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IS29. MALIGNANT PLEURAL MESOTHELIOMA IN TURKEY DUE TO THE ENVIRONMENTAL EXPOSURE

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Malignant pleural mesothelioma (MPM) is still a public health problem in Turkey mainly due to environmental fibrous mineral exposure (FME; tremolite asbestos, erionite). Total incidence of MPM was estimated as 7.8 million inhabitants in Turkey.

Exposure from domestic usage of asbestos contaminated soil is particularly important in rural areas in Central, East and Southeast of Turkey, whereas erionite is the responsible fibrous zeolite, particularly in three villages located in the Cappadocian region of Central Anatolia, namely Karain, Tuzköy and Sarıhıdır. Erionite has much more carcinogenic potency compared to asbestos and has lead to outbreaks of endemic mesothelioma in these villages before relocation of these villages to an erionite free area. Estimated annual incidence of mesothelioma in Turkey related to environmental exposure was approximately less than 1000 cases per 100.000 people in the erionite villages and 50 cases per million in Southeast Turkey.

Although preventive measures were taken by educating villagers to avoid using asbestos contaminated soil for domestically and reloacating the erionite villages, illegally operated erionite quarries in Karacaören region is of concern for risk of new environmental MPM cases.

In addition to Turkey's natural geographical properties leading to high incidence of MPM currently there is an increasing risk of developing occupational mesothelioma due to extensive usage of asbestos in industry. Based on asbestos production and consumption data of U.S. Geological Survey, Turkey had imported a total amount of 350,000 tons of asbestos between 1940-2013. Therefore, we expect to diagnose 350 new occupational MPM cases per year especially after 2015 till 2040.

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