

Doxy-PEP Decision Making Tool

Doxy-PEP is 200mg of doxycycline taken after sexual contact by gay or bisexual men, or trans women to reduce risk of syphilis

1. Suitability



Gay and bisexual men and trans women¹ who

- Are at increased risk of syphilis (See *below*), or
- Are at increased risk of serious consequences of chlamydia² or syphilis, e.g.
 - Psychosocial consequences
 - Transmission to women (or person with a uterus).

And

- Have no contraindications to taking doxycycline³
- Makes an informed decision after considering risks and benefits to take doxy-PEP.

Population Risk Factors

Markers of syphilis/STI risk in gay and bisexual men and trans women to consider for doxy-PEP

- Recent diagnosis (e.g. within the last year) of infectious/early syphilis (e.g. primary, secondary or evidence of acquisition within two years)
- Recent diagnoses (e.g. two or more within in 12 months) of other bacterial STIs (e.g. gonorrhoea, chlamydia)
- Periods of increased risk (e.g. sex parties, chemsex, holidays)
- At risk-patients who have both cis male and partner/s with a uterus, to protect their partners from syphilis and chlamydia.

Opportunities to discuss risk and consider Doxy-PEP if:

- Starting or continuing HIV PrEP⁴
- Seeking STI testing because of risk⁵

2. Assessment and Testing



Part of a holistic and comprehensive sexual health approach including STI, HIV and blood-borne virus testing and vaccination which should include:

- [Assess and offer HIV pre-exposure prophylaxis \(PrEP\)](#) if there is an identified risk of HIV
- Provide referrals to HIV care for people living with HIV and encourage sustained engagement where appropriate
- Conduct testing for STIs and blood-borne viruses in line with the [Australian STI Management Guidelines](#)
- [Offer vaccinations as indicated](#) (mpox, hepatitis A and B, HPV)
- Patient education (See *Box 1*).

3. Prescribing Doxy-PEP



Explain dosing

200mg (2x100mg) tablets within 24 hours and no later than 72 hours after sexual contact. Doxy-PEP should be taken within 72 hours of sexual encounter(s), with a maximum dose of 200mg every 72 hours (See *Box 1 over page*).

Prescribe

Doxycycline 100mg tablet, 2 tablets PO, (200mg) within 24 hours (up to 72 hours), max 200mg/24h.

Quantity

- Only 7 tablets + 1 repeat are PBS subsidised (unrestricted)
- Estimate quantity based on expected frequency of use, patient wishes and duration of next review (e.g. median 10 tablets/month in studies, patient prefers enough to last until expected 6 month review = 60 tablets)
- Larger quantities can be prescribed as a private prescription for total quantity or for 28 tablets plus sufficient repeats.

4. Ongoing Monitoring



- [Ongoing/regular STI testing](#) (gonorrhoea, chlamydia, syphilis and HIV if not already HIV positive)
- No specific additional monitoring for those taking doxy-PEP (e.g. renal or liver) is required
- Review ongoing need for doxy-PEP and patient preferences. Consider duration of review for ongoing prescriptions (e.g. 6 months)

Box 1: Patient Education



- Doxy-PEP is not 100% effective: approximately 80% for syphilis and chlamydia, and much less or not effective against gonorrhoea. Continue to test for STIs, particularly syphilis and HIV.
 - Clinical need for, and ideal frequency of, testing for asymptomatic gonorrhoea and chlamydia is not known
 - HIV and syphilis blood testing have important clinical and public health benefits
- [Side effects and how to manage them](#) (e.g. reflux, nausea, rash/photosensitivity).

Antimicrobial resistance

- Normal body bacteria (skin, intestines) may develop resistance – the health impact is not known.
- Similar to other ongoing use indication for tetracyclines, taking doxy-PEP may contribute to overall antibiotic resistance in the community.

Box 2: STI results and diagnosis

Interpreting STI results and diagnosis and management of concurrent STIs:

No change with doxy-PEP

- Syphilis serology interpretation – [as per guidelines](#)
- Sexual contacts of syphilis – [treat as per guidelines](#)
- Test and manage sexual contacts of other bacterial STIs according to [guidelines](#), and wait for results in most cases, except when there has been recent contact with gonorrhoea.
- Anyone diagnosed with gonorrhoea should have a swab collected for gonococcal culture prior to the administration of antibiotics.
- Risk or sexual contact with HIV: [post-exposure prophylaxis \(PEP\)](#) and [pre-exposure prophylaxis \(PrEP\)](#) as per guidelines.

Box 3: Footnotes

1. *No data currently on effectiveness or dosing in cis women, trans men or other people who are assigned female at birth. There is evidence of effectiveness in heterosexual men, although syphilis or STI risk is usually much lower.*
2. *Asymptomatic chlamydia is clinically insignificant in most gay and bisexual men. However, in some people, symptomatic chlamydia might be a significant concern. For example, psychosocial consequences (e.g. anxiety about receiving an STI diagnosis), relationship circumstances, or potential for transmission to women (or other people with a uterus) who might experience severe clinical manifestations (including congenital syphilis or pelvic inflammatory disease).*
3. *Contraindications are uncommon and include (risk of) pregnancy and previous or anticipated severe adverse reactions to tetracyclines and/or doxycycline which cannot be managed or mitigated (including allergy, drug eruptions, photosensitivity or gastro-esophageal reflux).*
4. *Not all PrEP users are at increased risk of STI.*
5. *Many gay and bisexual men prefer to manage their risk through frequent STI testing rather than doxy-PEP.*

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