



Activity (name):

Questacon Science Circus – Science Circus Shows

Date: 4 February 2025

Approved by: Leisha Duncan (APS6 – Team Leader)

Key objectives and business outcomes:

Risk assessment to assess the risks associated with the delivery of Questacon Science Circus shows across Australia.

Output description:

Delivery of Questacon Science Circus Shows around regional, rural, and remote Australia.

Risk Identification

ID	Risk Description	Impact	Risk Owner	Controls	Control Effectiveness Rating	Likelihood	Consequence	Risk Rating	Risk acceptable
1	Delivery staff, participants, venue staff, or visitors slip on liquids provided by delivery staff.	Injury to delivery staff, participants, venue staff, or visitors.	QSC Presenter	Delivery staff use absorbent mats where appropriate and clear spills promptly.	Fully effective	Unlikely	Insignificant	Low	YES
2	Delivery staff, participants, venue staff, or visitors trip on or knock over equipment including but not limited to props, electrical cables, absorbent mats, and personal items.	Injury to delivery staff, participants, venue staff, or visitors.	QSC Presenter	Delivery staff keep show area tidy by returning props promptly to/under prop table and ensuring all items not required for delivery are packed away. Delivery staff tape down cables or cover them with mats.	Fully effective	Unlikely	Insignificant	Low	YES



				<p>Delivery staff tape down absorbent mats used in show space.</p> <p>Delivery staff set up space such that expected walkways are clear of equipment.</p> <p>Delivery staff instruct participants to keep their stance when performing a demonstration where they could fall.</p>					
3	Participants have an allergic reaction to substances or equipment provided by delivery staff.	Allergic reactions .	QSC Presenter	<p>Delivery staff communicate to participants known allergens used in demonstrations when participants may come in contact with the allergen.</p> <p>NTP staff check school allergens as part of pre-tour information.</p>	Substantially effective	Unlikely	Minimal	Minor	YES
4	Delivery staff, participants, venue staff, or visitors are injured by equipment that is projected through the air	Injury to delivery staff, participants, venue staff, or visitors.	QSC Presenter	Delivery staff aim projectiles away from audience and educate participants on how to throw an object before demonstration.	Fully effective	Unlikely	Insignificant	Low	YES



	including but not limited to paper aeroplanes, balloon rockets, or sports balls.			Personal protective equipment is used when appropriate.					
5	Participants run into each other or hit each other while participating in a demonstration or imagination game.	Injury to delivery staff, participants, venue staff, or visitors.	QSC Presenter	<p>Delivery staff verbally warn audience to be careful of hitting others before starting demonstration.</p> <p>If space is limited, delivery staff may choose to alter or remove the demonstration or game.</p>	Substantially effective	Unlikely	Insignificant	Low	YES
6	Delivery staff, participants, venue staff, or visitors get burns to hands from participating in a demonstration including flammables or rope.	Minor burns to delivery staff, participants, venue staff, or visitors.	QSC Presenter	<p>Only delivery staff handle flammables.</p> <p>Delivery staff tie up their own long hair and use a long matches or splint when needed to light up the candles.</p> <p>When doing a demonstration using flammables, delivery staff ensure fire blanket is on demonstration table and know where</p>	Fully effective	Rare	Minimal	Low	YES



				<p>the nearest fire extinguisher and emergency exits are.</p> <p>Delivery staff educate participants on how to hold equipment if rope burn may be a risk and use all necessary safety equipment (including but not limited to gloves or soapy water).</p> <p>Personal protective equipment is used, if applicable.</p>					
7	Delivery staff, participants, venue staff, or visitors receive electric shock from props or equipment.	Electric shock.	QSC Presenter	<p>Delivery staff use RCDs with electrical props/equipment and discontinue use of props with signs of fraying or damage.</p> <p>Delivery staff ensure electrical equipment is tested and tagged and used according to manufacturer's instructions.</p> <p>Delivery staff perform water-based</p>	Fully effective	Rare	Moderate	Minor	YES



				demonstrations away from electricals.					
8	Delivery staff, participants, venue staff, or visitors get a liquid other than water, including but not limited to dish soap or vinegar, in eyes.	Injury to eyes.	QSC Presenter	Delivery staff ensure all people involved in a demonstration where liquids other than water may splash into eyes wear protective eyewear.	Fully effective	Unlikely	Insignificant	Low	YES
9	Equipment including but not limited to balloons, film canister, and bottle rocket, bursts during a demonstration causing loud noise and/or broken fragments.	Injury to delivery staff, participants, venue staff, or visitors. Emotional distress from sound sensitivities.	QSC Presenter	Delivery staff warn participants that equipment may burst unexpectedly and encourage participants to cover ears if they might find this upsetting. Delivery staff set up space with exclusion zone. Delivery staff aim any equipment that may burst away from all people. Personal protective equipment is used, if applicable.	Fully effective	Unlikely	Insignificant	Low	YES
10	Delivery staff, participants, venue staff, or visitors are	Injury to delivery staff, participants,	QSC Presenter	Delivery staff ensure props that may have sharp edges are filed	Fully effective	Rare	Minimal	Low	YES



	injured by glass fragments or sharp edges.	venue staff, or visitors .		<p>down or covered with tape.</p> <p>Delivery staff use non-breakable props where practical.</p> <p>Delivery staff carefully store and use fragile props.</p> <p>Delivery staff avoid giving fragile equipment to participants. Where delivery staff does give fragile equipment to participants, they ensure that the participant is educated on holding the equipment.</p> <p>Delivery staff ensure any sharp fragments are cleared promptly.</p>					
11	Delivery staff determine that space provided by venue is not appropriate for program delivery.	Program is unable to proceed and is cancelled.	QSC Team Leader	<p>Delivery staff communicate space and equipment needs to venue staff prior to travel.</p> <p>Delivery staff assess space provided upon</p>	Fully effective	Rare	Minimal	Low	YES



				arrival and communicate with venue staff if it is not appropriate to determine course of action.					
12	Delivery staff, participant, venue staff, visitors, or contract or transmit communicable diseases through shared equipment and materials, contact with infected surfaces, or due to close physical proximity to others in the venue.	<p>Delivery staff transmit a communicable disease throughout the community.</p> <p>Delivery staff is unwell resulting in reduced performance capacity of travelling team.</p> <p>Program is unable to proceed and is cancelled.</p>	<p>QSC Manager</p> <p>QSC PResenter</p>	<p>If delivery staff feel unwell before, during, or after a program they perform a rapid risk assessment to determine whether it is appropriate to continue and contact Questacon managers for advice.</p> <p>Delivery staff may choose to wear a mask and/or maintain physical distancing.</p> <p>Delivery staff maintain good hand hygiene and participants involved in demonstrations are encouraged to do the same.</p> <p>Delivery staff to clean any high touch equipment between use.</p>	Substantially effective	Unlikely	Minimal	Minor	YES



				Questacon staff contact venues prior to travel to confirm local health and safety guidelines.					
13	Staff may be required to drive on school property in order to properly set up school shows.	Injury to staff, participants and visitors.	QSC Presenter	Vehicles are only bought onto school property with express permission from school. Hazard lights are turned on and vehicle is driven very slowly. A second QSC presenter directs the car when on school property.	Fully effective	Rare	Moderate	Minor	YES

Risk Treatment Plan

Date last reviewed

[Click here to enter a date.](#)

Risk			Treatment			
ID	Risk description	Risk rating	Treatment actions	Treatment start date or trigger	Treatment Owner	Status
		Choose an item.				Choose an item.



		Choose an item.				Choose an item.
		Choose an item.				Choose an item.
		Choose an item.				Choose an item.
		Choose an item.				Choose an item.
		Choose an item.				Choose an item.



Risk Assessment LITE

This is a simple risk assessment template for activities such as programs and policies that don't require a full assessment or where constraints don't allow for a full assessment (i.e. time constraints). Use the descriptions below to guide you through the assessment. If you need any help completing the assessment or other risk related support please contact the risk team RiskManagement@industry.gov.au.

What risks should I assess? – Risk managers must understand the risk profile and dependencies of risks across the whole initiative to ensure its success. Operational risks are important: a poorly implemented policy that does not fully consider and track operational implementation risks may result in failure to achieve the end goal. Don't forget strategic risks to your work such as reputational damage, unnecessary market interference or public dissatisfaction as these could expose you to our strategic risks.

Key objective and outcomes – What is the purpose of the activity and what does success look like when the activity is successfully implemented or completed. What problems are you planning to solve and what are the desired business outcomes.

Key outputs – The key outputs should be clear, measurable and align with the intent of the activity such as policy outputs. The key outputs can assist in considering risks when completing a comprehensive risk assessment using the department's full risk assessment template.

Risk description – Describe an event or circumstance that could impact on the success of the activity, why it might occur, who it involves, and any key points your decision maker should know. Describe what concerns you and why. When considering risks associated with a program or project, reflect on each of the stages such as planning, implementation and evaluation. Assess if there are potential risks to any of the stages (as outlined below):

- Planning
- Governance
- Engaging stakeholders
- Monitoring, review and evaluation
- Resource management
- Management strategy.

Impact – Describe what are the consequences should the risk happen.

Risk owner – The Risk owner is the departmental officer who has overall accountability of the risk including the ability to authorise control activities or the implementation of treatments.



Controls – Any activities you incorporate as part of the design and delivery of the activity to reduce the impact of the risk or even the risk occurring in the first place.

Control Effectiveness – Control effectiveness describes how well a control or group of controls is reducing or managing the risk it has been designed to modify. Use table 1 to decide which rating applies to your controls:

Rating	Guide
Fully Effective	Controls are as good as realistically possible and work well together. There is a high degree of confidence from management in the protection provided by the controls and no further action is required, except to review and monitor.
Substantially effective	Controls are generally well designed, documented, well implemented and mostly reliable. Controls clearly address the likelihood or consequence of the risk.
Partially effective	Controls are well conceived, but some are not implemented or working together effectively OR implementation is thorough but better controls could be devised to address the likelihood or consequence of the risk.
Largely ineffective	There are significant gaps in the design or in the effective implementation of controls and they are not working together. Action needs to be taken to remediate controls (i.e. redesign or replace control).
None or totally ineffective	Virtually no credible control relative to what could be done. New controls needed.

Table 1 – Control effectiveness

Likelihood – Likelihood is the chance or probability that the risk will occur. You should consider how the proposed Controls impact Likelihood. Use Table to decide which likelihood category applies to your risk:

Likelihood	Description
Rare	Very unlikely to occur.
Unlikely	Uncommon, but has been known to occur.
Possible	Some evidence suggests this could occur.
Likely	Evidence suggests this will occur.
Almost certain	All evidence suggests this will occur.

Table 2 – Likelihood of a risk

Consequence – Consequence is the significance of the impact if the risk were to occur. You should consider how your proposed controls impact consequence. Use Table 3 to decide which consequence category applies to your risk:



Impact	Description
Insignificant	insignificant impact on achievement of objectives and/or outcomes.
Minimal	Minimal impact on achievement of objectives and/or outcomes.
Moderate	Moderate impact on achievement of objectives and/or outcomes.
Substantial	Substantial impact on achievement of objectives and/or outcomes.
Severe	Severe impact on achievement of objectives and/or outcomes.

Table 3 – Consequence table

Risk rating – The risk rating is the level of risk that remains after consideration of controls. Use table 4 to identify your risk rating:

Likelihood Ratings	Consequence Ratings				
	Insignificant	Minimal	Moderate	Substantial	Severe
Almost Certain	Minor	Medium	High	Very High	Very High
Likely	Minor	Medium	Medium	High	Very High
Possible	Low	Minor	Medium	High	Very High
Unlikely	Low	Minor	Minor	Medium	High
Rare	Low	Low	Minor	Medium	High

Table 4 – Risk assessment matrix

Is the risk acceptable – Yes or No. The **risk owner** decides if a risk is acceptable (after considering all the consequences, likelihood and controls)

Risk treatment plan – If the (proposed) controls are **not sufficient** to reduce the risk to an acceptable level, further action is required and a treatment plan for the risk needs to be prepared. A treatment plan highlights future activities to control the risk. The additional treatments aim to reduce the likelihood and/or consequence of the risk.