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British Association for Sexual Health and HIV (BASHH) UK national guideline for the use of doxycycline post-exposure prophylaxis (DoxyPEP) for the prevention of syphilis, 2025

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Abstract

This guideline provides evidence-based recommendations for the use of doxycycline post exposure prophylaxis (doxyPEP) for the prevention of syphilis. DoxyPEP should be part of a comprehensive approach to the prevention of STIs, along with condom use, appropriate HIV prevention interventions, vaccination, STI testing, treatment and management, and appropriate risk reduction advice and psychological interventions if indicated.

Keywords

Doxycycline, post-exposure prophylaxis, chlamydia, syphilis, gonorrhoea, STI prevention, antimicrobial resistance

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Scope and purpose

This guideline provides evidence-based recommendations for the use of doxycycline post-exposure prophylaxis (doxyPEP) for the prevention of syphilis. It is written for use by healthcare professionals working within specialist (level 3) sexual health services in the United Kingdom (UK), providing care tailored for patients aged 16 years and older.

Editorial independence

This guideline was commissioned, edited, and endorsed by the BASHH CEG without external funding being sought or obtained. All members of the guideline writing committee completed the BASHH conflicts of interest declaration at the time the guideline's final draft was submitted to the CEG.

Rigour of development

This guideline was produced according to specifications set out in the British Association for Sexual Health and HIV (BASHH) Clinical Effectiveness Group (CEG) document 'framework for guideline development and assessment' (2015, updated 2019) accessed at https://www.bashhguidelines.org/media/1229/2015-guidelines-framework-amended-dec-2019.pdf. The Grading of Recommendations, Assessment,

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Development, and Evaluations (GRADE) system was used to assess the evidence and make recommendations.

A search of published articles between 01 Jan 1990 to 03 April 2025 was conducted in PUBMED to address two primary questions:

1. Does taking doxycycline after having condomless vaginal, anal or oral sex reduce bacterial sexually transmitted infections (STIs) compared to not taking it?
2. What are the risks of using doxycycline, including antimicrobial resistance and side effects such as dermatological, gastrointestinal, and metabolic issues?

Search strategies and inclusion/exclusion criteria for assessing doxycycline's efficacy and safety are provided in the Supplemental Appendix.

Article titles and abstracts were reviewed and if relevant the full text article was obtained. Abstracts from meetings in the relevant period were hand-searched and considered. Priority was given to randomised controlled trials and systematic review evidence, and recommendations were made and graded based on the best available evidence.

The first draft was produced by the multi-professional and multidisciplinary writing group and then submitted to the BASHH CEG for review using the AGREE appraisal tool. The second draft was posted on the BASHH Web site for consultation (for a period of two months), with the authors responsible for assessing feedback. The document was also reviewed by a patient representative, target users, and the public panel of BASHH, and their feedback was considered by the authors and used to inform the final version. Appropriate input was also sought from national antimicrobial resistance (AMR) experts and NHS England colleagues involved in doxycycline drug procurement, stock and supply chains. The final draft was presented to the CEG for review. Maintaining the guideline is the responsibility of the BASHH CEG.

Efficacy of doxyPEP

Four randomised controlled trials of doxyPEP to reduce bacterial STIs were assessed. In each trial, participants were randomised to receive an oral dose of 200 mg doxycycline within 72 h of condomless sex, or to receive standard care (i.e., routine STI testing and no doxycycline). Three studies were conducted among gay, bisexual, and other men who have sex with men (GBMSM) and transgender women (TGW) using human immunodeficiency virus (HIV) pre-exposure prophylaxis (PrEP), or living with HIV.[1–3]

One study involved cisgender women using HIV PrEP.[4] The studies involving GBMSM and TGW showed that doxyPEP effectively prevented chlamydia (relative risk [RR] = 0.22; 95% confidence interval [CI] = 0.13–0.38) and syphilis (RR 0.23; 95% CI = 0.13–0.41) infections, although there was no consensus on the effectiveness of doxyPEP in reducing incidence of gonorrhoea infections (RR = 0.78; 95% CI = 0.65–0.94).[5] The study involving cisgender women did not find an effect of doxyPEP on reducing the incidence of bacterial STIs.

GBMSM and TGW: A sub study of IPERGAY included 232 participants using HIV PrEP.[1] Participants randomised to doxyPEP (n = 116) showed a reduction in chlamydia (hazard ratio [HR] = 0.30; 95% CI = 0.13–0.70) and syphilis (HR = 0.27; 95% CI = 0.07–0.98), but no statistically different reduction in gonorrhoea (HR = 0.83; 95% CI = 0.47–1.47). There was no impact on the incidence of *Mycoplasma genitalium*.[6] The DoxyPEP study included 501 participants using HIV PrEP or living with HIV.[3] Participants randomised to doxyPEP (n = 339) experienced significant reductions in chlamydia for both HIV PrEP users (RR = 0.12; 95% CI = 0.05–0.25) and those living with HIV (RR = 0.26; 95% CI = 0.12–0.57). Similar reductions were observed for syphilis (RR = 0.13; 95% CI = 0.03–0.59 for HIV PrEP users and RR = 0.23; 95% CI = 0.04–1.29 for those living with HIV). For gonorrhoea, there was a lesser but statistically significant reduction (RR = 0.45; 95% CI = 0.32–0.65 for HIV PrEP users and RR = 0.43; 95% CI = 0.26–0.71 for those living with HIV). A significant reduction in the incidence of STIs per calendar quarter was maintained during the open label extension phase of the trial.[7] The DOXYVAC study included 556 participants using HIV PrEP and also randomised participants to receive the 4CMenB meningococcal vaccination.[2] In keeping with the other studies, doxyPEP significantly reduced chlamydia (adjusted HR [aHR] = 0.14; 95% CI = 0.09–0.23) and syphilis diagnoses (aHR = 0.21; 95% CI = 0.11–0.41) but was less effective for gonorrhoea (aHR = 0.67; 95% CI = 0.52–0.87). Overall, these results provide clear evidence of the efficacy of doxyPEP in reducing chlamydia and syphilis in GBMSM and TGW compared to standard care, with a lesser or no effect on gonorrhoea, likely impacted by tetracycline resistance in *Neisseria gonorrhoeae*.

Similar reductions to those seen in the clinical trials have been observed following real-world implementation of doxyPEP. Among the 39% of 3081 HIV PrEP users who took up doxyPEP in one clinic in San Francisco, there was a significant decline in new chlamydia and syphilis diagnoses in the first 6 months of use (incidence rate ratio [IRR] = 0.33; 95% CI = 0.23–0.46 and IRR = 0.22; 95% CI = 0.07–0.54, respectively).[8] In the first year of implementation in San Francisco, approximately 20% of GBMSM and TGW attending public sexual health clinics (3974 individuals) initiated doxyPEP with a decline of 51% (95% CI = 43–58%) in early syphilis notifications and 50% (95% CI = 38–59%) in chlamydia observed.[9] In a Northern California health insurance cohort, including San Francisco, 2253 out of 11,551 HIV PrEP users were dispensed doxyPEP, with median monthly usage of 6.5 doses. Significant declines in STIs were observed, including a 79% reduction in chlamydia (95% CI = 73–83%)

and an 80% reduction in syphilis (95% CI = 63–98%). Smaller reductions were noted in urethral and rectal gonorrhoea diagnoses, though no significant change was observed in pharyngeal gonorrhoea.[10]

Cisgender women: The dPEP Kenya study included 449 cisgender women using HIV PrEP.[4] The results showed no significant effect of doxyPEP ($n = 224$) in reducing STIs compared to standard care (RR = 0.88; 95% CI = 0.60–1.29). Subsequent analyses have found poor adherence to doxyPEP among participants which may be the reason for a lack of observed effectiveness.

Other potential benefits of doxyPEP

Whilst most studies have focussed on the efficacy of reducing infection acquisition, there are also potential quality of life benefits associated with doxyPEP use. Participants of the DoxyPEP study reported benefits to their quality of life and mental health by reducing anxiety about acquiring and transmitting STIs and by providing more control over their sexual health.[11]

Safety of doxyPEP

Safety and tolerability evidence from randomised clinical trials

In the four randomised clinical trials described above, doxycycline was safe and well-tolerated. There were few or no discontinuations and serious adverse events (SAEs). In the IPERGAY sub study, there was no statistical difference in adverse events (AEs) between doxyPEP and control arms except for drug-related gastrointestinal effects (25% vs [vs] 14%, $p = 0.03$), and 10 of 116 participants discontinued.[1] In the DoxyPEP study, no SAEs attributable to doxycycline and a low occurrence of diarrhoea and headache were observed, and 2% of 339 participants discontinued because of unacceptable side effects or patient preference.[3] During the open label extension, there was a single grade 2 lab abnormality (raised alanine aminotransferase) and five grade 3 adverse events (diarrhoea and headache) that were possibly or probably related to doxyPEP.[7] In the DOXYVAC study, a single SAE related to doxycycline was reported (a fixed drug eruption) amongst 369 GBMSM, and six participants among the doxyPEP users discontinued the study, all due to GI side effects.[2] Lastly, in the doxyPEP Kenya study, there were no SAEs related to doxycycline reported among 224 cisgender women, and 10 participants among the doxyPEP users discontinued the study.[4]

Side effects

The most common side effects of long-term doxycycline include gastrointestinal symptoms (e.g., nausea, vomiting, dyspepsia) and photosensitivity. Rare side effects associated with long-term use of doxycycline include benign intracranial hypertension, and liver-related toxicity.[12,13]

Long-term safety

A systematic review and meta-analysis of 67 studies of long-term doxycycline use (i.e. >8 weeks), published between August 2003 and January 2023, found no difference in SAEs between the doxycycline and placebo groups.[14] Discontinuations due to doxycycline related AEs were rare. However, gastrointestinal (nausea, vomiting, abdominal pain), dermatologic symptoms (photosensitivity), and neurological symptoms (headache and dizziness) symptoms were more likely among those taking doxycycline compared to those who were not.

Antimicrobial resistance

Antimicrobial resistance

The main concern about using doxycycline prophylaxis is in relation to AMR in sexually and non-sexually transmitted infections. The most difficult, but potentially most significant, risk to quantify is selection of resistance amongst potentially pathogenic bacterial flora such as *Staphylococcus aureus* and respiratory tract pathogens. Doxycycline is a first-line antibiotic for both community and hospitalised patients with skin and soft tissue infections and respiratory tract infections. We emphasise the importance of considering the risk of AMR at both individual and population levels, in line with the National Institute for Health and Care Excellence (NICE) guidelines on long-term prophylactic antibiotic use for other indications (e.g., uncomplicated lower urinary tract infection, bronchiectasis, and acne).[15–17]

Clinical trials evaluating doxyPEP have reported varying levels of tetracycline resistance evolution in *N. gonorrhoeae*, commensal *Neisseria* species, *S. aureus* and the gut microbiome associated with doxyPEP use.[18] In the DoxyPEP study, doxycycline-resistant *N. gonorrhoeae* isolates increased from 27% at baseline to 38% in doxyPEP users, although the number of isolates available for testing was low (15 at baseline, 13 during follow-up).[3] Doxycycline resistance in *S. aureus* isolated from the oro- and nasopharynx increased from 12% at baseline to 16% at 12 months, although overall rates of carriage fell from 45% at baseline to 28% at 12 months.[3] Carriage of commensal *Neisseria* species in the oropharynx was high and remained stable among trial participants throughout follow up, however there was a non-significant increase in the proportion of these isolates with tetracycline resistance among participants in the doxyPEP arm at 12 months compared to baseline (70% vs 63%, respectively; $p = 0.11$). A significant decrease was seen in the control arm (62% to 42%, $p < 0.01$).[19]

In both the DOXYVAC and dPEP Kenya studies, all *N. gonorrhoeae* isolates were tetracycline resistant at baseline and during follow-up.[2,4] In the DOXYVAC study, rates of detection of methicillin-resistant *S. aureus* (MRSA) and extended-spectrum beta-lactamase producing *Escherichia coli* did not differ between the study arms.

In a study of 2312 GBMSM diagnosed with gonorrhoea in a sexual health service in Washington, USA, *N. gonorrhoeae* tetracycline resistance increased from 27% in the first calendar quarter of 2023 to 70% in the second calendar quarter (Q2) of 2024, after doxyPEP was introduced in Q2 2023.[20] Taking >3 doses of doxyPEP per month was associated with tetracycline resistance. This study also found that doxyPEP users had lower rates of *S. aureus* colonisation (27% vs 36%, $p = 0.02$) but *S. aureus* tetracycline resistance was higher (18% vs 8%, $p < 0.0001$). DoxyPEP users also had higher rates of Group A Streptococcus colonisation (9% vs 4%, $p = 0.008$). It has also been suggested that doxyPEP could induce cross-resistance to other antibiotic classes, although these data are from in silico studies only.[21,22]

To date, resistance to doxycycline has not been observed in *Treponema pallidum* and *Chlamydia trachomatis*.[23] In a recent in-vitro study, *T. pallidum* did not develop tetracycline-resistance following long-term sub-bactericidal exposure to doxycycline.[18] No phenotypic or genotypic markers of doxycycline resistance in chlamydia diagnosed among doxyPEP users were detected in any of the RCTs where this was explored.[1,2,4] In the IPERGAY substudy, 12.5% of *Mycoplasma genitalium* isolates had the MG 16S rRNA mutation although its association with tetracycline resistance is not understood.[6] None of the studies explored resistance in *T. pallidum* or sexually transmitted enteric infections.

Published studies on long-term doxycycline use for acne have not demonstrated increased resistance to doxycycline in *Staphylococcus epidermidis*, however, long-term use generally led to higher rates of AMR emergence in *Cutibacterium acnes* (previously *Propionibacterium acnes*).[24–27] Military studies on doxycycline for malaria prophylaxis have reported increased colonisation with multi-drug resistant *E.* coli and tetracycline resistant non-enterotoxigenic *E. coli* (ETEC), but no significant increase in resistance to doxycycline in *Campylobacter* and ETEC.[28–30] Additionally, AMR emergence in *S. aureus* related to history of daily doxycycline use has been observed.[31,32] Overall, these studies provided limited understanding of doxycycline's impact on AMR in STI and non-STI cases due to small sample size and varied study designs.

Microbiome and resistome

The DoxyPEP study included a microbiome and resistome subanalysis (doxyPEP users $n = 100$, control $n = 50$) using self-collected rectal swabs.[33] No difference in bacterial mass, abundance, alpha diversity (bacterial diversity within a sample) or beta diversity (bacterial diversity between samples) was seen between study arms at baseline and 6 months, or within study arms over time. However, higher tetracycline gene expression was seen in doxyPEP users at 6 months, without changes in other antibiotic classes (aminoglycosides, beta-lactams, macrolides/lincosamides/streptogramins). A greater number of doxyPEP doses was associated with higher levels of tetracycline resistance gene expression. Overall, the resistance gene abundance findings are in keeping with studies from other populations and indications.[34,35]

An RCT of immediate versus deferred daily doxyPEP in GBMSM and TGW ($n = 52$) assessed gut microbiome using rectal swabs.[33] This demonstrated minimal impact on the microbiome with no changes in alpha or beta diversity at the genus and family levels between baseline, week 24, and week 48 ($p > 0.05$). However, a decrease in alpha diversity at the order, class, and phylum levels was noted at week 48 in the immediate arm (mean: 0.84 vs 0.66 at phylum, $p < 0.05$), but not in the deferred arm.

Across a range of published microbiome studies, doxycycline exposure has been shown to alter microbial communities in the gut[35–38] and skin.[39,40] However, findings are not consistent, with no changes in skin, gut, or sinonasal bacterial diversity after doxycycline treatment also seen.[41,42]

Baseline assessment

Considerations for doxyPEP use across different populations

Current evidence consistently demonstrates that doxyPEP is effective at reducing the incidence of chlamydia and syphilis among GBMSM and TGW. In the UK, doxyPEP is not expected to be effective in preventing gonorrhoea due to the high prevalence of tetracycline resistance.[43]

Since most chlamydial infections among GBMSM and TGW are not associated with harmful clinical manifestations or sequelae, the major physical health benefit of doxyPEP in these key populations is likely the prevention of syphilis. The impact of doxyPEP on incident infection with lymphogranuloma venereum (LGV) has not been reported in RCTs.

We recommend doxyPEP for cisgender GBMSM and TGW at elevated risk of acquiring syphilis (GRADE 1A). Individuals who may be at increased risk of acquiring syphilis include those with a recent (in the last year) bacterial STI diagnosis and those with a recent history (in the last 3 months) of multiple new, occasional, or one-off sexual partners, including reporting group-sex and chemsex.

We recognise that chlamydia and syphilis may pose additional potential harms to people with a womb and ovaries (i.e., cisgender women, transgender men, and

non-binary people assigned female at birth) through adverse reproductive health sequelae and vertical transmission. Therefore, we recommend considering doxyPEP for GBMSM and TGW with concurrent male and cisgender female or other partners with a womb and ovaries (GRADE 1D).

Currently there is a lack of RCT evidence showing the effectiveness of doxyPEP in preventing STI acquisition following receptive vaginal sex. In a small pharmacokinetic study including nine cisgender women given a single 200 mg dose of doxycycline, high concentrations of doxycycline in vaginal tissue were achieved, suggesting it could be effective at preventing infection.[44] Whilst available data suggests good protection in cisgender men and TGW engaging in oral and anal sex, it is not yet known whether this intervention protects from infection and potential sequalae (for example, pelvic inflammatory diseases and congenital syphilis) in cisgender women, transgender men and other individuals with a vagina who only engage in oral and/or anal sex.

At the time of writing, there is no clinical trial evidence to support a recommendation of doxyPEP for cisgender women and other people assigned female at birth. However, clinicians may consider doxyPEP for people assigned female at birth at elevated risk of acquiring syphilis (this may include sex workers and transgender men who have sex with men), on a case-by-case basis, and in discussion with the patient (GRADE 2D).

There is a paucity of evidence on the prevalence of STIs post sexual assault, although, in general, the risk of any STI is thought to be low. For this reason, current BASHH guidelines for the management of individuals disclosing sexual violence (2022) do not recommend routine use of antibiotics for prophylaxis against STIs after sexual assault. Clinicians may consider doxyPEP for people at elevated risk of acquiring syphilis attending for clinical care within 72 h of sexual assault on a case-by-case basis, and in discussion with the patient (GRADE 2D). STI testing and further management of individuals who have experienced sexual violence should be in line with BASHH guidelines. Healthcare providers assessing the need for doxyPEP outside of specialist sexual health services should liaise with local sexual health teams for advice.

Health equity considerations

For cisgender GBMSM and TGW, where the use of doxyPEP is supported by RCT evidence, some individuals may be less likely to access or face additional barriers to accessing existing sexual health services. Services should try to mitigate issues of inequity of access and uptake for people who could benefit from doxyPEP. In addition, the current lack of inclusion of key population groups within clinical trials of doxyPEP and lack of RCT evidence of effectiveness in people assigned female at birth perpetuates health inequalities.

Dosage and administration

Recommended dosing regimen. We recommend taking a single dose of 200 mg (i.e., 2 x 100 mg capsules) of doxycycline, within 24 h and no later than 72 h after sex (GRADE 1A). No more than 200 mg of doxycycline should be taken in each 24 h period (i.e., maximum of 200 mg of doxycycline every 24 h).

Alternative dosing regimen. There is no evidence to guide whether the effectiveness of doxyPEP varies depending on when it is taken in the 72 h period after sex. However, individuals may have concerns about taking frequent antibiotics or experience side effects meaning they wish to reduce the frequency of taking doxycycline. Acknowledging this lack of evidence, individuals having sex on more than one occasion over a 72 h period may consider taking a single 200 mg dose of doxycycline at the end of the 72 h period, rather than multiple doses, to cover the entire period of risk (GRADE 2D).

Number of capsules to prescribe. There is no evidence to guide the optimal number of capsules to prescribe. This should be agreed following discussion with the patient, taking into consideration anticipated doxyPEP consumption and patient wishes. Prescribers should consider the potential service and patient impact of prescribing too few capsules to cover the period between service contacts, including scheduling of HIV PrEP and regular STI testing. Likewise, the potential impact of prescribing a large excess of capsules should be considered, for example, wastage, incorrect disposal, and sharing of medicines with others.

Pregnancy and breast/chest-feeding

Although doxycycline appears to be safe when used in the first trimester of pregnancy, data are limited. In keeping with the recommendation in the BASHH position statement on doxycycline use in pregnancy, we suggest doxyPEP is only used up to 15 weeks' gestation.[45] Outcome and follow up data should be collected to aid future practice. Healthcare professionals can contact UKTIS on 0344 892 0909 to prospectively report doxycycline exposure in pregnancy and UKTIS will ensure follow up.

Although use of doxycycline whilst breastfeeding is contraindicated in the summary of product characteristics (SmPC), very small amounts of doxycycline pass into the breast milk and absorption by the infant is inhibited by the calcium in the breast milk. Short term use of doxycycline is unlikely to cause harm to the breast feeding infant.[46,47]

Baseline screening and diagnostics

The provision of doxyPEP should be part of a holistic and comprehensive sexual health approach, including STI, HIV and blood-borne virus (BBV) testing, vaccination and other risk reduction strategies if appropriate such as motivational interviewing in line with current national clinical standards and guidelines. HIV negative individuals on doxyPEP should be assessed for eligibility for HIV PrEP and informed about HIV PEP and how to access this. People living with HIV on doxyPEP should be managed according to relevant British HIV Association (BHIVA) guidelines.

We do not recommend any additional renal or liver monitoring specific to doxyPEP use alone.

User education and support

Regarding user education and support, we recommend (GRADE 1D):

1. Providing clear information on dosing and timing, including infographics;
2. Providing clear information on the potential benefits and harms of taking doxyPEP including the current unknowns and limits of the evidence base around AMR;
3. Informing users about potential side effects, including photosensitivity, headache, nausea, vomiting, dyspepsia, and rash, and potential strategies to limit these, for example, taking doxycycline with plenty of fluid and some food, remaining upright for 30 min after taking a dose of doxyPEP, avoiding sunbeds and wear sunscreen with SPF;
4. Supporting doxyPEP users to make informed decisions about when and how to use doxyPEP including information about alternatives to doxyPEP (e.g., condoms), safer sex advice and appropriate behaviour change interventions as outlined in UK national guidance;
5. Providing clear information that doxyPEP is only for the prevention of syphilis and chlamydia, that it is not 100% effective at preventing acquisition of these infections, that it is unlikely to prevent gonorrhoea, and does not offer protection against any other STIs. Individuals should promptly seek clinical advice if they develop signs or symptoms of an STI. Individuals should be advised to undertake STI testing at a frequency consistent with current BASHH guidelines;
6. Informing users about possible drug-drug interactions, such as avoiding taking doxycycline at the same time as antacids containing aluminium, calcium, magnesium or oral zinc, iron salts or bismuth preparations. Intake of these substances should be separated from dosing with doxycycline as far as possible and at least 2 h. Additionally, note the possibility for increased clearance of doxycycline in patients taking carbamazepine or phenytoin, and advise against using it if they are on ciclosporin or isotretinoin. The absorption of doxycycline is not notably influenced by the simultaneous ingestion of milk;
7. Informing users that chronic and heavy alcohol consumption may decrease the effectiveness of doxycycline.

Follow-up and monitoring

Follow-up and monitoring

There is insufficient evidence to recommend any change to the STI testing method or frequency in individuals taking doxyPEP. We recommend that STI testing should be undertaken consistent with current BASHH guidelines (GRADE 1D). We recommend that doxyPEP users are encouraged to test for asymptomatic STIs at a frequency recommended in BASHH summary guidance on testing for STIs (GRADE 1D).

The effect on serological response to syphilis infection is not currently known although a small case series suggested possible delayed seroconversion in three men with primary syphilis.[48] We recommend that syphilis testing and treatment should be offered consistent with current BASHH guidelines (GRADE 1D).

There is insufficient evidence to recommend any change to the management of incident STIs diagnosed among doxyPEP users. We recommend STI treatment and management of incident STIs, should be in accordance with current BASHH guidelines. (GRADE 1D).

The impact of doxyPEP on the need for treating contacts of syphilis and chlamydia is not known. We recommend offering epidemiological treatment to doxyPEP users who are contacts of syphilis, in line with current BASHH guidelines due to the long potential time between exposure and reliably ruling out infection by serology (GRADE 1D). However, asymptomatic contacts who consistently use doxyPEP following sex or confirm that they took doxyPEP within 72 h of the potential exposure, may choose not to receive epidemiological treatment, opting for a 'watch and wait' approach instead. We recommend that all contacts of syphilis should be supported to attend if they develop symptoms of potential syphilis infection and have serological testing at appropriate time points (GRADE 1D).

We recommend that asymptomatic doxyPEP users who are contacts of chlamydia and took doxyPEP within 72 h of exposure, do not require epidemiological treatment (GRADE 2D). If the individual attends within 72 h of exposure but has not yet taken doxyPEP, then consider taking a dose of doxyPEP instead of offering standard epidemiological treatment (i.e., 7 days of doxycycline) (GRADE 2D). If the individual is in the clinical service, then consider offering a test for chlamydia (GRADE 2D). If this test is positive for chlamydia then offer treatment in line with the BASHH guideline on the management of

chlamydia (GRADE 1D). We recommend that asymptomatic doxyPEP users who are contacts of gonorrhoea, *M. genitalium* or LGV are managed according to the relevant current BASHH guideline (GRADE 1D).

We do not currently recommend additional monitoring of individuals using doxyPEP to address concerns about the impact of doxyPEP use on AMR in either sexually or non-sexually transmitted infections. However, if a situation arises that requires additional monitoring, we recommend implementing monitoring and surveillance processes that prioritise health equity, including the minimising of potential barriers to access. These processes should be developed in collaboration with and through engagement with communities using doxyPEP or those who might benefit from doxyPEP use.

Coding and data collection

We recommend reporting of doxyPEP use for public health surveillance purposes according to the requirements of the relevant UK nation (GRADE 1D). This will allow for easier monitoring and evaluation in relation to the uptake and use of doxyPEP, the incidence of STIs among users and any associations with AMR.

Recommendations for non-specialist providers

Given the widespread availability, low cost, and high effectiveness of doxycycline in averting incident infections with chlamydia and syphilis, doxyPEP might be prescribed, continued and perhaps initiated in other settings although these models of care have not been described in the UK. Recommendations in this guideline should be followed regardless of where doxyPEP is provided.

Auditable outcome measures

- All cisgender GBMSM and TGW at elevated risk of acquiring syphilis are offered doxyPEP (performance standard 97%)
- All people prescribed doxyPEP should be offered information (written or digital) about doxyPEP (performance standard 97%)
- All people prescribed doxyPEP should undergo testing for STIs (performance standard 97%)
- All people prescribed doxyPEP should be offered appropriate vaccines (performance standard 97%)
- All people prescribed doxyPEP should be assessed for eligibility for HIV PrEP (performance standard 97%)

Qualifying statement

The recommendations may not be appropriate for use in all clinical situations. Decisions to follow these recommendations must be based on the professional judgement of the clinician and consideration of individual patient circumstances and available resources.

Review arrangements

Maintaining the guidelines is the responsibility of BASHH Clinical Effectiveness Group. The guideline will be formally reviewed and updated, if necessary, every 5 years. However, addenda may be issued sooner if relevant new data are available.

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Supplemental Material

Supplemental material for this article is available online.

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