

# **Doxycycline as STI PEP**

#### What is Doxycycline as STI PEP?

Doxycycline as sexually transmitted infection post-exposure prophylaxis (STI PEP) or doxycycline postexposure prophylaxis (doxyPEP) is a new and effective way to prevent bacterial STIs (syphilis, gonorrhea, or chlamydia). By taking the antibiotic doxycycline ideally within 24 hours, but no later than 72 hours, after condomless oral, anal, or vaginal sex, you can potentially reduce your risk of getting a bacterial STI.

### How effective is Doxycycline as STI PEP?

Research has found that doxycycline as STI PEP reduced syphilis by 87%, chlamydia by 88%, and gonorrhea by 55% in people taking HIV PrEP. Moreover, doxycycline as STI PEP reduced syphilis by 77%, chlamydia by 74%, and gonorrhea by 57% in people living with HIV (PLWH). (Source: <u>N Engl J Med 2023; 388:1296-1306</u>)

### Can anyone use Doxycycline as STI PEP?

The research referenced above showed doxyPEP is effective for adult gay, bisexual, and other men who have sex with men (GBMSM), as well as transgender women. DoxyPEP should work for other groups of people, including cisgender women, men who have sex with women, and adolescents. Studies to prove this are ongoing.

# What do I need to know about Doxycycline as STI PEP and STI testing?

If you are using doxycycline as STI PEP, you should still engage in regular sexual health testing, including being screened for gonorrhea, chlamydia, syphilis, and HIV (if not known to be living with HIV) every three months. If you are using doxycycline as STI PEP and diagnosed with an STI, you will need treatment.

#### How can I protect myself from other STIs?

- DoxyPEP only works against bacterial STIs.
- HIV PrEP prevents HIV infection and can be taken with doxycycline. For PLWH, it's safe to take doxycycline and HIV ART.
- Mpox and HPV (genital warts) can be prevented through vaccination. There are vaccines against hepatitis A and B that are also recommended.

# How do patients use Doxycycline as STI PEP?

- Take 200 mg (#2 100mg capsules or tablets) within 24 hours of unprotected oral, anal, or vaginal sex.
- Repeat dosing after each instance of unprotected sex, but not more than 200 mg within a 24-hour period.
- Take doxycycline with a full glass of water and remain sitting up for at least 30 minutes afterwards to prevent throat irritation.
- Swallow whole. Do not chew or crush.
- If doxycycline upsets your stomach, you may take it with food.

# What are the side effects of doxycycline?

Most side effects of doxycycline are mild and usually do not require medical attention. Also, any side effects you may have often go away during treatment as your body adjusts to the medicine. However, check with your nurse or doctor if any of the following side effects continue or get worse:

\* Cramps \* Burning of the stomach

- \* Rash
- \* Diarrhea \* Increased sensitivity of skin to sunlight

\* Sore mouth or tongue

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#### \* Nausea or vomiting

### \* Itching of the rectal or genital area

Other side effects not listed above may also occur in some people. If you notice any other effects, check with your nurse or doctor.

Serious adverse reactions to doxycycline are rare. However, if you have any of the following reactions while taking Doxycycline, stop taking the medicine and go immediately to the emergency room:

\* Hives

#### \* Choking sensation \* Loss of consciousness

\* Wheezing

\* Difficulty breathing

# What should I tell the nurse or doctor before I take Doxycycline?

- If you have ever had any unusual or allergic reactions to doxycycline of any of the tetracyclines.
- If you are pregnant, doxycycline should not be taken during pregnancy because it may affect the unborn infant's teeth. It may also slow down the growth of the infant's bones if taken during pregnancy.
- If you are breastfeeding. Doxycycline passes into the breast milk and may affect the infant's teeth and bones.
- If you have liver disease.
- If you are taking any other prescription or non-prescription medicine, especially:
- \* Antacids \* Medicine that contains iron \* Laxatives that contains magnesium \* Calcium supplements \* Birth control pills

## What precautions should I take while using Doxycycline?

- Birth control pills may not work as well when you are taking doxycycline. You should use another method of birth control, such as condoms, in addition to taking your birth control pills.
- Do not take antacids, calcium supplements, iron, or laxatives containing magnesium within two to three hours of the time you take Doxycycline. These medicines keep doxycycline from working as well.
- Avoid too much sun and do not use a sunlamp or tanning bed while taking doxycycline. Doxycycline can make your skin sensitive to sunlight and possibly cause severe burns.
- You may develop symptoms of a STI despite having taken DoxyPEP. Get tested if you have symptoms and follow treatment recommendations. Do not use DoxyPEP until you have completed STI treatment.
- Keep this medicine out of the reach of children. Doxycycline can be harmful to children.
- Do not share this medicine with anyone. Doxycycline can cause problems in some people, especially pregnant women and women who are breastfeeding.