

Get two issues of Forbes for FREE!

Log in | Sign up | Connect | Help

MBET IS DIFFERENT. ARE YOU?

Explore the Master of Business, Entrepreneurship and Technology at uWaterloo

CONRAD
BUSINESS. ENTREPRENEURSHIP. TECHNOLOGY
uwaterloo.ca/Conrad



Capital Flows, Contributor
Select commentary curated by the Opinions editors
[Follow](#) (154)

OP/ED | 11/20/2012 @ 4:13PM | 3,555 views

How Activism Distorts The Assessment Of Health Risks

[Comment Now](#) [Follow Comments](#)

By Geoffrey Kabat

The International Agency for Research on Cancer is renowned for producing assessments of carcinogens. But it appears that some of the agency's evaluations may overstate the risks, for reasons that tell us a great deal about the science and politics of risk assessment.



The hazard symbol for carcinogenic chemicals. (Photo credit: Wikipedia)



Behind The World Health Organization's "Cancerous" Pronouncement On Cell Phones

Capital Flows Contributor

It is a paradox that, in spite of dramatic increases in life expectancy and improvements in health in the developed world over recent decades, as a society we are obsessively preoccupied with the specter of hazards lurking in our environment and consumer products.

Many factors have contributed to this ever-increasing climate of fear, including the success of the environmental movement; a deep-seated distrust of industry; the public's insatiable appetite for stories related to health, which the media duly

Most Read on Forbes

[NEWS](#) [People](#) [Places](#) [Companies](#)

How Vinegar Could Save 73,000 Women A Year From Cancer
+79,077 views

My 'One Week Later' Review Of The Samsung Galaxy S4 +56,908 views

Rate Shock: In California, Obamacare To Increase Individual Health Insurance Premiums By 64-146%
+26,058 views

Confessions Of A Compulsive Saver
+22,840 views

Weekend Box Office: Will Smith's 'After Earth' Opens Soft, 'Now You See Me' Surprises +15,971 views

[+ show more](#)

Follow On Forbes

Keep up with the writers, people, places, companies and organizations that interest you.

[Sign up now >>](#)



[New Posts](#)

[Most Popular](#) [Lists](#)

[Video](#)

Meg Whitman Jolts HI Most Powerful Women \$190 Million Estate





Do Smoking Bans Really Save Lives? If So, Whose?

Capital Flows Contributor

The Bad News About the Good News About Chocolate

Capital Flows Contributor



Does Coffee Drinking Really Protect Against Devastating Diseases?

Capital Flows Contributor

Epidemiologists have long been aware of the baleful effects of contradictory findings reported in the media, which confuse the public about what threats to health are worth worrying about. However, only recently have prominent epidemiologists begun to critically examine their own discipline and to speak out about the “false positives” – initial findings that later prove to be wrong – that are latched onto by the media, the public, advocacy groups, and regulatory agencies.

In 2005 the epidemiologist John Ioannidis published a paper entitled “Why Most Research Findings are False.” Among the factors contributing to this reality, he cited methodological issues but also researchers’ desire for their results to be meaningful and the strong motivation of professional advancement.

In the past several years, one of the most respected institutions in the area of disease prevention has come under scrutiny for allowing its assessments to be colored by a bias toward positive results and to be swayed by advocacy in the wider society.

Since the early 1970’s the International Agency for Research on Cancer (IARC), a part of the World Health Organization, has produced assessments of carcinogenic hazards for use by researchers and regulators. These reports are widely regarded as the most authoritative assessments available on health risks.

However, a number of scientists with direct experience of IARC have felt compelled to distance themselves from the agency’s approach to evaluating carcinogenic hazards. Their critique goes to the heart of the agency’s epistemology and its

deliberative process.

IARC classifies the agents it evaluates into one of the following categories: 1 – carcinogenic to humans; 2A – probably carcinogenic to humans; 2B – possibly carcinogenic to humans; 3 – not classifiable as to its carcinogenicity in humans; 4 – probably not carcinogenic to humans.

In its evaluation, IARC considers experimental evidence of carcinogenicity but gives priority to human epidemiologic evidence. But – as pointed out by Ioannidis and others – epidemiologic studies are subject to high rates of false positives. When IARC’s classification of individual agents is examined critically it appears that the agency’s ratings may be systematically inflated.

For example, according to the critics, the classification of formaldehyde in group 1 appears to be “particularly problematic,” being based primarily on two positive studies, one of which has serious methodological flaws, while the other shows inconsistent results.

Among the agents classed in Group 2B, possibly carcinogenic, are coffee and

Select commentary curated by the Opinions editors.

The author is a Forbes contributor. The opinions expressed are those of the writer.

CAPITAL FLOWS’ POPULAR POSTS

The TSA Is Coming To A Highway Near You 511,699 views

Fast And Furious' Just Might Be President Obama's Watergate 299,665 views

Obamacare's Slush Fund Fuels A Broader Lobbying Controversy 86,923 views

Yep, Obama's a Big Spender...Just Like His Predecessors 82,464 views

As Country Club Republicans Link Up With The Democratic Ruling Class, Millions Of Voters Are Orphaned 76,146 views

MORE FROM CAPITAL FLOWS

Who Just Made a Billion Dollars?



+6 comments in last 24 hours

China And The Biggest Territory Grab Since World War II



DDT, both of which have been extensively studied and found not be linked to cancer.

In 2011 IARC classified cell phone use as “possibly carcinogenic,” when the agency’s own review showed that the overall evidence overwhelmingly indicated that cell phone use was not associated with increased cancer.

One has to ask what “possibly carcinogenic” means, if extensive evidence in humans and animals points to no threat. A major problem with the IARC process is that it makes it almost impossible to assign an agent to category 4 – probably not carcinogenic. Of the roughly one thousand agents evaluated by the agency exactly one is in this category.

A second problem with the IARC process — one that reinforces the classification problem — is that some of the working groups convened to assess a particular agent have included scientists who have carried out studies on the agent under evaluation. It is fanciful to think that scientists who have a vital stake in a particular question can evaluate the evidence, including their own studies, dispassionately.

Finally, IARC reaches its assessments by consensus. But this can mean that those who are more forceful and persuasive may influence the group decision-making process. In addition, consensus implies a philosophic stance which has nothing to do with science.

All three of these flaws came together in IARC’s [assessment of cell phones](#): undue emphasis on a small number of positive epidemiologic studies from a single group, when the much larger body of studies indicated no elevated risk; the improper influence of an activist researcher (the lead author of the anomalous positive studies) on the deliberations of the working group; and, finally, a tilt toward the “precautionary principle.”

The precautionary principle states that, if there is uncertainty regarding the effects of exposure to an agent, the burden of proof that exposure does not cause harm falls on those who utilize the agent. While this formulation may sound reasonable, in actuality it has nothing to contribute to the assessment of risks. First, there are always uncertainties, and it is not possible to prove the absence of risk. Furthermore, in practice invocation of the precautionary principle focuses attention solely on the possibility of harm, often ignoring information about the dose to which people are exposed, avoiding consideration of benefits of the agent in question and whether safer substitutes are available, and giving greater weight to studies that appear to indicate a hazard, even when these studies may be of poorer quality.

Page 1 | 2 | [Next Page »](#)

See Also:

[High Paying Jobs](#)

[Leadership Qualities](#)

[Complete Interview Guide](#)

[10 Best Mutual Funds](#)

[Best Places to Retire](#)

[Best Places to Work](#)

[Best Resume Samples](#)

[Online Tax Calculator](#)

[Comment Now](#) [Follow Comments](#)

[Print](#)

[Report Corrections](#)

[Reprints & Permissions](#)

From Around the Web



How to Speed Up Your PC - Tricks Manufacturers Hate



5 Dumb Mistakes That Will Destroy Your Retirement



How Penny Stocks Create Millionaires Every Day



How Cruise Lines Fill All Those Unsold Cruise



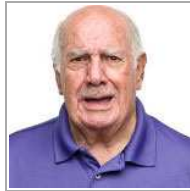
How New iPads are Selling for Under \$40



How to Exercise Your Brain to Make It Strong



New Tech Lets You Start Speaking a Language in 10 Days



Billionaires Dump Stocks. Prepare For Unthinkable.

?

ADVERTISER VIDEO



Post Your Comment

Please [log in](#) or [sign up](#) to comment.



Enter Your Comment

Text input area for user comments.

Forbes writers have the ability to call out member comments they find particularly interesting. Called-out comments are highlighted across the Forbes network. You'll be notified if your comment is called out.

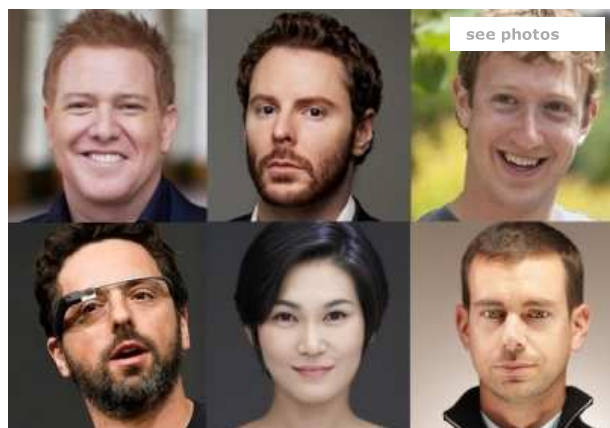
Comments

CALLED-OUT [Expand All Comments](#)

[Follow Comments](#)

+ expand 6 comments

Inside Forbes



The 29 Youngest Billionaires: World's Richest Under 40

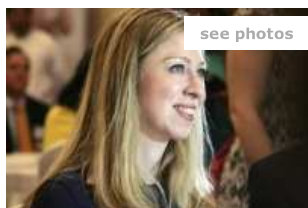
With \$119 billion between them, these 29 billionaires under 40 years old have it made.



Why Facebook's Cofounder Gives Cash To The Poorest



The PGA Tour's Crazy And Wonderful Year, So Far



Redefining Power: Women To Watch This Year



Real-Time Billionaires

Channels

- Business
- Investing
- Technology
- Entrepreneurs
- Op/Ed
- Leadership
- Lifestyle
- Lists

Company Info

- Forbes Careers
- Advertising Information
- Forbes Conferences
- Investment Newsletters
- Reprints & Permissions
- Terms and Conditions
- Privacy Statement
- Contact Us
- Sitemap
- Help

Affiliate Sites

- Forbes China
- Forbes India
- Forbes Israel
- Forbes Mexico
- Forbes Middle East
- Forbes Poland
- Forbes Romania
- Forbes Russia
- Forbes Ukraine
- RealClear Politics
- RealClear Markets
- RealClear World
- RealClear Sports

Data Partners

- Market Data by Morningstar
- Thomson Reuters
- AdChoices

Publications



- Free Trial Issue
- Subscriber Services
- Buy Back Issues

