prevalence was the highest in young people, with 3.6% for women and 2.4% in men aged 18–24 yo. To face this problem, several countries have developed new strategies, mixing newer technologies and home-based self-sampling test. Inspired by evaluation of those dispositives, the French National Institute of Health Prevention and Education (INPES) decided to experiment the proposition of a free home-based self-sampling to screen this infection via internet in young people 18–24 yo. This study, named Chlamyweb, aims to compare CT screening rate from this intervention with traditional information system and screening centre. Study design was a random control trial, with a 1:2 randomization. Recruitment took place on an Internet information website on sexually transmitted infections, and support by web campaign from September 3 to October 14 2012. Home-based kits were composed by uriswab 3 sponges for men and dry vaginal swabs for women (Copan diagnostics). All samples were analysed by using the fully automated cobas 4800 (Roche diagnostics). Self-sampling was proposed to 5 531 people. Out of them, 47.3% accepted, with a higher rate in women (53.0%). A total of 1616 kits provided [1002 from women (63.8%) and 614 from men (58.8%)] was return to the French National Reference Center for chlamydial infections. The global prevalence was 6.8% (8.3% in women, 4.4% in men). Sexual behaviour and sociodemographic patient's characteristics were collected and their analysis is under investigation. These preliminary results show that Internet testing reaches a population with a high prevalence of CT infection and appears to be acceptable to young people.

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Background Chlamydia trachomatis is reported to be the most common sexually transmitted infection (STI) in developed countries; this data depends on the sensitivity and specificity of the diagnostic test employed. Even when Nucleic acid amplification tests (NAATs) are used to detect C.trachomatis infection, the occurrence of variant strains which lack the cryptic plasmid or possess deletion mutations may be responsible for negative test results, as was detected in Sweden recently. The present study was undertaken to establish the true prevalence of C.trachomatis infection among males with urethritis using not only a well tested NAAT but also Direct Fluorescent Antibody test (DFA).

Methods A total of 34 male patients reporting to the STI OPD of the Lok Nayak Hospital with urethritis were included in this study. Gram staining and culture was done for detection of Neisseria gonorrhoeae and DFA and real-time PCR using COBAS® TaqMan® CT Test, v2.0 to detect the presence of C.trachomatis.

Results Among the 34 males, 55.9% cases were positive for N.gonorrhoeae by culture. DFA for C.trachomatis was positive in 17.6% cases, 5 out of 6 DFA positive cases were also positive for N.gonorrhoeae. PCR for C.trachomatis has so far been done in 19 cases, including 4 of the DFA positive cases, and none of them yielded a positive result. Neither C.trachomatis nor N.gonorrhoeae was found in 41.1% cases.

Conclusion C.trachomatis was detected only in 17.6% men with urethritis and that too only by DFA and none by PCR. This could be either an actual low prevalence of C.trachomatis or it may be due to the occurrence of new variant strains not detected by the molecular diagnostic test used by us. Sequencing of C.trachomatis isolated from patient specimens will be required to detect mutants that could be responsible for underdiagnosis, when relying only on NAATs.

D De Maria, G De Intinis, M Peretto, V Buselli, M A Latino. *Sant'Anna Hospital, Turin, Italy*

Background According to the WHO, *Chlamydia trachomatis* (Ct) is the most common sexually transmitted bacterial agent worldwide. The infection is most common among young women less than 25 years old; the symptoms are often mild or inexistent.

The aim of this study was to assess the prevalence of Chlamydia trachomatis in women in Turin and to identify risk factors associated with this STI.

Methods This study was performed between January 2007 and December 2011, among sexually active women aged 14 to 65 years (mean 33 years) attending STI Centre of Sant'Anna Hospital in Turin, Italy. Every woman was submitted to a questionnaire aimed at collecting socio-demographic, behavioural and clinical information. Cervical specimens were tested with a real time qualitative PCR (Nanogen).

Chi square test and EpiInfo were used to identify associations between potential risk factors and Ct infection.

Results A total of 14071 women were included in the study. The overall prevalence of Ct was 2.8%.

The prevalence rate in the symptomatic and asymptomatic patients was 3.5% versus 2.2%; high prevalence rates were observed among women aged 14–24 years (9.9%; p < 0.001), reporting more than one partner in the previous six months (13.3%; p < 0.001), among foreign women compared to Italian women (3.7% vs 2.6%; p < 0.001). With regard to numbers of sexual partners lifetime, the prevalence rate for patients who had between 1 and 3 partners was 1.9% while in women with more than 3 partners was 4.1% (p < 0.001). In multivariate analysis, Ct was significantly associated with young age, more than 1 partner in the previous 6 months and use of barrier contraceptives.

Conclusion The value and risk factors highlighted can be compared with other studies. The high number of asymptomatic cases confirms the need to consider selective screening in order to reduce the spread of this STI and other secondary complications.

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Background *Chlamydia trachomatis* (CT) infections are not reportable in Germany and limited data on CT-prevalence among women is available. In 2008 an opportunistic CT screening programme for women < 25 years (OCS) was introduced. We assessed positivity rate of CT-infection and evaluated the OCS in order to develop recommendations to improve OCS.

Methods In September 2010 voluntary laboratory-based sentinel surveillance system was implemented and is collecting retrospective (from 2008) and prospective data on performed CT-tests together with results and information on age and test reason (TR). We calculated positivity rates (PR) by age and TR and compared them with Chi^2 test. We described data by time and estimated the proportion of the target population reached by OCS.

Results As of 27.11.2012 data from 14 laboratories were available for analysis. These data cover approximately 25% of all CT-tests performed in Germany. Overall 90.6% (643,332) of all tests (710,021) were among women. Among those 19.1% (122,650)

were attributable to OCS, 31.3% (201,322) to screening in pregnancy (CSP), 30.6% (197,013) to diagnostic test (DT), and in 19.0% (122,347) the TR was not known. The number of OCS-tests increased by 114% in 2009, 15% in 2010, and 7% in 2011 compared to the previous year. Extrapolating, OCS covered 10% of the target population.

OCS PR was 5.3%, higher than for other TR (2.6% among CSP, and 3.9% among DT, p-value < 0.001). OCS PR was highest in women aged 15–19 years (7.1%) and 20–24 (6.5%) compared to other age-groups (p-value < 0.001).

Conclusion The proportion of young women testing positive for CT was high. OCS coverage in Germany is insufficient and did not increase substantially in the last years. OCS should be promoted among the target population and physicians. Awareness campaigns for young women should be implemented. Respective regulations should be expanded and remuneration to physicians for OCS offered.

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Background Screening and case-finding for Chlamydia infection among all sexually active men and women under the age of 25, annually or during presentation to a health care provider were introduced in Canada and US in 2001. This strategy was aimed to reduce new Chlamydia infections and its long term adverse reproductive complications. The objective of this study is to explore the temporal trends of Chlamydia infections and test uptake in the targeted population of Manitoba.
Method We used Manitoba Cadham Provincial Laboratory (CPL) Chlamydia test data (1992 to 2008). CPL captured almost all sexually transmitted disease testing data of Manitoba. Descriptive statistics and logistic regression were used to describe the trend of Chlamydia infections and tests uptake over time.
Results Overall Chlamydia infection showed an initial flat trend in 1992–2001 and followed by a steady increasing in 2002–2008 trend in all women and men. Using Rural South as reference, the increasing infection rates are most prominent in Rural North rural, OR = 6.12 [CI = 6.06–6.17], Urban Core, OR = 3.52 [CI = 3.49–3.55], Urban non-Core, OR = 3.06 [3.04–3.08], Middle

Abstract P3.029 Table 1

Average annual crude rates (% CI), 1992–2008			
Age/region	Infection	Positivity	Test Uptake
Age = < 14	0.02 (0.02–0.03)	13.3 (9.49–17.14)	0.18 (0.16–0.19)
Age 15–19	1.58 (1.48–1.69)	11.07 (10.93–12.33)	14.32 (14.90–15.50)
Age 20–24	1.77 (1.75–1.96)	7.04 (6.62–7.45)	25.19 (24.78–25.59)
Age 25–29	0.83 (0.76–0.90)	3.88 (3.54–4.22)	22.02 (21.64–22.39)
Age 30–34	0.34 (0.30–0.39)	2.28 (1.98–2.58)	15.28 (14.98–15.28)
Age 35+	0.03 (0.03–0.04)	1.2 (1.02–1.38)	2.73 (2.69–2.78)
Rural South	1.21 (1.13–1.29)	9.44 (8.79–10.10)	13.42 (13.14–13.70)
Urban Core	0.57 (0.53–0.62)	6.4 (5.91–6.90)	9.36 (9.18–9.53)
Urban Non-Core	0.23 (0.22–0.25)	3.54 (3.32–3.76)	7.00 (6.92–7.08)
Mid Rural	0.26 (0.23–0.28)	5.52 (4.97–6.08)	4.86 (4.74–4.97)
Rural South	0.13 (0.12–0.15)	4.16 (3.67–4.64)	3.24 (3.18–3.31)

Rural, OR = 1.78 [1.76–1.79], p < 0.0001). Chlamydia test uptake rates showed the same trend and prominent increased test uptakes since 2002 (annual increase 36%, OR = 1.43, CI = 1.42–1.44, p < 0.0001), more in Rural North and Urban Core area in women aged 15–24 years. In younger women (aged 15–19) of Rural North, test positivity rates "outperformed" test uptake rates (annual increase 43% versus 22%).
Conclusions The increasing trends of Chlamydia infection rates cannot be fully explained by the Chlamydia test uptakes in Manitoba young women. The geographic variations flag alarming signals for more effective core group targeted public health intervention.

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Background Despite the availability of regular STI care by STI clinics and general practitioners many young people at high risk for *Chlamydia trachomatis* are hidden to care. Members of the social and sexual networks relating to Chlamydia positives typically show high risk, therefore these networks members are potentially valuable targets for interventions.
Methods Intervention Mapping (IM), a systematic approach to develop theory- and evidence-based interventions, was used to develop a strategy to target Ct testing towards young people who are currently hidden to care. Both clinical users (i.e. sexual health care nurses) and public users (i.e., young people) were closely involved in the IM process. A needs assessment study was carried out using semi-structured interviews among users (n = 21), a literature search and by taking lessons learned from existing Ct screening programmes. Theoretical methods and practical applications to reach high risk young people and influence testing were selected and translated into specific programme components.
Results The IM approach resulted in the development of a secure and web-based outreach Chlamydia trachomatis screening strategy. Ct testing and the motivation of peers were proposed as the desired behavioural outcomes. Key methods include web-based Respondent Driven Sampling (web-based RDS), starting from young Chlamydia positive sexual health care centre clients, to reach and motivate peers (i.e., sex partners and friends) to get tested. Furthermore, these sex partners and friends can also motivate peers in their networks to get tested, and so on.
Conclusions We believe this is a unique Chlamydia screening strategy that combines web-based RDS with the delivery of Chlamydia testing to high risk young people within their sexual and social networks. This approach can become an integral part in sexual health care for reaching high risk populations with Ct screening and treatment which is important for both the individual and public health level.