content of past and present dust exposures. It should be recognized also that the health effects of other materials in brake dust have not been studied.

Dr. Rohl from Mt. Sinai reported on studies of asbestos dust exposure in automobile repair shops in New York City. Peak exposures from 5-8 minutes duration were measured. Fiber counts, using the OSHA method, were from 6 to 30/ml at 3-5 feet from brake drums cleaned with compressed air. At 5-10 feet, counts ranged from 2 to 4 ml; at 10-20 feet 0.4 to 4.8/ml. Drums cleaned with a brush generated less airborne asbestos, 1.3-3.6 fibers/ml in the operators breathing zone. Eighty to 99% of the fibers as observed by electron microscopy were less than 5.4 microns in length, indicating a much higher exposure to asbestos fibers than indicated by optical microscopy. Workers engaged in grinding operations to renew brake linings were exposed to 2-7 optically visible fibers/ml. Those bevelling linings had high exposures ranging from 32-72 fibers/ml. Dr. George Wright pointed out that earlier studies showed that 1 to 3% of brake dust is fibrous asbestos.

Dr. Lorimer of Mt. Sinai reported on medical examination of 93 brake repair workers with 10-40 years of exposure. A substantial number were reported to have X-ray and ventilatory function abnormalities. Further studies need to be done in this area before any conclusions on health effects can be drawn. However, it was pointed out that at least four cases of mesotheliomas have been reported nationally among automobile repair workers and this lends urgency to the problem.

Dr. Finklea asked for comments and recommendations for addressing the problem.

Mr. Meyers suggested that several practical control measures are feasible now. Indeed, these measures have been instituted in several shops. His union alerted its members via its newsletter and developed posters to alert workers to the problem. Mr. Meyers emphasized that the employers with whom he worked were most cooperative. Employers were encouraged to use vacuum cleaning of brake drums and, where necessary, masks to reduce exposure. His union has made arrangements for continued medical evaluation of its members. He emphasized the importance of union representatives having access to workplaces for observation of sanitary practices.

Dr. George Wright, an industrial consultant, emphasized that manufacturers have a responsibility to ascertain what happens to their products after being sold to others. This problem represents a difficult problem for the manufacturer and for their industrial customers. Dr. Wright stressed belief that the asbestos industry would cooperate in every possible way. Dr. Wright was not totally surprised by the fiber counts reported and expressed the belief that one might subsequently encounter the full spectrum of asbestos-related disease among grinders. Dr. Wright expressed concern that conditions might be worse and