

Burden of fungal infections in Ecuador

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Background. There is a dearth of data from Ecuador on the burden of life threatening fungal disease entities; therefore we estimated the burden of serious fungal infections in Ecuador based on the populations at risk and available epidemiological databases and publication. **Methods.** A full literature search using Google Scholar, Pubmed website, Journals Online and grey literature was done to identify all epidemiology papers reporting fungal infection rates from Ecuador. WHO population statistics, WHO HIV infection and ARV treatment rates; National Data (INEC, MSP, SOLCA, ONDOT), TB statistics, Index Mundi, Global Asthma Report when no data existed, risk populations were used to estimate frequencies of fungal infections, using previously described methodology by LIFE. **Results.** Ecuador, located in the middle of the world has a population of 15,223,680 people. The median estimates 52,000 HIV/AIDS The population at risk (<200 CD4 cell counts) is ~10,000, with a rate of 11.1% (1,100) of histoplasma, 7% (700) of cryptococcal meningitis and 32 % (3,200) of *Pneumocystis* pneumonia. The burden of candidaemia is 684 and Candida peritonitis is 103. For recurrent Candida vaginitis (more than 4 per year) is 256,327. Chronic pulmonary aspergillosis probably affects ~1,205 patients, 50% following TB. Invasive aspergillosis is estimated to affect 82 patients (~0.60/100,000) not including COPD patients. In addition, ABPA in asthma and CF and SAFS were estimated to affect 36.7/100,000 (5,028) and 48.5/100,000 (6,637) people respectively. **Conclusions.** Our estimates indicate that around 300,000 (2%) of the population in Ecuador is affected by serious fungal infection.

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