

Correcting Misperceptions – Delphi Approach

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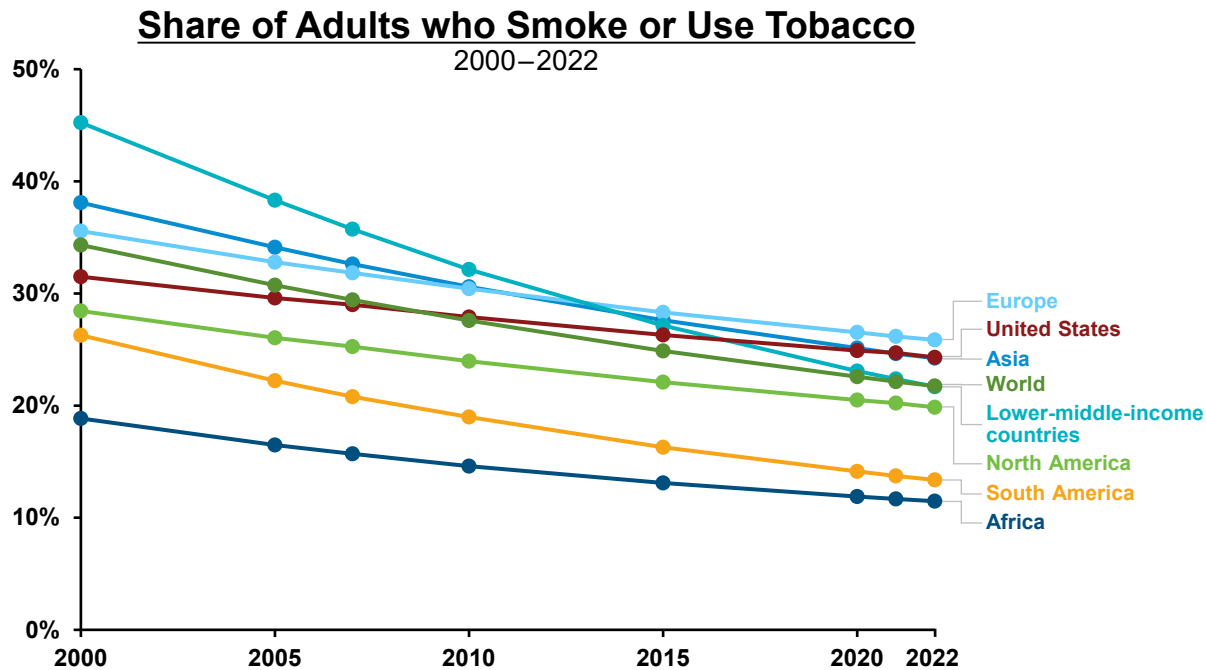


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Although Declining, Smoking is Still Widely Prevalent Globally



**MORE THAN
1 BILLION PEOPLE**
smoke across the world

**AN ESTIMATED ~8 MILLION
PREMATURE DEATHS**
due to smoking-attributable
diseases

Source: <https://ourworldindata.org/smoking-big-problem-in-brief> Accessed 5/24/2023; Estimated percentage of people aged 15 years and older who currently use tobacco. This includes all forms of tobacco use, such as smoking, chewing or snuffing, but excludes products that do not contain tobacco, such as e-cigarettes.

The Solution For Those Unable or Unwilling to Quit

Traditional Strategies



Complement to Existing Approach



Harm Reduction Framework

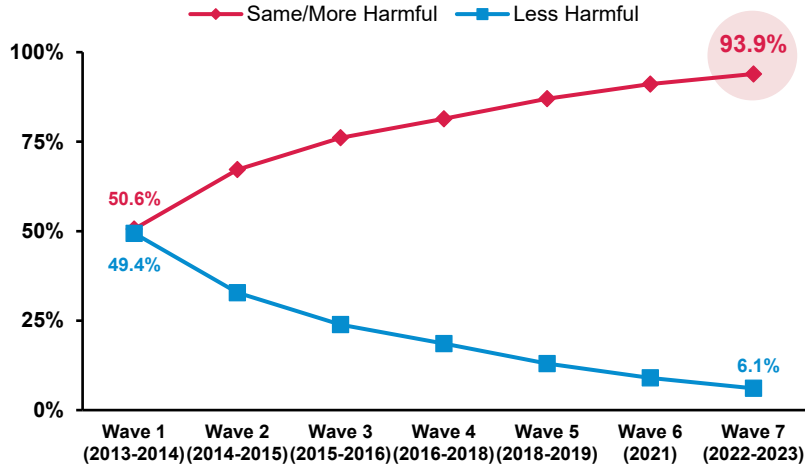
ATC=Adult Tobacco Consumers.

Product Risk Misperceptions Are Widely Pervasive and Continue to Increase Among U.S. Adults Who Smoke

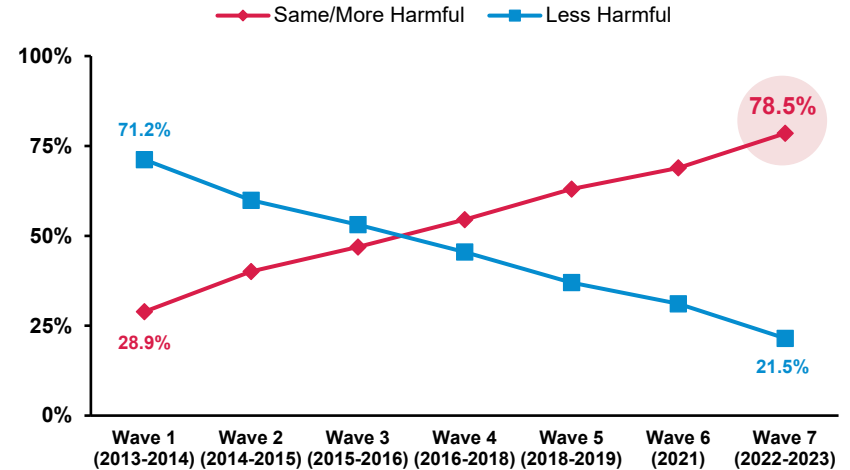


Is using e-cigarettes or other electronic nicotine products less harmful, about the same, or more harmful than smoking cigarettes?*

Current Exclusive Smokers



Dual Users of Cigarettes and E-vapor



*Based on ALCS analysis of PATH data

Definition of use status:

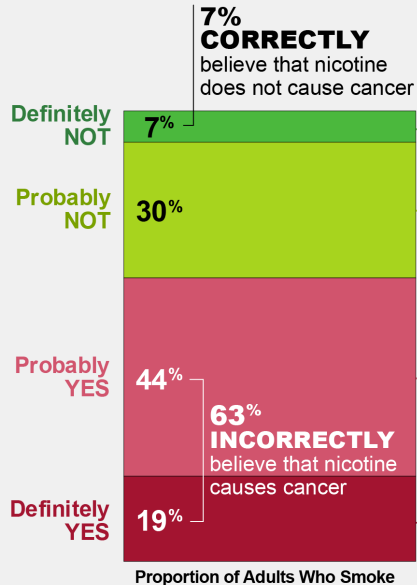
Current Exclusive Smokers: Individuals who currently smoke every day or some days and have smoked 100+ cigarettes, and not currently using e-vapor products;

Current dual users of cigarettes and e-vapor: Individuals who currently smoke cigarettes (having smoked 100+ cigarettes) and use e-vapor every day or some days..



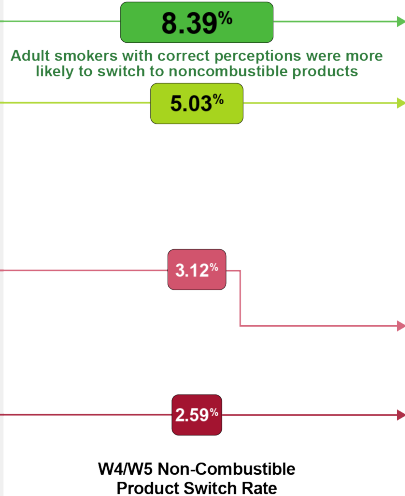
Majority of Adults Who Smoke Believe that “Nicotine Causes Cancer” and Less Likely to Switch

Perceptions

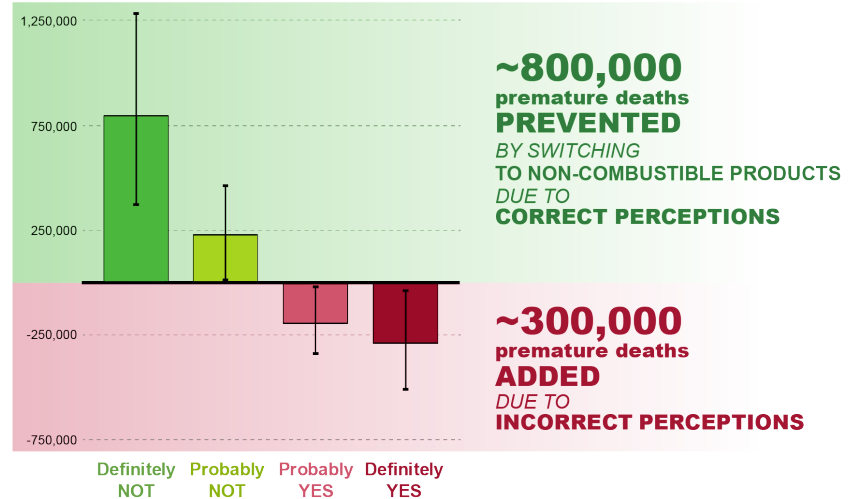


OUTCOMES Based on Adult Smokers’ Nicotine Perception

Likelihood of Adult Smokers Switching to Non-combustible Products



Cumulative Premature Deaths Prevented Over 75 Years (Ages 35-85) Effects of Perception on Premature Deaths in Adult Smokers



Hannel T, Wie L, Muhmmad-Kah RS, Largo EG and Sarkar M., *Harm Reduction J*, 21:145 (2024).

Prevailing Nicotine Misperceptions Among Doctors

September 8, 2020

RUTGERS TODAY

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Health Care

Rutgers-Led National Survey Uncovers Doctors' Misconceptions About Nicotine Risks

83%

Strongly believed that nicotine directly contributed to heart disease

81%

Thought nicotine contributed to COPD

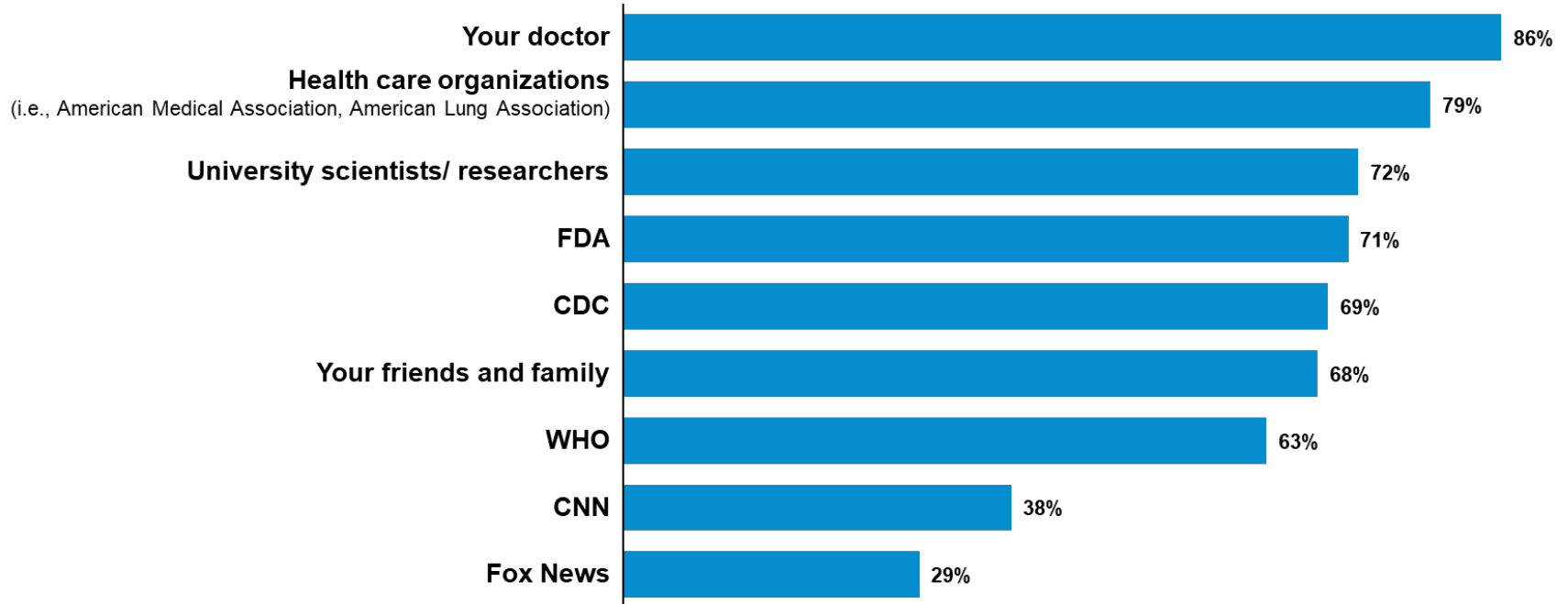
80%

Incorrectly believed nicotine causes cancer

Steinberg, M.B., Bover Manderski, M.T., Wackowski, O.A. et al. Nicotine Risk Misperception Among US Physicians. *J GEN INTERN MED* (2020).

Doctors – Most Trusted Source for Information

Total Trustworthiness



Nationwide survey conducted among n=1,000 general population adults age 21+ ("GP", m.o.e +/- 3.1%), n=150 primary care physicians;"PCP", m.o.e +/- 8.0%), and n=151 policy professionals; "PP", m.o.e +/- 8.0%) from 11/22 - 12/8, 2021 by Povaddo LLC for Altria Client Services LLC.

KEY QUESTION

How Can We CHANGE Misperceptions?

Table 1. Health Panel members

Graham A. Colditz,
Channing Laboratory,
Boston, MA

Martin Jarvis,
Health Behaviour Unit of Cancer Research UK,
Department of Epidemiology and Public Health,
University College London,
London, United Kingdom

Michael Kunze,
Institute of Social Medicine,
University of Vienna,
Vienna, Austria

Freddi Lewin,
Department Oncology,
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Bloomberg School of Public Health,
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Baltimore, MD

Peter Shields,
Cancer Genetics and Epidemiology,
Lombardi Cancer Center,
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Steven D. Stellman,
Mailman School of Public Health,
Department of Epidemiology,
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Michael Thun,
Department of Epidemiology and Surveillance,
American Cancer Society,
Atlanta, GA

Deborah M. Winn,
Epidemiology and Genetics Research Program,
Division of Cancer Control and Population Sciences, NIH,
Washington, DC

RESEARCH ARTICLES | DECEMBER 14 2004

The Relative Risks of a Low-Nitrosamine Smokeless Tobacco Product Compared with Smoking Cigarettes: Estimates of a Panel of Experts **FREE**

David T. Levy; Elizabeth A. Mumford; K. Michael Cummings; Elizabeth A. Gilpin; Gary Giovino; Andrew Hyland; David Swenor; Kenneth E. Warner



+ Author & Article Information

Cancer Epidemiol Biomarkers Prev (2004) 13 (12): 2035–2042.

<https://doi.org/10.1158/1055-9965.2035.13.12> [Article history](#)

HEALTH PANEL MEMBERS CONCLUDED THAT:

Using an iterative Delphi process of estimation and discussion, the panel's consensus estimated that the median total mortality RR ranged 5%-10% of the risk of smoking.

Delphi Approach – A Potential Solution for Correcting Misperceptions



Delphi,
an archaeological site in Greece,
was the seat of Pythia, the
major oracle who was
consulted about important
decisions

Source:
<https://whc.unesco.org/en/list/393/#:~:text=Delphi%20lies%20between%20two%20towerin,g,in%20the%206th%20century%20BC.> Accessed 5/24/2025

Delphi Consensus Method

Misperceptions can be addressed using the Delphi Approach as an Education Tool



Well-established survey-based approach answering research questions through the identification of a consensus based on available scientific evidence and expert judgment



Clearly define the problem (& goal)



Engage experts & develop statements



Test & amplify with peers (participants)



Experts analyze results & provide recommendation



Communicate and support to drive change

Revision of statements (further rounds of testing, if required)





Any

Questions?



Workshop Material – Instructions for participants

Identify a Group Leader to take notes and report the findings.

The Group Leader will:

- 1) Take notes on key points of discussion;
- 2) Identify specific reasons for the divergence or convergence of opinions; and
- 3) Report the number of individuals in the group that agree, disagree, or abstained.

Please review the following statements within your breakout group and feel free to refine the statement or recommend an alternate statement that reflects the consensus of the group.

Workshop Material – Nicotine Perceptions Statements

Perceptions About Nicotine				
Statement	# Agree	# Disagree	# Abstain	Comments
1) Nicotine does not cause cancer.				
2) Nicotine does not cause emphysema and chronic obstructive pulmonary disease (COPD).				
3) While nicotine has some cardiovascular effects, nicotine does not directly cause cardiovascular disease.				
4) Nicotine use can harm the baby if used during pregnancy or by nursing mothers.				
5) There is no direct evidence that long-term use of nicotine irreversibly damages the human brain.				



Workshop Material – Smoke-Free Product Perceptions Statements

Perceptions About Smoke-Free Products				
Statement	# Agree	# Disagree	# Abstain	Comments
1) Combustible cigarettes are the most harmful tobacco products.				
2) Switching completely from combustible cigarettes to smoke-free products can substantially reduce exposure to smoke-related toxicants.				
3) Smoke-free products are less harmful than cigarettes.				
4) Healthcare providers should advise adults who are unable or unwilling to quit cigarettes, to switch completely to smoke-free products.				
5) Correcting misperceptions among Dual Users can accelerate complete switching.				

