



Estimated risk of HIV transmission by exposure type from known HIV positive source person with detectable viral load

Exposure	Estimated Risk per 10,000 acts (95% Confidence Interval)	Estimated risk per act/ Event ¹
Hollow Bore Needlestick injury ²	23 (0-46)	0.23%
Needle sharing – injection drug use	63 (41-92)	0.63%
Occupational Mucous membrane exposure ³	9 (0.6-50)	0.09%
Penile-vaginal intercourse – risk to insertive partner	4 (1-14)	0.04%
Penile-vaginal intercourse – risk to receptive partner	8 (6-11)	0.08%
Anal intercourse (risk to insertive partner)	11 (4-28)	0.11%
Anal intercourse (risk to receptive partner)	138 (102-186)	1.38%
Oral intercourse (risk to either partner)	Low (0-4)	Low (<0.001%)

1. PEP is generally indicated if the risk level is 1/1000 (0.1%) or greater, and not indicated if the risk level is 1/100,000 (0.001%) or less.

2. Risk probably lower with cuts or punctures involving solid objects (vs. hollow bore needle)

3. Risk probably lower for exposures involving non-intact skin (vs. mucous membranes)

Transmission risk increased by higher plasma viral load or acute or late-stage HIV in the source person.

Transmission risk in sexual exposures increased by genital ulcer disease, and decreased by condom use.

References:

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