Post Exposure Prophylaxis for HIV - Integrated Sexual Health Service - Summary Clinical Guideline

Reference no.: CG-GUM/2015/001

Following Needle stick injury
Follow Infection control policy

Following Sexual Exposure

- Studies indicate there may be a window of opportunity to prevent HIV infection by inhibiting viral replication after exposure
- Once HIV crosses the mucosal barrier it may take up to 48-72 hours to reach regional lymph nodes and up to 5 days to be detected in the blood
- Where individuals have multiple exposures within 72 hours, a cumulative risk should be considered

Risk of HIV transmission = Risk that source is HIV positive x Risk of exposure

The following may increase the risk of HIV transmission

- A high plasma viral load in the source (although it is possible to have an undetectable plasma viral load but detectable virus in the genital tract)
- Breeches in the mucosal barrier - mouth/genital ulcer disease, trauma, menstruation
- STIs
- Ejaculation
- Non Circumcision

Risk that source is HIV Positive

	HIV prevalence (%)	
Population group (aged 15–59 years)[a]	Men	Women
Men who have sex with men (MSM)[b]		
UK	5.9	–
London	12.5	–
Brighton	13.7	–
Manchester	8.6	–
Elsewhere in the UK	3.8	–
Heterosexuals		
Black African ethnicity	4.1	7.1
Non Black African ethnicity	0.06	0.06
Injecting drug users (IDU)	0.67–1.1	0.67–1.1

Risk of HIV transmission following an exposure from a Known HIV Positive Individual

Type of exposure	Estimated risk of HIV transmission per exposure from a known HIV-positive individual not on ART
Receptive anal intercourse	1 in 90
Receptive anal intercourse with ejaculation	1 in 65
Receptive anal intercourse no ejaculation	1 in 170
Insertive anal intercourse	1 in 666
Insertive anal intercourse not circumcised	1 in 161
Insertive anal intercourse and circumcised	1 in 909
Receptive vaginal intercourse	1 in 1000
Insertive vaginal intercourse	1 in 1219
Semen splash to eye	<1 in 10,000
Receptive oral sex (giving fellatio)	<1 in 10,000
Insertive oral sex (receiving fellatio)	<1 in 10,000
Blood transfusion (one unit)	1 in 1
Needlestick injury	1 in 333
Sharing injecting equipment (includes chemsex)	1 in 149
Human bite	<1 in 10,000

Recommend in cases where estimated transmission risk is greater than 1 in 1000. To be considered where estimated transmission risk is between 1 in 1000 and 1 in 10 000. Not recommended when estimated risk is less than 1 in 10 000

	Source HIV status			
	HIV-positive		**Unknown HIV status**	
	HIV VL unknown/ detectable (>200 copies/mL)	HIV VL undetectable (<200 copies/mL)	From high prevalence country/risk-group (e.g. MSM)[a]	From low prevalence country/group
Receptive anal sex	Recommend	Not recommended[b] Provided source has confirmed HIV VL < 200 c/mL for- > six months	Recommend	Not recommended
Insertive anal sex	Recommend	Not recommended	Consider[c]	Not recommended
Receptive vaginal sex	Recommend	Not recommended	Consider[c]	Not recommended
Insertive vaginal sex	Consider[d]	Not recommended	Consider[c]	Not recommended
Fellatio with ejaculation[e]	Not recommended	Not recommended	Not recommended	Not recommended
Fellatio without ejaculation[e]	Not recommended	Not recommended	Not recommended	Not recommended
Splash of semen into eye	Not recommended	Not recommended	Not recommended	Not recommended
Cunnilingus	Not recommended	Not recommended	Not recommended	Not recommended
Sharing of injecting equipment[f]	Recommended	Not recommended	Consider	Not recommended
Human bite[g]	Not recommended	Not recommended	Not recommended	Not recommended
Needlestick from a dis- carded needle in the community			Not recommended	Not recommended

In the UK, high risk groups would be MSM, IDUs from high risk countries and people who have immigrated to the UK from areas of HIV prevalence i.e. sub Saharan Africa

After sexual assault, PEPSE may be more readily considered as increased risk of transmission because of trauma

Administration of PEPSE

Discuss all cases where PEPSE may be required with a senior doctor at a hub clinic

- Up to 72 hours after exposure and as early as possible
- Attempt should be made if possible to establish the HIV status of the source individual as early as possible
- If source is known to be HIV positive efforts should be made to determine HIV viral load, resistance profile, treatment history
- Full medical and drug history including OTC medication, vitamins use, herbal remedies and illicit drug use

Baseline bloods required for patient

- Need to identify patient HIV negative at baseline- either POCT/ urgent laboratory sample
- STS, Hep B, C
- UE, LFT, bone
- Urinalysis

Provide patient with 3 day starter pack

Contained in starter pack is:

- Truvada PO one tablet OD
- Raltegravir PO 400mg BD
- Drug information leaflets

Start hepatitis B immunisation/ HBIG if required

Assess need for emergency contraception/ possibility of pregnancy (drugs unlicensed in pregnancy)

STI screening

Discuss with patient:

- Rationale for PEPSE
- Lack of conclusive data for efficacy
- Possible risks and side effects
- Drug – drug interactions
- Importance of adherence
- Follow up arrangements
- Advise that if develop skin rash/flu like symptoms to attend for review to rule out HIV seroconversion
- Safer sex advice

Follow Up

Day 3 - Follow up in hub clinic

- Check compliance
- Check side effects
- Review baseline blood results
- Prescribe further 28 days medication

Routine blood monitoring after initiation of raltegravir based PEPSE not necessary unless clinically indicated or baseline bloods are abnormal (if required, would be at 14 days)

If further high risk exposure during last 2 days of PEPSE then continue PEP for further 48 hours after that exposure

If more than 48 hours of PEPSE medication missed - stop course

- Pregnancy test if indicated
- STI screening
- HIV test at 12 weeks post exposure

For further reading see:
BASHH UK Guideline for the use of HIV Post Exposure Prophylaxis following sexual exposure 2015