Appendix 2: Exposure Prone Procedures

The following information describing exposure prone procedures and the potential of BBV spread from HCW to patient is taken from:


Abbreviations:

HCW: Health care worker  
BBV: Blood-borne virus (ie. HIV, hepatitis B, hepatitis C)

Transmission from HCW to patient

The risk of an infected HCW transmitting an infection to patients is of particular concern. The possibility of this happening is related to the types of procedures the HCW is involved in, their infection status and the types of patients they provide care for. The table below shows the level of risk to patients from HCWs infected with blood-borne viruses associated with various clinical procedures, from low-risk procedures (such as interview or non-invasive examination), to high-risk, exposure-prone procedures.

**Invasive procedures** carry a risk of infection and include any situation where an HCW enters the tissue, body cavity or organs of a patient. Operator factors may also increase the likelihood of transmission. These include technical competency (which may relate to skills training and education) and infectious status (eg. a high hepatitis B virus DNA titre.)

**Exposure-prone procedures** are invasive procedures where there is a potential for direct contact between the skin (usually finger or thumb) of the HCW and sharp surgical instruments, needles or sharp tissues (spicules of bone or teeth) in body cavities or in poorly visualised or confined body sites, including the mouth (NSW Health 1995a) of a patient. An exposure-prone procedure is one in which there is potentially a high risk of transmitting a blood-borne disease between an HCW and a patient during a medical or dental procedure.

### Levels of risk to patients from HCWs infected with blood-borne viruses, associated with particular procedures

<table>
<thead>
<tr>
<th>RISK CATEGORY</th>
<th>PROCEDURE</th>
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<tbody>
<tr>
<td>HIGH RISK (exposure-prone procedures; NSW Health 1995&lt;sup&gt;a&lt;/sup&gt;)</td>
<td>Any submucosal invasion with sharp, hand-held instruments, or procedures dealing with sharp pathology/bone spicules, usually in a poorly visualised or confined space (eg. orthopaedic surgery, trauma, internal cavity surgery, oral surgery).</td>
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<tr>
<td>VARIABLE RISK&lt;sup&gt;a,b&lt;/sup&gt;</td>
<td>Minor dental procedures (excluding examination), routine dental extractions. Internal/instrument examination/biopsy (eg. endoscopy, vaginal examination, laparoscopy). Minor skin surgery.</td>
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<tr>
<td>LOW RISK</td>
<td>Interview consultation, dental examination. Noninvasive examinations or procedures (aural testing, electrocardiograph, abdominal ultrasound. Intact skin palpation (gloves not required, no pathology). Injections/venpuncture (gloves required).</td>
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</tbody>
</table>

<sup>a</sup> “Variable risk” refers to procedures where the risk may depend on training, experience, competence or other operator-specific factors related to the status of infection (eg. HBeAg, high levels of HBV DNA).

<sup>b</sup> Where the risk to patients from HCWs infected with blood-borne viruses during specific procedures is unclear, consult with State/Territory professional advisory boards for further advice.