

Testimony of

Dr. Philip Landrigan

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TESTIMONY BEFORE

United States Senate
Committee on the Judiciary

by

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"A Fair and Efficient System to Resolve Claims of Victims for Bodily Injury Caused by Asbestos, and Other Purposes"

April 26, 2005

Mr. Chairman and Members of the Committee on the Judiciary,

I am pleased to appear before you today to review the impacts that asbestos has had on the health of American workers, and to discuss the legislative remedies that have been proposed for dealing with the asbestos epidemic.

My name is Philip J. Landrigan, MD, MSc, DIH. I am a physician, a board-certified specialist in occupational medicine, and Chairman of the Department of Community and Preventive Medicine in the Mount Sinai School of Medicine in New York. I am Editor-In-Chief of the American Journal of Industrial Medicine. I am President of the Collegium Ramazzini, an international scientific society in occupational and environmental medicine. I have had many years of experience of dealing with the clinical manifestations and studying the epidemiology of the diseases caused by asbestos. A copy of my biographical sketch is appended to this testimony.

The late Irving J. Selikoff, MD, the "Father of Asbestos Research in the United States", was one of the founders of the Department that I now chair at Mount Sinai. This Department contains New York's largest clinical facility in occupational medicine and one of the nation's largest research and training programs in occupational health, a program that Dr. Selikoff established 30 years ago. We have been designated by the National Institute for Occupational Safety & Health (NIOSH) as the major provider of diagnostic services to the men and women who worked at Ground Zero, the site of the World Trade Center in the terrible days and weeks that followed the attacks of September 11, 2001. We have now examined over 12,000 of those workers - police officers, firefighters, construction workers, paramedics, and building cleaners. Many of them were exposed in their work to asbestos.

The testimony that I shall be presenting today reflects the collective knowledge and experience of our occupational medicine group at Mount Sinai, and most especially the thoughts of my colleague, Stephen Levin, MD, Director of the Selikoff Center for Occupational and Environmental Medicine.

The Asbestos Epidemic

Asbestos has been and continues to be an occupational and environmental hazard of catastrophic proportion. Asbestos has been responsible for over 200, 000 deaths in the United States, and it will cause millions more deaths

worldwide. The profound tragedy of the asbestos epidemic is that all illnesses and deaths related to asbestos are entirely preventable.

Clinical and epidemiologic studies, many of them initiated by Dr. Selikoff at Mount Sinai, have established incontrovertibly that asbestos is a human carcinogen. All forms of asbestos are carcinogenic. Asbestos has been shown to cause cancer of the lung, malignant mesothelioma of the pleura and peritoneum, cancer of the larynx and certain gastrointestinal cancers. Asbestos also causes asbestosis, a progressive fibrotic disease of the lungs.

Asbestos has been declared a proven human carcinogen by the Environmental Protection Agency (EPA) and by the International Agency for Research on Cancer of the World Health Organization.

Asbestos and cigarette smoke are powerfully synergistic in the causation of lung cancer. Nonsmoking asbestos workers have five times the background risk of lung cancer. Smokers who have had no exposure to asbestos have 10 times the background risk of developing lung cancer. But asbestos workers who also smoke have 55 times the background risk of lung cancer. This is the classic and best-studied example in the medical literature of a synergistic interaction between two proven human carcinogens.

New use of asbestos has almost completely ended in the United States and in most other developed nations as a result of government bans and market pressures. Those forces were stimulated by the epidemiologic studies that I have noted above and by the release of information on the carcinogenicity of asbestos that previously had been suppressed by the asbestos industry. By contrast, extensive and aggressive marketing of asbestos continues in the developing world, where sales remain strong and worker protections are too often weak.

Problems with the Proposed Fairness in Asbestos Injury Resolution Act

The proposed Fairness in Asbestos Injury Resolution Act contains serious scientific problems as currently written. It creates criteria for assessing the causation of disease by asbestos that are not based on scientific evidence and that are not consistent with current knowledge in occupational medicine.

Difficulties with the proposed exposure criteria

The bill contains medically unsupported requirements for minimum duration of exposure to asbestos.

Contrary to the requirements for minimum duration of exposure set forth in the bill, there is clear evidence from carefully conducted epidemiological studies that exposures to asbestos for even one month under heavy exposure conditions can increase the risk of lung cancer two-fold and also increase the risk of death from asbestosis.

The requirement for 5 or more weighted years of exposure to asbestos to establish a diagnosis of asbestosis is not supported by scientific evidence.

Also unsupported by the published medical literature are the minimum requirements set forth in the bill of 8, 10 or 12 years of exposure for establishment of asbestos causation in a case of lung cancer.

The bill contains a medically unsupported proposal for discounting exposures to asbestos.

The bill establishes three exposure classifications:

? Moderate exposure for persons who worked in areas that experienced "regular airborne emissions of asbestos fibers",

? Heavy, for persons who worked in direct installation, repair or removal of asbestos, and

? Very heavy for those who worked in primary asbestos manufacturing or a WWII shipyard

Each year worked in these categories counts as 1, 2 and 4 years respectively.

However, these years of work are discounted depending on when they occurred. Every year of exposure that occurred after 1976, no matter what was the level or circumstance of occupational exposure, counts as only one half of a year. Every year of exposure that occurred after 1986 counts as only one tenth of a year.

The plan to discount exposures from 1976-1986 by half is without medical or scientific basis. Many workers had exposures during this period that were no different in intensity from those that preceded 1976.

Similarly, discounting post-1986 exposures to 1/10 the accumulated years is without medical or scientific basis. Removal or other disturbance of asbestos in place has yielded exposure levels in the past two decades that are no different from those encountered before 1986 or 1976.

It may be illustrative to see how application of this proposed discounting formula will work when applied to the situation of individual cases. It would appear, for example, that no claims for lung cancer level VII (with bilateral plaques, without asbestosis), will be paid for anyone with "moderate" exposure to asbestos prior to 1972. Or put another way, a person with lung cancer could have worked in areas with "regular airborne emissions of asbestos fibers" since 1973 and still not qualify for compensation under this bill because he or she would fail to meet the substantial exposure criteria set forth in the bill.

Specifically, for lung cancer level VII (with bilateral pleural disease) a claimant would need 12 years of weighed exposure (pg 82). Only those exposures that occurred before 1976 would count at full value. If exposure for a lung cancer victim with pleural disease started in 1972, it would take 30 years of exposure to meet this 12-year exposure requirement. For every year later that the person started occupational exposure (1973, 1974 etc) it will take an extra 10 years of occupational exposure to meet the criteria for compensation in the bill. Thus a person with lung cancer and pleural plaques who began occupational exposure to asbestos in 1974 would need 52 years of work exposure (through 2025, or "until" 2026) to meet the 12-year weighted exposure criteria in the bill.

For cancers other than lung (malignant level VI) the proposed situation is still more difficult. A person with colorectal, laryngeal, esophageal, pharyngeal or stomach cancer would need 15 years of weighted occupational exposure to asbestos to qualify for compensation under this bill for any of those diseases. If all of that person's exposure occurred after 1976 it would take 105 years to meet the criteria. This would seem an unattainable goal.

Difficulties with the proposed diagnostic criteria

The bill contains medically unsupported criteria for diagnosis of non-malignant disease.

The requirement that pleural disease be bilateral to be considered the consequence of exposure to asbestos is not warranted by medical evidence. Asbestos-related scarring often develops unevenly and almost always begins unilaterally. Miller and Lillis showed a clear relationship between degree of pleural scarring and loss of FVC independent of whether the pleural changes were bilateral.

The criteria set forth in the bill require that there be no evidence of obstructive airway disease (i.e. that the FEV1/FVC ratio be ≥ 0.65) in order to compensate for loss of FVC is not consistent with the medical literature. There are many cases of combined restrictive and obstructive disease in workers with airway disease and asbestos-related scarring.

The bill contains medically unsupported criteria for diagnosis of cancer

I am deeply troubled by the requirement that no lung cancer case will receive compensation without evidence of "bilateral pleural plaques, bilateral pleural thickening, or bilateral pleural calcification" (pg 82), or grade 1/0 asbestosis (pgs 83-84). In other words, lung cancer in a person who has been exposed to asbestos but who does not have asbestos-related scarring in both lungs will not be compensated, even if there is unilateral scarring/calcification. This is problematic for two reasons; one, is that many cases of lung cancer caused by asbestos occurs without any radiographic evidence of pleural plaques or asbestosis; asbestosis is not a necessary precursor to asbestos-induced lung cancer. Moreover, requiring that the damage be bilateral, has no basis in biology or medicine.

In summary, the proposed Fairness in Asbestos Injury Resolution Act establishes barriers to the diagnosis of asbestos-related disease that are arbitrary, that are not based in science, that are not based in medical knowledge, and that would appear, almost without exception, to make extremely difficult - indeed, well nigh impossible - any diagnosis of causation of disease by asbestos.

The approach to the diagnosis of disease caused by asbestos that is set forth in this bill is not consistent with the diagnostic criteria established by the American Thoracic Society. If the bill is to deliver on its promise of fairness, these criteria will need to be revised.

I shall be pleased to answer questions.

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Philip J. Landrigan, M.D., M.Sc. is the Ethel H. Wise Professor and Chair of the Department of Community and Preventive Medicine of the Mount Sinai School of Medicine in New York City. He holds a Professorship in Pediatrics at Mount Sinai. He directs the Mount Sinai Center for Children's Health and the Environment. He is a board-certified specialist in pediatrics, general preventive medicine and occupational medicine.

Dr. Landrigan obtained his medical degree from the Harvard Medical School in 1967. He interned at Cleveland Metropolitan General Hospital. He completed a residency in Pediatrics at the Children's Hospital Medical Center in Boston. In 1977, he obtained a Master of Science in occupational medicine and a Diploma of Industrial Health from the University of London.

From 1970 to 1985, Dr. Landrigan served as a commissioned officer in the United States Public Health Service. He served as an Epidemic Intelligence Service Officer and then as a medical epidemiologist with the Centers for Disease Control in Atlanta. While with CDC, Dr. Landrigan served for one year as a field epidemiologist in El Salvador and for another year in northern Nigeria.

Dr. Landrigan is an elected member of the Institute of Medicine of the National Academy of Sciences. He is Editor-in-Chief of the American Journal of Industrial Medicine and previously was Editor of Environmental Research. He has chaired committees at the National Academy of Sciences on Environmental Neurotoxicology and on Pesticides in the Diets of Infants and Children. Dr. Landrigan's report on pesticides and children's health was instrumental in securing passage of the Food Quality Protection Act of 1996.

In New York City, he served on the Mayor's Advisory Committee to prevent Childhood Lead Paint Poisoning and on the Childhood Immunization Advisory Committee. He is Chair of the New York State Advisory Council on Lead Poisoning Prevention. From 1995 to 1997, Dr. Landrigan served on the Presidential Advisory Committee on Gulf War Veteran's Illnesses. In 1997 and 1998, Dr. Landrigan served as Senior Advisor on Children's Health to the Administrator of the U.S. Environmental Protection Agency. He was responsible at EPA for helping to establish a new Office of Children's Health Protection.

Dr. Landrigan served from 1996 to 2005 in the Medical Corps of the United States Naval Reserve and rose to the rank of Captain. He served overseas with the Navy in London, Singapore, Korea and Ghana and was Officer-in-Charge of the West Africa Training Cruise, a medical humanitarian mission to Senegal that saw over 11,000 patients in rural West Africa in July, 2004. He has been awarded the Navy Commendation Medal (2 awards), the National Defense Service Medal, and the Secretary of Defense Medal for Outstanding Public Service.