

sexual activity when calculating Chlamydia incidence and screening rates, particularly for adolescents. Using data from a provincial adolescent health survey we assessed the impact of adjusting for sexual activity on population-based Chlamydia incidence and screening rates among adolescents in British Columbia (BC), Canada.

**Methods** We estimated the proportion of adolescent males (15–18 years) and females (14–18 years) who had ever had sexual intercourse (i.e., sexually active) using data from a cluster-stratified survey of public school students (Grades 7–12) completed by ~30,000 BC students in 2003 and 2008. Using provincial Chlamydia surveillance and testing data we compared adolescent Chlamydia screening and incidence rates in BC by age and gender, using total and sexually active populations as denominators.

**Results** During these time periods, an estimated 32% and 33% of males 15–18 years and 28% and 31% of females 14–18 years were sexually active in 2003 and 2008 respectively. Regardless of denominator used, screening and incidence rates increased with age, and were higher among females compared to males. Sexually active incidence and screening rates were consistently higher with a more pronounced impact at younger ages. For example, in 2008 screening rates among 14 year old females were 26.2% vs 2.5% in sexually active and total populations respectively, while the corresponding rates among 18 year old females were 60.2% vs 28.9% (2.1 times higher).

**Conclusions** Using data representing the entire population of BC adolescents we demonstrated that without adjustment for sexual behaviour, adolescent Chlamydia incidence and screening rates are substantially under-estimated, particularly at younger ages. Adjusting for sexual behaviour using population survey data is essential for accurately monitoring the population impact of prevention and screening programmes among adolescents.

**P3.316 ESTIMATING CHLAMYDIA AND GONORRHOEA BURDEN WITHIN THE US ARMY - A REVIEW OF PASSIVE SURVEILLANCE SYSTEMS TO IDENTIFY INCIDENT INFECTIONS**

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**Background** The burden of sexually transmitted infections (STI) within the US military is primarily assessed through review of case reports for notifiable conditions (e.g., Chlamydia, gonorrhoea, and syphilis). The degree to which under-reporting affects burden approximations is unknown. This study was conducted to assess the burden of Chlamydia and gonorrhoea infections and compare case capture across multiple military medical data systems.

**Methods** Incident infections among Army active duty soldiers from January 2007-December 2011 were identified using three data sources: Health Level 7 laboratory records (HL7), Military Health System Data Repository (MDR) medical records, and case reports from the Disease Reporting System internet (DRSi) and its predecessor, the Reportable Medical Event System (RMES). A thirty day rule was used to define incident cases; i.e., successive records logged within 30 days were excluded.

**Results** 53,228 incident Chlamydia infections and 11,065 incident gonorrhoea infections were identified over five years; calendar year 2011 incidence rates were 22.0 and 4.2 infections per 1000 person-years, respectively. Chlamydia case capture was 80%, 74%, and 35%, respectively for case reports, HL7, and medical records. Gonorrhoea case capture was 65%, 62%, and 56%, respectively for medical records, case reports and HL7. A notable decrease in laboratory identified infections occurred in 2011, decreasing from highs of 78% and

60% in 2008 to 67% and 49% for Chlamydia and gonorrhoea, respectively.

**Conclusion** The results emphasise the need to utilise multiple databases to obtain more complete estimates of STI burden among active duty Army personnel. While this comprehensive approach provides a better approximation of burden, estimates are likely conservative since many infections go undetected or undocumented. Future analyses should incorporate advanced statistical methods such as capture-recapture methodology to estimate infections not identified through conventional passive surveillance. Furthermore, the decreased case detection through laboratory records is notable, and worthy of investigation.

**P3.317 USE OF TABLETS FOR DATA COLLECTION AMONG FEMALE SEX WORKERS: LESSONS LEARNED FROM A BEHAVIOURAL SURVEILLANCE STUDY IN HONDURAS, 2012**

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**Background** The use of tablets and other hand-held devices is increasingly considered as an option for survey data collection, particularly sensitive personal information among key populations.

**Methods** In 2012, a behavioural surveillance study was conducted among 1426 female sex workers (FSWs) in Honduras. Sensitive personal information was collected, including sexual practises, condom use, sexual violence, alcohol and drug use, and reporting of STI symptoms. Research instruments were inputted into tablets and piloted with FSWs. During the study, facilitators briefed participants in tablet use while participants inputted their responses, in case they had any issues. Daily occurrences were recorded into a log. We analysed qualitative pilot results reports and discussed the advantages and disadvantages of using tablets for data collection with survey facilitators and investigators during regular monitoring visits.

**Results** Tablet use eliminated the need for paper questionnaires and data entry, and allowed for early database population as surveys were uploaded to a virtual platform. Facilitator help was repeatedly required by participants and self-administered surveys often took more time to complete, particularly during the first sections when participants were familiarising themselves with the tablet. Issues with web connectivity prevented data submission as scheduled in some sites and two tablets were reported missing in one site (out of a total of 22 tablets in the study).

**Conclusions** The use of tablets can reduce certain study costs (data input, photocopying) and facilitate data management. Facilitators should be available to assist survey participants as they input their own responses, particularly in settings where participants have had little exposure to technology. A brief introduction to tablet use and practise session for participants should be incorporated into the survey flow. Adequate measures should be taken to safeguard tablets and a stable internet connexion should be guaranteed.

**P3.319 MALIGNANCIES SURVEILLANCE IN A HISPANIC HIV/AIDS COHORT BEFORE AND AFTER HAART**

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**Background** This study describes trends in malignancies as it relates to the availability of highly active antiretroviral therapy (HAART) in a Hispanic HIV/AIDS infected cohort.

**Methods** The database of 4,232 HIV infected adults followed in the Retrovirus Research Center at Bayamon, Puerto Rico was