

Canberra Space Centre
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HEALTH, SAFETY AND ENVIRONMENT ASSESSMENT CANBERRA SPACE CENTRE

CSIRO acknowledges that assessment and control of health, safety and environmental risk is an important process and one that is integral to achieving its strategic intent. Risk assessment of all CSIRO work and sites is intended as a planning activity to prevent incidents, injury, illness, property damage and environmental degradation as well as assist CSIRO comply with health, safety and environmental legislation.

CSIRO will identify workplace hazards that pose a risk to people and the environment, assess the magnitude of these risks and apply appropriate operational controls.

The Canberra Space Centre (located on the grounds of the Canberra Deep Space Communication Complex – CDSCC) is a public centre providing school groups with an education program in a safe and comfortable setting. The exhibits and school programs are assessed regularly for identification and assessment of hazards that may pose a threat to visiting school groups. Staffs trained in administration of first aid are on call at CDSCC at all times during school visits. All presenting staff have current Working With Vulnerable People clearance as mandated by the ACT government. CSIRO also keeps a record of this clearance.

Identified hazards are examined against a hierarchy of controls to determine whether it is possible to eliminate the hazard completely or minimise the consequences.

Following is an assessment of identified health and safety hazards that visiting school groups may be exposed to during a booked visit to the Canberra Space Centre. The assessment includes identified controls to manage the risk and inherent and residual risk calculations. The inherent and residual risks are calculated using the Risk Assessment Module (see pages 2 and 3).

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CSIRO HSE Risk Matrix

CONSEQUENCE (Con) RATINGS	
Descriptor	Definition
Catastrophic	Single fatality Permanent or severe health effects for one or more staff members Major release of toxic pollutants resulting in long term damage to environment and / or significant compensation costs
Major	Extensive injuries or Serious health impacts Significant release of toxic pollutants Localised impact with significant clean up costs
Moderate	Medical treatment required and notification to regulator Transient release of pollutants Localised impact with no long term damage and minimal clean-up costs
Minor	First Aid injury or Health impact Brief transient release of pollutants that does require notification to regulator Relatively minor clean up costs
Insignificant	No injuries Brief transient release of pollutants – contained on site and does not require notification to regulators No immediate impact but requires some remedial action

LIKELIHOOD (Li) RATINGS	
Descriptor	Definition
Almost Certain	Almost certain the event will happen several times. Chronic risk with history of occurrence
Likely	Likely to occur
Possible	Has occurred with the defined consequence
Unlikely	Low probability that the situation in the defined consequences will occur
Rare	Very unlikely that the situation in the defined consequences will occur

LIKELIHOOD	CONSEQUENCE				
	Insignificant	Minor	Moderate	Major	Catastrophic
Almost Certain	S	S	H	H	H
Likely	M	S	S	H	H
Possible	L	M	S	H	H
Unlikely	L	L	M	S	H
Rare	L	L	M	S	S

H	High Risk
S	Significant Risk
M	Medium Risk
L	Low Risk

Canberra Deep Space Communication Complex – Risk Assessment – School Groups and Visitors

As part of the booking process for school excursion and tour groups, each group is provided a copy of the Risk Assessment. An annual review is conducted of the Risk Assessment to identify any changes or updates required. All groups are confined within the vicinity of the Visitor Centre (indoors/outdoors) and do not enter the site.

Risk Assessment – Canberra Deep Space Communication Complex – Visitor/School/Group Visits

Note: This risk assessment is intended as a guide only. It is the individual school's responsibility to conduct their own risk assessment prior to visiting.

Specific Hazard	Description of task/Activity	Inherent Risk			Controls – Existing and Proposed	Residual Risk		
		C	L	IR		C	L	RR
Fall on uneven grass and dirt surfaces around public carpark	Adults and children running in carpark area and surrounds external to the Visitor Centre	Moderate	Possible	Significant	<u>Existing:</u> Teachers should supervise students at all times and ensure students wear appropriate footwear.	Moderate	Unlikely	Medium
Person hit by moving vehicle (Arrival / Depart – Carpark)	The CDSCC public car park caters for all types of vehicles including buses. All visitors including students will have to walk through this area.	Major	Possible	High	<u>Existing:</u> All visitors should exercise caution when moving through this car park area. Teachers/group co-ordinator should instruct all students to exercise caution whilst moving through the car park area and supervise all students when moving through the car park area. Speed limits set in carpark, warning signs and marked and raised pedestrian crossing and no visual obstructions.	Minor	Rare	Low
Slips, trips and falls in the centre and grounds	The CDSCC Visitor Centre contains variety of exhibits, interactive displays and native gardens.	Moderate	Unlikely	Medium	<u>Existing:</u> Visitor Centre staff to monitor all visitors (including students) to ensure that they stay in public areas and that they do not run or climb on structures or exhibits. Teachers/group co-ordinator should specifically instruct students not to run around or climb on any structures and exhibits. Students must stay within public access areas. Staff should supervise students at all times and ensure students wear appropriate footwear.	Insignificant	Unlikely	Low
Cigarette Smoke	People smoking in outdoor areas and eating areas	Minor	Possible	Medium	Signage indicating no smoking areas.	Minor	Rare	Low

Fall from low levels	Falls from low garden retaining walls, outdoor furniture and garden stairs	Minor	Unlikely	Low	Supervision of children when in the company of staff.	Minor	Rare	Low
Fall in children's playground	Fall from playground equipment	Moderate	Possible	Significant	Playground maintained to Australian Standard and regular independent audit/assessment of playground identifying and removing pinch points and hazards. Soft-fall material maintained and regularly replaced.	Minor	Rare	Low
Fall from antenna structure exhibit	Fall from climbing antenna (quadrapod) structure	Moderate	Possible	Significant	Signage indicating not to climb structure and barriers erected to prevent access to structure	Insignificant	Rare	Low
Automatic and gas return doors	Impact with door during opening or closing process	Minor	Rare	Low	Regular maintenance on door mechanisms to ensure correct operation and sensors set at correct levels/distances	Insignificant	Rare	Low
Automatic and gas return doors	Impact with door during opening or closing process	Min or	Rare	Low	Regular maintenance on door mechanisms to ensure correct operation and sensors set at correct levels/distances	Insignificant	Rare	Low
Impact with exhibits	Impact with exhibits (freestanding and wall-mounted), display cases, computer bench-tops	Insignificant	Possible	Low	Children supervised by adults, teachers and staff.	Insignificant	Rare	Low

Sunburn, dehydration or heat stroke.	Visitors, students and staff using outdoor facilities may be exposed to the elements. Summer temperatures can be very high in the Canberra region and can often reach 40°C or higher.	Moderate	Moderate	Medium	<u>Existing:</u> Teachers/group co-ordinator should ensure that all students wear hats and sun screen. Students should also drink water and stay within shaded areas when possible. Staff should limit the amount of time students spend outside on very hot days. Visitor Centre staff to monitor all visitors, to be aware of heat stress and to provide appropriate first aid action if required.	Minor	Rare	Low
Bites from wildlife (Snakes / Spiders)	Snakes and spiders are possible in the Canberra region during both the summer and winter months. Visitors including students may encounter them while exploring the grounds. Attacks by swooping/nesting birds is possible in springtime.	Moderate	Possible	High	<u>Existing:</u> CDSCC regularly monitor and manage wildlife within the grounds. CSIRO staff are trained in first aid and have bites and stings treatment equipment. Teachers/group co-ordinator should check the ground surface and report snakes and spiders to CSIRO Staff. Students should also be instructed to be cautious of snakes and spiders and not touch these creatures if spotted. Students should be instructed to not to enter gardens. Signs erected to warn of swooping birds. Minimise exposure time outdoors.	Minor	Unlikely	Low
Electric shock	Electrical shock from powered equipment (eg: computers) and power outlets	Moderate	Unlikely	Medium	Electrical equipment maintained, power cords tested and checked. Power outlets fitted with approved childproof plugs.	Insignificant	Rare	Low
Allergic reaction to food/drinks	Allergic reaction to food and drinks served in Moon Rock Cafe.	Moderate	Possible	Significant	School groups required to notify staff of students at risk and to carry appropriate medications. Cafe staff maintains food preparation and storage areas to reduce risk of contamination.	Minor	Unlikely	Low