Joe Lombardo *Governor*

Richard Whitley, MS *Director*



DEPARTMENT OF HEALTH AND HUMAN SERVICES





Cody Phinney, MPH Administrator

Ihsan Azzam, Ph.D., M.D. Chief Medical Officer

TECHNICAL BULLETIN

DATE: September 24, 2024

TOPIC: CDC Clinical Guidelines on the Use of Doxycycline Postexposure Prophylaxis for Bacterial Sexually

Transmitted Infection Prevention, United States, 2024

AUTHOR: Jeanne Ruff, State Epidemiologist, Office of State Epidemiology

TO: Health Care Providers, Health Care Facilities and Local Health Authorities

SUMMARY

On June 6th, 2024, the U.S. Centers for Disease Control and Prevention (CDC) <u>released clinical guidelines</u> for the use of doxycycline post-exposure prophylaxis (doxy PEP) to prevent bacterial sexually transmitted infections (STIs) such as syphilis, chlamydia, and gonorrhea.

Doxy PEP has a demonstrated benefit in reducing incident syphilis, chlamydia, and gonorrhea in certain populations and represents a new approach to addressing STI prevention in men who have sex with men (MSM) and transgender women (TGW). Data cited in the guidelines shows that for high-risk populations there was a reduction in syphilis and chlamydia infections by >70% and gonococcal infections by approximately 50% when using doxy PEP.

Ongoing studies are being conducted to evaluate doxy PEP and PrEP, including the risk for the development of antimicrobial resistance. Currently, the available evidence in the context of increased national incidence of syphilis, chlamydia, and gonorrhea supports consideration of this approach for MSM and TGW at substantial risk for acquiring bacterial STIs. As such, the CDC recommends the following:

- Provide comprehensive preventative sexual health counseling and services to all sexually active
 individuals as indicated. This may include risk reduction counseling, screening for human
 immunodeficiency virus (HIV) and STIs, doxy PEP, HIV pre-exposure prophylaxis (Prep), HIV postexposure prophylaxis (PEP), vaccinations (e.g. Hepatitis A/B, Human Papilloma Virus, Mpox,
 Meningococcal/MenACWY), expedited partner therapy, contraception, linkage to care, and/or
 other interventions.
- 2. Providers are encouraged to discuss the benefits and potential harms of using doxy PEP with all gay, bisexual, and other MSM and TGW with a history of at least one bacterial STI (syphilis, chlamydia, gonorrhea) in the last 12 months.
- 3. Providers may also use a shared decision-making approach to discuss doxy PEP with MSM and TGW who have not had a bacterial STI diagnosed during the previous year but who will participate in sexual activities that are known to increase the likelihood of exposure to STIs.
- 4. If offering doxy PEP, healthcare providers should write a prescription for self-administration of the recommended dose of 200 mg of doxycycline (any formulation) to be taken as soon as possible

within 72 hours after having oral, vaginal, or anal sex with a maximum dose of 200mg every 24 hours. The prescription should account for enough doses on the basis of the person's anticipated sexual activity until their next visit. Ongoing need for doxy PEP should be assessed every 3-6 months.

TREATMENT, TESTING AND COUNSELING RECOMMENDATIONS

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-prepguidelines-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:
 - o 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.
- 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.

FOR MORE INFORMATION:

Additional information on doxy PEP and STI follow-up testing can be found online at:

- MMWR, CDC Clinical Guidelines on the Use of Doxycycline Postexposure Prophylaxis or Bacterial Sexually Transmitted Infection Prevention, United States, 2024
- CDC STI Screening Recommendations
- CDC Recommendations for HIV Screening of Gay, Bisexual, and Other Men Who Have Sex with Men

These guidelines will be updated as additional data become available.

Ouestions

For updated guidance, review the Division of Public and Behavioral Health Technical Bulletin web page regularly. Email stateepi@health.nv.gov for other questions regarding Bicillin® L-A Shortage and syphilis treatment.

Cody Phinney, MPH

Administrator

Division of Public and Behavioral Health

Ihsan Azzam, Ph.D., M.D. Chief Medical Officer

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