

Abstract:

Objective: To determine the prevalence, incidence, and correlates of HIV-1 infection in a cohort of east African trucking company employees. **Methods:** HIV-1-seronegative trucking company employees were enrolled in a prospective cohort study and evaluated at 3 monthly intervals for HIV-1 seroconversion, sexually transmitted diseases, and sexual behavior. **Results:** The baseline seroprevalence of HIV-1 among 1500 trucking company employees was 17.8%. Among 752 HIV-1-seronegative men who were followed, the HIV-1 annual seroincidence was 3.1%. In univariate analysis, HIV-1 acquisition was associated with age under 25 years, 10 years or less of sexual activity, occupation as a driver/driver,s assistant, occupational travel for more than 14 days per month, religion other than Christian or Muslim, uncircumcised status, sex with a prostitute, sex with a girlfriend/casual partner, extramarital sex, and enrollment seropositivity to *Treponema pallidum*, *Haemophilus ducreyi*, and Herpes simplex virus type 2 (all P values ≤ 0.05). Using multivariate analysis, HIV-1 acquisition was independently associated with 10 years or less of sexual activity (hazard rate ratio (HRR) 2.0, 95% confidence interval (CI) 1.0-4.3), occupation as a driver/driver,s assistant (HRR 3.9, 95% CI 1.7-9.0), religion other than Christian or Muslim (HRR 6.1, 95% CI 1.4-25.7), uncircumcised status (HRR 2.3, 95% CI 1.0-5.0), and unprotected sex with a prostitute (HRR 2.8, 95% CI 1.1-7.0). **Conclusions:** Trucking company employees had a high HIV-1 seroprevalence rate at enrollment and a high HIV-1 seroincidence during follow-up. Risk factors for HIV-1 seroconversion included years of sexual activity, occupation, religion, uncircumcised status, and unprotected sex with a prostitute. This population is an appropriate target for HIV-1 prevention trials and behavioral interventions