Corporate manipulation of environmental health research: A comparison of four industries

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#### Purpose

Examine strategies used by four industry groups to manipulate data on health risks in ways that would enhance their credibility and profits.

# Four industry groups, four sets of health problems

- Tobacco industry (secondhand smoke)
  Lead industry (lead poisoning)
  Vinyl chloride industry (cancer and other diseases)
- The "dusty trades" mining, foundries, sandblasting and others (silicosis)

#### Data sources

Legacy Tobacco Documents Library, University of California, San Francisco (http://legacy.library.ucsf.edu) Lead, vinyl chloride and silica industry internal documents provided by Dr. David Rosner, Columbia University

### Methods

Reviewed primary source documents cited in 12 scholarly articles related to tobacco industry manipulation of research – approximately 300 documents total. Reviewed all documents provided by Dr. Rosner.

Coded using Bero's categories of research manipulation.

# Hypothesis

The four industry groups used similar strategies to manipulate data on risk, including:

- Fund research that supports their interests
- Publish research that supports their interests
- Suppress unfavorable research
- Criticize unfavorable research

 Disseminate favorable research to policymakers and the lay press

# Fund and publish research: Tobacco

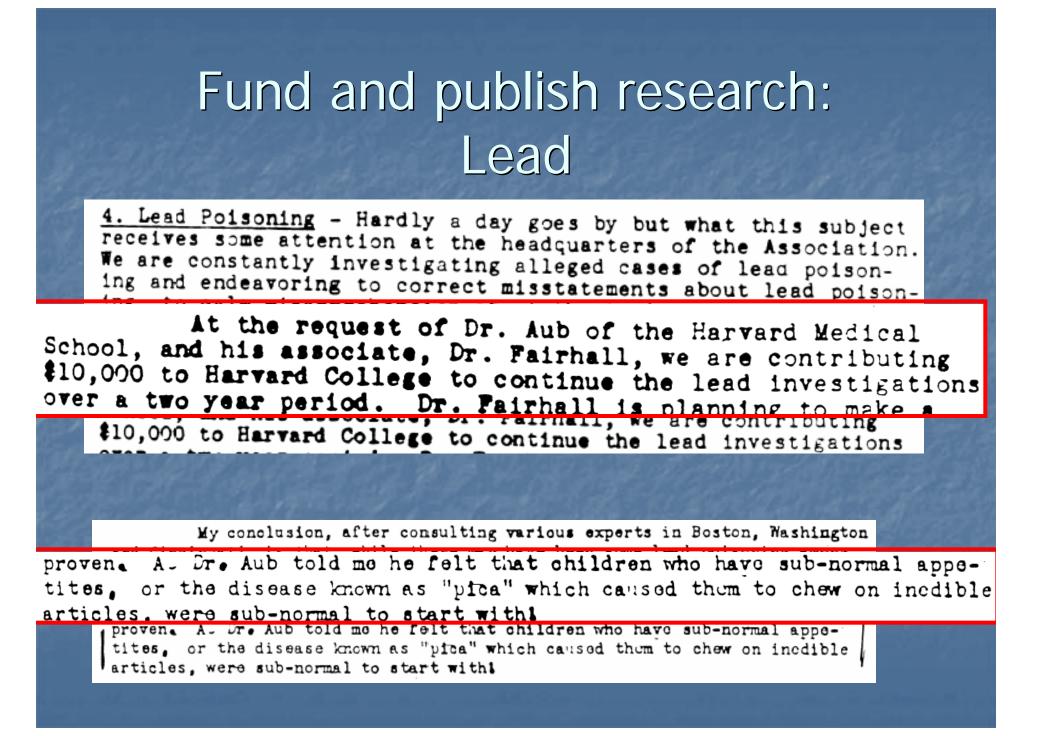
Philip Morris' world-wide ETS Consultants' Program – the "Whitecoats"

> Lisbon. Our European consultants have organised and will conduct a major scientific conference in Lisbon next month on indoor air quality in warm climates. More than 100 scientists from throughout the world will

scientific groups -- all quite independent of the industry, and all made possible by our consultants.

scientific groups -- all quite independent of the industry, and all made possible by our consultants. The papers will be published both in the form of conference proceedings and, more selectively, in a iournal run by one of our consultants. The focus of The focus of erence will not be tobacco; rather, the point

the 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 guality in warm climates nd important.



# Fund and publish research: Vinyl chloride

Manufacturing Chemists Association meeting, 1/24/1967: Participants agree to fund an epidemiological study of polyvinyl chloride workers which will

"hopefully be expected to... confirm that the condition is purely an occupational disease and in no way affects the general public using PVC products."

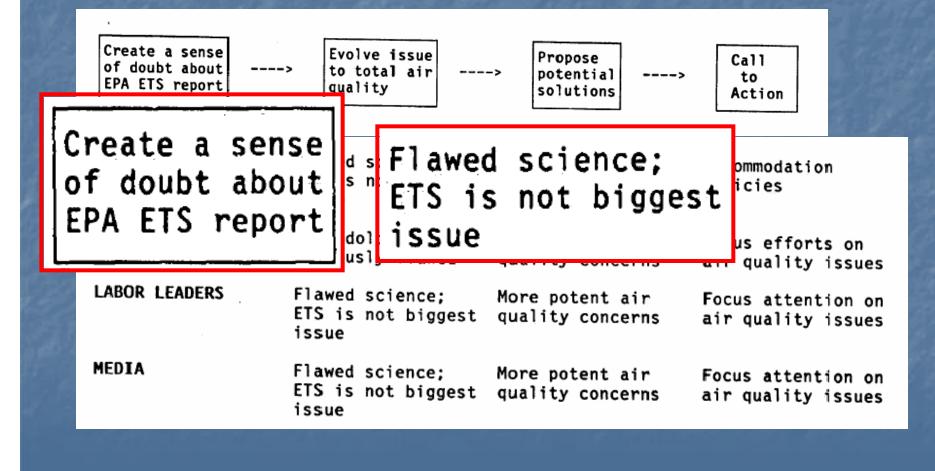
#### Fund and publish research: Silicosis

If this work were to be centralized in Mellon Institute, it could be carried out as a part of our air hygiene research. The director appointed to handle the investigation would also be the head of the institution or organization which the industries would set up. In this

way, the work could be carried out in a most confidential manner as to who was supporting the research and no one would know what industries or individuals were contributing to the fund. This would enable the organization to get soundly established, so that if later on it was desired to eome out in the open this could be arranged.

E.R. Weidlein, Mellon Institute, an industry-funded research group, 1935

## Criticize unfavorable research: Tobacco



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# Criticize unfavorable research: Lead



American Council on Science and Health (ASCH)

-- funders have included Ethyl Corporation, Exxon, Ford, Shell, Union Carbide, Dow, Monsanto, etc.

"Claims of subtle neurobehavioral effects in children due to elevated BLL are not based on firm evidence; many studies that attempt to link low-level lead exposure with learning disabilities, behavioral problems, attention deficit disorders, and lowered IQ are complicated by multiple confounding socioeconomic and familial factors."

Posted July 1, 2000

# Criticize unfavorable research: Vinyl chloride

Deceit and Denial "represents the highest standards of the history profession" – American Historical Association Deceit and DeNIAL

THE DEADLY POLITICS

GERALD MARKOWITZ DAVID ROSNER

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# Criticize unfavorable research: Silicosis

4. Is there a conscientious discrimination between occupational as opposed to nonoccupational or natural causes for the disability?

5. Is there constant vigilance in avoiding the expression of that which is speculation as though it were in reality a fact? Where substantiating evidence is not available, are expressions of thought scrupulously labeled as opinion?

6. Is there willingness to frankly admit ignorance of specific information?

Thoughtful consideration of these questions should lead to an appreciation of the great responsibilities of the medical expert. The scarcity of factual information and lack of knowledge of already established fact are responsible for the major part of the medical expert's shortcomings. Additional study is certainly needed.

#### Suppress unfavorable research: Tobacco

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.

> Lawyer, British American Tobacco, 1963

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#### Suppress unfavorable research: Lead

Getting wind of a forthcoming report on the suitability of plastic pipe for potable water supplies in preparation at the University of Michigan, we arranged to see the galley proof of the report and, through contacts with members of the advisory committee on the report, were able to secure elimination of a number of statements adverse to the use of lead stabilizers.

Lead Industry Association, 1956

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# Suppress unfavorable research: Vinyl chloride

erations. It was judged that possible consumer safety; and

related potential hazards would not be <u>pertinent</u> to a presentation to NIOSH which is concerned with employee health matters.

 All references to use of vinyl chloride in aerosol propellants' were removed, since it is a minor part of the industry and is not a worker-exposure problem except for beauticians and can fillers. (This was removed at the insistence of UCC and Allied,

Manufacturing Chemists' Assn., 1973

## Suppress unfavorable research: Silicosis

meeting would accomplish nothing. The conference would be a modern Tower of Babel, for the several groups do not speak the same language or understand each other's viewpoints: As we have reportedly soil

ings are excellent for safety education and propaganda, but silicosis requires something quite different. It is far too complex, too involved and too little understood to be suited to mass-meeting methods.

#### Disseminate favorable research: Tobacco

#### TALKING POINTS TI'S COMMENTS IN RESPONSE TO OSHA'S RFI ON INDOOR AIR POLLUTANTS

Additionally, several independent scientists and ventilation experts commented separately on technical matters at TI's request.

Studies indicate that occupational exposures to ETS are, under normal conditions, minimal. The available data do not support the claim that ETS exposure is associated with a statistically significant increased risk of lung cancer or of other disease.

# Disseminate favorable research: Lead

NO PUPLIC RALARD FROM LEAD SEEN,

MUSICIE SUNCOHIGTTEE ON POLLUTION TOLD

Mashington -- From results of extensive scientific investigations,

NO PUPLIC RALARD FROM LEAD SEEN,

#### MUSICIE SUNCOMMETTEE ON POLLUTION TOLD

Washington -- From results of extensive scientific investigations, "I can positively assert that lead constitutes no public health hazard in America today," Pelix E. Wormser, former president of Lead Industries Association, today told the Senate Public Works Subcommittee on Air and Water Pollution.

conducted in 16 countries, including the United States, that found there has

been no increase in lead contamination in the last two decades.

President, Lead Industry Association, 1966

# Disseminate favorable research: Vinyl chloride

"It must be emphasized that the information developed thus far does not yet constitute a body of 'hard data' on the totality of the vinyl chloride hazard... The workers who died were exposed to high levels of vinyl chloride for long periods of time. [A] study... conducted by the Dow Chemical Company at its Midland division... showed a general cancer increase among heavily exposed workers (above 200 parts per million on a time-weighted average for an eight-hour day) but none among workers below that level. No angiocarcinomas were found."

> President, Society of Plastics Industry, to NIOSH, 1974

# Disseminate favorable research: Silicosis

health of industrial workers, is no longer a threat. In one research project involving 28 plants, having operations using millions of tons of dangerous silies This triumph of scientific research to protect workers' health was announced by Dr. F. R. Holden, W. C. L. Hemeon and T. F. Hatch of the Industrial Hy.	Science News Letter, November 80, 1946 MEDICINE Silicosis Is Not Threat To Workers' Health	giene Foundation at its meeting in Pitts- burgh. "The dangerous trades of our fathers have all but disappeared," they reported. Potentially poisonous dusts, fumes and gases can and are being used every
This triumph of scientific research to protect workers' health was announced by Dr. F. R. Holden, W. C. L. Hemeon and T. F. Hatch of the Industrial Hyperson and the Indus	a threat.	Potentially poisonous dusts, fumes nd gases can and are being used every ay in modern industry without danger.
by Dr. F. R. Holden, W. C. L. Hemeon and T. F. Hatch of the Industrial Hy-	plants, having operations using millions of tons of dangerous cilicated This triumph of scientific research to protect workers' health was announced by Dr. F. R. Holden, W. C. L. Hemeon and T. F. Hatch of the Industrial Hy- by Dr. F. R. Holden, W. C. L. Hemeon	em. Not infrequently we find nuisance lust exposures to be more injurious to he mechanical equipment than to work- nen. Good progress has been made in measurement and identification of dif- ferent kinds of dust."

# Conclusion

The tobacco, lead, vinyl chloride, and silica industries used similar strategies to manipulate research on risk.

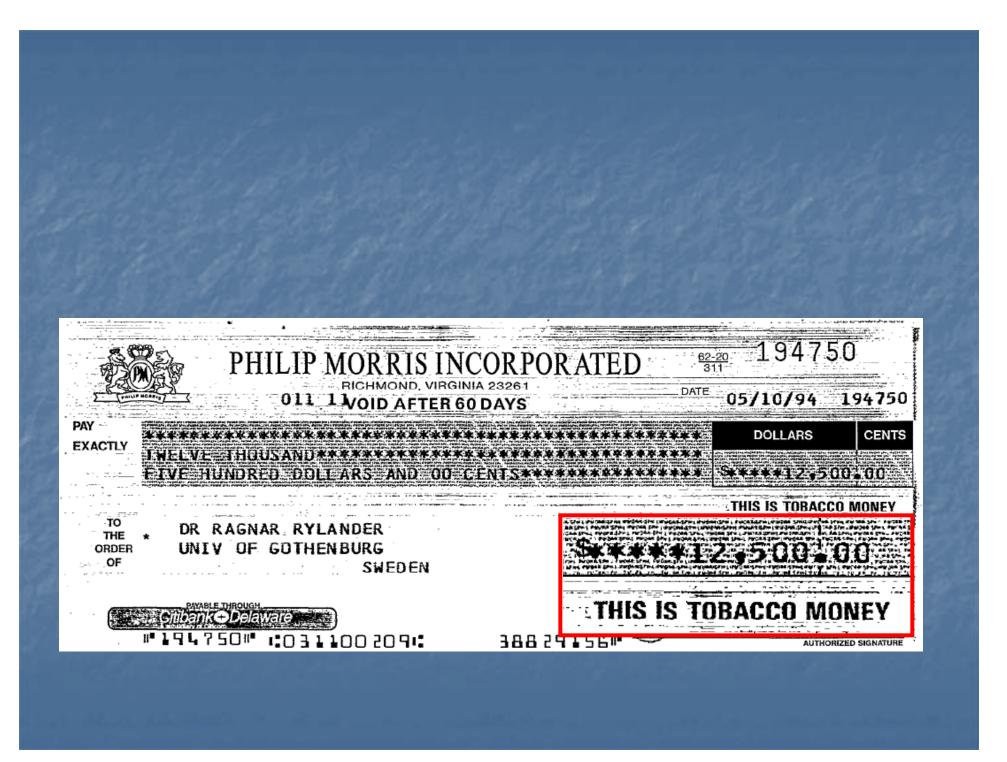
# Solutions

• Transparency: disclose funding sources, roles of sponsor, and financial ties of investigators and critics

 Complete separation of funding decisions and sponsors (independent scientific panels)

Institutional bans on corporate funding





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### Disseminate favorable research: Lead

The Lead Industries Association in its internal thinking has always met the problem of lead poisoning frankly and fearlessly. Extern-

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Treel that the word of the Lead Industries Association might carry even

We have not attempted to disseminate any information that was not backed by the soundest scientific, medical and hygienic research we could obtain.

of any education institution for what would be, in part, publicity or

I feel that the word of the Lead Industries Association might carry even more weight than if some other agency, used as a screen, were utilized in order to do the job for us. This point may only be academic, however,

President, Lead Industry Association, 1945