The risk of blood-borne virus (BBV) transmission to the client is influenced by several factors including the susceptibility of the client to infection, the infectivity of the nurse, and the practices performed by the nurse, i.e. exposure-prone procedures (EPP) or non-exposure prone procedures (NEPP). Exposure-prone procedures increase the risk of transmitting infection to clients because there is a risk that injury to the nurse may result in exposure of the patient/client open tissues to the blood of the nurse (also described as “bleedback”).

The definition of EPP and NEPP procedures (adapted from the 1998 Health Canada definitions), a table of procedure examples, and the assessment of risk factors for CARNA members reporting blood-borne virus infection (BBVI) follows:

### Non-Exposure Prone Procedures (NEPP)

Procedures where the hands and fingers of the health-care worker are visible and outside of the body at all times and procedures or internal examinations that do not involve possible injury to the health-care worker’s hands by sharp instruments and/or tissues are considered NEPP, provided routine infection prevention and control procedures are adhered to at all times.

### Exposure-Prone Procedures (EPP)

Invasive procedures where there is the potential for direct contact between the skin (usually a hand finger or thumb) of the health-care worker and sharp instruments, needle tips, or sharp tissues (spicules of bone or teeth) in body cavities, wounds, or in poorly visualized, confined anatomical sites.

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### NEPP – Low/Minimal Risk Activities

(Examples for all health-care workers but not limited to)

- Regular history taking and physical examinations
- Routine oral (gloved with mirror and/or tongue depressor), vaginal, and rectal examinations
- Resuscitation with appropriate personal protective equipment
- Insertion and maintenance of intravenous or central lines
- Minor suturing
- Incision of external abscesses
- Simple endoscopic procedures
- Risk from handling sharps
- Hands off supervision during surgical procedures

### Exposure-Prone Procedures (EPP)

(Examples for all health-care workers but not limited to)

- Trauma care due to the risk of sharp objects such as broken bones
- Rectal examination in the presence of suspected pelvic fractures
- Insertion of chest tube with rib fractures
- Internal cardiac massage
- Deep suturing to arrest hemorrhage
- Open surgical procedures in gynecology or obstetrics including repair of significant episiotomy tears
- Open orthopedic procedures with cutting or fixation of bone including K-wire fixation
- Orthopedic procedures involving acute hand trauma
- Open general surgical procedures
Assessment of Risk Factors for CARN A Members with BBVI Performing EPP and NEPP

Regulated members of CARN A are required to self-report to CARN A BBVI caused by the hepatitis B virus (HBV), hepatitis C virus (HCV), and/or human immunodeficiency virus (HIV) to minimize the risk of transmitting infection to clients (e.g. patients, residents, groups) receiving care. CARN A provides guidance and support to registered nurses with BBVI to provide nursing care that is of the highest standard of public safety.  

1. A risk assessment of CARN A member practices is made individually and must include a review of procedures carried out in a specific work setting. Examples of considerations for assessment are:

- the possibility of a nurse being called upon to perform EPP (e.g. in emergent situations) even though not performed on a regular basis
- the presence of specific patient circumstances (e.g. agitated patients) that increase the likelihood of nurse injury

Nurses working in areas where there is a risk of a patient/client biting are not generally regarded as performing EPP. There is a theoretical and negligible risk of BBV transmission to a biting patient from a nurse with BBVI.

2. A risk assessment of nurse practices for EPP includes an understanding that similar nursing practices may vary by nurse and by work setting.

The risk of CARN A members transmitting infections caused by the hepatitis B virus, hepatitis C virus and HIV to individuals receiving care is very low as nursing practices do not commonly include EPP. Most published reports of transmission to patients include health-care workers routinely involved in EPP, e.g. surgeons or dentists, however transmission by nurses with BBVI has been reported.

References


5. College and Association of Registered Nurses of Alberta. (September 2008). Registered nurses with blood-borne virus infection: Standard for reporting and guidance for prevention and transmission of infection.