

# RESCUE

## EXHIBITION GUIDE



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## Contents

Introduction.....	2
Audience appeal .....	3
The exhibition.....	5
Key messages.....	5
Exhibit descriptions .....	6
Education resources and marketing .....	14
Touring arrangements .....	15
Contact details.....	16





## Introduction

Search and rescue operations take place every minute, every hour, every day, all around the world. From the air to the sea and on land, responsive operations are lifelines to many people in times of need. But what does a rescue scenario really involve? Who are the teams who put themselves in these dangerous situations? And do we really know what to do if we find ourselves in need of rescuing?

Rescue operations require a high level of training and are undertaken by specialist rescue squads. *Rescue* the exhibition, delves into this world, exploring topics related to rescue techniques, emergency supplies and equipment.

Visitors can engage with exciting hands-on and full-body experiences such as fire-fighting, surf rescue and sea life survival, while comprehensive graphic panels communicate the technology and techniques that rescuers use.

## Audience appeal

The exhibition design is real, relevant and interactive, and offers visitors a unique experience for those who dare to enter the earthquake-damaged entrance. Captivating exhibits throw visitors straight into the thrall of emergency scenarios and engage all ages.

The primary target market is children aged between five and twelve years old and their parents. With full-body exhibits and interactive computer-based and tabletop exhibits, *Rescue* caters for whole-family interaction and teamwork.

This exhibition also provides unique teaching and learning opportunities. Elementary school students

will particularly benefit from interacting with exhibits such as the *Fire experience* and *Drone rescue*, which involve learning about collaboration and assistance in physical rescue scenarios; while middle school students will be able to explore challenging rescue concepts and practices with the *Search patterns* and *Wave rescue exhibits*.

In addition, the exhibition will engage adults of all ages with science and technology as it is both credible and relevant to everyday life.





## The exhibition

The exhibition consists of 17 interactive science exhibits; including the entry tunnel, three information kiosks, supporting walls, lighting, and additional equipment. The exhibition has a flexible configuration designed to fit a space between 4,300 - 6,500 square feet, depending on the available floor area.

Full-body exhibits allow for plenty of group interaction and role-play, while a collection of computer-based and table-top exhibits encourage visitors to use problem-solving skills and explore rescue techniques to develop a deeper understanding of the science and technology involved in a rescue scenario.

## Key messages

### 1. Technology expands our capacity to rescue

Advancements in technology means rescues are now faster and safer. Breathing apparatus has transformed the work of fire-fighters, radio beacons are fundamental in locating missing persons and infrared cameras allow rescuers to spot casualties even at night. Examples of rescue technology are integrated throughout the exhibition, helping to inform and educate visitors.

### 2. Rescue is a human endeavor

Rescues would be impossible without the brave people who perform them – many of whom push themselves to extremes both physically and mentally. Rescuers are highly trained members of teams who work together to produce amazing results. In this exhibition, visitors are encouraged to put themselves in the shoes of a rescuer and examine their own feelings and reactions.

### 3. Rescue situations promote innovation and improvements in technology

Rescuers often have to improvise techniques and equipment in unique scenarios. These skills and technologies can then be refined and incorporated into innovative equipment.







## Helicopter rescue

Step into the shoes of a helicopter rescue team as you climb aboard a life-size helicopter. Choose to fly a simulator or use the infrared camera to search around the exhibition.

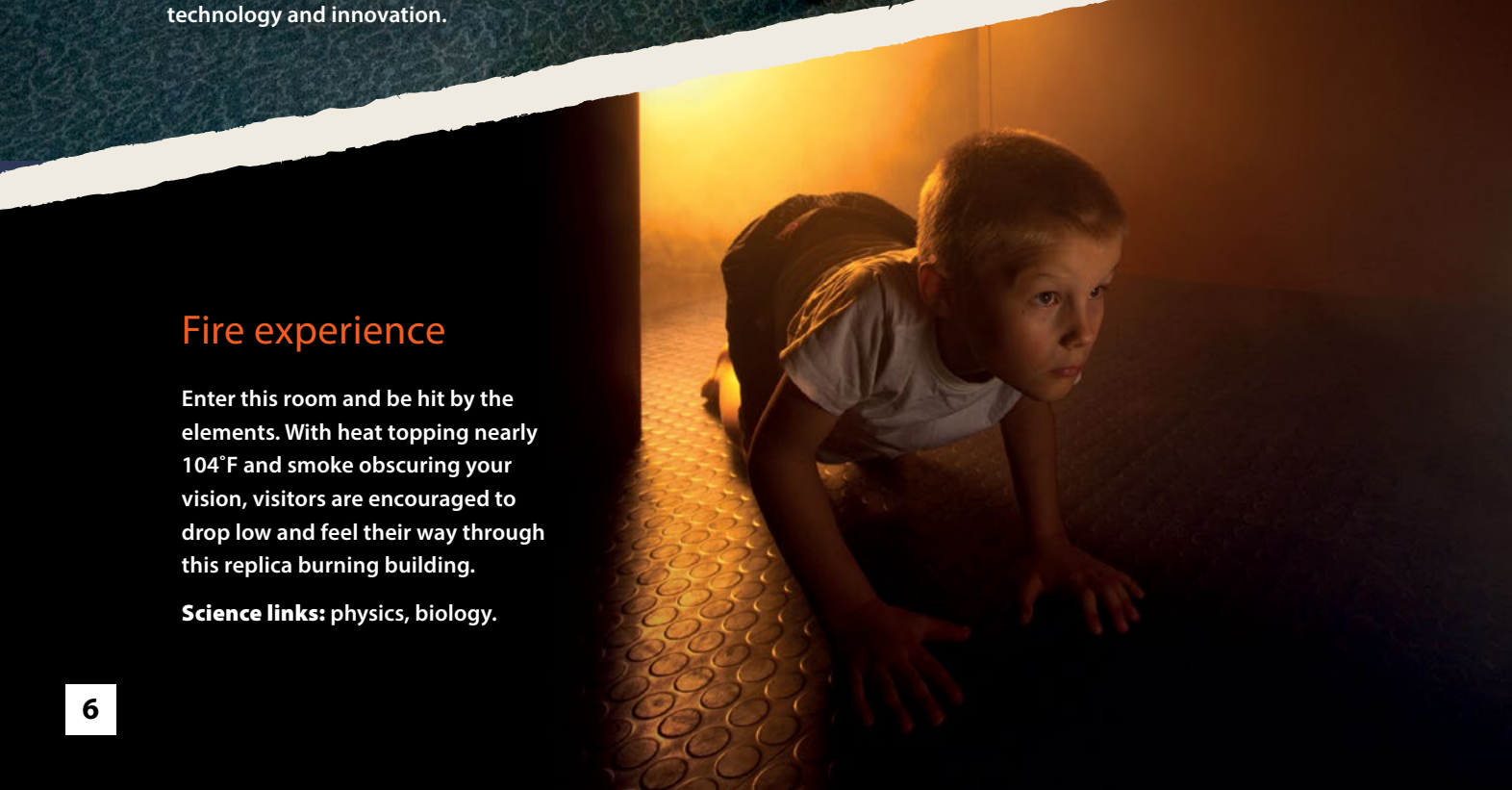
**Science links:** physics, biology, engineering, technology and innovation.



## Vertical rescue

Visitors of all ages will have fun as they tackle the climbing wall. The aim is to make it around the wall in a 360° loop without losing your grip. With sloping surfaces, this is no easy feat. Do you have what it takes to hang on?

**Science links:** exercise science, physics.



## Fire experience

Enter this room and be hit by the elements. With heat topping nearly 104°F and smoke obscuring your vision, visitors are encouraged to drop low and feel their way through this replica burning building.

**Science links:** physics, biology.

## Wave rescue

A radio-call has come in alerting you to a swimmer who has been washed out to sea. You and your friend must navigate jet skis around the obstacles to rescue the swimmer. You have just three minutes. Who will reach the swimmer first?

**Science links:** technology and innovation, mathematics (mapping), earth science.





## Exhibit descriptions



### Fight the fire

Would you know what to do if confronted with a 'fat fire'? What about an 'electrical fire'? Would you know what extinguishing device to use in each scenario and which ones to avoid? In this interactive exhibit, visitors are faced with four different fire extinguishers and must choose the correct one to put out the simulated fire.

**Science links:** physics, chemistry, problem solving.



### Read the news

When a disaster strikes, the media play a crucial role in informing the public. In this exhibit, one visitor takes to the news desk as the anchor, breaking the news story and informing the public, while the other visitor is the reporter live on the scene of a fire. Chromakey technology relays the vision onto a monitor so friends and family can watch the news program come together.

**Science links:** technology and innovation.



## Exhibit descriptions

### Drone Rescue

Drones are being used in more rescue operations around the world. From lifesaving support to search and rescue in difficult terrain, drone operators can reach people in need faster. Visitors fly a surf lifesaving drone and deliver a flotation aid to a swimmer in distress.

**Science links:** technology and innovation



### Ropes and knots

Would you trust yourself to tie a knot to save a life? Knots, although simple, are used for specialist purposes. Learn where and when to use particular knots and how to tie them.

**Science links:** mathematics (topology).







## Cliff walk

Your eyes will deceive you as you make your way across a balance beam perched above a 'raging ravine.' Clever graphics give the illusion of depth as you conquer your fear and make it to the other side. Supporting graphics detail how rescuers must often overcome their own fear to save others.

**Science links:** biology (neuroscience and psychology), physics.

## Real life rescues

Large screens mounted in a collapsed building display real-life rescue videos. This makes an audio-visual impact on the visitor as they enter the exhibition. On the other side of the entrance, a visually captivating wall of newspaper articles highlights amazing rescue stories from around the world.

**Science links:** technology and innovation, biology, physics, problem solving.



## You can be a rescuer

Rescue uniforms are designed to resist extreme conditions. From chemical explosions to fat fires, these outfits can mean the difference between life and death for fire fighters. Visitors can try on various real rescue uniforms including fire fighter, surf lifesaver and paramedic.

**Science links:** materials science.







### Escape the rip ▲

You are caught in an ocean rip at the beach and have to try to escape and return to shore without losing too much energy. In this exhibit, visitors learn about the properties of rips and what a swimmer should do if caught in one.

**Science links:** earth science, biology, exercise science.

### Search patterns ►

Using this interactive touch-screen exhibit, visitors take command of a search team to map out a search route to find a missing hiker. What search tactic would you use to locate a missing person in a vast area?

**Science links:** problem solving, mathematics.



### Mayday, mayday ▲

A distress call comes through on the radio – it is panicked, rushed and hard to hear. With no time to lose, you must pick out the most important details and piece together what is needed to perform the sea rescue.

**Science links:** problem solving.



### Cut the car ▲

Would you know where to cut a car to avoid hazards and rescue a trapped person? This interactive multimedia exhibit educates about the hazards in a car and the technology and techniques used by specialist rescue teams. This exhibit is complemented by 'jaws of life' cutters that were once used in active duty.

**Science links:** engineering, problem solving.

### ◀ Information kiosks

Interactive multimedia kiosks are positioned around the exhibition and feature information, images and video to educate visitors about:

- Finding people faster,
- Protecting the rescuer,
- Treating the casualty.

**Science links:** problem solving, physics, biology, innovation and technology.



### What to pack ▲

You have been called out to the scene of a rescue. Before you go, you must decide what to pack in your supplies bag. Make sure you only take the essential emergency items suitable to the surroundings because your backpack will fill up fast.

**Science links:** biology, health science, materials science.





## Educational resouces

*Rescue!* is accompanied by School and Visitor complements to assist teachers and family groups...

### The exhibition covers the following areas of science:

- Technology
- Innovation
- Human endeavor

Venues are free to use and modify this material to suit the curriculum in their area or the target audience, providing due acknowledgement is made to Scitech.

## Marketing

*Rescue!* has been designed specifically for children aged between 5 and 12 years old although the subject material and exhibit content will have broad appeal for both younger and older audiences.

### Imagine will provide the following marketing materials to help each venue promote the exhibition:

- Exhibition photos and videos (where available)
- Exhibition logos
- Examples of advertising and promotional artwork

*Rescue!* will tour to other venues free of any specific sponsorship agreements, enabling host venues to link with a wide range of sponsors for the local market.

## Touring arrangements

*Rescue!* consists of 17 interactive exhibits with accompanying inbuilt, durable graphic panels that outline instructions for the visitor and relate interesting science facts in everyday terms.

### Space and height

- Fits an exhibition space of approximately 4,300 – 6,500 square feet (400 – 600 meters squared) in flexible configurations
- Minimum ceiling height requirement for the exhibition is 10 feet (3 meters), although 13 feet (4 meters) is optimal
- Minimum entry and exit points for installation is 9 square feet (2.7 meters squared)

### Power and air

- Exhibits are powered by a standard 120v/240v electricity supply and are designed to accept power from the ceiling or the floor
- Some exhibits require 24 hour power to prevent damage to the projectors
- A licensed electrician will need to be supplied by the host venue to assist with the exhibition installation
- The exhibition is completely self-contained

### Training and maintenance

Imagine will provide the host venue's exhibition and visitor staff with a full briefing on exhibit operation and maintenance, as part of the exhibition installation. The exhibition does require some simple maintenance which needs to be carried out on a daily basis. A full list will be provided in the exhibition manual.

### Imagine will provide:

- The exhibition as outlined in the Contract
- An exhibition supervisor to coordinate the installation and dismantling of the exhibition
- Replacement parts through normal wear and tear
- Education and marketing material

### The host venue will provide:

- A team to assist the installation and dismantling of the exhibition
- Replacement exhibit consumables as required
- 24 hour physical and/or electronic security of the exhibition
- Any special requirements (scaffolding, forklifts, trolleys etc) specified in the Contract





## Contact details

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Information contained in this guide was  
correct at the time of printing.







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