

Blood Borne Viruses – Background Information for Risk Assessment

Transmission rates for Blood Borne Viruses

Quoted transmission rates are¹:

- HIV:
 - Percutaneous exposure: ~0.3%
 - Mucocutaneous exposure: <0.1%
- HBV (Percutaneous): ~30% (HBsAg +ve source)
- HCV (Percutaneous): 1-3%

Factors associated with **increased** risk of occupationally acquired HIV infection include:

- Deep injury
- Visible blood on the device which caused the injury
- Injury with a needle which had been placed in a source patient’s artery or vein
- Known or likely high viral load in source patient

Estimated prevalence of BBV in Lothian (NB: if no data use General Population values)

	HIV	HCV	HBV
General population²	0.21% in 15-79-year olds (Lothian, 2017*) Estimated 13% of HIV+ in Lothian are undiagnosed.	0.4% Lothian, 2017*	0.4% (chronic) overall prevalence in Scotland -0.2% (British ethnicity) -2.2% (non-British ethnicity)
Men who have sex with men³⁻⁵	5.4% Scotland 6.3% England & Wales, excluding London (2017)	No higher than general population (unless HIV+)	No data
People who inject or have ever injected drugs^{6,7}	0.6% in Lothian ~ 1.7% England, Wales & N.Ireland (2017)	47% in Lothian	0.19% (HBsAg+) England, Wales & N.Ireland (2017)
People who inject performance & image enhancing drugs⁸	England & Wales 1.5% (all) 0.8% (other risk behaviours excluded)	England & Wales 5.5% (all) 4.7% (other risk behaviours excluded)	England & Wales 8.8% (chronic, all) 8.0% (other risk behaviours excluded)
Prisoners HMP Edinburgh⁹	No data	All prisoners: 13% -Ever injected: 34% -Never injected: 2%	No data
Prisoners HMP Addiewell⁹	No data	All prisoners: 16% -Ever injected: 46% -Never injected: 3%	No data
Black Africans⁴	Male: 2.5% Female: 4.7%	No data	No data
South Asian¹⁰	No data	No data	Chronic: 0.59%
East Asian¹⁰	No data	No data	Chronic: 10.3 – 11.6%

* Based on est.3500 still to be diagnosed/treated Lothian (population=883732)

NB: IF SOURCE IS FROM OUTWITH UK DISREGARD TABLE AND SEEK ADVICE

References

1. [Health and safety executive.](#)
2. HPS & GCU Report. [BBV and STIs – Scotland 2017.](#)
3. MRC Gay and Bisexual Men’s Sexual Health Survey Edinburgh, Glasgow and Dundee 2014 unpub. (n=1106)
4. [Progress towards ending the HIV epidemic in the UK:](#) 2018 report (estimated diagnosed and undiagnosed).
5. Audit by Lothian GUM, 2009
6. [NESI](#) 2017
7. [Shooting Up: An update](#) 2018
8. [Hope et al](#) BMJ, 2013
9. [Taylor et al](#), HCVAction, 2012
10. [Schnier et al](#), HPS, 2013