July 15, 2024

Dear Colleagues,

Please join me and our health care colleagues across the state in using doxycycline for postexposure prophylaxis to prevent bacterial STI infections. On June 4, 2024, CDC released The Guidelines for the Use of Doxycycline Postexposure Prophylaxis for Bacterial Sexually Transmitted Infection (STI) Prevention. Use of doxycycline for PEP, known as doxy PEP, has been reported as tolerated and to significantly reduced the acquisition of chlamydia (CT), gonorrhea (GC), and syphilis when taken within 72 hours after condomless oral, anal, or vaginal sex. Please review and adopt CDCs recommendation and considerations for doxy PEP and consider the best practices and additional local resources from WA DOH included in this letter.

Dosing and Prescribing Key Points

- 200 mg of doxycycline should be taken ideally within 24 hours but no later than 72 hours after condomless oral, anal, or vaginal sex. (Regimen graphic).
- Doxycycline can be taken as often as every day, depending on frequency of sexual activity, but individuals should not take more than 200 mg within a 24-hour period.
- Take doxycycline with fluids and remain upright for 30 minutes after the dose. Taking doxycycline with food may increase tolerability.
- Either doxycycline hyclate OR doxycycline monohydrate immediate release 100 mg tabs (2 tabs taken simultaneously) are acceptable.
- Do not take concurrently with polyvalent cations such as iron and calcium carbonate. Take doxycycline at least 1 hour before or 2 hours after antacids, calcium or iron containing products.
- No laboratory monitoring is needed with doxy PEP.

The Washington State Department of Health (WA DOH) recommends these best practices for supporting patients in doxy PEP use:

- 1. **Health Equity Considerations for doxy PEP:** Lessons learned from the introduction of PrEP for HIV and Jynneos as the Mpox vaccine demonstrate that an effective introduction of doxycycline as STI PEP will require careful attention to health equity:
 - During the 2022 Mpox Outbreak, public health officials learned that excessive vaccine restrictions based on sexual behavior deterred some people from getting the mpox vaccine. Remember that patients may not be willing to divulge sensitive information about sexual behavior because of stigma.
 - Doxycycline as STI PEP is a new intervention. Some patients may have heard about it in the
 news while others may not know about it. Proactively informing patients rather than waiting
 for them to request it can facilitate more equitable distribution of doxycycline as STI PEP.
- 2. **Inform and consult patients on doxy PEP.** Doxy PEP may be effective for all people who have oral and anal sex with people with a penis regardless of gender identity and sex assigned at birth. It may be particularly indicated for those who have recent or frequent exposure to STIs, particularly syphilis.
- 3. Offer doxy PEP using shared decision-making to all non-pregnant individuals and those not wishing to become pregnant at increased risk for bacterial STIs and to those requesting doxy PEP, even if these individuals have not been previously diagnosed with an STI or have not disclosed their risk status.
- 4. Assess for the need of HIV PEP, HIV treatment, and consult for HIV Prep. As appropriate, initiate HIV PEP within 72-hours to prevent infection and rapid start treatment regimens. Coordinate with your <u>local health department</u>, Emergency Department, or <u>Prevention Services Partner</u> to ensure prompt and comprehensive prevention measures are taken.
- Partner with the DOH to help remove and reduce financial barriers. Become a contacted provider with Client Services for <u>Early Intervention Program</u> (EIP) and the <u>PrEP Drug Assistance Program</u> (PrEP DAP)
- 6. **ICD-10 diagnosis code, Z20.2, is recommended** (Contact with and [suspected] exposure to infections with a predominantly sexual mode of transmission).

CDC recommendation* for use of doxycycline as postexposure prophylaxis for bacterial sexually transmitted infections prevention

• Providers should counsel all gay, bisexual, and other men who have sex with men (MSM) and transgender women (TGW) with a history of at least one bacterial sexually transmitted infection (STI) (specifically, syphilis, chlamydia or gonorrhea) during the past 12 months about the benefits and harms of using doxycycline (any formulation) 200 mg once within 72 hours (not to exceed 200 mg per 24 hours) of oral, vaginal, or anal sex and should offer doxycycline postexposure prophylaxis (doxy PEP) through shared decision-making. Ongoing need for doxy PEP should be assessed every 3–6 months.

• No recommendation can be given at this time on the use of doxy PEP for cisgender women, cisgender heterosexual men, transgender men, and other queer and nonbinary persons.

Considerations for ancillary clinical services to provide to persons receiving doxycycline postexposure prophylaxis for the prevention of syphilis, chlamydia, and gonorrhea.

At initial postexposure prophylaxis (PEP) visit

- Screen and treat as indicated for sexually transmitted infections (STIs) (obtain nucleic acid amplification test for gonorrhea and chlamydia at anatomic sites of exposure and serologic testing for syphilis). For persons without HIV infection receiving HIV pre-exposure prophylaxis (PrEP), screen per CDC HIV PrEP guidelines (https://www.cdc.gov/hiv/pdf/risk/prep/cdc-hiv-prep-guidelines-2021.pdf). For persons without HIV infection not receiving HIV PrEP, consider screening for HIV infection every 3–6 months.
- Counsel on use of prevention strategies including condom use, consideration of reducing the number of partners, and accessing HIV PEP, PrEP or HIV treatment as indicated.
- Counseling should include:
 - A discussion of the benefits and potential harms of doxycycline PEP including known side effects such as photosensitivity, esophagitis and esophageal discomfort, gastrointestinal intolerance (nausea, vomiting, and diarrhea), and the potential for the development of antimicrobial resistance in other pathogens and commensal organisms and changes in the microbiome and the unknown long-term effects that might cause.
 - Guidance on actions to take to mitigate potential side effects including taking doxycycline on a full stomach with a full glass of liquid and avoiding lying down for 1 hour after taking doxycycline to prevent esophagitis.
 - The need to take doxycycline exactly as individually prescribed and only for its intended purpose. Patients should not take more than 200 mg of doxycycline per 24 hours; doses should be taken as soon after sex as possible, but no later than 72 hours.
 - Counsel on potential drug interactions including the importance of separating the doxycycline dose by at least 2 hours from dairy products, antacids, and supplements that contain calcium, iron, magnesium, or sodium bicarbonate. No clinically relevant interactions between doxycycline and gender-affirming hormonal therapy are likely.

^{*}Although not directly assessed in the trials included in these guidelines, doxy PEP could be discussed with MSM and TGW who have not had a bacterial STI diagnosed during the previous year but will be participating in sexual activities that are known to increase likelihood of exposure to STIs.

- Because doxycycline interacts with other drugs, providers should review patient's medication list, including over the counter medications, to assess for possible drug interactions.
- Provide enough doses of doxycycline to last until the next follow-up visit, based on individual behavioral assessment through shared decision making.

At follow-up visits

- Screen for gonorrhea and chlamydia at anatomic sites of exposure and syphilis every 3–6
 months per CDC STI treatment guidelines recommendations for screening men who have sex
 with men and transgender women.
- For persons without HIV receiving HIV PrEP, screen per CDC HIV PrEP guidelines (https://www.cdc.gov/hiv/pdf/risk/prep/cdc-hiv-prep-guidelines-2021.pdf). For persons without HIV infection not receiving HIV PrEP, consider screening for STIs and HIV infection every 3–6 months. Assess for the need for HIV PEP and encourage the use of HIV PrEP.
- Confirm or encourage linkage to HIV care for persons living with HIV infection.
- Assess for side effects from doxycycline.
- Provide risk reduction counseling and condoms.
- Re-assess continued need for doxy PEP.
- Provide enough doses of doxycycline until next follow-up visit, based on individual behavioral assessment through shared decision-making.

Additional services to consider

- Screen for hepatitis B and C infection; vaccinate against hepatitis B if susceptible. Administer other vaccines as indicated (mpox, hepatitis A, and human papillomavirus).
- Refer for comprehensive primary care, mental health services, substance use treatment, and other services as appropriate.

STIs are pervasive and increasing rapidly in the U.S., and doxy PEP has demonstrated substantial benefit in reducing new chlamydia, gonorrhea, and syphilis infections. Statewide STI trends mirror the rise inf STI rates in the U.S., with noteworthy racial and ethnic disparities persisting among American Indian/Alaska Native, Black, Native Hawaiian or Pacific Islander, and Hispanic/Latina/o/x populations as compared to their white counterparts. When offered, doxy PEP should be implemented in the context of comprehensive sexual health. The guidelines released by CDC and WA DOH represent a new approach to addressing STI prevention.

Thank you for your partnership in making this emerging STI prevention intervention available to address the increase in STI rates across the state. Please contact us as questions arise for your practice.

Very Sincerely,

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Resources:

On June 4, 2024, Centers for Disease Control and Prevention (CDC) released <u>Guidelines for the Use of Doxycycline Postexposure Prophylaxis for Bacterial Sexually Transmitted Infection (STI) Prevention</u>, which offers an important resource for healthcare providers to inform the use of Doxy PEP for preventing bacterial STI infections.

<u>Seattle & King County Doxy PEP guidelines-June 2023</u>. Additional Doxy PEP guidance documents have been released by the <u>San Francisco Department of Public Health</u>; <u>California Department of Health</u>; and <u>Oregon Health Authority</u>.

The San Francisco City Clinic has published <u>patient-facing materials</u> that providers can use when talking to patients about doxy PEP. Providers can consult the <u>National STD Clinical Consultation Network</u> or contact resources within their facility or network where expertise is available.

<u>AETC Coordinating Resource Center's HIV PrEP and DoxyPEP</u> reviews the indications and contraindications on use of different types of pre-exposure prophylaxis (PrEP), potential use for doxycycline as postexposure prophylaxis (PEP) for bacterial sexually transmitted infections (STI), as well as a discussion on challenges to the uptake of HIV and STI prevention strategies.

Additional Resources:

- <u>Doxycycline Postexposure Prophylaxis (Doxy PEP) | Washington State Department of Health</u>
- Luetkemeyer et al. <u>Postexposure Doxycycline to Prevent Bacterial Sexually Transmitted Infections</u>. N Engl J Med. 2023;388(14):1296-1306. doi:10.1056/NEJMoa2211934
- Washington State STI Epidemiological Profile
- "Doxycycline postexposure prophylaxis for STI prevention among MSM and transgender women on HIV PrEP or living with HIV: high efficacy to reduce incident STI's in a randomized trial." AIDS 2022:
 - https://programme.aids2022.org/Abstract/Abstract/?abstractid=13231
- CDC STI Treatment Guidelines (2021)
- Washington State PrEP Drug Assistance Program
- ArrayRx Washington Prescription Drug Discount Card