Public Health England

Evidence Summary

NCSP Recommended Case Management Change: Routine offer of re-test to young adults testing positive for chlamydia

This document is a summary of an evidence review carried out as part of the NCSP consultation process. The full report and position statement are available on the NCSP website here.

- **The National Chlamydia Screening Programme (NCSP) recommends all sexually active under-25 year olds are tested annually for chlamydia, or on change of sexual partner.**
- **In August 2013, NCSP policy on case management was updated to recommend that case management of those testing positive for chlamydia should include a routine offer of re-testing around 3 months after treatment. This update reflects available evidence showing young adults who test positive for chlamydia are at increased risk of re-infection.**
- **Local areas are responsible for deciding how to implement this recommendation, and are advised to review local care pathways to identify opportunities to offer re-testing. NCSP consultation feedback indicates: the possibility of a re-test should be raised with young adults early in the care pathway; and that re-testing should be used in combination (not substituted for) partner notification or advice on safe sexual practices, as good case management.**
- **The NCSP will publish guidance on management of those testing positive later this year. This guidance will provide examples of delivery models.**
- **Re-testing is expected to incur minimal additional "per test" costs but it is anticipated it will identify more infections.**

What was the previous guidance on the management of those who test positive?

As set out in the NCSP Standards, management of positive cases includes antibiotic treatment, partner notification support and provision of safer sex advice. [1]

How has case management policy changed?

In August 2013, the NCSP policy on case management was updated to recommend that case management of those testing positive for chlamydia should include a routine offer of re-testing around 3 months after treatment.

Why should young adults who test positive for chlamydia be re-tested?

Young adults with chlamydia are at higher risk of having chlamydia again, and re-infection with chlamydia is common. Studies show that:

- After a positive chlamydia test the rate of a subsequent positive test is around two to three times higher than in those with an initial negative test [2-9];
- Around 10-15% of young adults diagnosed with chlamydia also test positive at their next test [2-11].

Possible reasons why young adults diagnosed with chlamydia may test positive at a re-test include:

- Re-infection due to incomplete treatment of sexual partner(s)
- Re-infection due to continuing risk behaviour (i.e. unprotected sex with new or existing partners)
- Detection of a persistent infection. In rare cases (<5%) the prescribed antibiotic may not have been fully effective in clearing the original infection[12].

Why is the recommended interval for re-testing 'around three months'?

Although the optimum interval for re-testing has not been empirically established, the recommended window of 'around three months' is considered to be long enough that re-infections might have occurred by this time, but also short enough so that infections are not left untreated for a long period. This period is also recommended in order to maximise the likelihood that individuals will accept the offer of a re-test.

As stated in the British Association for Sexual health and HIV (BASHH) and NCSP standards, it is also important to wait at least five weeks (six weeks if azithromycin is given) before carrying out any re-test after the end of treatment, as NAATs can detect the presence of chlamydia for several weeks, even if the person is no longer 'infected'[12].

Does the NCSP recommend young adults are offered a re-test at around three months, if a service carrys out partner notification and gives safe sex advice to those testing positive?

Advising re-testing is one aspect of good case management; it does not replace the need for partner notification and advice about safe sex. However, we know some young adults will continue to engage in unsafe sex with existing and new partners, and these individuals will remain at risk of re-infection with chlamydia. Partner notification of 100% is not always possible, and even with high levels of partner notification high rates of re-infection have been observed [2,5]. As such, the NCSP now recommends that young adults are offered a re-test at around three months so that any re-infections that do occur would be diagnosed and treated earlier in the course of infection.

The NCSP already advise that young adults should be tested when they change their sexual partner. Why does the NCSP also recommend positive cases are re-tested?

Moderate rates of repeat testing already occur in England among young adults, but lower than might be expected if all young people were re-tested on change of sexual partner [9]. In addition, re-infection can occur due to both incomplete partner treatment and continuing unsafe sex. It is therefore feasible (although not demonstrated in practice) that routine re-testing could increase the number of infections diagnosed and treated, over and above those identified via existing testing patterns.

Will re-testing reduce the incidence of either chlamydia or chlamydia-related complications?

There is limited evidence on the impact of increasing re-testing after a positive test on the incidence of chlamydia or on the development of chlamydia-related complications such as pelvic inflammatory disease, ectopic pregnancy and tubal factor infertility. It would be reasonable to assume that identifying and diagnosing a re-infection would have at least as much benefit as identifying and treating an initial infection identified through opportunistic asymptomatic screening.

What is the best way to achieve high rates of re-testing?

Although there are no published UK studies, those from the US, Australia and the Netherlands suggest that achieved rates of re-testing following a positive test vary in practice, and are likely to vary by the method used to encourage repeat testing. Mailed screening kits, and telephone or text message reminders appear to increase rates of re-testing [2; 13-15].

What should local areas now do?

The NCSP will not be publishing a prescribed approach for re-testing, as commissioners and provider teams are best placed to decide together how to implement this policy. Local areas are now advised to review local care pathways to identify opportunities offer re-testing to those testing positive, including considerations such as: obtaining consent to re-contact young people, identifying any additional resource required and clarifying changes to the clinical pathway for management of positive cases.

However, the NCSP will publish guidance to support local areas later this year. This guidance will address possible delivery models and provide examples of current practice. Consultation feedback indicates: the possibility of a re-test should be raised with young adults early in the care pathway; and that re-testing should be used in combination (not substituted for) partner notification or advice on safe sexual practices.

How much will re-testing cost?

No studies have reported the costs of different methods of achieving re-testing in England.

The costs of encouraging re-testing among those who test positive will depend on the selected approach. One study from the US found phone reminders to be more cost effective (in terms of numbers of infections treated) compared to motivational interviewing or a brief recommendation [16].

References: [1]NCSP Standards (6th Edition). http://www.chlamydiascreening.nhs.uk/ps/standard.asp [Accessed July 2013]; [2]Batteiger BE, et al. J.Infect.Dis. 2010;201:42-51; [3]Gotz HM, et al. STI.2013;89(1):63-9; [4]Götz HM, et al. BMC Infect Dis. 2013 May 24;13(1):239; [5]LaMontagne DS, et al. STI. 2007;83:292-303; [6]Rietmeijer CA, et al. STD. 2002;29:65-72; [7]Turner KM, et al. STI. 2013 Feb;89(1):70-5; [8]Walker J, et al. PLoS.One. 2012;7:e37778; [9]Woodhall SC, et al. STI. 2013 Feb;89(1):51-6; [10]Hosenfeld CB, et al. STD. 2009;36:478-89; [11]Fung M, et al. STI. 2007;83:304-9; [12]BASHH 2006 UK National Guideline for the Management of Genital Tract Infection with Chlamydia trachomatis. http://www.bashh.org/documents/65.pdf [Accessed July 2013]; [13]Guy R, et al. STI. 2013 Feb;89(1):11-5; [14]Guy R, et al. STD. 2012 Feb;39(2):136-46; [15]Downing SG, et al. STI. 2013 Feb;89(1):16-9; [16]Gift T, et al. STD. 2005;32:542-9.