Appendix A Literature review search strategy

1.	HIV Infections[MeSH] OR HIV[MeSH] OR hiv[tiab] OR hiv-1*[tiab] OR hiv-2*[tiab] OR hiv1[tiab] OR hiv2[tiab] OR hiv infect*[tiab] OR human immunodeficiency virus[tiab] OR human immunedeficiency virus[tiab] OR human immuno-deficiency virus[tiab] OR human immune-deficiency virus[tiab] OR ((human immun*[tiab]) AND (deficiency virus[tiab])) OR acquired immunodeficiency syndrome[tiab] OR acquired immunedeficiency syndrome[tiab] OR acquired immuno-deficiency syndrome[tiab] OR acquired immune-deficiency syndrome[tiab] OR ((acquired immun*[tiab]) AND (deficiency syndrome[tiab])) OR "sexually transmitted diseases, Viral"[MeSH:NoExp]
2.	Post exposure prophylaxis[tiab] OR postexposure prophylaxis[tiab] OR post-exposure prophylaxis[tiab] OR PEP[tiab] OR anti-infection prophylaxis[tiab] OR post-exposure HIV prophylaxis[tiab] OR chemoprevention[tiab] OR exposure prophylaxis
3.	interview*[Title/Abstract] OR interviews[MeSH:noexp] OR experience*[Text Word] OR qualitative[Title/Abstract]
	(1 AND 2) AND 3

Values and preferences of female sex workers on Post Exposure Prophylaxis for prevention of HIV

Topic guide

Knowledge of PEP

- What do you know about PEP?
- Do you think that PEP works to prevent HIV?

Use of PEP

- Have you ever used PEP (how many times)?
- When would you use PEP (type of exposure)?
- Did you experience side effects?
- How long did you take it for? Did you complete the course? If not any reason why?

Preferences of PEP

- Would you like to receive all PEP drugs at first visit to clinic?
- Have you ever been given a starter pack (5 days)? Would you like this - would need to return to clinic after 5 days?
- Where would you like to have your assessment?
- Where would you like to collect the prescription?

Challenges to accessing PEP

- What are the problems with getting PEP?
- Do you think PEP is easy to get hold of?
- How would you feel about having a HIV test before starting PEP?

Challenges to completing a course of PEP

- What are the problems with taking PEP?
- What would help to finish a full course of PEP (28 days)?
- How do you feel about the number of tablets?
- How do you feel about possible side effects?
- How do you feel about a HIV test after taking PEP?
- What type of support/counseling would you like for taking PEP?
- When would you like a follow up appointment?

Healthcare workers preferences on HIV Post Exposure

The World Health Organization(WHO) is updating guidelines for the use of antiretroviral drugs for Post Exposure Prophylaxis (PEP) to prevent HIV infection. The prescription of PEP can vary by drug number (two drugs or more), drug class, frequency and health care setting. Existing recommendations also vary according to the suspected level of risk. The extent to which these different approaches may influence completion rates is unclear.

We are seeking to understand the views of healthcare workers who have prescribed PEP for HIV exposures, or who have taken PEP themselves.

In answering this survey please consider your current and preferred practice.

Thank you for completing this survey. The values and preferences of health care professionals are paramount to the development of a highly practical and relevant document on PEP for HIV prevention.

If you have any questions please contact:
Rachel Beanland (beanlandr@who.int) or Cadi Irvine (irvinec@who.int)

1. Gender

- Female
- Male
- Prefer not to indicate

*2. Country of residence

*3. Setting

- Community clinic
- Hospital: Emergency unit/department
- Hospital: other department
- Sexual health clinic
- Emergency/humanitarian response
- Other (please specify)

***4. Professional role**

- Nurse
- Doctor/physician: adult
- Doctor/physician: paediatrican
- Doctor/physician: adults and children
- Community health worker
- Other (please specify)

Please read the following definitions before answering Q5-7

PEP : set of services to manage the exposure to HIV and to help prevent HIV infection in an exposed individual

Occupational exposure: sustained by an individual in the course of their work.

Non-occupational exposure: sustained by an individual outside of the work setting: i.e. sexual assault exposures, needle-sharing among injecting drug users (IDUs) and consensual sex exposures.

5. What HIV PEP drug regimen is currently available in your setting?

***6. How many times have you prescribed PEP for HIV exposure in the last 2 years?**

	Never	1-5	6-10	11-15	16-20	21 or more
Adults						
Children						

***7. Have you ever taken PEP following possible exposure to HIV?**

- Never
- Once
- More than once

8. If you have taken HIV PEP and would be willing to be contacted about your experience please îndicate below

- Yes, I would be happy to be contacted- see Q9
- No, I do not want to be contacted

Healthcare workers preferences on HIV Post Exposure

9. Please enter your contact details

Name

Email

Eligibility for PEP

Current WHO guidelines recommend that HIV PEP be administered if:

1. Exposure occurred within the past 72 hours;
and
2. The potentially exposed individual is not known to be infected with HIV;
and
3. There was significant exposure of mucous membrane or non-intact skin to a potentially infectious body fluid;
and
4. The source is HIV-infected or their HIV status is unknown.

10. If a patient is eligible for HIV PEP would you prefer to prescribe 2 or 3 drugs?

- I would prefer to prescribe 3 drugs for all eligible HIV exposures
- I would prefer to prescribe 2 drugs for all eligible HIV exposures
- I would prefer to prescribe 3 drugs only for high risk HIV exposures

11. What would you consider high risk HIV exposures?

12. Please give details of scenarios when you would NOT give PEP for HIV exposure

PEP drug regimens

Healthcare workers preferences on HIV Post Exposure

WHO guidelines for first line antiretroviral treatment for adults recommends 2 nucleoside reverse-transcriptase inhibitors (NRTIs) + 1 non nucleoside reverse transcriptase inhibitor (NNRTI):

TDF + 3TC (or FTC) + EFV

Second line ART for adults should consist of 2 NRTIs + ritonavir boosted protease inhibitor (PI)

WHO recognises the need to align PEP regimens with standard treatment for HIV infected individuals.

13. Please indicate your preference in order (1 most preferred, 5 least preferred) for the following PEP drug regimen for HIV exposure with the listed criteria for adults

	Effectiveness	Tolerability	Cost	Availability	Overall preference
TDF+ (3TC or FTC)					
TDF + (3TC or FTC) + Efavirenz					
TDF + (3TC or FTC) + Atazanavir					
TDF + (3TC or FTC) + Lopinavir					
TDF + (3TC or FTC) + Raltegravir					

Other (please specify)

WHO guidelines for antiretroviral treatment for HIV infected children and adolescents recommend: < 3 years: LPV/r with (ABC +3TC) or (AZT +3TC) 3 to <10 years: (<35kg): EFV+ABC +3TC 10 to 19 years (>35kg): EFV+TDF+3TC (or FTC)

14. What HIV PEP drug regimen is available for children and adolescents in your setting?

<3 years	
3-10 years	
10-19 years	

15. What is your preferred drug regimen for HIV PEP for children and adolescents?

	<3 years	3-10 years	10-19 years
First line			
Alternative			

PEP prescription

***16. How do you manage side effects from HIV PEP? (tick all that apply)**

- ☐ Counsel patient at start of drug course
- ☐ Prescribe medication to manage side effects i.e. antiemetics
- ☐ Monitor patient
- ☐ Change from 3 drug to 2 drug regimen
- ☐ Discontinue PEP
- ☐ Switch suspected drug for different type
- ☐ Shorten PEP course duration

Other (please specify)

The current recommended duration of PEP for HIV infection is 28 days. The first dose should always be offered as soon as possible after exposure. The options for dispensing PEP at initial consultation are:

Starter packs: initial supply for 1-7 days.
Incremental dosing: medicine every week or 2 weeks
Full 28 days dosing: supply all 28 day course at initial visit

***17. What are your views on the use of starter packs?**

	Agree	Disagree	Neither agree/disagree
Starter packs encourage adherence to follow up appointments	○	○	○
Starter packs allow non specialists to start HIV PEP safely	○	○	○
Starter packs complicate prescribing	○	○	○
Starter packs can decrease adherence to PEP drugs	○	○	○
Starter packs encourage adherence to taking PEP drugs	○	○	○
Starter packs are suited to emergency settings	○	○	○
Starter packs increase the burden on patients	○	○	○
Starter packs result in less wastage of medicine	○	○	○

Other (please specify)

Healthcare workers preferences on HIV Post Exposure

***18. What are your views on incremental dosing?**

	Agree	Disagree	Neither agree/disagree
Incremental dosing provides opportunities for counselling and support	○	○	○
Incremental dosing can result in missed doses	○	○	○
Incremental dosing improves adherence to PEP drugs	○	○	○
Incremental dosing allows monitoring of side effects	○	○	○
Incremental dosing can decrease adherence to PEP	○	○	○

Other (please specify)

19. What are your views on full 28 day dosing?

	Agree	Disagree	Neither agree/disagree
Full 28 day dosing should only be used if a HIV test is performed on exposed patient	○	○	○
Full 28 day dosing may contribute to developing drug resistance	○	○	○
Full 28 day dosing should only be prescribed by HIV specialists	○	○	○
Full 28 day dosing reduces the motivation of the patient to return for follow up	○	○	○
Full 28 day dosing is unsafe without monitoring	○	○	○
Full 28 day dosing maximises the likelihood of completion	○	○	○
Full 28 day dosing can be prescribed by any healthcare worker	○	○	○
Full 28 day dosing should be used in settings where follow up is not feasible	○	○	○

Other (please specify)

PEP follow up

Healthcare workers preferences on HIV Post Exposure

Follow up for individuals prescribed PEP is recommended to monitor side effects, adherence and referral needs. Repeat HIV testing is currently recommended at 2-4 months after exposure and again at 4-6 months.

20. What do you consider the minimum package of care for HIV PEP? (tick all that apply)

- ☐ Risk assessment
- ☐ HIV test of exposed patient prior to prescription of PEP
- ☐ HIV test of exposed patient at 3 months
- ☐ HIV test of exposed patient at 6 months
- ☐ Consensual HIV testing of source patient prior to prescription of PEP
- ☐ Counselling on possible risk of HIV transmission
- ☐ Counselling on possible side effects of PEP
- ☐ Discussion of secondary prevention whilst taking PEP
- ☐ Prophylaxis for other blood borne viruses
- ☐ STI screening and treatment
- ☐ Emergency contraception
- ☐ Counselling on importance of adherence
- ☐ Counselling on reduction of future risk

Other (please specify)

Healthcare workers preferences on HIV Post Exposure

21. When would you like to refer a possible HIV exposure to a HIV specialist before prescribing PEP?

	Adult	Child <3 years	Child or adolescent 3 to 19
Always	☐	☐	☐
Sexual exposure	☐	☐	☐
Sexual violence	☐	☐	☐
Injecting drug use	☐	☐	☐
Unknown HIV status of source	☐	☐	☐
Concern of HIV status of exposed patient	☐	☐	☐
Concern of drug resistance	☐	☐	☐
Never	☐	☐	☐

Other (please specify)

***22. What support do you think is important for adherence to HIV PEP treatment and follow up?**

- ☐ Risk discussion
- ☐ Support from family member/partner
- ☐ Frequent follow up appointments
- ☐ Phonecall or SMS follow up
- ☐ Patient information leaflet
- ☐ Counselling

Other (please specify)

PrEP

WHO recommends consideration of daily oral PrEP - Pre Exposure Prophyalxis (tenofovir or tenofovir and emtricitabine) for sero-discordant couples and Men who have Sex with Men as an additional intervention to prevent HIV transmission.

Healthcare workers preferences on HIV Post Exposure

23. When would you consider recommending the use of Pre Exposure Prophylaxis for repeat attendances for HIV PEP?

- ☐ Men who have Sex with Men
- ☐ Don't know
- ☐ Injecting Drug Users
- ☐ I would not consider PrEP
- ☐ Sex workers
- ☐ Heterosexual sexual exposure

Other (please specify)

24. After how many PEP exposures would you consider discussing PrEP with a patient?

- ○ I would not consider PrEP
- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5 or more

Other (please specify)

Summary

25. Please add any other comments that you would like to share about your views and experience of PEP for HIV exposure

26. Thank you for completing this survey.
If you would like to receive the results of this survey please leave your contact details below

Name

Email

Thank you for taking the time to complete this survey.

The survey has 10 questions and should take less than 20 minutes to complete.

We would like to understand the preferences of healthcare workers who have taken Post Exposure Prophylaxis (PEP) for occupational exposure to HIV.

The results of this survey will be used to inform the revision of WHO guidelines for the use of antiretrovirals as PEP to prevent HIV infection. Your answers will be combined with the values and preferences of other populations to inform the recommended package of care and considerations for service delivery.

All your answers are confidential.

If you have any questions please contact Rachel Beanland beanlandr@who.int or Cadi Irvine irvinec@who.int.

*1. Your details

Gender	
Country of residence	
Number of times you have taken HIV PEP	
Professional role	
Healthcare setting where HIV exposure took place	
Setting where PEP was prescribed to you	

2. Please briefly outline the exposure(s) that occurred resulting in prescription of PEP for occupational exposure to HIV

3. What drug regimen were you given as HIV PEP?

4. Was the source patient known to be HIV positive at the time of the exposure?

- Yes
- No

5. Consider your exposure to HIV and PEP course to answer the following:

	Yes	No	Don't know
Did you present within 72 hours of your exposure?			
Did you have a HIV test prior to starting PEP?			
Was your risk assessment completed by an occupational health professional?			
Did you receive the full course of PEP (28 days) at the first appointment?			
Did you receive counselling about side effects of PEP?			
Did you receive counselling about your HIV test(s)?			
Did you experience any side effects from PEP drugs?			
Did you discontinue PEP due to side effects?			
Did you receive adherence support during your PEP course?			

6. What did you find difficult about completing the full course of PEP (28 days)?

7. If you had another possible occupational exposure to HIV when would you like to have a HIV test performed? (tick all that apply)

- ☐ I would like a HIV test before starting PEP
- ☐ I would like an intermediary HIV test during the 28 day course of PEP
- ☐ I would like a HIV test at 3 months
- ☐ I would like a HIV test at 6 months

8. If you had another possible occupational exposure to HIV how would you like to receive your prescription of PEP?

- ☐ 1 week of tablets, then return for follow up
- ☐ 2 weeks of tablets, then return for follow up
- ☐ Full 28 day course at initial assessment

Other (please specify)

9. If you had another possible occupational exposure to HIV what support would you like to help complete thefull 28 day course of PEP drugs? (tick all that apply)

- ☐ Counselling prior to PEP initiation
- ☐ Telephone follow up in during the 28 days
- ☐ Information leaflet
- ☐ Pillbox
- ☐ Support from friend or partner

Other (please specify)

10. Do you have any other comments about the preferences of healthcare workers taking PEP after exposure to HIV in occupational settings?

11. If you would like to receive the results of this survey please enter your contact details

Name

Email