STI prevention for Aboriginal and Torres Strait Islander communities: HIV PrEP and Doxy PEP

12 August 2025

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Subject Matter Expert: Dr Trent Yarwood


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Topic areas of today's session include...

- Welcome, Acknowledgements and Introductions
- Epidemiology & Impact
- HIV and Sexual Health Prevention: HIV PrEP & Doxy-PEP
- Open Discussion
- Q&A and Wrap Up

Acknowledgements

This materials for this webinar were put together and reviewed by:

- ASHM
- NACCHO
- Dr Trent Yarwood, Infectious Disease Physician, Senior Lecturer, James Cook University

This session is supported by funding from Australian Government Department of Health, Disability and Ageing

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RACGP CPD Approved Activity — Educational Activities 1 hours

Continuing Professional Development (CPD)

This course and associated activities have been endorsed by NAATSHWIP for 1 CPD hours.

If you would like to seek CPD from other accreditation bodies such as ACN or RACGP please make an individual submission.

About ASHM

Who we are

- Peak organisation of health professionals in Australia and NZ working in HIV, Viral Hepatitis, and Sexual Health

What we do

- Policy development and advocacy
- Deliver education focused on prevention, identification, management and treatment of BBVs and STIs
- Develop guidelines and resources

About NACCHO

Who we are

National Aboriginal Community Controlled Health Organisation (NACCHO) is the national peak body representing 146 Aboriginal Community Controlled Health Organisations (ACCHOs) across Australia.

What we do

Our expansive primary healthcare network spans more than 550 sites, providing over 3.1 million episodes of care each year to 410,000 people, including vital healthcare services in remote regions.

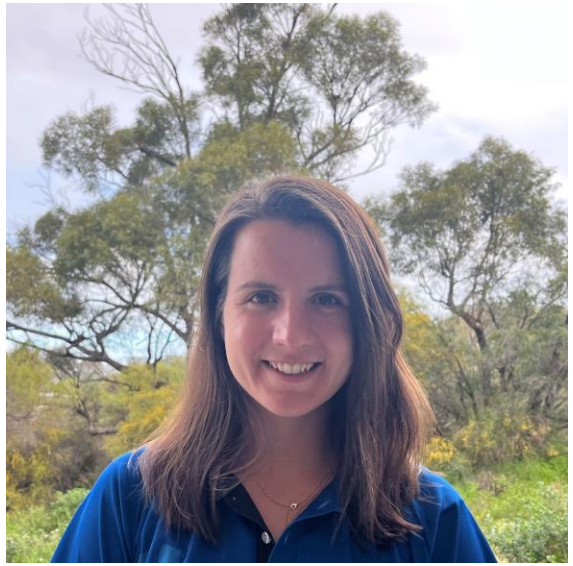
NACCHO also plays a vital role in administering programs and projects dedicated to the improvement of Aboriginal and Torres Strait Islander health, including the Enhanced Syphilis Response and Blood Borne Virus and STI programs.

Microsoft Teams Housekeeping

Please keep your microphone muted throughout the session.

Your questions/comments can also be sent via the *Chat* box anytime.
Let's practice > type in the chat your name and what Country you're dialing in from.

Facilitator & Subject Matter Expert



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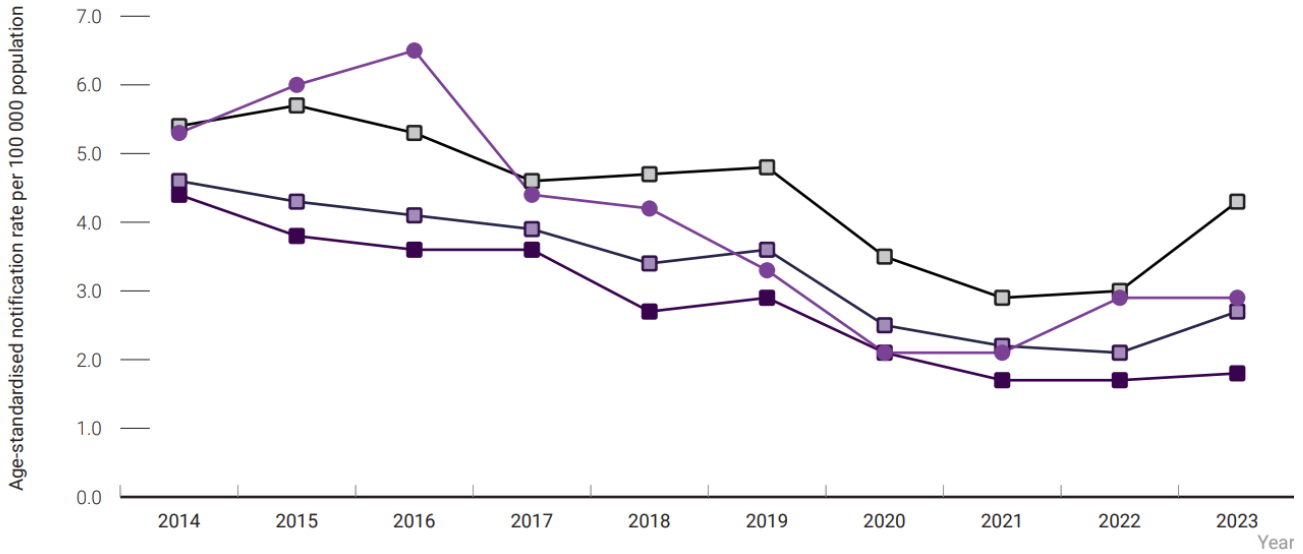
Epidemiology & Impact

HIV Notification Rate

Figure 36 HIV notification rate by Aboriginal and Torres Strait Islander status per 100 000 population, 2014-2023



	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Aboriginal and Torres Strait Islander peoples	5.3	6.0	6.5	4.4	4.2	3.3	2.1	2.1	2.9	2.9
Australian-born non-Indigenous people	4.4	3.8	3.6	3.6	2.7	2.9	2.1	1.7	1.7	1.8
All non-Indigenous people	4.6	4.3	4.1	3.9	3.4	3.6	2.5	2.2	2.1	2.7
Overseas-born	5.4	5.7	5.3	4.6	4.7	4.8	3.5	2.9	3.0	4.3

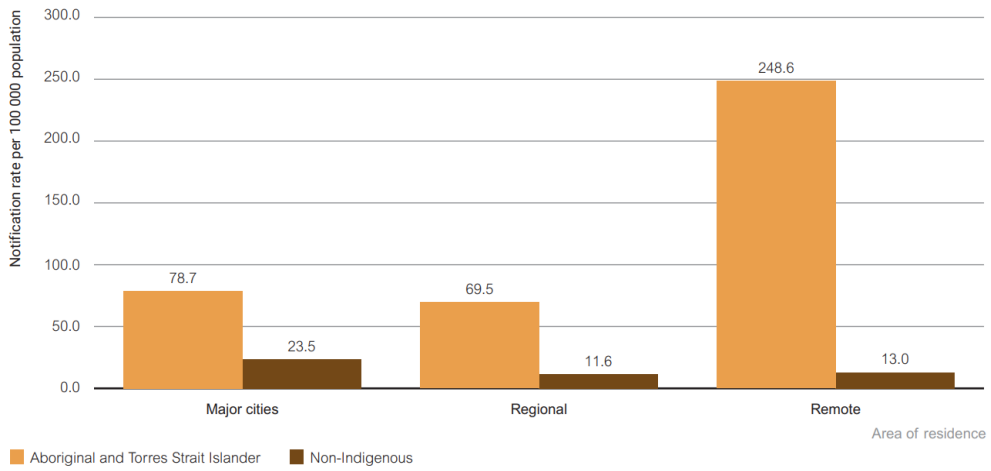
Source: State and territory health authorities; see Methodology for detail.

HIV Data

- Between 2014 and 2023, the HIV notification rate among Aboriginal and/or Torres Strait Islander peoples declined from 5.3 to 2.9 per 100 000.
- In 2023 there were 24 HIV notifications (3% of total) among Aboriginal and/or Torres Strait Islander peoples
- Of those notifications, 63% were male
- Median age at diagnosis was 40.5yrs

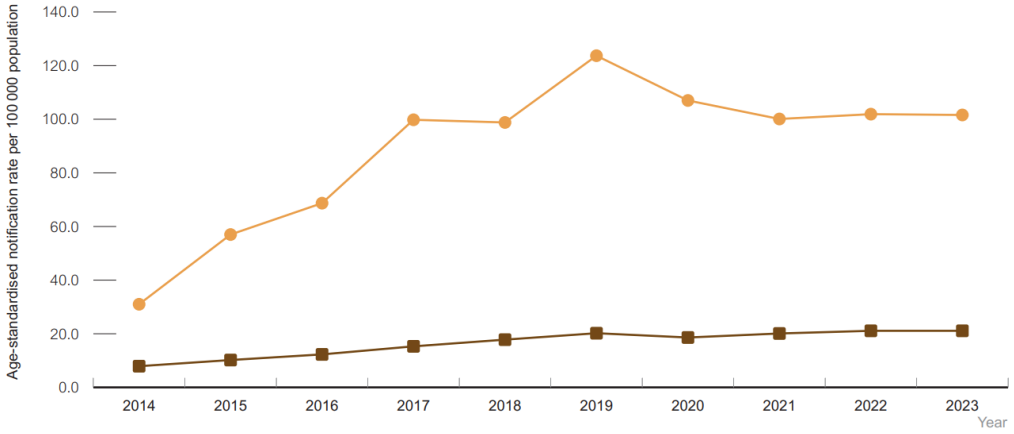
Syphilis Notification Rate

Figure 12 Infectious syphilis notification rate per 100 000 population by Aboriginal and Torres Strait Islander status and area of residence, 2023



Source: Australian National Notifiable Diseases Surveillance System.

Figure 6 Age standardised Infectious syphilis notification rate per 100 000 population by Aboriginal and Torres Strait Islander status, 2014-2023

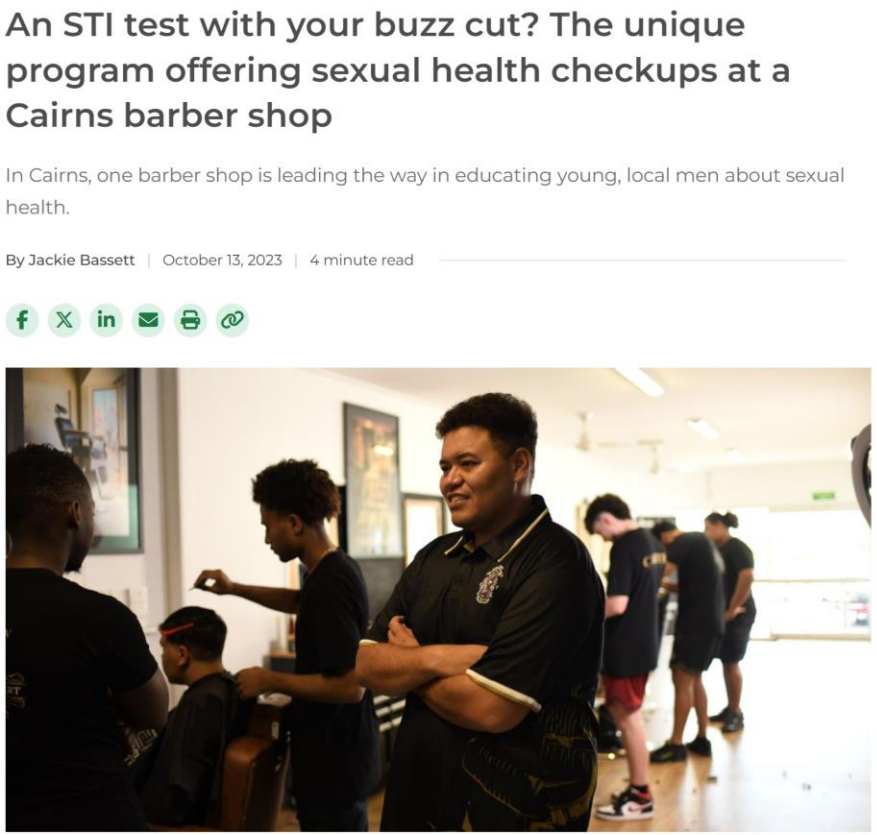


	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Aboriginal and Torres Strait Islander peoples	31.0	57.0	68.7	99.8	98.8	123.7	107.0	100.1	101.9	101.6
Non-Indigenous people	7.9	10.2	12.3	15.3	17.8	20.2	18.6	20.1	21.1	21.1

Source: Australian National Notifiable Diseases Surveillance System.

NNDSS via Kirby Institute: https://kirby.unsw.edu.au

Partnering with local communities



An STI test with your buzz cut? The unique program offering sexual health checkups at a Cairns barber shop

In Cairns, one barber shop is leading the way in educating young, local men about sexual health.

By Jackie Bassett | October 13, 2023 | 4 minute read

- Outreach model targeting at-risk youth
- NACCHO Syphilis Point of Care Testing program
- Partnership with Fresh-Start Academy (and funding from Gilead Sciences)
- Embedding health workers in a barber training program
- Yarning about sexual health while having (or learning how to) haircut.

https://www.ruralhealthpro.org/s/rhp-news/a2TMp000000CV01MAG/an-sti-test-with-your-buzz-cut-the-unique-program

Poll Question

How confident are you in your ability to have a discussion with a patient about HIV PrEP and Doxy-PEP?

1. Not confident
2. A little confident
3. Somewhat confident
4. Confident
5. Very confident

HIV & STI Prevention

Biomedical:

- HIV Pre-exposure prophylaxis (PrEP)
- Doxycycline Post-exposure prophylaxis (Doxy-PEP)
- Treatment as Prevention (TasP)
- Post-exposure prophylaxis (PEP)

Access & Screening:

- Regular STI testing & screening
- Prevention of vertical (mother to child) transmission

Behavioural:

- Condoms and other sexual behavioural strategies
- Needle and Syringe (NSP) exchange programs

Education:

- Sexual Health Education & Awareness campaigns
- Contraceptive Counselling and Provision

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HIV PrEP

What is PrEP?

- PEP: *Post*-exposure prophylaxis – taken after an event
- PrEP: *Pre*-exposure prophylaxis – taken before an event

- PrEP is an antiretroviral medication to prevent HIV (two drugs combined in one pill - Tenofovir + Emtricitabine)
- Taking PrEP before sex prevents HIV infection if exposed to the virus
- PBS Listed since April 2018 – available at standard script price
- Can be prescribed by any medical / nurse practitioner (s85)

How do we know PrEP works?

- Multiple studies of PrEP efficacy across different groups
  - Data best quality for GBMSM
  - Also effective for Trans women
  - Emerging data for cis women in high prevalence settings

- For participants who took their PrEP every day (100% adherence), PrEP was 95-99% effective.

- Two ways of taking PrEP
  - Every day
  - "On-demand" - evidence mostly in GBMSM

Combined data across all PrEP trials suggest up to a 99% reduction in HIV acquisition

People to consider for PrEP

Priority populations are identified for testing in the Ninth National HIV Strategy 2024-2030

- Gay, bisexual and men who have sex with men (MSM)
- Trans and gender-diverse people
- Heterosexual people who have sex with people that may be at higher risk of HIV

Consider behaviours that increase the risk of HIV and not just how people identify:

- Men who have sex with men but identify as heterosexual
- MSM, trans or gender diverse people who have been diagnosed with an STI recently
- People who share injecting equipment

When should I discuss PrEP?

Patient requests

Why might the patient request?

- Actual risk
- Perceived risk

People who present requesting PrEP are typically at high risk for HIV & should be considered for PrEP.

Clinician suggests

Why might the clinician suggest?

- Eliciting a history of high-risk behaviors
- People who are priority populations
- Recent diagnosis of any STI

Medical Contraindications to oral HIV PrEP

- HIV infection, unknown HIV status or HIV negative with recent HIV exposure (within 72 hours)
  - **Note:** Urgently refer for post exposure prophylaxis (PEP) or treatment
  - PBS clinical criteria for HIV PrEP: Patient must have at least one of the following prior to having the latest PBS-subsidised prescription issued: (i) a negative HIV test result no older than 4 weeks, (ii) evidence that an HIV test has been conducted, but the result is still forthcoming.
- Allergy to tenofovir and/or emtricitabine
- Renal impairment – eGFR <30mL/minute.
- Note: Additional prescribing criteria/contraindications for on-demand PrEP – Contraindicated in chronic Hep B infection

Is PrEP safe?

- Drugs have been used safely for many years in treatment of HIV

- Very well tolerated, some potential side effects:
  - Short term: headache, nausea, flatulence
  - Long term: potential kidney injury (rare), lowered bone mineral density (reversible)

- Additional considerations include:
  - Concern over safety for use in patients with chronic hepatitis B
  - Development of antiretroviral resistance (rare if adherent and diagnosed quickly)

Access to PrEP

Medication Tenofovir 300mg + Emtricitabine 200mg

Supply & review: 90 tablet (3 months)

PBS script

- PBS Streamlined Authority: $31.60 per month
- CTG Co-payment program: $7.70 per month
- CTG and Concession: no cost to the patient

Remote Area Aboriginal Health Service (RAAHS) program

RAAHS can order and subsequently supply PrEP to their clients for free as per the PBS restrictions.

Other options

Medicare ineligible: order online with script ($15/month)

PrEP Regimens

Daily PrEP

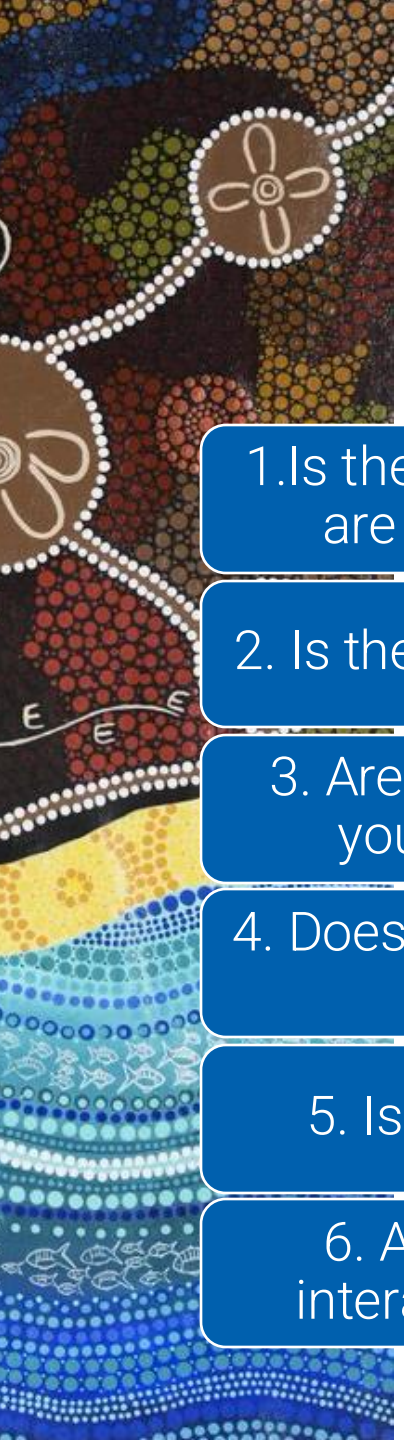
- One tablet at the same time each day
- Can begin with 2 tablets on the first day (similar to on-demand) for rapid onset
    - Pros: "always on" protection; may aid with adherence; best evidence base
    - Cons: More expensive than on-demand if sex is infrequent

On-demand (event-driven) PrEP *("single event")*

- If exposure happens only for very short periods of time, *i.e.* irregular, event-based exposures
- Two tablets 2-24 hours prior to sex
- One tablet daily until 2 days after last exposure
- Only recommended for people assigned male sex at birth
    - no data in other populations

Injectable PrEP

- Data on long-acting injectable antivirals are encouraging in cis-women
- Not yet easily available in Australia – watch this space



Checklist prior to starting PrEP

1.Is the person HIV+ already, or are they seroconverting?	• Recent (<4 week) HIV test • Could they have been recently exposed?
2. Is their renal function normal?	• History of nephrotoxic drugs • Check bloods (EUC) and urine (ACR)
3. Are there any co-infections you need to be alert to?	• HAV, HBV, HCV
4. Does the person have another STI?	• Full baseline STI screen as per recommendations
5. Is the person pregnant?	• betaHCG
6. Are there any possible interactions with TF*/FTC?	• Protein supplements, OTC preps, NSAIDs

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Doxy-PEP

What is Doxy-PEP?

- Doxy-PEP means taking an oral dose of an antibiotic called doxycycline within 72 hours (3 days) of having sex (oral, anal, or vaginal) to protect against syphilis and chlamydia.
- Doxycycline is a safe and common medication used to treat certain infections, acne and prevent malaria

Evidence for Doxy-PEP

- Doxycycline is effective treatment for several STIs
  - E.g. first line for uncomplicated chlamydia infection in Australian STI Management Guidelines
- Studies show Doxy-PEP reduces syphilis transmission by 70-80% and chlamydia by 70-90%
- Data is conflicted about gonorrhoea
  - Effective in GBMSM / trans women in Seattle
  - Not effective in GBMSM in France where resistance is higher
  - Not effective in young ciswomen in Kenya (mostly inconsistent use, COVID confounded)
- Not effective at providing protection from viral infections such as HIV or herpes

Who can benefit most from Doxy-PEP?

Doxy-PEP is most likely to benefit people at higher risk of syphilis, including:

- Gay, bisexual, and other men who have sex with men
- Transgender women and non-binary people assigned male at birth
- Particularly with recent syphilis or multiple recent sexually transmissible infections

Those who want to reduce their risk of STIs including people taking HIV pre-exposure prophylaxis (PrEP), and commercial sex workers after a condom break.

Side effects & Pregnancy:

Common but non-serious side effects

- nausea, vomiting and diarrhoea
- skin may become more sensitive to sunlight, causing a rash or sunburn

Rare but serious reactions

- allergies
- oesophageal ulcers
- liver damage

Pregnancy

- after 18 weeks of pregnancy, can cause bone and teeth defects
- advise about options for contraception.

Prescribing Doxy-PEP

- Prescribed as part of a holistic and comprehensive sexual health approach
- Take two 100 mg tablets of doxycycline (total dose: 200 mg) within 48 to 72 hours after having sex.
- PBS listed for 7 tablets and 1 repeat (unrestricted)
- Ongoing regular STI testing
- Review ongoing need and patient preferences

What about resistance?

- Initial studies did not show increases in antibiotic resistance
  - Study not designed to answer this question e.g. short follow up
- Despite the widespread long-term use of doxy (eg: malaria prophylaxis) there are only a handful of studies which look at resistance outcomes
- Large retrospective review of Gonorrhoea isolates from America
  - Widespread increase in tetracycline resistance
  - Possible link with doxyPEP
    - High-level tet-resistance in Gono 3x more likely in patients on doxyPEP

Helekal et al. *N Engl J Med* 2025. Doi:10.1056/NEJMc2504010

What does this mean for our patients?

- At present, antimicrobial resistance is relatively low (but some concerning signs)
- Potential for harm, but at the moment, clearly strong benefits to considering Doxy-PEP for patients at high risk
- Does this mean we should be recommending it universally?

Aboriginal Health Workers/Practitioners, nurses, midwives and GPs can all play a critical role in:

IDENTIFYING patients who might be suitable for PrEP and Doxy-PEP

EDUCATING patients on the benefits of PrEP and Doxy-PEP

ADVOCATING for patients by supporting informed decision-making within their communities

Resources

Clinical tools:

- PrEP https://ashm.org.au/resource/decision-making-in-prep/
- Doxy-PEP Doxy-PEP Decision Making Tool | ASHM Health
- STI/BBV Testing Tool STI/BBV testing tool for asymptomatic people

Patient referral partner notification

- Better to Know website Better to Know - Better to Know

Young Deadly Free

- https://youngdeadlyfree.org.au/6338-2/

2s

Guidelines

- PrEP Home - PrEP Guidelines
- Doxy-PEP Doxy-PEP: Everything you need to know! Information Sheet | ASHM Health
- PEP Home | PEP Guidelines
- STI Management STI Guidelines Australia | Australian STI Guidelines website
- National guide to preventive healthcare for Aboriginal and Torres Strait Islander people National guide to preventive health care for Aboriginal and Torres Strait Islander people Fourth Chapter

PrEP Access

- pan.org.au
- prepdforchange.com
- rinseandrepeat.info

Open Discussion

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Thank you!

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Evaluation Survey

This link will also be sent via email.