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| Department/Location/Project: Day assessment unit maternity (D7) | SOP Document Reference Number: SOP/POCT/75 |
| Risk Assessor(s): N. Hodges | Highest Risk Rating Identified\*:3 |
| Date of assessment:12.01.2023 | Informed QM of any Risk Score >9: NA |

**\* Any identified risk which has a rating >9 must be communicated with the Quality Manager**

| **Description of risk** | **Existing control/ safe**  **System of work** | **Initial Risk**  **Rating**  **(S X L= RR)** | | | **What further action is required** | **Responsible person and target date for completion** | **Final Risk**  **Rating**  **(S X L= RR)** | | |
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| Example wording:  *There is a risk that …*  *As a result of …*  *Which may result in …*  *Who is exposed to the risk?*   * *Staff (including contractors)* * *Patients’* * *Organisation* | What prevents the risk occurring, if anything? |  |  |  | What needs to take place to prevent the risk occurring. Consider - elimination, substitution, physical controls/safeguards, safe systems of work, other methods i.e. personal protective equipment etc.  Include cost.  **[If None state N/A]** | Required information  **[If None state N/A]** |  |  |  |
| *As a result of …*  **The operation of centrifuge in day assessment unit in maternity.**  *A re-assessment of the risks to staff and (indirectly) to patients is required to ensure that they are reduced or mitigated as far as possible.*  *These risks (and the controls to reduce them are described in the subheadings below)* | Staff wear PPE and are trained or supervised to work in this area. |  |  |  |  |  |  |  |  |
| 1. Musculoskeletal injury to staff if stretching and bending when loading/unloading centrifuges. | 1. Centrifuge placed on lower level bench to allow visual and operational access into centrifuge(s) without significant stretching and bending. | 2 | 1 | 2 | **NA** | **NA** | 2 | 1 | 2 |
| 1. Musculoskeletal injury to staff when handling bulky/heavy equipment during installation or removal of centrifuge (e.g. for repair). | 1. Manual handling training (mandatory).   POCT staff would assist using laboratory trolleys/lifting equipment. | 2 | 1 | 2 | **NA** | **NA** | 2 | 1 | 2 |
| 1. Transporting to/from and loading/unloading samples into centrifuge(s).   Risk of dropping samples (sample loss) Risk of spillage or contamination. Biological hazard to staff. | 1. Samples are collected in close proximity to the centrifuge and often only one sample at a time. Tubes are plastic and have a sealed lid on that is not removed before centrifuging. A rack is available to place the sample in before and after centrifugation and during analysis.   All holes in the rota are set up with inserts and correct blue mats (see SOP if unsure) to fit the 5ml EDTA tubes, as long as a balance is placed directly opposite the patient sample the centrifuge will be balanced. | 2 | 1 | 2 | **NA** | **NA** | 2 | 1 | 2 |

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| 1. Sample breakage whilst in centrifuge.   In routine use there is very low incidence of sample tube breakage.  Biological hazard to staff. | 1. Plastic sample tubes in use. Minimise risk of breakage by balancing tubes in centrifuge and not placing tall tubes in the carousel holes with blue mats in.   Universal precautions should be applied (treat all samples as potentially infectious).  PPE should be worn (gloves, eye protection, and apron).  Ventilate the room and do not open the centrifuge for 30 minutes. | 2 | 1 | 2 | **NA** | **NA** | 2 | 1 | 2 |
| 1. There is not a lid for the centrifuge rotor, potentially releasing aerosols if the centrifuge is immediately opened post a sample breakage   . | 1. Centrifuge should not be left unsupervised during operation, the department is relatively busy with staff who can observe centrifuge at all times.   If a breakage is suspected the centrifuge must be stopped, when the lid releases it should be pushed down to not allow it to open.  PPE should be worn (gloves, eye protection, apron) when dealing with a breakage.  Ventilate the room and do not open the centrifuge for 30 minutes. | 2 | 1 | 2 | **NA** | **NA** | 2 | 1 | 2 |
| 1. Opening of centrifuge whilst rotor is spinning.   Biological agents and  mechanical hazards to staff | 1. Lid lock enabled whilst rotor is spinning, operator cannot open lid until rotor has stopped spinning. | 3 | 1 | 3 | **NA** | **NA** | 3 | 1 | 3 |
| 1. Mechanical & electrical hazards to staff including risk of imbalance in centrifuge causing movement on bench. | 1. The samples should always be evenly distributed   around the centrifuge and balanced with a tube of water when necessary.  Centrifuge is serviced and electrically tested annually.  Cleaning/maintenance programs are in place – see SOP/POCT/75. | 3 | 1 | 3 | **NA** | **NA** | 3 | 1 | 3 |

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| 1. Cleaning / Maintenance, 70% alcohol used as cleaning agent. Flammable and harmful by inhalation and contact with skin | 1. Gloves & apron worn, eyewash station available.   Provided in small individual wipes.  Detergent wipes can be used for routine cleaning, alcohol wipes used for decontamination less frequently. | 2 | 1 | 2 | **NA** | **NA** | 2 | 1 | 2 |
| 1. Sample analysis impacted by incorrect centrifugation. | 1. Centrifuge programme cycles set for duration and speed/rcf.   These do not need adjusting for routine use, settings can be found in SOP/POCT/75. | 2 | 2 | 4 | **NA** | **NA** | 2 | 2 | 4 |

**Risk assessment matrix**

**Acceptable Risk**

Risk is tolerable as long as it is well managed and controlled. In addition to identified hazards, all incidents claims and complaints will be risk assessed according to the following process and investigated according to the severity or the consequence and likelihood of (re)occurrence.

**All Risk Assessments within the Trust will identify:**

1. The hazards within the Task/ area being assessed inherent in the work undertaken
2. who and how many people would be affected
3. how often specific events are likely to happen (may be based on frequency of previous occurrence):
4. how severe the effect or consequence would be
5. how controllable the hazards are.

Acceptable risk will be determined using the following traffic light system:

**Severity/consequence**

Given the (in) adequacy of the control measures, how serious the consequences are likely to be for the group, patient or Trust if the risk does occur (using the matrix).

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|  | **Consequence score (severity levels) and examples of descriptors** | | | | |
|  | **1** | **2** | **3** | **4** | **5** |
| **Domains** | **Negligible** | **Minor** | **Moderate** | **Major** | **Catastrophic** |
| **Impact on the safety of patients, staff or public (physical/**  **psychological harm)** | Minimal injury requiring no/minimal intervention or treatment.  No time off work | Minor injury or illness, requiring minor intervention  Requiring time off work for ≤3 days  Increase in length of hospital stay by 1-3 days | Moderate injury requiring professional intervention  Requiring time off work for 4-14 days  Increase in length of hospital stay by 4-15 days  RIDDOR/agency reportable incident  An event which impacts on a small number of patients | Major injury leading to long-term incapacity/ disability  Requiring time off work for >14 days  Increase in length of hospital stay by >15 days  Mismanagement of patient care with long-term effects | Incident leading to death  Multiple permanent injuries or irreversible health effects  An event which impacts on a large number of patients |
| **Quality/complaints/**  **audit** | Peripheral element of treatment or service suboptimal  Informal complaint/inquiry | Overall treatment or service suboptimal  Formal complaint (stage 1)  Local resolution  Single failure to meet internal standards  Minor implications for patient safety if unresolved  Reduced performance rating if unresolved | Treatment or service has significantly reduced effectiveness  Formal complaint (stage 2) complaint  Local resolution (with potential to go to independent review)  Repeated failure to meet internal standards  Major patient safety implications if findings are not acted on | Non-compliance with national standards with significant risk to patients if unresolved  Multiple complaints/ independent review  Low performance rating  Critical report | Totally unacceptable level or quality of treatment/service  Gross failure of patient safety if findings not acted on  Inquest/ombudsman inquiry  Gross failure to meet national standards |
| **Human resources/ organisational development/ staffing/ competence** | Short-term low staffing level that temporarily reduces service quality (< 1 day) | Low staffing level that reduces the service quality | Late delivery of key objective/ service due to lack of staff  Unsafe staffing level or competence (>1 day)  Low staff morale  Poor staff attendance for mandatory/key training | Uncertain delivery of key objective/service due to lack of staff  Unsafe staffing level or competence (>5 days)  Loss of key staff  Very low staff morale  No staff attending mandatory/ key training | Non-delivery of key objective/service due to lack of staff  Ongoing unsafe staffing levels or competence  Loss of several key staff  No staff attending mandatory training /key training on an ongoing basis |
| **Statutory duty/ inspections** | No or minimal impact or breech of guidance/ statutory duty | Breach of statutory legislation  Reduced performance rating if unresolved | Single breech in statutory duty  Challenging external recommendations/ improvement notice | Enforcement action  Multiple breeches in statutory duty  Improvement notices  Low performance rating  Critical report | Multiple breeches in statutory duty  Prosecution  Complete systems change required  Zero performance rating  Severely critical report |
| **Adverse publicity/ reputation** | Rumours  Potential for public concern | Local media coverage –  short-term reduction in public confidence  Elements of public expectation not being met | Local media coverage –  long-term reduction in public confidence | National media coverage with <3 days service well below reasonable public expectation | National media coverage with >3 days service well below reasonable public expectation. MP concerned (questions in the House)  Total loss of public confidence |
| **Business objectives/ projects** | Insignificant cost increase/ schedule slippage | <5 per cent over project budget  Schedule slippage | 5–10 per cent over project budget  Schedule slippage | 10–25 per cent over project budget  Schedule slippage  Key objectives not met | Incident leading >25 per cent over project budget  Schedule slippage  Key objectives not met |
| **Finance including claims** | Small loss Risk of claim remote | Loss of 0.1–0.25 per cent of budget  Claim less than £10,000 | Loss of 0.25–0.5 per cent of budget  Claim(s) between £10,000 and £100,000 | Uncertain delivery of key objective/Loss of 0.5–1.0 per cent of budget  Claim(s) between £100,000 and £1 million  Purchasers failing to pay on time | Non-delivery of key objective/ Loss of >1 per cent of budget  Failure to meet specification/ slippage  Loss of contract / payment by results  Claim(s) >£1 million |
| **Service/business interruption Environmental impact** | Loss/interruption of >1 hour  Minimal or no impact on the environment | Loss/interruption of >8 hours    Minor impact on environment | Loss/interruption of >1 day  Moderate impact on environment | Loss/interruption of >1 week  Major impact on environment | Permanent loss of service or facility  Catastrophic impact on environment |

**Likelihood**

Given the (in) adequacy of the control measures for each risk, decide how likely the risk is to happen according to the following guide. Scores range from 1 for rare to 5 for very likely.

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| **Score** | **Descriptor** | **Description** |
| **1** | **Rare** | Extremely unlikely to happen/recur – may occur only in exceptional circumstances – has never happened before and don’t think it will happen (again) |
| **2** | **Unlikely** | Unlikely to occur/reoccur but possible. Rarely occurred before, less than once per year. Could happen at some time |
| **3** | **Possible** | May occur/reoccur. But not definitely. Happened before but only occasionally - once or twice a year |
| **4** | **Likely** | Will probably occur/reoccur. Has happened before but not regularly – several times a month. Will occur at some time. |
| **5** | **Very Likely** | Continuous exposure to risk. Has happened before regularly and frequently – is expected to happen in most circumstances. Occurs on a daily basis |

**Risk Score is determined by Severity x Likelihood**

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|  | **Consequence** | | | | |
| **Likelihood** | **1**  **Insignificant** | **2**  **Minor** | **3**  **Moderate** | **4**  **Major** | **5**  **Catastrophic** |
| **5 – Almost certain** | **5** | **10** | **15** | **20** | **25** |
| **4 - Likely** | **4** | **8** | **12** | **16** | **20** |
| **3 – Possible** | **3** | **6** | **9** | **12** | **15** |
| **2 – Unlikely** | **2** | **4** | **6** | **8** | **10** |
| **1 - Rare** | **1** | **2** | **3** | **4** | **5** |

