

As this aspect of asbestos fiber concentration to disease was reviewed, it was made known that the British were using a method whereby asbestos fibers were counted in the workroom atmosphere. They had started out in 1951 with a thermal precipitator. But because this unit did not count fibers longer than 10 μ m, a better method was sought. In 1960, they started using a long-running thermal precipitator and were able to collect and count the long fibers. They made a second change in 1965 when they started collecting samples with cellulose membrane filters.

As an informational note, in the standard thermal precipitator, dust-laden air is drawn vertically into the sampling head and down a narrow vertical channel between two glass coverslips. Halfway between these two coverslips is stretched a horizontal wire, heated electrically. Dust is deposited by a thermal effect, opposite the wire, in two strips on the coverslips. The coverslips are then mounted, dust side down, on microscope slides and the dust is then counted.

In the "long-running" thermal precipitator, the dust-laden air is drawn from a vertical passage and along a horizontal channel, the floor of which is formed by a glass coverslip. At first particles settle out from the air by gravity and the remainder are precipitated thermally beneath a heated wire.

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