

Risultati di un programma pilota per il controllo di qualità dei laboratori che effettuano analisi sull'amianto mediante microscopia elettronica a scansione (SEM)

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KEY WORDS

Asbestos fibres; scanning electron microscopy; quality count data

SUMMARY

«Results of an interlaboratory fibre count comparison program concerning the SEM technique». Background: *The necessity of quality control for laboratories carrying out airborne asbestos fibre monitoring is recognized in Italian law concerning the worker and the environmental protection against asbestos. The scanning electron microscopy technique is prescribed to control the airborne fibre concentration after asbestos removal from buildings.* Objectives: *In 2002 the Italian laboratories carrying out SEM analysis on asbestos were requested by the Istituto Superiore di Sanità to take part in a fibre count comparison program. Thirty-nine agreed to participate.* Methods: *Fifteen samples were exchanged among the laboratories participating in the program. Seven samples consisted of polycarbonate membranes and eight of cellulose ester membranes. The sample loads did not exceed 50 fibres/mm². The fibre counting results were evaluated with reference to the mean value of each sample calculated from the results provided by all the participants.* Results: *Only 19% of the fibre count results were considered "insufficient", and the results falling within the 95% confidence interval were the 65% of the total. University and public laboratories obtained on the whole the best results.*

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