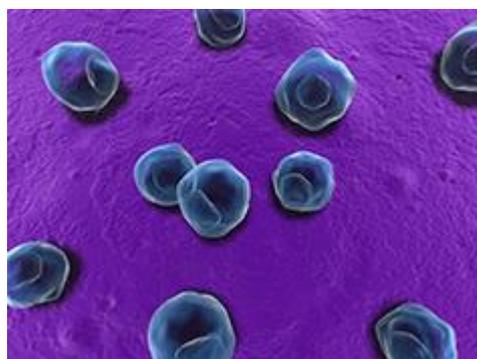


Evaluating register-based chlamydia screening

A trial involving young people aged 16 to 29 years in the Netherlands reported that individual invitations to order home sampling kits via the internet is a feasible option for chlamydia screening. However, the programme did not increase testing enough to significantly reduce chlamydia prevalence.

Overview: Chlamydia is one of the most common sexually transmitted infections in the UK.



Symptoms of chlamydia include pain on urination, unusual discharge from the penis, vagina or rectum or, in women, bleeding between periods or after sex. However, most people have no symptoms so do not know they are infected – some data suggest that 50% of men and 70–80% of women who are infected will not get symptoms.

Testing for chlamydia is done with a urine or swab sample. The infection can be treated with antibiotics, but if left untreated can cause pelvic inflammatory disease and reproductive tract complications including ectopic pregnancy and infertility.

The goals of chlamydia screening are to detect and treat asymptomatic infections, to limit ongoing transmission in the community, and to reduce the incidence of complications.

See the [NHS Evidence topic page on chlamydia](#) for a general overview of the condition.

Current advice: The [National Chlamydia Screening Programme](#) recommends that sexually active people under the age of 25 are screened for chlamydia annually or after a change of sexual partner. Tests under this programme are available at sexual and reproductive health clinics, GP surgeries, pharmacies, contraception clinics and colleges, as well as online and via post.

Those not eligible for the programme can still request a free chlamydia test at a sexual health clinic or a GP surgery. [NICE guidance on antenatal care advises](#) that chlamydia screening should not be offered as part of routine antenatal care until further research is undertaken to assess the effectiveness, practicality and acceptability of chlamydia screening in an antenatal setting.

New evidence: A randomised controlled trial evaluated the effectiveness of the addition of register based annual chlamydia screening in the Netherlands against usual care. In the Netherlands, as in the UK, usual care involves testing through GPs and sexual health clinics ([van den Broek et al. 2012](#)). The aims of the study were to investigate the effects of yearly invitations for chlamydia screening on the percentage of positive chlamydia test results (positivity), uptake of chlamydia screening, and estimated prevalence among sexually active women and men in the Netherlands.

All men and women aged 16-29 years old, who were listed on the municipal population from March 2008 to February 2011 were eligible to participate. Personal written invitations to take part in a chlamydia screening programme were sent to 269,273 people. Participants were asked to log onto an internet site to request a specimen kit (urine for men; vaginal swab or urine for women), to be returned in a prepaid envelope. Test results, with a referral letter for those with positive results, were provided online. Treatment and partner notification were done by the participant's GP or at a sexual health clinic.

Of those invited, 43,358 (16.1%) took part in the first round of the programme. Participation fell to 10.8% in the

second round and 9.5% in the third. In total, 102,283 samples were returned by 79,173 people, and 4252 cases of chlamydia infection were detected.

The percentage of those testing positive for chlamydia in the screening group after the first invitation was the same as in the control block (4.3%) and 0.2% lower at the third invitation. This decrease in positive testing after 3 screening rounds was not statistically significant.

Rates of positive results were higher in young people under 20 years old than among older invitees in all 3 rounds – at the first invitation, 7.1% in those under 20, 4.9% in those aged 20–24 years, and 2.7% in 25–29 year olds. The proportion of participants testing positive for chlamydia according to age did not change markedly after 2 or 3 invitations.

The researchers concluded that although individual invitations and internet home sampling was feasible, the register-based screening programme did not increase testing enough to significantly reduce chlamydia prevalence, and there was not sufficient evidence to support rolling out the programme on a national scale.

Commentary: "This trial of register-based screening for chlamydia contributes to the debate about how to screen young adults. Participation was lower than hoped, decreased over time and was less than needed to have a detectable impact on outcomes. These findings argue against register-based screening as the way to improve screening of all young adults, at least in the Netherlands at this time.

"Current guidance for chlamydia screening in England promotes opportunistic screening for all sexually active young adults across a wide range of venues. In 2010, this approach resulted in testing of up to 34% of 15–24 year olds (assuming one test equivalent to one individual), which is higher than total screening in the Netherlands (usual care plus trial participation). The proportion of screens testing positive between 2008 and 2011 in England fell more than seen in the Netherlands trial. However, different participation biases make it difficult to compare or interpret these findings. The Netherlands study did not provide evidence about the effectiveness of chlamydia screening as practiced in England. The National Chlamydia Screening Programme continues to promote opportunistic chlamydia screening in sexually active young adults, and to develop methods to evaluate its effectiveness". – *Dr Angie Bone, Director of the National Chlamydia Screening Programme, Health Protection Agency.*



About this article: This article appeared in the December 2012 issue of the [Eyes on Evidence newsletter](#). This free monthly newsletter from NICE Evidence outlines interesting new evidence and what it means for current practice. They do not constitute formal NICE guidance. The opinions of contributors do not necessarily reflect the views of NICE.

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