

Table 1 - Hepatitis B transmission risk by exposure type

| Exposure | | Risk per exposure (unless otherwise stated) |
|--|--|---|
| Needlestick | Healthcare setting, patient known | HBeAg (+) = 37-62% risk of serologic evidence of infection in recipient HBeAg (-) = 23-37% risk of serologic evidence of infection, 1-6% clinical infection. [3] |
| | Healthcare setting, patient unknown, or patient known but serology unknown | Requires risk assessment |
| | Community setting | 2 case reports only [208, 80]. Risk very low. Requires risk assessment. For example, if the local PWID population has a seroprevalence of 50%, the risk from a community acquired needlestick is 12-31% [53]. (Note: seroprevalence in PWID in Ireland is lower than 50% - see epidemiology section). |
| Other percutaneous injuries with blood exposure | Healthcare sharp (e.g. lancet) | Risk per exposure unknown. 36.8% [209] -42% [210] developed HBV after repeat exposures. |
| | Exposure prone procedure by infected healthcare worker | Transmission rates vary between 6 and 15% [88] - most were before standard precautions introduced |
| Transfusion | | 52-69% transmission if transfused with HBsAg (+) blood [211] |
| Human bites | | Risk negligible in the absence of visible blood. Case reports only. Requires risk assessment. |
| Percutaneous exposure to other body fluids (e.g. saliva) | | Very low risk. Case reports - HBeAg (+) source. [78] Requires risk assessment. |
| Sexual exposures | Heterosexual exposures in general | 18% [212]– 40%[213] - 44.2% [214] infection rate seen in regular partners of HBV infected people Increased risk if: multiple partners [67, 71] syphilis [71, 72, 215] gonorrhea [215] receptive anal intercourse [72]. |
| | Men who have sex with men | Increased risk of HBV transmission associated with ulcerative STI, gonorrhoea/chlamydia, sexual partner with HIV/AIDS, multiple sexual partners, commercial sex work [216] history of insertive anal intercourse. [217] |
| | Receptive oral sex (fellatio) | Possible means of transmission [218]. |

Risk assessment

- Type/details of injury – as above
- Source status – increased risk with HBeAg, high viral load
- Recipient status – increased risk if immunocompromised
- For unknown source, consider where injury occurred – community setting versus hospital setting
 - if in hospital – consider high-risk ward/patients
 - if in community – consider prevalence of HBV and of PWID locally