The growth of immigrant populations in Portugal over the last decades has increased the need to enhance understanding about the knowledge of HIV transmission and risk factors that influence HIV risk behaviors.

**Aim:** This research aimed to study the HIV infection among immigrant population residing in Northern of Portugal, identifying the knowledge about modes of virus transmission and determinants of HIV testing uptake.

**Participants and methods:** A structured questionnaire was administered by trained interviewers to 704 immigrants (51% men) who attended to National Immigrant Support Centre, in Porto, Portugal. Proportions were compared using chi-square and Fisher tests, as appropriate. Logistic regression was used to calculate Odds Ratios (OR) and 95% confidence intervals (95% CI).

**Results:** Of all participants, 5.8% believed that sharing a meal with someone who is infected can be a risk behavior. The question that showed high proportion of correct answers was that about the use of condom to reduce HIV transmission (92.9%). Overall, 63.1% of participants reported have already been HIV tested. A statistically significant difference in the practice of HIV testing among immigrants by regions of origin was found (60.6% of sub-Saharan African; 69.7% of Latin Americans; 56.2% Eastern Europeans and 44.4% of immigrants from other regions; p<0.001). Among those who have been tested for HIV, 65.2% reported to have had the last test in Portugal, with Africans presenting the highest rate (77.0%). After adjustment for potential confounders, age was a significant associated factor for HIV testing uptake among these immigrants. The prevalence of self-reported HIV infection among participants who had performed the HIV test (n=444) was 1.1% [95%CI 0.4-2.6]. Among men, 6.2% reported having had sex with men in the last 12 months (3 of them were
HIV positive – which corresponds to 15% HIV prevalence in men who have sex with men).

**Conclusion:** Our results showed that immigrants are fairly informed about the risk factors for HIV transmission however important gaps remain. The prevalence of self-reported HIV infection among immigrants residing in Portugal was higher than the general population and we found that prevalence increased even more if immigrants engaged in risk behaviours. A high proportion of immigrants have been tested before for HIV and most of them were tested in Portugal which supports the success of HIV policies and efforts implemented in recent years.

**Keywords:** HIV, Immigrants, knowledge of HIV transmission, risk behaviours, HIV testing