

Briefing on the recent sexually transmitted infection and blood-borne virus outbreaks: focus on hepatitis A, drug-resistant gonorrhoea and syphilis

This briefing is intended for community organisations, clinicians, health promotion professionals, Local Authority professionals and sexual health commissioners.

Public Health England (PHE) takes a lead role in outbreak investigations concerned with sexually transmitted infections (STIs), sexually transmissible enteric infections and blood-borne viruses (BBVs) throughout England. All investigations are multidisciplinary collaborations. PHE provides advice on all aspects of investigations including case definition, outbreak control team membership, methods to improve case ascertainment, qualitative interview techniques and intervention evaluation.

Experience from the investigations is used to develop the PHE STI Outbreak Guidance¹ to reflect current epidemiology and management techniques. In 2016/17 investigations have focused on infectious syphilis, antimicrobial resistant (AMR) gonorrhoea, hepatitis A (HAV) and hepatitis B (HBV). There is considerable inequality in the distribution of STIs across the population. Health promotion and education remain the cornerstones of STI prevention through improving risk awareness, encouraging safer sexual behaviour and promoting appropriate preventive behaviours such as regular testing and immunisation.

KEY 'CALL TO ACTION' POINTS

- Prevention efforts should include ensuring open access to sexual health services and STI screening, focusing on groups at highest risk including young adults, men who have sex with men (MSM) and black ethnic minorities.
- Consistent and correct use of condoms can significantly reduce the risk of infection.
- Immunisation against hepatitis A and B should be offered in sexual health clinics as per national recommendations, including in response to outbreaks.
- Rapid access to treatment and partner notification can reduce infection spread.
- The British Association of Sexual Health and HIV (BASHH) recommends that MSM should test annually for HIV and every three months for STIs if having condomless sex with new or casual partners².
- Regular testing for HIV and STIs is essential for good sexual health. Anyone under 25 who is sexually active should be screened for chlamydia annually, and on change of sexual partner.

INFECTIOUS SYPHILIS

BACKGROUND AND INTERPRETATION

Diagnoses of infectious syphilis have increased rapidly over the last 10 years and in 2015 reached the highest level seen since 1949. Between 2014 and 2015, diagnoses in men increased by 20% (from 4,139 to 4,971). Most diagnoses were seen in MSM. Diagnoses in this group increased by 18% from 3,503 to 4,141 during this time and diagnoses seen in women increased by 15% (273 to 313). Infection is endemic in London, Manchester, Brighton and Blackpool and increasing incidence has been characterised by outbreaks seen around the country. The epidemic has been focused on infection in white MSM aged 25–34, many of whom were co-infected with HIV and had high numbers of sexual partners. Similar characteristics were seen in localised clusters although some have been centred on young, socially vulnerable heterosexuals. Congenital syphilis (passed from a mother to her baby) is rare in England but early evidence suggests that more cases were seen in 2016.

WHAT SHOULD COMMUNITY ORGANISATIONS AND HEALTH PROFESSIONALS DO?

- Raise awareness through:
 - The provision of information on condom use and protected sex.
 - Increasing knowledge and understanding of the consequences of untreated syphilis infection among at risk populations.
 - Increasing professional awareness of syphilis.
 - Improving service access and instigating comprehensive communications plans tailored to local at-risk populations.
- It is vital that sexual partners of service users are contacted and that they attend a sexual health clinic for appropriate management.
- All pregnant women should be screened at antenatal booking in the first trimester - tests should be repeated in pregnancy if a woman has been at risk of an STI after an initial negative screen.

ANTIMICROBIAL RESISTANT (AMR) GONORRHOEA

BACKGROUND AND INTERPRETATION

Between November 2014 and January 2017 there have been 61 cases of high level azithromycin resistant gonorrhoea (HL-AziR) (MIC >256 mg/L) diagnosed among residents of England. HL-AziR has previously been observed only sporadically in the UK and elsewhere. Although cases have been seen across England, the focus of the outbreak has mostly involved young heterosexuals in Leeds and MSM in London. Genomic analysis indicates the strains involved in the outbreak are closely related. This suggests that partner notification has been of limited effectiveness and that many cases in the population remain undiagnosed.

Few antimicrobials remain effective in the treatment of gonorrhoea infection and gonorrhoea could become untreatable in future. In 2011 the British Association of Sexual Health and HIV (BASHH) UK National Guideline for the Management of Gonorrhoea in Adults³ was changed to recommend intramuscular ceftriaxone 500mg in combination with azithromycin 1g orally as first-line therapy. This was in order to delay the accumulation of treatment failure and extend the useful life of ceftriaxone. The current outbreak strain remains sensitive to ceftriaxone. However, if azithromycin becomes ineffective against gonorrhoea, there is no 'second lock' to prevent or delay the emergence of ceftriaxone resistance. Put simply, it is vital to contain this outbreak otherwise we will eventually run out of treatment options.

WHAT SHOULD COMMUNITY ORGANISATIONS AND HEALTH PROFESSIONALS DO?

- It is vital that sexual partners of cases are contacted and attend a sexual health clinic for appropriate management.
- Test-of-cure should be undertaken for all cases.
- Service commissioners should ensure that local clinics have robust partner notification procedures in place and have capacity to complete enhanced surveillance forms.

- Because of limited options for gonorrhoea treatment, public health messages should aim to raise awareness of drug-resistant gonorrhoea and highlight the importance of infection prevention. Consistent and correct use of condoms is highly effective at preventing gonorrhoea transmission. PHE advises people to use a condom when having sex with new or casual partners.
- Emphasise the importance of following national gonorrhoea treatment guidelines³.
- - Ensure any suspected treatment failures are reported to PHE using the [Gonorrhoea: reporting treatment failure](#) web resource

HEPATITIS A: NOVEL CLUSTERS WITH A UNIQUE SEQUENCE

BACKGROUND AND INTERPRETATION

There are ongoing clusters of acute hepatitis A, predominantly among MSM in various regions of England and Northern Ireland. The public health response has included a focus on risk assessment for vaccination of MSM in sexual health clinics and PHE has briefed members of BASHH through its newsletter at: www.bashh.org/news/news

Between July 2016 and January 2017, 37 confirmed cases of hepatitis A (with two unique IA genotype strains primarily found among MSM) were reported across eight areas in England and Northern Ireland⁴. Epidemiological and laboratory investigations indicate that these strains may have been imported several times from Spain, with secondary sexual transmission in the United Kingdom. Local and national public health services are collaborating to control this ongoing outbreak. Cases were predominantly found among MSM. Cluster investigations including food and sexual history questionnaires have suggested it is unlikely that food was the source of these infections, and there were no links between clusters.

Hepatitis A is a vaccine-preventable viral infection of the liver that is mainly spread faeco-orally through contaminated food or inadequate hand-washing and may also be sexually acquired. The hepatitis A vaccine is

highly effective at preventing infection if given prior to exposure, and can also be given as Post-exposure prophylaxis. The Green Book Immunisation Against Infectious Disease⁵ (Chapter 17) recommends that immunisation should be offered to at-risk MSM, such as those with multiple sexual partners, particularly during periods when outbreaks are occurring. BASHH also recommends that: 'Clinics should offer vaccination when increased rates of infection have been recognised locally.'

WHAT SHOULD LOCAL AUTHORITIES, COMMUNITY ORGANISATIONS AND HEALTH PROFESSIONALS DO?

- Suggest that commissioners consider ways to support the provision of local health promotion activities. These will lead to improved sexual health awareness, promotion and, where appropriate, delivery of hepatitis A and B vaccination as well as BBV/STI testing in sexual health services. Specifically:
 - For areas where one or more cases of the cluster strains have been seen sexual health services are advised to offer opportunistic vaccination against hepatitis A to any MSM with a new or casual partner in last three months in outbreak areas. In view of the link with Spain, sexual health services have been asked to raise awareness about the current clusters of hepatitis A among their MSM attendees, particularly if they intend to travel to Spain. Immunisation against hepatitis A is also available and recommended for individuals travelling to countries where the disease is common.
 - For all areas sexual health clinics should be encouraged to raise awareness among MSM about the risks and symptoms of hepatitis A and discuss ways of avoiding infection during sex. Health promotional materials for use in sexual health clinics are in development and will be circulated.
 - Environmental Health Officers should use the PHE revised Hepatitis A National Questionnaire⁶ to identify relevant sexual health history from hepatitis A cases in MSM.

RESOURCES

RESOURCES AVAILABLE TO SUPPORT YOUR WORK

Patient resources concerned with the hepatitis A MSM outbreak for clinics and general service outreach are being co-produced by **Terrence Higgins Trust** and PHE.

Resources such as posters, flyers and postcards concerned with hepatitis B vaccination in at-risk adults are now available on the [PHE website](#).

Posters and information leaflets on hepatitis A and information leaflets on syphilis and gonorrhoea are available on the [HPE website](#).



This briefing was produced by Public Health England in partnership with HIV Prevention England.

¹ Public Health England, Managing Outbreaks of Sexually Transmitted Infections Operational Guidance, Dr Ian Simms, Dr Margot Nicholls, Dr Kirsty Foster, Lynsey Emmett, Dr Paul Crook and Dr Gwenda Hughes, January 2017. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/584723/PHE_STI_outbreak_guidelinesNB180117.pdf

² British Association of Sexual Health and HIV Recommendations for Testing for Sexually Transmitted Infections for Men Who Have Sex With Men, Slide taken from a workshop presentation: [www.bashh.org/documents/BASHH Recommendations for testing for STIs in MSM - FINAL.pdf](http://www.bashh.org/documents/BASHH%20Recommendations%20for%20testing%20for%20STIs%20in%20MSM%20-%20FINAL.pdf)

³ British Association of Sexual Health and HIV, UK National Guideline for the Management of Gonorrhoea in Adults, C Bignell BSc FRCP and M FitzGerald FRCP FSRH, 2011. www.bashh.org/documents/3920.pdf

⁴ Eurosurveillance, Volume 22, Issue 5, 2 February 2017, Outbreak of Hepatitis A Associated With Men Who Have Sex With Men (MSM), England, July 2016 to January 2017, Beebeejaun, K; Degala, S; Balogun, K; Simms, I; Woodhall, SC; Heinsbroek, E; Crook, PD; Kar-Purkayastha, I; Treacy, J; Wedgwood, K; Jordan, K; Mandal, S; Ngui, SL; Edelstein, M. www.eurosurveillance.org/ViewArticle.aspx?ArticleId=22706

⁵ The Green Book Immunisation Against Infectious Disease, Chapter 17, Hepatitis A, December 2013. www.gov.uk/government/uploads/system/uploads/attachment_data/file/263309/Green_Book_Chapter_17_v2_0.pdf

⁶ Hepatitis A: A Case Questionnaire, Maya Gobin, Koye Balogun, Obaghe Edeghere on behalf of the Viral Hepatitis Leads Group, 14/12/16. Access from: www.gov.uk/government/publications/hepatitis-a-case-questionnaire

The HIV and sexual health charity for life

Website: www.tht.org.uk | THT Direct: 0808 802 1221
Registered office: 314–320 Gray's Inn Road, London WC1X 8DP
Tel: 020 7812 1600 | Email: info@tht.org.uk

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