Media Monitor

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The Media and Chemical Risk

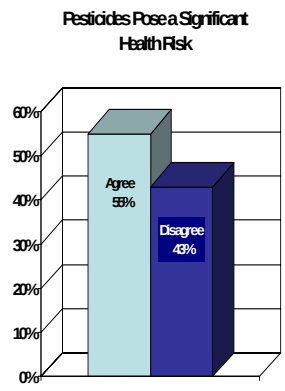
Toxicologists' Opinions on Chemical Risk and Media Coverage

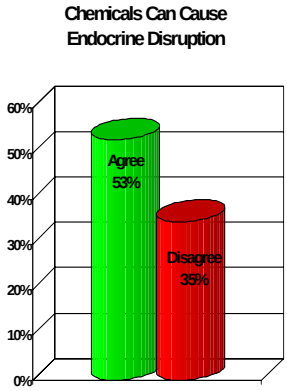
From baby bottles to shower curtains, iPods to lipstick, and "new car smell" to non-stick frying pans, recent media accounts have warned the American public about the hidden dangers of toxic chemicals in everyday use. To find out what the experts think about chemical risk, the Center for Media and Public Affairs coordinated a survey of scientists specializing in toxicology (the study of the adverse effects of chemicals).

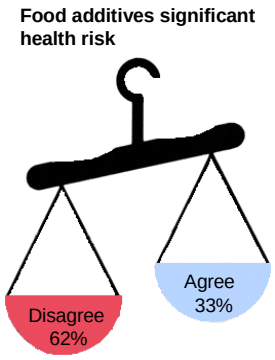
This survey of 937 members of the Society of Toxicology was administered online from Jan 27 to March 2 by Harris Interactive on behalf of the Center for Media and Public Affairs, the Statistical Assessment Service (STATS) and the Center for Health and Risk Communication at George Mason University. A more detailed report of the methods and findings can be viewed on the STATS website. **To view the survey online, go to** http://stats.org/stories/2009/are_chemicals_killing_us.html

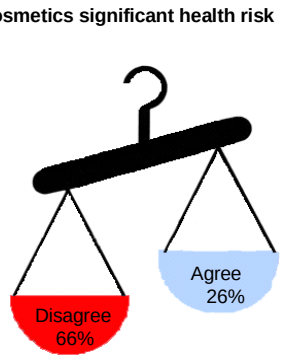
Major Findings:

- **Toxicologists rate pesticides as greater health risks than cosmetics and food additives** ***Page 2***
- **Most don't think organic products are inherently safer** ***Page 2***
- **Most prefer the US regulatory system to Europe's** ***Page 2***
- **Few see high profile chemicals like phthalates and BPA as major health risks** ***Page 3***
- **Most think activist groups and the media overstate risks** ***Page 4***
- **They rate Wikipedia and WebMD as more accurate than traditional news sources** ***Page 5***
- **They don't think the media can differentiate between bad studies and good ones** ***Page 5***







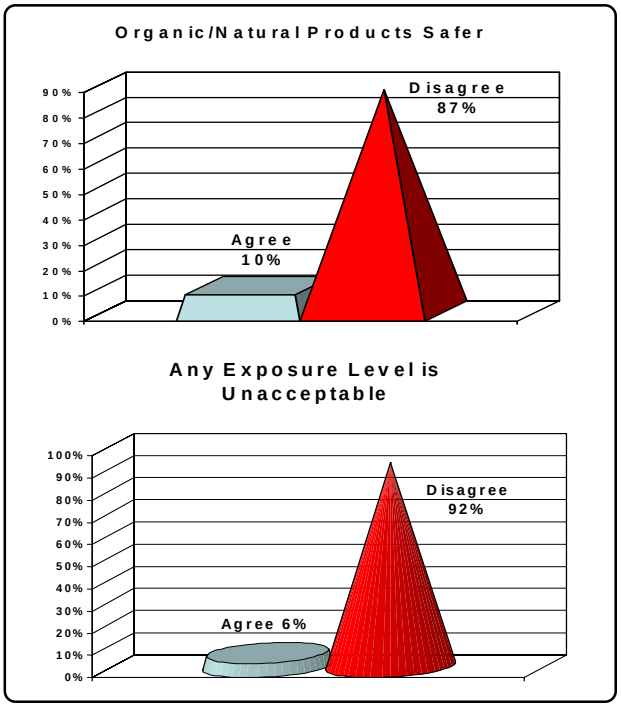


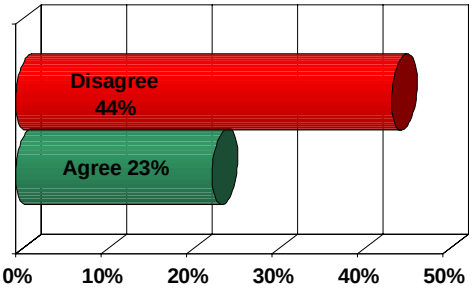
Chemical Safety and Regulation

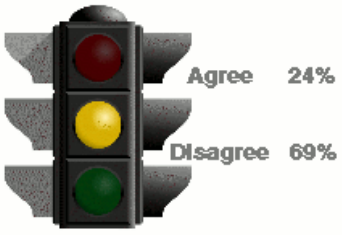
When asked about chemical safety and regulation, toxicologists make distinctions among different substances. Slight majorities rate pesticides as a significant health risk and believe chemicals cause endocrine disruption. By contrast, only one out of three thinks food additives pose a significant risk and one out of four says the same of cosmetics.

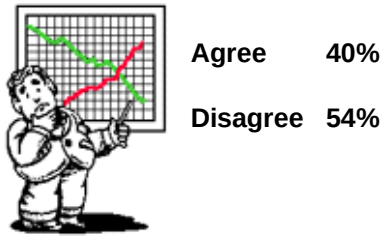
Very few believe organic or "natural" products are inherently safer than others or that any level of exposure to a harmful chemical is unacceptable.

Most prefer the US regulatory system over Europe's, and they reject the precautionary principle applied by European regulators,









which presumes that a substance is dangerous unless it has been proven safe. However, a majority say U.S. regulators are not doing a good job explaining chemical risks.

Risks of Specific Chemicals

Despite recent controversies in the news over the safety of commonly used chemicals, few toxicologists believe they pose a major health risks for humans. For example, only three percent see Teflon or genetically modified organisms having a high degree of risk. Only about one in ten attribute high risk to Bisphenol A, a component of many plastics, or phthalates, which make vinyl flexible. And only one in eight sees high fructose corn syrup, used in soft drinks, as a major health risk.

By comparison, over one out of four rates both sunlight and aflatoxin, a naturally-occurring fungus found in peanut butter, as posing a high health risk. Finally, toxicologists put no other substance in the same league as tobacco – in any form – as a threat to human health.

Percent of Toxicologists Who Rate Substances as High Health Risks

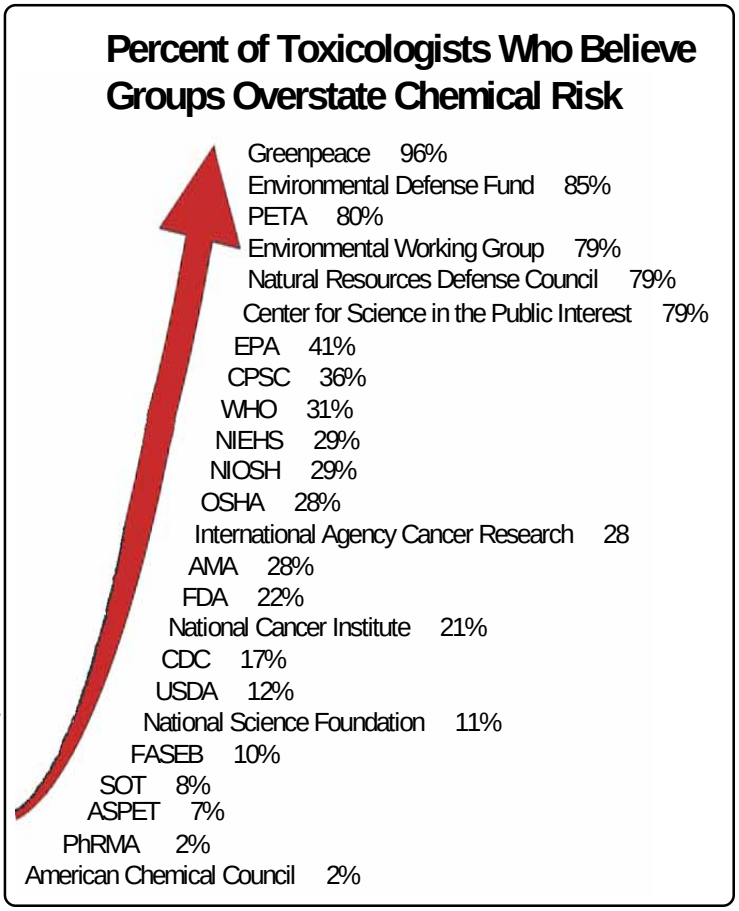
Smoking Tobacco	88%
Chewing tobacco	70%
Second Hand Smoke	44%
Mercury	35%
Aflatoxin	29%
Sunlight	26%
Ethyl alcohol	25%
Benzene	24%
Dioxin	24%
Radiation	23%
PCBs	21%
Hormones	14%
Environmental Estrogens	14%
Formaldehyde	14%
DDT	14%
Acrylamide	13%
Phthlates	11%
Corn syrup	11%
PBDEs	10%
Chlorpyrifos	10%
Atrazine	9%
Bisphenol A	9%
EDB	7%
Chlorine	7%
Nanomaterials	6%
PFOA	5%
Triclosan	4%
Parabens	3%
Teflon	3%
Genetically Modified Organisms	3%
Saccharine	2%
Sucralose	1%

Rating Organizations That Portray Chemical Risk

Most toxicologists who responded say that environmental activist groups overstate the health risks of chemicals, while industry groups underplay these risks. Their ratings of government agencies are generally more favorable.*

Among those who expressed an opinion, over nine out of ten say Greenpeace overstates the health risks of chemicals, and eight out of ten make the same criticism of the Environmental Defense Fund, Environmental Working Group, Natural Resources Defense Council, and Center for Science in the Public Interest.

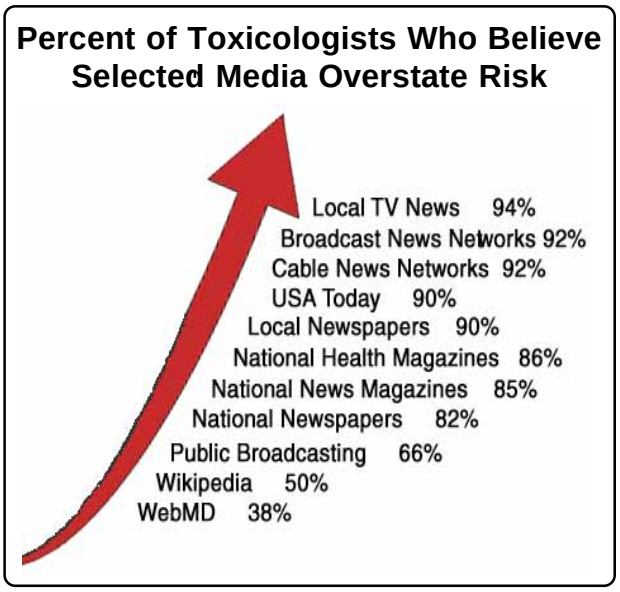
Conversely, smaller majorities say the American Chemistry Council and the Pharmaceutical Research and Manufacturers of America (PhRMA) understates chemical risks. In contrast, majorities say that most U.S. governmental agencies accurately portray risk, with only the EPA (40%) and the CPSC (47%) falling below a majority who rate them as accurate. The proportion who think government organizations overstate risks varies from a low of 12% for the Department of Agriculture (USDA) to a high of 41% for the EPA.



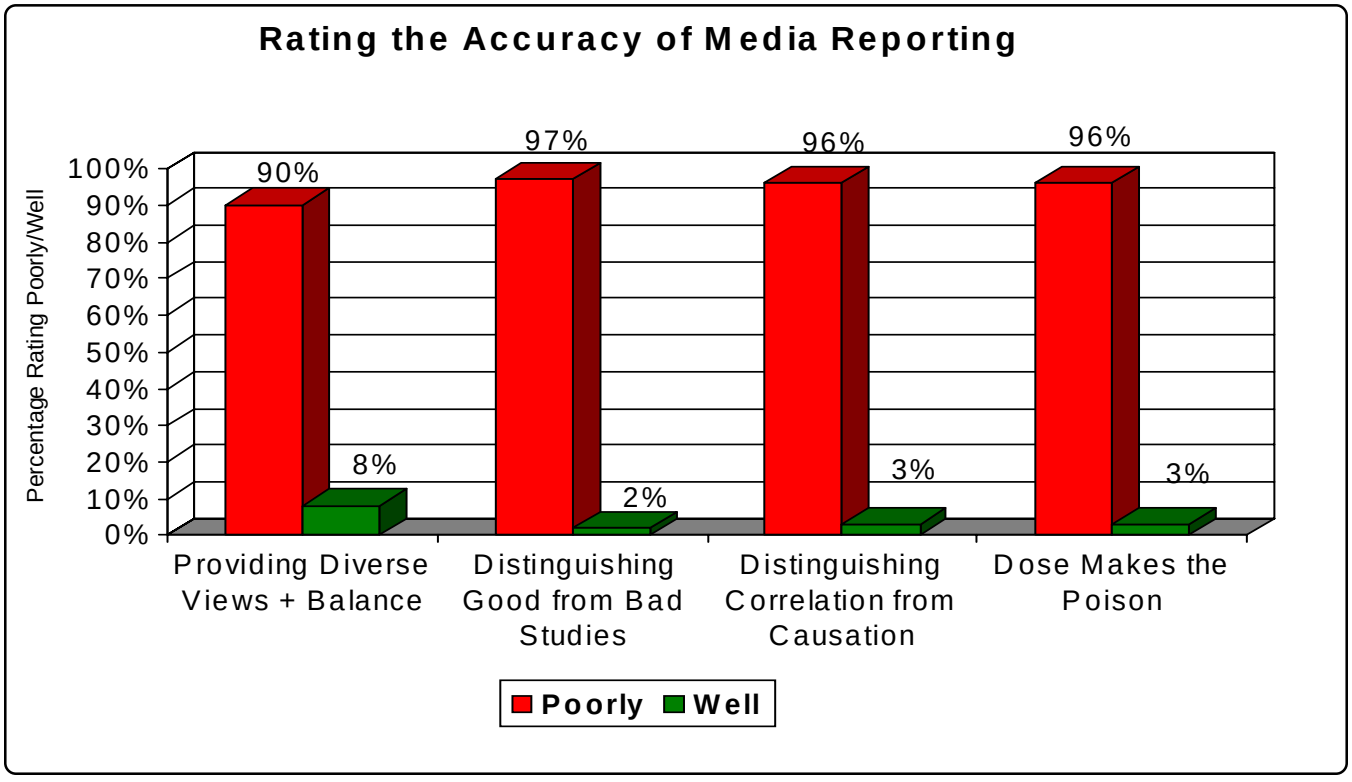
** The proportion of toxicologists who expressed an opinion varied from one organization to another. To make the findings commensurable, we excluded "don't know" responses from the calculations. The full report, available at STATS.org, provides calculations both with and without "don't know" responses.*

Rating the Media Coverage

In a surprising finding, WebMD and Wikipedia are seen as more reliable than traditional news sources for information about chemical risks. Among those with an opinion, a majority say WebMD accurately portrays chemical risks, and nearly that many say the same of Wikipedia. By contrast, over 80 percent say that leading national newspapers, news magazines, health magazines, and television networks overstate chemical risk in their coverage.

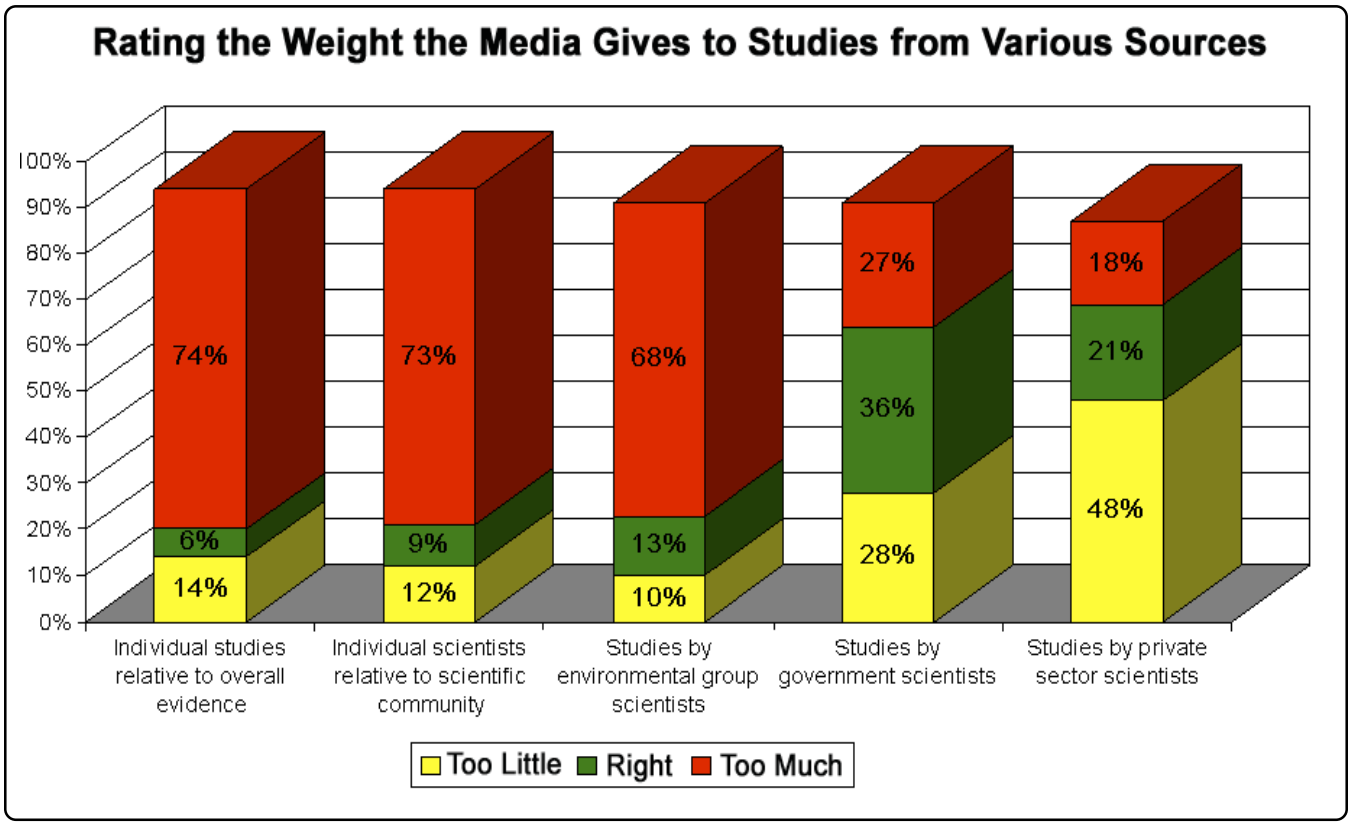


Moreover, toxicologists almost unanimously believe the media do a poor job covering basic scientific concepts and explaining risk. For example, 90 percent or more say media coverage of risk lacks balance, and the media don't distinguish good studies from bad ones, don't distinguish correlation from causation, and don't explain that "the dose makes the poison," a cardinal principle of toxicology.



On the question of balance and diversity in risk reporting, three out of four toxicologists believe the news media pays too much attention to individual studies, as opposed to the overall evidence, and to individual scientists, as opposed to the broader community.

Over two out of three believe the news media pays too much attention to studies put out by environmental groups, compared to fewer than one out of three who see too much media attention to studies by government or private sector scientists.



Survey Methodology

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