



Managing Risk, Sydney Opera House

Sydney Opera House manages risk in a live environment, with many unique reputational, safety, financial, security and logistical factors at play.

There are more risks than just stairs behind the curtains

Jessica Doyle, Head of Safety – Sydney Opera House

Overview

Sydney Opera House is a statutory agency which operates and maintains the World Heritage Listed Sydney Opera House and its surrounding area. The Sydney Opera House is open 363 days per year and receives 8.2 million visitors per year.

The Sydney Opera House works side by side with presenting partners who share the site and have office space in the buildings which include Opera Australia and the Sydney Theatre Company. The presenting partners maintain rights to hold performances at certain times of the year.

Background

Considering the importance of the site as well as the volume of people that attend the site, there are a number of high to extreme risks that need to be managed daily.

Workers and visitor safety each have their own unique risks needing to be addressed.

WHS Safety

There are 500 FTE staff, with up to nine times that many onsite contractors working at the site at any given time, and many of these people face risks in their daily activities.

There are hazardous manual tasks associated with bump-in and bump-out of performances in addition to challenges such as narrow walkways, machinery crush/impact and objects falling from heights. Due to the World Heritage Listing of the site, changes to the building are tightly restricted.

Visitor Safety

The high volume (8.2 million per year) of visitors to the site creates many challenges. In particular, narrow entry and exit point, limiting egress. Crowd crush is a significant risk, particularly during special events such as New Year's Eve. Medical emergencies are a considerable factor due solely to the volume of visitors, as well as slips, trips and falls.



The journey to change

Staff safety

Sydney Opera House has implemented a series of safety measures to prevent and respond to incidents. Their vision is for safety to be embedded in all levels of organisational culture and to work proactively to find and address problems.

For example, brass thresholds impeding the rolling of heavy equipment through doorways cannot be removed due to the World Heritage Listing. As a work around, a small ramp has been created to minimise physical stress on staff. Similarly, netting has been installed in the orchestra pit to address the



risk of objects falling from height and a change in level.

Major building works are currently underway to improve the truck turning circle.

Visitor safety

The goal for visitor safety is to provide a safe, accessible site for all visitors.

The Sydney Opera House has a large security department as well as reliable contractors to boost security numbers during large events. They are experienced in managing crowd crush and ensure strict capacity controls are enforced.

Onsite nurses work from 8am until the end of the last performance, ready to assist with any medical emergencies that may occur.

The Vehicle and Pedestrian Safety Project, a three year project nearing completion, will result in an underground loading dock and the removal of approximately 100 vehicles per week from the

forecourt. As part of this project cobblestone pavement around the site has been modified to be high heel friendly, and the roadway has been replaced with a flat surface. These preventative actions have been undertaken to reduce the risk of slips, trips and falls.

Results

Addressing risk factors and implementing corrective actions have allowed the smooth operation of the Sydney Opera House. The occurrence of incidents has been steadily reducing.

Due to the development project there is a reduction of interaction between heavy vehicles and the public.

Challenges

There is a broad spectrum of challenges the Sydney Opera House faces:

	Accessibility to venues for capital works is difficult	Non-routine, non-standardised work	Risk elements introduced by Third Parties	Extremely tight immovable deadlines
8.2 million visitors pa.	Plan / Machinery (crush or impact)	Drowning	Collapse of Temporary Structure	Outdated Theatre Machinery
	Crowd Crush	Confined Space	Contact with electricity	
	Objects falling from Heights	Work at Heights	Noise	High stake reputation
Heritage design restrictions	Fire Explosion	Fatigue	Asbestos	
	Dangerous Goods	Lead	Violence / Aggression	
	Psychological injury	Slip, trip, falls (LTI)	Hazardous Manual Task (LTI)	
	Physically demanding and high risk work	Shiftwork	Diverse workforce profile with dominant workforce not directly employed by SOH	

Risk Grid: High Risk in blue boxes, associated contributing factors surrounding grid





Future strategies

Sydney Opera House has a three-year strategy with three streams to ensure the safety of everyone onsite:

1. Public safety – creating a safe, accessible site for our visitors
2. Staff – risk assurance, proactive culture, well-being for our staff
3. Other staff onsite – safety partnerships and third parties.

This strategy is underscored by a safety culture improvement plan and a strong safety culture.

Future strategies for performance safety measures will need to include the following:

- The renewal of the theatre machinery for the Joan Sutherland Theatre
- Low influence in the design of scenery, which often requires customisation for the Opera House rear lifts
- Performances wanting to use the stage and platform in new ways, e.g. revealing artists, lowering artists, horses.

This brief was prepared by Big Picture Communications based on presented material from Jessica Doyle, Head of Safety, Sydney Opera House and Megan Langtip, Event Safety Specialist, Sydney Opera House Risk - at the Suncorp Risk Services Sharing Day 2015. For more information, please contact Jessica via jdoyle@sydneyoperahouse.com or Megan via mlangtip@sydneyoperahouse.com.