

**BRIEF ANALYSIS**

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## Secret Disservice: Covering Up Scientific Data Violates the Public's Right to Know

Policy makers often rely on scientific research, much of which is funded by the federal government, in making important policy decisions. Faulty research can result in bad policy. For example:

- Scientist Robert Liburdy faked data that resulted in costly efforts to mitigate the effects — later found not to exist — of high-tension electric lines.
- The Environmental Protection Agency (EPA) tried to impose new, expensive and possibly hazardous air quality standards based on scientific data it claimed were not available for review.

Scientific progress depends on the free flow of ideas and data, which allows researchers to independently confirm, refute or improve on the findings of a specific course of inquiry. Thus the transparency of scientific data and methods is critical to sound policy decisions.

To ensure open access to publicly funded scientific data in the future, Sen. Richard Shelby (R-Ala.) inserted a provision into the Fiscal Year 1999 Omnibus Spending Bill making it available to the public. Now a move is afoot to repeal or delay the Shelby requirement.

**Case Study: Scientific Malfeasance.** In June 1999, Robert Liburdy, who had received more than \$3.3 million in federal grants for his research, was forced to leave Lawrence Berkeley National Laboratory when it was discovered that he had faked data to produce results which indicated that electromagnetic fields caused cancer. The Office of Research Integrity (ORI) found that in one published paper Liburdy discarded 93 percent of the lab data that did not agree with his hypothesis that electromagnetic fields affect living cells. None of the 20

studies subsequent to Liburdy's 1992 study have found any causal connection between electromagnetic fields and cellular changes in the body. Aside from losing his position with Lawrence Berkeley, Liburdy had to ask several scientific journals to retract three key graphs in papers they had published, and has agreed to a three-year ban on applying for federal grants.

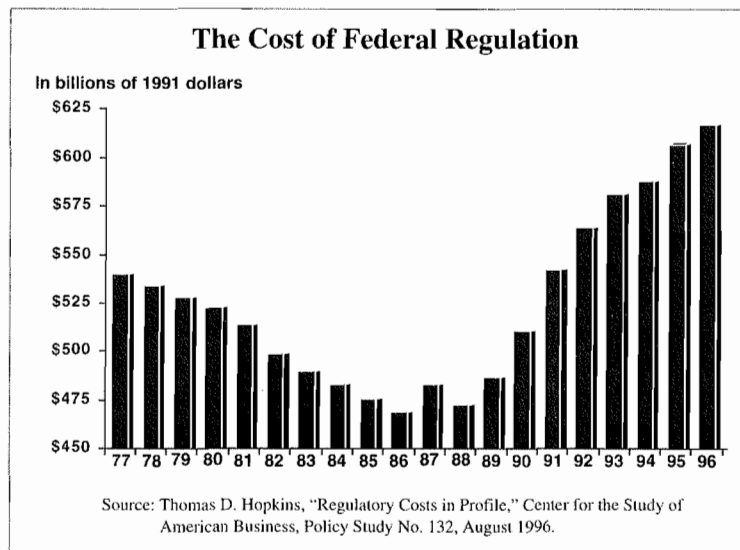
Unfortunately, before Liburdy's fraud had been revealed, several communities and utilities acted on Liburdy's findings, implementing costly mitigation efforts. A 1994 General Accounting Office report found that the cost of such efforts had topped \$1 billion. Had the ORI not had access to Liburdy's data, his fraud might never have been revealed and the costly power line mitigation might have continued.

**Case Study: EPA Air Quality Rules.** When the EPA proposed new clean air standards for ozone (smog) and particulate matter (soot), EPA Administrator Carol Browner claimed the new standards were based on the most thorough peer review process ever. However, researchers have disputed

the health claims made for both the soot and smog standards. For instance:

- The EPA first estimated that the soot standard would save more than 40,000 people from premature deaths annually, later revised this figure downward to 20,000 and three months later to 15,000 after an outside researcher found a simple mathematical error in one of its key studies.
- A former air quality advisor to the President's Council on Environmental Quality reanalyzed the estimates and concluded that only 840 lives would be saved by the soot standard.

Ground level ozone screens out potentially deadly ultraviolet radiation, and a Department of Energy study indicated that the required ozone reduction would:



- Increase malignant skin cancers, causing 25 to 50 new deaths a year.
- Cause as many as 260 new cases of cutaneous melanoma and 11,000 new cases of nonmelanoma skin cancer.
- Cause between 13,000 and 28,000 new incidences of cataracts each year.

Because the proposed standards were controversial, Congress had requested the EPA to release the supporting data for independent testing. The EPA asked the researchers to release the data but they refused. The EPA claimed it could not require the scientists to release the data. On May 14, 1999 a federal appeals court rejected the standards, in part because it questioned the scientific basis of the health claims made for the standards. The judges called the regulations “fatally incomplete,” because the agency failed to say why it chose the level of protection that it did. If independent researchers had had access to the original data, the costly court battle that ensued might have been avoided.

**Let the Sunshine In: Sen. Richard Shelby’s “Right to Know” Provision.** The controversy over the new clean air rules prompted Sen. Shelby’s move. In the 1999 spending bill, Congress directed the OMB to draft regulations requiring “Federal awarding agencies to ensure that *all* data produced under an award will be made available to the public through procedures established under the Freedom of Information Act (FOIA).” In response, the OMB drafted a narrower set of regulations requiring only that *published* federally funded research actually *used* in developing policies or rules be made available under the FOIA.

Under the provision, a person can submit a FOIA request for data from an agency that has given a research grant. Researchers would then be required to turn their data over to the funding agency which would then excise sensitive information before releasing the data. FOIA regulations specifically protect trade and commercial secrets, ensure patient and personnel confidentiality and protect information vital to U.S. national security — so no information of this type would be released.

Aside from promoting scientific integrity, the new rules would promote open government and better informed democratic decision making. Openness also promotes fairness: research paid for by the public and used to shape laws that will impose constraints should be reviewable by the people footing the bill and affected by the results.

In addition, it promotes fiscal responsibility. Regulations cost Americans more than \$700 billion, or more than \$6,000 per household, each year [see the figure]. Access to data gives the public a starting point to judge whether the public health and safety benefits of the proposed policies will outweigh the often substantial costs they impose. This is important since reduced income, especially for the poor, is associated with poor health. For instance, the American Thoracic Society has concluded that poverty is the number one risk factor for asthma.

**Research Coverup: Some Object to the Public’s Right to Know.** Some legislators wish to rescind or delay the Shelby provision. The late Rep. George Brown (D-Calif.) sponsored a bill to repeal it, and Reps. David Price (D-N.C.) and James Walsh (R-N.Y.) attempted to attach an amendment to appropriation bills that would delay its implementation for a year.

Opponents of the reform claim they are concerned that releasing research data will slow the implementation of regulations critical to protecting public health. They argue that it will be harder to find participants for research, since people may fear that government bureaucrats will mistakenly release sensitive personal or business data. In addition, some researchers argue that corporate or political interests will use the law to hinder research on controversial issues and hamper regulatory reform by tying up scientists with continual requests for data. They argue that even the best research can be made to appear incomplete or flawed when examined by hostile or paid experts.

The same arguments about releasing information are made when local governments and school boards seek to keep information from the public. It is doubtful that such releases would be as hazardous to the public’s well-being as science conducted in secrecy. Researchers who fear that sensitive information will be mistakenly revealed or that outside parties will misrepresent their findings can avoid the problem by refusing public funding.

**Conclusion: More Secrecy Is Bad.** Secret science may be bad science. The Shelby provision ensures the transparency of research, which is the best guarantee of scientific integrity. There is no evidence that the costs of allowing the public to make more fully informed decisions outweigh the benefits — so Congress should give the law a chance to work.

*This Brief Analysis was prepared by NCPA Senior Policy Analyst H. Sterling Burnett.*