Workshop: The nitty gritty of risk assessment - decontamination processes

IDI Managers Study Day April 12th 2012

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Decontamination Coordinator CUHG
Cork University Hospital
Aim & Objectives

Gain greater clarity, a deeper understanding and insight into the risk assessment process for decontamination RIMD

- Demystify risk assessment process
- Build on own experience
- Focus on the practicalities of risk assessment – (how is it done and how often is it done)
Risk management

- Proactive Risk Management → Risk Register
- Reactive Risk Management → Incident Management
What is **Proactive** Risk Management?

Work out what can go wrong and plan for the eventuality

→ spot a problem in the making and do something about it in advance
What is a risk register?

A risk register is a **database of risks** that face an organisation its staff and service users at any time.

**Always changing** to reflect the dynamic nature of risks and the organization's management of them.
Supporting Resources to Assist Risk Assessment Process

- HSE Decontamination Standards & Recommended Practices 2011
- HSE Risk Assessment Tool & Guidance (including guidance on application Oct 2011)
- HSE Developing & populating a Risk Register-Best Practice Guidance Feb 2008
Resources where to get them

HSE Risk Assessments Docs via


HSE Decontamination RIMD Best Practice Guidance

- [www.hse.ie/eng/Publications/services/Hospitals/](http://www.hse.ie/eng/Publications/services/Hospitals/)
Importance of Professional Judgement

- Risk assessment and analysis can be a subjective process relying on the knowledge and experience of the person making the analysis.

- Stakeholders & Team – should have clearly defined roles
Completing the Risk Assessment Form
Section 1

- Administrative Area:
- Location:
- Section/Ward/Dept:
- Date of Assessment:
- Source of Risk:
- Unique ID No:
- Primary Risk Category:
- Secondary Risk Category:
- Tertiary Risk Category:
- Name Risk Owner: (BLOCKS)
- Signature of Risk Owner:
Completing the Risk Assessment **Form**
Section 2

<table>
<thead>
<tr>
<th>RISK DESCRIPTION</th>
<th>IMPACTS/VULNERABILITIES</th>
<th>EXISTING CONTROL MEASURES</th>
<th>ADDITIONAL CONTROLS REQUIRED</th>
<th>PERSON RESPONSIBLE FOR ACTION</th>
<th>DUE DATE</th>
</tr>
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<tbody>
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</table>
Describe the Risk

**ICC approach**
- Describe the primary area of **Impact** if the risk were to materialise.
- Describe the **Causal Factors** that could result in the risk materialising.
- Ensure that the **Context** of the risk is clear
  - is the risk ‘target’ well defined (e.g. staff, patient, department, hospital, etc.) and
  - is the ‘nature’ of the risk clear (e.g. financial, safety, physical loss, perception, etc.)
Example of ICC Approach

- Potential injury to service users and staff (impact) due to old, unreliable & not fit for purpose steam sterilizer (causal factor) in the CDU (context)
Impacts & Vulnerabilities

- What is the likely harm that will occur if it does happen?

- HSE classified impacts into eight types of Harm
Completing the Risk Assessment Form
Section 2 continued

Existing Controls

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Existing Controls

Need to consider

- Adequacy
- Method of implementation
- Effectiveness

In minimizing risk to low as is reasonably practicable level → LRPL
- In a safety context it is often required to make the adverse impacts of a risk as low as is reasonably practicable level
As low as is reasonably practicable (ALARP) Principle

- Intolerable region: Risk cannot be justified in any circumstances.
- As Low As Reasonably Practicable: Tolerable only if the risk reduction is impracticable or if its cost is greatly disproportionate to the improvement gained.
- As Low As Reasonably Achievable: Tolerable if cost of reduction would exceed the improvements gained.
- Broadly acceptable region or minimal risk: Necessary to maintain assurance that the risk remains at this level.
Additional Controls Required

Work through hierarchy of controls *higher up the more reliable*

- Elimination
- Substitution
- Engineering Controls
- Administrative Procedure and safe work practices
- PPE – last control measure to be considered
Completing the Risk Assessment Form
Section 3  Risk Analysis

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<td>Residual Risk Rating</td>
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HSE’s Risk Assessment Tool

- To **reduce subjective biases** as far as possible and **make the process more objective** the HSE’s Risk Assessment Tool should be used when analysing risk.
Analysing the risk – Six?

- If this risk was to be managed effectively what controls would be required to be in place?
- What are the existing controls?
- How effective are they?
- Given the controls that are in place – how would you rate this risk?
- Are additional controls required? Y/N
- Is it ‘actual’ or ‘potential’ risk?
Rating the Risk

- Risk is **analysed** and **rated** in terms of
  - **Likelihood** (how likely is it to happen?) &

- **Impact** (what is the likely harm that will occur if it does happen?)
<table>
<thead>
<tr>
<th>1. IMPACT TABLE</th>
<th>Negligible</th>
<th>Minor</th>
<th>Moderate</th>
<th>Major</th>
<th>Extreme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injury</td>
<td>Adverse event leading to minor injury not requiring first aid.</td>
<td>Minor injury or illness, first aid treatment required &lt;3 days absence &lt; 3 days extended hospital stay Emotional Distress</td>
<td>Significant injury requiring medical treatment e.g. Fracture and/or counselling Agency reportable, e.g. HSA Gardai (violent and aggressive acts) &gt;3 Days absence 3-8 Days extended hospital Stay Emotional Trauma</td>
<td>Major injuries/long term incapacity or disability (loss of limb) requiring medical treatment and/or counselling Physical /emotional disability</td>
<td>Incident leading to death or major permanent incapacity. Event which impacts on large number of patients or member of the public (Emotional / Physical trauma)</td>
</tr>
<tr>
<td>Service User Experience</td>
<td>Reduced quality of service user experience related to inadequate provision of information</td>
<td>Unsatisfactory service user experience related to less than optimal treatment and/or inadequate information, not being to talked to &amp; treated as an equal; or not being treated with honesty, dignity &amp; respect - readily resolvable</td>
<td>Unsatisfactory service user experience related to less than optimal treatment resulting in short term effects (less than 1 week)</td>
<td>Unsatisfactory service user experience related to poor treatment resulting in long term effects</td>
<td>Totally unsatisfactory service user outcome resulting in long term effects, or extremely poor experience of care provision</td>
</tr>
<tr>
<td>Compliance with Standards (Statutory, Clinical, Professional &amp; Management)</td>
<td>Minor non compliance with internal standards. Small number of minor issues requiring improvement</td>
<td>Single failure to meet internal standards or follow protocol. Minor recommendations which can be easily addressed by local management</td>
<td>Repeated failure to meet internal standards or follow protocols. Important recommendations that can be addressed with an appropriate management action plan.</td>
<td>Repeated failure to meet external standards. Failure to meet national norms and standards / Regulations (e.g. Mental Health, Child Care Act etc). Critical report or substantial number of significant findings and/or lack of adherence to regulations.</td>
<td>Gross failure to meet external standards Repeated failure to meet national norms and standards / regulations. Severely critical report with possible major reputational or financial implications.</td>
</tr>
<tr>
<td>Objectives/Projects</td>
<td>Barely noticeable reduction in scope, quality or schedule</td>
<td>Minor reduction in scope, quality or project objectives or schedule.</td>
<td>Reduction in scope or quality of project; project objectives or schedule.</td>
<td>Significant project over – run. Inability to meet project objectives. Reputation of the organisation seriously damaged.</td>
<td></td>
</tr>
<tr>
<td>Business Continuity</td>
<td>Interruption in a service which does not impact on the delivery of service user care or the ability to continue to provide service.</td>
<td>Short term disruption to service with minor impact on service user care.</td>
<td>Some disruption in service with unacceptable impact on service user care. Temporary loss of ability to provide service</td>
<td>Sustained loss of service which has serious impact on delivery of service user care or service resulting in major contingency plans being involved</td>
<td>Permanent loss of core service or facility. Disruption to facility leading to significant ‘knock on’ effect</td>
</tr>
<tr>
<td>Financial Loss (per local Contact)</td>
<td>&lt;€1k</td>
<td>€1k – €10k</td>
<td>€10 – €100k</td>
<td>€100k – €1m</td>
<td>&gt;€1m</td>
</tr>
<tr>
<td>Environment</td>
<td>Nuisance Release.</td>
<td>On site release contained by organisation.</td>
<td>On site release contained by organisation.</td>
<td>Release affecting minimal off-site area requiring external assistance (fire brigade, radiation, protection service etc.)</td>
<td>Toxic release affecting off-site with detrimental effect requiring outside assistance.</td>
</tr>
</tbody>
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Likelihood Scoring

<table>
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<th>TABLE 1: LIKELIHOOD SCORING</th>
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<tbody>
<tr>
<td>RARE/REMOTE (1)</td>
</tr>
<tr>
<td>Actual Frequency</td>
</tr>
<tr>
<td>Occurs every 5 years or more</td>
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<tr>
<td><strong>3. RISK MATRIX</strong></td>
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<tr>
<td>Almost Certain (5)</td>
</tr>
<tr>
<td>Likely (4)</td>
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<td>Possible (3)</td>
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<tr>
<td>Unlikely (2)</td>
</tr>
<tr>
<td>Rare/Remote (1)</td>
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Evaluating Risk in Decontamination of RIMD

- Easy to identify what is definitely ‘unsafe’ or definitely ‘safe’
- In between there is significant gray area – which is dependent on the organism, the type of instrument and the immune statue of the patient/service user
  e.g. patient & tissue TSE/CJD risk category; dried out organic debris; final rinse water quality; site endoscope procedure; universal versus choose framework approach to decontamination standards
Evaluate the Risk

Depending on the risk rating and the adequacy of the current controls in place an evaluation must be made on whether to

- accept the risk,
- treat the risk by:
  - i) Avoiding the risk,
  - ii) Transferring the risk or
  - iii) Controlling the risk.

- ALARP Principle
Completing Risk Assessment Form
Section 3  Risk Analysis & Evaluation

- Existing control measurers
- Additional control measures required

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Break Out Group Session

- Risk Assessment Exercise
- Feedback 30 minutes
- Followed by Discussion
Treat Risks / Improvement Action Plan

Aim of the Plan:
- Reduce the Level of Risk or Eliminate Risk if possible

1. Specific cost effective actions
2. Resource Requirements
3. Person Responsible
4. Time Frame
5. Performance measures
6. Reporting & monitoring Requirements
PDSA Tool

- it is vital that risks identified are addressed.
- a simple yet powerful the Plan-Do-Study-Act (PDSA) cycle tool for accelerating improvement.

- **The model has two parts:**
  - Three fundamental questions, which can be addressed in any order
  
  - The PDSA cycle
    - is used to test and implement changes in real work settings
      - guides the test of a change to determine if the change is an improvement.
The ‘Plan, Do, Study, Act’ (PDSA) Cycle.
Monitor & Review Risks

- Monitor & Review effectiveness of all steps of the risk management process
- Document & use Process Records of all stages, steps taken & decisions made
- Evidence of continual improvement & learning
Monitor & Review

Fig 9. Monitor and Review

- Establish the Context
- Identify Risks
- Analyse Risks
- Evaluate Risks
- Treat Risks

AS/NZS RM Standard 4360: 2004
# Additional Controls (Actions) Update Form

* Attach this form to original Risk Assessment Form

**Action Owner:**

**Unique Risk ID No:**

**Date of Update:**

<table>
<thead>
<tr>
<th>ACTION NUMBER</th>
<th>ADDITIONAL CONTROL (ACTION) SUMMARY UPDATE</th>
<th>PERSON RESPONSIBLE FOR ACTION (if changed)</th>
<th>Action STATUS {Behind Schedule On Schedule Complete}</th>
<th>NEW REVIEW DATE</th>
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**EXAMPLE**

Additional Controls (Actions) Update Form

*original Risk Assessment Form attached*

**Action Owner:** Dr  ---- Chair Endoscopy Users Group / Director Internal Medicine  
**Unique Risk ID No:**  INM -4  
**Date of Update:**  28th June 2011

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<th>ACTION NUMBER</th>
<th>ADDITIONAL CONTROL (ACTION) SUMMARY UPDATE</th>
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<th>Action STATUS  (Behind Schedule On Schedule Complete)</th>
<th>NEW REVIEW DATE</th>
</tr>
</thead>
<tbody>
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<td>1.</td>
<td>In progress due completion December 2012. The planning process for the development of the a new Endoscopy Reprocessing Unit (ERU) commenced in May 2011. The capital funding for the project has been approved.</td>
<td>CEO &amp; ERU Steering Group</td>
<td>On schedule</td>
<td>Jan 2013</td>
</tr>
</tbody>
</table>
Management Procedures

- Departmental Level
- Service Delivery / Directorate Level
- Risk Management Dept → Risk Register
- Organization Senior Management
- Regional Level
- Corporate Level – Quality & Safety & Risk
Reactive Risk Management

Incident Management
- Identifying actual accident or near miss
- Reporting
- Investigating
- Implementing recommendations
- Sharing the learning
Serious Incident

Any incident which involved or is likely to cause extreme harm or is likely to become a matter of significant concern to service users, employees or the public
Procedure for managing incidents

- Complete Local Incident Form → to Line Manager & Risk Manager

- Consider Risk Assessment and or System Analysis/Case Review

- Complete Regional Incident Report Form → immediately following an incident; kept locally for local follow up and management
Failure to adequately decontaminate RIMD

Will
- increase the risk of transmission of cross-infection between patients
- Compromised the integrity of biopsy specimens
- Expose the patient to adverse consequences of non-sterile contaminants
- Damage RIMD and impede their effective function
- Increase costs unnecessarily
Summary

Questions & Discussion