

**COVENTRY SCHOOL FOUNDATION – Risk Assessment**

<b>Foundation Area/Foundation School: Biology Department</b>	King Henry VIII Senior School
<b>Date of Assessment: 1-9-20</b>	<b>Name of Assessor:</b> Donna Norman
<b>Location &amp; Subject of Assessment:</b> Practical Biology in a Laboratory	
<b>Review Date:</b>	<b>Other Relevant Information:</b> This document is specifically concerned with Biology practical work in a laboratory. It is in addition to the school wide risk assessment.

<b>Area/Activity Assessed: Practical Biology in a Laboratory</b>					
<b>Summary of significant risks where action is required</b>		<b>Summary of controls to be implemented</b>			
Contamination and infection from covid19 virus.		Social distancing measures in line with government guidance as applicable to our environment. Creating a teaching environment which allows for pupils to undertaken practical work whilst working within the guidelines to minimise risk. Creating a routine where practical equipment and reagents can be safely prepared and used by staff and students whilst working within the guidelines to minimise risk. Staff given appropriate training as to the organisation of practical during the week before any practical work happens. Pupils to be given a general induction by their teacher before the first practical activity and key information and reminders before each practical.			
<b>Reviewed / Approved by Senior Manager</b>		Senior Manager:	Signature: P.Dearden, Headmaster		Date: 15/09/2020
Date Reviewed					
Reviewer / Signature					

What are the hazards?	Who will be affected?	Risk (possible harm)	Control Measures		Who by?	When?	Can this be achieved? Risk after measures?
			In Place	Action Required (to reduce risk)	Name	Date	
Cross contamination from proximity with each other as pupils arrive and leave the laboratory.	Pupils and staff	HIGH		<p>All equipment/ reagents will be placed into the laboratory by the technician(s) prior to the entry of pupils as far as possible.</p> <p>Pupils will line up outside the laboratory using the markers on the floor to observe appropriate social distancing at the predetermined entrance (where a lab has more than one door).</p> <p>If the class are likely to arrive all at the same time then it would be helpful for the pupils to organise themselves in workstation order from the one furthest from the front to those at the front as predetermined by the teacher. This may not be possible practically, however.</p> <p>Pupils will be invited into the laboratory by their teacher one at a time and will make their way to their predetermined numbered work station (the teacher will have a predetermined seating plan). Students will move to their work station using the predetermined (one way if possible) route.</p> <p>Pupils will remain in their predetermined numbered work station for the duration of the lesson unless given instructions by their teacher to move in specific circumstances.</p> <p>Pupils will leave using the predetermined routes and in a manner so that they are spaced apart.</p> <p>Where laboratories have an external door, pupils can enter and leave via this route to reduce mixing in classrooms.</p>	Department staff	Every lesson	MEDIUM

				Other teachers should not enter a laboratory during another lesson with a different teacher/ group.			
Cross contamination from working in the same laboratory/ prep room	Pupils and staff	HIGH		<p>Class laboratories have been assigned to different year group bubbles.</p> <p>Staff will aim to maintain a social distance of 2m from both pupils and other members of staff at all times.</p> <p>Within the prep room, tasks should be discussed and as far as possible divided between technicians to reduce the use/ handling of the same equipment.</p> <p>Wherever possible, pupils should aim to be 1m from other pupils in the laboratory. Each room has been assessed to determine an appropriate occupancy and teachers will create seating plans for each group to allow for maximum social distancing.</p> <p>All working spaces should have as much ventilation as possible, windows and doors will be left open as far as reasonably practical.</p> <p>Pupils can only work in a pair during a practical activity if they are from the same bubble and maintain an appropriate social distance so this is acceptable within Biology lessons in laboratories.</p> <p>Movement around the laboratory must be planned in advance to allow pupils to collect/use equipment or reagents and they should do so using the predetermined one way routes whilst observing a social distance of 1m from other pupils and 2m from the teacher.</p> <p>When collecting equipment or reagents, it could be spaced out on the side if this is still accessible to all pupils and if working in pairs, the normal practice of getting each pair to allocate one person</p>	Department staff	Each lesson/ day	MEDIUM

				<p>to collect specific items should be rigorously enforced, whilst maintaining 1m social distancing.</p> <p>In certain instances, some equipment and/ or reagents may be placed in individual trays for use. This will only happen when it is deemed necessary and will be agreed at a department meeting.</p> <p>Additional cleaning rotas are in place to allow for cleaning of the labs between 11.00 and 14.00 where practicals have occurred.</p>			
--	--	--	--	--	--	--	--

<p>Cross contamination from using the same practical equipment or reagents</p>	<p>Pupils and staff</p>	<p>HIGH</p>		<p>The following practicals must NOT be attempted:          Cheek cell sampling          Lung volume/ capacity/ other breathing based activities          Activities involving saliva          Activities that make use of straws or other equipment that is blown through          Pupils to be organised and remain in year group 'bubbles' so practical equipment and reagents will be assigned to a specific year group for a specified time. This will be agreed at a department meeting, ideally one week in advance of the practical in question so that the technicians can prepare effectively and plan how best to prepare and deliver the equipment and reagents. The teacher leading the lesson will need to assess the non-COVID-19 related risks of any activity in the usual manner. If a teacher has concerns about the ability of pupils to carry out the task safely whilst maintaining a 2m social distance and without direct intervention, then this should be factored into the risk assessment. In such cases, teachers should consider whether a demonstration or an alternative activity should be provided. This should be discussed with the Head of Department. Pupils and staff must wash/ sanitise their hands before and after handling any equipment. Soap and paper towels will be readily available for this procedure and will be checked and replenished by the technicians. Any hand gel should be non-alcohol based (due to the flammability of ethanol) but should claim to kill 99.9% of viruses and bacteria. Teachers will need their own set of equipment if demonstrating and this cannot be handled by other teachers or pupils until it</p>	<p>Department staff</p>	<p>Each practical lesson</p>	<p>MEDIUM</p>
--	-------------------------	-------------	--	---	-------------------------	------------------------------	---------------

			<p>has been quarantined (or meticulously cleaned) appropriately.</p> <p>Sharing of equipment should be kept to a minimum at every stage to minimise technician/ pupil contact.</p> <p>After a practical has been completed, the technician(s) will need to collect the equipment and reagents immediately so careful planning to allow this to occur must have happened. Manual handling issues will need to be considered.</p> <p>Once a practical has been used by all groups within the bubble, it will need to be meticulously cleaned or quarantined for 72 hours before use by a different bubble. For the majority of practicals, 72 hours quarantine will be observed. Consideration will need to be given to ensure sufficient storage space and additional plastic colour coded boxes will be purchased for this purpose. In addition 'safe to use' labels (colour coded) will be attached to the boxes so that it is clear when the full 72 hour quarantine has occurred. The rules regarding the storage of hazardous chemicals still apply along with quarantine rules so this needs to be taken into account. As a result stock reagents should not be provided to classes and quantities need to be provided in line with what is going to be used. In addition, only the correct quantity of equipment should be provided so that any space designated for quarantine purposes is kept to a minimum. To allow this to happen, teachers will need to indicate the number of complete sets of apparatus required for each practical booked.</p> <p>Microscopes will need to be quarantined for 72 hours before use by pupils in different bubbles. However, the eye piece must be wiped before and after use with a non-alcohol based sanitising wipe by the user.</p>			
--	--	--	--	--	--	--

				<p>If a practical requires the use of safety specs then it must not go ahead unless these are available. Class sets of safety specs will be meticulously cleaned using Milton for a minimum of 20 min, then securely stored prior to use. These need to be booked when required by the class teacher. Immediately after use, pupils should place these in a pre-prepared container of Milton so that they can be meticulously cleaned. Staff will need a pair of safety specs solely for their use and will be provided with non-alcohol based antiseptic wipes for cleaning during the day as required. Staff eye protection if used needs to be cleaned at the end of the day with Milton. Lab coats and aprons have been removed from the labs. Standard CLEAPPS guidance advice is that they should not be used by pupils. However, for certain practicals e.g. dissection, plastic disposable aprons could be used. After use these should be placed into a bag that is sealed and stored securely for 72 hours before disposal. Teachers can choose to wear their own lab coat which must be laundered regularly and not shared. Routine glove use by pupils is not necessary for all practicals but where appropriate, they should be of the correct type and must not be shared. After use they should be placed in a bag, stored securely for 72 hours and then disposed of.</p>			
--	--	--	--	---	--	--	--

<p>Cross contamination as a result of dealing with an accident or emergency</p>	<p>Pupils and staff</p>	<p>HIGH</p>		<p>The teacher leading the session will need to assess the severity of the incident.          If the teacher deems that the pupil can deal with accident in an appropriate way under the direction of the teacher at a distance of 2m, then this should occur e.g. sweeping up broken glass.          If the accident requires teacher intervention, then the pupils will need to be evacuated from the room in an orderly fashion and wait in line just like at the start of the lesson. The teacher can then deal with the incident in question.          When closer contact might be needed to deal with a casualty, staff may 'break' the 2m social distance rule to provide first aid. First aiders need to follow guidance provided by their trainer in light of COVID-19. To minimise risk, an emergency use only pack will be available in each lab containing disposable gloves, fluid resistant face mask, disposable plastic apron, eye protection, paper towels, plastic bags for disposal of used equipment/ contaminated clothing. PPE needs to be worn properly. Hands should be washed thoroughly and immediately after removing any PPE. Used PPE should be stored securely in a bag for 72 hours and then be disposed of.</p>	<p>Department staff/ first aider</p>	<p>When necessary</p>	<p>MEDIUM</p>
---	-------------------------	-------------	--	--	--------------------------------------	-----------------------	---------------