

Protecting and improving the nation's health

Sexually transmitted infections: promoting the sexual health and wellbeing of gay, bisexual and other men who have sex with men

From research to public health practice: an evidence-based resource for commissioners, providers and voluntary sector organisations STIs: promoting the sexual health and wellbeing of gay, bisexual and other men who have sex with men

Contents

Glossary and terminology	3
Executive summary	4
Purpose and scope	5
Background and strategic context	5
The PHE strategy for research, translation and innovation	5
STIs and health promotion priorities	6
Partners involved	6
Sexual health promotion	7
Methodology	7
Phase 1: Review of NIHR HPRU BBSTI research	7
Phase 2: Knowledge translation exercise	8
Evidence	9
Community engagement workshop	10
Implications for policy and practice	15
Appendix 1. Sexual health promotion: national resources	19
References	20

Glossary and terminology

BBV: Blood Borne Virus

Chemsex: Chemsex is a term for the use of drugs before or during planned sexual activity to sustain, enhance, disinhibit or facilitate the experience. Chemsex commonly involves crystal methamphetamine, GHB/GBL and mephedrone, and sometimes injecting these drugs

DHSC: Department of Health and Social Care

HIV: Human Immunodeficiency Virus

LSHTM: London School of Hygiene & Tropical Medicine

MSM: Gay, bisexual and other men who have sex with men

NCSP: National Chlamydia Screening Programme

NIHR HPRU BBSTI: National Institute for Health Research Health Protection Research Unit in Blood Borne and Sexually Transmitted Infections

PrEP: Pre-Exposure Prophylaxis

RSHE: Relationship, Sex and Health Education

SHC: Sexual Health Clinic

SRH: Sexual and Reproductive Health

STI: Sexually Transmitted Infection

TasP: Treatment as Prevention

UCL: University College London

Executive summary

This resource provides information to support commissioners, providers and voluntary and community sector organisations in developing interventions for improved sexual health and wellbeing among gay, bisexual and other men who have sex with men (MSM).

Evidence from the National Institute for Health Research Health Protection Research Unit in Blood Borne and Sexually Transmitted Infections (NIHR HPRU in BBSTI) on drivers of inequalities in STI rates suggests there is widespread lack of knowledge about factors which influence infection and fear of infection, such as prevalence, modes of transmission, health implications and treatment among MSM. Findings show that there is a need to improve STI knowledge, especially among men who are HIV-negative or of unknown HIV-status.

Based on the NIHR HPRU BBSTI evidence and the findings from the community engagement workshop, this resource outlines system-wide implications for policy and practice to reduce STI prevalence among MSM. Key priorities and areas for action include:

- raising awareness among MSM about how STIs are prevented, transmitted, diagnosed and treated and how to improve sexual wellbeing. Individuals should understand the different groups of STIs, associated potential consequences and how to protect themselves and partners from STI transmission, including the difference between STI prevention and HIV PrEP
- ensuring that services are equipped to provide non-judgemental, confidential, professional and empathetic approaches to sexual health care to create a safe and comfortable environment for gay, bisexual and other men who have sex with men to discuss their needs
- considering alternative and innovative ways of providing services and developing strategies to facilitate targeted, appropriate, accessible, culturally sensitive and inclusive access to sexual health services that meet the needs of gay, bisexual and other men who have sex with men
- encouraging ongoing collaboration with local partners and ensuring that community members are involved in the design and delivery of sexual health promotion and sexual health interventions

Purpose and scope

This resource provides information to support commissioners, providers and voluntary and community sector organisations in developing interventions for improved sexual health and wellbeing among gay, bisexual and other men who have sex with men (MSM). It presents evidence from the National Institute for Health Research Health Protection Research Unit in Blood Borne and Sexually Transmitted Infections (NIHR HPRU BBSTIs) on important drivers of inequalities in STI rates and collates feedback from engagement with community members on the most acceptable and effective approaches for targeted interventions for these communities.

The purpose of this resource is to:

- disseminate a summary of the latest evidence on the knowledge, behaviours, attitudes and contextual factors that influence STI acquisition and transmission risk among MSM in England
- translate the evidence into advice for stakeholders (commissioners, service providers and voluntary and community sector organisations) that will inform the design, targeting and delivery of interventions to maximise patient and public health benefit
- encourage stakeholders to use the best available evidence to inform their sexual health promotion decision-making

This resource has been developed by the National Institute for Health Research Health Protection Research Unit in Blood Borne and Sexually Transmitted Infections (NIHR HPRU in BBSTI) at University College London (UCL) in partnership with Public Health England, and in collaboration with London School of Hygiene & Tropical Medicine (LSHTM). It incorporates the views, experiences and advice shared during a workshop with community members.

Background and strategic context

The PHE strategy for research, translation and innovation

PHE has a strategy to drive research, translation and innovation to support the transformation of public health practice and services (1). The strategy addresses 5 priorities which are:

- knowledge
- infrastructure
- capacity
- innovation
- communication

In line with this strategy, PHE:

- supports and undertakes research to improve and protect the health of the population
- supports NIHR HPRU, enabling infrastructure for public health research
- develops public health research capacity within PHE and supports and engages academics in public health
- accelerates translation of research into policy and practice in public health and commercial products
- communicates widely and openly about how research is contributing to improving and protecting health and wellbeing and reducing health inequalities

STIs and health promotion priorities

One of the 4 priorities identified by the Department of Health and Social Care (DHSC) in A Framework for Sexual Health Improvement in England (2) was to reverse the rapid increase in STIs in populations most at risk of infections. In response, PHE's health promotion for sexual and reproductive health and HIV: strategic action plan, 2016 to 2019 (3) set out how PHE would use its strengths in data, scientific evidence, evaluation and community engagement to undertake activity to achieve the aims of reducing HIV and STIs by supporting programme approaches to promoting safer sexual behaviours and risk reduction strategies. PHE also published a series of documents, Promoting the health and wellbeing of gay, bisexual and other men who have sex with men (4) providing evidence and an action plan to address the health and wellbeing and inequalities affecting MSM and a Syphilis Action Plan to address the increase in syphilis in England (5).

Partners involved

Since 2014, the NIHR HPRU in BBSTIs led by University College London (UCL), and in partnership with London School of Hygiene & Tropical Medicine (LSHTM), has conducted state-of-the-art research to improve population health, infection prevention and quality of care for those affected by STIs and Blood Borne Viruses (BBVs).

The HPRU focused on 3 research themes which address the key health protection priorities for the prevention and control of BBSTIs: understanding risk and risk reduction (Theme A); reducing the burden of under-diagnosis (Theme B); and improving care and management of those diagnosed with infections (Theme C).

This resource focuses specifically on the Theme A STIs research findings concerning MSM. The overarching aim of Theme A is to improve understanding and the knowledge-base of the behaviours, attitudes, and factors that influence the risk of STI and BBV acquisition and transmission among key priority groups identified by PHE.

Sexual health promotion

Health promotion is defined as "the process of enabling people to increase control over, and to improve, their health" (6). This includes primary prevention initiatives aimed at individual behaviours, as well as a range of social and environmental interventions. Health promotion interventions need to be designed and developed with clearly defined aims, objectives and outcomes such as behaviour change, improved awareness or education and greater empowerment.

Good sexual health and reproductive health is important for everyone; however, sexual ill health affects some population groups, such as gay, bisexual and other men who have sex with men, more than others. Thus, while some sexual health promotion activities aim to achieve universal coverage to benefit the general population (for example, providing information on maintaining good sexual and reproductive health), others need to be tailored for key populations at particular risk of experiencing poor sexual health outcomes. Additionally, health promotion activities and health education must be acceptable, relevant and unambiguous to the target population to help stimulate a change in attitude and enable behaviour change.

In England, sexual and reproductive health promotion and HIV prevention is provided within a complex system. Within this system, Local Authorities are mandated to commission comprehensive sexual health services, including the provision of information, advice and support to reduce STIs. PHE has an important national role in surveillance and research; scientific expertise; social marketing; and providing and developing resources to support local and national activities. PHE also provides support through regional and local teams, supported through the sexual health facilitator network.

Methodology

To understand the key factors underlying the high rates of STIs experienced by MSM, PHE in partnership with UCL and in collaboration with LSHTM conducted a programme of mixed methods research.

Phase 1: Review of NIHR HPRU BBSTI research

Phase 1 involved qualitative research, specifically eight focus group discussions with a total of 61 MSM undertaken in four English cities. These sought insights into participants' experience of attending sexual health services, perceptions of norms of attendance among the MSM, their knowledge of, and attitudes towards, STIs, and the acceptability and potential impact of delivering sexual health promotion information through social media and dating apps. Findings from thematic data analysis were published (10, 12, 13), and used to inform the content of an anonymous online survey. The survey was completed by MSM who were recruited during 2016 to 2017 from sexual health clinics across England and via social networking/dating apps.

Key quantitative findings have also been published (11, 14) and are summarised in this guidance.

Phase 2: Knowledge translation exercise

Phase 2 focused on translating the qualitative and quantitative review findings from phase 1 into 3 initial priority areas which might reduce infection rates among MSM and engaging community members in the knowledge translation exercise through a community engagement workshop.

To do this we followed the PHE Knowledge to Action evidence-based approach (8) and the Lavi's framework for knowledge-transfer strategy (9). These are based around a series of key questions which are:

- What should be transferred?
- To whom should research knowledge be transferred?
- By whom should research knowledge be transferred?
- How should research knowledge be transferred?
- With what effect should research knowledge be transferred?

One of the strengths of this framework is that it enables evaluation of knowledge translation overall and for the specific elements, each of which can be fine-tuned in response to feedback.

Using the knowledge transfer frameworks, the NIHR HPRU BBSTI Theme A research findings were first translated by the study team into proposed priorities area of work (Table 1). During the community engagement workshop, the study team sought community members' reflections and advice on:

- the NIHR HPRU BBSTIs research findings, the proposed priority areas and whether these seemed relevant for the community
- acceptable ways of delivering sexual health information and how to better design sexual health promotion campaigns and messaging targeting MSM

The groups' reflections were then captured through small and large group verbal feedback and grouped by theme (Table 2), and the proposed priority areas revised and refined by the study team (Table 3).

Additionally, the study team and community members also reviewed existing sexual health promotion materials and identified features which could stimulate behavioural and attitudinal change among the target population, in a culturally appropriate manner (Table 4).

System-wide implications for policy and practice to improve the sexual health and wellbeing of MSM were then developed based on the evidence review and the themes captured from the community engagement workshop (Table 5).

Please see the Community engagement workshop section below for more detail on this process.

Evidence

Understanding knowledge and awareness of STIs, behaviours, attitudes and other contextual factors that influence the risk of STIs among MSM in the UK, are essential for developing effective health promotion and interventions to reduce STI prevalence in this community. The NIHR HPRU BBSTIs used mixed method research to address these issues and the findings are summarised here (NB: the research focussed on STIs other than HIV and pre-dated significant uptake of HIV PrEP and therefore issues around STI acquisition amongst MSM taking PrEP were not thoroughly covered).

The qualitative study investigated awareness of, and attitudes towards STIs, found that, although some MSM are well informed, there is widespread lack of knowledge about factors which influence infection and fear of infection, such as prevalence, modes of transmission, health implications and treatment (10). From these findings, researchers suggested that enhancing men's knowledge about groups of STIs (for example based on whether they are bacterial or viral) may be more effective than interventions focusing on individual infections. To help reduce the lack of knowledge and contribute to the control of STIs, greater promotion of effective educational interventions is key.

The need to improve STI knowledge, especially among men who are HIV-negative or of unknown HIV-status, and promoting STI testing among men engaging in STI risk behaviours, were also highlighted in the subsequent quantitative study examining the association between knowledge, risk behaviours, and STI testing among MSM (11). The authors suggested that, in addition to knowledge, behaviours are determined by a complex range of psychological and ecosocial factors. For example, despite having relatively good knowledge of STIs, MSM living with HIV were more likely to engage in STI risk behaviours than those who were HIV-negative or of unknown status. However, among HIV-negative or unknown-status men, engagement in STI risk behaviours varied by STI knowledge. Men with good STI knowledge reported more sexual partners and recreational drug use prior to sex than those with poor knowledge, however, those with poor knowledge were more likely to report engaging in condomless anal sex. Additionally, a quarter of men, mainly HIV-negative or unknown-status men, had never received an STI test result, highlighting the need to improve STI testing uptake.

Regarding experiences and perceptions of Sexual Health Services (SHSs), the qualitative research found that although specialist SHSs are the most common choice, MSM expressed no particular preference for service type (12). Men of Black and Asian ethnicity were more likely to identify confidentiality and being identified within their community as a barrier to accessing local services. Some participants described the experience of attending SHSs as embarrassing and expressed concerns that procedures such as calling out names loudly or using specific doors

for men living with HIV could compromise confidentiality. Personal qualities of staff are valued and key to the amelioration of discomfort, for example, by being friendly, professional, discreet, knowledgeable and non-judgemental. The study also found that alternative testing options such as self-testing and self-sampling could increase access for those reticent about attending services in person.

The qualitative research showed that delivering sexual health information and health promotion for MSM through social media and geosocial networking-dating apps ('dating apps') is acceptable and feasible (13). Social media and dating apps can reach those who may not access SHSs and can tailor information to the individual's geolocation, including referral to local SHSs. The study found that, to be effective and acceptable, the information shared on social media and dating apps needs to be engaging, positive in tone, not too clinical, focused on building social norms, and delivered discreetly by trusted healthcare organisations.

The qualitative study found that one in 10 MSM recruited through community and clinical settings had engaged in chemsex in the previous year (14). Men who reported engaging in chemsex also reported increased STI risk behaviours and were more likely to be living with HIV. However, of all men engaging in chemsex, those who were HIV negative or of unknown status were more likely to report STI risk behaviour including condomless sex with those of unknown or different HIV status. Men reporting chemsex were more likely to access SHSs and STI testing. These findings suggest a need for chemsex-related services in SHSs and robust referral pathways to drug treatment services.

Community engagement workshop

NIHR and other research funders require research to include patient and public involvement activities. The aim is to ensure that research is carried out 'with' or 'by' members of the public rather than 'to', 'about' or 'for' them (15). Involving members of the public and key stakeholders in the research process helps to ensure research quality and relevance, and enables end-users to inform and co-produce resources that will benefit them.

To develop this resource, the study team engaged a group of MSM (n=9) in a research translation exercise. Attendees were recruited from Liverpool, London, and Manchester through national and local sexual health and charitable networks, ensuring a mix of ethnicities and ages. The study team facilitated one workshop in London and presented the main research findings and the proposed priority areas of work (Table 1).

Table 1: Main research findings and proposed priority areas of work

Main HPRU research findings	Proposed priority areas of work
 Main HPRU research findings The 3 key factors that might influence an increased risk of being diagnosed with an STI are: lack of knowledge of how STIs are transmitted, the health implications of STIs, and treatment or vaccination regimens available for STIs Behavioural factors such as: high partner numbers and condomless sex with new or casual 	 Proposed priority areas of work The 3 identified priority areas which might reduce infection rates among MSM are: improving knowledge of how STIs are prevented, transmitted, diagnosed, and treated increasing STI testing uptake promoting condom use to influence behaviour change and risk reduction
 partners engagement in chemsex and group sex within dense sexual networks facilitated by dating apps 	

During the community engagement workshop, the study team sought community members' reflections and advice on:

- the NIHR HPRU BBSTIs research findings, the proposed priority areas and whether these seemed relevant for the community
- acceptable ways of delivering sexual health information and how to better design sexual health promotion campaigns and messaging targeting MSM

The groups' reflections were captured and grouped by theme (Table 2), and the proposed priority areas revised and refined (Table 3). The key message was a need to raise awareness around STI risk, transmission, diagnosis, treatment, and prevention. Additionally, using multiple channels to deliver sexual health information is optimal; however, online sources of information which include social media were preferred as they were perceived to allow easier and quicker access and provide privacy. Dating apps were also seen as potential tools to deliver sexual health information.

Theme	Reflections
Awareness	 raising awareness on STIs (including how these are transmitted, diagnosed, and treated) and promoting condom use were perceived as critical factors to influence behavioural change and risk reduction PrEP was considered a key intervention; however, the group reflected that this may influence individuals' attitudes towards STI preventative measures and a potential reduction in condom use. Information around PrEP should emphasise that it is an intervention exclusively for HIV and does not protect against other STIs the group discussed the need to disseminate explicit information on how to prevent STIs highlighting the purpose of PrEP and the difference between STI treatments and prevention approaches interventions that continue focusing on addressing STI-related stigma were perceived as critical families and culture were perceived as important structures to forming views on sexual health engaging faith leaders was considered important to influence communities' views on providing sexual health information on dating apps, it was largely seen as acceptable, consistent with findings in published research (10). The group reflected that any intervention using dating apps would need to be carefully designed and implemented
Consent and negotiation	 having conversations around consent and negotiation with partners were perceived as a challenge, particularly when addressing condom use
Empowerment	 sexual health education, particularly in schools, was considered fundamental to empower individuals to make informed decisions about their health and wellbeing, but also to influence communities' views on sexual health and behaviours, and to address stigma interventions focused on explaining the different prevention methods available were perceived as critical to support individuals assessing options and making

Table 2: Community reflections on the research findings and proposed priority areas

	 informed decisions about their sexual health and wellbeing involving and consulting the target community when planning and designing sexual health promotion campaigns and messaging was perceived as an important step towards incorporating their views and experiences and therefore ensuring that these are effective and relevant to the target audience
Access to services	 variation in service offer across regions was perceived as a barrier to accessing services positive and professional attitudes from staff were perceived to be key to minimise negative experiences of those accessing services and encourage continued healthcare seeking

The proposed priority areas of work were revised based on the groups' reflections (Table 3).

Table 3: Revised priority areas of work

Priority 1: STI awareness raising and sexual health promo Priority 2: improving access to services and testing uptake	· •
Priority 3: ongoing community involvement and partnersh	p

As part of this exercise, the study team and community members also reviewed existing sexual health promotion materials and identified features which could stimulate behavioural and attitudinal change among the target population, in a culturally appropriate manner (Table 4).

Table 4: Community reflections on designing culturally sensitive and tailored sexualhealth promotion campaigns and messaging targeting MSM

Effective messaging techniques	Ineffective messaging techniques
 Content: educative and informative trustworthy engaging clear, explicit and easy to understand balanced information (shocking messages vs professional advice) has a clear objective(s) 	 Content: lacking information on the range of prevention and treatment options available to enable individuals making informed decisions

 Tone: narrated by speakers who have relatable voices messaging is professional and delivered by trusted healthcare organisations 	 Tone: narrated by speakers whose voices are not relatable messaging is too clinical and is difficult to understand
 Delivery: online tools that are quick and easy to access, including dating apps social media internet (to access information and learn about symptoms of specifics STIs and find services) use of influencers frequent reminders about STI testing and other key sexual health messages in dating apps and social media 	 Delivery: tools that are not considered 'trendy' (for instance, leaflets) tools that are not generation- specific contains elements that distract attention posters in the street displaying too much text (insufficient opportunity to read)
 Style: providing options on prevention and treatment (for instance, Generation Zero video) context specific tailored to different cohort groups (for example, using animation, real people, and so on), depending on the message content 	Style: • negative or fear-based

Community members' reflections on acceptable and unacceptable sexual health interventions and the evidence review were used to develop system-wide priorities and suggested actions to improve the sexual health and wellbeing of MSM.

The study team recognises the limitations of having a relatively small number of participants in the community workshop which reflects the timing of this phase of the project and constraints due to the COVID-19 pandemic.

Implications for policy and practice

In this section, we propose system-wide implications for policy and practice to reduce STI prevalence among MSM that were derived from the evidence review and engagement with community members (Table 5).

These priorities and focus areas are for strategic leaders and service designers (including commissioners and public health teams), services providers (including clinicians, healthcare professionals, and service managers), and voluntary and community sector organisations (including programme and outreach managers). We recognise that these areas of focus are not exhaustive, for example, participants did not mention, and were not prompted to discuss, the role of vaccines or suggest that advice to reduce the number of concurrent partners was an acceptable intervention. Strategies that are specific to HIV such as **Treatment as Prevention** (TasP) were also not discussed, reflecting in part how the focus of the original study was primarily on addressing STIs other than HIV.

Priorities	Areas of focus
Priorities Raise awareness among MSM about how STIs are prevented, transmitted, diagnosed and treated	 Areas of focus STI knowledge and healthcare seeking: ensure individuals attending services understand the different groups of STIs, associated potential consequences and how to protect themselves and partners from STI transmission; the Sexwise website provides a number of useful resources and the NHS.UK website provides useful information on STIs raise awareness about the different STI prevention
	 methods available and support individuals in making informed decisions concerning the best sex, with the least harm ensure individuals understand the difference between STI prevention and HIV PrEP
	Attitudes and behaviours:
	 develop interventions that promote and raise awareness of different STI prevention methods, including the use of condoms

Table 5: Implications for policy and practice

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How we can do this:
 ensure messages are targeted, clear, informative, educational and include a call for action explore the use of 'dating apps' and social media to disseminate sexual health information support campaigns to raise awareness of STIs, and promote condom use and behaviour change among MSM
Attitudes and behaviours:
 ensure services are equipped to provide non-judgemental, confidential, professional and empathetic approaches to sexual health care to create a safe and comfortable environment for gay, bisexual and other men who have sex with men to discuss their needs
How we can do this:
 following a Making Every Contact Count approach, utilise every opportunity to provide sexual health promotion advice and raise awareness about prevention, diagnosis, treatment, partner notification and chemsex ensure high standards of partner notification are available in services to protect patients from STI reinfection
Attitudes and healthcare seeking:
 develop evidence-based interventions aimed at increasing testing uptake
How we can do this:
 consider alternative and innovative ways of providing services such as online, whilst continuing to support face-to-face sexual health and community testing services where possible develop strategies to facilitate targeted, appropriate, accessible, culturally sensitive and inclusive access to sexual health services that meet the needs of gay, bisexual and other men who have sex with men, including pathways into drug and alcohol services to support those with

	 continue to monitor the HIV and Syphilis Self-Sampling and the E-Sexual and Reproductive Health National Frameworks to support the commissioning of online STI testing services to increase the number and range of
	places to access testing
Encourage more collaboration with local partners and involve the community	 Whole system approach and partnerships: capitalise on local systems' strengths and maximise collaborative efforts following a whole system approach ensure community members are involved in the design, delivery, and evaluation of sexual health promotion and sexual health interventions create partnerships with community and voluntary and community sector organisations. This could include the use of sexual health champions from within higher risk communities to build trust, support community based STI testing, address stigma and to contribute towards improving the sexual health and wellbeing of MSM
	How we can do this:
	 work to ensure sexual health promotion is prioritised in relevant services so that people have the opportunity, capability and are motivated to practise safer sex work to ensure children and young people receive good quality evidence based relationships and sex education at school, at home and in the community following the Relationships. Education, Relationships and Sex Education (RSE) and Health Education Statutory Guidance capitalise on existing assets such community pharmacies to commission sexual health services, raise awareness, and increase screening, testing and treatment (The Pharmacy Offer for Sexual Health, Reproductive Health and HIV. A resource for commissioners and providers) contact your regional Public Health England Sexual Health Facilitator for tailored support and advice
Evaluation and sharing learning	 evaluate sexual health promotion interventions and share lessons learned continue to undertake surveillance of STIs among MSM, identify and manage outbreaks, and undertake analyses to support progress in reducing STI acquisition and inequalities in sexual health

	 continue to support and produce research that helps to improve the knowledge-base around behaviours, attitudes, and factors that influence the risk of STI acquisition and transmission among MSM ensure findings from this report are disseminated through
•	 ensure findings from this report are disseminated through the healthcare and public health system, and are reflected in the upcoming national Sexual and Reproductive Health
	Strategy and the HIV Action Plan

Appendix 1. Sexual health promotion: national resources

PHE's national HIV Prevention and Sexual Health Promotion programme supports national and local health promotion activities to improve SRH and prevent HIV. These activities include:

Sexwise is a sexual health and reproductive health information programme that seeks to provide clear, impartial, up-to-date information for the general public and healthcare professionals, to enable informed sexual health choices and support healthy sexual behaviour.

Protect Against STIs Use a Condom is a sexual health campaign launched by PHE in 2017, to encourage condom use by young adults aged 16-to-24 years to reduce the rates of STIs. It aims to raise awareness of the serious consequences of STIs, as well as normalise and encourage condom use. See the range of campaign advertising and images.

PHE also commissions specialist programmes to address HIV prevention and sexual health improvement, including multimedia and local outreach programmes.

National HIV Testing Week is a part of the national HIV Prevention England Programme aimed at MSM, black African communities and other groups in whom there is a higher or emerging burden of HIV infection.

National Chlamydia Screening Programme (NCSP) provides opportunistic screening to sexually active young people aged 15-to-24 years. The aim of the programme is to control chlamydia through early detection and treatment of asymptomatic infection, so reducing onward transmission and the consequences of untreated infection.

The National HPV Immunisation Programme delivers the HPV vaccine, which protects against 4 types of HPV (6, 11, 16 and 18). These include both high- and low-risk types responsible for the majority of cervical cancers and genital warts.

PHE has published a Syphilis Action Plan, which, to help reduce the impact of syphilis on the main affected populations, brings together existing evidence, national guidelines and best practice.

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Published September 2021 PHE gateway number: GOV-9550



PHE supports the UN Sustainable Development Goals

