Transport workers (n = 504) in Mombasa, Kenya, were screened for urethral infection by history, clinical examination, and laboratory testing of urethral swabs and first-catch urine specimens. The prevalence of Neisseria gonorrhoeae was 3.4%, Chlamydia trachomatis, 3.6%, and Trichomonas vaginalis, 6.0%; more than two-thirds of infections were asymptomatic. A complaint of urethral discharge, dysuria, or both was twice as sensitive as the sign of discharge on physical examination (34.5% vs. 15.5%) in identifying infection. A positive leukocyte esterase dipstick (LED) test on urine predicted infection with a sensitivity of 95.0% and a specificity of 59.3% in symptomatic men and with a sensitivity of 55.3% and a specificity of 82.8% in asymptomatic men. Demographic and behavioral factors were not independent predictors of infection. In resource-poor settings with high prevalences of urethral infection, an effective screening and management strategy would be to treat symptomatic men, as well as asymptomatic men with a positive LED test, for all three infections.