Benefits for using a standardised risk management framework to risk assess Infection Prevention and Control

Sue Greig
Senior Project Officer
AURA HAI/IPC and Emerging Issues Program

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Who might benefit from this presentation?

- Organisation governance – improve their understanding of their role in infection prevention and control and risk management
- Quality and safety managers or departments
- Infection prevention and control professionals
Key message – infection control is everybody’s business

To make this message meaningful it requires a governance structure and key people to drive and direct the infection prevention and control programme and all staff to have a basic understanding of:

- Effective governance to support implementation, monitoring, reporting activities
- Effective work practices to minimise risk of transmission of infectious agents
- Modes of transmission of infectious agents
- Legislation, regulation and standards to be applied
A risk management framework

- Provides a nationally consistent approach that is robust enough to be applied across the health continuum
- How do we use risk assessment and management principles for Infection Prevention and Control?
- Infection should not be considered an unpredictable complication but a potentially preventable adverse event
The risk assessment and management flowchart
Source: Australian Guidelines for the Prevention and Control of Infections in Health Care - Adapted
## A risk matrix

Source: Australian Guidelines for the Prevention and Control of Infections in Health Care

<table>
<thead>
<tr>
<th>Likelihood</th>
<th>Consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Insignificant</td>
</tr>
<tr>
<td>Almost certain</td>
<td>Medium</td>
</tr>
<tr>
<td>Likely</td>
<td>Medium</td>
</tr>
<tr>
<td>Possible</td>
<td>Low</td>
</tr>
<tr>
<td>Unlikely</td>
<td>Low</td>
</tr>
<tr>
<td>Rare</td>
<td>Low</td>
</tr>
</tbody>
</table>

### Manage by routine procedures

- **Low risk**
- **Medium risk**
- **High risk**
- **Extreme risk**

- Manage by specific monitoring or audit procedures
- This is serious and must be addressed immediately.
- The magnitude of the consequences of an event, should it occur, and the likelihood of that event occurring, are assessed in the context of the effectiveness of existing strategies and controls.
Who owns the risk?

Governance of the organisation or service

From where can risks come?

- the system
- the organisation
- the team who are delivering the care
- the individual
Who is at risk?

Patients – some patients more than others, e.g. elderly, surgical patients, neonates, patients with indwelling devices

HCWs – they are health consumers as well and they have extensive exposure to the risk

The organisation
Firstly, we need to understand the principles of risk management

Avoid risk – if a risk cannot be eliminated then it must be managed

Identify risk – what is the risk and who is involved?

Analyse risks – how did it occur, what is the likelihood and what are the consequences?

Evaluate risk – can the risk be reduced or eliminated?

Treat risks – who will do this, how and when will it be monitored?
What do we do to minimise risk

We need to identify:

- Who is at risk?
- What infectious agent is involved?
- How is the agent transmitted?
- Why can it happen?
- How likely is it?
- What are the consequences?
- What can be done?
- How is it applied to the situation?
Successful risk management includes

• A range of strategies that will be influenced by
  – a base-line review or gap analysis
  – review of the current governance arrangements, systems, processes, practices and their effectiveness

• Development of an action plan to prioritise response strategies and resources
A risk assessment tool - example

Risk Factors – to be considered when calculating risk for workforce immunisation.

1. History of vaccination or disease/infection – risk will be dependent on point 2
   - Confirmed past history of vaccination or disease to specific vaccine preventable diseases or infections e.g. hepatitis B
   - Unsure of previous vaccination or disease status
   - Unvaccinated or no known history of disease or infection

2. Workforce assessment – related to point 1
   - Pre-employment – information required as part of recruitment process prior to job offer being confirmed.
   - On commencement of work in the organisation
   - An existing employee being assessed

3. Opportunity for Exposure – independent risk factor
   - No direct contact with patients or clients
   - Contact with patients or clients – no contact with blood or body substances
   - Contact with patients or clients – direct or indirect contact with blood or body substances

4. Consequences of exposure – independent risk factor
   - Occupational acquisition of a specific vaccine preventable disease or infection
   - Health care associated infection of a specific vaccine preventable disease or infection
   - Increased risk of acquisition of disease or infection to specific vaccine preventable diseases or infections
   - No increased risk of disease or infection to specific vaccine preventable diseases or infections
   - Corporate risk including not meeting duty of care, litigation, workers compensation claims, decreased productivity, increased insurance premiums, risk of regulatory breach.
Calculating level of risk (assessing and scoring each matrix separately)

<table>
<thead>
<tr>
<th>Workforce Immunisation</th>
<th>1. History of vaccination or infection/disease</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2. Workforce assessment</strong></td>
<td>Confirmed past history of vaccination or disease</td>
</tr>
<tr>
<td>Pre-employment</td>
<td>1 = Low</td>
</tr>
<tr>
<td>On commencement of work</td>
<td>1 = Low</td>
</tr>
<tr>
<td>Existing employee</td>
<td>2 = Low</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Opportunity for exposure</th>
<th>No direct contact with patients or clients</th>
<th>Contact with patients or clients - No contact with blood or body substances</th>
<th>Contact with patients or clients - Direct or indirect contact with blood or body substances</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 = Low</td>
<td>4 = Medium</td>
<td>8 = High</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Consequences of exposure to a specific vaccine preventable disease or infection</th>
<th>Occupational acquisition</th>
<th>Health care associated infection</th>
<th>Increased risk of acquisition of disease</th>
<th>No increased risk of disease or infection</th>
<th>Corporate risk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9 = High</td>
<td>8 = High</td>
<td>6 = Medium</td>
<td>1 = Low</td>
<td>10 = Very High</td>
</tr>
<tr>
<td>Risk Score</td>
<td>Risk Factors</td>
<td>Score</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------------------</td>
<td>-------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1, 2. History of vaccination and workforce assessment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Opportunity for exposure</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>4. Consequences of exposure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Risk Rating (score)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall Risk Rating</th>
<th>Risk Factors</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low risk</td>
<td>1-8</td>
</tr>
<tr>
<td></td>
<td>Medium</td>
<td>9-16</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>17-24</td>
</tr>
<tr>
<td></td>
<td>Very High</td>
<td>25-28</td>
</tr>
</tbody>
</table>
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