

## NATURAL OCCURRING ASBESTOS IN ITALY

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Naturally Occurring Asbestos means asbestos presence of geological origin, in rocks or their alteration products, outcropping or buried, with asbestos minerals content varying and not definable in advance. In Italy NOA are quite distributed in all National territory and particularly well known are the cases of Balangero (ex asbestos mine, Piedmont Region), Ophiolites Quarries in Emilia Romagna, Lombardy and Piedmont Region, Biancavilla (Sicily), etc. A National Program to map the Asbestos occurrence has been funded and started in 2001 (L. 93/2001, D.M. 101/2003). The Italian asbestos mapping have to be realized distinguishing 4 different categories: 1-2-4 dedicated to factories, buildings, and landfills with asbestos and one (category 3) for Natural Occurring Asbestos:

- Mining activities, in use or disused, processing of rocks and minerals containing or not containing asbestos in areas where the presence of asbestos is known.
- Rocky masses which are characterized by the presence of asbestos.

The areas identified as NOA are mainly concentrated in central and northern Italy, and they do provide an outline of the main Italian risk situations. Limited areas with risk outcrops are also in Calabria, Basilicata and Sicily Regions, although not yet officially mapped according to the Italian Decree n° 101/2003. Most of the data so far acquired and officially sent by the regions, is related to mining activities in use or disused (former mines for asbestos extraction, quarries for ornamental stones extraction, quarries for inert materials extraction). There are still big gaps about natural outcrops mapping with no economic use, or of some outcrops came from local works (roads, earthworks etc.). This paper reports the updated map data on a national scale with close examination on some well-known situations (mining activities in Lombardy and Emilia Romagna). The collected data allow for a fairly complete picture of situations at greatest risk that could be used as comparison in European and international scale. We also highlight the need to implement this database with minor situations. Finally, we underline the lack of funds and national guidelines both to complete the mapping and to implement any possible remediation and restoration of the territory.

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