



Public Health, Policy & Planning 225 37th Ave San Mateo, CA 94403

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Dear Colleagues:

Recent San Francisco data reported at Conference on Retrovirus and Opportunistic Infections (CROI) (refs 1-5) show significant Syphilis and Chlamydia decreases since doxy- PEP launched in San Francisco October 2022. The California Department of Public Health (CDPH) shared doxy-PEP guidance on April 28, 2023. CDPH Doxy-PEP Recommendations for Prevention of STIs

San Mateo County Health encourages clinicians to offer doxy- PEP to men who have sex with men and trans women who have had a bacterial STI in the last year. While resistance data on use of doxy-PEP on Neisseria gonorrhea, Staphylococcal aureus, and other bacteria in the microbiome emerge (see current resistance summary in NIH and CDC doxy-PEP guidelines below), we agree doxy-PEP is an important STI prevention tool which has the potential to bridge STI disparities and morbidity.

Recommendations

- Recommend doxy-PEP to cis men and trans women who: 1) have had a bacterial STI in the past year and
 2) report condomless anal or oral sexual contact with ≥ 1 cis male or trans female partner in the past year. These were the eligibility criteria used for the DoxyPEP study. Patients with a history of syphilis should be prioritized for doxy-PEP.
- Offer doxy-PEP using shared decision making to cis men and trans women who report having multiple
 cis male or trans female sex partners in the prior year, even if they have not previously been diagnosed
 with an STI.
- A randomized controlled trial in Kenya assessed the safety and efficacy of doxy-PEP in cis women. At this
 time, there is insufficient evidence to recommend doxy-PEP for STI prevention for individuals who
 report receptive vaginal sex. If used in people who are able to become pregnant, pregnancy testing
 should be conducted as doxycycline use should be avoided during pregnancy.
- When initiating doxy-PEP, discuss the following key points with patients:
 - Efficacy from a single randomized trial:
 - In persons taking HIV PrEP, doxy-PEP reduced syphilis by 87%, chlamydia by 88% and gonorrhea by 55%.
 - In persons living with HIV, doxy-PEP reduced syphilis by 77%, chlamydia by 74% and gonorrhea by 57%.
 - Efficacy against other bacterial STIs is not known, and doxy-PEP does not prevent HIV, monkeypox (MPX) or other viral infections, for example HPV and HSV.





Dosing and prescribing:

- 200 mg of doxycycline should be taken ideally within 24 hours but no later than 72 hours after condomless oral, anal or vaginal sex.
- 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.
- Either doxycycline hyclate delayed release 200 mg (1 tab) OR doxycycline hyclate or monohydrate immediate release 100 mg (2 tabs taken simultaneously) are acceptable.
- Immediate release may be less expensive than delayed release and should be equivalently bioavailable.
- For ICD10 diagnosis code, use Z20.2 (Contact with and (suspected) exposure to infections with a predominantly sexual mode of transmission).

Counseling messages:

- People taking doxycycline should be counseled about possible drug interactions, risk of sun sensitivity, remaining upright for 30 minutes after taking doxycycline to reduce the risk of pill esophagitis, and the rare risk of benign intracranial hypertension and other serious side effects.
- Study data on the impact of doxy-PEP on antibiotic resistance and the gut microbiome are being collected and reviewed.
- Impacts of long-term use of doxy-PEP for STI prevention for individual patients and for population-level rates of antimicrobial resistance are unknown, but doxycycline has been previously used safely for long-term prophylaxis of malaria.

Monitoring while taking doxycycline:

- Per the doxycycline package insert, LFTs, renal function and a CBC should be checked periodically in patients taking doxycycline for a prolonged period. LFTs and CBCs were monitored in the DoxyPEP study, and there were no laboratory-related severe adverse events. Consider checking these laboratory parameters annually, particularly in individuals with a history of liver disease.
- Persons taking doxy-PEP should be screened every three months for gonorrhea and chlamydia at all anatomic sites of exposure, syphilis, and HIV (if not known to be living with HIV).
- If a patient is diagnosed with an STI while using doxy-PEP, they should be treated according to standard CDC STI treatment guidelines.





• Further implementation guidance here: www.ncsddc.org/resource/doxy-as-sti-pep-command-center

References and Implementation Resources

Luetkemeyer A et al. *Sustained reduction of bacterial STIs during the DoxyPEP study open-label extension*. Conference on Retroviruses and Opportunistic Infections, Denver, abstract 125, 2024. View the abstract on the conference website.

Scott H et al. *Doxycycline PEP: High uptake and significant decline in STIs after clinical implementation*. Conference on Retroviruses and Opportunistic Infections, Denver, abstract 126, 2024. View the abstract on the conference website.

Sankaran M et al. *Doxy-PEP associated with declines in chlamydia and syphilis in MSM and trans women in San Francisco*. Conference on Retroviruses and Opportunistic Infections, Denver, abstract 127, 2024. View the abstract on the conference website.

Liu A et al. *Bacterial STI trends associated with the October 2022 doxy-prophylaxis recommendation, San Francisco*. Conference on Retroviruses and Opportunistic Infections, Denver, abstract 1150, 2024. View the abstract on the conference website.

Bacon O et al. *Doxy-PEP effectiveness in men who have sex with men (MSM) and transgender women (TGW) on HIV PrEP*. Conference on Retroviruses and Opportunistic Infections, Denver, abstract 1151, 2024. View the abstract on the conference website.

- NIH DoxyPEP Guidance
- CDC DoxyPEP Guidelines

Timeline of Bay Area Regional Counties and CDC/CDPH Initiation of Guidance

- CDC Response to DoxyPEP clinical data presented at 2022 AIDS Conference
- SFDPH Doxy PEP Health Update Oct 2022
- Alameda County DoxyPEP Information to Healthcare Providers Feb 2023
- Santa Clara County DoxyPEP Guidelines March 2023
- CDPH Doxy PEP Recommendations for Prevention of STIs April 2023

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