



HEALTH, SAFETY AND ENVIRONMENT ASSESSMENT

CSIRO DISCOVERY

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 environment 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.

CSIRO Discovery 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.

Identified hazards are examined against a hierarchy of controls to determine whether it is possible to eliminate the hazard completely or minimize 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 CSIRO Discovery. 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).

18th July 2022

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RISK ASSESSMENT MODULE - DETERMINATION OF RESIDUAL RISK

INHERENT RISK (the risk that exists in the absence of control measures)

Find the ratings for the consequence and the likelihood then refer to the table below:

Consequence Table

LEVEL	DESCRIPTOR	CONSEQUENCE – DESCRIPTION
1	Insignificant	No injuries, low financial loss
2	Minor	First aid treatment, on site release immediately contained
3	Moderate	Medical treatment required, on site release contained with outside assistance, high financial loss
4	Major	Extensive injuries, loss of production capability, off site release with no detrimental effects, major financial loss
5	Catastrophic	Death, toxic release off site with detrimental effect, huge financial loss

Likelihood Table

LEVEL	DESCRIPTOR	LIKELIHOOD – DESCRIPTION
1	Rare	May occur only in exceptional circumstances
2	Unlikely	Could occur at some time
3	Possible	Might occur at some time
4	Likely	Will probably occur in most circumstances
5	Almost Certain	Is expected to occur in most circumstances

Risk Matrix

LIKELIHOOD	CONSEQUENCES				
	Insignificant (1)	Minor (2)	Moderate (3)	Major (4)	Catastrophic (5)
(5) Almost Certain	M	M	H	H	H
(4) Likely	M	M	M	H	H
(3) Possible	L	M	M	H	H
(2) Unlikely	L	L	M	M	H
(1) Rare	L	L	M	M	H

Legend:

H:	High risk immediate action required
M:	Moderate risk; management responsibility must be specified (significant and moderate combined to be moderate)
L:	Low risk; manage by routine procedures

Assessment of OHS Risks - Booked school groups visiting CSIRO Discovery Centre

This page is used to record each of the occupational health and safety hazards identified in relation to a school visit to CSIRO Discovery and to record the risk ratings associated with each hazard.

C – consequences; L – likelihood; IR – inherent risk; M – management control; RR – residual risk

Specific Hazard	Description of task/activity	Inherent Risk*			Controls – Existing and Proposed	Residual Risk*	
		C	L	IR		M	RR
Fall from entrance walkway	Children climbing hand rails	major	rare	moderate	Walkway built to Australian standards Students supervised by teachers	very good	low
Collision with Vehicle	Running across road while entering or leaving Discovery	Major	Rare	Moderate	Students supervised by teachers	very good	Low
Fall down entrance stairs	Children running	moderate	possible	moderate	Stairs built to Australian standards Students supervised by teachers	very good	low
Spillage of liquids in Discovery lab area	Performing experiments	insignificant	likely	moderate	Small quantities of liquids used	Very good	low
Chemical /food poisoning in Discovery lab area	Drinking chemicals	moderate	unlikely	moderate	Children supervised by CSIRO staff Only small quantities (<50ml) used	very good	low
Fall from stool in Discovery lab area	Children 'arguing' over use of stool; stool moves.	moderate	likely	moderate	Children supervised by CSIRO staff	reasonable	moderate
Swallowing/choking on small object in Discovery lab area	Children swallow 'damaged' microscope samples	moderate	unlikely	moderate	Microscopes and samples checked regularly for damage Petri dishes checked regularly for cracks by CSIRO staff	Very good	low
Collision with exhibit	Children running through exhibit	insignificant	possible	low	Children supervised by CSIRO staff	reasonable	low
Fire	Building on fire	Catastrophic	unlikely	high	CSIRO staff are trained in evacuation procedures. Full time Discovery centre staff are fire warden trained	Very good	low
For PC2 lab tours: exposure to biological and chemical hazard	Students on tour of PC2 areas where hazards may be present	minor	possible	moderate	Students are to comply with all instructions from CSIRO staff. Closed in shoes must be worn. Lab coats and safety glasses may be required depending on particular lab area. Students are instructed not to touch or move any samples, equipment or chemicals unless given permission by lab staff	Very good	low
For outdoor programs (Ecology Lab and glass house tours): exposure to bites and stings	Students on tour of glass house areas or Ecology Lab fieldwork where snakes, scorpions and stinging insects may be present	minor	unlikely	low	Students are to comply with all instructions from CSIRO staff. Closed in shoes must be worn	Very good	low