

INTRODUCTION

A major objective of the National Institute for Occupational Safety and Health (NIOSH) is to determine environmental exposures of working populations through research, surveys, and industrywide studies. Accordingly, NIOSH is presently conducting research to characterize dust exposure resulting from vehicle brake servicing operations. Of particular interest are the small diameter, potentially respirable asbestos fibers generated by these operations. Limited studies have suggested that such emissions may be associated with asbestos-induced diseases.¹

An estimated workforce of 900,000 brake mechanics and garage workers in the U.S. are potentially exposed to asbestos.² An estimated 118 million pounds of asbestos are used annually in the U.S. for the production of brake friction materials.³ In addition to asbestos, other materials which are used in the manufacture of brake linings such as lead, zinc, copper, and iron pose other potentials for exposures. Rohl and Langer identified thirty materials or compounds that make up the binders, fiber reinforcers, and the property modifiers as being present during brake lining manufacturing.²

SELECTION OF FACILITIES SURVEYED

The purpose of the study was to investigate and characterize dust exposures resulting from vehicle brake maintenance and repair operations taking into account the work practices utilized. Therefore, it was necessary to locate