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RESEARCH PROJECTS ON
ENVIRONMENTAL TOBACCO SMOKE: U.S. INDUSTRY

I. Completed Projects (ETS Advisory Group):

1. Evaluation of questionnaire design in epidemiological studies on environmental tobacco smoke--IITRI, Chicago, Illinois:

   This study examined the kinds of questionnaires which have been used in studies on ETS. The study provided a comparison between nonsmoker perception of ETS exposure and smoker's reported daily use.

2. Critical evaluation of current environmental tobacco smoke health risk models--T. D. Sterling:

   This study assessed the methods and assumptions used by Repace-Lowrey in their estimates of health effects from exposure to ETS. Sterling et al. have submitted two papers for publication, one of which has been accepted by Carcinogenesis Review.

3. Aircraft cabin air quality assessment:

   Researchers at RJR have monitored nicotine, CO and particulate levels on Piedmont aircraft. Results have been presented to the NAS committee on aircraft air quality and submitted for publication.

II. Current Approved Projects (ETS Advisory Group):

1. Evaluation of the Japanese personal nicotine monitor--Oak Ridge National Laboratory, Oak Ridge, Tennessee:

   This project will evaluate the accuracy of the personal nicotine monitor developed by Murumatsu, et. al. Other aspects of the study will include the determination of nicotine and particulate decay for environmental tobacco smoke, the identification of a suitable particulate marker for ETS, and an evaluation of the monitor in homes and public places.

2. Determination of responses of asthmatics to ETS exposure--Tulane University, New Orleans, Louisiana:

   This project will determine the physiological parameters of responses to ETS exposures by allergic asthmatics.

3. Examination of home ventilation and heating/air conditioning systems--ACVA, Washington D.C.:

   Environmental and mechanical engineers will test and evaluate the efficiency and cleanliness of home ventilation units in selected residences in Florida. Methods are employed to determine the presence of biological organisms which are capable of playing a causal role in respiratory infections.

4. Critical examination of the use of particulates as a marker for exposure to ETS--DiNardi, University of Massachusetts:

   This study will examine the methods and monitoring devices employed in studies which suggest that particulates may act as a marker for exposures to ETS.

5. Development and use of a "briefcase sampler" for CO, nicotine and particulates:

   Scientists at RJR have developed a portable briefcase sampler for ETS constituents. Sampling in restaurants under realistic conditions of exposure to ETS is planned. Scientists from PM, B&W, Lorillard and Reynolds will participate. IT Corporation will oversee sampling and provide sample analyses for this project.

6. Methodological Study of the Effects of Control Selection and Exposure Ascertainment Bias in the Case-Control Context--Husting:

   Dr. E. L. Husting of the University of South Florida has proposed a study to assess the various assumptions and methodologies used in case-control studies on ETS.

7. Analysis of the Hirayama study data:

Various company and independent scientists have expressed interest in a reanalysis of the raw data used by Hirayama in his 1981 paper on ETS exposures and lung cancer. Efforts are now underway to secure a copy of the data base for review. Professor James Kilpatrick of Virginia Commonwealth University is preparing an analyses of the Hirayama methodology for publication.

III. Tobacco Institute Projects:

1. Reply to the 1986 SGR:

A reply to the Surgeon General's Report on ETS is currently planned by the IAPAG and Covington and Burling.

2. Review of the Literature on ETS--Katzenstein:

Public relations specialist Alan Katzenstein will review the literature on ETS and prepare critiques for publication.

3. Preparation of a report reviewing corporate work-place smoking policies and contacts. The report is available upon request.

4. Preparation of a response to the NAS report on aircraft air quality, 9-13-86.

IV. Other Projects:

1. Preparation of a paper on ETS health claims and constituents for INFOTAB. For use by member companies, NMA's and lead companies. (Shook, Hardy)

2. Preparation of witnesses for testimony before Congressional subcommittee hearing to restrict smoking in Federal buildings (June 1986) (Covington & Burling; Shook, Hardy)

3. Sponsorship of IAPAG (Indoor Air Pollution Advisory Group) members in testimony on ETS at local and regional levels. (TI, Covington & Burling)

4. Dr. Tom Osdene, Dr. Charles Green and Mr. Don Hoel will be the panelists for a presentation on ETS at the October 1986 INFOTAB Workshop.

V. Proposed Projects:

1. Comparison of mainstream and sidestream smoke toxicity:

Research associates at RJR have prepared a protocol for comparing mainstream with sidestream smoke toxicity. The protocol includes *in vitro* and animal inhalation testing.

2. Determination of the feasibility of using nicotine or cotinine in bodily fluids as a marker for ETS exposure:

Proposals are now being sought which will develop methods for the collection and analysis of nicotine and cotinine in saliva, urine and blood samples from nonsmokers. Cotinine will be evaluated as a marker for total ETS exposure.

3. Scientific Symposia on ETS:

Plans are currently underway to host a symposium of international scientists on the issue of ETS. Scheduled for the latter part of 1986. The Advisory Group and others are exploring the possibility of holding several workshops on the ETS issue in North America, Europe and Japan, 1986-87.

VI. Other Research:

1. General evaluation of ETS--The University of Kentucky Tobacco and Health Research Institute, Lexington, Kentucky:

This state funded research institute for tobacco and health matters will continue its examination of the characteristics of ETS and its possible effects on animal pulmonary systems. Researchers at the Institute will develop an analytic method for this evaluation of nicotine and cotinine in bodily fluids, and have expressed willingness to assess the personal nicotine monitor.

2. ETS research projects undertaken by R. J. Reynolds, U.S.A.:

Includes the development and evaluation of ETS monitoring techniques using nicotine and cotinine--Brigham Young University, Salt Lake City, Utah and Penn State University, Pennsylvania; analysis of biochemical markers and effects assessment--University of Pittsburgh, University of California at San Francisco.

VII. Meetings:

1.	Annual Conference; Indoor Air Quality (See attached schedule)	September 18-19, 1986 Washington
2.	Indoor Air Quality Symposium (Georgia Institute of Technology)	September 23-25, 1986 Atlanta
3.	ASHRAE Conference on ETS and Indoor Air Quality, hosted by T. D. Sterling	September 27, 1986 Vancouver
4.	International Experimental Toxicology Symposium on Passive Smoking (See attached program)	October 23-25, 1986 Essen, Germany
5.	Symposium on Environmental Tobacco Smoke and Health Effects of Passive Smoking (See attached program)	June 9-12, 1987 Finland
6.	Indoor Air '87 (See attached program)	August 17-21, 1987 Berlin

VIII. ETS Events:

1. Publication of WHO/IARC (World Health Organization/ International Association on Research of Cancer) monograph on tobacco smoke. Includes ETS. May 1986.

2. OTA (Office of Technology Assessment) U.S. Congress report on smoking in the workplace. May 1986.

3. NAS (National Academy of Science) report on airliner air quality. July 1986.

4. NAS report on "passive smoking". Forthcoming.

5. Report from Health and Welfare Canada on ETS. Forthcoming.

6. 1986 Surgeon General's Report on ETS. Forthcoming.