

Supporting Information 2

Supplementary material

This appendix was part of the submitted manuscript and has been peer reviewed.
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Appendix to: Bell SFE, Sweeney EL, Kong FYS, et al. Response to the ASHM 2023 statement on the use of doxy-PEP in Australia: considerations and recommendations. *Med J Aust* 2024; doi: 10.5694/mja2.52255.

Documents addressing the use of post-exposure prophylaxis for the prevention of sexually transmitted infections

Date	Author / Document Type	Region	Doxy-PEP status	Population coverage / Risk / Sexual partners	Dosing schedule	Duration of use	Counselling	Management / Monitoring	Surveillance / Reporting / Policy
2017 Nov #	Public Health England / BASHH (1)	National (UK)	Not endorsed	Clinical trial participants only	N/A	N/A	Initiate antibiotic treatment on positive test results only	N/A	N/A
	Position statement								
2019 March	Government of Alberta (2)	Province (Alberta, Canada)	Consider	Not specified Condomless vaginal/oral/anal sex	Prophylaxis should be as recommended for the treatment of specific infections	As per the specific infections treatment	Refer to Alberta Treatment Guidelines for Sexually Transmitted Infections in Adults and Adolescents, 2018	Refer to Alberta Treatment Guidelines for Sexually Transmitted Infections in Adults and Adolescents, 2018	Not specified
	Guideline								
2022 Apr	BASHH / UKHSA (3)	National (UK)	Not endorsed	Advice provided for clinicians with patients self-initiating STI prophylaxis	If using, doxycycline 200mg within 24 hours of condomless sex, maximum 600mg weekly i.e., PEP not PrEP	Not addressed	Doxy-PEP not recommended; no evidence for use of alternate antibiotics or for STIs other than CT/TP; pregnancy: doxycycline not safe-contraception; side effects	Routine review and document any antibiotic use; Monitor for adverse effects	Not specified
	Position statement								
2022 Oct	San Francisco Department of Public Health, USA (4)	County (SF, CA, USA)	Recommend	Cisgender men / transgender women with bacterial STI (prioritize TP history) & condomless anal/oral ≥ 1 Cisgender men / transgender women contact last 12 months	200 mg doxycycline within 24 hours (no later than 72 hours) of condomless oral/anal/vaginal sex; daily use if required, up to 200mg /24 hours; doxycycline hyclate or monohydrate acceptable	Not specified	Avoid pregnancy; efficacy; immediate release doxycycline less expensive; drug interactions, photosensitivity, pill esophagitis, other rare side effects; unknown effect on gut microbiome; long term individual and population AMR unknown.	Pregnancy test (patients able to conceive); annual FBC, LFT, RFT; 3-monthly STI screen (all exposure sites CT/NG NAAT, TP serology, HIV (if not PLWH) - treat as per guidelines; HIV PrEP / cabotegravir LA; U=U; vaccinations (Hep A/B, HPV, Mpox, MenACWY)	ICD10 diagnosis code (Z20.2)
			Offer with shared decision-making	Cisgender men / transgender women / transgender men with multiple cisgender men / transgender women partners last 12 months (+/- STI diagnosis)					
2022 Dec	International Antiviral Society-USA Panel, USA (5)	National (USA)	Case-by-case basis	High risk of acquiring TP, CT, NG	Not specified, reference to Doxy-PEP studies (200mg within 72 hours)	Not specified	Not specified	Not specified	Not specified
	Recommendations								

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2023 Apr	California Department of Public Health, USA (6) Recommendations	State (CA, USA)	Recommend	MSM / transgender women ≥1 bacterial STI in last 12 months	200 mg doxycycline within 24 hours (no later than 72 hours) of condomless oral/anal/vaginal sex; daily use if required, up to 200mg /24 hours	Not addressed	Preventative sexual health counselling and education (HIV/STI screening, doxy-PEP, HIV PrEP, HIV PEP, vaccination (Hep A/B, HPV, Mpox, MenACWY), expedited partner therapy, contraception/pregnancy; drug interactions, photosensitivity, pill esophagitis, other rare side effects	At doxy-PEP initiation and 3-monthly - CT/NG screen all exposure sites (urogenital, pharyngeal, and/or rectal), TP and HIV (if not known PLWH); treat diagnosed STI as per guidelines; pregnancy test; consider indications for FBC, LFT, RFT;	Not addressed
2023 Jun	Public Health Seattle and King County, Seattle, Washington, USA (7) Guidelines	County (King County, WA, USA)	Inform and discuss, shared decision-making	Cisgender men / transgender women who have sex with men with bacterial STI in previous 12 months, especially TP and/or multiple STI;	200 mg doxycycline within 24 hours (no later than 72 hours) of condomless oral/anal/vaginal sex; daily use if required, up to 200 mg /24 hours; doxycycline hyclate or monohydrate acceptable; consider episodic treatment for higher risk periods	Suggestion to prescribe 30 tablets with one repeat (equivalent to 30 individual doses), prescriber discretion	Efficacy; potential benefits and risks; unknown outcomes e.g., microbiome and AMR; dosing regimens; ongoing monitoring; alternative STI prevention, diagnosis, and treatment options; HIV PrEP, HIV treatment for PLWH, condoms, HIV/STI testing and treatment, and vaccines; Take with fluid, food increases tolerability; drug interactions and dose timing	Standard laboratory monitoring schedule not stated; STI testing and repeat prescription frequency based on provider discretion and patient expectations	ICD-10 diagnosis code (Z20.2)
			Not recommended	Cisgender women					
			Benefits unknown	Transgender men and other gender diverse people assigned female at birth					
2023 Aug	New Mexico Department of Health, USA (8) Health Emergency Management	State (New Mexico, USA)	Recommend	Men who have sex with men / transgender women ≥1 bacterial STI in last 12 months	200 mg doxycycline within 24 hours (no later than 72 hours) of condomless oral/anal/vaginal sex; daily use if required, up to 200mg /24 hours; doxycycline hyclate or monohydrate acceptable	1–3-month supply to meet patients expected use; no serious events from long term prophylactic use (e.g., malaria, acne)	Sexual health counselling and education (e.g., HIV/STI screening, HIV PrEP/PEP, immunisations, condoms, contraception) as appropriate; unknown effect on commensal AMR, gut microbiome and other STI	At doxy-PEP initiation and 3-monthly - CT/NG screen all exposure sites (urogenital, pharyngeal, and/or rectal), TP and HIV (if not known PLWH); treat diagnosed STI as per guidelines; pregnancy test; consider indications for FBC, LFT, RFT	Not specified
			Offer with shared decision-making	Non-pregnant people at increased risk for bacterial STI; people requesting doxy-PEP, regardless of STI history /disclosed risk					
2023 Aug	State Of Michigan Department of Health and Human Services (9) Memo to Health Dept. Medical Directors	State (Michigan, USA)	Recommend	Adult men who have sex with men and transgender women with >1 bacterial STI in last 12 months	200 mg doxycycline within 24 hours (no later than 72 hours) of condomless sex	Not specified	Referred to San Francisco Department of Public Health, USA (4) document	Referred to San Francisco Department of Public Health, USA (4) document	Not specified

Date	Author / Document Type	Region	Doxy-PEP status	Population coverage / Risk / Sexual partners	Dosing schedule	Duration of use	Counselling	Management / Monitoring	Surveillance / Reporting / Policy
2023 Sept	New York State Department of Health AIDS Institute, USA (10) Guidelines	State (New York, USA)	Offer	Cisgender men / transgender women taking or not taking HIV PrEP or people receiving HIV care and condomless sex with people assigned male at birth and bacterial STI in past 12 months and ongoing STI exposure risk	200mg doxycycline ideally within 24 hours up to maximum of 72 hours after condomless sex; maximum 200mg / 24 hour period	Up to maximum of 90 doses; equivalent duration of doxy-PEP as HIV PrEP supply (if taking); await screening results before repeat prescription	Doxy formulations and availability; contraindications, interactions, and dose adjustments; adverse effects; potential for AMR development	At least 3-monthly screening (HIV,CT,NG,TP); presumptive treatment if ≤60 days since contact with CT/NG or ≤90 days since contact with TP; offer HIV PrEP to people living without HIV; offer HIV treatment to PLWH; HIV PrEP, immunization; health promotion; annual FBC, LFT, RFT	Not specified
			Shared decision making (case-by-case)	Cisgender men engaging in condomless sex with multiple partners assigned female at birth and ≥1 STI in last 12 month					
2023 Sept	Australasian Society for HIV Medicine (ASHM), Australia (11) Consensus statement	National (Australia)	Consider ('primarily for syphilis prevention')	Gay and bisexual men who have sex with men (GBMSM) with: syphilis or ≥2 other bacterial STI past 12 months; period of heightened STI risk; concurrent male and partners with a uterus; presenting for HIV PEP	Single 200mg dose within 72 hours of risk; Doxy-PrEP not recommended but may be appropriate if daily risk exposures	Defined period with follow up review e.g., 3-6 months	Minimise use of Doxy-PEP e.g., single dose to cover up to 3 previous days of risk vs. 3 doses; personal and population AMR risks; no other antibiotic suitable for prevention	STI screening (CT/NG/TP) as per GBMSM guidelines (3-monthly) (ideal interval undetermined); test if symptomatic; culture prior to NG treatment; support access to HIV PrEP/treatment as appropriate; AMR monitoring (STI; other organisms)	AMR monitoring (STI; other organisms)
2023 Oct	European AIDS Clinical Society (EACS) (12) Guidelines	Continent (Europe)	Propose (case-by-case)	MSM with repeated STIs	200mg within 24 to 72 hours after sexual intercourse	Not specified	Unknown long-term effect on microbiota and STIs resistances	Not specified	Not specified
2023 Oct	Centers for Disease Control and Prevention (CDC), USA (13) Draft Guidelines (Nov 2023 Public consultation closed)	National (USA)	<i>Considerations</i>	Gay and bisexual men, transgender women	As per trials (i.e., doxycycline 200 mg within 24-72 hours of condomless sex)	Not specified	Other antibiotics should not be considered for PEP; doxy benefits and adverse effects	Screen, test, and treat for bacterial STI even if using Doxy-PEP / PrEP	Not specified

The Public Health England / The British Association for Sexual Health and HIV Position Statement was updated in April 2022.

Doxy-PEP = doxycycline post-exposure prophylaxis. BASHH = The British Association for Sexual Health and HIV. UK = United Kingdom. N/A = not applicable. UKHSA = United Kingdom Health Security Agency. STI = sexually transmitted infection. Doxy = doxycycline. PEP = post-exposure prophylaxis. PrEP = pre-exposure prophylaxis. CT = *Chlamydia trichomoniasis*. TP = *Treponema palladium*. NG = *Neisseria gonorrhoeae*. AMR = antimicrobial resistance. FBC = full blood count. LFT = liver function tests. RFT = renal function tests. NAAT = nucleic acid amplification test. HIV = human immunodeficiency virus. PLWH = people living with HIV. LA = long acting. U=U = Undetectable equals untransmittable. HPV = human papilloma virus. Mpox = monkeypox virus. MenACWY = Meningococcal ACWY. ICD = International Classification of Disease.

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