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Outreach workers tell us they often face questions on HIV and sexual health that they find difficult or awkward to answer. Here is some information to help answer these frequently asked questions.

Questions about Sexually Transmitted Infections (STIs)

Q1. For how long is syphilis infectious?

Syphilis is an infection that is caused by bacteria. It is most often passed on during sexual contact.

When someone is infected with syphilis, it can go through different stages and the likelihood of it being passed on depends on the stage of the syphilis.

There are four main stages of syphilis infection:

Primary stage: People may experience painless sores and swollen lymph nodes (glands) in the neck, groin and armpits. Syphilis is highly infectious during this phase.

Secondary stage: People can experience rashes, hair loss, wart-like growth near the genitals and anus, and feeling unwell (e.g., flu-like symptoms, fever or muscle aches). Syphilis is very infectious during this phase.

Latent phase: During this time, people often do not experience any symptoms. This 'inactive' phase may last several years, up to a decade. However, the bacteria are still present during this time of inactivity. Syphilis is very infectious during the early part of the latent phase. Transmission is less likely, but not impossible, during the late latent phase.

Tertiary stage: This is now extremely rare in the UK. When it occurs, people may experience more severe health issues such as heart disease, stroke, dementia, paralysis (being unable to move), blindness and deafness. Transmission is less likely, but not impossible, during this phase.

If someone undergoes treatment for syphilis they are often prescribed penicillin as an antibiotic. The British Association for Sexual Health and HIV (BASHH) recommends that people should not have sexual contact with other people until skin lesions are healed and for two weeks following penicillin treatment.

Q2. Can women who only have sex with women get an STI or HIV?

The likelihood of female-to-female transmission of HIV during sex is extremely low. There have been only a handful reported cases of transmission during sex

between cisgender women. Several of these reports are not considered reliable, involve women who also had sex with men, or involved specific activities, like sharing sex toys without covering them with condoms and changing the condoms between partners.

There's more chance of passing on other STIs between two cisgender women. For example, STIs like syphilis, human papillomavirus (HPV), herpes and genital warts can be passed on via close skin contact. Other STIs like chlamydia, gonorrhoea and trichomonas can be transmitted through vaginal fluids.

The likelihood of transmission is higher during the menstrual period or if there are any cuts on hands, mouth or genitals.

There are different ways to reduce the likelihood of HIV and STIs being passed on:

- Using protective barriers, such as gloves and dental dams.
- Going slow and using lube to avoid tears.
- Using a new condom when sharing sex toys. Similarly, if a toy is used to penetrate a different part of the body, a new condom should be used.

Questions about PrEP (pre-exposure prophylaxis) Q3. What can someone do if they are refused PrEP?

PrEP should be available for free in all sexual health clinics in the UK. It's usually recommended for HIV-negative people who:

- do not consistently use condoms or think they are unlikely to use condoms.
- have partners who do not know their HIV status.
- have sexual partners who may have HIV without realising it.
- recently had an STI.

However, many people feel current guidelines are too restrictive. Future guidelines may change to recommending PrEP to more people who say they feel the need for it.

There are some reasons why someone might not be able to take PrEP, for example, if they have certain health conditions, such as severe liver or kidney problems.

Some people find it difficult to access PrEP even though they're eligible for it. If someone thinks PrEP would be useful for them but their clinic seems unwilling to help, you can advise them to speak to a senior doctor.

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They could also share the British HIV Association (BHIVA) and British Association for Sexual Health and HIV (BASHH) **guidelines on the use of PrEP**. This gives clinicians information on how they can support people using PrEP. You can also signpost them to **Prepster's guide on talking to health professionals about PrEP**.

PrEP is also available through private prescriptions or by ordering from an online pharmacy that is based overseas. In the UK, it's legal to buy the drugs for personal use and have them delivered to you. If someone decides to do this, it's still a good idea for them to talk to a healthcare professional at a sexual health clinic so they can be supported to take PrEP safely (e.g., by having all the recommended tests).

For more support and advice on accessing PrEP, you can also signpost them to THT Direct on **0808 802 1221** or at **info@tht.org.uk**.

Q4. If I'm undocumented, can I get PrEP?

The rules for access to NHS care for HIV, sexually transmitted infections and several other infectious diseases are different from the rules for access to many other NHS hospital services. People can access PrEP for free at sexual health clinics in the UK, regardless of their immigration status. You can signpost service users to the **NHS website** to locate nearby sexual health clinics.

Access to PrEP, like access to all treatment at NHS sexual health clinics, is free of charge. This is the case regardless of someone's immigration status. It also includes people who are undocumented. Service users do not have to share their immigration status or provide their ID to access PrEP for free. However, the clinic may take their postcode for administration purposes.

Even though PrEP should be free for everyone, some undocumented people may experience additional barriers when trying to access PrEP, like language barriers or fear of repercussions because of their immigration status. You can advise your service users that they can ask for an interpreter at their local clinic. You can also reassure documented and undocumented migrants that they should not have to prove their immigration status at their clinic appointment.

Q5. Can people share PrEP with their friends or partners?

It is recommended that people should not share prescription-only drugs. However, multiple studies have shown that pill sharing is common among people who take PrEP. Some people may share it with friends/partners as PrEP but others might share it to use as PEP when they have an emergency. If a service user is sharing their PrEP, you should make them aware that, in the UK, it is illegal to share prescription medications, including PrEP. That means giving medication that was specifically prescribed for you to someone else is against the law.

There are risks associated with sharing medication. When someone is prescribed PrEP the healthcare provider makes sure that taking PrEP is safe for them. They will have an HIV test to ensure they are HIV negative before starting PrEP. They'll also make sure that it won't interfere with other health conditions or allergies a person may have. While taking PrEP, they'll provide regular tests for HIV, kidney function and STIs.

Sharing PrEP means someone will be providing medication to another without medical supervision which could be dangerous. It might also mean PrEP doesn't work for them properly, in particular when someone uses PrEP as PEP. There are three drugs in PEP – usually the same two that are taken for PrEP, plus a third one. The third one would be missing if someone used PrEP as PEP.

Sharing PrEP might also mean the person who was prescribed PrEP won't have enough medication for themselves. For someone prescribed daily PrEP, research suggests that four doses a week may be enough to provide protection.

PrEP is free for everyone in the UK. Unfortunately, some people may still find it difficult to access PrEP, for example, due to long waiting times to get an appointment. Please see question 3 for what to do when a person is refused PrEP.

Q6. Will PrEP/HIV treatment affect gender-affirming hormone therapy for trans people?

Many people who use gender-affirming hormone therapy (GAHT) may be worried that PrEP or HIV treatment could interfere with the hormones they take. The majority of studies that looked into the interaction between PrEP/ HIV treatment and GAHT were relatively small and many focused on trans women only.

Daily oral PrEP is recommended for both trans men and trans women. It does not significantly change levels of gender-affirming hormones in the blood. GAHT slightly decreases levels of the PrEP drug tenofovir in trans women, but not enough to affect how well it works as daily PrEP. That's because small differences in drug levels do not necessarily mean that the drugs don't work as well.

Event-based dosing is currently not recommended for trans women or trans men. That's because not enough research has been done into this.

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One large study has also shown that injectable PrEP is safe and effective for trans women. No research has been done specifically in trans men.¹

HIV treatment is recommended for all trans people living with HIV. Some HIV treatment regimens might affect GAHT. You can advise trans people who are living with HIV to discuss their hormone therapy with their HIV clinician. You can also advise them that they can request a blood test to monitor hormone levels at their HIV clinic.

Some HIV treatment regimens, including unboosted integrase inhibitors, doravirine, or rilpivirine, are less likely to interact with GAHT.² Drugs that are more likely to interact with GAHT include some older NNRTIs (nevirapine, efavirenz and etravirine), boosted protease inhibitors and boosted integrase inhibitor regimens (elvitegravir).

Questions about HIV

Q7. What is the window period for HIV testing?

The window period is the time after an HIV infection during which a test may not be able to detect the virus. During this time, a test result might show as negative, even if the person has contracted HIV.

How long this window period is depends on the type of test.

Fourth-generation laboratory tests

Fourth-generation laboratory tests are the most accurate type of test. They're also called combination tests or antigen/antibody tests. They use blood that is sent to a laboratory for processing. *The British HIV Association say the window period for fourth-generation laboratory HIV tests is 45 days*.³ That means 99% of HIV infections would be detected by a fourth-generation laboratory test after 44 days of being exposed to the virus.

Rapid, point-of-care tests

The window period of rapid, point-of-care tests and self-tests is longer. They use fingerprick blood (collected by pricking the finger with a lancet) or oral fluid (from swabbing the gums). *The British HIV Association say the window period for rapid, point-of-care tests and self-tests is 90 days.*³

Some people who are taking PrEP (pre-exposure prophylaxis) or PEP (post-exposure prophylaxis) may have a delayed antibody response. That means their window period can be longer and an HIV infection may be harder to detect. Guidelines recommend people should always take an HIV test prior to starting PrEP and every 3 months after starting PrEP.

Q8. What is an indeterminate test result and why do they happen?

'Indeterminate' HIV test results are also called 'equivocal', 'invalid' or 'grey-zone'. It means the test result is unclear – it's neither clearly negative nor clearly positive.

There's a number of reasons why a result may be indeterminate:

- Reaction to an antibody that is fighting something that isn't HIV (e.g., a different infection).
- Contamination of the test sample.
- Technical errors.
- A recent HIV infection may mean the immune response is still developing (see question 7).
- Use of PrEP (pre-exposure prophylaxis) or PEP (post-exposure prophylaxis) may affect how the immune system reacts to an infection.

An indeterminate result means another test needs to be done to confirm the result. If a second test is negative, it's highly likely the first test was a false positive. But if multiple tests show an indeterminate result, more testing should be done with several types of test.

An indeterminate result can happen if someone was infected with HIV very recently. Doing a new test two weeks later can help confirm if the indeterminate result was caused by a recent infection.

However, the majority of people with an indeterminate result are later confirmed to be HIV negative. 4,5

Q9. What are the chances of getting HIV from different types of sex?

There is zero chance of HIV being passed on when someone is taking effective treatment and has an undetectable viral load.^{6,7} 'U=U' ('Undetectable equals Untransmittable') means that effective HIV treatment reduces the amount of HIV in the body to an undetectable level. It means HIV cannot be passed on during sex.

When someone has a detectable viral load and/or is not taking HIV medication, the likelihood of HIV being passed depends on the type of sex someone is having and how frequently they're having sex. The likelihood is higher during some types of sex compared to others.

HIV is most likely to be passed on when someone has receptive ('bottom') anal sex with someone who has a detectable viral load and/or is not on treatment (1 in 72).⁸ The likelihood of HIV being passed to the insertive ('top') partner during anal sex is lower compared to the receptive (bottom) partner (1 in 909).⁸

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The likelihood of HIV being passed on during vaginal sex is lower than during anal sex. For a cisgender heterosexual couple, the likelihood of HIV being passed on is higher for the female partner (1 in 1,234) than the male partner (1 in 2,380).⁸

The chance of HIV being passed on during oral sex is very low. There may be a small likelihood of HIV transmission during receptive fellatio (giving head), especially if there are wounds or cuts in the mouth (estimated at between 0 and 1 in 2,500).⁸ There are no reliable reports of HIV being transmitted during insertive fellatio (receiving head) or cunnilingus (eating out or being eaten out).

The likelihood of HIV being passed on during sex is also affected by things like:

- Protective measures such as PrEP and condoms.
- If a partner has an unknown HIV status, the prevalence of HIV in their community affects the chance of HIV being passed on.
- Frequency of exposure increases the likelihood (the more often an activity is done, the higher the likelihood of HIV being passed on).

For information on HIV and STIs for women who only have sex with women, please see question 2.

Q10. Can we use U=U messaging in non-sexual contexts?

'U=U' stands for 'Undetectable equals Untransmittable'. It means that effective HIV treatment reduces the amount of HIV in the body (also called viral load) to an undetectable level. Having an undetectable viral load means there's no chance of passing on HIV during sex.

U=U only applies to sex. It doesn't apply to transmission through other routes, such as pregnancy, birth, breastfeeding, injecting drugs and blood donations. However, having an undetectable viral load is still important in all these cases. That's because it greatly reduces the likelihood of transmission, even though it doesn't reduce it to zero as it does with sex.

Pregnancy and birth

U=U does not apply to pregnancy and birth. But with effective treatment, the likelihood of passing on HIV during pregnancy and birth is very low. Having an undetectable viral load when giving birth means there's an 0.1% chance of passing on HIV.⁹ That means HIV is passed on to 1 in 1,000 children.

Breastfeeding

U=U does not apply to breastfeeding. Having an undetectable viral load reduces the likelihood of passing on HIV during breastfeeding greatly. However, it does not eliminate it entirely.

The most recent study shows that the chance of passing on HIV is 0.3% after six months of breastfeeding (3 in 1,000 babies) and 0.6% after 12 months (6 in 1,000 babies) when taking HIV treatment.¹⁰ But more research is needed to confirm these numbers.

In the UK, using formula milk is recommended as the safest option for feeding a baby.

Injecting drugs

U=U does not apply to injecting drugs. Having an undetectable viral load greatly reduces the likelihood of passing on HIV when sharing needles or other equipment, but it doesn't reduce it to zero. There's not been enough research to confirm the exact likelihood of passing on HIV when injecting drugs with an undetectable viral load.

Blood donation

U=U does not apply to blood donations. In the UK, you're not eligible to donate blood if you've ever been diagnosed with HIV, even if you have an undetectable viral load. That's because very large volumes of blood are transferred in a transfusion, which may increase the likelihood of the virus being passed on.

With thanks to Aliya Yule, Greg Owen, Gus Cairns, Juddy Otti, Kate Nambiar, Michelle Ross, Sheena McCormack and Will Nutland.

Written by Laura Ohlmeier. May 2024.



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References

1 Marzinke, M. A., et al. (2023). Efficacy, safety, tolerability, and pharmacokinetics of long-acting injectable cabotegravir for HIV pre-exposure prophylaxis in transgender women: a secondary analysis of the HPTN 083 trial. *The Lancet HIV*, 10 (11), e703-e712.

2 Cirrincione, L. R., et al. (2020). Drug interactions with gender-affirming hormone therapy: focus on antiretrovirals and direct acting antivirals. *Expert Opinion on Drug Metabolism & Toxicology*, 16 (7), 565-581.

3 Palfreeman, A., et al. (2020). British HIV association/British association for sexual health and HIV/British infection association adult HIV testing guidelines 2020. *HIV medicine*, *21* (S6), 1-26.

4 Mwinnyaa, G., et al. (2020). HIV serologically indeterminate individuals: future HIV status and risk factors. Plos one, 15 (8), e0237633.

5 Hunt, J. H., et al. (2024). Longitudinal patterns in indeterminate HIV rapid antibody test results: a population-based, prospective cohort study. *Microbiology Spectrum*, 12 (2), e03253-23.

6 Rodger, A. J., et al. (2016). Sexual activity without condoms and risk of HIV transmission in serodifferent couples when the HIV-positive partner is using suppressive antiretroviral therapy. Jama, 316 (2), 171-181.

7 Rodger, A. J., et al. (2019). Risk of HIV transmission through condomless sex in serodifferent gay couples with the HIV-positive partner taking suppressive antiretroviral therapy (PARTNER): final results of a multicentre, prospective, observational study. *The Lancet, 393* (10189), 2428-2438.

8 Patel, P., et al. (2014). Estimating per-act HIV transmission risk: a systematic review. Aids, 28 (10), 1509-1519.

9 Gilleece, Y., et al. (2019). British HIV Association guidelines for the management of HIV in pregnancy and postpartum 2018. HIV medicine, 20 (S3), S2-S85.

10 Flynn, P. M., et al. (2018). Prevention of HIV-1 transmission through breastfeeding: efficacy and safety of maternal antiretroviral therapy versus infant nevirapine prophylaxis for duration of breastfeeding in HIV-1-infected women with high CD4 cell count (IMPAACT PROMISE): a randomized, open-label, clinical trial. *JAIDS Journal of Acquired Immune Deficiency Syndromes*, 77 (4), 383-392.