

# News Release



Wednesday, July 28, 1993

CONTACT: S. Martin Filipowski  
(904) 791-8075

## MEDIA ADVISORY

### GOVERNMENT EXPERT ON SECOND-HAND SMOKE AVAILABLE TO DISCUSS UPCOMING GUIDELINES TO CURB SMOKING IN THE WORKPLACE

**WHO:** Robert A. Rosner, a former Environmental Protection Agency (EPA) expert and policy consultant for second-hand smoke. Rosner provided the technical support for the soon-to-be-released EPA guide that will help curb the presence of second-hand smoke in the workplace.

Rosner is executive director of the Seattle-based National Smoking Institute. He is responsible for the EPA's study "Environmental Tobacco Smoke: A Guide to Workplace Policies," which was released for public review in 1991.

**WHAT:** Media tour in the Orlando area.

The purpose is to discuss upcoming federal guidelines to curb smoking in the workplace.

**WHEN:** Monday, August 2 & Tuesday, August 3.  
Interviews may be scheduled upon request by contacting:  
S. Martin Filipowski  
(904) 791-8075.

**WHY:** According to Rosner, The EPA's soon-to-be-released guidelines were designed to precede upcoming federal mandates to curb smoking in the workplace. During his visit, Rosner will make recommendations on the steps employers can take now to offer their employees a smoke-free workplace.

Rosner can help companies understand legal discussions between the EPA and tobacco companies over the dangers of second-hand smoke in the workplace.

Rosner and BCBSF have helped over 100 Florida companies go smoke free. BCBSF has offered its employees a smoke-free workplace since 1988.

HEALTH

# Statisticians Occupy Front Lines In Battle Over Passive Smoking

By JERRY E. BISHOP

Staff Reporter of THE WALL STREET JOURNAL

In the controversy over passive smoking, the difference between 90% and 95% has become a matter of life and death.

The U.S. Environmental Protection Agency says there is a 90% probability that the risk of lung cancer for passive smokers is somewhere between 4% and 35% higher than for those who aren't exposed to environmental smoke. To statisticians, this calculation is called the "90% confidence interval."

And that, say tobacco-company statisticians, is the rub. "Ninety-nine percent of all epidemiological studies use a 95% confidence interval," says Gio B. Gori, director of the Health Policy Center in Bethesda, Md., who has frequently served as a consultant and an expert witness for the tobacco industry.

These five percentage points will haunt the coming battle in a North Carolina courtroom where tobacco interests led by Philip Morris Cos. and RJR Nabisco Holdings Corp. have sued the EPA. The tobacco companies want the court to declare "null and void" the EPA's report this year convicting environmental tobacco smoke of causing lung cancer in nonsmokers.

## Weighing the Evidence

The evidence underlying the EPA finding was "manipulated" to "falsely disparage" cigarettes, the companies charge. The EPA retorts that its evidence is far stronger than that which has led to banning other substances in the environment suspected of causing cancer.

Although the trial is still months away, the validity of the evidence already is being weighed by individuals, managers, city and state legislatures and others who have the power to ban smoking in their immediate environs. Only last Wednesday, the EPA, citing its earlier conclusions, urged schools, day-care centers, parents, party hosts and others to voluntarily ban smoking in their respective areas or to at least increase ventilation.

"The scientific case against environmental tobacco smoke is now overwhelming," declares a recent editorial in the Journal of the National Cancer Institute by David M. Burns, a specialist in pulmonary medicine at the University of California, San Diego.

## Links in a Chain

Dr. Burns cites the EPA report as offering a completed chain of evidence convicting environmental smoke of causing cancer. One link in the chain is the fact that the same proven cancer-causing

chemicals found in directly inhaled cigarette smoke — mainstream smoke — are found in the exhaled or environmental smoke. The final link is the evidence that nonsmokers exposed to environmental smoke have a higher-than-normal incidence of lung cancer.

This last link of evidence is based in large part on studies of nonsmoking women who lived with longtime smokers. Adding up the results from 11 such studies, the EPA concluded that the nonsmoking women who live with smokers have, on the average, a 19% higher risk of developing lung cancer than comparable women who live in a smoke-free home. The risk is higher for wives of heavy smokers and lower for wives of light smokers.

This 19% higher risk translates into 1,500 to 1,760 women dying each year of lung cancer caused by breathing other peoples' cigarette smoke, the EPA statisticians calculated. An equal number of nonsmoking men also die of lung cancer from environmental smoke, for a total of more than 3,000 deaths a year, the EPA report declares.

## No Diet Information

The tobacco lawyers and their statistician consultants attack the 19% increased risk as being so small as to be canceled out by unknowns in the passive-smoking studies. One potential error, the industry maintains, is the lack of information on the diets of the nonsmokers. It is possible, they argue, that those who lived in smoke-free homes might have consumed higher amounts of beta carotene and other nutrients that are claimed to reduce the risk of cancer. If so, then the studies are actually measuring a lower-than-normal risk among nonsmokers instead of a higher-than-normal risk in those who breathe environmental smoke — or so the industry will argue.

To top it off, the industry consultants assert, in many instances researchers had to ask relatives about how much environmental smoke a deceased lung-cancer patient had been exposed to. Enough relatives probably erred in their recollections of the smoking habits of the deceased's husband or father to make the studies' conclusions totally unreliable, the consultants argue.

When statisticians on both sides go at it, calculator-a-calculator, in the coming trial, they will present a series of arcane arguments about how much these unknowns affect the study's reliability.

When the 19%-higher-risk figure was

Please Turn to Page B6, Column 4

Continued From Page B1

first calculated a statistical test determined its "statistical significance," that is, the odds that the answer was the result of chance instead of reality, explains Kenneth G. Brown, an independent statistician consultant in Chapel Hill, N.C., who did the risk calculations.

This latter calculation showed that there were only two chances out of 100 — a probability of 0.02 — that the 19% figure was a matter of happenstance. This more than meets the standard of 0.05 (five chances out of 100) at which most scientific studies are considered statistically significant.

Mr. Brown says that it was during the reviews of the final drafts that a second reliability calculation was added to give reviewers a better feeling for the reliability of the calculations. This second calculation produced the controversial 90% confidence interval, or 90% probability that the lung-cancer-risk range is between 4% and 35% higher for passive smokers than those who aren't so exposed.

The Health Policy Center's Dr. Gori explains that the standard in such studies is to calculate the range within which it is 95% certain that the true answer lies, rather than the range for a 90% certainty. The reason the EPA didn't use the standard 95% confidence interval, Dr. Gori says, is that it would be so wide it might even hint that passive smoking actually reduced the risk of lung cancer. Although such a calculation wasn't made, it might show, for instance, that passive smokers' risk of lung cancer ranges from, say, 15% lower to 160% higher than the risk run by those in a smoke-free environment.

"The issue isn't tobacco but the legitimacy of the science" underlying the EPA report, Dr. Gori says. "We shouldn't permit this kind of license," he says.

Dr. Wood, the EPA consultant, says that Dr. Gori is correct in saying that using a 95% confidence interval would hint that passive smoking might reduce the risk of cancer. But, he says, this is exactly why it wasn't used. The EPA believes it is inconceivable that breathing in smoke containing known cancer-causing substances could be healthy and any hint in the report that it might be would be meaningless and confusing, he explains.

"I could have presented any level of confidence interval you wanted and it still wouldn't change the conclusion" that passive smoking boosts the risk of lung cancer an average of 19%, he says.

"The confidence interval isn't a substantive issue," Mr. Wood says. The 90% confidence interval used in the report was added for the convenience of scientifically oriented readers. The tobacco industry's harping on it, he says, "is just to confuse the public."