

HIV

Sexual History

- Heterosexual / MSM ?
- Number of partners
- Vaginal / Anal / fellatio ?
- Rash ? Discharge ? Sores
- Less common presentations may include - headache, meningism and diarrhoea

British Association for Sexual Health & HIV: HIV Guidelines

Table 1. Estimated HIV prevalence (diagnosed and undiagnosed infection) in adults aged 15–59 years in the UK in 2014.

Population group (aged 15–59 years) ^a	HIV prevalence (%)	
	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

^aThese data are for England and Wales only.

^bThe prevalence of HIV among MSM varies across the UK and is higher in metropolitan areas with large MSM populations.^{6,7}

Prevalence estimates were obtained at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/401662/2014_PHE_HIV_annual_report_draft_Final_07-01-2015.pdf

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/475712/Shooting_Up_2015_FINAL.pdf

Table 2. Risk of HIV transmission per exposure from a known HIV-positive individual not on ART.

Type of exposure	Estimated risk of HIV transmission per exposure from a known HIV-positive individual not on ART	References
Receptive anal intercourse	1 in 90	10-16
Receptive anal intercourse with ejaculation	1 in 65	10-17
Receptive anal intercourse no ejaculation	1 in 170	17
Insertive anal intercourse	1 in 666	10,12,13,18
Insertive anal intercourse not circumcised	1 in 161	17
Insertive anal intercourse and circumcised	1 in 909	17
Receptive vaginal intercourse	1 in 1000	10,15,19-15
Insertive vaginal intercourse	1 in 1219	14,15,19-25
Semen splash to eye	<1 in 10,000	26
Receptive oral sex (giving fellatio)	<1 in 10,000	13,20,25,27
Insertive oral sex (receiving fellatio)	<1 in 10,000	12,25
Blood transfusion (one unit)	1 in 1	28
Needlestick injury	1 in 333	27,29,30
Sharing injecting equipment (includes chemsex)	1 in 149	26
Human bite	<1 in 10,000	31,32

ART: antiretroviral therapy.

Definition of HIV

- Chronic condition characterized by progressive immunodeficiency, a long clinical latency period and opportunistic infections
- HIV is the cause of the acquired immune deficiency syndrome (AIDS)

Pathogenesis

- HIV targets primarily CD4 positive cells (CD4+) and replicates rapidly within these cells throughout all stages of the infection
- Normally a healthy human has a CD4+ count of 800 to 1200 cells per mm³ of blood
- Type 1 (HIV-1): causes the majority of infections throughout the world
- Type 2 (HIV-2): seen mostly in West Africa, although individual cases have been reported in other parts of Africa, Europe, the Americas and India

What Do You Do?

Depends on setting and patient preference

- GUM Clinic: Buryfields in Guildford
- Serum save
- HIV serology counselling
- PEP protection
- Safe sex advice

Table 3. Summary table of PEPSE prescribing recommendations.

	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 ^c	Not recommended	Consider ^c	Not recommended
Fellatio with ejaculation ^d	Not recommended	Not recommended	Not recommended	Not recommended
Fellatio without ejaculation ^d	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 ^e	Recommended	Not recommended	Consider	Not recommended
Human bite ^f	Not recommended	Not recommended	Not recommended	Not recommended
Needlestick from a dis- carded needle in the community			Not recommended	Not recommended

PEPSE: post-exposure prophylaxis following sexual exposure; MSM: men who have sex with men.

^aHigh prevalence countries or risk-groups are those where there is a significant likelihood of the source individual being HIV-positive. Within the UK at present, this is likely to be MSM, IDUs from high-risk countries (see ¹ below) and individuals who have immigrated to the UK from areas of high HIV prevalence, particularly sub-Saharan Africa (high prevalence is > 1%). Country specific HIV prevalence can be found in UNAIDS Gap Report: <http://www.unaids.org/en/resources/campaigns/2014/2014gapreport/gapreport>

^bThe source's viral load must be confirmed with the source's clinic as <200 c/ml for > 6 months. Where there is any uncertainty about results or adherence to ART then PEP should be given after unprotected anal intercourse with an HIV-positive person

^cMore detailed knowledge of local prevalence of HIV within communities may change these recommendations from consider to recommended in areas of particularly high HIV prevalence. Co-factors in Box 1 that influence the likelihood of transmission should be considered

^dCo-factors in Box 1 that influence the likelihood of transmission should be considered

^ePEP is not recommended for individuals receiving fellatio i.e. inserting their penis into another's oral cavity. For individuals giving fellatio PEP is not recommended unless co-factors 1 & 2 in Box 1 are present e.g HIV seroconversion and oropharyngeal trauma / ulceration, see notes in guideline above

^fHIV prevalence amongst IDUs varies considerably depending on country of origin and is particularly high in IDUs from Eastern Europe and central Asia. Region-specific estimates can be found in the UNAIDS Gap Report http://www.unaids.org/sites/default/files/media_asset/05_Peoplewhoinjectdrugs.pdf

^gA bite is assumed to constitute breakage of the skin with passage of blood. See notes in guideline below about extreme circumstances where PEP could be considered after discussion with a specialist

Indicator conditions a for HIV testing:

- **Neoplasms**

- cervical cancer
 - Kaposi's sarcoma
-

STIs

- **Bacterial infections**

- Mycobacterium tuberculosis, pulmonary or extrapulmonary

Viral infections

CMV / EBV

- **Parasitic infections**

- cerebral toxoplasmosis
- Cryptosporidiosis diarrhoea, > 1 month

- **Fungal infections**

- Pneumocystis pneumonia (PCP)
- candidiasis, oesophageal

Physical and Mental Health Aspects of a HIV Diagnosis

- <https://www.youtube.com/watch?v=ng5WSbZ9M08>

Resources

- <https://www.bashh.org/guidelines>
- BASHH Guidelines (<https://www.bashhguidelines.org/current-guidelines/hiv/post-exposure-prophylaxis-following-sexual-exposure/>)
- GP Notebook (www.gpnotebook.com)