

ABSTRACT

Despite global efforts to reduce measles incidence, outbreaks continue to occur in developing countries where HIV-1-infected adults represent a vulnerable population. Immunization campaigns have targeted children, although little is known about the levels of measles protection in adult populations in Kenya. The objective of this study was to determine seroprevalence and titers of measles IgG among HIV-1-infected and uninfected adults in Nairobi, Kenya. The presence of anti-measles IgG was measured in cryopreserved serum of 257 HIV-1-infected and 367 uninfected adults using a commercial ELISA (Enzygnost, Germany). The measles IgG concentration was calculated for those samples that were positive. Overall, 96% of adults were measles seropositive and the mean measles IgG concentration among those who were seropositive was 4134 mIU/ml, which is well above previously reported protective levels. There was no statistical difference in seroprevalence or antibody concentration between the HIV-infected and HIV-uninfected groups. While local vaccination efforts and circulating measles infection likely contribute to this high measles seroprevalence rate, these data are unique to an urban population and may not reflect a country-wide distribution. Our results suggest that reduced immunity among HIV-1-infected adults is not a major contributor to measles resurgence in Kenya.