

Extrapulmonary tuberculosis among migrants in the EU/EFTA: Implications for policy and practice

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Background:

The proportion of tuberculosis (TB) cases in the European Union/European Free Trade Association (EU/EFTA) that occur in migrants is increasing. Extrapulmonary TB poses challenges in diagnosis and treatment and causes serious morbidity and mortality. To date, there has been no in-depth exploration of extrapulmonary TB in migrants across Europe.

Methods:

We analysed 22 years of data from the European Centre for Disease Prevention and Control's European Surveillance System (TESSy) for 32 EU/EFTA countries between 1995 and 2017. We investigated whether the proportion of TB cases that were extrapulmonary varied between migrants and non-migrants, and whether this varied by a) country/region of origin, b) reporting country/region, and c) site of disease.

Results:

1,270,896 TB cases were included in the analysis, comprising 326,987 (25.7%) migrants, and 943,909 (74.3%) non-migrants. The proportion of TB that is extrapulmonary is significantly higher in migrants than in non-migrants: 45.2% (n = 147,814) of cases in migrants were extrapulmonary, compared to 21.7% (n = 204,613) in non-migrants ($\chi^2=6.7 \times 10^4$, $p < 0.001$). A relatively low proportion of extrapulmonary TB was seen in Eastern (17.4%) and Southern (29.6%) Europe compared with Western (35.7%) and Northern (41.8%) Europe, with migrants having a greater proportion of extrapulmonary TB only in Northern/Western Europe. Migrants from South-East Asia and Sub-Saharan Africa were at highest risk of extrapulmonary TB, with over half of all cases being extrapulmonary (62.0% and 54.5% respectively).

Conclusions:

Among TB cases in the EU/EFTA, extrapulmonary disease is significantly more common in migrants than non-migrants, which has clinical and policy implications for patient detection and management. There is a need to improve clinical awareness of extrapulmonary TB, integrate detection of extrapulmonary TB into latent TB infection screening programmes, and harmonise data collection on migrant status in health systems.

Key messages:

- Migrants in the EU/EFTA are disproportionately affected by extrapulmonary TB compared to non-migrants.
- This has clinical and policy implications for diagnosis, screening, and data collection.