**Background**

In Central America, surveillance of HIV has been strengthened by regular and systematic collection of HIV, sexually transmitted infection, and behavioural data among most at risk populations. In Guatemala, men who have sex with men (MSM) are a highly vulnerable to HIV infection. Behavioural data are needed to help plan for prevention interventions in this group.

**Methods**

Male residents of Guatemala City at least 18 years of age who self-reported having had anal sex with another man in the past 12 months were invited to participate in a face-to-face structured behavioural survey using respondent-driven-sampling (RDS) from September to December 2010. Participants who provided informed consent were administered a questionnaire that collected information on socio-demographics, risk behaviour, knowledge and attitudes, access to services, and stigma and discrimination, using personal digital assistants (PDA). Medians and IQRs were calculated for continuous variables. Population proportions were calculated for categorical variables and adjusted for RDS-sampling weights using Respondent Driven Sampling Analysis Tool version 6.0.

**Results**

A total of 500 MSM enrolled in the study. Respondents self-identified as gay or homosexual (39.5%), bisexual (39.5%), heterosexual (11.5%), and transvestite or transgender (9.5%). Median age was 26 years (IQR 22–34 years). The majority of respondents (79.5%) reported to have access to free condoms in their last 12 months. Consistent condom use with all male partners in the past 12 months was 75.4%, respectively. Overall, 44.3% reported having sex with a woman in the past 12 months. Consistent condom use with female sexual partners in the last 12 months and during last sex was reported by 46.1% and 66.0%, respectively. The median number of female sexual partners reported in the last 12 months was 3 (IQR: 2–5). Ever paying for sex and paying for sex in the last 12 months was reported by 0.8%. Overall, 73.3% of respondents reported ever having an HIV test and 43.1% had been tested in the past 12 months.

**Conclusions**

MSM in Guatemala engage in high risk behaviours that place them and their male and female partners at high risk for HIV infection. Innovative strategies are needed to promote condom use and access to HIV testing and counselling.