



RISK ASSESSMENT: ESTIMATED PROBABILITY OF HIV FOLLOWING A SINGLE EXPOSURE IN BRITISH COLUMBIA

	Source Person in Major Risk Group			Source Person Not Known to be in a Major Risk Group		
	Known HIV+	PWID	MSM	Biological Male	Biological Female	Unknown
Estimated probability of being HIV+	100%	13%	23%	0.009%	0.002%	0.006%
Estimated probability of seroconversion after sexual exposure²						
Penile-vaginal intercourse (risk to insertive partner)	0.04%	0.005%	0.01%	0.000004%	0.000001%	0.000002%
Penile-vaginal intercourse (risk to receptive partner)	0.08%	0.01%	0.02%	0.000007%	0.00002%	0.000005%
Insertive anal intercourse	0.11%	0.01%	0.025%	0.00001%	0.000002%	0.000007%
Receptive anal intercourse	1.38%	0.2%	0.3%	0.0001%	0.00003%	0.00008%
Oral sex³	0.01%	0.001%	0.002%	0.0000009%	0.0000002%	0.0000006%
Estimated probability of seroconversion after parental exposure²						
Percutaneous needle stick⁴	0.23%	0.03%	0.05%	0.00002%	0.000009%	0.00001%
Needle sharing injection drug use	0.63%	0.08%	0.14%	0.00006%	0.00001%	0.00004%
Occupational mucous membrane exposure⁵	0.09%	0.01%	0.02%	0.00001%	0.000002%	0.000005%

PWID, person who injects drugs; MSM, men who have sex with men

1. Based on Public Health Agency of Canada (PHAC) surveillance data 2014; Moore D et al., JAIDS 2016, 72: 87-95; PHAC. I-Track: Enhanced Surveillance of HIV, Hepatitis C and associated risk behaviours among people who inject drugs in Canada. Phase 2 Report. Centre for Communicable Diseases and Infection Control, Infectious Disease Prevention and Control Branch, PHAC; 2013.

2. Based on estimates for each exposure type from Patel P et al., AIDS 2014; 28:1509-1519 and Ippolito G et al., Arch Int Med 1993; 153:1451-1458.

3. Low risk for both receptive and insertive oral sex; 95% confidence interval around the estimate is 0-4 per 10,000 exposures [Patel P et al., AIDS 2014; 28:1509-1519]

4. Risk probably lower with solid object [Ippolito G et al., Arch Int Med 1993; 153:1451-1458.]

5. E.g. splashes to eyes, nose, mouth; risk probably lower with exposure to non-intact skin [Ippolito G et al., Arch Int Med 1993; 153:1451-1458.]