June 4, 2024

## CDC Issues Guidelines for Doxycycline Use in the Prevention of Bacterial Sexually Transmitted Infections (doxy PEP)

On June 4, 2024, the U.S. Centers for Disease Control and Prevention issued clinical guidelines for the use of doxycycline post-exposure prophylaxis (doxy PEP) for bacterial sexually transmitted infection (STI) prevention.<sup>1</sup> Because of increasing rates of bacterial STIs and the reported high efficacy for the reduction of STIs in the reviewed clinical trials, the potential benefits of doxy PEP are notable. Systematic reviews of potential harms appear low in the short-term and unknown but potentially concerning in the long-term. Overall, the intervention appears feasible and acceptable and will require a focused effort for equitable implementation.

## Summary:<sup>1</sup>

No vaccines and few chemoprophylaxis options exist for the prevention of bacterial STIs (specifically syphilis, chlamydia, and gonorrhea). These infections have increased in the United States and disproportionately affect gay, bisexual, and other men who have sex with men (MSM) and others. In three large randomized controlled trials, **200 mg of doxycycline taken within 72 hours after sex** has been shown to reduce syphilis and chlamydia infections by >70% and gonococcal infections by approximately 50%.

The <u>CDC Morbidity and Mortality Weekly Report</u> outlines recommendations for the use of doxy PEP, a novel, ongoing, patient-managed biomedical STI prevention strategy for a selected population. The CDC recommends that MSM and others who have had a bacterial STI (specifically syphilis, chlamydia, or gonorrhea) diagnosed in the past 12 months should receive counseling that doxy PEP can be used as postexposure prophylaxis to prevent these infections. Following shared decision-making with their provider, the CDC recommends that providers offer persons in this group a prescription for doxy PEP to be self-administered within 72 hours after having oral, vaginal, or anal sex. The recommended dose of doxy PEP is 200 mg and should not exceed a maximum dose of 200 mg every 24 hours.

Doxy PEP, when offered, should be implemented in the context of a comprehensive sexual health approach, including risk reduction counseling, STI screening and treatment, recommended vaccination and linkage to HIV PrEP, HIV care, or other services as appropriate. Persons who are prescribed doxy PEP should undergo bacterial STI testing at anatomic sites of exposure at baseline and every 3–6 months thereafter. Ongoing need for doxy PEP should be assessed every 3–6 months as well. HIV screening should be performed for HIV-negative MSM and TGW according to current recommendations.

## Conclusion:<sup>1</sup>

Doxy PEP has demonstrated benefit in reducing incident syphilis, chlamydia, and gonorrhea in certain

populations and represents a new approach to addressing STI prevention in MSM and others at increased risk for these infections. Certain ongoing studies are evaluating doxy PEP and PrEP, including the risk for the development of antimicrobial resistance. The available evidence in the context of increased national incidence

of syphilis, chlamydia, and gonorrhea supports consideration of this approach for MSM and others at substantial risk for acquiring bacterial STIs. These guidelines will be updated as additional data become available

U.S. Centers for Disease Control and Prevention. MMWR. CDC CDC Clinical Guidelines on the Use of Doxycycline Postexposure Prophylaxis for Bacterial Sexually Transmitted Infection Prevention, United States, 2024. Recommendations and Reports / June 6, 2024 / 73(2);1–8.