

# The Big Bang Fair 21 to 23 June 2023

# Visiting School Groups Risk Assessment

Hall 12
National Exhibition Centre
North Avenue
Marston Green
Birmingham
B40 1NT

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### Introduction

Welcome to The Big Bang Fair Visiting Schools' Risk Assessment. As you will know, you have obligations when planning any school activity to ensure the Health and Safety and well-being of your pupils and likewise, the school has an obligation to make sure that any activity you undertake as their employee is also safe for you.

The following document is to assist you in your obligations on this front.

The Event Organisers have undertaken this risk assessment and carried out the following:

- Gather information/identify risks
- Implement control measures appropriate to the identified risks
- Evaluate residual risk once all risk management is in place

To quantify the level of risk, we have used a matrix to score the level of the risk, its severity and the likelihood and consequences. Once the risk management has been put in place, we revisited the matrix and re-scored the hazards, and the final score identified the final assessed severity, likelihood and consequences.

Please convey all this information to other supervising adults travelling with you to The Big Bang Fair.

The NEC is a large exhibition complex and can be very daunting at the best of times. Please be aware that we are not the sole users of the venue. There will be other exhibitions and activities taking place at the time of the Big Bang Fair, with additional attractions such as shops, food outlets and coffee shops on the Concourses that are open and might attract the attention of the young adults in your care. The same facilities are available within the exhibition so people should not need to leave the halls.

The whole of the NEC complex is secured and covered by CCTV, and we will have specific security and event staff within Hall 12 to ensure the safety of all visitors to the exhibition. However, The Big Bang Education CIC will only prevent visitors from leaving the halls if they wish to, and we are not responsible for managing the security outside of Hall 12. Other exhibitions and activities are taking place at the NEC at the same time as the Big Bang.

The event has taken note of its duty of care to all involved and those attending, and we have used all reasonable and practicable measures to control the identified risks.

During the event period, there is a process of continuous assessment and reassessment that will be undertaken by the Event Safety Advisor to ensure appropriate risk controls are put in place should situations develop which are not covered by this assessment. As it is a dynamic situation, the Safety Advisor will respond accordingly. This document relies on the support of all the staff and the subcontractors involved.

Alongside this Risk Assessment is a full event safety file holding all the risk data from exhibitors and sub-contractors. It includes their Risk Assessments and Methodology Statements, which cover their activities and operational undertakings supported by their insurance policies and qualifications to support their competencies.

# No exhibitor activity will be authorised to take place without the necessary documentation.

The Event Safety Advisor is independent of the event and provide operational support, guidance, assistance, and advice on all aspects of Health and Safety. They check all aspects of the risks and Health and Safety of all contractors and subcontractors and the safety of all staff and the public in attendance at the event whilst working closely with the NEC teams. They are present on-site during the build and breakdown of the event and on-site the whole time. The public is in attendance and operational at all times to ensure compliance and safe delivery of the event.

This document relies on the support of the Event Team, contractors, subcontractors, exhibitors, event staff, The Big Bang Education CIC team, volunteers, and any other contributors to the event.

The Event Team includes the fresh Group, their contractors and sub-contractors who coordinate all aspects of the event, from pre-planning to the delivery, working closely with the Big Bang Education CIC.

#### COVID-19

Current regulations and legislation related to the controls and management of activities in relation to COVID-19 are ever-evolving. With this in mind and to avoid confusion, the Big Bang Fair is working closely with various qualified professionals and the NEC to produce the most appropriate way to manage activities and risks in the current climate. Up-to-date documentation will be sent out in the weeks leading up to the event with detailed guidance and recommendations for managing the COVID-19 virus and associated risks best. Should individuals in your party be unwell, whatever the cause, we highly recommend that they refrain from attending this event. Big Bang Fair and the NEC will follow any government guidance in place at the time of the event

# Lost and vulnerable persons

Both the Event Team and the venue have a robust lost and vulnerable persons policy.

With an event of this nature and the size of the venue, it is possible that someone could be separated from their group. As such, we ask that you inform all the people in your care, should they become separated from your group, to make themselves known to a member of the venue security team or the information desks at the venue.

All staff taking care of the visiting groups should ensure that their mobile phone is charged and in total working order should the Event Team contact them. Please ensure that the Event Team has the correct contact information for your school, which is supplied through the booking process for your visiting party.

# Safeguarding

Both The Big Bang Education CIC team and the Fresh Group have an event-specific safeguarding policy. All staff to whom this is applicable are briefed prior to the event by the Events Safety Advisor.

Copies of the policy are kept on-site at the Information Desk and is available on request from school and youth groups.

## References

- CLEAPSS Model Health & Safety Codes of Practice in Science for Local authorities (L22) <a href="http://www.cleapss.org.uk">http://www.cleapss.org.uk</a>
- CLEAPSS Laboratory Handbook <a href="http://www.cleapss.org.uk">http://www.cleapss.org.uk</a>
- Association for Science education –Topics in Safety & Be Safe 4<sup>th</sup> edition www.ase.org.uk
- www.Thepurpleguide.co.uk
- The guide to managing Health & Safety at Exhibitions and Events (The Red Guide)
- The Association for Science Education 'Be Safe 'and Safeguards in the School Laboratory" <a href="https://www.ase.org.uk">www.ase.org.uk</a>

#### **Current information on how the NEC manages COVID 19**

• Venue Protect | Helping you plan| The NEC, Birmingham

## **Risk Matrix & Definitions**

LIKELIHOOD (L)	RISK RANKING MATRIX						
HIGH 5	5	10	15	20	25		
SIGNIFICANT 4	4	8	12	16	20		
MODERATE 3	3	6	6	12	15		
LOW 2	2	4	6	8	10		
NEGLIGIBLE 1	1	2	3	4	5		
CONSEQUENCE (C)	NEGLIGIBLE 1	LOW 2	MODERATE 3	MAJOR 4	CATASTROPHIC 5		

LIKELIHOOD DEFINITIONS				
A <b>high</b> likelihood	<ul> <li>It is expected to occur in most circumstances</li> <li>There is a strong likelihood of the hazards reoccurring</li> <li>The Incident has happened repeatedly before and is expected again</li> </ul>			
A <b>significan</b> t likelihood	<ul> <li>Similar hazards have been recorded on a regular basis</li> <li>Considered that it is likely that the hazard could occur</li> <li>The Incident has occurred more than once before and is liable to occur again</li> </ul>			
A moderate likelihood	<ul> <li>Incidents or hazards have occurred infrequently in the past</li> <li>The incident has been recorded before and could happen again</li> </ul>			
A <b>low</b> likelihood	<ul> <li>Very few known incidents of occurrence</li> <li>Has not occurred yet, but it could occur sometime</li> <li>Incident not previously recorded but is conceivable</li> </ul>			
A <b>negligible</b> likelihood	<ul> <li>No known or recorded incidents of occurrence</li> <li>Remote chance, may only occur in exceptional circumstance</li> </ul>			

	CONSEQUENCE DEFINITIONS
Catastrophic	<ul> <li>Multiple of single death</li> <li>Costs to Event of up to £10,000,000</li> <li>International and National media outrage</li> </ul>
Major	<ul> <li>Serious health impacts on multiple or single persons or permanent disability.</li> <li>Costs to Event between £2,000,000 - £5,000,000</li> <li>National media outrage</li> </ul>
Moderate	<ul> <li>Accident resulting in an injury reportable under RIDDOR</li> <li>More than 10 days rehabilitation required for injured persons</li> <li>Costs to Event between £500,000 - £2,000,000</li> <li>Local media and community concern</li> </ul>
Low	<ul> <li>Accident resulting in minimal personal injury</li> <li>Injury to person resulting in lost time and claims</li> <li>Costs to Event between £500,000 - £1,000,000</li> <li>Minor isolated concerns raised by stakeholders, customers</li> </ul>
Negligible	<ul> <li>Accident resulting in minimal personal injury</li> <li>Costs to Event up £500,000</li> <li>Minimum impact to reputation</li> </ul>

# **Controls**

## How to control hazards.

By determining the consequences and likelihood of risks occurring, and to aim to eliminate, minimise and control the hazards, using the hierarchy of control systems will minimise or eliminate exposure to hazards.

It is a widely accepted system promoted by the Health and Safety Executive and the hierarchy is used to decide what controls need to be put in place to manage the hazards once the risk has been assessed.

HIERACHY OF CONTROLS				
ELIMINATION Eliminate the hazard	Remove or stop the hazard if possible, remove the cause or source of the hazard, by eliminating the machine, task or work process. <i>If this is not practical, then substitute.</i>			
SUBSTITUTION Substitute the process	Use a less hazardous process- use a less-noisy machine for the task or introduce a less-noisy work process. If this is not practical, then engineer.			
ENGINEERING Change the equipment	Introduce enclosures and barriers around or between the hazards. Improve maintenance procedures. If this is not practical, then:			
ISOLATION	Separate or isolate the hazard or equipment from people by relocation or by changing the operation. If this is not practical, then administer			
ADMINISTRATIVE	Design and communicate written or verbal procedures that prevent the hazard from occurring. If this is not practical, then PPE			
PERSONAL PROTECTIVE EQUIPMENT (PPE)	Provide protective equipment appropriate to the risk. Provide training information and supervision to ensure that personal hearing protection is fitted, used and maintained appropriately. Equipment that protects the person exposed to the hazard.			

Definitions list			
Risk Assessment	=	A systematic process of evaluating the potential risks that may be involved in a projected activity or undertaking.	
Method Statement	=	Outlines the hazards involved and include a step-by-step guide on how to do the job safely.	
NEC	=	National Exhibitions Center the location that the event is held	
NEC security	=	The national exhibitions centers own in house security and stewarding team who are Security industry Authority registered	
Medical	=	The national exhibitions centres in house first aid teams and special private medical practioners paramedic specialising in large-scale events all are registered with the Health and Care Professions Council (HCPC)	
Guardians/Group Leaders	=	Teachers, Careers, Youth group leader responsible for young adults attending the Big Bang Fair	
Event Team	=	The Event Management company (The Fresh Group) running the event on behalf of Engineering UK	
Event Control	=	The central location a The Big Bang Fair that manages Security, Traffic, Medical, lost person & vulnerable adults health and safety and all incidents and emergencies are managed from this centralised location	
Big Bang CIC	=	Engineering UK is the working name of The Engineering and Technology Board. The owner and promoter for the event. Address: 5 <sup>th</sup> Floor, Northern & Shell Building, 10 Lower Thames Street, London, EC3R 6EN	
The Big Bang Fair	=	The Big Bang UK Young Scientists & Engineers Fair is the largest celebration of science, technology, engineering, and math's (STEM) for young people in the UK	
HSE	=	Health and Safety Executive	
СОЅНН	=	Control of Substances Hazardous to Health Regulations. These Regulations require employers to control exposure to hazardous substances to prevent ill health.	

The Big Bang UK Young Scientists and Engineers Fair 2023					
Visiting School Groups Risk Assessment  21st - 23rd JUNE 2023  Location of Event: Hall 12 NEC, Birmingham B40 1NT  What is the hazard and who might be harmed and how  Initial Risk Rating		EVENT RISK ASSESSMENT  The find the state of		Risk Management Team: The fresh Group Site Supervisors: Nicola Willett / Kevin Sparkes	
		Control / Actions	Safety officers: Neil Marcus  Residual Risk Rating  Further Action / Controls		
Members of the public  Visitor Participation:  Visitors participating in activities where a significant risk has been identified	L 20 + C 15 = 35	The Big Bang Education CIC staff will ensure that the risks associated with any of the show's activities are fully explained to all persons involved in the activity, and if required, specific instructions and method statements will be provided for any such activity.  Event staff will assess the physical suitability of the participant Only Visitors who knowingly volunteer will be allowed to participate in any activity  Specific signage will be on display explaining acceptance and liability of all involvement.	L 2 + C 2 = 4	There will be additional information about allergic reactions Hand washing facilities will be available.	

Visitor movement and crowd management, poor security and stewarding deployment:  Members of the public, event staff and contractors  Overcrowding can cause trauma and crush injuries  The Big Bang Education CIC prior to the event has established the audience profile and expected behaviour of the public. In conjunction with this, there is a full crowd management plan that has been developed for this event under the Guidance of NEC security team and other experts in this area  The Big Bang Education CIC will ensure that venue/room capacities are not exceeded and that the dynamic flow of the public has been assessed to enable a safe and free flow the public around the whole exhibition  An assessment of the numbers of NEC security and the stewarding team has been carried out and a full security deployment plan will be in place at the exhibition to manage the public  Emergency evacuation routes have been identified and will be maintained at all times  If any stand or exhibit attracts overly large crowds of visitors then the stand/exhibit will be closed until such time as the crowd dissipates  Throughout the duration that the public is on site there will be constant monitoring of the crowds and people movement. The Event Safety Advisor, NEC Security and Event Control who will log the situation, control and manage the issues until resolved.

Who might be harmed & hazards	Initial Risk Rating	Control / Actions	Residual Risk Rating	Further Action / Controls
Lost Persons  Members of the public, children and vulnerable adults, event staff  Young person being separated from group or leaders, leaving the main space and going in hazardous areas, being approached by persons unknown to them.  Distress, mental and physical vulnerability	L 20 + C 12 = 32	There is a full event plan for dealing with lost children and vulnerable adults, all of the NEC security staff and all key Big Bang staff will know of this and how to implement it.  If anyone is notified of a missing person directly by a member of the public or Guardians/Group Leaders, they must immediately notify Event Control. They will coordinate the whole process with the NEC security and the Event Team. The Big Bang management team will be informed of any missing persons. As soon as this is done the Lost person and Vulnerable adults procedure will come into full operation. Event Control will co-ordinate the operations until such time as repatriation of the missing person, all aspects of the situation will be logged and all responsible partners will be informed of the situation and as it unfolds and is resolved.  There will be a record of the contact details of Guardians/Group Leaders attending the event that can be accessed should it be required At no times will lost children or vulnerable adults be left unaccompanied. They will always be accompanied by more than one member of the Event Team, with at least one being DBS accredited. The full Lost Person and Vulnerable Adults Management Plan is available to see on request		Event Control will deal with this situation professionally and involve all the required partners deemed necessary. If any potential harm could arise the Police will be involved to ensure the welfare of all staff and public.

Who might be harmed & hazards	Initial Risk Rating	Control / Actions	Residual Risk Rating	Further Action / Controls
Unruly Visitors:  Members of the public, event staff and contractors  Visitors behaving in an antisocial manner that could impact on the safety of other visitors.  Potential conflicts, overcrowding, crushing and possible hostile situations and fighting	L 25 + C 15 = 35	All incidents will be reported to Event Control and Directions as to how to manage this will be given via Event Control. Immediate engagement by NEC Security will take place and all actions will be recorded  We request that Guardians/Group Leaders explain to their visitors in their care that they always behave in social and polite manner, as they are not only representing themselves but their schools and organisations  Event staff observing unruly visitors will advise their Operations Manager or Room Manager, who in turn will contact the Guardian/Team Leader and request that the visitor is reprimanded and brought under control. Such matters will not be treated lightly and it's the events responsibility to maintain the safety for all those attending  In extreme cases of anti-social behaviour, visitors will be removed from the venue – under these circumstances there would be no re-admission and they will be dealt with accordingly to these actions. The police will be informed, and action will be taken based on this contact and if required prosecute any consequences anti-social behaviour  Any Event staff or NEC staff involved in dealing with such matters will all be DBS accredited; They will comply with all the correct safeguarding measures at all times, they will always work in pairs when dealing with such situations, no individuals involved in such incidences will not be left unaccompanied in any location within the NEC.	L 5 + C 5 = 10	Any removal of person due to antisocial behaviour will be carried out by SIA qualified staff, and in situations where a law has been broken the individual/s will be taken to a controlled area and the police will be informed and advise of the due process  Event Control will have access via the live NEC CCTV feeds of the exhibition and surround areas all radio communications in relations to the event will be directed to this point with key representatives from all the responsible partners involved in the event.
		Operations Manager, Event Control, NEC Security and Event Safety Advisor will monitor all of the above		

Who might be harmed & hazards	Initial Risk Rating	Control / Actions	Residual Risk Rating	Further Action / Controls
Exhibitors:  Members of the public, event staff and contractors  Unsafe exhibits or demonstrations  Slips trips and falls plus injuries caused by exhibition and stands	L 15 + C 10 = 25	All Exhibitors are required to submit detailed Risk Assessments and Method Statements certification and public liability insurances to The Big Bang Education CIC All these documents are audited in advance of the event to ensure no unsafe exhibits or demonstrations are permitted in the event  During the pre-event phase and build phase all aspects of the exhibitor's installations are monitored and assessed along-side that of the activity taking place using the references mentioned earlier in this risk assessment  The Event Safety Advisor, prior to the event opening, visually inspects each and every aspect of all Exhibitors and their stand and demonstrations and only then will they be signed off enabling them to operate at the show.  Throughout the whole time the public are on site there will be constant monitoring of the exhibitions and the Event Safety Advisor and Event Control will log any issue, control, and manage the situation until resolved and then assess the issue.	L 2 + C 2 = 4	All Exhibitors are provided an Exhibitor Manual which explains what activities and substances are prohibited within the event  All Exhibitors are provided an Exhibitor Manual, which explains what activities, and substances are prohibited within the event.  Each stand will have a stand check sheet that will be completed by the Event Safety Advisor prior to the public being on site and this database will be held in the event office.
Food Sampling:  Members of the public, event staff and contractors  Allergies / Contamination / Reaction	L 15 + C 12 = 22	All Exhibitors are required to submit detailed description of any food sampling they wish to undertake. During the pre-event phase the exhibitors information will be checked using references mentioned earlier in this risk assessment.  All Exhibitors will comply with legislation and guidance for food sampling Allergies and intolerance as laid by The Food Standards Agency (EU/FIC) and the Food information regulations 2014  Clear warning signage to be displayed detailing the contents of any sampling foodstuffs  The Event Safety Advisor, prior to the event opening will watch and assess these demonstrations and check the exhibitor is fully compliant with all the regulations and only then will they be signed off enabling them to operate at the show  Throughout the whole time the public our onsite there will be constant monitoring of the demonstrations and food sampling. If there are any issues they will be assessed and investigated by The Event Safety Advisor who then manage the situation until it has been successfully resolved	L 2 + C 2 = 4	Samples only to be given with the consent of Guardians/Group Leaders or Parent in the case of young adults.  Clear signage as to allergies and a food safety check list will be completed in relation to each exhibitor doing any food sampling, in accordance with Natasha's Law.

Who might be harmed & hazards	Initial Risk Rating	Control / Actions	Residual Risk Rating	Further Action /Controls	
		As with any event of this scale, a full medical Risk Assessment has been carried out and the medical provision for The Big Bang Fair has been based on this utilising a Professional and qualified First Aid/ Paramedic team. This is supported by the NEC medical provision and own standard operational plan.			
Medical Provisions – Insufficient / Delays: Members of the public, event staff and contractors	L 20 + C 10 = 30	located no Event Cor and able to Risk Asset treatment actors  located no Event Cor and able to Risk Asset treatment The Event Cor The Event Cor and able to Risk Asset treatment The Event Cor The Event Cor and T	The medical team will be based in a First Aid Room as indicated on the site maps located near the exhibition hall. The First Aid Room will be in direct contact with Event Control. This will be staffed throughout the open periods. It is fully equipped and able to deal with a majority of the medical situations as detailed in the medical Risk Assessment. Beyond this any person/s requiring more complex medical treatment will be taken to the local hospital for a continuation of care and treatment. The Event Medical team will have mobile response teams that operate in the exhibition areas that are able to deal with medical situation as and when they occur	L 4	Throughout the event open period there will be continued assessments of the needs and application of the medical provision.
Prolonged or additional		All medical incidents will be reported to Event Control and the incident will be logged and managed via Event Control	Medical Team will ad	The Safety Advisor and Senior Medical Team will advise Big Bang CIC and the Event Management team	
personal injury following an initial incident		Guardian/Group Leaders responsible for any individual involved in a medical incident will be fully informed and briefed as to the nature of the situation and treatment will be given		of any alterations to the medical plan (if required).	
		All medical incidents will be recorded on an event accidents form and the information will be passed to all the responsible partners and dealt with in accordance with HSE and RIDDOR guidelines			
		As part of the planning for this, the Event Safety Advisor will make an assessment of the staffing levels required based on the expected attendance number, the medical Risk Assessment and discussions with the NEC's Senior Medical Officer.			

Who might be harmed & hazards	Initial Risk Rating	Control / Actions	Residual Risk Rating	Further Action / Controls
Slips, trips & falls:  Members of the public, event staff and contractors  Trailing cables and redundant equipment, loose carpet or other obstruction that might cause injuries, cuts and/or abrasions	L 15 + C 12 = 27	As part of the pre-planning for the event, all exhibitors and contractors will need to provide details of the exhibition stand/display installation. All cables will be either flown or taped down. Cables will not be permitted to cross the gangways and will be checked prior to the venue being open to the public  All redundant equipment will be removed from the exhibition floor prior to the event opening to visitors  The Event Safety Advisor and Production Manager will conduct a thorough inspection of the show floor prior to the event opening to ensure there are no obstructions that might cause trips  The Big Bang Event Team will be in direct contact with NEC contracted cleaners that will be on hand to clear up any spillages within the exhibition halls. Spillages involving chemicals on any exhibition stands will have their own methodology of cleaning them up safely and in accordance with COSHH regulations  As the event is of a temporary nature the exhibition hall will be regularly checked to ensure that if anything poses a trip hazard, it is reported to Event Control who will ensure it is either removed, repaired or corrected  Throughout the duration that the public is on site there will be regular monitoring of the exhibitions. The Event Safety Advisor and Event Control will log, control and manage any issues until resolved before reassessing the risks.	L 2 + C 2 = 4	Event Safety Team to monitor onsite.

Who might be harmed & hazards	Initial Risk Rating	Control / Actions	Residual Risk Rating	Further Action / Controls
Theatre Shows / Live experiments and demonstrations with a seated audience:  Members of the public, event staff and contractors  Personal injury through show related risks, loud bangs and explosions  Exposure to loud noise, spills, contamination, falling objects, slips trips and falls, overcrowding, crushing	L 20 + C 16 = 36	A highly experienced team are carrying out the management of the Theatre shows  Scientific demonstrations have produced a comprehensive risk assessment of all of the on-stage activities (These are available on request). If you have any doubt, we kindly ask that Guardians/Group Leaders speak to the Theatre staff prior to entering the theatre  There is a rolling programme of shows throughout the day, and before and during the changeovers, each area will be checked to ensure its fully operational and fit for purpose  All Guardians/Group Leaders MUST BE AWARE that in exhibition halls their party will be exposed to loud bangs, explosions and flashing lights and ought to consider the situation for any persons in their party of a nervous disposition or that have complex medical conditions that may be affected by such effects. There will clear signage local to this type of activity warning of any such elements, We would ask any Guardians/Group Leaders to respond accordingly and either remove the person in question or advise the staff working on such stands or running the demonstrations  Everyone in the theatre area will be allocated his or her own seat. Theatre Room Managers will direct you to your seats and manage this aspect of the event  In an emergency you will be directed from the area by the Theatre staff and the NEC security team. Guardians/Group Leaders are requested to listen to and assist in the guidance of their party at this time.  Specific Risk Assessments have been produced for the shows and these have been checked and signed off by the Event Safety Advisor.  The Event Safety Advisor has checked all of the shows documentation, watched rehearsals and if required put in any additional control measures to ensure all activities are safe. A team will then be in attendance during the first stage performance and onsite the whole time the public is in the NEC.  The Event Medical Team will be on standby to deal with any medical situation should it occur.  Throughout the time events are running in the area, constan	L 2 + C 2 = 4	All aspects will be rehearsed, and continuous monitoring will take place.  The Event Safety Advisor and Production team will advise the Big Bang Education CIC of any alterations to the show or risk assessment that might need to be made.

Who might be harmed & hazards	Initial Risk Rating	Control / Actions	Residual Risk Rating	Further Action / Controls
Substances Hazardous to Health (COSHH) Members of the public, event staff and contractors Sickness, ill health etc. Contaminations and spills	L 15 + C 12 = 27	Prior to any Exhibitor arriving onsite, all information relating to Hazardous Substances will have been collected, as they must inform the event of what they are bringing and methods that are being used along with their own risk assessments. All items used in the event will have been identified, listed and COSHH data sheets obtained in addition to this an assessment will be made of each substance to be established as essential to the task or function for which it is used  On arrival to the NEC All hazardous substances will be stored in accordance with the COSHH data sheets and under the guidance of the NEC safety team and the events Safety Advisor. All necessary safety precautions will be in place to establish the safe storage of each hazardous substance including the provision of any necessary water or ventilation systems  All necessary hazard warning signs to be in place local to the substances in use or being stored  All used/ waste hazardous substances, including all vessels, bags, wrappings etc. that contain the hazardous substance will be disposed of in accordance with the NEC event waste management plan for hazardous substances  All of the necessary antidotes or neutralising agents must be available in close proximity to the hazardous substance in the event of spillages. Special cleaning staff will clear up spillages and waste will be cleared in accordance with the data sheets for the specific products  The Event Medical Team will be on standby to deal with any medical situation, should it occur  Throughout the time the Exhibition is running, hazardous substances will be monitored, and any issues raised with these products will be assessed by the Event Safety Advisor and Event Control who will log the situation, control and manage the issues until resolved  Any hazardous substances being moved or in transit will have a detailed method statement covering such activity	L 2 + C 2 = 4	Onsite monitoring by the Event Safety Team.

Who might be harmed & hazards	Initial Risk Rating	Control / Actions	Residual Risk Rating	Further Action / Controls
Traffic management:		As with any event of this nature there is a complex and robust traffic management plan in place. The NEC is used to dealing with high volumes of traffic and is highly experienced in this area		
Members of the public, event staff, traffic marshals and		The Big Bang Education CIC will be using the NEC's approved traffic management strategies to manage this process		Traffic issues beyond the boundary of
contractors		Event staff will produce a detailed plan as to how this process will work	L 3	the NEC will be monitored using
Vehicle / pedestrian conflicts,	L 15 + C 12	All school groups will be sent information on this and the parking arrangements prior to your visit	+ C 3 = 6	information provided via local and national traffic reports and the Highways agency and any aspects of
such as road accidents, poor weather conditions etc – resulting in injury	= 27	We recommend that you check if there are any issues on your route to the NEC to identify if there are any traffic issues that might impact on your Journey or arrival time <a href="https://nationalhighways.co.uk/travel-updates/">https://nationalhighways.co.uk/travel-updates/</a>	-0	this will be assessed and worked into the dynamic traffic plan on any given day.
		Throughout the time the Exhibition is running the traffic the NEC security and traffic team, the Event Safety Advisor and Event Control, will monitor management. Event Control will log the situation, control and manage the issues until resolved and will assess any issues raised with these products.		

Who might be harmed & hazards	Initial Risk Rating	Control / Actions	Residual Risk Rating	Further Action / Controls
Traffic Congestion:  Members of the public, event staff, traffic marshals and contractors  Long delays within a confined space, injury as a result of walking through a congested area, injury as a result of a traffic collision  Slips, trips, and falls causing injuries	L 15 + C 12 = 27	Within the NEC complex it has large coach parks capable of accommodating the high volumes of coaches and other transportation expected for this event  Please allow plenty of time to travel from your destination to the NEC. You will be issued with a BIG BANG coach sign. We ask that you please display this clearly in the front window of the coach. Parties with Disabled passengers will be directed to an inner access point closer to the NEC buildings.  Guardians/Group Leaders will be sent an email explaining the process and reminding them to take the coach drivers contact details so they can call them when they require pick up.  On arrival to the NEC your Vehicles (coaches) will be directed to its allocated parking area, by the NEC traffic team. On arrival, please listen to the instructions given to you and your party before disembarking  Guardians/Group Leaders please be aware there are large numbers of Vehicles (coaches) arriving and please ensure you and your party use all the pedestrian walkways as directed to by the event staff, the road system around the NEC is busy please do not be distracted	L3 + C3 = 6	Coaches arriving without the correct accreditation. Will directed to a holding area whilst the traffic management team identify you and deal with your parking requirements.  If you do not have your pass, you will be directed to this area and your arrival will be managed from this point

Who might be harmed & hazards	Initial Risk Rating	Control / Actions	Residual Risk Rating	Further Action / Controls
Visitors accessing Coach Park: Members of the public, event staff, traffic marshals and contractors Vehicle / pedestrian conflicts resulting in injury Slips, trips, and falls causing injuries	L 15 + C 12 = 27	Guardians, Group Leaders, or Visitors will need to have their accreditation checked by the Event Team prior to disembarking, you will be restricted from leaving your coach until this activity has taken place. You need to display the vehicle pass for your vehicle prior to arriving at the NEC complex  Once your accreditation has been checked Guardians/Group Leaders, Visitors will be directed the queuing area and entry points for the exhibition  From this point event staff will dispatch staff, either traffic managers or event staff to escort the visitor group into the venue. Please always follow any given instructions.	L 3 + C 3 = 4	Guardians/group leaders should return to the car park in which you left your coach or vehicle as it will be waiting for you in the same location. If you have a pickup by a coach or minibus, please return to North 1 Car Park where you will be directed by the NEC traffic team.  Please make sure you and your traveling party take everything they need from the coach before disembarking.
Visitors egressing Coach Park: Members of the public, event staff, traffic marshals and contractors Vehicle / pedestrian conflicts resulting in injury Slips, trips and falls causing injuries	L 15 + C 12 = 27	Guardians/Group Leaders and visitors will not be permitted to access the coach park until their designated coach has arrived and is ready to pick up  When you leave exhibition, you will need to walk back to the point that your coach dropped you off, unless you have mobility impaired people as part of your group, and you will managed accordingly onsite and directed to specific areas for parking	L3 + C3 =6	Any visitors whose coaches have not used the required procedures will be directed to the place that they were dropped off for pick ups

Who might be harmed & hazards	Initial Risk Rating	Control / Actions	Residual Risk Rating	Further Action / Controls
		All structures in the Theatres are to be of flame retardant substances or class products, documentation on this and any other fire certification for materials used will be held in the event safety file		
Fire Hazard – Theatres		All required documentation will be in place prior to the arrival and construction of the Theatre areas		
Members of the public, event	1.20	The NEC has an existing evacuation strategy in place and The Big Bang show will adopt this	L 3	There will be a full event fire risk
staff and contractors  Death, major injury, and	L 20 + C 15	Throughout the time the public are onsite Fire Marshalls are on duty within the NEC complex	+ C 2 = 5	assessment carried out for the event and all required FFE will be checked as part of the venue check and stand
damage to property.	= 35	Theatres to be inspected by Event Safety Advisor NEC safety team and Production Manager	- 5	sign off on a daily basls
		The Theatre area will be assessed as to the required needs of Fire fighting equipment and where appropriate equipped with CO <sub>2</sub> , powder, water extinguishers and fire blankets		
		In an evacuation situation the NEC security team will manage this along with The Big Bang Theatre team		

Who might be harmed & hazards	Initial Risk Rating	Control / Actions	Residual Risk Rating	Further Action / Controls
Fire Hazard – Workshops/Side Meetings Members of the public, event staff and contractors Death, major injury, and damage to property	L 15 + C 12 = 27	Event staff to be positioned and to continually check for ignition sources  Daily inspection carried out by the Event Safety Advisor and Production Manager  Fire points placed in secure locations – all event staff made aware of their positions prior to the event opening fire marshals will be on site the whole time the public are in the NEC  Selected venue stewards trained in fire fighting procedures will be in each zone to monitor and respond as required  The NEC has a detailed evacuation strategy in place and The Big Bang Fair will adopt this  Should there need to be an evacuation Guardians/Group Leaders please listen to and follow the instructions given to you and the people you are responsible for in accordance to the NEC evacuation procedure  You will be taken to muster points and held there until it is safe to leave  Once the all clear is given you will either be guided back into the NEC or to the coach parks, again Guardians/Group Leaders please listen to the information being provided and we request that you and you colleagues work with the NEC security and stewarding team to manage the situation	L 2 + C 4 = 6	Event site exit values to be calculated using the Regulatory Reform (Fire Safety) Order 2005  Once the final event design has been confirmed a full occupancy calculation will be carried out in accordance with the above order ensuring the isle widths and exit routes are more than able to carry out the evacuation procedure.

Who might be harmed & hazards	Initial Risk Rating	Control / Actions	Residual Risk Rating	Further Action / Controls
Fire Hazard – Exhibition area  Members of the public, event staff and contractors  Death, major injury and damage to property	L 25 + C 15 = 40	The Event Safety Officer, the NEC's Fire Officer and the Production Manager will inspect and sign off the Exhibition area prior to opening each day  The following areas will be inspected:  Occupancy capacities  Fire Exits- Suitable and enough, properly signed, free of obstruction and easily opened  Fire Fighting Equipment in place and within service date  Flame Retardancy Certificates held in the safety file  Event staff numbers required covering all operational aspects of the event  Emergency Procedures check and alarms tested  Combustible materials cleared and safely stored  Storage of Waste away from public areas and managed  The name and contact details of all key personnel and Room Managers will be obtained and held in Event Control  Throughout the time the Exhibition is running there will be regular patrols of the event halls to ensure constant monitoring takes place and any fire related issues identified are assessed by the Event Safety Advisor, the Fire Safety Officer and Event Control who will log, control, and manage the issues until resolved.	L 5 + C 5 = 10	Throughout the time the Exhibition is running there will be regular patrols of the event halls to ensure regular monitoring takes place and any fire related issues identified. These issues will be assessed by the Event Safety Advisor the Fire Safety Officer and Event Control who will log the situation, control, and manage the issues until resolved.

Who might be harmed & hazards	Initial Risk Rating	Control / Actions	Residual Risk Rating	Further Action / Controls
Fire Hazard – Exhibition Stands & Demonstrations  Members of the public, event staff and contractors  Death, major injury, burns and damage to property	L 24 + C 15 = 38	All Exhibitors are required to submit detailed Risk Assessments and Method Statements to The Big Bang Education CIC prior to the show and each will be inspected and checked they cover all their operational practices whilst at The Big Bang Fair  All documents are audited in advance of the event to ensure no flammable exhibits or demonstrations that could cause burns or injuries are permitted in the event  The full event safety file can be seen on request  The Event Safety Advisor prior to the event opening visually inspects all Exhibitors and their stand.  The Event Safety Advisor and the NEC safety team will have signed off each stand and demonstrations.	L 5 + C 5 = 10	Throughout the time the Exhibition is running there will be regular patrols of the event halls to ensure constant monitoring take place and any fire related issues identified.  These issues will be assessed by the Event Safety Advisor the Fire Safety Officer and Event Control who will log the situation, control, and manage the issues until resolved.

Who might be harmed & hazards	Initial Risk Rating	Control / Actions	Residual Risk Rating	Further Action / Controls
Emergency Vehicle Routes (EVR's) Red Routes becoming blocked or obstructed:  Members of the public, event staff and contractors  A delay in emergency vehicles being granted access to manage the incident safely Slips, trips and falls causing injuries	L 20 + C 12 = 32	The NEC Event Team and Event Safety Advisor have identified the Emergency Vehicle Routes (EVRs) Red routes, these are clearly detailed on the event site plan The EVRs stewarded at all times  All Security and Stewards policing EVRs to have operational radios and are in direct contact with Event Control  Event Safety Advisor and the NEC Senior Security manager to monitor this at all times  The NEC will deal with any requests for emergency services, they will ensure that if required that they get the relevant areas as quickly as possible.  All emergency routes will be kept clear at all times	L3 + C3 =6	Event Safety Team and NEC Security and traffic management will make sure all EVR/ Red routes are always clear.
LPG:  Members of the public, Event Team and contractors  Fire and explosion.  Death, major injury, burns and damage to property	L 15 + C 15 = 30	Minimum amounts of (LPG) Liquid petroleum Gas are allowed in the NEC for demonstration/ display proposes  Event Safety Officer/NEC Fire Safety Officer to make sure none is in the Venue  If required it will be stored externally, The NEC will have a designated LPG Store and a specific risk assessment will be created if any of these products used at The Big Bang Fair  The event will follow guidance as detailed in the (LPG) Liquid petroleum Gas Code of Practice for the safe use and storage of the product, such legislation will always be followed, and in full compliance with Gas Safe regulations	L 4 + C 2 = 6	All aspects of LPG /Butane will be managed and monitored by the Event Safety Advisor and NEC Safety team  Once installed, the installation will be checked and signed off by a competent gas engineer.

Who might be harmed & hazards	Initial Risk Rating	Control / Actions	Residual Risk Rating	Further Action / Controls
Waste Storage:		A full waste management plan will be in place and the NEC waste management team will manage it. There will be mobile cleaning teams who can clear any build-up of waste should it occur		All aspects will be monitored by the Event Safety Advisor, and NEC fire
Members of the public, event staff and contractors	L 15 +	All exhibitors are requested to remove waste to avoid any build up and if they require assistance, they should contact Event Control who will deal with the request and task the NEC waste management team to assist as required.	L 2 +	safety team  Fire related issues identified will be assessed by the Event Safety Advisor the Fire Safety Officer and Event Control who will log the situation, control, and manage the issues until resolved.
Burns and associated injuries	C 12 = 27	Waste storage close to event infrastructure to be provided in metal skips in secure locations away from main public areas Suitable and sufficient firefighting equipment to be in place Event Safety Advisor and Production Manager to inspect.	C 2 = 4	

Who might be harmed & hazards	Initial Risk Rating	Control / Actions	Residual Risk Rating	Further Action / Controls
Arson  Members of the public, event staff and contractors  Damage by fire or smoke to persons and/or property as a result of a wilful act.	L 15 + C 12 = 27	A full waste management plan will be in place, which the Management team will manage. There will be mobile cleaning teams who can clear any build-up of waste should it occur  Smoking, including e-cigarettes and vapes, are not permitted in the NEC; there are dedicated smoking areas in many points around the NEC  Combustibles will be kept to a minimum where possible. No storage of combustible or explosive material will be permitted in the NEC Hall  Provide suitable and sufficient fire extinguishers at exit doors. Event staff to be aware of location of extinguishers  All fabric of drapes, linings and any floor covering to be flame retardant to BS5348 Test 2, BS7157 Annex A, BS7837, BS5287 Table 1 or BS5867 Part2 Type B as appropriate. Certificates to be available for inspection  Materials that have been chemically treated to achieve their fire Retardancy may require recertification at intervals – Event Safety Advisor to check for certification  Access to combustibles to be restricted to working personnel by Event Team	L 2 + C 2 = 4	There is a full surveillance operation in place, ranging from visual detection to a range of electronic fire detections systems that will be operational though out the event and managed by the NEC
Emergencies: That might cause the need for a full evacuation  Members of the public, event staff and contractors  • Fire in the Exhibition Halls • Collapse of structure • Bomb threat • Power failure  Death, major injury, burns and damage to property	L 25 + C 15 = 40	In the current climate which is at a (Serve Level), In relation to Terrorist activity. We all need to have a heightened state of awareness to this and the emergency procedures  The NEC has an Evacuation Plan that has been agreed with the local emergency services and responsible partners, that cover the requirements of a fire evacuation and the management plan for an act of terrorism  Should there be a need for an Evacuation, Emergency announcements will be made over the NEC PA system (back-up power necessary) to give instructions to the Visitors. We ask Guardians/Group Leaders to listen to these and act as directed and support the work of the NEC security team and emergency services  All access routes to be controlled by the venue  Event staff and Event Safety Advisor will be familiar with all processes	L 5 + C 5 = 10	All aspects will be monitored by the Event Safety Advisor and NEC's Event Teams.  Any amendments in procedures or operational practice will be added to evacuation plans and operational processes.

Who might be harmed & hazards	Initial Risk Rating	Control / Actions	Residual Risk Rating	Further Action / Controls
Portable Electrical Equipment:  Members of the public, event staff and contractors  Sources of ignition and heat Electrocution Death, major injury, burns and damage to property	L 15 + C 10 = 25	Reputable suppliers used  The NEC house mains supply to be used for all the exhibits and the appointed contractor to manage the mains distribution and protection  Evidence of PAT (portable appliance testing) available upon request  Visual inspection as installed on site any damaged equipment to either be repaired by a competent person and then PAT tested or to be removed from site  All equipment to be powered down at the end of the work activity  All electrical installations by exhibitors to be signed off as fully compliant with all IET Wiring Regulations BS 7671 and take particular note of Regulation 421.1.201 (PROTECTION AGAINST FIRE CAUSED BY ELECTRICAL EQUIPMENT)  Event Safety Advisor to check and collate the electrical sign-off documentation.	L 2 + C 2 = 4	Throughout the exhibition there will be regular monitoring of all electrical installations by stand owners and the Event Safety Advisor.  Any issues identified will be rectified and if needed the NEC electrical team will be involved.
Blocked vents on portable equipment with internal fans:  Members of the public, event staff and contractors  Sources of ignition and heat  Fire and explosion  Burns and associated injuries	L 15 + C 10 = 25	Event layout designed to allow adequate space for equipment storage  Production Managers to check before each session that vents have not become blocked  All equipment to be powered down at the end of the work activity  Remove all potential sources of heat generating items away from possible sources of ignition  Ensure that all heat generating items are clear from any obstructions and have a good free flow of air and to be well ventilated  Event Safety Advisor to monitor.	L 2 + C 2 = 4	As part of the pre-show checks and routine patrols, the vents will be inspected for any issues

Who might be harmed & hazards	Initial Risk Rating	Control / Actions	Residual Risk Rating	Further Action / Controls
House supply socket. No RCD on outlet:  Members of the public, event staff and contractors  Sources of ignition and heat  Death, major injury, burns and damage to property	L 15 + C 10 = 25	Production Manager and Event Safety Officer to undertake basic checks onsite RCD (Residual current devices) provided by official contractor to be located as near as possible to mains outlet to reduce length of unprotected cable Routing of all cable to be considered and managed Approved type connector to be used only.	L 2 + C 2 = 4	Event Safety Team to monitor onsite.
Set materials (Felt, Timber):  Members of the public, event staff and contractors  Sources of fuel  Contamination  Fires  Death, major injury, burns and damage to property	L 12 + C 12 = 24	Stock products from a reputable supplier  All contractors to supply full details of the stands materials and to provide all required information as required by the Event Team as part of there own Big Bang risk assessment  All fabrics to be inherently flame retardant with proof of fire certification  Use Class 1/A timber or thicker than 10mm  Fire certificates held in the event safety file  A test sample of materials if no cert available that can be tested  Event Safety Advisor to inspect all aspects of the products used in building the stand and other scenic items used during The Big Bang Fair.	L 4 + C 3 = 7	None required

Who might be harmed & hazards	Initial Risk	Control / Actions	Residual	Further Action / Controls
	Rating		Risk Rating	
		Where possible all cables laid flat, matted with heavy rubber matting and taped in		
Fire Escape Routes:		place	L 4 + C 4 = 8	Event Safety Team, and security to monitor onsite and manage any issues.
Members of the public, event	L 20	Ensure that personal belongs e.g., bags do not block exit routes or walkways		
staff and contractors	C 12 = 32	Do not allow Waste products, signs, or other movable objects to block exit routes or walkways		
Becoming blocked or obstructed		White tape used to mark trip hazard		
		Consider alternative route with less traffic over the duration of the Fair		
Lack of security and stewards		Check at regular intervals throughout each day and before each session		
Burns and overcrowding/ crushing		Escalate to venue if there is no sensible provision for cabling across the doorways, a requirement at the NEC		
		Production Manager/Event Safety Advisor to monitor and advise as needed.		
		Limit sources of ignition		
		Limit sources of fuel – all construction materials in set / staging / dressing to be treated with a fire retardant		
Generic Risks:		Separate risk assessment to be undertaken when Oxidising agents and or oxygen gas cylinders brought onsite		
Members of the public, event staff and contractors	L 20	All staff will not interfere with any detection equipment installed by the venue		
Personal injury and property	Event Safety Advisor to conduct a separate risk assessment where egress routes, signage or firefighting equipment are obstructed  All event staff to be briefed on proper procedures to be undertaken when discovering a fire  All personnel to be briefed on evacuation procedure including escape routes	L 4 +	Event Safety Team, and security to monitor onsite and manage any	
damage			C 4 = 8	issues.
Injury due to falling and unsafe objects, cuts, and grazing,				
burns and contamination from				
burning material		relation to fire related issues. The Event Safety Advisor, the Fire Safety Officer, will assess identified issues and Event Control who will log the situation, control, and		

Who might be harmed & hazards	Initial Risk Rating	Control / Actions	Residual Risk Rating	Further Action / Controls
Exhibition Stands:	L 20 + C 12 = 32	Stands and exhibits with Powerful magnets on will have clear signage on to Identify them.		
Use of Powerful Magnets		Persons both young and old with Cochlear implants, Pacemakers and Insulin pumps to avoid these stands.		
Members of the public, event staff and contractors		Schools are asked to notify the event in advance so any specific measure need to be in place prior to the schools arrival at the Big Bang Fair		Event Safety Team, and security to monitor onsite and manage any
Personal injury and property damage		The site maps of the event indicate these stands as well, Also specific information can be obtained on-site from the main information desk. Event medical providers on site the whole time event is open to manage any Incident when people feeling unwell  Production Manager/Event Safety Advisor to monitor and advise as needed.	issues.	
		Froudction inanager/Event Salety Advisor to monitor and advise as needed.		