

dicted ($100 \times \text{MMF/PMMF}$) according to job category and smoking history. The prediction equations used were those of Miller et al. (1980) (See Table 3). The distribution of these parameters is shown in Tables 26, 27, 28, 29. With the exception of auto body workers and garage workers who do not work with brakes, there are no differences between the means or in the distributions of the three principal spirometric test results (FVC/PPFVC , $\text{FEV}_1/\text{PFEV}_1$, FEV_1/FVC) for all other groups of workers, including those with possible past exposure to asbestos. While there are some differences between the various job categories in smoking category subgroups, these are largely the result of statistical variations. The more stable, smoking standardized data, show virtually identical results for the unexposed control population, brake workers and individuals exposed, or possibly exposed, to asbestos. These data are shown in Table 30. This might be anticipated as only marginal differences were seen in the percentage of X-ray abnormalities among individuals in different work categories. As forced vital capacity is usually a less sensitive determination of asbestos-related changes than the presence of X-ray abnormalities and forced expiratory volume in one second relates to exposures other than asbestos, the absence of a definite trend among the groups with varying asbestos exposure is not unexpected (see section on measures of small airway disease for a discussion of MMF/PMMF).

Measures of small airway disease

As was seen in Tables 22-24, with the exception of non-mechanic garage workers and those men engaged in auto body work, no differences existed in the means of the spirometric test results between the three major occupational groups studied, those unexposed to asbestos or to garage work, those engaged in brake work, and those with a probable asbestos exposure. However, in the case of MMF/PMMF (Table 25) individuals with an identified asbestos exposure had a lower smoking standardized mean compared to those in the other two categories although not at a $P < 0.05$ level of significance. The unexposed control group had the highest mean values, followed closely by mechanics engaged in brake work. Those with identified and possible exposure to asbestos had interme-