to consider moving our present brands in the direction of the new type of cigarette"

1973 memo from Claude E. Teague, RJR assistant director of research and development [The New York Times 02/23/98](#)

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"KOOL'S stake in the 16- to 25-year-old population segment is such that the value of this audience should be accurately weighted and reflected in current media programs. As a result, all magazines will be reviewed to see how efficiently they reach this group and other groups as well"

1973 B&W memo, by R. L. Johnson, brand manager, to executive VP Pittman [Trial Exhibit #TE 13820](#)

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"Pre-smokers"

Interesting term in 1973 draft paper, written by R. J. Reynolds' research planning department [Scripps Howard 03/30/98](#)

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"They represent tomorrow's cigarette business. . . As this 14-24 age group matures, they will account for a key share of the total cigarette volume -- for at least the next 25 years."

1974 R.J. Reynolds Tobacco Co. marketing plan presented to the company's board of directors

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"We are not sure that anything can be done to halt a major exodus if one gets going among the young. This group follows the crowd, and we don't pretend to know what gets them going for one thing or another . . . Certainly Philip Morris should continue efforts for Marlboro in the youth market, but perhaps as strongly as possible aimed at the white market rather than attempting to encompass blacks as well."

1974 Philip Morris document

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"Marlboro's phenomenal growth rate in the past has been attributable in large part to our high market penetration among young smokers ... 15 to 19 years old . . . my own data, which includes younger teenagers, shows even higher Marlboro market penetration among 15-17-year-olds."

"The teen-age years are also important because those are the years during which most smokers begin to smoke, the years in which initial brand selections are made, and the period in the life-cycle in which conformity to peer-group norms is greatest"

1975 report from PM researcher Myron E. Johnston to Robert B. Seligman [Richmond Times-Dispatch 05/09/98](#)

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"Our attached recommendation to expand nationally the successfully tested 'Meet the Turk' ad campaign and new Marlboro-type blend is another step to meet our marketing objective: To increase our young adult franchise. To ensure increased and longer-term growth for CAMEL FILTER, the brand must increase its share penetration among the 14-24 age

**group which have a new set of more liberal values and which represent tomorrow's cigarette business."**

January 23, 1975 RJR memo from Mr. C.A. Tucker [St. Paul Pioneer Press 03/12/98](#)

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**"Evidence is now available to indicate that the 14-to-18- year-old group is an increasing segment of the smoking population. RJR-T must soon establish a successful new brand in this market if our position in the industry is to be maintained over the long term."**

1976 Claude Teague draft report, "Planning Assumptions and Forecast for the Period 1977-1986 for R.J. Reynolds Tobacco Company."

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**"Our people have been asked a couple of times why, if the cigarette companies do not want to promote smoking among young people, they allow candy cigarette manufacturers to use their brand names"**

November 1976 memo from William Kloepper Jr., a senior vice president with the Tobacco Institute, to Arthur Stevens, Lorillard's vice president and general counsel [The Wall Street Journal 04/23/98](#)

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**"However intriguing smoking was at 11, 12, or 13, by the age of 16 or 17 many regretted their use of cigarettes for health reasons and because they feel unable to stop smoking when they want to . . . Over half claim they want to quit. However, they cannot quit any easier than adults can"**

"Project 16". By Kwechansky Marketing Research Inc. Report for Imperial Tobacco Limited. Montreal: 1977.

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**"The adolescent seeks to display his new urge for independence with a symbol, and cigarettes are such a symbol since they are associated with adulthood and at the same time adults seek to deny them to the young."**

**"Since how the beginning smoker feels today has implications for the future of the industry, it follows that a study of this area would be of much interest. Project 16 was designed to do exactly that --learn everything there was to learn about how smoking begins, how high school students feel about being smokers, and how they foresee their use of tobacco in the future."**

**"Serious efforts to learn to smoke occur between ages 12 and 13 in most cases."**

**"Ads for teenagers must be denoted by lack of artificiality, and a sense of honesty"**

"Project 16," Oct. 18, 1977 Kwechansky Marketing Research Inc. Report for Imperial Tobacco Limited

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**"Smoking during pregnancy interferes with fetal development, and even if the mother is only exposed to smoke-filled rooms she will produce smaller babies and will have a one-third greater chance than a non-smoking mother of giving birth to a stillborn. The reason is nicotine constricts fetal blood vessels."**

Feb. 9, 1977 B&W file note, "Book Summary: *The Greatest Battle* by Ronald J. Glasser, M.D. (Random House, 1976)" Bates Nos: 690009054-9065

**"Our profile taken locally shows this brand being purchased by black people (all ages), young adults (usually college age), but the base of our business is the high school student"**

1978 Lorillard memo from T.L. Achey to Curtis Judge, CEO of Lorillard about the "fantastic success" of Newport [Trial Exhibit #TE 10195](#) Bates Numbers: [03537131/7132](#).



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**"the base of our business is the high school student ... It is the 'in' brand to smoke if you want to be one of the group"**

Aug. 30, 1978 Lorillard memo from executive T.L. Achey wrote to former Lorillard President Curtis Judge [Greensboro News & Record 06/28/98](#)

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**"They [Philip Morris] believe the industry should not show 'gratification' at news that smoking among children is trending down or express the view that children should not smoke"**

May 1979 BAT memo from senior vice president and general counsel Ernest Pepples to the industry's "committee of counsel" [St. Paul Pioneer Press 04/24/98](#)

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**"Marlboro dominates in the 17 and younger category, capturing over 50 percent of this market"**

1979 Philip Morris memo [Minneapolis-St. Paul Star Tribune 04/25/98](#)

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**"Consider also that in 1967, for one dollar, a teen-ager could buy two gallons of gasoline and a pack of cigarettes . . . this was no longer possible for the 1979 teen-ager, and the 1980 teen-ager could not even afford the two gallons of gasoline. I think it is more than coincidental that the sharpest declines in smoking prevalence among teen-age males occurred in 1979 and 1980, the years in which the price of gasoline rose most sharply. When it comes to a choice between smoking cigarettes or cruising around in his car, the average teen-age male would probably choose the latter"**

**"Today's teen-ager is tomorrow's potential regular customer. . . The smoking patterns of teen-agers are particularly important to Philip Morris. . . the share index is highest in the youngest group for all Marlboro and Virginia Slims packings"**

1981 report sent from researcher Myron E. Johnston to Robert B. Seligman, then vice president of research and development at Philip Morris in Richmond. [Richmond Times-Dispatch 05/09/98](#)

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**"We will no longer be able to rely on a rapidly increasing pool of teenagers from which to replace smokers through lost normal attrition. . . Because of our high share of the market among the youngest smokers Philip Morris will suffer more than the other companies from the decline in the number of teenage smokers."**

1981 report sent from researcher Myron E. Johnston to Robert B. Seligman, then vice president of research and development at Philip Morris in Richmond.

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**"It is hypothesized that very young starter smokers choose Export 'A' because it provides them with an instant badge of masculinity, appeals to their rebellious nature and establishes their position amongst their peers"**

March 22, 1982 RJR-Macdonald Inc Export Family Strategy Document

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**"It is the case that most of those who become smokers do so in their teens, but this is by no means to say that the teen years are when young people first try cigarettes. In fact, many, the males in particular, dabble at smoking well before adolescence. That very first smoke, in a number of cases, took place between the ages of 9 and 12 or 13."**

1982, "Project Plus/Minus". By Kwechansky Marketing Research Inc. Report for Imperial Tobacco Limited. Montreal: 1982. [Minneapolis-St. Paul Star Tribune 05/06/98](#) Here's the full report: [Project Plus/Minus](#) Report for ITL by Kwechansky Marketing [952 Kb]

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**"Believe it or not, I had my first cigarette when I was in kindergarten"**

1982, "Project Plus/Minus". By Kwechansky Marketing Research Inc. Report for Imperial Tobacco Limited. Montreal: 1982. [Minneapolis-St. Paul Star Tribune 05/06/98](#) Here's the full report: [Project Plus/Minus](#) Report for ITL by Kwechansky Marketing [952 Kb]

**"[T]he desire to quit seems to come earlier now than ever before, even prior to the end of high school. In fact, it often seems to take hold as soon as the recent starter admits to himself that he is hooked on smoking. However the desire to quit and actually carrying it out, are two quite different things, as the would-be quitter soon learns."**

[Project Plus/Minus](#) Report for ITL by Kwechansky Marketing [952 Kb] Report for Imperial Tobacco Limited. Montreal: 1982.

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**"[Brown & Williamson] will not support a youth smoking program which discourages young people from smoking."**

1983 Tobacco Institute memo [US News 05/04/98](#)

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**"I have just received data on the graduating class of 1982 and the results are much more encouraging and corroborate the Roper data [a survey that tracked track smoking trends] . . . These data show that smoking prevalence among these 18-year-old high school seniors has increased from 1981 to 1982."**

Philip Morris interoffice memo, Feb. 18, 1983. [Minneapolis-St. Paul Star Tribune 03/14/98](#)

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**"I wish I had never began smoking"**

1984 Philip Morris document that said more than 85 percent of smokers agree strongly or very strongly with the statement. [CNN 03/16/98](#)

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**"Kool is successfully attracting new smokers." [Defined by B&W as a group between 16- and 25-years-old]**

1984 Brown & Williamson advertising agency report

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**"Younger adult smokers have been the critical factor in the growth and decline of every major brand and company over the last 50 years. They will continue to be just as important to brands/companies in the future for two simple reasons: The renewal of the market stems almost entirely from 18-year-old smokers. No more than 5 percent of smokers start after age 24. [And] the brand loyalty of 18-year-old smokers far outweighs any tendency to switch with age... Brands/companies which fail to attract their fair share of younger adult smokers face an uphill battle. They must achieve net switching gains every year to merely hold share... Younger adult smokers are the only source of replacement smokers... If younger adults turn away from smoking, the industry must decline, just as a population which does not give birth will eventually dwindle."**

February 29, 1984 RJR document, "Young Adult Smokers: Strategies and Opportunities"

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**"Overall, Camel advertising will be directed toward using peer acceptance/influence to provide the motivation for target smokers to select Camel"**

1986 RJR Nabisco document [Dow Jones 03/10/98](#)

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"[Advertising should] create the perception that Camel smokers are non-conformist, self-confident and project a cool attitude which is admired by their peers. . . This approach will capitalize on the ubiquitous nature of Marlboro by repositioning it as the epitome of conformity, versus Camel the smoke of the cool/in-group"  
1986 memo by Rick Caufield, an employee of Reynolds' Brand Group [Minneapolis-St. Paul Star Tribune 04/05/98](#)

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"real laid back. . . . He's kind of a `90s role model for young guys. . . . What guy wouldn't want to live like him -- be like him? . . . Joe's so cool `cause he's real weird looking, but he does so many neat things . . . Joe's so totally something else that I just like him. . . . It sounds weird, but even though he's not real -- he's a good role model."  
1991 RJR focus group comments [St. Paul Pioneer Press](#)

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"To ignore the impudence of the Camel could also be gambling with the entry level smoker and the future of the Marlboro franchise "  
1992 New York advertising agency report done for Philip Morris [Minneapolis-St. Paul Star Tribune 04/05/98](#)

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[Nicotine](#) / [Health](#) / [Youth](#) / [Public Suasion](#) / [Documents](#) / [Research](#) / [Legal](#) / [Government](#)

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#### Public Suasion

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##### ☐ Individual Rights

- Sarah Weddington--The Texas attorney who argued Roe vs. Wade, Weddington could speak in support of freedom of choice and individual rights.

##### ☐ Discrimination

- Julian Bond--Civil rights activist and former Georgia politician, Bond might speak out against anti-smoker efforts that suggest that minorities are more susceptible to corporate advertising and promotional dollars.
- Hazel Dukes--Civil rights activist and NAACP official, Dukes also could attack suggestions that minorities are being "targeted" by corporate America."

This document may be found at [Tobacco Institute Document Site](#) ID #S: TIMN0371863/1866 ("CELEBRITY" SPOKESMAN PROJECT," The Tobacco Institute, August, 1990)

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☐ Corbin Bernsen--LA Law actor--was the celebrity spokesman for the launch ofr PM's "Cartier" last winter. At a desk, in a suit, within a thoughtful, "legalistic" environment, Bernsen could address fairness, "minority" interests and the freedom from state-sponsored harrassment that everyone deserves . . . but some aren't getting.

☐ Martina Navratilova--tennis star who doesn't smoke but prior press comments indicate she's very open-minded about the issue (and not afraid to voice her opinion.)

☐ FYI--Other famous smokers: Lauren Bacall Jamie Lee Curtis Jerry Ford Robert Mitchum Jackie Onassis"

This document may be found at [Tobacco Institute Document Site](#) ID #S: TIMN0408836/8837 ("POSSIBLE CELEBRITY SPOKESPERSONS" Draft, undated, unattributed.)

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☐ Linda Ellerbee--A smoker, she is very angry at the press for the attacks on her for the Maxwell House commercials and may be willing to lash back at her critics.

☐ Helen Gurley Brown--Has signaled some concern over Molly Yard's focus on tobacco.

☐ Jimmy Breslin--He is very outspoken about almost anything and always interested in making money. He also smokes cigars.

☐ Ted Turner--He seeks publicity and is a defender of freedom of speech. He may have done a Davidoff print ad. He may be too high profile and difficult to control (since money is probably not a concern)."

This document may be found at [Tobacco Institute Document Site](#) ID #S: TIMN0408832/8833 ("POSSIBLE CELEBRITY SPOKESPERSONS," James Moeller, Ogilvy & Mather, to Susan Stuntz, TI. April 20, 1990)

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[The below documents are discussed in

[Wanted: Stars for tobacco PR campaign](#) St. Paul (MN) Pioneer Press]

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"Further to our meeting on 9 June 1993, I contacted John Luik to invite his comments on the two options for publication that are now open to us . . . I reiterated our reservation that the full paper may be too long, either to attract commitment to publication from an appropriate publisher or for optimum impact upon publication. In his reply, Luik expresses a strong preference nevertheless for attempting to have the full paper published as one piece in a respected journal. He says that despite the careful surgery performed by John Rupp and himself, the "Tokyo" paper is too sketchy"

June 22, 1993 memo, J. C. Luik's "Pandora's Box" paper, from John Lepere, Chairman of the Confederation Of European Community Cigarette Manufacturers, to members. [Bates #s 2501139681/9682](#) Any relation to the "R. Luik" cc'd in this letter of March 7, 1968? [Bates # 2049422341](#)

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"There are many research projects that the industry could spend money on--cancer, heart, respiratory diseases--but our money should be spent to produce results. Not necessarily confined to smoking and health per se, but on some of the new promising developments which are beginning to point up other factors relating to disease. These would take away the burden now laid on smoking. Look for areas where the results will relieve the pressures on the industry. For example, study the kind of people who smoke to identify differences from non-smokers which would explain the statistical association. Research in this area looks promising"

Bill Shinn, in March 13, 1972 Tobacco Institute meeting (Bates #s 50004925-28). The text is [here](#).

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"We expect plaintiffs to argue that CTR was a fraud, created not to conduct relevant research, but to further political, legal and public relations aims. In addition, plaintiffs may assert that Brown & Williamson and the industry conspired with CTR to mislead the public concerning smoking and health.

"Specifically, plaintiffs may claim that through CTR the industry conspired to refute, undermine, and neutralize all information coming from the scientific and medical community about the health hazards of smoking while at the same time over-promoting those few studies which suggested that smoking was not harmful. The end result of this conspiracy, according to plaintiffs, was to reassure smokers that 'nothing had been proven' and thereby encourage them to continue smoking and to encourage new smokers to begin smoking."

October, 1991 Shook, Hardy document, " BROWN & WILLIAMSON -- COUNCIL FOR TOBACCO RESEARCH CTR NOTEBOOK" (Bates #s 682631909-2261 (353 pp)) Text of the first 36 pp is [here](#)

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"Let's go to Washington and hear from the Chairman of the Tobacco Institute, the organization which represents tobacco companies: Horace Kornegay.

CAMERA MOVES TO MONITOR WITH KORNEGAY.

KORNEGAY (SYNC): We don't know [if cigarette smoking causes lung cancer], nobody does. But, as an industry, we've spent

more than any non-governmental agency trying to find out, more than the American Cancer Society and Lung Association combined. We have one position and that's all: there is a clear need for answers and carefully conducted research is the only way we're going to get answers. . . We do know that a lot of folks feel that all of the answers are known, that cigarette smoking does cause cancer. We know that a lot of people consider it a closed subject. But that's all the more reason for us to fund serious research. It's the right thing, the constructive thing to do. . .

DICK (SYNC): Cigarette smoking and lung cancer? Is it a closed book? No. It is one of many scientific mysteries yet to be solved. . .

CLOSING CREDITS SUPERED OVER LS SET IN DIM LIGHT.

CREDITS MUST INCLUDE FIRST AMENDMENT STATEMENT."

May 24, 1982 RJR DRAFT, "UNTITLED" (Film on Smoking and Lung Cancer) [Bates #s 500888775 - 8792](#) The text is [here](#)

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"The industry also funded a project at UCLA Medical School, but only after the Medical School reassured the industry that nothing damaging to the industry would be discovered. . . The least damaging response to the Huber and UCLA issues is a matter-of-fact attitude. The substance of the studies conducted by these researchers is favorable to the tobacco companies' position. Thus, unless the defendants give plaintiffs credibility issues by denying what they know about the outside studies, the issue marginally helps defendant."

Undated RJR report, *Corporate Activity Project*, prepared by outside law firm Jones, Day, Reavis & Pogue. The document was released in the Washington Medicaid suit June, 1998. Here's the June 11, 1998 PR from the [Washington AG Office](#) You can download the 23 Mg TIFF file (Bates # 681879254) [here](#)

"[I]t is impossible to overlook the fact that some of the industry's advertising has come in for serious public criticism because of emphasis on health aspects of smoking. . . it must be recognized that some of the advertising may have created a degree of skepticism in the public mind which at the start at least could affect the believability of any public relations effort"

"10. Radio and Television. Millions of people are informed and their attitudes influenced by radio and television. It will be important to keep commentators and other key people in broadcasting aware of the Committee's existence and of any facts it may assemble. . . Moreover, the Committee should be on the alert for public discussion programs where spokesmen for the facts as the Committee sees them might be welcome. . . Plans should be explored for giving attention to the positive aspects of smoking through motion pictures suitable for television use as well as group showings."

December 24, 1953 Hill and Knowlton memo, [PRELIMINARY RECOMMENDATIONS FOR CIGARETTE MANUFACTURERS](#)

A blueprint for waging the tobacco war, in text format

This 9 page document may be viewed at [Frontline: The Cigarette Papers](#)

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"Because of the grave nature of a number of recently highly publicized research reports on the effects of cigarette smoking, widespread public interest has developed, causing great concern within and without the industry. These developments have confronted the industry with a serious problem of public relations. Obviously, that problem would be quickly solved if the adverse publicity would cease and people would stop talking about the whole matter."

"[T]here is no evidence that the publicity has abated, or is about to abate, or that the research workers who are critical of cigarettes are going to cease these criticisms. . . There is nothing the manufacturers can say or refrain from saying that can stop people from being interested in their health. . . The situation is one of extreme delicacy There is much at stake and the industry group, in moving into the field of public relations, needs to exercise great care not to add fuel to the flames"

December 24, 1953 Hill and Knowlton memo, [PRELIMINARY RECOMMENDATIONS FOR CIGARETTE MANUFACTURERS](#)

A blueprint for waging the tobacco war, in text format

This 9 page document may be viewed at [Frontline: The Cigarette Papers](#)

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"As regards the media, we plan to build similar relationships to those we now have with Murdoch's News Limited with other newspaper proprietors. Murdoch's papers rarely publish anti-smoking articles these days"

March 29, 1985 appendix by a PM exec to *The Perspective of PM International on Smoking and Health Issues: Text of the discussion document used at the meeting of top management* (Bates #2023268329) [Mother Jones 08/25/98](#)

"The two most valuable lessons from this experience, which should be applicable to almost any type of marketing response project, concern the use of phone calls in conjunction with direct mail. The first is that phone calls have a tremendous impact on mail recall. . . The other lesson from this project is that telephone calls dramatically increase the average response time in terms of receiving mail back."

December 9, 1994 report, [Lessons from Proposition 188](#), from Mike Meyers, Michael D. Meyers Company, Inc., to David Laufer and Sid Stitzenberger, The Dolphin Group

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"[T]here are two complicating factors that make it difficult to explain the discrepancy between the number of voters who promised to sign a petition and the number who actually returned a signed petition. The first was the barrage of negative publicity in the middle of the signature gathering process. The empirical evidence regarding the impact of this adverse coverage is that more than 30% of the voters contacted by the follow-up phone program reported that they had changed their mind about signing."

December 9, 1994 report, [Lessons from Proposition 188](#), from Mike Meyers, Michael D. Meyers Company, Inc., to David Laufer and Sid Stitzenberger, The Dolphin Group

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#### "What We Did Right

- Utilized the proper criteria of previous turnout history, household composition, etc. to identify likely voters. Our principal target universe of non-smokers was comprised of the top 62% of likely voters. . .
- Pretested most of the mail. Focus group reaction to conceptals was extremely helpful in terms of fine tuning creative approach for pieces that worked and, perhaps more importantly, indentifying conceptals that were clearly off the mark."

December 9, 1994 report, [Lessons from Proposition 188](#), from Mike Meyers, Michael D. Meyers Company, Inc., to David Laufer and Sid Stitzenberger, The Dolphin Group

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"Dear Dr. Colby, I have much pleasure in enclosing a preprint of the talk I gave in Lexington last November. I apologise for the delay in sending it to you. I was interested to hear about your collection of tobacco literature\* and I am grateful to you for your offer of assistance should this be required."

February 16, 1976 letter from Alan K. Armitage, Scientific Director, Hazelton Laboratories Europe (now [Covance Laboratories](#)), to Dr. F. G. Colby, Manager, Science Information R. J. Reynolds Tobacco Company.

The graphic image of the original document may be viewed on the [RJ Reynolds Site](#) as a TIFF file, or [here](#) as a smaller gif file. The full text is [here](#)

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"Confirming our telephone conversation earlier today, Hazelton will amend the smoking policy at its Madison facility to be consistent with the practices in effect at other Hazelton locations. Namely, those of our Hazelton Wisconsin employees who wish to smoke will be able to do so, both in specified locations within the building and outside the building but on the site. . . We have approached these changes in the context of the broad business relationship which exists between RJR/Nabisco and Hazelton . . . We hope this is seen as constructive and as a commitment on our part to see all aspects of the relationship flourish"

March 11, 1991 letter from William C. Neely, VP of Hazelton Corporation (now [Covance Laboratories](#)), to Dr. A. Wallace Hayes, Vice President, Biochemical/Biobehavioral Research & Development, R.J. Reynolds Tobacco Company. Covance performed the "personal air monitors" European ETS study reported by the [08/18/98 Electronic Telegraph](#)) This document (#508038472,73) may be viewed on the [RJ Reynolds Site](#) but the text is [here](#)



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"Approximately 50 documents prepared by or for Imperial Tobacco Limited were produced as exhibits in the course of the Canadian tobacco advertising ban trial pleaded in Montreal during 1989-1990. A small number of these documents have been, or could be, used out of context to suggest that ITL has engaged in inappropriate marketing activities, particularly in respect to youth. The present document is prepared on the assumption that the best defence to such suggestions is the presentation of all the facts, as they appear in the documents themselves or from testimony and evidence filed in Court." December 18, 1991 Brown & Williamson document on Imperial Tobacco's "Project Viking" Bates # 689466035 [to be continued ...]

"ITL's Chairman issued a directive to the effect that the study could be continued, but that there was to be nothing done with the results of the study without further approval from him. No use of the results has ever been proposed, no approval has been either sought or granted for their use, and no action has ever been taken based on Project Viking. (Transcripts p. 1314, testimony of Don Brown)

December 18, 1991 Brown & Williamson document on Imperial Tobacco's "Project Viking" Bates # 689466042

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"Looking toward the future, the report suggests that there would seem to be targetable groups for advocacy communications. The most susceptible groups are those which were characterized as "pressured" and "disease-concerned". It also suggests that "disease- and socially-concerned non-smokers should be considered as a target for a campaign of amelioration of anti-smoking positions". It concludes that if a decision is made to enter the public debate, the issue of passive smoking should be used as the focal point."

December 18, 1991 Brown & Williamson document on Imperial Tobacco's "Project Viking" (Bates # 689466039): [ITL Documents: Apparent Difficulties And Relevant Facts](#)

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" In effect, as extensive as Project Viking's research was, it only reaffirmed to ITL the correctness of its position that advertising could not, and therefore should not be directed at non-smokers."

December 18, 1991 Brown & Williamson document on Imperial Tobacco's "Project Viking" (Bates # 689466044): [ITL Documents: Apparent Difficulties And Relevant Facts](#)

ITL never set as its objective to increase the size of the overall tobacco market, nor has it ever set as an objective to limit the decline of the market. (Transcripts p. 597, testimony of Don Brown)

ITL has never considered targetting non-smokers for the purpose of making them consider smoking, and no advocacy campaign of any sort has ever been designed with non-smokers as the target. Project Viking simply tells ITL what it could or could not do in this regard, that is, whether it has the necessary credibility to undertake advocacy advertising. The results of the study show that it does not. (Transcripts pp. 902, 909, testimony of Don Brown; Project Viking, Volume II, pp. 14, 17, 61)

The study found no possible means to forestall people from actually quitting, except perhaps by means of a medical endorsement, but even this was not viewed as an effective or feasible measure. (Transcripts pp. 2707, 2730, testimony of Ian Brown; Project Viking, Volume II, pp. 14, 17, 59-60-61)

The findings regarding would-be quitters "in urgent need of reassurance and stroking" (Project Viking, Volume II, p. 33) were the opinion of the researchers, and not of ITL. (Transcripts pp. 2707, 2730, testimony of Ian Brown) ITL never sought the assistance of a doctor for advocacy purposes. (Transcripts p. 914915, testimony of Don Brown)"

December 18, 1991 Brown & Williamson document on Imperial Tobacco's "Project Viking" Bates # 689466042-43

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"While there was a high incidence of starting smoking among their peers when they decided to reject smoking, there was also a high level of pressure from within the home not to start. Peer pressure was not sufficient to encourage serious smoking. A major part of the reason for this was the physical reaction to the cigarette. Lack of physical tolerance is the major reason given for rejection of cigarettes. The products tried were just too harsh and irritating and caused symptoms Experimenters/Rejectors were not prepared to endure."

[PROJECT VIKING Volume 1: A Behavioural Model of Smoking](#) B&W Bates # 689466047-63

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**"product was supplied"**

Philip Morris supplied tobacco for 190 films from 1978-1988, according to [Document # 2025863645](#)  
[Minneapolis-St. Paul Star Tribune 08/05/98](#)

**"We accept an interest in people's health as a basic responsibility, paramount to every other consideration in our business. We believe the products we make are not injurious to health. We always have and always will cooperate closely with those whose task it is to safeguard the public health."**

"A Frank Statement to Cigarette Smokers," January 4, 1954 [Trial Exhibit #14145](#) The text is provided at the [St. Paul Pioneer Press 05/07/98](#)

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**"Counsel at Shook, Hardy, & Bacon and Covington & Burling are seeking scientists and physicians able and willing to refute claims of nonsmoker harm"**

RJR memo on secondhand smoke [Knight Ridder 04/23/98](#)

**"After leaving a long research career funded by the tobacco industry at Harvard where Huber managed to keep the millions rolling in from the offices of lawyer Dave Hardy who was the middleman for the tobacco companies (Harvard was funded as a Special Acct Project) . . . he managed to annoy his medical students at Harvard for taking the cig. company money, an apparent conflict for a medical researcher . . . annoyed them more by pasting up a giant tobacco leaf in his office (causing students to boycott and protest his actions . . . said cigs were not harmful, and grabbed money. When John Wyatt, head of the Un. of Ky. Research on Tob. and Health Institute, died in 1980(?), he was hired at the urging of B&W and CTR."**  
Unexplained, unattributed, undated note found in the [Brown & Williamson Collection](#), UCSF

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**"There is only one problem -- confidence, and how to establish it; public assurance, and how to create it . . . And, most important, how to free millions of Americans from the guilty fear that is going to arise deep in their biological depths -- regardless of any pooh-poohing logic -- every time they light a cigarette"**

December 1953 Hill and Knowlton memo

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**"We have one essential job -- which can be simply said: Stop public panic"**

December 1953 Hill and Knowlton memo

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**"Statistical association does not prove cause and effect"**

1958 comment by Clarence Little, in response to the Dorn study on the mortality rates of smokers who as veterans had bought life insurance from the U.S. government

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**"The continued failure of evidence which is qualitatively different or of increased significance to appear leaves the causation theory of smoking in lung cancer, heart disease and other ailments without clinical and experimental proof.... The result is that the tobacco theory is rapidly losing much of the unique importance claimed by its adherents at its original announcement. . . The one hard fact that we must face up to is that there is so much more to find out.... It is [as] important to know ... why the overwhelming majority of heavy cigarette smokers do not develop lung cancer as it is to know why the comparatively small percentage of smokers do"**

1960 TIRC Scientific Advisory Board report, "Causation Theory of Smoking Unproved"

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**"I just don't believe it. People are hearing the same old story, and the record is getting scratched."**

April 21, 1960. RJR chairman Bowman Gray, Jr. on cancer and smoking. Time Magazine Cover Story

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**"Mr. W.W. Reid suggested that no industry was going to accept that its product was toxic or even believe it to be so. And naturally, when the health question was first raised, we had to start denying it at the PR level. But by continuing that policy, we had got ourselves into a corner and left no room to maneuver. In other words, if we did get a breakthrough and were able to improve our product, we should have to about-face, and this was practically impossible at the PR level. If we could ease the approach a bit, then when we did make a positive contribution, we could at least say so without having to crawl behind the door."**

1962 Discussion, [Smoking and Health--Policy on Research](#)

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**"Mr. McCormick. It was very difficult when you were asked as chairman of a tobacco company to discuss the health question on television. You had not only your own business to consider but the employees throughout the industry, retailers, consumers, farmers growing the leaf, and so on. And you were in much too responsible a position to get up and say, 'I accept that the product which we and all our competitors are putting on the market gives you cancer,' whatever you might think privately."**

1962 Discussion, [Smoking and Health--Policy on Research](#)

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**"The raising of so many bogey-man issues over the centuries concerning the allegedly unhealthful effects of tobacco has no doubt jaded the user's appetite for such rations. Consequently, the tobacco interests have successfully put their accusers in the position of proving their point, and as the latter failed, so the issue died."**

Feb. 18, 1964, *SMOKING AND HEALTH Significance Of The Report Of The Surgeon General's Committee To Philip Morris Incorporated* [Trial Exhibit #TE10322](#)

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**"The informal agreement between TRC members not to make health claims was explained to Philip Morris. Mr. Weissman said that he was not prepared to bind himself and had to reserve freedom of action as there was no definition of what constituted a "health claim." . . . Assuming a reasonable definition of health claims, he would subscribe to the spirit of not making health claims in the U.K."**

"Reports on Policy Aspects of the Smoking and Health Situations in U.S.A." Prepared by Philip J. Rogers and Geoffrey F. Todd, Tobacco Research Council (United Kingdom), October, 1964.

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**"[T]he AMA appears to be more concerned with safeguarding the financial interests of doctors through political lobbying than with the doctors patients"**

"Reports on Policy Aspects of the Smoking and Health Situations in U.S.A." Prepared by Philip J. Rogers and Geoffrey F. Todd, Tobacco Research Council (United Kingdom), October, 1964.

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**"This Committee is extremely powerful, it determines the high policy of the industry on all smoking and health matters - research and public relations matters, for example, as well as legal matters- and it reports directly to the Presidents."**

October, 1964 report by two British tobacco executives, Phillip J. Rogers and Geoffrey F. Todd ["Reports on Policy Aspects of the Smoking and Health Situations in U.S.A."](#)

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"[T]he law imposes on a manufacturer the duty to know what can be known about its product . . . the question will be raised, for jury resolution, whether a reasonably prudent manufacturer capable of conducting biological research would not have instituted biological testing programs in the 1920s, 1930s or 1940s, eras in which . . . red flags of warning respecting serious health questions were being raised in the scientific literature"

1965 Janet Brown memo on whether American Tobacco Co should investigate "the relationship of smoking to human cancer."  
[St. Paul Pioneer Press 02/23/98](#)

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"It should be mentioned that the research work into cigarette filters carried out by Kensler, Thayer and Battista was supported by the Liggett & Myers Tobacco Company, manufacturers of Lark and Devon. I wasn't particularly worried about this sponsorship, since scientists are honest -- often to the point of embarrassment."

Lloyd Mallon, *It Is Safe to Smoke* (1966)

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"Clarence Newman, of the Wall Street Journal, informed me yesterday that he is interested in doing a story on the 'confused picture about tar and nicotine reporting.' He asked if Brown & Williamson could provide a spokesman to give the 'industry's side' (presumably what is being done in the way of research, testing, and posture). I told him I would discuss this with my principals; he said there is no great rush, but would like to have some indication of our interest as soon as possible.

In addition, I am reliably informed that a similar opportunity exists with Life Magazine.

Obviously, the key word is 'confusion,' and anything we can do to confirm such a situation could work to our advantage, provided:

(a) The current methods of testing are shown to be fraught with numerous variables, and therefore give rise to misleading results;

(b) The significance of 'tar and nicotine' *per se* is seriously questioned in terms of scientific indictment and 'established' ranges of hazard; and

(c) The tobacco industry is shown to be assuming a highly responsible and active role in trying to clear up the confusion -- *in the public interest*. This would involve the disclosure of our own plans for a testing laboratory, our initiative in offering cooperation to the FTC, our intention to do testing in a 'glass case' stance, and our dedication to the most scientific procedures and skilled techniques in arriving at *complete* results.

By taking advantage of these opportunities, perhaps we can forcefully refute *Reader's Digest's* criticism (in the November issue) of the industry's 'deeply ingrained flim-flam' in reporting the facts about tar and nicotine"

October 20, 1966 B&W memo from A. Y. Yeaman to J. V. Blalock. Bates #690006608

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"[Surgeon General's 1964 Advisory Committee member Louis F. Fieser, Ph.D.] stated publicly that he considered Lark to be the one cigarette he considered safe enough to smoke himself. . . . But Dr. Fieser's statement about the safety of the Lark filter was soon swept from memory by a deluge of "scare" headlines inspired in the press and other news media by the Surgeon General's report. In fact, some of these could easily compete with that genre of fiction-writing called 'the horror story.'"

Lloyd Mallon, *It Is Safe to Smoke* (1966)

"We will pay Frank \$500.00 for his time and expenses in preparing the article. This is a firm obligation whether he sells it or not. If True buys the article, our full obligation is satisfied. The magazine pays \$1,750.00 for material of this type. Should True turn down the article, and Frank does not subsequently sell it to another publication, we will pay him \$1,250.00 to make up the difference between our guarantee of \$500.00 and the anticipated magazine payment of \$1,750.00."

March 28, 1967 memo from J.V. Blalock, director of public relations at B&W, to Addison Yeaman, then B&W vice president and general counsel. The article by Stanley Frank, "To Smoke or Not To Smoke--That is Still the Question" was published in the January, 1968 issue of *True*. 600,000 copies of were distributed with a letter from "the editors" to physicians, the media, and



business and political leaders without public acknowledgment of the industry's involvement. A simplified version of the article, "Cigarette Cancer Link Is Bunk," was later run in the March, 1968 *National Enquirer* under the pseudonym Charles Golden.

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**"The most important type of story is that which casts doubt on the cause and effect theory of disease and smoking.... [Eye-grabbing headlines] should strongly call out the point--Controversy! Contradiction! Other factors! Unknowns...."**

October 18, 1968 Hill & Knowlton memo from Carl Thompson, the executive in charge of the Tobacco Institute account to TI PR head William Kloepfer, on how to best angle the contents of "Tobacco and Health Research," the industry's newsletter which was distributed massively to doctors and scientists around the country (R. Kluger, *Ashes to Ashes*, p. 324)

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**"No clearcut case against cigarette smoking has been made despite millions spent on research. . . The longer these tests go on, the better our case becomes"**

1968 statement by Philip Morris President George Weissman, to *Dun's Review* (R. Kluger, *Ashes to Ashes*, p. 325)

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**"Janet Brown (made) a well-reasoned argument in defense of the long-established policy . . . to 'research the disease' as opposed to researching questions more directly related to tobacco . . . First, we maintain the position that the existing evidence of a relationship between the use of tobacco and health is inadequate to justify research more closely related to tobacco. . . Secondly, . . . the study of the disease keeps constantly alive the argument that, until basic knowledge of the disease itself is further advanced, it is scientifically inappropriate to devote the major effort to tobacco"**

1968 memo from Addison Yeaman, general counsel of Brown & Williamson, after a 1968 meeting to discuss the industry's research plans. [St. Paul Pioneer Press 02/23/98 Trial Exhibit 21804](#)

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**"1.) Reduce the amount smoked, perhaps by confining smoking to certain periods of the day."**

**"2.) Inhale as little as possible"**

**"In smoking cigarettes, throw away a long butt."**

Late-1960s (apparently) memo on how smokers can reduce the risk of lung cancer; by Dr. F.J.C. Roe and M.C. Pike for a British affiliate of Brown & Williamson [St. Paul Pioneer Press 03/14/98](#)

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**"[A]s an alternative to invalidation, we can have the authors rewrite those sections of the reports which appear objectionable."**

1969 RJR memo, "Re: Invalidation of Some Reports in the Research Department," from senior research scientist Murray Senkus to Max Crohn, a company lawyer who later served as Reynolds' general counsel. [Reuters 04/14/98](#)

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**"It has been stated that CTR is a program to find out about the 'truth about smoking health.' . . . Let's face it. We are interested in evidence which we believe denies the allegations that cigarette smoking causes disease."**

1970 Philip Morris memo, *Best Program for CTR*, from Helmut Wakeham, then Philip Morris's head of research, to President Joe Cullman. [Trial Exhibit 11586](#)

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**"It is my strong belief that we now have an opportunity to take the initiative in the cigarette controversy, and start to turn it around. For nearly twenty years, this industry has employed a single strategy to defend itself on three major fronts -- litigation, politics, and public opinion. While the strategy was brilliantly conceived and executed over the years helping us to win important battles, it is only fair to say that it is not -- nor was it intended to be -- a vehicle for victory. On the contrary, it**

**has always been a holding strategy, consisting of, one, creating doubt about the health charge without actually denying it. . .**  
May 1, 1972 Tobacco Institute memorandum from Fred Panzer, a vice-president for the Tobacco Institute, to Horace Kornegay, the president of The Tobacco Institute. Trial Exhibit 20987 (NOT POSTED) This document was discussed in the Minnesota trial on [Jan. 29, 1998](#)

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**"As an industry, therefore, we are committed to an ill-defined middle ground which is articulated by variations on the theme that 'the case is not proved.' . . In the cigarette controversy, the public -- especially those who are present and potential supporters (e.g. tobacco state congressmen and heavy smokers) -- must perceive, understand, and believe in evidence to sustain their opinions that smoking may not be the causal factor."**

May 1, 1972 Tobacco Institute memorandum from Fred Panzer, a vice-president for the tobacco industry, to Horace Kornegay, the president of The Tobacco Institute. Trial Exhibit 20987 (NOT POSTED) This document was discussed in the Minnesota trial on [Jan. 29, 1998](#)

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**"[Gio B.] Gori very bluntly asked, was it not possible for the tobacco lobby in Congress to use its influence to get Gori appointed to the position [head of etiology at the National Institutes of Health], bearing in mind that he is a reasonable man and sympathetic to the industry"**

1973 B&W memo by research director I.W. Hughes, who later became chairman [St. Paul Pioneer Press 04/02/98](#)

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**"Historically, the joint industry-funded smoking and health research programs have not been selected against specific scientific goals, but rather for various purposes such as public relations, political relations, position on litigation etc."**

1974 memo by Alexander Spears, former research director and current chairman of Lorillard Tobacco Co.

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**"Since 1972, I have not seen any data which would change my opinion that smoking has not been scientifically established as a "major health hazard" to humans. Nor have I seen any studies in the medical literature which establish "tar," nicotine or any other constituent of tobacco smoke as disease producing in human smokers. This is especially true with regard to the so-called epidemiological or statistical studies."**

November 25, 1974, "Statement of Robert C. Hockett," [CTR Doc # 1200.pdf](#)

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**"It is my strong feeling that with the progress that has been claimed, we are in the process of digging our own grave. . . I believe that the program as set up has the potential of great damage to the industry and I strongly urge that the whole relationship of our company to CTR be carefully reviewed. I am very much afraid that the direction of the work being taken by CTR is totally detrimental to our position and undermines the public posture we have taken to outsiders."**

1977 memo from Thomas Osdene, then Philip Morris's vice president for science and technology, to R.B. Seligman, vice president for research and development."

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**"We have again 'abdicated' the scientific research directional management of the industry to the 'lawyers' with virtually no involvement on the part of scientific or business management side of the business"**

1978 memo by C.H. Judge, former Lorillard chief executive and a member of the CTR board

**"unhappiness causes lung cancer"**

**"dampness causes lung cancer"**

1978: Philip Morris scientist J.E. Lincoln's "reverse hypothesis" suggestions [Deseret News 06/28/98](#)



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**"In view of Dr. Russell's undisputed eminence in the medically orientated smoking behaviour area, I recommend that we should support him on the lines detailed above. I believe that Dr. Russell would, in future, be prepared to take more notice of our advice, particularly on cigarettes."**

1979 internal BAT Co. memo by senior scientist R.E. Thornton on Dr. M.A.H. Russell [Minneapolis-St. Paul Star Tribune 04/10/98](#)

**"Of course, he (the Allstate general counsel) saw nothing wrong with it. It wasn't anti-tobacco, he said. Well, Sears Roebuck, his parent company, may be hearing from people in Congress and in tobacco land who think otherwise. . . Tobacco-state governors and (insurance) commissioners are being alerted. So are key members of Congress. Ross Millhiser (Philip Morris president) is contacting the CEO of Allstate. Tobacco organizations' leadership and their membership are being informed."**

1979 Tobacco Institute document by Horace Kornegay, then chairman of the Tobacco Institut. The quote is from Kornegay's prepared remarks to the executive committee on an Allstate ad promoting a 5% discount on life insurance for nonsmokers [St. Paul Pioneer Press 07/27/98](#) Some of this issue is covered in the [Part 3](#)"> Corporate Activity Project, Part 3 Search on "Allstate."

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**"For two to three weeks during the spring and summer breaks, the Sales Force promotes the brand heavily at POS [point of sale]. Marlboro T-shirts, visors etc. are given away at the beach, bars and other hang outs. No publicity nor outside visibility is desired"**

1979 PM memo [Richmond Times-Dispatch 05/09/98](#)

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**"Although Dr [Ragnar] Rylander does not have a specific list of invitees in mind at this time, he was very receptive to suggestions. He would not invite Garfinkel, Hirayama, etc. . . [Rylander's publication of the seminar's findings] would be valuable in view of the anticipated chapter in the 1982 Surgeon General's Report dealing with lung cancer and passive smoking."**

1982, Donald Hoel, a tobacco company lawyer, writing to Thomas Osdene, director of the Philip Morris USA Research Center [New Scientist 04/30/98](#)

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**"And when it's over, the victors will gather for the traditional ritual of slapping each other on the backs and pouring champagne--usually on each other's heads. And they'll pass out the cigars that have come to be a symbol of manly success."**

1982. Reporter reciting Cigar Association script on camera during a preview of the Super Bowl

1983 Cigar Assn. of America internal memo [LA Times 02/12/98](#)

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**"If we are to survive as a viable commercial enterprise, we must act now to develop responses to smoking and health allegations from both the private and the government sectors. The anti-smoking forces are out to bury us."**

1982 Memo by Philip Morris researcher Thomas Osdene

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**"The activists, whatever their aims and issues of focus, can and do rely for help on churches present around the world. They are therefore formidable even without any particularly organised structure because their work can be conducted through other existing organisations. The challenges they pose to industry must therefore be taken very seriously in a spirit of open-mindedness. The reason is that however ideological or politically motivated their views, they have a very large audience and a very large body of sympathisers in the well-organised Christian churches world-wide. The companies have to win over that 'concerned' audience which has the real moral and ethical motives (in contrast to most activists)."**

Sept. 23?, 1982 *Report on the Strategy of Activists and How to Respond to that Strategy* [Bates #s 2501021445/1451](#)

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"While the consumer of the '80s may harbor built-in skepticism when he reads an advertisement in a magazine or sees a commercial on TV, he accepts and believes the public relations message because it reaches him in the form of news and information."

1983 Cigar Assn. of America internal memo [LA Times 02/12/98](#)

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"A 30-second TV commercial during the Super Bowl would have cost \$400,000. . . . However, we decided upon multiple exposures through TV news features which cost just \$30,000. They reached 40 million viewers, resulting in a cost-effectiveness of 75 cents per thousand viewers--or less than one-quarter the cost of advertising."

1983 Cigar Assn. of America internal memo [LA Times 02/12/98](#)

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"1984 was the year that the anti-smokers came of age. They settled on a leader, an individual capable of uniting the many competitive organizations intent upon closing the doors of this industry. That individual is the United States Surgeon General. Dr. Koop has called for a smoke-free society by the year 2000. He has made that his personal and official crusade. He has attracted funding for the anti-smokers. He has attracted journalists. And he has deliberately inspired anti-smoking militarism. That militarism is more than a mere P.R. theme. We see it clearly in our own research. The gestation of the anti-smoking movement during the past two decades has brought forth a stampeding elephant."

Tobacco Institute, "Annual Report to the Board of Directors," December 13, 1984. [Bates Nos. 367-394](#) Here's the [text](#)

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"Our lobbyists did an excellent job of negotiating the federal bill and fending off the state legislation. . . We started in 1982, took hold in 1983, and produced results this past summer. Before we began, the fire service was slowly uniting against us. Uniformed firefighters were appearing at legislative hearings, writing articles and giving interviews, demanding cigarette regulation. By this past summer several of the largest fire service groups were working closely with us legislatively and on the prevention of all kinds of accidental fires. We have been told we have the best structured fire prevention project ever sponsored by the private sector. We have been asked to serve .on their boards. We are asked to give speeches and we are invited into the homes and private meetings of America's fire service."

Tobacco Institute, "Annual Report to the Board of Directors," December 13, 1984. [Bates Nos. 367-394](#) Here's the [text](#)

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"Over the years you've heard so many negative reports about smoking and health, and so little to challenge these reports, that you may assume the case against smoking is closed. This is far from the truth. Studies which conclude that smoking causes disease have regularly ignored significant evidence to the contrary."

1984 RJR ad published in Better Homes and Garden, Newsweek, People, Red Book, Time, TV Guide, USA Today, U.S. News & World Report, the Wall Street Journal, the New York Times and the Washington Post. [Trial Exhibit 12667](#) This ad was discussed in the Minnesota Trial on [March 31, 1998](#)

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"They [Merrell Dow, then selling Nicorette Gum] cannot realistically expect a customer to spend millions of dollars for materials, when the profits from those sales, directly or indirectly, are used to attack that customer's product and perhaps reduce the customer's sales"

1984 Philip Morris memo; PM cancelled a lucrative contract with Dow Chemical over the gum's "anti-smoking propaganda"  
[Washington Post 03/05/98](#)

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"A number of media proprietors that I have spoken to are sympathetic to our position - Rupert Murdoch and Malcolm Forbes are two good examples. The media like the money they make from our advertisements and they are an ally that we can and



**should exploit"**

1985 PM document, "Smoking and Health Initiatives - P.M. International" (Bates numbers 2023268329 - 49.)

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**"We anticipate that if Repace runs true to form there will be a good deal of media copy written about their analyses and thus we should begin eroding confidence in this work as soon as possible Anthony Colucci"**

Feb. 25, 1985, letter by RJR scientist Dr. Anthony Colucci [The Wall Street Journal 04/28/98](#)

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**"We must attack the anti-smoking groups and zealots more confidently than we have in the past. If we can cool their zeal just a bit, not only might smoking as a subject become less of an issue, but also smokers might begin to feel less embattled... Here perhaps we could commission a book on the 'anti-industry industry' and show that our attackers actually make money out of their activities, a situation quite at variance with their image today. Possibly, too, we can discredit our critics..... If we dig around, we will certainly find anomalies which we can exploit."**

1985 PM document, "Smoking and Health Initiatives - P.M. International" (Bates numbers 2023268329 - 49.)

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**"rather oblique" . . . "somewhat less than honest"**

c. 1988 BAT memo, describing an ETS scientist-finding strategy presented by Philip Morris in a 1988 tobacco industry meeting [BBC 04/19/98](#)

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**"Philip Morris are putting vast amounts of funding into these projects, not only in... large numbers of research projects but in attempting to co-ordinate and pay so many scientists on an international basis to keep the ETS [environmental tobacco smoke] controversy alive"**

February 17th, 1988 note by Dr Sharon Boyse of British American Tobacco on a special meeting of the UK Industry on Environmental Tobacco Smoke, London [This is the note](#) at Jack Cannon's site.

**"In all of these countries Philip Morris have already begun to identify and talk to suitable scientists. . . The consultants should, ideally, according to Philip Morris, be European scientists who have had no previous association with tobacco companies and who have no previous record on the primary issue which might, according to Remes, lead to problems of attribution. The mechanism by which they identify their consultants is as follows: - they ask a couple of scientists in each country (Francis Roe and George Leslie in the UK) to produce a list of potential consultants. The scientists are then contacted by these coordinators or by the lawyers and asked if they are interested in problems of Indoor Air Quality: tobacco is not mentioned at this stage. CVs are obtained and obvious 'anti-smokers' or those with 'unsuitable backgrounds' are filtered out. The remaining scientists are sent a literature pack containing approximately 10 hours reading matter and including 'anti-ETS' articles. They are asked for a genuine opinion as independent consultants, and if they indicate an interest in proceeding further a Philip Morris scientist makes contact"**

February 17th, 1988 note by Dr Sharon Boyse of British American Tobacco on a special meeting of the UK Industry on Environmental Tobacco Smoke, London [This is the note](#) and this is the [May 31, 1997 British Medical Journal article](#)

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**"vii. Lancet. One of our consultants is an editor of this very influential British medical Journal, and is continuing to publish numerous reviews, editorials and comments on ETS and other issues."**

1990, [Report on the European Consultancy Programme](#) (Covington & Burling, for Philip Morris) [Times of London 05/14/98](#)

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**"The focus of the [Lisbon] conference will not be tobacco; rather, the point of the conference is to show the insignificance of ETS by emphasising the genuine problems of air quality in warm climates. Some degree of "balance" in the presentation of**

the issues is of course necessary to achieve persuasiveness, but the overall results will be positive and important."  
1990, [Report on the European Consultancy Programme](#) (Covington & Burling)

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"(b) Bird keeping. The keeping of pet birds appears to be a major risk factor for lung cancer -- a far more serious factor than anyone has ever alleged ETS to be. Two consultants have guided research on this issue conducted by others in Holland. A significant scientific paper was the result. Another consultant, plus one of the first two, has been investigating the same issue in Scotland, where pet birdkeeping is a very common hobby."  
1990, [Report on the European Consultancy Programme](#) (Covington & Burling)

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"The Philip Morris approach is that the industry's position on the science is correct, but that it is better to have someone else say it because the industry itself cannot win a causation argument."  
"1991 minutes of a meeting of the environmental smoke group [New Scientist 04/30/98](#)

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"Create sufficient counterforces in Australian political life that the Antis loose their ability to legislate and regulate at will"  
1992 Philip Morris document [Herald Sun 06/22/98](#)

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"OUR OVERRIDING OBJECTIVE IS TO DISCREDIT THE EPA REPORT"

"IN ADDITION, VH, JR, MM WILL DEVELOP MATERIALS TO BE USED IN OP ED PIECES AS WELL AS FOR MEETINGS WITH EDITORIAL BOARDS AND EDITORS . . . VH WILL COORDINATE MATERIALS FOR PUBLICATIONS, IE. GOVERNING, ST. LEG. CONG. Q, ROLLCALL, ETC"

"THAT'S IT--THE CZARINA IS HUNGARY AND IS OFF TO CHIN CHIN!"

January 11, 1993 Philip Morris document "THE CZARINA'S EDICT," by Ellen Merlo [Philip Morris Document #2023920140/0141](#)  
Here's [the text](#)

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"An excessive quantity of tomato juice would have done that, as I recall . . . "

August 19, 1997. American Tobacco Co. CEO Donald Johnston on Wynder's 1953 study in which tobacco tars, painted on the backs of mice, produced tumors in 44% of the animals.

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#### Advertisements

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"You're darn tootin my dad smokes Marlboro . . . he knows what's good for him!"

Baby in undated ad found on Philip Morris' documents website [Richmond Times-Dispatch 03/16/98](#)

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"New King-Size Viceroy's give double-barrel health protection"

1953 Viceroy ad [CNN 03/17/98](#)



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**"Lark isn't perfect, but it lets you have a lot less on your mind."**

1950s Lark ad [CNN 03/17/98](#)

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**"First for finer flavor, no throat irritation, no cough 11,105 doctors give written opinion."**

Lucky Strike ad in December 1927 Pictorial Review

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**"entirely safe for use in the mouth."**

1952 ad for Chesterfield cigarettes [AP 04/28/98](#)

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**"Smoke as many as you want. They never get on your nerves"**

Camel, 1934

**"More doctors smoke camels than any other cigarette"**

1948

**"Not one single case of throat irritation due to smoking Camels!"**

1949

**"Old Gold cigarettes . . . not a cough in a carload"**

1927

**"Ask your dentist why Old Golds are better for the teeth."**

1935

**"Many prominent athletes smoke Luckies all day long with no harmful effects to wind or physician condition"**

1929

**"Philip Morris -- a cigarette recognized by eminent medical authorities for its advantages to the nose and throat"**

1939

**"No other cigarette approaches such a degree of health protection and taste satisfaction"**

Kent, 1952

**"Just what the doctor ordered"**

L&M, 1953

**"[Viceroy] gives double-barreled health protection."**

1953

Ads cited in B&W's *A Review of Health References in Cigarette Advertising 1927-1964* [AP 05/02/98](#)

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[Nicotine](#) / [Health](#) / [Youth](#) / [Public Suasion](#) / [Documents](#) / [Research](#) / [Legal](#) / [Government](#)

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## DOCUMENTS

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"The [Sidestream Reduction] program description suggests that a low sidestream cigarette can be developed quickly which will have satisfactory mainstream smoke qualities . . . The assertion is inconsistent with statements by B&W and the U.S. manufacturers that technology is not available to manufacture a commercially acceptable cigarette with reduced ignition potential. . . [The program] is based in part upon acceptance of the theory that atmospheric tobacco smoke has health consequences for smokers. . . It could be disadvantageous for B&W to retain the ... letter in our files because of potential mandatory disclosure in legislative proceedings or litigation. Consequently, we are returning it."

Undated B&W memo from a company lawyer to manager I.W. Hughes [The Wall Street Journal/MSNBC 4/28/98](#)

"If important letters or documents have to be sent, please send to home -- I will act on them and destroy."

Undated, unsigned, memo by senior Philip Morris scientist Thomas Osdene, talking about the routing of documents from INBIFO in Cologne, Germany [Trial Exhibit #TE2501](#) LINK DEAD. Bates#: [1000130803](#)

"PRIOR TO RECEIPT YOUR TELEX JULY 3 HOYT OF TIRC AGREED TO WITHHOLD DISCLOSURE BATTELLE REPORT TO TIRC MEMBERS OR SAB UNTIL FURTHER NOTICE FROM ME. FINCH AGREES SUBMISSION BATTELLE OR GRIFFITH DEVELOPMENTS TO SURGEON GENERAL UNDESIRABLE AND WE AGREE CONTINUANCE OF BATTELLE WORK USEFUL BUT DISTURBED AT ITS IMPLICATIONS RE CARDIOVASCULAR DISORDERS. WE BELIEVE COMBINATION BATTELLE WORK AND GRIFFITH'S DEVELOPMENTS HAVE IMPLICATIONS WHICH INCREASE DESIRABILITY REEVALUATION TIRC AND REASSESSMENT FUNDAMENTAL POLICY RE HEALTH."

July 3, 1963 BAT cable from Addison Yeaman to BAT executive Anthony D. McCormick [Trial Exhibit 3962](#)

"Herewith the three volumes of "Project HIPPO I & II." You are at complete liberty to disclose these reports to Henry Ramm. I suggest to you and Henry that it is now timely to release these reports to the S.A.B, but I shall defer doing so until I have the benefit of a further talk with you and with Henry."

August 5, 1963 B&W letter from Addison Yeaman to E.J. Jacob [B&W Papers, UCSF](#)

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"Once it becomes clear that such action is necessary for the successful defense of our present and future suits, we will promptly remove all such reports from our files. . . We can cite misinterpretation of data as a reason for invalidation . . . As an alternative to invalidation, we can have the authors rewrite those sections which appear objectionable."

1969 RJR memo from senior research scientist Murray Senkus to the legal department [AP 04/14/98](#)

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"It is one thing when 'known enemies' claim smoking is dangerous. . . Our problem becomes entirely different and far more serious [when tobacco's own] agents and employees . . . become spokesmen against it. . . [Evidence from industry files] which seems to acknowledge or tacitly admit that cigarettes cause cancer or other disease would likely be fatal."

1970 letter from David R. Hardy to Brown & Williamson [LA Times 05/10/98](#)

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"We have gone to great pains to eliminate any written contact with Inbifo, and I would like to maintain this structure."

1977 letter from Robert B. Seligman, then vice president of research and development at Philip Morris [The Wall Street Journal 04/24/98](#)

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"An admission by the industry that excessive cigarette smoking is bad for you is tantamount to an admission of guilt with regard to the lung cancer problem. This could open the door to legal suits to which the industry would have no defense."

1978 Osdene memo



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**"If company testing began to show adverse results pertaining to a particular additive, the company control would enable the company to terminate the research, remove the additive and destroy the data."**

1981 memo by Brown & Williamson corporate counsel J. Kendrick Wells [Minneapolis-St. Paul Star Tribune 04/16/98](#)

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**"On Tuesday, January 15th, I talked with Earl Kohnhorst about engineering and scientific reports held by the RD -- R&D Department. I gave Earl copies of pages which contained various document numbers and files, and document numbers and abstracts. I explained I had marked certain of the document references with an X. The X designates documents which I suggested were deadwood in the behavioral and biological sciences area. I said that the 'B' series are 'Janus' series studies and should also be considered as deadwood. I suggested that Earl have the documents indicated on my list pulled, put into boxes and stored in the large basement storage area. I said that we would consider shipping the documents to BAT when we had completed segregating them. I suggested that Earl tell his people that this was part of an effort to remove deadwood from the files and that neither he nor anyone else in the department should make any notes, memos or lists"**

January 17th, 1985 B&W memo from J. Kendrick Wells. [Trial Exhibit #TE13851](#)

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[Nicotine](#) / [Health](#) / [Youth](#) / [Public Suasion](#) / [Documents](#) / [Research](#) / [Legal](#) / [Government](#)

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## RESEARCH

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**"Boy! Wouldn't it be wonderful if our company was first to produce a cancer-free cigarette. What we could do to the competition."**

Mid-1950s Hill & Knowlton memo quoting an unnamed tobacco company research director [Minneapolis-St. Paul Star Tribune 02/22/98](#) Trial Exhibit [TE18904](#)

**"Cautionary warning notices on packs would appear from experience to have had no significant effect on total consumption. If insisted on, the wording must make clear that the warning emanates from a government source. Warning notices on advertising should be resisted as long as possible"**

BAT Co. Ltd., date illegible [Minneapolis-St. Paul Star Tribune 03/14/98](#)

**"The program description suggests that a low sidestream cigarette can be developed quickly which will have satisfactory mainstream smoke qualities. The assertion is inconsistent with statements by B&W and the U.S. manufacturers that technology is not available to manufacture a commercially acceptable cigarette with reduced ignition potential. . . It could be disadvantageous for B&W to retain the . . . letter in our files because of potential mandatory disclosure in legislative proceedings or litigation. . . Consequently, we are returning it"**

Undated memo by a B&W lawyer, addressed to manager I.W. Hughes on a project called Sidestream Reduction [The Wall Street Journal 04/28/98](#)

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**"The physiological part will involve the use of rats and rabbits . . . Subsequently similar measurements will be made on human non-smokers and on addicted smokers."**

February 13th, 1962 BAT memo, "The Effects Of Smoking, Proposal For Further Research Contracts With Battelle," by Sir Charles Ellis, director of research. [Trial Exhibit #11938](#).

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**"We did put together a charcoal-filter product, Saratoga. . . Physiologically, it was an outstanding cigarette. We decided not to tell the physiological story. The product, as test-marketed, didn't have good taste and as a result it was unacceptable to**

**the public, ignorant of its physiological superiority."**

October 1964 memo by a Philip Morris executive [St. Paul Pioneer Press 03/20/98](#)

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**"[Smoking machines] cannot give the smoker meaningful information... . He is more likely to be misled than informed"**

1965 RJR report by ex-research director Alan Rodgman [The Wall Street Journal \(pay registration\) 03/16/98](#)

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**"We have reason to believe that in spite of gentlemen (sic) agreement from the tobacco industry in previous years that at least some of the major companies have been increasing biological studies within their own facilities."**

1968 memo, *Need for Biological Research* from Dr. Helmut Wakeham, vice president of research for Philip Morris

[AP/Minneapolis-St. Paul Star Tribune 2/19/98](#)

[Trial Exhibit 2544](#)

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**"In-house biological testing in the smoking health area such as work we have been doing for the Scientific Advisory Board of the Council for Tobacco Research has been terminated. . . The biological division is being dissolved"**

March 1970 RJR "mouse house" document.

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**"One result of the greater influence which Wakeham has with Mr. J. Cullman has been the agreement, albeit reluctant, to permit Philip Morris to do "in-house" biological work. When this was first mooted Wakeham was told there was a tacit agreement between the heads of the US Companies that this would not be done. Wakeham had countered by saying that he knew Reynolds, Lorillard and American were all undertaking some and that Liggett and Myers had never been party to the agreement. Cullman had been incredulous and had phoned Galloway, the President of R. J. Reynolds who had denied Reynolds was doing any bioassay. When Cullman had told Wakeham this, Wakeham's response had been to quote the Reynold's work on the Senkus smoking machine and to claim that he had floor plans showing outline area allocations"**  
September 16, 1970 BAT document, "Meeting with Dr. Helmut Wakeham, vice-president and director of research, Philip Morris Inc., 10th of September, 1970" [Trial Exhibit 2549](#)

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**"I feel [this] presents an opportunity that is relatively lacking in risk and unattractive repercussions in [the U.S]."**

Feb. 24, 1970 memo from Philip Morris CEO Joseph Cullman III on the acquisition of INBIFO [The Wall Street Journal 04/24/98](#)

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**"[O]ver the last 15 years . . . [human] puff volumes have risen as inexorably as machine deliveries have declined."**

BATCO researcher, Colin C. Greig, in a document thought to date from the early 80s

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**"The majority of blacks ... do not respond well to sophisticated or subtle humor in advertising. They related much more to overt, clear-cut story lines."**

1981 RJR marketing plan statement

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**"The industry also funded a project at UCLA Medical School, but only after the Medical School reassured the industry that nothing damaging to the industry would be discovered. . . The least damaging response to the Huber and UCLA issues is a**

**matter-of-fact attitude. The substance of the studies conducted by these researchers is favorable to the tobacco companies' position. Thus, unless the defendants give plaintiffs credibility issues by denying what they know about the outside studies, the issue marginally helps defendant."**

Undated RJR report, *Corporate Activity Project*, prepared by outside law firm Jones, Day, Reavis & Pogue. The document was released in the Washington Medicaid suit. Here's the June 11, 1998 PR from the [Washington AG Office](#) You can download the 23 Mg TIFF file (Bates # 681879254) [here](#) Here's the [text file](#)

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**"RJR Research and Development Activities, Fact Team Memorandum, Volume III"**

104-page 1985 report compiled by Jones, Day, Reavis & Pogue For R.J. Reynolds, which several articles say is particularly damning [Minneapolis-St. Paul Star Tribune 04/23/98](#) / [Winston-Salem Journal 04/23/98](#) / [The Wall Street Journal 04/23/98](#)

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**"Our vision of the future market looks like this. . . A slightly shrunken but titanium-hard and impenetrable 'collapsar core' of smokers -- resolute, self-indulgent and largely indifferent to what other people think."**

1989 memo prepared for R.J. Reynolds Tobacco Corp. [Minneapolis-St. Paul Star Tribune 02/26/98](#)

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[Nicotine](#) / [Health](#) / [Youth](#) / [Public Suasion](#) / [Documents](#) / [Research](#) / [Legal](#) / [Government](#)

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## LEGAL

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**"I discussed with Mr. Max Crohn (Legal) your September 20 memo on . . . your proposal. Mr. Crohn remains adamant that investigation of the mutagenicity of tobacco smoke condensate fractions is unwise from a legal point of view. To conduct such experiments will compromise the philosophy of our defense against claims raised in the smoking-health issue. . . In accordance with Legal's wishes and reasons, permission to examine the mutagenicity of smoke condensate fractions and denicotinized tobacco smoke condensate is refused."**

Oct. 11, 1978, memo written by R.J. Reynolds Tobacco Co. executive Alan Rodgman to company scientist Dr. Chin Lee [St. Paul Pioneer Press 05/07/98](#)

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**"In NL 188, we quoted Pollin's predecessor, Dr. Robert DuPont: 'Cigarette smoking is more addictive than using heroin, hooking two-thirds of the people who ever smoke.' . . . Did TI miss a chance to attend and present information at NIDA's 1979 meeting which developed the 'addictive' language? . . . I feel badly about my own lack of intelligence-gathering in this situation. But I don't think the questions I now raise are academic. Shook, Hardy reminds us, I'm told, that the entire matter of addiction is the most potent weapon a prosecuting attorney can have in a lung cancer/cigarette case. We can't defend continued smoking as 'free choice' if the person was 'addicted'."**

Sept. 9, 1980 Tobacco Institute memo from William Kloefer, senior vice-president, public relations, to Mr. Knopick [Trial Exhibit #14303](#)

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**"We have again 'abdicated' the scientific research directional management of the industry to the 'lawyers.' . . Lorillard's management is opposed to the total [i]ndustry future being in the hands of the Committee of Counsel."**

1978 note from Curtis H. Judge, president of Lorillard Tobacco, from a meeting of the industry's Scientific Research Liaison Committee. [Business Week June 15, 1998](#)

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"The policy Committee set up another Committee of lawyers, known as the Ad Hoc Group, to assist them. . . The Ad Hoc Group is concerned with -

- (1) Medical- legal matters
- (2) Scrutinizing proposed action by other tobacco organizations
- (3) Clearing papers (e.g. Dr. Little's annual report).
- (4) Watching the Inter-State and Foreign Commerce Committee of the House of Representatives.
- (5) Making certain that no assurances of any kind relating to the safety of smoking are given by any manufactures (e.g. in advertisements)."

October, 1964 report by two British tobacco executives, Phillip J. Rogers and Geoffrey F. Todd ["Reports on Policy Aspects of the Smoking and Health Situations in U.S.A."](#)

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"The lawyers are thus the most powerful group in the smoking and health situation. It is uncertain, however, whether the Presidents of the three smaller Companies are fully in agreement with this situation, considering the lawyers to be too restrictive and too dominant generally in the industry. They, are however, neither powerful enough not sufficiently sure of themselves to do anything about it."

October, 1964 report by two British tobacco executives, Phillip J. Rogers and Geoffrey F. Todd ["Reports on Policy Aspects of the Smoking and Health Situations in U.S.A."](#)

"A jury might, whether instructed or not, operate on the theory of comparative negligence: 'True the buyer was negligent in smoking a product he knew was dangerous, but he was lulled by the seller and the seller's negligence was the greater in failing to make his product safe'"

July 17, 1963 B&W memo by Addison Yeaman, General Counsel for Brown & Williamson [Frontline](#)

"No U.S. tobacco manufacturer can analyze tobacco or tobaccosmoke for carcinogens because he may be cross-examined in lawsuits. Therefore all contract this work out."

1964 report by Philip Rogers and Geoffrey Todd, Tobacco Research Council (United Kingdom), following their trip to US tobacco cos. [Minneapolis-St. Paul Star Tribune 03/01/98](#)

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"International Conference on Smoking and Health . . . The Ad Hoc Committee's plans for such a conference, made a year or so ago, have been reviewed and weighed. . . The attorneys (Hardy, Shinn, Jacob) will take part in each phase of preparation and planning."

April 17, 1968 Tiderock Corp. letter from Reginald Wells, Vice President, Public Relations, to Senator Earle Clements ( ["The Tiderock Program Progress Report"](#) Bates Nos. 403-407)

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"I can anticipate rulings which would leave us defeated by our own hand"

David R. Hardy, of Shook Hardy & Bacon, in a 1970 memo to Brown & Williamson [Boston Globe 12/28/97](#)

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"We become more 'politically sensitive' in the areas of smoking and health, e.g., reporting of 'nasties' and biological studies generally. (Remember what pays all our salaries.)"

Concern listed by Brown & Williamson as reported in a memo from the BAT Group Research Development Centre, July 18, 1979. [Minneapolis-St. Paul Star Tribune 03/14/98](#)

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"Our attorneys have come to acknowledge that the original carte blanche avoidance of all biological research is not required in order to plead ignorance about any pathological relationship between smoke and smoker"

1980 PHILIP MORRIS memo by researcher William Dunn [AP 04/15/98](#)

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**"The psychopharmacology of nicotine . . . is where the action is for those doing fundamental research on smoking, and from where most likely will come significant scientific developments profoundly influencing the industry. Yet it is where our attorneys least want us to be"**

1980 Philip Morris memo by William L. Dunn [Washington Post 04/16/98](#)

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**"We can work with biological systems; we can inject nicotine in rats and we can perform the surgery required for implanting cannulae. But in doing so we are engaging in research on the pharmacological action of nicotine, which brings us to the second concern of our attorneys. This is a more recent concern arising from increasingly favorable prospects for the success of a legislative effort to transfer authority for the regulation of tobacco manufacture to a federal agency (F.D.A.) known to have interests and powers antithetical to the interests of the industry. Any action on our part, such as research on the psychopharmacology of nicotine, which implicitly or explicitly treats nicotine as a drug, could well be viewed as a tacit acknowledgment that nicotine is a drug. Such acknowledgment, contend our attorneys, would be untimely. Therefore, although permitted to continue the development of a three-pronged program to study the drug nicotine, we must not be visible about it."**

March 21, 1980 Philip Morris memo by William L. Dunn [The Wall Street Journal \(pay registration\) 04/16/98](#)

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**"So long as we must be officially heedless of the drug properties of nicotine, and cannot openly communicate with our counterparts in other laboratories, and cannot aggressively institute a large-scale neurosciences program on site, then we must have a window to the outside world"**

March 21, 1980 Philip Morris memo by William L. Dunn [The Wall Street Journal \(pay registration\) 04/16/98](#) This is [Trial Exhibit 26227](#)

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**"When he [research official, G. Robert DiMarco] first came to the company, he thought that perhaps the company would be better off under FDA jurisdiction. . . He now understands from what the lawyers have told him that this might not be good because it might affect the ability of the company to market its products in supermarkets and other places"**

1983 RJR memo [The New York Times 05/06/98](#)

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**"From a legal standpoint, we have advised management based upon our own and outside counsel's opinion that there are substantial litigative risks associated with having an individual as head of R&D who believes that smoking causes disease"**

1983 RJR memo [St. Paul Pioneer Press 05/06/98](#)

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**"Research engaged in, as well as some possibly under consideration, by Philip Morris has undesirable and dangerous implications for litigation positions the industry takes in regard to smoking behavior. In the final analysis, the performing and publishing of nicotine-related research clearly seems ill-advised from a litigation point of view."**

1983 Shook Hardy Bacon memo on DeNoble's "Mouse House" experiments," sent to Philip Morris July 27, 1983. [The New York Times 05/07/98](#)

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**"Direct lawyer involvement is needed in all BAT activities pertaining to smoking and health from conception through every step of the activity"**

1984 BAT memo by J. Kendrick Wells III [AP 04/23/98](#)

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**"New York Times principle"**

Definition: no one should keep a document in their files they wouldn't want published in the New York Times. "RJR Research and Development Activities, Fact Team Memorandum, Volume III" (1985) [Winston-Salem Journal 04/23/98](#)

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**"The documents will be difficult for the witness to explain. . . Plaintiffs can argue that certain statements in the documents demonstrate the scientists of the company accepted causation and addiction."**

1989 B&W memo by counsel J. Kendrick Wells III, to chief executive R.J. Pritchard. [The Wall Street Journal \(pay registration\) 09/04/98](#)

**"The documents will be difficult for the witness to explain. . . Plaintiffs can argue certain statements in the documents demonstrate the scientists of the company accepted causation and addiction. . . Large numbers of documents with difficult statements can wear away the credibility of the witness' explanation. . . The witness probably will be unprepared to explain the documents adequately to preserve credibility for the management's statement on smoking and health."**

1989 B&W memo by counsel J. Kendrick Wells III, to chief executive R.J. Pritchard. [AP 04/15/98](#)

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**"[I]t is important to avoid production of the documents as long as possible. . . It is crucial to avoid the production of scientific witnesses and documents at this time even if production were to occur in the indefinite future"**

1989 B&W memo by counsel J. Kendrick Wells III, to chief executive R.J. Pritchard. [Dow Jones \(pay registration\) 04/15/98](#)

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**"Under our current scrutiny, a wise move to rid ourselves of developmental work!"**

Oct. 31, 1991 memo from former Young & Rubicam Vice President Mark A. Morrissey, sent to senior brand manager Edmund C. Leary of Reynolds [The Wall Street Journal 04/30/98](#)

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[Nicotine](#) / [Health](#) / [Youth](#) / [Public Suasion](#) / [Documents](#) / [Research](#) / [Legal](#) / [Government](#)

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**Government**

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**"Obviously, the tobacco growers are the political strength along with the 1,300,000 retail tobacco outlets"**

December 15, 1953, [BACKGROUND MATERIAL ON THE CIGARETTE INDUSTRY CLIENT](#), the Hill & Knowlton memo on the industry's new 'public relations program on the health issue' [Trial Exhibit 18905](#)

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**"The cigarette manufacturers have deceived the American public through their advertising of filter-tip cigarettes"**

**"Without specifically claiming that the filter tip removes the agents alleged to contribute to heart disease or lung cancer, the advertising has emphasized such claims as 'clean smoking,' 'snowy white,' 'pure,' 'miracle tip,' '20,000 filter traps,' 'gives you more of what you changed to a filter for' and other phrases implying health protection, when actually most filter cigarettes produce as much or more nicotine and tar as cigarettes without filters."**

**"The Federal Trade Commission has failed in its statutory duty to 'prevent deceptive acts or practices' in filter-cigarette advertising."**



*False And Misleading Advertising (Filter-tip Cigarettes)* Twentieth Report By The Committee On Government Operations  
February 20, 1958

[Note: Rep. John Blatnik (D-MN) was shortly removed as Chairman of the Legal and Monetary Subcommittee, and the committee itself was reorganized out of existence by Representative William I. Dawson (D., Illinois), chairman of the full committee.]

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**"I have no opinion about . . . the filter at all. I don't know why it was done, and I frankly--if you don't think I am in contempt--care very little"**

Dr. Clarence Little, scientific director of the Tobacco Industry Research Committee, to the Blatnik Commission (1957)

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**"In preparation, we are establishing and building upon our relations with the Federal agencies dealing in this area. In the process of bringing in new leadership, the administration's nominee for head of the EPA is Lee Thomas. The good news is that we understand he is a reasonable man. The bad news is that under Thomas will be two men in key positions who are known anti-smokers. Joseph Cannon, Assistant Administrator for Air, in charge of the \$75,000 study mentioned in Mr. Milway's comments, and James Repace, who claims that cigarette smoke in the air kills between 500-5,000 nonsmokers annually. One month ago, we asked prominent medical researcher, Dr. Sorell Schwartz of Georgetown University, to critique Repace's work. We will use that critique in briefings with EPA officials."**

December 13, 1984, Tobacco Institute, "Annual Report to the Board of Directors" [Bates Nos. 367-394](#) Here's the [text](#)

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**"Of all the concerns, there is one -- taxation -- that alarms us the most. While marketing restrictions and public and passive smoking [restrictions] do depress volume, in our experience taxation depresses it much more severely"**

1985 PM document, "Smoking and Health Initiatives - P.M. International" (Bates numbers 2023268329 - 49.)

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**"I realize that research tells us that the majority of smokers wished they did not smoke and are, therefore, unlikely to be of much help to the industry ... My guess is that a large number of our smokers must take the view that, though they may try to quit, they will probably not be successful. Having faced up to the fact that they will probably continue to smoke, I cannot believe that they will willingly accept higher taxes on cigarettes"**

1985 PM document, "Smoking and Health Initiatives - P.M. International" (Bates numbers 2023268329 - 49.)

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**"The circumstances surrounding the release of the first report in 1964 are worth remembering. The date chosen was a Saturday morning, to guard against a precipitous reaction on Wall Street. An auditorium in the State Department was selected because its security could be assured - it had been the site for press conferences of the late President John F. Kennedy, whose assassination had occurred less than 2 months earlier. The first two copies of the 387-page, brown-covered report were hand delivered to the West Wing of the White House at 7:30 on that Saturday morning. At 9:00 o'clock, accredited press representatives were admitted to the auditorium and 'locked in' without access to telephones. Surgeon General Terry and his Advisory Committee took their seats on the platform. The Report was distributed and reporters were allowed 90 minutes to read it. Questions were answered by Dr. Terry and his Committee members. Finally, the doors were opened and the news was spread. For several days, the Report furnished newspaper headlines across the country and lead stories on television newscasts. Later it was ranked among the top news stories of 1964."**

The 1989 Surgeon General report is the focus of some questioning in the Minnesota trial on [April 16, 1998](#)

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[Nicotine](#) / [Health](#) / [Youth](#) / [Public Suasion](#) / [Documents](#) / [Research](#) / [Legal](#) / [Government](#)

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UNSORTED

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"COMPETITIVE ANALYSIS: Background - The Cigarette and the Smoking Experience . . . Different people smoke cigarettes for different reasons. But, the primary reason is to deliver nicotine into their bodies. Nicotine is an alkaloid derived from the tobacco plant. It is a physiologically active nitrogen containing substance. Similar organic chemicals include nicotine, quinine, cocaine, atropine and morphine. While each of these substances can be used to affect human physiology, nicotine has a particularly broad range of influence.

During the smoking act, nicotine is inhaled into the lungs in smoke, enters the bloodstream and travels to the brain in about eight to ten seconds. The nicotine alters the state of the smoker by becoming a neurotransmitter and a stimulant. Nicotine mimics the body's most important neurotransmitter acetylcholine (ACH), which controls heart rate and message sending within the brain. The nicotine is used to change psychological states leading to enhanced mental performance and relaxation. A little nicotine seems to stimulate, while a lot sedates a person. A smoker learns to control the delivery of nicotine through the smoking technique to create the desired mood state. In general, the smoker uses nicotine's control to moderate a mood, arousing attention in boring situations and calming anxiety in tense situations. Smoking enhances the smoker's mental performance and reduces anxiety in a sensorially pleasurable form.

Other reasons for smoking, besides nicotine delivery, include habituation, attachment, personality, culture and genetics.

- as an aid to vigilance, rapid information processing and memory
- doing nothing while doing something
- a communication tool
- a sexually alluring act
- a sign of rebelliousness
- something to do with your hands
- an oral gratification device
- a taste experience and other sensory stimulation at back of throat, windpipe and lungs
- a persona statement of image - based on the culture, it is positive or negative
- a sign of a risk taker
- predisposed in people by genetics

In its broadest sense, the cigarette is a pleasure product. It alters mood states just like the caffeine, alcohol and sugar in other Philip Morris products that affect human physiology and psychology. As with nicotine, these substances become part of an individual's life style and are used as coping mechanisms to help adjust to the environment."

"Competitive Products - Nicotine Delivery: Nicotine delivery devices range from snuff, chewing tobacco, cigars, pipes and conventional cigarettes to unique smoking articles, chewing gum, patches, aerosol sprays and inhalers"

"Competitive Products--Recent Trends: In the last five years, the scientific community in both the United States and Europe has been pursuing innovative nicotine delivery systems to either replace or transform the worldwide cigarette business as we know it. The majority of the patent activity has been focused on transdermal and nasal delivery systems, although more recent work has moved into tablets and injectable nicotine. The primary motivation for the products is smoking cessation through a controlled, gradual reduction in nicotine delivery. The companies dominating the development and the marketing are primarily pharmaceutical firms, although Procter & Gamble, Seimens and JTI have also shown interest in the subject.

The barriers to entry that have characterized the tobacco business do not constrain the broad field of potential competitors we now face. In addition, the nature of product development relies on legal protections afforded to technological innovation, an area not historically of value to the oligopolistic tobacco industry"

October 5, 1992 Memo *Table* by Barbara Reuter, director of portfolio management for Philip Morris' domestic tobacco business. [Trial Exhibit 11559](#)

☒ Bates Nos. 2021118664-8680

☒ [Minneapolis-St. Paul Star Tribune 03/04/98](#)

☒ Dr. A. Clifton Lilly was questioned about this document on [April 21, 1998](#)

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"Due to the selective membrane permeability only unprotonized nicotine can freely penetrate the mucosa or the bronchial alveolar lining. . . However, an influence of smoke pH on nicotine kinetics in the lower respiratory tract cannot be excluded: pH-enhanced gas diffusion of nicotine to the mucosa might increase its uptake rate." [GB]"

November 15, 1994 Philip Morris memo to director of research Dr. Kathy Ellis from Reininghaus (INBIFO) [Trial Exhibit 11751](#) PM CEO Geoffrey Bible was question about this document on [March 3, 1998](#)

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"The argument that bases are added to increase the nicotine delivery above normal levels" -- nicotine delivery above normal levels -- "is entirely specious." . . "The same amount of nicotine is delivered whether the smoke is acidic, basic, or neutral." . . . "Only the form, not the amount of nicotine is changed." . . . "To illustrate, a study was conducted on nicotine aerosols, where subjects inhaled the same amounts of nicotine at pHs of 5.6, 7.5 and 11.0." . . It was found that higher peak concentrations of nicotine in blood were achieved at higher pHs. Since the amounts of inhaled nicotine were the same, the results indicate that the higher the pH, the more rapidly nicotine enters the blood stream. Eventually, of course, all of the nicotine, regardless of pH, would enter the blood stream. Only the rate of entry is pH dependent." . . . "We conducted a study comparing the electrophysiological and subjective effects produced by smoking cigarettes containing nicotine as the base to the effects produced by smoking nicotine as the citrate." . . . Equimolar amounts of nicotine were used. We found that, compared to cigarettes containing the citrate, cigarettes containing the base produced enhanced electrophysiological and subjective responses. It is of interest to note the filler pHs for the base and the citrate cigarettes were 6.4 and 5.2, respectively. Nicotine delivery levels, however, were not different." . . . "We conducted a study assessing the effects of increase filler pH on electrophysiological and subjective responses to cigarettes." . . . "The cigarettes contained 0, 1 or 2 calcium hydroxide. Filler pHs were 5.7, 6.6 and 8.0, respectively. The corresponding nicotine deliveries were 0.34, 0.32, and 0.31 milligrams/cig. It is clear from these data that filler pH has no effect on nicotine delivery. We found that increased filler pH resulted in enhanced electrophysiological and subjective effects. We interpreted this data to mean that the higher pHs resulted in more unprotonated nicotine - a physiologically -- a more physiologically effective form."

*The Effects of Cigarette Smoke 'pH' on Nicotine Delivery and Subjective Evaluations* [Trial Exhibit 11752](#) PM CEO Geoffrey Bible was question about this document on [March 3, 1998](#)

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"2. Health Warnings--Awareness Research. . . Objectives are to assess spontaneous and prompted awareness of health warnings on cigarette packs; recall of the wording; attitudes towards changing the prominence of the health warning on the pack . . Survey will provide baseline data to monitor changes in public awareness and attitudes over time."

September 28, 1982 *Miscellaneous Research Projects* [Bates # 2501021452](#)

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"Several film producers have submitted outlines of script approaches to the Cigarette Controversy film. The best of these (prepared by Target Films, New York) has been sent to Kloefer for reaction. He feels the preliminary outline is suitable. It is suggested that because of the documentary type of film we intend to make, showing both sides of the medical/ statistical controversy, Tiderock be authorized to go ahead and get on film some of the doctors and their opinions before waiting for final approval of a script. The script could then be developed around the filmed interviews obtained."

April 17, 1968 Tiderock Corp. letter from Reginald Wells, Vice President, Public Relations, to Senator Earle Clements ( "[The Tiderock Program Progress Report](#)" Bates Nos. 403-407)

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"International Conference on Smoking and Health . . . The Ad Hoc Committee's plans for such a conference, made a year or so ago, have been reviewed and weighed. . . The attorneys (Hardy, Shinn, Jacob) will take part in each phase of preparation and planning."

April 17, 1968 Tiderock Corp. (The Tobacco Institute's PR firm) letter from Reginald Wells, Vice President, Public Relations, to Senator Earle Clements ( "[The Tiderock Program Progress Report](#)" Bates Nos. 403-407)

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**"Resources are stretched so thin that things will just begin to happen by default"**

Sept., 1990 Tobacco Institute memo lamenting the California situation. [LA Times 07/11/98](#)

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**"[I]t will always be a long and grueling battle when you take on tobacco."**

1987 A-K Associates memo describing its effort to keep wealthy potential supporters of California's Proposition 99, such as organized labor and the California Medical Assn., on the sidelines [LA Times 07/11/98](#) (LINK DEAD)

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**"Best strategy for anti-smoking forces: have a large number of smokefree efforts at once. Why havent they figured that out yet?"**

B&W Document, "Addendum To California Task Force Report Public Smoking Restrictions" Bates # 521047657

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**"ASSIST will hit us in our most vulnerable areas -- in the localities and in the private workplace. . . It has the potential to peel away from the industry many of its historic allies. For example, major employers in many states are members of the ASSIST coalition. Also, chambers of commerce, labor unions, groups like the Urban League and NAACP."**

January, 1992 Philip Morris memo, unidentified by [Richmond Times-Dispatch 07/12/98](#)

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**"I arrived after the meeting commenced and despite my effort to remain invisible, ended up seated at the head of the table. . . Would advise future 'plants' to arrive late and leave early, avoiding the awkward small talk with other attendees that might create suspicion"**

December 9, 1992 Philip Morris memo by an industry spy at a Fort Collins, CO, tobacco control meeting. Memo is unidentified at the [Richmond Times-Dispatch 07/12/98](#)

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☐ 07/12/98 [Hot Quotes: Geoffrey Bible, Philip Morris CEO, On the Stand in Minnesota](#) MN AG site

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**"This effectively took the tobacco initiative issue out of the hands of the current CMA leadership and placed it in the hands of the 'old guard' . . . [and] placed a huge roadblock in front of people like Dr. (Frederick) Armstrong, the current CMA president, who is an avowed anti-tobacco crusader"**

A-K Associates memo covering how it "arranged" to have the CMA's governing council to clear any requests for political contributions with its Finance Committee. [San Francisco Chronicle 07/14/98](#)

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**"The attached NEW YORK TIMES article reports on a legal action brought against the New Jersey Bell Telephone Company and a temporary court injunction granting the plaintiff, an employee, 'the right to work in a smoke-free environment' pending a court hearing. . . Blucher was aware of the suit, but said he had not heard from New Jersey Bell and could not offer Institute assistance without specific 'Committee of Counsel' approval."**

April 6, 1976 RJR memo, [New Jersey Bell Telephone No Smoking Suit](#) from J. S. Dowdell to C. B. Wade, Jr. (Document ids: [500004097](#) and [500004095](#))

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**"Project A."**

1970 anti-politician/anti-cig taxes ad plan, which was abandoned [Deseret News 06/28/98](#)

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**"The ever-increasing evidence linking cigarette smoking with lung cancer, pulmonary diseases, cardiovascular diseases, etc., can no longer be ignored... The Surgeon General, United States Air Force, has taken a firm stand on this issue and has informed tobacco companies that gift cigarettes are no longer acceptable. . . To allow the free distribution of cigarettes in our hospitals and in flight lunches suggests to our personnel that the Air Force Medical Service, in effect, condones cigarette smoking. . . To do so is to repudiate the overwhelming evidence of many medical teams working independently on a world-wide basis"**

Maj. Gen. R. L. Bohannon, the Deputy Surgeon General, United States Air Force, October, 1962

**"[An] increasing and consistent body of evidence [indicates that] excessive cigarette smoking is one of the causative factors in lung cancer"**

Surgeon General Leroy E. Burney, *Joint Report of Study Group on Smoking and Health* (July 12, 1957). [AP 08/01/98](#)

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**"As a courtesy to the tobacco industry, I sent a copy of the press release ... a few days prior to the (news) conference. My courtesy was repaid by their simultaneously releasing a lengthy, harsh rebuttal to the statement. I continue to be surprised by an action of a vested interest which puts profits above human welfare."**

Ex-Surgeon General Leroy E. Burney, whose funeral is today. [Indianapolis Star/News 08/08/98](#)

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From: "James Middleton"  
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Smoking kills 2 in every 3 users

Smokers lose 10 years off a normal non smoker lifetime

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## Results

Overall, 5,593 deaths accrued during follow-up (874,120 person-years; mean: 4.26 years); 7.7% of participants were current smokers and 34.1% past smokers at baseline. Compared to never-smokers, the adjusted RR (95% CI) of mortality was 2.96 (2.69–3.25) in current smokers and was similar in men (2.82 (2.49–3.19)) and women (3.08 (2.63–3.60)) and according to birth cohort. Mortality RRs increased with increasing smoking intensity, with around two- and four-fold increases in mortality in current smokers of  $\leq 14$  (mean 10/day) and  $\geq 25$  cigarettes/day, respectively, compared to never-smokers. Among past smokers, mortality diminished gradually with increasing time since cessation and did not differ significantly from never-smokers in those quitting prior to age 45. Current smokers are estimated to die an average of 10 years earlier than non-smokers.

## Conclusions

In Australia, up to two-thirds of deaths in current smokers can be attributed to smoking. Cessation reduces mortality compared with continuing to smoke, with cessation earlier in life resulting in greater reductions.





RESEARCH ARTICLE

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# Tobacco smoking and all-cause mortality in a large Australian cohort study: findings from a mature epidemic with current low smoking prevalence

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## Abstract

**Background:** The smoking epidemic in Australia is characterised by historic levels of prolonged smoking, heavy smoking, very high levels of long-term cessation, and low current smoking prevalence, with 13% of adults reporting that they smoked daily in 2013. Large-scale quantitative evidence on the relationship of tobacco smoking to mortality in Australia is not available despite the potential to provide independent international evidence about the contemporary risks of smoking.

**Methods:** This is a prospective study of 204,953 individuals aged  $\geq 45$  years sampled from the general population of New South Wales, Australia, who joined the 45 and Up Study from 2006–2009, with linked questionnaire, hospitalisation, and mortality data to mid-2012 and with no history of cancer (other than melanoma and non-melanoma skin cancer), heart disease, stroke, or thrombosis. Hazard ratios (described here as relative risks, RRs) for all-cause mortality among current and past smokers compared to never-smokers were estimated, adjusting for age, education, income, region of residence, alcohol, and body mass index.

**Results:** Overall, 5,593 deaths accrued during follow-up (874,120 person-years; mean: 4.26 years); 7.7% of participants were current smokers and 34.1% past smokers at baseline. Compared to never-smokers, the adjusted RR (95% CI) of mortality was 2.96 (2.69–3.25) in current smokers and was similar in men (2.82 (2.49–3.19)) and women (3.08 (2.63–3.60)) and according to birth cohort. Mortality RRs increased with increasing smoking intensity, with around two- and four-fold increases in mortality in current smokers of  $\leq 14$  (mean 10/day) and  $\geq 25$  cigarettes/day, respectively, compared to never-smokers. Among past smokers, mortality diminished gradually with increasing time since cessation and did not differ significantly from never-smokers in those quitting prior to age 45. Current smokers are estimated to die an average of 10 years earlier than non-smokers.

**Conclusions:** In Australia, up to two-thirds of deaths in current smokers can be attributed to smoking. Cessation reduces mortality compared with continuing to smoke, with cessation earlier in life resulting in greater reductions.

**Keywords:** Cohort, Mortality, Smoking

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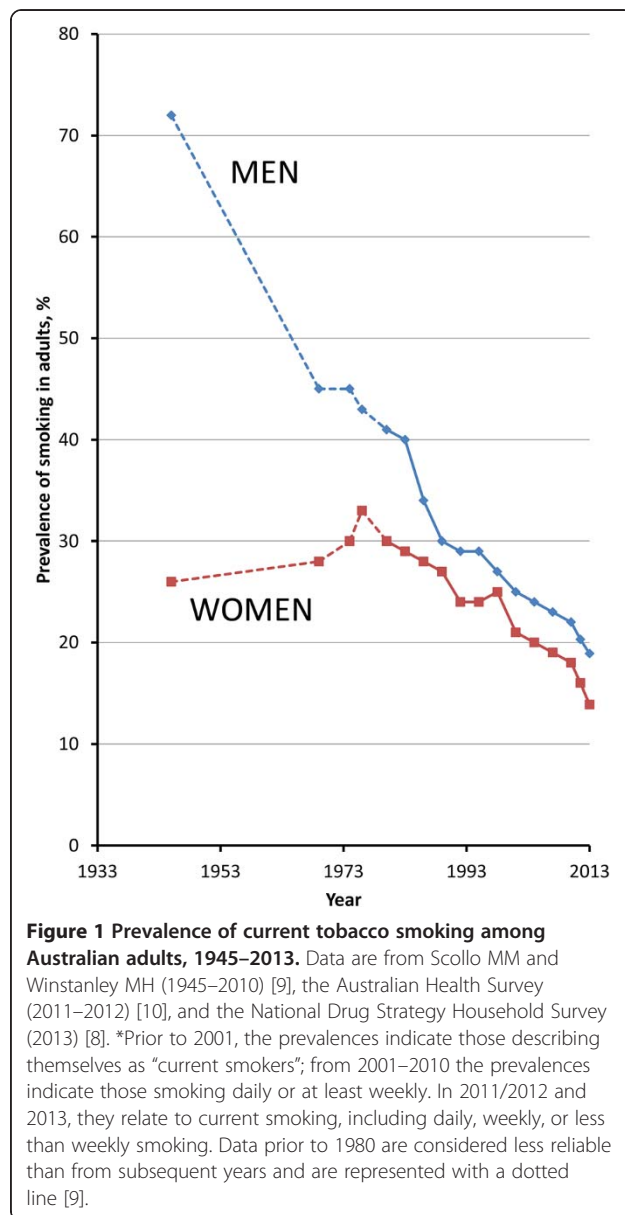
## Background

The risks of cancer, cardiovascular disease, respiratory disease, and a range of other health problems are increased in tobacco smokers and, as a consequence, smokers are more likely than non-smokers to die prematurely [1]. Smoking is a leading cause of morbidity and mortality in virtually every country in the world and is second only to high blood pressure as a risk factor for global disease burden [2]. It is arguably the leading readily preventable factor.

The relative risks of adverse health effects increase with increasing intensity of smoking, measured by the amount of tobacco smoked per day, and with increasing duration of smoking [3]. Smoking cessation imparts significant health benefits [3]. The overall effects of smoking on mortality in a population relate closely to the prevalence of current and past smoking and to the duration and intensity of smoking, among smokers. These indices relate, in turn, to the factors influencing smoking behaviour, including the stage of the smoking epidemic in the population under examination, to the relative success of tobacco control measures and to cultural and socioeconomic factors.

Hence, both the relative risks of mortality and the overall population impacts of smoking are not uniform across the world and may also vary across time, population groups, and birth cohorts within a single location [3-5]. Large-scale quantitative evidence on the relationship of tobacco smoking to mortality among countries with a mature smoking epidemic is accruing, but is not yet available for Australia. In common with many countries, Australia has relied on the findings from studies conducted in the UK and US, including the British Doctors Study [3] and the American Cancer Society Cancer Prevention Studies [6], to underpin estimation of the population impact of smoking [7]. As well as providing local evidence, large-scale data from Australia have the potential to contribute to knowledge internationally by providing additional independent data on the effects of prolonged, heavy, and widespread smoking. Furthermore, Australia has been among the most successful nations regarding tobacco control, with most recent data indicating that 13% of adults in Australia reported daily smoking in 2013 [8]; data from Australia are therefore likely to provide insights into the risks of smoking in settings with high historical prevalence of smoking and low current prevalence (Figure 1).

This study aims to investigate the relationship of smoking to all-cause mortality in Australia, in the 45 and Up Study cohort. Although cause-specific mortality data have been used in analyses from other countries, these were not available for Australia at the time of writing. Participants in this population-based cohort study were predominantly born between 1920 and 1964, and have lived



through the peak of the smoking epidemic, as well as through many changes in tobacco policy, legislation, and health information.

## Methods

The Sax Institute’s 45 and Up Study is an Australian cohort study of 267,153 men and women aged 45 and over, randomly sampled from the general population of New South Wales (NSW), Australia. Individuals joined the study by completing a postal questionnaire (distributed from 1 January 2006 to 31 December 2008) and giving informed consent for follow-up through repeated data collection and linkage of their data to population health

databases. The study methods are described in detail elsewhere [11].

Baseline questionnaire data included information on socio-demographic factors, health behaviours, height and body weight, medical and surgical history, functional capacity, and physical activity. The study questionnaire is available online [12]. To provide data to allow correction for regression dilution, repeat data on smoking status were taken from a resurvey of a sample of 60,404 participants a mean of 3.3 years after recruitment.

Questionnaire data from study participants were linked probabilistically to data from the NSW Register of Births, Deaths and Marriages up to 30 June 2012 to provide data on fact and date of death. This probabilistic matching is known to be highly accurate (false-positive and false-negative rates <0.4%) [13]. Death registrations capture all deaths in NSW. Cause of death information was not available at the time of analysis. In order to conduct sensitivity analyses, questionnaire data were also linked probabilistically to data from the NSW Admitted Patient Data Collection, which is a complete census of all public and private hospital admissions in NSW. The linked data that were used contained details of admissions in participants from the year 2000 up to the point of recruitment, including the primary reason for admission using the International Classification of Diseases 10<sup>th</sup> revision – Australian Modification (ICD-10-AM) [14] and up to 54 additional clinical diagnoses.

### Statistical methods

There were 266,777 participants with valid data on age and date of recruitment. Participants with data linkage errors ( $n = 20$ , 0.01%), age below 45 years at baseline ( $n = 3$ , 0.001%), and missing or invalid data on smoking status ( $n = 860$ , 3%) were excluded. To minimise the potential impact of changes in smoking behaviour and higher mortality in those with baseline illness (also known as reverse causality or the “sick quitter” effect), participants with a self-reported history of doctor-diagnosed cancer other than melanoma and/or non-melanoma skin cancer ( $n = 30,393$ , 11%) and those with a history of cardiovascular disease at baseline, defined as self-reported doctor-diagnosed heart disease, stroke, or blood clot on the baseline questionnaire ( $n = 30,548$ , 11%) were excluded from this study. It was not possible to exclude all individuals with respiratory illness because this information was not available in an appropriate form from the baseline questionnaire. However, sensitivity analyses were conducted to investigate the impact on the main results of additional exclusion of individuals with a history of admission to hospital with chronic obstructive pulmonary disease or other respiratory illnesses (defined as an admission to hospital with ICD-10-AM diagnosis codes J40 to J44 and J47 in any

of the 55 diagnostic fields) in the 6 years prior to completing the baseline 45 and Up Study questionnaire.

Smoking status was classified according to the responses to the following series of items on the baseline questionnaire: “Have you ever been a regular smoker? If “Yes”, how old were you when you started smoking regularly? Are you a smoker now? If not, how old were you when you stopped smoking regularly? About how much do you/did you smoke on average each day?” Never-smokers were participants who answered “No” to the question, “Have you ever been a regular smoker?”; current smokers were those who answered “Yes” to this question and “Yes” to being a smoker now; and past smokers were those who indicated that they had ever been a regular smoker but who indicated that they were not a smoker now. The age at ceasing smoking, among past smokers, was taken as the age they indicated they stopped smoking regularly and was categorised as <25, 25–34, 35–44, 45–54, and  $\geq 55$  years. Among current and past smokers, the number of cigarettes smoked per day was taken from the answer to the question about how much they smoked on average each day and was categorised as  $\leq 14$ , 15–24, and  $\geq 25$  cigarettes/day.

Mortality rates since baseline and 95% confidence intervals (CIs) were calculated for participants who reported being current, past, and never-smokers at baseline; these were indirectly standardised for age to the person-year distribution of the whole cohort population [15], and were presented separately for men and women. Hazard ratios (which are equivalent to, and described here as relative risks [RRs]) for mortality in men and women were estimated separately for men and women and according to birth cohorts with sufficient amounts of data, using Cox regression modelling, in which the underlying time variable was age. Estimates are shown initially accounting for age only (automatically adjusted for as the underlying time variable). Models are then presented adjusted for additional covariates derived from baseline questionnaire and participant location data, including education (<secondary school, secondary school graduation, trade/apprenticeship/certificate/diploma, university graduate); annual pre-tax household income (AUD <\$20,000, \$20,000–\$39,999, \$40,000–\$69,999,  $\geq$ \$70,000); region of residence (major cities, inner regional areas, outer regional/remote areas); alcohol consumption (0, 1–14,  $\geq 15$  alcoholic drinks/week), and body mass index (BMI) (<20, 20–24.99, 25–29.99,  $\geq 30$  kg/m<sup>2</sup>). Missing values for covariates other than smoking status were included in the models as separate categories. Hypertension and dyslipidaemia were considered likely to be part of the causal pathway between smoking and mortality and were not adjusted for. Sensitivity analyses were conducted: i) adjusting additionally for physical activity; and ii) categorising current smokers as those who



reported being current smokers at baseline and past smokers who had ceased smoking 3 or fewer years prior to baseline.

Among current and never-smokers at recruitment, mortality rates and RRs by amount smoked were calculated according to categories of consumption reported at recruitment ( $\leq 14$ , 15–24, and  $\geq 25$  cigarettes/day). Mortality rates were then plotted against the mean number of cigarettes within each category reported at the 3-year resurvey among those who reported being current smokers at resurvey, as this was considered the best estimate of long-term mean consumption among all in that category, before the study started (Additional file 1: Table S1). Rates in never-smokers were plotted against the “0” on the x-axis. The RR of dying during the follow-up period was then quantified among past versus never-smokers, in those ceasing smoking at ages <25, 25–34, 35–44, and 45–54 years. Sensitivity analyses were conducted restricting the data to individuals aged  $\geq 55$  years, ensuring that all participants had the opportunity to quit at these ages.

The proportionality assumption of the Cox regression models was verified by plotting the Schoenfeld residuals against the time variable in each model, with a stratified form or time-dependent form of the model used where covariates displayed non-proportionality of hazards. No violations of the proportionality assumption were detected for the main exposure. Minor violations were observed in covariates for certain models and a stratified Cox model was fitted, as follows: overall analyses of current and past versus never-smokers – model stratified by education; analyses relating to birth decade – model stratified by alcohol, education, and income; analyses relating to number of cigarettes smoked per day – model stratified by income; analyses relating to age at smoking cessation – model stratified by alcohol and education.

Separately for males and females, absolute mortality rates for Australian smokers and non-smokers for age group  $i$  (45–54, 55–64, and 65–74 years) were estimated by  $M_i/(1 + (RR - 1)P_i)$  for non-smokers and RR times this for smokers [16] (where  $M_i$  and  $P_i$  represent 2010/2011 Australian population mortality rates and smoking prevalence estimated from other sources, respectively [17,18], and RR represents all-cause current smoker versus never-smoker RRs estimated in the current study). From these rates, cumulative risks of death for non-smokers and smokers at age  $x$  (55, 65, or 75 years) from age 45 were estimated by  $1 - \exp\left(-10 \sum_{i=(45-54)}^x MR_i\right)$  (where  $MR_i$  is either the smoker or non-smoker mortality rate for age group  $i$ ) [19].

All statistical tests were two-sided, using a significance level of 5%. Analyses were carried out using SAS® version 9.3 [20] and Stata® versions 11 and 13.

Ethical approval for the 45 and Up Study as a whole was provided by the University of New South Wales Human Research Ethics Committee and specifically for this study by the NSW Population and Health Services Research Ethics Committee and the Australian National University Human Research Ethics Committee.

#### Role of funding sources

The sponsors of this study had no role in study design, data collection, data analysis, data interpretation, or the writing of the report. All authors had full access to the data in the study and had final responsibility for the decision to submit for publication.

#### Results

At baseline, 7.7% of the 204,953 study participants reported being current smokers and 34.1% were past smokers. Of the 84,312 participants with relevant data, 81,179 (96%) smoked only cigarettes, 1,572 (2%) smoked only pipes/cigars, and 1,561 (2%) reported smoking both. The prevalence of smoking was similar in men and women. Compared to never-smokers, current smokers were, on average, younger, less likely to be urban residents, of lower income and education level, and less likely to hold private health insurance; they were more likely to report consuming  $\geq 15$  alcoholic drinks/week and to have a BMI <20 kg/m<sup>2</sup> (Table 1).

The mean age at commencing smoking was similar for male study participants born in the decades from 1920–1929 to 1960–1969 (Additional file 2: Table S2). For women, the average age at commencing smoking decreased from 24 years in those born in 1920–1929 to 17 years among those born in 1960–1969, similar to males born in this decade (Additional file 2: Table S2). The average duration of smoking in current smokers was 38.5 years (SD, 9.4 years), with the majority having smoked for 35 or more years and reporting consuming 15 or more cigarettes per day (Table 2). Because of the narrow age range of commencing smoking, duration of smoking among current smokers was strongly correlated with current age ( $r = 0.8$ ). Data from the 3-year resurvey indicated consistency of reporting of never-smoker and ex-smoker status, with little misclassification and very few indicating that they had taken up smoking between surveys (Additional file 1: Table S1). Among current smokers at baseline who completed the 3-year resurvey, around one-third indicated that they were no longer smoking at resurvey, with those smoking fewer cigarettes per day being more likely to quit (Additional file 1: Table S1).

Over a mean follow-up time of 4.26 years, 874,120 person-years accrued and 5,593 deaths occurred. The RR (95% CI) of dying during the follow-up period, adjusting

**Table 1 Characteristics of participants in the study according to smoking status**

	Smoking status			Total
	Current	Past	Never	
Total	15,768	69,900	119,285	204,953
Men	7,625 (48%)	37,335 (53%)	45,251 (38%)	90,211 (44%)
Age				
45–64 years	12,951 (82%)	45,107 (65%)	79,667 (67%)	137,725 (67%)
65–79 years	2,443 (15%)	19,378 (28%)	29,913 (25%)	51,734 (25%)
≥80 years	374 (2%)	5,415 (8%)	9,705 (8%)	15,494 (8%)
Residing in Major Cities	6,428 (41%)	30,103 (43%)	55,300 (46%)	91,831 (45%)
University degree	2,209 (14%)	15,300 (22%)	32,721 (27%)	50,230 (25%)
Household income ≥ \$70,000	2,789 (18%)	18,218 (26%)	33,195 (28%)	54,202 (26%)
Private health insurance	6,714 (43%)	45,066 (64%)	84,007 (70%)	135,787 (66%)
≥15 alcoholic drinks/week	3,762 (24%)	15,685 (22%)	9,699 (8%)	29,146 (14%)
Highest physical activity tertile	5,278 (33%)	25,475 (36%)	39,044 (33%)	69,797 (34%)
Born in Australia	11,714 (74%)	50,845 (73%)	90,477 (76%)	153,036 (75%)
Body mass index				
<20 kg/m <sup>2</sup>	1,011 (6%)	1,848 (3%)	4,711 (4%)	7,570 (4%)
≥30 kg/m <sup>2</sup>	3,084 (20%)	16,160 (23%)	22,618 (19%)	41,862 (20%)

for age, socioeconomic factors, alcohol intake, and BMI, was 2.96 (2.69–3.25) in current versus never-smokers overall, and 2.82 (2.49–3.19) and 3.08 (2.63–3.60) in men and women, respectively (Figure 2). The adjusted RRs in past versus never-smokers were 1.43 (1.35–1.52) overall and 1.34 (1.24–1.45) and 1.54 (1.40–1.70) in men and women, respectively (Figure 2). Although the absolute rates of death were higher for men than for women, the RRs relating to current and past smoking did not differ substantively between the sexes; nor did they vary materially according to birth cohort, from 1920–1959 (Figure 2). The results remained similar following exclusion of individuals with a history of admission to hospital with a diagnosis of chronic obstructive pulmonary disease and other respiratory illness; compared to never-smokers, RRs of mortality were 2.76 (2.42–3.14) and 2.95 (2.50–3.49) in male and female current smokers, respectively, with corresponding RRs in past smokers of 1.27 (1.17–1.37) and 1.39 (1.25–1.55). RRs did not change materially when further adjusted for physical activity and when data among past smokers were restricted to individuals aged 55 and over who had the opportunity to cease smoking from age 45–54 (data not shown). Nor did the RRs for mortality in current and former versus never-smokers change substantially when current smokers were defined as individuals reporting current smoking at baseline or within 3 years prior to baseline (for men RR (95% CI) using the new definitions of current/recent versus never-smokers: 2.65 (2.36–2.96) and former versus never-smokers: 1.34 (1.24–1.44); the corresponding figures for women were 3.26 (2.84–3.75) and 1.47 (1.33–1.62)).

Among current smokers, the mortality rate during the follow-up period increased markedly with increasing number of cigarettes smoked per day, with around a two-fold increase in mortality in the groups smoking 14 or fewer cigarettes per day (10 cigarettes per day, on average) and around a four-fold increase in the groups of current smokers who smoke ≥25 cigarettes per day, compared to never-smokers (Figure 3 and Additional file 3: Figure S1). While there was evidence that the increase in mortality with increasing numbers of cigarettes smoked was significantly greater for women than for men ( $P_{\text{interaction}} = 0.0002$ ), the confidence intervals were relatively wide and the absolute mortality rates were considerably higher for men than for women.

The RR of dying during the follow-up period was 1.42 (1.29–1.58) among individuals ceasing smoking at age 45–54, compared to never-smokers (Figure 4); corresponding results were 1.36 (1.20–1.53) among men and 1.52 (1.27–1.82) among women (Additional file 4: Figure S2). Mortality diminished progressively with increasing time since cessation of smoking (data not shown) and did not differ significantly from that in never-smokers in individuals ceasing use prior to age 45 (Figure 4).

In Australia, male and female smokers were estimated to have the same risks of death 9.6 and 10.1 years earlier than 75-year-old non-smokers, respectively (Figure 5). Starting from age 45, 44.6% of male smokers in Australia would be estimated to die by age 75, compared to 18.9% of male non-smokers. Corresponding figures for females were 33.0% for smokers and 12.2% for non-smokers.

**Table 2 Smoking habits among current and former smokers, by sex**

	Men	Women
<b>Never-smoker</b>	45,251 (50%)	74,034 (65%)
<b>Current smoker</b>	7,625 (8%)	8,143 (7%)
Smoking duration (years)		
Mean $\pm$ SD	39.9 $\pm$ 9.8	37.1 $\pm$ 8.8
<20	124 (1.6%)	205 (2.5%)
20–34	2,143 (28%)	3,085 (38%)
35–49	3,869 (51%)	3,814 (47%)
$\geq$ 50	1,063 (14%)	541 (7%)
Cigarettes/day		
Mean $\pm$ SD	18.9 $\pm$ 10.4	16.6 $\pm$ 8.6
$\leq$ 14	2,308 (30%)	3,016 (37%)
15–24	2,931 (38%)	3,324 (41%)
$\geq$ 25	2,222 (29%)	1,632 (20%)
Age at starting smoking (years)		
Mean $\pm$ SD	17.6 $\pm$ 5.2	18.7 $\pm$ 6.1
<13	525 (7%)	222 (3%)
13–17	3,741 (49%)	3,736 (46%)
18–25	2,408 (32%)	2,863 (35%)
$\geq$ 25	526 (7%)	824 (10%)
<b>Past smoker</b>	37,335 (41%)	32,565 (28%)
Smoking duration (years)		
Mean $\pm$ SD	22.6 $\pm$ 12.7	19.8 $\pm$ 12.2
<20	15,669 (42%)	16,305 (50%)
20–34	12,707 (34%)	10,126 (31%)
35–49	5,767 (15%)	3,796 (12%)
$\geq$ 50	888 (2%)	351 (1%)
Cigarettes/day		
Mean $\pm$ SD	20.1 $\pm$ 13.8	15.2 $\pm$ 10.4
$\leq$ 14	12,083 (32%)	16,121 (50%)
15–24	15,004 (40%)	11,036 (34%)
$\geq$ 25	9,725 (26%)	4,910 (15%)
Age at starting smoking (years)		
Mean $\pm$ SD	17.5 $\pm$ 3.8	18.5 $\pm$ 4.7
<13	1,439 (4%)	469 (1%)
13–17	18,316 (49%)	13,624 (42%)
18–25	14,238 (38%)	14,363 (44%)
$\geq$ 25	1,621 (4%)	2,600 (8%)
Age at ceasing smoking (years)		
Mean $\pm$ SD	40.1 $\pm$ 12.6	38.4 $\pm$ 12.5
<25	3,421 (9%)	4,109 (13%)
25–34	9,616 (26%)	9,207 (28%)
35–44	9,548 (26%)	7,461 (23%)
45–54	7,627 (20%)	6,354 (20%)
$\geq$ 55	5,259 (14%)	3,776 (12%)

Numbers may not add up to total due to missing data.

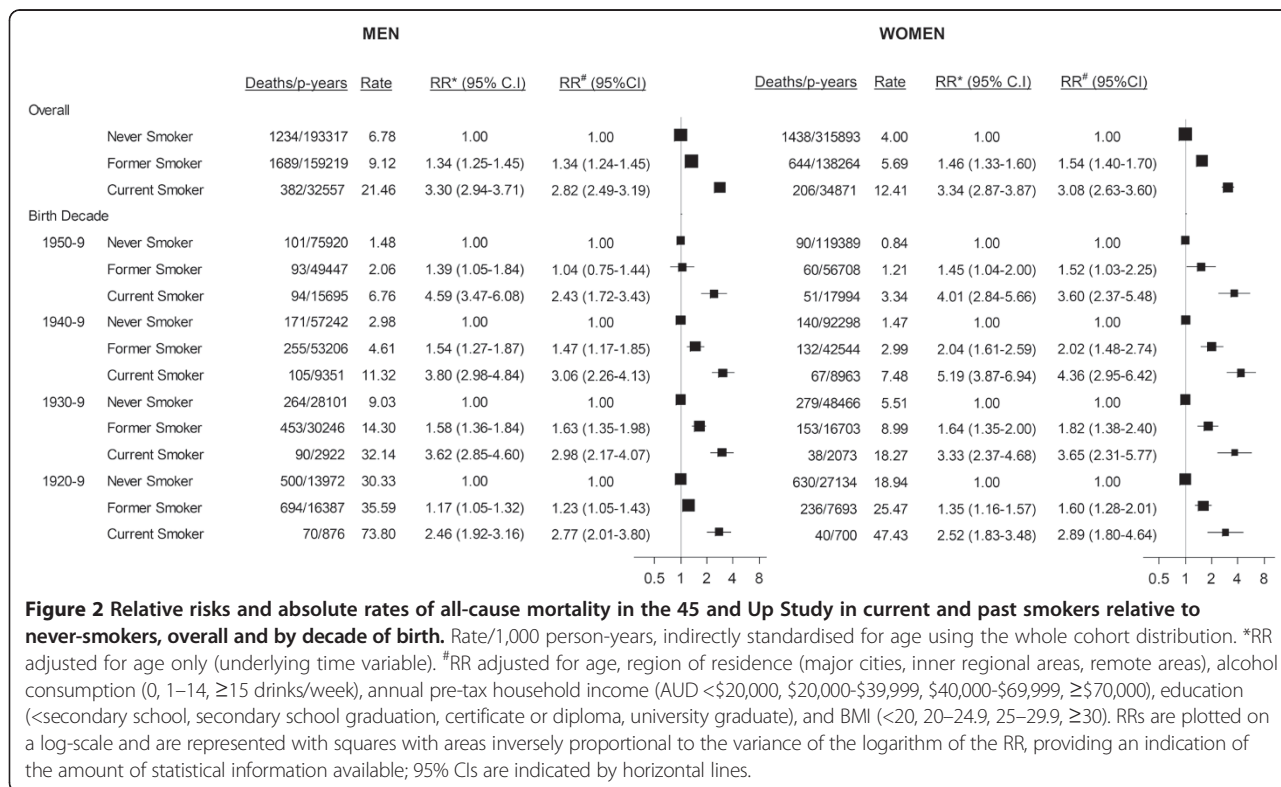
## Discussion

In this large-scale, population-based Australian study, death rates in current smokers were around three-fold those of people who had never smoked, in both men and women. On average, smokers died around 10 years earlier than non-smokers, over the ages examined. Mortality rates increased substantially with increasing intensity of smoking, with rates approximately doubling in those smoking around 10 cigarettes per day and four- to five-fold those of never-smokers in current smokers of 25 or more cigarettes per day. Cessation of smoking conferred large mortality benefits compared with continuing to smoke. These findings were adjusted for a range of potential confounding factors, including socioeconomic status, alcohol intake, and BMI.

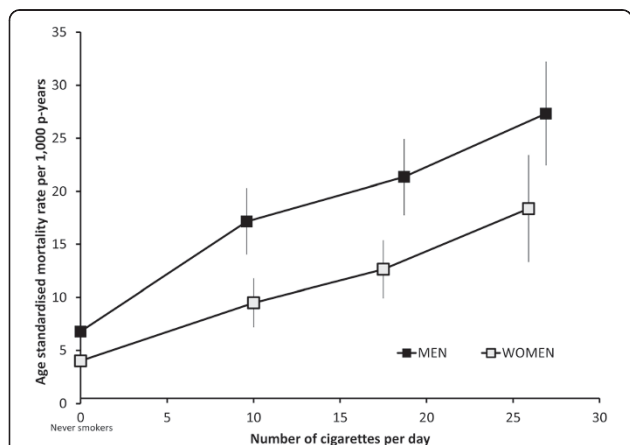
These findings are virtually identical to those on the contemporary risks of smoking from the UK and US, where the RR of all-cause mortality in current versus never-smokers has been consistently reported at 2.8 to 3.0 [3,21–23] and similar to a recent report from Japan [24]. The finding of similar RRs among smokers across successive birth cohorts in this study indicates that, in common with these countries, it is likely that the full mortality impacts of smoking are being realised among smokers in Australia. The evolution of increasing smoking-attributable mortality over time is well documented, with RRs of all-cause mortality in current versus never-smokers of around 1.4 to 1.8 in the 1960s to 2.1 to 2.3 in the 1980s [3,6], corresponding to up to around one-third and one-half of the deaths in smokers being attributable to smoking, respectively. The findings from this and contemporary estimates from the US and UK indicate that up to two-thirds of deaths in smokers in the 21<sup>st</sup> century in these settings are likely to have been caused by smoking [3,6,23]. The progressive increase in RRs has been attributed to the earlier commencement of smoking and greater intensity of smoking among successive birth cohorts, along with reductions in mortality among never-smokers [3,6,23]. In keeping with this, the smoking-related RRs in countries where widespread heavy and prolonged smoking from an early age began more recently are somewhat lower than those observed here [25].

The study provides the first large-scale direct evidence on the relationship of smoking to mortality in Australia. The population examined displays quantitatively many of the characteristics of a mature epidemic of smoking in the Western context, namely a relatively low prevalence of current smoking; similar prevalence of current smoking in men and women; long durations and stable intensities of smoking among current smokers; young and stable age at commencing smoking; a high prevalence of past smoking; and stable RRs of smoking-related mortality in successive birth cohorts [26]. Consistent RRs

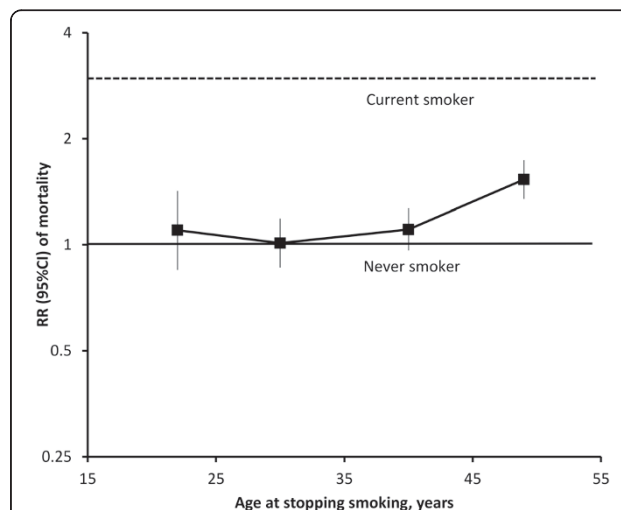




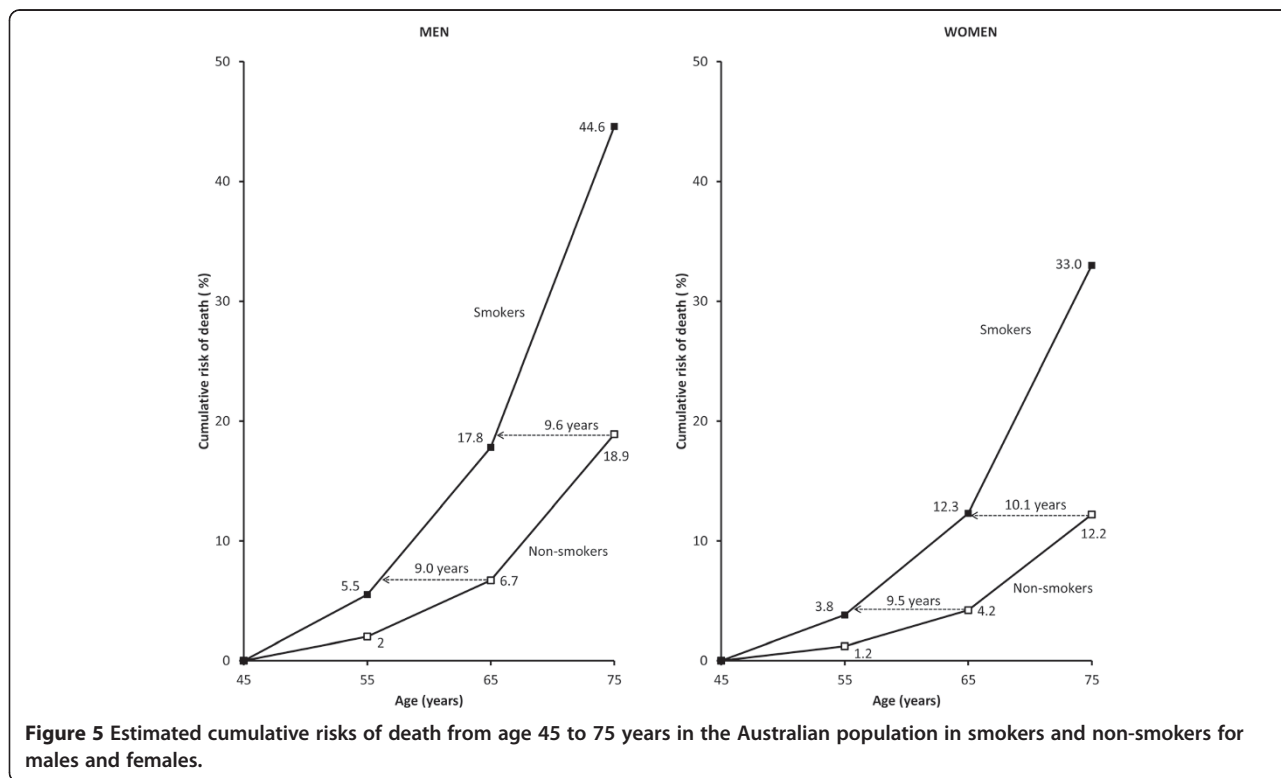
**Figure 2** Relative risks and absolute rates of all-cause mortality in the 45 and Up Study in current and past smokers relative to never-smokers, overall and by decade of birth. Rate/1,000 person-years, indirectly standardised for age using the whole cohort distribution. \*RR adjusted for age only (underlying time variable). #RR adjusted for age, region of residence (major cities, inner regional areas, remote areas), alcohol consumption (0, 1–14, ≥15 drinks/week), annual pre-tax household income (AUD <\$20,000, \$20,000–\$39,999, \$40,000–\$69,999, ≥\$70,000), education (<secondary school, secondary school graduation, certificate or diploma, university graduate), and BMI (<20, 20–24.9, 25–29.9, ≥30). RRs are plotted on a log-scale and are represented with squares with areas inversely proportional to the variance of the logarithm of the RR, providing an indication of the amount of statistical information available; 95% CIs are indicated by horizontal lines.



**Figure 3** Age standardised rates of all-cause mortality in current smokers and never-smokers, by smoking intensity. Categories of smoking intensity (0 (never smokers), ≤14, 15–24, ≥25 cigarettes/day) are based on smoking behaviour reported at baseline. Rates are plotted against the mean number of cigarettes within each pre-defined category, based on smoking intensity reported at the 3-year resurvey among current smokers at resurvey, to minimise regression dilution bias. Vertical lines represent 95% confidence intervals; the intervals around the rates for never-smokers are small and contained within the squares that indicate the rates [Men 6.8 (6.4–7.2), Women 4.0 (3.8–4.2)].



**Figure 4** Relative risk of all-cause mortality in past smokers relative to never-smokers in the 45 and Up Study, by age at smoking cessation. RRs adjusted for age, sex, region of residence (major cities, inner regional areas, remote areas), alcohol consumption (0, 1–14, ≥15 drinks/week), annual pre-tax household income (AUD <\$20,000, \$20,000–\$39,999, \$40,000–\$69,999, ≥\$70,000), education (<secondary school, secondary school graduation, certificate or diploma, university graduate), and BMI (<20, 20–24.9, 25–29.9, ≥30). RRs plotted on log-scale against median value for age at stopping smoking categories <25, 25–34, 35–44, and 45–54 years.



among successive birth cohorts were observed although the tar content in cigarettes in Australia has fallen over the last four decades [9]. The findings also demonstrate the continuing harms of smoking, despite highly successful tobacco control measures, and the need for continuing attention and control. The introduction of “plain packaging” for cigarettes in Australia in 2012 is an example of the continuing efforts required.

This study has the strength of being large and population-based, with independent and virtually complete data on the outcome of all-cause mortality. The study ascertained smoking status from questionnaire items that are based on those used in the Million Women Study, allowing direct international comparison of results [23]. Repeat data collection on smoking status allowed correction for regression dilution, such that the findings relating to smoking intensity are likely to reflect long-term habits. In keeping with the continuing decline in smoking prevalence in Australia, the data indicate that a substantial minority of current smokers at baseline ceased smoking during the follow-up period. This suggests that the estimated hazard ratios for mortality among current smokers at baseline are likely to be conservative. Although we do not have direct data on use of smokeless tobacco products among participants, importation and supply of these products has been illegal in Australia since 1991 and use has been negligible since then [27].

The study provides evidence on the effects of heavy and prolonged smoking in a setting where the prevalence of smoking is now low. Around 12% of individuals aged 45 and over in NSW were estimated to be current smokers at the time when the 45 and Up Study commenced [28] and, following exclusions, current smokers made up around 8% of the cohort. It should be noted that although the 45 and Up Study is, like the vast majority of cohort studies, not strictly representative of the general population, the results presented here are based on internal comparisons within the cohort and are likely to be reliable [28]. Moreover, as the British Doctors Study illustrates, cohort studies do not need to be representative to produce effect estimates that are generalizable. Follow-up time was relatively short, which has the advantage of meaning that smoking status measured at baseline is likely to broadly represent smoking status during the follow-up period. NSW is the most populous state in Australia, comprising around one-third of the total population. Smoking prevalence and cause-specific death rates for major causes of death in NSW are similar to those observed nationally [17,18].

To ensure that the study focussed on the likely causal effect of smoking on mortality, participants who had had cancer or cardiovascular disease at baseline were excluded. Although it was not possible to exclude individuals with chronic respiratory disease, sensitivity analyses indicated that the results did not change materially when

individuals with a previous hospital admission including a diagnosis of respiratory illness were excluded. Because of the tendency for smokers, particularly older smokers, to quit due to ill-health, it was not possible to reliably estimate the mortality risks in those ceasing smoking at older ages (i.e., 55 years or older), although they represented the minority of past smokers. It should be noted that the findings here are contingent on surviving to age 45; however, few deaths attributable to smoking are likely to have occurred below this age.

The evidence presented here relates to death from any cause. Data on cause of death were not available at the time this study was conducted. International evidence shows that the vast majority of excess deaths in smokers are caused by smoking and are due to conditions such as cardiovascular disease, cancer, and chronic lung disease. However, it should be borne in mind that a minority of deaths, such as those related to suicide, may be increased in smokers but may not be wholly caused by smoking. Hence, although we are not able to exclude the relatively small number of deaths that are less likely to be causally related to smoking, the large majority of the observed excess mortality in smokers observed here would have been caused by smoking [3].

## Conclusions

The national prevalence of smoking in Australia has fallen rapidly and is now among the lowest in the world, with an estimated 13% of adults smoking daily. A number of countries are moving towards tobacco “eradication”. These data indicate that, in a low prevalence setting, the risks of continuing to smoke and the benefits of cessation remain high.

## Additional files

**Additional file 1: Table S1, Smoking patterns at re-survey, by smoking status reported at baseline.**

**Additional file 2: Table S2, Smoking habits among current and former smokers by sex and birth decade.**

**Additional file 3: Figure S1, Relative risk (RR) of all-cause mortality in current and past smokers relative to never smokers, by smoking intensity, separately for men and women.** Rate/1,000 person-years, indirectly standardised for age using the whole cohort distribution. \*RR adjusted for age only (underlying time variable). #RR adjusted for age (underlying time variable), region of residence (major cities, inner regional areas, remote areas), alcohol consumption (0, 1–14, ≥15 drinks/week), annual pre-tax household income (AUD <\$20,000, \$20,000–\$39,999, \$40,000–\$69,999, ≥\$70,000), education (<secondary school, secondary school graduation, certificate or diploma, university graduate), and BMI (<20, 20–25, 25–30, ≥30). RRs are plotted on a log-scale and are represented with squares with areas inversely proportional to the variance of the logarithm of the RR, providing an indication of the amount of statistical information available; 95% CIs are indicated by horizontal lines.

**Additional file 4: Figure S2, Relative risk (RR) of all-cause mortality in past smokers relative to never-smokers in the 45 and Up Study, by age at smoking cessation, separately for men and women.** Rate/1,000 person-years, indirectly standardised for age using the whole cohort

distribution. \*RR adjusted for age only (underlying time variable). #RR adjusted for age (underlying time variable), region of residence (major cities, inner regional areas, remote areas), alcohol consumption (0, 1–14, ≥15 drinks/week), annual pre-tax household income (AUD <\$20,000, \$20,000–\$39,999, \$40,000–\$69,999, ≥\$70,000), education (<secondary school, secondary school graduation, certificate or diploma, university graduate), and BMI (<20, 20–25, 25–30, ≥30). RRs are plotted on a log-scale and are represented with squares with areas inversely proportional to the variance of the logarithm of the RR, providing an indication of the amount of statistical information available; 95% CIs are indicated by horizontal lines. Mean (±SD) number of cigarettes/day for the above age at smoking cessation groups (<25, 25–35, 35–44, 45–54 years) were: 15.4 ± 10.5, 18.7 ± 12.5, 21 ± 14.5, and 21.8 ± 14.6, respectively, among men, and 11.7 ± 8.4, 13.8 ± 9.2, 16.1 ± 10.8, and 17.2 ± 11.3, respectively, among women.

## Abbreviations

AUD: Australian dollars; BMI: Body mass index; CIs: Confidence intervals; ICD-10-AM: International Classification of Diseases 10<sup>th</sup> revision – Australian Modification; NSW: New South Wales; RR: Hazard ratios (described here as relative risks).

## Competing interests

The authors declare that they have no competing interests.

## Authors' contributions

EB and VB conceived of the original idea for the paper. GJ, SE, and EP conducted the data analyses. EB produced the initial draft of the paper. All authors were involved in the interpretation of the analyses and writing of the paper. All authors approved the final version of the paper and take responsibility for its content.

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# Modern cigarette filters increase the risk of lung cancer, study finds

Harriet Alexander

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SHARE TWEET MORE

Cigarette filters introduced in the 1960s to reduce the health risks associated with smoking have actually increased the likelihood of lung cancer, researchers say.

The study published in the *Journal of the National Cancer Institute* upends the perception by smokers that they are consuming a safer product and is already leading to calls for governments to regulate the design of cigarettes.



### Healthy lifestyle lowers cancer risk

New research shows one in three cancers in Australia are caused by lifestyle factors including diet, drinking alcohol, smoking and sun exposure.

Curtin University professor of health policy Mike Daube said it was "one of the most important papers on tobacco in recent years" and urged the government to control the product and its promotion through legislation.

"There is a long history of tobacco industry fraud in relation to lower tar products, and of consumer perceptions that modern filters somehow make cigarettes less harmful," Professor Daube said.



Modern cigarette filters may actually increase the rate of cancer. Photo: Nic Walker

"Now it turns out that they are likely to increase the risks of smoking.

"Getting rid of filter ventilation would reduce the harm and make cigarettes less appealing to young smokers - a win-win outcome for everyone except Big Tobacco."

Modern cigarette filters contain tiny ventilation holes designed to dilute the smoke with air, based on the theory that this would reduce the amount of tar yielded by the cigarette and therefore reduce smoking risks.

But since the design was perfected in the 1960s, the incidence of lung adenocarcinoma - a type of lung cancer - has risen among smokers and makes up about 60 per cent of non-small cell lung cancer.

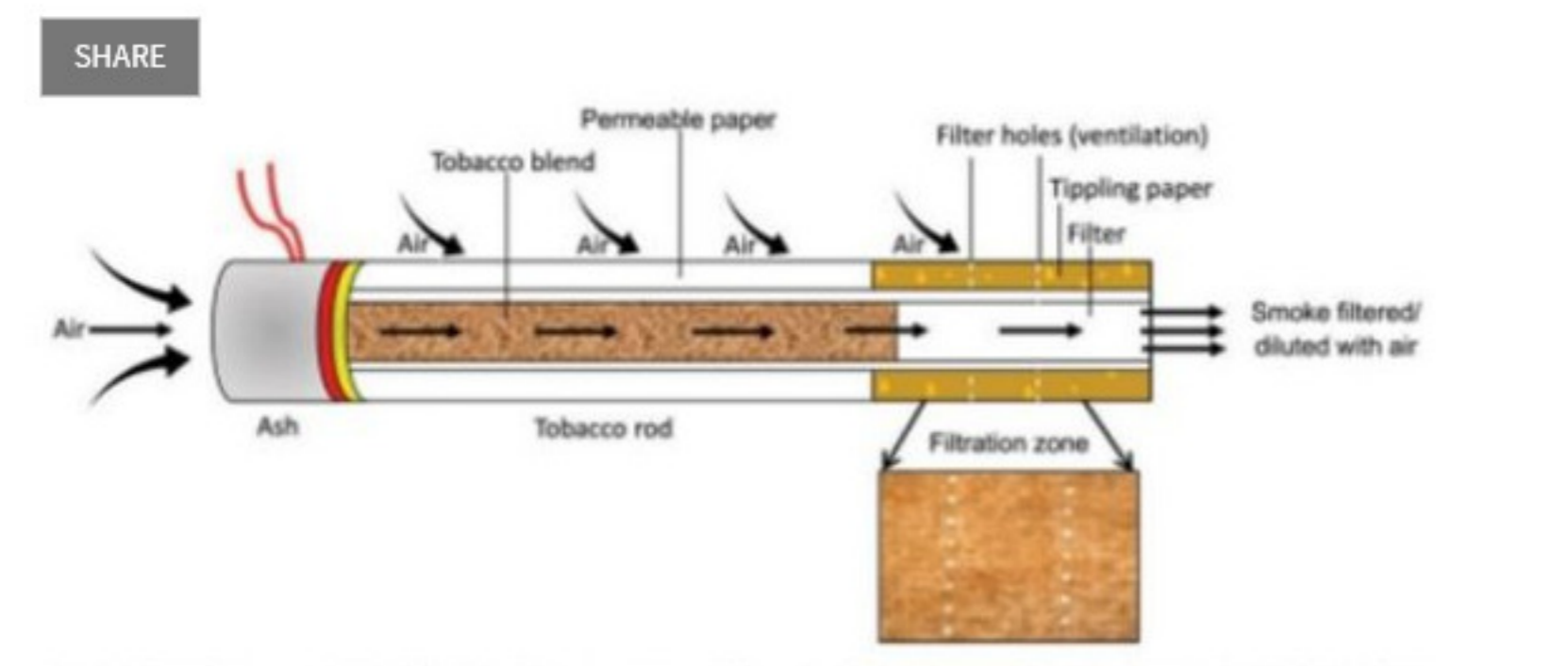


Figure 3. The modern cigarette. An adapted digitized modern cigarette as to illustrate mechanisms to end around the burning cigarette by Richard R. Baker in 1982

An image of a modern cigarette published in the Journal of the National Cancer Institute. Illustration: Richard R. Baker

Researchers at Ohio State University reviewed internal tobacco company documents and published scientific literature, giving more weight to the most relevant and best studies, to provide an overview of the relationship between filter ventilation and lung adenocarcinoma.

They found that filter ventilation did result in lower tar yields, but the cigarette burnt down less rapidly so there were more puffs per cigarette and there was more time for the coal to smoulder and form toxic constituents.

Smokers also took deeper puffs, inhaled larger particles and smoked more cigarettes a day.

"The use of ventilation in the filters of cigarettes has failed to make cigarettes safer, and more than likely has made them more harmful," the authors concluded.

"The [US Food and Drug Administration] now has the authority to require the elimination of filter ventilation because ventilation does not serve any public health purpose and instead provides a false promise of reduced risk."

Cancer Council Australia head of public policy Paul Grogan said the study added weight to calls in Australia for legislation surrounding the composition of tobacco products, following plain packaging laws that came into effect in 2012.

The implied health benefit of filter ventilation followed a pattern of misleading marketing by tobacco companies, including cigarettes branded "light" or "mild", which were banned from product descriptions in 2005.

"The tobacco industry is notorious for seeking to exploit every possible loophole in any public health measure designed to reduce consumption," Mr Grogan said.

"There's a case to talk to government about another legislative reform agenda to pick up some of these things."

Health Minister Greg Hunt has been contacted for comment.



Curtin University professor Mike Daube says cigarette ventilated filters should be banned.

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