

Knowledge, uptake and intention to use antibiotic post-exposure prophylaxis and meningococcal B vaccine (4CMenB) for gonorrhoea reported in the ‘Reducing inequalities in Sexual Health’ (RiiSH) survey, a large, online community sample of GBMSM in the UK, 2023

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In the UK, GBMSM continue to be **disproportionately** affected by STIs.

Novel STI prevention interventions have been increasingly considered as tools to aid STI control in key populations.

**Meningococcal B
vaccine
(4CMenB or
'Bexsero')**



Real-world effectiveness has shown reduction in gonorrhoea incidence between **22% to 47%***

Modelling suggests can be a cost-effective strategy*

Awaiting ministerial approval for targeted programme

*Molina et al, Abara et al, Whittles et al, Wang et al, Petousis-Harris et al, Ladhani et al

Given potential availability of doxyPEP and 4CMenB vaccine across SHS in the UK, we used an online community survey to explore:

└─→ Knowledge, uptake, and regimens used as antibiotic post-exposure prophylaxis (antibiotic PEP) for STI prevention

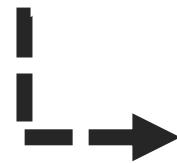
└─→ Intention to use (ITU) doxyPEP and 4CMenB vaccine assuming availability and efficacy

Reducing inequalities in Sexual Health (RiSH) Survey 2023

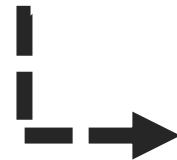
**“Have you ever used
antibiotics in this way?”**

8%

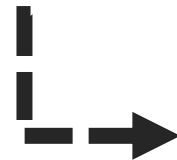
**of all participants had ever used
antibiotics after sex for STI
prevention**



8 in 10 used antibiotics in the last year



7 in 10 only ever used doxycycline



1 in 10 were uncertain of which were used

Correlates of ever using antibiotic PEP

More likely

to report ever using antibiotic PEP



People living with HIV

Adjusted odds ratio: 6.00 (95% CI: 2.81-12.8)*^



Those recently using HIV-PrEP

Adjusted odds ratio: 4.54 (95% CI 2.33-8.85)*^



Those reporting mpox vaccination

Adjusted odds ratio: 2.24 (95% CI: 1.37-3.66)*



Those reporting 4CMenB ITU

Adjusted odds ratio: 1.97 (95% CI: 1.12-3.46)*



Those with markers of sexual risk

Adjusted odds ratio: 2.84 (95% CI: 1.81-4.47)*

* Multivariable logistic regression

adjusted for age-group, country of birth,
educational qualifications, markers of sexual risk
(where applicable)



Less likely

to report ever using antibiotic PEP



**Those reporting lower
educational qualifications**

Adjusted odds ratio: 0.58 (95% CI: 0.34-0.97)*

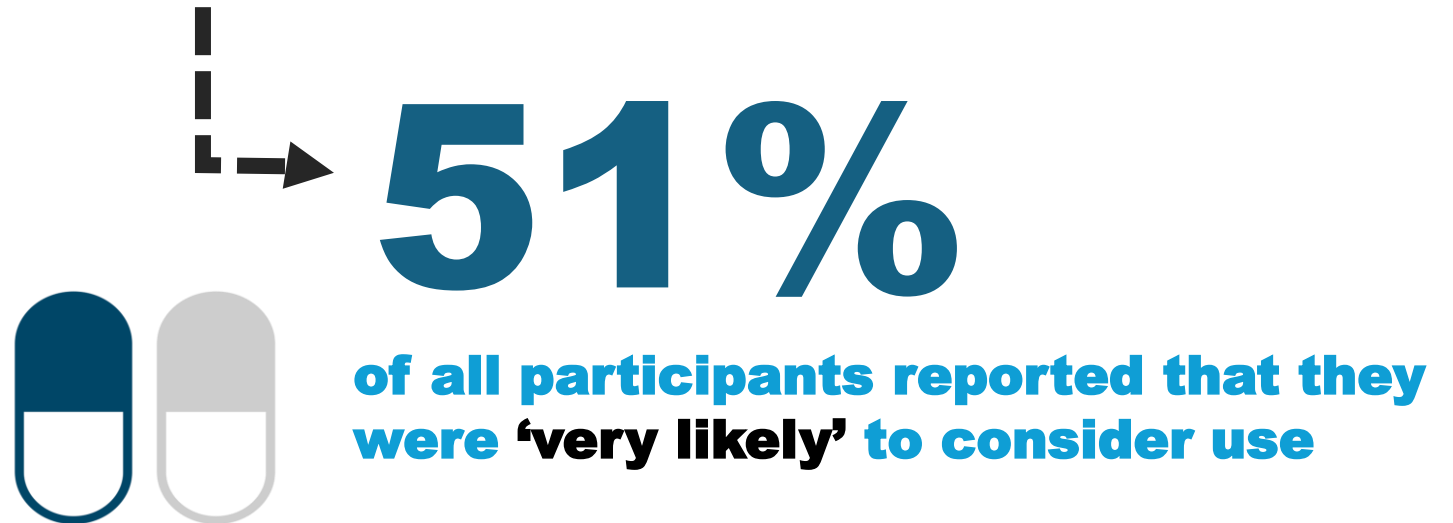
^ Compared to HIV-negative participants
not reporting recent HIV-PrEP use

**Markers of sexual risk = reporting (in the last 3 months):
≥5 condomless anal sex partners, bacterial STI diagnosis, chemsex,
and/or meeting partners at sex-on-premises venues, sex parties, or
cruising locations.**

Reducing inequalities in Sexual Health (RiSH) Survey 2023

“Doxycycline PEP (doxycycline post-exposure prophylaxis or doxyPEP) would involve taking antibiotic tablets within 72 hours after sex to try and prevent getting bacterial STIs.”

“If this was shown to be safe and effective, **how likely** would you be to take doxyPEP?”



Correlates of doxyPEP ITU

More likely

to report doxyPEP ITU



People living with HIV

Adjusted odds ratio: 1.74 (95% CI: 1.28-2.57)*^



Those recently using HIV-PrEP

Adjusted odds ratio: 1.40 (95% CI: 1.17-1.84)*^



Those reporting a SHS visit in last year

Adjusted odds ratio: 1.66 (95% CI: 1.29-2.14)*^



Those reporting mpox vaccination

Adjusted odds ratio: 1.28 (95% CI: 1.10-1.64)*



Those reporting 4CMenB ITU

Adjusted odds ratio: 8.82 (95% CI: 6.62-11.9)*



Those with markers of sexual risk

Adjusted odds ratio: 1.50 (95% CI: 1.16-1.94)*

* **Multivariable logistic regression**

adjusted for age-group, markers of sexual risk
(where applicable)



Less likely

to report doxyPEP ITU



Those reporting 'high anxiety'
(based on ONS personal-well-being measures)

Adjusted odds ratio: 0.77 (95% CI: 0.80-0.99)*

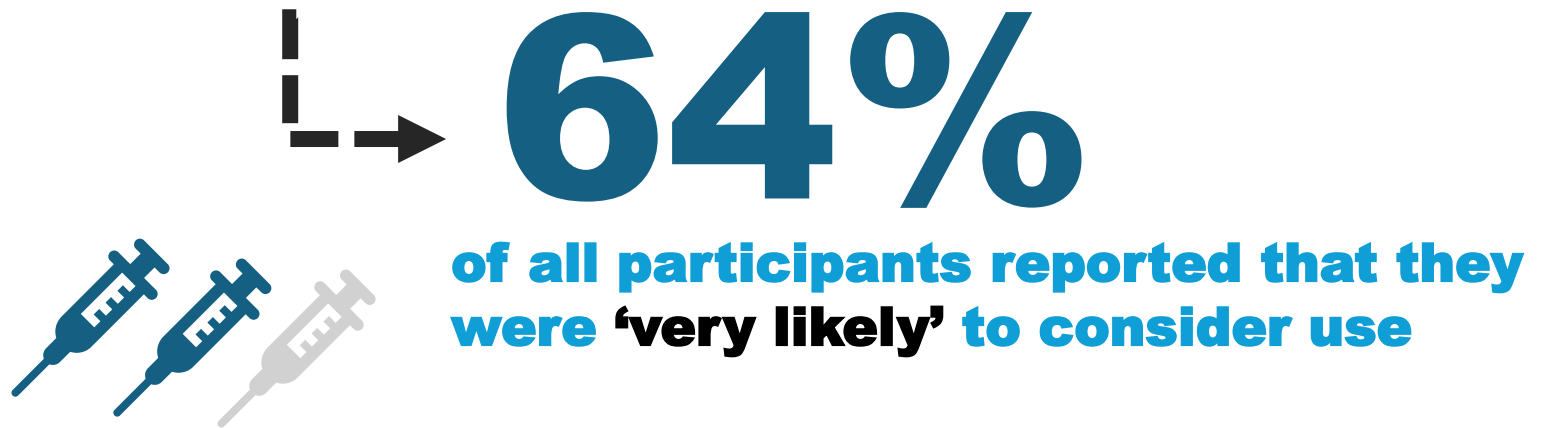
^ Compared to HIV-negative participants
not reporting recent HIV-PrEP use

Markers of sexual risk = reporting (in the last 3 months):
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cruising locations.

Reducing inequalities in Sexual Health (RiSH) Survey 2023

“New research evidence suggests that Bexsero, a vaccine that protects against a type of meningitis, can lower the risk of getting gonorrhoea by 30%-50%.”

“If this vaccine was available at a sexual health clinic, **how likely** would you consider having it (i.e., getting a jab at two different times) to protect yourself from gonorrhoea?”



Correlates of 4CMenB ITU

More likely

to report 4CMenB ITU

- 🕒 **People living with HIV**
Adjusted odds ratio: 1.96 (95% CI: 1.28-2.99)**^
- 🕒 **Those recently using HIV-PrEP**
Adjusted odds ratio: 2.26 (95% CI: 1.67-3.05)**^
- 🕒 **Those reporting a SHS visit in last year**
Adjusted odds ratio: 2.45 (95% CI: 1.87-3.21)**^
- 🕒 **Those reporting mpox vaccination**
Adjusted odds ratio: 2.38 (95% CI: 1.79-3.16)*
- 🕒 **Those reporting doxyPEP ITU**
Adjusted odds ratio: : 10.1 (95% CI: 7.33-13.8)*
- 🕒 **Those with markers of sexual risk**
Adjusted odds ratio: 2.09 (95% CI: 1.56-2.79)*
- 🕒 **Younger participants**
Adjusted odds ratio: : 2.16 (95% CI: 1.44-3.25) aged 16-29 vs ≥45)*

^ Compared to HIV-negative participants not reporting recent HIV-PrEP use

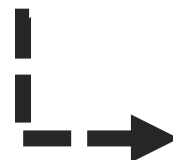
Less likely

to report 4CMenB ITU

- 🕒 **Those reporting lower educational qualifications**
Adjusted odds ratio: 0.57 (95% CI: 0.44-0.73)*
- 🕒 **Those identifying as bisexual, straight, or another way**
Adjusted odds ratio: 0.62 (95% CI: 0.45-0.86)*

* Multivariable logistic regression

adjusted for age-group, sexual orientation, educational qualifications, employment, markers of sexual risk (where applicable)



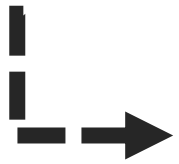
Markers of sexual risk = reporting (in the last 3 months): ≥5 condomless anal sex partners, bacterial STI diagnosis, chemsex, and/or meeting partners at sex-on-premises venues, sex parties, or cruising locations.

Reducing inequalities in Sexual Health (RiSH) Survey 2023

Key messages

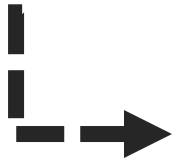
- Most participants of our online community survey would **choose to access doxyPEP and the 4CMenB vaccine** were they available for use in the **UK**.
- There are indications of knowledge of antibiotic PEP, as well as continued uptake through **self-sourcing**, using **appropriate, evidence-based antibiotics**.
- The use and intention to use novel STI prevention interventions was **greater amongst those most likely to benefit**.

Implications



There will be a need to ensure **equitable** health promotion and access for those who could benefit from these interventions.

◉ How can we best package preventative interventions?



Future guidelines and health promotion must be carefully crafted **alongside clinical experts and community partners.**

Robust monitoring and evaluation will be crucial in understanding the impact of doxyPEP on AMR and STI incidence in key populations if rolled out across SHS.

◉ How can we best facilitate empowered decision-making that benefits individual-level sexual wellbeing and autonomy?

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Thank you.
Questions?



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