sure to asbestos has been infrequent and exceed 50% when it has been prevalent" (p. 710).

Many of the statements are conflicting or inaccurate. Patient histories and subjective symptoms are unreliable, particularly in legal proceedings (2). Pleural plaques are evidence of exposure and do not indicate a greatly increased risk for asbestos-related disease in those workers with equal exposure and no radiologically visible plaques (3). The implication that asbestos contributes to clinically significant COPD is not supportable (4). The role of the International Labour Organization (ILO) B-reader chest X-ray interpretation has recently come into question (5, 6).

Conflict of Interest Statement: D.D.S. has no financial relationship with any asbestos manufacturer or commercial entity but has been an expert witness for the defense in asbestos litigation.

DORSETT D. SMITH
University of Washington
Seattle, Washington

References

1. American Thoracic Society. Diagnosis and initial management of nonmalignant diseases related to asbestos. *Am J Respir Crit Care Med* 2004;170: 691–715.
2. Agostoni P, Smith DD, Schoene R, Robertson H, Butler J. Evaluation of breathlessness in asbestos workers: results of exercise testing. *Am Rev Respir Dis* 1987;135:812–816.
3. Smith DD. Plaques, cancer and confusion. *Chest* 1994;105:8–9.
4. Smith DD. Does asbestos exposure cause obstructive airways disease? [letter] *Chest* 2004;126:1000.
5. Janower ML, Berlin L. "B" Reader's radiographic interpretations in asbestos litigation: is something rotten in the courtroom? *Acad Radiol* 2004; 11:841–842.
6. Gitlin JN, Cook LL, Linton OW, Garrett-Mayer E. Comparison of "B" readers' interpretations of chest radiographs for asbestos related changes. *Acad Radiol* 2004;11:843–856.

From the Committee:

The Committee appreciates the opportunity to respond to these two additional letters. This is also an opportune time to clarify other issues that may be lost in the detail of the Statement.

Dr. Martin's letter is entitled "2004 Asbestos disease guidelines ignore mass screening abuse," as if the Statement condoned abusive practices. In fact, the Statement favorably cites both a 2002 white paper from the National Institute of Occupational Safety and Health and a 2000 resolution by the Association of Occupational and Environmental Clinics regarding characteristics of responsible and ethical screening programs.

Dr. Martin makes two substantive allegations of error by the Committee in his original letter. One involves the interpretation of 1/0 readings, which the Statement describes, correctly, as "presumptively diagnostic but not unequivocal": this interpretation is inherent in the International Labour Organization (ILO) Classification system. Dr. Martin also requests a reference for the statement that the plain chest film has a sensitivity of no more than 90% and a specificity of about 93% (the source says 90 to 95%): the reference is number 150, cited in the Statement on page 710.

To Dr. Smith, the Committee responds that the passages he describes as contradictory simply make reasonable distinctions. With respect to occupational and medical histories, the Committee has made the unexceptional recommendation that a physician take a history to help guide the diagnosis. With respect to his comment on pleural plaques, the Committee stands by what was written and the evidence cited. With respect to the contribution of asbestos exposure to airway obstruction, the Statement says that asbestos exposure might be clinically significant in the presence of low lung function. Dr. Smith writes: "The role of ILO B-Reader chest X-ray interpretation has recently come into question." In point of fact, the B-Reader Program belongs to NIOSH. It is not an activity of the ILO.

Although relatively few communications have been received to date, it is unreasonable to expect the members of the Committee to provide individual responses to every future correspondent. In the interest of anticipating the concerns of others, therefore, the Committee offers the following broad overview of the Statement.

The key difference between the 1986 criteria and the 2004 criteria is that the 2004 Guidelines present a more explicit approach to diagnosis based on criteria: the need to establish evidence for exposure, to identify a disorder compatible with asbestos as a cause, exclusion of other causes, and a forceful requirement for assessing impairment in the event that the physician makes a diagnosis of nonmalignant asbestos-related disease. Although these elements were mentioned in 1986, they were not given the same emphasis.

The 2004 document also broadens the discussion beyond asbestosis, which predominated in 1986, and brings the criteria up to date with respect to modern methods of imaging, such as HRCT and digital radiography, and clinical evaluation. It also provides guidance to the physician on the initial management of the patient once a disease of this type is diagnosed, including what to look for and how to follow up such patients. The disease has to come first, so the identification of a disorder that is compatible with asbestos exposure is first. Then, the connection to asbestos exposure must be made and other plausible causes ruled out.

The emphasis in the guidelines is on structural change, not functional change, in making the diagnosis. Functional deficit is not a diagnosis, in the sense of a specific disease entity, and members of the committee thought that functional changes were secondary phenomena, too nonspecific to fulfill a criterion but which may support the diagnosis. A restrictive defect, for example, is consistent with asbestosis (and much else) but may not be present early on and is not required for the diagnosis. The asbestos-related disease entity may of course result in impairment, which should then be measured to guide care and track progression.

The document is not a major break with the past. The evidence required to meet each criterion has broadened with the advance of technology but remains conservative in that the emphasis is on the likelihood of a connection to asbestos and excluding other types of conditions, rather than identifying disease at the very earliest possible moment. The criteria are generally more specific than they are sensitive.

The Committee prepared these guidelines for the purpose of guiding physicians to the recognition and confirmation of nonmalignant asbestos-related disease for the purpose of treatment and patient care: that was our mandate. The Committee did not formulate the guidelines for other applications and is not encouraging the use of these guidelines outside of clinical diagnosis.

The Committee welcomes the comments of ATS members on the Asbestos Statement. An open forum has been scheduled during the ATS annual International Conference in San Diego for 7:00 to 9:00 pm, Sunday, 22 May 2005.

Conflict of Interest Statement: Neither T.L.G. nor any member of his immediate family or, to his knowledge, extended family have a financial relationship with any commercial entity that has a substantial interest in asbestos, exposure to asbestos liability, or business that would be affected by the Statement of this committee. During the period of deliberation of the Committee, he declined to participate in personally remunerative activities directly related to asbestos, in order to avoid the perception of conflict of interest. During this period, the George Washington University Medical Faculty Associates received fees for his professional

services in a few cases in which exposure to asbestos could have been an issue, including a small number of individual cases and cases referred by the U.S. Department of Energy for evaluation (value, less than $7,000). Dr. Guidotti receives a small revenue from royalties derived from books, one of which, *Science on the Witness Stand* (2001), contains an appendix discussing asbestos; future sales of this book are not expected to be affected (value in 2004, less than $200). C.A.B. has never served as an expert for a commercial sponsor in the course of his occupational medical practice; he has served as an expert witness for individuals with asbestos-related disease involved in workers compensation and litigation represented by various attorneys and legal firms and has no contractual financial relationship with these individuals or their legal representatives with all work performed on an hourly fee for service basis; D.C. does not have a financial interest with a commercial entity that has a substantial interest in the subject of the deliberations of the Committee or the manuscript published as the Statement of the Committee. No member of his family has a financial relationship with such a commercial entity. The following represents disclosure of asbestos-related income for the years 2001 to the present: in 2001 he received $2,750 in consulting fees from asbestos plaintiff attorneys and approximately $4,000 from insurers, Medicare, Medicaid, work compensation and commercial insurers for evaluating asbestos-exposed individuals in his clinical practice; in 2002 he received $4,600 in consulting fees from plaintiff attorneys and $4,000 from third party payers for evaluating asbestos-exposed individuals in his clinical practice; in 2003 he received $2,000 in consulting fees from asbestos plaintiff attorneys and approximately $3,000 from third party payers for evaluating asbestos exposed individuals in his clinical practice; in 2004, he received $1,225 in consulting fees from plaintiff attorneys and approximately $2,000 from third party payers for evaluating asbestos-exposed individuals in his clinical practice; M.R.H. presented at the White House and the U.S. Congress on aspects of the Hyde-Ashcroft Asbestosis reform bill; his airfare and hotel were paid for by Public Citizen and he received no other compensation. He wrote a position statement for the Association of Occupational and Environmental Clinics which set ethical guidelines for physician participation in asbestosis screening. In the early 1990s, he participated in an asbestosis screening program which was associated with investigations from multiple government agencies. No impropriety or wrongdoing was found. G.H. does not have a financial relationship with a commercial entity that has an interest in the subject of this letter; J.R.B. does not have a financial relationship with a commercial entity that has an interest in the subject of this letter. He has been an expert witness for plaintiffs who have filed asbestos-related disease claims, but has not personally received remuneration for work on these cases. Remuneration has always gone to his employer, e.g., Regents of the University of California; P.H. and his employer, University of California, Los Angeles, have received approximately $10,000 from Conwed Corp. for a project and payment for medical consultation and expert witness services and approximately $7,500 from multiple insurers and attorneys in 2001–2004; F.H.Y.G. is employed full time jointly by the University of Calgary where he is a Professor of Pathology & Laboratory Medicine and by Calgary Laboratory Services where he is the Chief of the Autopsy Service for the Calgary Health Authority. He has not been employed by a commercial entity that has an interest in the subject of the statement and does not perform consultant work. In the past three years, his medical/legal consultations involving claimants in the United States have been entirely in the area of black lung compensation and none of the cases have involved asbestosis. He is also employed infrequently (once or twice a year) to review potential cases of occupational lung disease for the Alberta Workmen's Compensation Board; in the last three years two of these cases have involved the pathologic diagnosis of asbestosis at autopsy. He is paid for these opinions at the rate of Can $200 per hour and has also been paid to give lectures by commercial sponsors; in the last three years the only sponsorship has been by the 3M Company to give a talk on the pathology of asthma at the European Respiratory Symposium in 2002; asbestos was not part of the presentation or discussion. With Dr. Sam Schurch he has a patent pending on a treatment of asthma involving surfactants and perfluoracarbons and this has no relationship to asbestos or asbestos-related injuries. He also receives royalties from a textbook co-edited by Dr. Andrew Churg entitled "The Pathology of Occupational Lung Disease" published by Williams & Wilkins. This book covers numerous areas of occupational lung disease pathology including asbestosis. However, the chapters on non-neoplastic and neoplastic lung disease associated with asbestos exposure are entirely authored by Dr. Churg and thus the opinions expressed in this book regarding asbestos are largely those of Dr. Churg. He has no stock ownership or options in any company that would be related the subject of this letter; W.N.R. has a contract with Con Edison to perform CT scans on employees, some of whom have had asbestos exposure; G.R.W. does not have a financial relationship with any commercial entity that has an interest in the subject of this letter; A.M. has reviewed medical/scientific aspects of proposed administrative guidelines or legislation for asbestos-related claims for the American Bar Association in 2002 receiving no fee, for the Province of British Columbia Workers Compensation Board for a fee of Can $150 and for law firms for a standard per-hour fee. He lectured for the Defense Research Institute for their standard honorarium and for a symposium on law and medicine for a Federal District Court, receiving no fee. He is a designated "impartial expert" for the New York State Workers Compensation Board, receiving their standard fee. He served on a NIOSH expert panel on the B Reader Program in 2004, receiving no fee. He has reviewed clinical cases for plaintiff and defense law firms and served as an expert witness in three mesothelioma trials in the past three years, the last being 10/2/02. All his publications on asbestos-related disease have been supported solely by the academic medical centers at which he was employed.

Tee L. Guidotti
The George Washington University
Washington, DC

Carl A. Brodkin
University of Washington
Seattle, Washington

David Christiani
Harvard University
Boston, Massachusetts

Michael R. Harbut
Wayne State University
Detroit, Michigan

Gunnar Hillerdal
Karolinska Institute
Stockholm, Sweden

John R. Balmes
University of California at San Francisco
San Francisco, California

Philip Harber
University of California Los Angeles
Los Angeles, California

Francis H. Y. Green
University of Calgary
Calgary, Alberta, Canada

William N. Rom
New York University
New York, New York

Gregory R.Wagner
National Institute for Occupational Safety and Health
Morgantown, West Virginia

Albert Miller
St. Vincent Catholic Medical Center
Jamaica, New York

On behalf of the Ad Hoc Committee to Update the 1986 ATS Criteria for the Diagnosis of Nonmalignant Asbestos-Related Disease