

SUMMARY

B.C. forest industry operations are actively working on asbestos control programs to minimize the risk of health problems linked with exposure to asbestos fibres. In many cases this involves removal of asbestos and replacement with a variety of materials known as man-made mineral fibres (MMMF). The substitute products are generally made from fibrous glass, ceramic fibres or synthetic fibres.

The similar fibrous nature of asbestos and some MMMF has led to concern that the health hazards of replacement products may be similar to those of asbestos as well. During the 1970's animal studies, primarily designed to investigate the health effects of asbestos, found that tumours were also induced by a variety of surgically implanted MMMF. However, when animals breathed man-made mineral fibres evidence of cancer was not found.

During the 1980's, a series of health studies involved workers in the MMMF production industries. The results indicated that in some cases there was an increased incidence of chronic respiratory disease and lung cancer 20 or more years after the start of employment. These studies do not conclusively demonstrate that the health effects were caused by MMMF, but serve to emphasize the need for good work practices as a precaution when handling these fibres.

Workers exposed to MMMF have experienced irritation of the throat and upper respiratory tract. There are, however, no clear indications of respiratory diseases such as asthma or fibrosis (scar tissue in the lungs). Although eye irritation is rare, skin irritation often occurs temporarily among new employees and those infrequently exposed.

MMMF's are classified by the Workers' Compensation Board of B.C. as a nuisance dust with an eight-hour maximum average permissible concentration of 10 mg/m^3 . Considering information from studies of health effects, and the need to clarify the risk of long-term exposure, it is recommended that handling practices should be established to keep exposures much lower than this.