

PLENARY SESSION PRESENTATION

WHAT LEVEL OF RISK ARE ASBESTOS REMOVAL WORKERS BEING EXPOSED TO USING CONTEMPORARY RPE?

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From the available data it is possible to estimate likely airborne asbestos fibre levels within asbestos removal enclosures and to estimate the likely levels of protection being provided by contemporary RPE.

In the UK a large proportion of asbestos removal work involves insulation or insulating boards containing amosite.

Careless removal of dry insulation or dry asbestos insulation boards can generate up to >3,000 million fibres/m³ and up to 75 million fibres/m³ respectively. Careful manual wet removal can generate about 1-2 million fibres/m³. However, as the lowest tender generally wins the contract, it is considered highly likely that many asbestos removal jobs in the UK generate exposures above 1-2 million fibres/m³.

In the UK the levels of "acceptable" and "tolerable" risk have been defined as 1 or 10 per million per year respectively.

For 20 year olds exposure to amosite asbestos would need to be restricted to less than about 50 fibres/m³ for "acceptable" risk or to less than about 1000 fibres/m³ for "tolerable" risk.

To reduce 1-2 million fibres/m³ to 1000-2000 fibres/m³ for "tolerable" risk will require RPE with APF >1000. The same data can be used to define what control measures must achieve for current RPE to provide adequate protection.

The presentation will assess the available exposure data from work with asbestos and assess the likely levels of mesothelioma risk for asbestos workers wearing contemporary RPE.