Malignant mesothelioma (MM) is an important health problem due to ongoing asbestos exposure. Environmental asbestos exposure leads to a high risk of MM in Turkey. The Turkish Mesothelioma Working Group and the Turkish Public Health Institute designed and performed the Turkey National Mesothelioma Surveillance and Environmental Asbestos Exposure Control Program (TUNMES-EAECP). The aim of this study was to analyze the results of the TUNMES-EAECP. Patients diagnosed with MM (code C45.0–C45.9) between 2008 and 2012 were identified. The “from case to the field” method was used to determine the villages with current or previous asbestos exposure. Special public health teams took soil samples from these villages, which were then examined using an X-ray diffractometer. Direct Standardized Average Annual Mesothelioma Incidence Rate (AMIR) and relative risk (RR) of MM were calculated. Finally, a projection on the incidence of MM between 2013 and 2033 was made. The number of confirmed MM cases was 5617 with a male to female ratio of 1.36. Mean age was 61.7 ± 13.4 (20–96) years. The median survival was eight (95% CI 7.6–8.4) months. Asbestos exposure continues in 379 villages, with 158,068 people still living in high risk areas. The standardized AMIR was 2.33/100,000 per year. The risk of MM was higher in males, in both sexes over the age of 40, in asbestos-containing provinces, and in those where the TUNMES was organized. Among the population with continuing asbestos exposure in rural areas, the number of MM cases between 2013 and 2033 was estimated as 2511. As such, the incidence of MM in Turkey is as high as in industrialized countries. Asbestos exposure in rural areas continues to be a serious problem in Turkey, which obviates the necessity for effective preventive measures.