What we will cover today
• Stages of Emergency Planning
• Types of emergencies
• Why plan for emergencies?
• What makes a good Emergency Plan
• How to test a plan.
• What is requires for Accreditation and Benchmarks.

Stages of Emergency Planning
• Assessment
• Prevention
• Preparedness
• Reaction
• Recovery
• Review

Types of Emergency
• Fire
• Flood
• Water leaks
• Theft
• Vandalism
• Earthquake
• Hurricane
• Tornado
• Terrorism
• Storm Damage
• Building collapse
• Chemical leak
• Mould outbreak
• Landslide
• Gas Leak
• Metal Theft
• Pandemic

A survey carried out between 2005-2006 showed 30% of museums in the UK had experienced a 'disaster' in the past 5 years, 21% had experienced more than one…

- Bomb incident/ terrorist threat
- Fire
- Other (building collapse, IT/power failure)
- Theft/ break-in/ burglary
- Vandalism
- Water damage

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3%
10%
68%
2%
6%
11%
A survey carried out between 2005-2006 showed 30% of museums in the UK had experienced a ‘disaster’ in the past 5 years, 21% had experienced more than one...

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- Fire 3%
- Other (building collapse, IT/power failure) 10%
- Theft/ break-in/ burglary 68%
- Vandalism 10%
- Water damage 68%

www.bbc.co.uk/news/uk-44359651
A survey carried out between 2005-2006 showed 30% of museums in the UK had experienced a ‘disaster’ in the past 5 years, 21% had experienced more than one…

<table>
<thead>
<tr>
<th>Incident Type</th>
<th>Percentage</th>
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Theft

400 Viking objects stolen in Norway museum heist

Sweden’s Crown Jewels stolen in dramatic heist | The Cube
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How do you plan for the unexpected?
‘Although the events of September 11 were caused by an unprecedented act of terror, we found that standard, proven emergency management plans and responses turned out to be the most effective way of dealing with the disaster.’

( Heritage Preservation 2002, p.20)

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68%

Fire

Notre Dame

Image - New York Times

March 2013 Battersea Art Centre

May 2013 Glasgow School of Art

April 2015 Clandon Park

March 2013 Hatton Art Centre

Image - New York Times
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Prevention

• Maintenance
• Building work
• Detection
Questions?

The Emergency Plan

Preparedness

The Emergency Plan is nearly ready...

Emergency Planning is ...

- Boring
- A waste of time...
  - It will never happen
  - You would not be allowed in
  - You can’t plan for everything
- Not my responsibility
- Hard to prioritise.

10: WORKING WITH FIRE AND RESCUE SERVICES

Local law enforcement agencies and fire and rescue services are required by law to prepare plans for dealing with the event of a public emergency. These plans are designed to protect the public, including those at the event location, by ensuring that the necessary resources are available and that the response is coordinated to achieve the desired outcomes.
What makes a good plan?

• Information you need to deal with an emergency presented in a way that is easy to find and use.

• Better to have a good plan today, than a perfect plan tomorrow...

• Preparing the plan is part of the process
  • ‘I have always found that plans are useless, but planning is indispensable.’ Eisenhower

• Plans that are considered fit for purpose have contributions from a variety of roles in the museum.

What should be in an emergency plan?

Contacts

- Staff
- Salvage team
- Press/communications team
- Visitor Services
- Utilities
- Tradespeople
- Specialists
- Other local museums

Plans

- Decent size A3/A2
- Laminated
- 2 copies
- Clear – only useful information
- Clearly labelled
- One of site with info on access, fire hydrants
- One of each floor of building – compartmentation/stopcock, electrical main switches.

Priority Objects

![Image of Priority Object]

Priority/Grab Sheet

![Image of Priority/Grab Sheet]

Roles

![Image of Roles]
Central Risk Register

- The sun was coming up, and still none of the fire-fighters had any idea what was in the building, let alone that there were valuable artworks in unit 49. London Fire Brigade has a computerised database called the Central Risk Register, or CRR. Its main purpose is to warn fire crews of special hazards in particular buildings, but it also carries records of art and historical objects in London's museums and galleries. On the database are last-ditch rescue plans in the event of the worst happening to a building like the National Gallery.

- "There would be a priority list available which would, in the event of a fire, say: 'Go into the room on the left, take the first four paintings,'" said Senior Divisional Officer Gary Fredericks. "We'd sit down with people in an art gallery and work out a salvage strategy, what pictures to rescue first, which could entail cutting them from their frames. Which is obviously the quickest way. You would rather lose a couple of inches around the edge than the whole painting."

- The fire brigade does not solicit entries to the CRR;

UK Museum Accreditation Scheme: A clear, workable emergency plan.

"Your museum must be able to respond effectively to emergency or disaster situations. This means having an emergency plan. It should cover all buildings and sites that house collections and services, and should include:

- arrangements for staff and volunteers, visitors, collections and collections information
- a risk assessment of threats
- how you authorise, maintain, communicate, and test your emergency plan, and how you share it with your staff and volunteers, and the emergency services
- how your museum works with the emergency services, and any other relevant emergency plans
- a priority salvage list – a record of any priority collections you would save first in an emergency
- when you'll review your emergency plan"

(Accreditation standard, November 2018)
9.1 All staff and volunteers are given a basic awareness of the potential risks to the collection from hazards such as fire, water and theft, as a part of their induction and periodical ly reviewed.

9.2 You have consulted the Emergency Plans and response materials developed by similar organisations and BS ISO 21110:2019.

9.3 Your organisation has carried out a risk assessment for all areas where collections are held, in accordance with BS EN 16893:2018.

9.4 Your organisation has implemented precautionary measures, including smoke detectors, against identified hazards. All alarm systems are tested regularly.

9.5 All collections and objects that can be raised (if necessary on a pallet, with lifting gear) are stored or displayed on shelves or plinths at or more than 150mm (c.6") above the floor.

9.6 Adequate drainage is provided in buildings where there is a risk of flooding.

9.7 You have surveyed and identified any collections that may present a hazard (such as cellulose nitrate cine-film, spirit stored natural history specimens, radioactive materials).

9.8 Primary documentation that exists in hard copy only (eg catalogues and Accession records) is kept in fireproof cabinets and/or a copy exists off-site.

9.9 Water alarms have been installed in storage and display areas at risk of leaks.

9.10 The premises are equipped with fire fighting equipment as required for fire certification, following a fire risk assessment.

9.11 Your organisation has a written Emergency Plan which includes steps to be taken in an emergency, measures to salvage the collections, emergency telephone numbers, the location of supplies that might be needed in an emergency and floor plans of buildings. If you do not have an Emergency Plan in place, you have a schedule to produce one.

9.12 At least one individual in your organisation is responsible for the development of your Emergency Plan, communication with all staff about emergency preparedness and the implementation of emergency procedures.

9.13 You have identified high priority objects and documents that would need to be salvaged in an emergency.

9.14 Current emergency contact details are posted in a central location.

9.15 A report of any flood or fire, however minor, is made to managers together with any recommendations for improvement in prevention and response arrangements.

9.16 As far as possible no pipes or tanks are permitted in new buildings in areas where collections are kept; every effort is made to exclude pipework from such areas in old buildings.

9.17 Buildings have been designed or modified to meet fire, water and security standards set out in BS EN 16893:2018.

9.18 The findings of your building risk assessment for collection areas have been reviewed and improvements prioritised for action or....

9.19 Hazardous collections (such as cellulose nitrate cine film, spirit stored natural history specimens, radioactive materials) have been placed in an approved off-site store.

9.20 Accession records and catalogues exist in digital format and are securely accessible off-site.

9.21 Your organisation has a written Emergency Plan endorsed by management, your governing body and any building services department.

9.22 Your Emergency Plan is regularly tested and reviewed, and recommendations for improvement are presented to your governing body.

9.23 Copies of your Emergency Plan are kept at a separate, secure location for access off-site, e.g. on a remotely accessed server.

9.24 Your Emergency Plan is implemented and maintained by several people with defined roles and responsibilities.

9.25 All staff (including building managers where appropriate) and volunteers attend training in emergency response procedures as described in your Emergency Plan.

9.26 The local police and fire services are aware of the organisation's specific needs and have advised on emergency planning both verbally and in writing.

**Testing the plan.**

- Train staff and volunteers first
- Test the plan – not the team
- Table top exercise
- Formal or a game
- Update the plan
- Exercise (with or without Fire Service/ Police)
- Update the plan.

**Working with the Fire Service**

- Training on fire and rescue procedures
- Exercises and visits to the fire station
- Consultation with fire service personnel
- Collaboration on fire safety projects

**Benchmarks**

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**Score**

- 73
- 74
- 75
- 76
- 77
- 78
Reaction

Equipment

- PPE
- Absorbents
- Packing materials (short term)
- Protection in-situ/ water diversion
- Documentation materials
- Packing materials (long term)
- Stabilisation/ first aid treatment equipment
- Lighting/ generators

Equipment
Salvage

- Know your collection.
- Priority Objects
- Vulnerable Objects
- Dangerous Objects
- Fixtures and fittings
- Remove or protect in-situ

Salvaging objects

- Look for priority objects, but don’t be blinkered.
- If multiple objects are at risk, give priority to undamaged objects.
- Try to pack wet objects and dry objects separately.
- Try to keep object parts together and any labels with the object.
- Put heavy objects at the bottom
  - Make sure crate is not too heavy or too full.
- Use packing to stop objects knocking into each other— it needs to be quick - it will not be museum standards
Recovery - Treatment

• Where?
  • Triage
    • Wet / damaged treatment areas
    • Dry

Air-drying

• Cheap
  • Objects stay with you
  • Takes a lot of space
  • Time consuming
  • Relentless

Air-drying

Freezing

• Buys time.
• Prevents damage from inks/ dyes running (if freeze dried)
• Can be expensive
• Objects leave site
• Not suitable for all types of materials.
• Vacuum Pack

Freezing

• When to freeze?
  • Large amount of wet objects you cannot air-dry
  • If inks or dyes are running
  • If you have the facilities
• Then...
  • Air dry at a later date
  • Freeze dry
• But...
  • Objects sent off site
  • Freeze drying can be expensive
  • Not all objects can be frozen
Health and Safety

• Health and safety is the highest priority.
  • Human safety first

DO NOT ENTER IF...

• You suspect any structural problems (bulging ceiling plaster or tiles, debris on floor, toppled furniture, broken glass from windows, skylights or showcases/cabinets.)
• You cannot enter the area without walking through running/ standing water, as there may be live electricity or hidden hazards.
• You suspect the area is contaminated with dirty water (sewage) or mould.

PPE

• Boots/ shoes (steel toe cap, midsole penetration protection)
• Gloves
• Mask
• Hard hat/ bump cap
• Hi-vis waistcoat/ jacket
• Overalls/ aprons
• Eye protection

Other H&S considerations

• Slips and trips
  • Appropriate PPE
  • Move trip hazards
  • Make sure there is adequate lighting
• Manual Handling
  • Good handling techniques
  • Appropriate PPE
• Working at height
• Safety using tools
Welfare

- Freeze, flight, fight...
- People are working safely and within their capabilities
- Rest, water, food, warmth, shelter
  - HALT (Hungry, Angry, Lonely, Tired)
- People want to feel useful
- Appreciate it might be a stressful situation