

## Risk Assessment Form

HSF-CBIO-119

Use this form for any detailed risk assessment unless a specific form is provided. Refer to your Summary of Hazards/Risks and complete forms as required, including those that are adequately controlled but could be serious in the absence of active management. The Action Plan and reply section is to help you pursue those requiring action.

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| **Name of Assessor:**  | Pam Saunders | **Post Held:** | Operations Manager  |
| **Department:** | SMiRL | **Date:** | 12/03/2020 |
| Subject of Assessment: E.g.: hazard, task, equipment, location, people |
| Operation of **Freestyle Precision Pro by Abbott**with samples from patients that fit the case description of novel coronavirus (COVID-19)**Documented Guidance**Current HPS guidance recommends that Point of Care Equipment should not be used, unless a local Risk Assessment is conducted to show that analysis can be conducted safely. The purpose of this risk assessment is to provide guidance to individual units to show the risks associated and recommended precautions to take to minimise this risk to facilitate POC blood glucose analysis in Greater Glasgow and Clyde where blood glucose analysis is deemed essential and not being able to perform would be detrimental to patient care. The PHE Guidance **COVID-19: safe handling and processing for samples in laboratories** which is linked in the HPS Guidance for laboratories (direct link below) has been updated:<https://www.gov.uk/government/publications/wuhan-novel-coronavirus-guidance-for-clinical-diagnostic-laboratories/wuhan-novel-coronavirus-handling-and-processing-of-laboratory-specimens>There is, as yet, no evidence that viable virus particles are present in the blood of patients with COVID-19 and no evidence that aerosolisation of the blood would lead to infection in the HCW. Additionally, evidence of viraemia is low in patients with COVID-19.<https://jamanetwork.com/journals/jama/fullarticle/2762997?resultClick=1> |
| Hazards (Describe the harmful agent(s) and the adverse consequences they could cause) |
| **Agent: COVID-19**2019-nCoV infection is classified as an airborne [high consequence infectious disease](https://www.gov.uk/guidance/high-consequence-infectious-diseases-hcid) (HCID) in the UK.Characterisation of COVID-19 is ongoing. Initial information shared by China and WHO indicates that [2019-nCoV is a beta-coronavirus](https://www.who.int/docs/default-source/coronaviruse/20200114-interim-laboratory-guidance-version.pdf) that is genetically similar to SARS-like coronaviruses obtained from bats in Asia. Both SARS-CoV and MERS-CoV are ACDP Hazard Group 3 Pathogens; as such this virus COVID-19 should be treated as hazard group 3.*Ref:* [*https://www.gov.uk/government/publications/wuhan-novel-coronavirus-background-information/wuhan-novel-coronavirus-epidemiology-virology-and-clinical-features*](https://www.gov.uk/government/publications/wuhan-novel-coronavirus-background-information/wuhan-novel-coronavirus-epidemiology-virology-and-clinical-features)**Blood Glucose Monitor****Mechanical:** No risks to user or patient. Incorrect insertion of the test strip into the analyser may damage the analyser.**Chemical:** Chlorine based disinfectant. **Biological:*** Accidental spillage or exposure to biological material e.g. blood samples – biological waste
* Procedure use of safer sharp lancet sampling device – sharps risk
* Incorrect disposal of specimen waste

**Electrical:**Blood gas analyser power supply |
| Description of RiskDescribe the work that causes exposure to the hazard, and the relevant circumstances. Who is at risk? Highlight significant factors: what makes the risk more or less serious – e.g.: the time taken, how often the work is done, who does it, the work environment, anything else relevant. |
| As blood is considered a potential source of infection any risk of splash or spillage of blood glucose monitoring collection Ref: <https://www.gov.uk/government/publications/wuhan-novel-coronavirus-guidance-for-clinical-diagnostic-laboratories/wuhan-novel-coronavirus-handling-and-processing-of-laboratory-specimens> Based on knowledge of other coronaviruses, infection with COVID-19 could occur by inhalation of aerosolised virus or by contact with droplets, contaminated surfaces or formites. Exposure to upper and lower respiratory tract specimens in the absence of appropriate biological safety measures is likely to represent the greatest risk of transmission in a laboratory setting, and thus the risk could be assumed the same for Point of Care Testing.**Freestyle Precision Pro by Abbott**Decision re undertaken procedureBlood glucose monitoring with the Freestyle Precision Pro should be undertaken as clinically required. If the need for blood glucose monitoring is not immediate, consider sending a grey topped tube to the laboratory for laboratory blood glucose . If the patient is also requiring venous gas analysis, use the glucose result from the gas analyser. PPEAppropriate PPE is made available including FFP3 face mask, gown, gloves, eye protection where appropriate. PPE should be as per patient management. ‘Fit testing’ of FFP3 mask if required. The minimum level of PPE to be worn for the procedure is that suitable for droplet precautions ( Disposable apron / consider fluid-resistant disposable gown if apron provides inadequate cover for the procedure/task being performed , Disposable gloves, Fluid-resistant Type IIR surgical face mask and goggles or full face visor if splashes anticipated )Procedure* Using single safer sharp lancet sampling device - to prevent cross infection and contamination and reduce pain from a blunt lancet and to meet EU directive 2010/32/EU and to help prevent needle stick incidents
* Prick side of finger (avoid finger pad, thumb and index finger where possible)
* Scan barcode
* Take the strip in the meter to the blood and ensuring meter and strip are above the drop of blood touch in the strip tip into the blood
* Wait till meter displays blood glucose reading
* Remove and safely dispose of test from strip from meter in biological waste
* Remove gloves and wash hands

DecontaminationDecontamination procedure after analysis of a sample from patient with COVID-19 * Using clean gloves, Clean the machine with Clinell sanitising wipe. The device must be cleaned prior to use on another patient
	+ There is a risk to other healthcare staff operating the analyser afterwards due to transmission by direct contact with possible contaminated surfaces if the blood analyser is not decontaminated after each use following analysis.
* Visible contamination - the device will need to be decontaminated immediately after use if there is visible contamination e.g. blood. For blood apply 10, 000 ppm of chlorine solution for 10 minutes then wipe off with Clinell wipe
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| **Summarise current controls In place**  | **Describe how they might fail to prevent adverse outcomes.** |
| * Work instruction and risk assessments in place to cover all procedures and equipment pertaining to blood glucose monitoring protocol
* Staff receive approved training prior to requesting and using blood glucose meters and can demonstate competence and attend update session
* Completion of Learnpro modules – including sharps
 | * Work instructions and risk assessments not in place
* Procedures, Risk assessments & policies not reviewed
* Staff not carrying out procedures as per training /SOP/Risk assessment and failure of staff to work in a safe manner
* Changes in procedures which are not cascaded to staff or meter used by untrained staff.
* Ongoing/review of Competency not assessed
* Staff not carrying out procedures as per training /Work Instruction/Risk assessment

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| * Using single safer sharp lancet sampling device - to prevent cross infection and contamination and reduce pain from a blunt lancet and to meet EU directive 2010/32/EU and to help prevent needle stick incidents
 |  |
| * Appropriate PPE is made available including FFP3 face mask, gown, gloves, eye protection where appropriate. PPE should be as per patient management. ‘Fit testing’ of FFP3 mask if required
 | * Failure of healthcare staff to to wear appropriate PPE correctly.
* Touching, mouth, eyes or nose with potentially contaminated gloves.
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| * All blood spills handled according local departments policy on disposal of clinical waste
* Decontamination of all potentially contaminated surfaces of analyser, screen and barcode scanner with chlorine based disinfectant
* All waste material handled according to the local departments policy on disposal of clinical waste (Category B waste).
* Use of sharps container for disposal of lancet to prevent contamination and sharps injury by following GG&C infection control and safe dispoal of sharps policy
 | * Failure to report accidents or blood spills
* Ward staff/infection control failing to inform sample of patient with suspected coronovirus.
* Failure of staff to follow decontamination procedure after analysis of each potentially infective sample
* Failure to dispose of clinical waste safely
* Failure to dispose of sharps safely
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**Existing Precautions**

**Level of Risk -** Is the control of this risk adequate?

Give more than one risk level if the assessment covers a range of circumstances. You can use the ‘matrix’ to show how ‘likelihood’ and ‘consequences’ combine to give a conclusion. Also, be critical of existing measures: if you can think how they might fail, or how they could be improved, these are indications of a red or orange risk.

**Risk Matrix**

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| --- | --- | --- | --- |
| Likelihood |  | Impact/Consequences |  |
|  | Negligible | Minor  | **Moderate**  | **Major**  | **Extreme**  |
| **Almost Certain** | **Medium** | **High** | **High** | **V High** | **V High** |
| **Likely** | **Medium** | **Medium** | **High** | **High** | **V High** |
| **Possible** | Low | **Medium** | **Medium** | **High** | **High** |
| **Unlikely** | **Low** | **Medium** | **Medium** | **Medium** | **High** |
| **Rare** | **Low** | **Low** | **Low** | **Medium** | **Medium** |

 **Very High**  **High** **Medium** **Low**

**Current risk level: Medium**

Given the current precautions, and how effective and reliable they are, what is the current level of risk? **Green** is the target – you have thought it through critically and you have no serious worries. Devise ways of making the risk green wherever you can. **Yellow** is acceptable but with some reservations. You can achieve these levels by reducing the inherent risk and or by effective and reliable precautions.

**High (Orange) or Very High (Red) risks are unacceptable and must be acted on: use the Action Plan section to summarise and communicate the problems and actions required.**

**Action Plan** (if risk level is **High (Orange) or Very High (Red)**

Use this part of the form for risks that require action. Use it to communicate, with your Line Manager or Risk Coordinator or others if required. If using a copy of this form to notify others, they should reply on the form and return to you. Check that you do receive replies.

Describe the measures required to make the work safe. Include hardware – engineering controls, and procedures. Say what you intend to change. If proposed actions are out with your remit, identify them on the plan below but do not say who or by when; leave this to the manager with the authority to decide this and allocate the resources required.

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| **Proposed actions to control the problem**List the actions required. If action by others is required, you must send them a copy | **By Whom** | **Start date** | **Action due date** |
| Actions – involve the Clinical teams agreeing to Risk assessment and have instructions on the wards.Requirement for training needs to be evidenced |  |  |  |

# Action by Others Required - Complete as appropriate: (please tick or enter YES, name and date where appropriate)

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| **Report up management chain for action** | NA |
| **Report to Estates for action** | NA |
| **Contact advisers/specialists**  | NA |
| **Alert your staff to problem, new working practice, interim solutions, etc** | Ensure this risk assessment is available to GGC POC Co-ordinators |

##### Reply

##### If you receive this form as a manager from someone in your department, you must decide how the risk is to be managed. Update the action plan and reply with a copy to others who need to know. If appropriate, you should note additions to the Directorate / Service Risk Register.

**If you receive this as an adviser or other specialist, reply to the sender and investigate further as required.**

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| **Assessment completed - date:** | 16/03/20 | **Review date:**  | 16/03/2021 |