

## Doxy-PEP: medication to prevent syphilis, chlamydia, and gonorrhea.

Doxy-PEP is a new sexual health strategy to prevent bacterial STIs. By taking a commonly used antibiotic called doxycycline after sex, you can significantly reduce your chances of getting syphilis, chlamydia and gonorrhea.



Doxy-PEP can safely be taken alongside medication to prevent or treat HIV. But, doxy-PEP does NOT help prevent HIV and uses a different type of drug compared to HIV PrEP and HIV PEP.

How do I  
know if  
doxy-PEP  
is for me?



Current evidence only supports the use of doxy-PEP in people assigned male at birth. This may change in the future as clinical trials are published with data on cis women, trans men, and other gender diverse people. Based on current evidence, you may find doxy-PEP particularly helpful if you were assigned male at birth and:

- You have been diagnosed with chlamydia, gonorrhea, and/or syphilis in the last 12 months;
- You haven't had a recent STI but feel at risk of one (for example, because you have multiple sexual partners);
- You don't always use condoms as an STI prevention strategy;
- You are already taking HIV PrEP.

# How do I take doxy-PEP?

While some planning is required, taking doxy-PEP is as simple as 3,2,1!



Take it within **3 days**,  
or 72 hours, after  
condomless sex.



Just take **2 pills**,  
or 200 mg, of  
doxycycline.



**1 time a day**,  
or no more than  
200 mg per day.

If you have condomless sex again within 24 hours of taking doxycycline, take another two pills, or 200 mg, 24 hours after your last dose.

When taking doxy-PEP, you should also keep in mind that:

- The sooner you can take doxy-PEP after sex, the better (ideally within 24 hours).
- Do not take more than 200 mg in one day.
- To avoid possible side effects like nausea and headaches, take it with food and water, and stay upright for 30 minutes after taking it.
- Avoid dairy products, calcium, antacids, or multivitamins 2 hours before and after taking it.

# How effective is doxy-PEP?

Doxy-PEP greatly reduces the likelihood of getting syphilis and chlamydia and reduces the likelihood of gonorrhea to a lesser extent. In one recent study, doxy-PEP reduced the chances of getting syphilis, chlamydia, and gonorrhea (among those also taking HIV PrEP) by 87%, 88%, and 55% respectively<sup>1</sup>. While doxy-PEP doesn't prevent these infections every time, it still allows us to protect our sexual health and lower STI rates in our communities.

<sup>1</sup> Luetkemeyer AF, Donnell D, Dombrowski JC, Cohen S, Grabow C, Brown CE, et al. Postexposure Doxycycline to Prevent Bacterial Sexually Transmitted Infections. *N Engl J Med*. 2023;388(14):1296-1306. doi: 10.1056/NEJMoa2211934



## Doxy-PEP versus doxy-PrEP

While doxy-PEP involves taking medication after sex using the 3-2-1 method, doxy-PrEP involves taking one pill per day continuously. Research is ongoing to determine if doxy-PrEP works as well as doxy-PEP.

## Are there any risks or side effects to taking doxy-PEP?

Doxy-PEP is generally well tolerated, but possible side effects include:

- Nausea, stomach aches, or diarrhea;
- Allergic reaction or rash;
- Sensitivity to the sun.

Very rarely, people can have more serious side effects like a bad headache or vision changes. If you experience this, contact your healthcare provider. Checking in with your healthcare provider regularly can help manage any side effects you may encounter.

**Remember:** Reduce side effects like nausea by taking doxy-PEP with food and water, and staying upright for 30 minutes after taking it. Wearing sunscreen or avoiding extended time in the sun will help avoid skin irritation.



## How much does doxy-PEP cost?

Public insurance coverage for doxycycline varies by province, but most private insurance plans will cover the prescription. If you are not covered, a 30-tablet prescription of doxycycline typically costs around \$30-\$35 per month. Doxycycline is also covered under non-insured health benefits, offered by Indigenous Services Canada. In British Columbia, doxy-PEP is available for free to those already accessing HIV PrEP or HIV treatment.



# How do I get doxy-PEP?

To get on doxy-PEP, you will need to speak to a healthcare provider and get a prescription. If you don't feel comfortable talking to your family doctor about doxy-PEP or if you do not have a family doctor, there may be sexual health clinics nearby that can help. Follow the checklist below to get started.

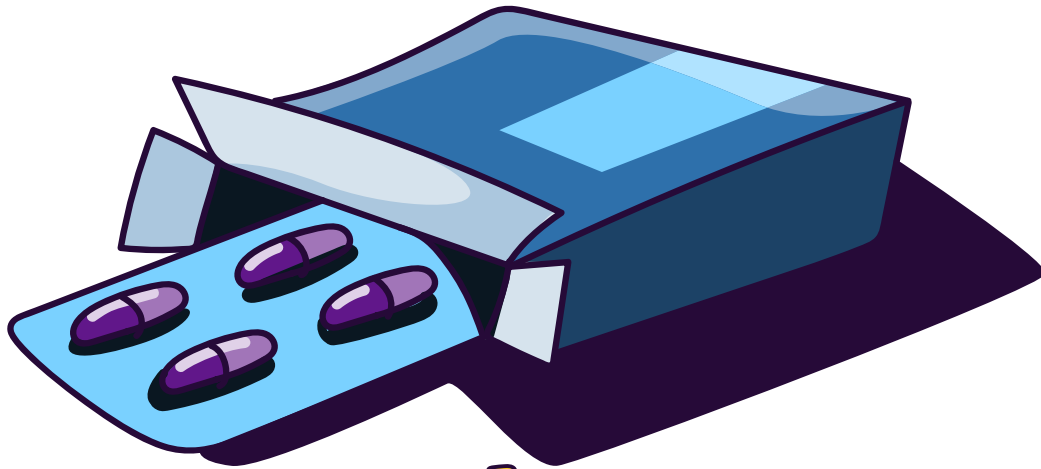
1. Think about your reasons for wanting to take doxy-PEP. This can help you communicate with your healthcare provider.
2. Read the section below, "Talking to healthcare providers" and book an appointment with your local sexual health clinic, your family doctor or another provider you trust.
3. Attend your appointment. Be prepared that you may need to teach your healthcare provider about doxy-PEP. It's also possible they won't be comfortable prescribing it right away.

## **If your healthcare provider is ready to prescribe doxy-PEP...**

They will likely arrange for STI testing and bloodwork. Once you receive a prescription, you should be able to fill it at any pharmacy. Keep the bottle in your medicine cabinet or on your nightstand until you need it!

## **If your healthcare provider is not ready, or not willing, to prescribe doxy-PEP...**

1. You can try asking them again, once they have had time to review the evidence. For many healthcare providers, doxy-PEP is a new concept and they may not have prescribed it before.
2. You can direct healthcare providers to resources on doxy-PEP, including those captured in the 'For Healthcare Providers' section of this guide.
3. If your regular healthcare provider doesn't want to prescribe doxy-PEP, you can also make an appointment with a different provider, or ask a sexual health clinic or local community-based organization for support.



### **Tip:**

If you take HIV PrEP, keep your doxy-PEP near your PrEP as a reminder that it's there when you need it.

# Talking to Healthcare Providers

Navigating the healthcare system can be challenging. When it comes to doxy-PEP, not all healthcare providers will be familiar with this sexual health strategy, or feel comfortable prescribing doxycycline right away. You may have to speak up for yourself and advocate for your healthcare needs.

You don't need to have all the answers, but it may be helpful to think through the following scenarios and plan how you could respond.



**Your healthcare provider does not think you are at risk for STIs.**

**Possible response:** remind your healthcare provider that doxy-PEP is just another tool to protect yourself against STIs and can also lower anxiety related to sexual health. Even in cases where the risk for bacterial transmission is moderate or low at the individual level, doxy-PEP can help to reduce transmission in the community. Syphilis and other bacterial STIs are on the rise among GBT2Q people and doxy-PEP can help.

**Your healthcare provider is worried about antibiotic resistance.**

**Possible response:** Healthcare providers are often reminded to consider antibiotic resistance before prescribing antibiotics (like doxycycline). However, with doxycycline in particular, antibiotic resistance hasn't been observed in syphilis and chlamydia. Reports of antibiotic-resistant strains of gonorrhea are not a major concern to leading experts as doxycycline is not the primary drug to treat the infection. More information is available in the 'For Healthcare Providers' section.

**Your healthcare provider is unfamiliar with doxy-PEP or its effectiveness.**

**Possible response:** Point them to the 'For Healthcare Providers' section of this guide! If you have a good relationship with your healthcare provider, you can try asking them again for doxy-PEP once they have had time to review the evidence.

**Your healthcare provider thinks prescribing doxy-PEP will motivate you to stop using condoms.**

**Possible response:** Using a condom or not is a personal choice. The more STI prevention options people have, the easier it is for them to find options that work for them. You may want to remind your healthcare provider that condoms are not a surefire way to prevent syphilis transmission, and syphilis can be passed in other ways beyond anal and vaginal (frontal) sex. Doxy-PEP is not meant to replace condoms for everyone. Regardless of condom use, doxy-PEP is emerging as another effective prevention option for bacterial STIs.



**Tip:**

Advocating for your sexual health doesn't mean having to do it solo. If you're worried about talking to a healthcare provider, you can always bring a friend or loved one for moral support. Check out *The Care I Want*, an illustrated guide to navigating healthcare, for more self-advocacy tips.



**Next page:**  
**Information for healthcare providers**

Share this section of the guide with your healthcare provider when you talk about doxy-PEP.





# For Healthcare Providers

Recent clinical trials demonstrate that doxycycline post-exposure prophylaxis (doxy-PEP) is effective in preventing syphilis, chlamydia and gonorrhea in gay, bisexual and other men who have sex with men (gbMSM) as well as transgender women.

## The basics: Prescribing doxycycline as prophylaxis for syphilis, chlamydia and gonorrhea

- a. Doxy-PEP consists of a 200mg dose of doxycycline taken within 72 hours following a sexual exposure. It is well tolerated with potential GI side effects and possible risk for photosensitivity.
- b. Doxy-PEP is intended for gbMSM and transgender women at risk for bacterial STIs, including those with a bacterial STI diagnosis in the previous year.
- c. Provide a 30-tablet prescription (with refills), with the instructions that 200 mg of doxycycline (i.e. 2 x 100 mg pills) be taken within 72 hours of condomless sex. No more than one dose should be taken per day.
- d. Clinical follow-up while on doxy-PEP should include:
  - Baseline and regular (e.g. quarterly) STI screening
  - Assessment and mitigation of HIV risk if HIV-negative (e.g., provision of HIV PrEP)
  - Counselling around potential side effects, dosing, and drug interactions
  - Necessary monitoring during use (e.g., periodic routine bloodwork including complete blood count, renal and liver function tests).
  - Doxycycline is available in both tablet and capsule form. For patients experiencing side effects from this medication, consider switching them to the other form (i.e., tablet or capsule).

Doxy-PEP is an evidence-based prevention strategy for sexually transmitted infections such as chlamydia and syphilis. In a landmark clinical trial, regular use of Doxy-PEP reduced the risk of these infections by about 80%. This prevention strategy has been endorsed by the US CDC and is supported as a public program in BC for GbMSM on HIV pre-exposure prophylaxis (PrEP) or living with HIV. All sexually active gbMSM should be assessed for both HIV PrEP and Doxy-PEP eligibility.

– Dr. Mark Hull, Research Scientist, BC Centre for Excellence in HIV/AIDS and Clinical Assistant Professor, UBC

**Access training  
on doxyPEP here:**



## Additional considerations

- **Offer doxy-PEP as part of comprehensive sexual health services, and support patients to make informed decisions about the full spectrum of prevention options available to them**, including alternatives to doxy-PEP (e.g., condom use), STI testing and treatment, HIV pre-exposure prophylaxis (PrEP) and emergency post-exposure prophylaxis (PEP), HIV testing, HIV treatment for people with HIV, and STI vaccines (e.g., human papillomavirus, hepatitis A, hepatitis B, and Mpox vaccines).
- Doxycycline is available in both tablet and capsule form. For patients experiencing side effects from this medication, consider switching them to the other form (i.e., tablet or capsule).

Learn more about doxy-PEP, including clinical trial results and comments on antimicrobial resistance, in a recent position paper<sup>2</sup> from The British Columbia Centre for Disease Control, and an evidence summary<sup>3</sup> produced by the Ontario HIV Treatment Network. Clinicians in BC can also access the doxy-PEP enrolment and prescription form at <https://bccfe.ca/doxycycline-for-sti-prevention>.

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2 British Columbia Centre for Disease Control. 2023. BCCDC Position Statement on Doxycycline as Prophylaxis for Sexually Transmitted Infections. available at: <https://smartsexresource.com/for-health-providers/sti-updates/2023/11/the-bccdc-position-statement-on-doxycycline-as-prophylaxis-for-sexually-transmitted-infections/#:-:text=Recent%20clinical%20trials%20show%20that,i.e.%20in%20the%20previous%20year>.

3 Rapid Response Service. Doxycycline prophylaxis for the prevention of bacterial sexually transmitted infections (STIs). Toronto, ON: The Ontario HIV Treatment Network; March 2023. available at <https://www.ohrn.on.ca/rapid-response-doxycycline-prophylaxis-for-the-prevention-of-bacterial-sexually-transmitted-infections>.