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Cultural Heritage Safeguarding Plan (CHSP)
CHSP Handbook
Guidelines for drafting your plan

CULTURAL HERITAGE SAFE-GUARDING PLAN

Department of Preventive Conservation
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CHSP HANDBOOK

This handbook is aimed at all heritage institutions intending to draw up cultural heritage safeguarding plans (CHSP). In 2019, the Centre for Research and Restoration of Musées de France (C2RMF) joined forces with the Regional Directorates of Cultural Affairs (DRAC), the Paris Fire Brigade (BSPP) and the Departmental Fire and Rescue Services (SDIS) to launch a series of workshops to assist in the drafting of CHSPs on a local level, in order to ensure that these systems - essential to protecting cultural heritage in the event of a disaster - are effective. Indeed, while prevention remains the mainstay of risk reduction, forecasting and planning are also primordial to being fully prepared in the event of a disaster. For this reason, each entity must have access to a tailored, operational document to assist the emergency services. The "workshop" format differs from traditional training in that it is based on a concept of step-by-step progress, with each step being clearly delimited and following a defined sequence and schedule, enabling the project to be carried out within a realistic timeframe, with time allowed for each phase of work to be completed before moving on to the next one.
These guidelines have been drawn up with this approach in mind.

Structure of the workshop / plans:
- 5 main work themes
- Sections of the plans to be completed/adapted to your institution for each phase
- Toolkit / useful knowledge for each mission
- List of actions to be carried out for the next phase
- Appendices and additional resources

By following the recommendations in this handbook, you should be able to draw up your plan within a year.

CHSP template (included here for each step):
(in French for now)
https://c2rmf.fr/sites/c2rmf/files/modele_psbc_a_utiliser.pptx
Presentation of C2RMF workshops: (in English)
https://www.tandfonline.com/doi/full/10.1080/00393630.2022.2066317

SOME TIPS BEFORE YOV GET STARTED

NB

It should be noted that the risk of slow onset (slow kinetic) flooding caused by the overflowing of waterways must be covered by a specific flood protection plan. When floods are forecast sufficiently in advance, protective actions can be implemented beforehand (unlike unforeseeable events, such as fire, water damage, etc. which are managed after the event and within the framework of the CHSP).

http://www.prefectures-regions.gouv.fr/content/download/14807/104155/file/Guide_PPCi-UTEA75_Juillet2012.pdf

Assess the major risks specific to your institution

Off-site risks

- Consult relevant local government safeguarding plans and risk assessments for your area
- Use local mapping tools to identify your main risks as accurately as possible

On-site risks

- Evaluate on-site risks and carry out a risk assessment for fire and water damage. Your security/building manager will be able to assist you in this, and you can also contact your local fire service, if necessary.
- Consult the relevant risk assessment methodological tools:

www.iccrom.org/sites/default/files/2017-12/risk_manual_2016-fra.pdf
https://www.iccrom.org/fr/file/2925/download?token=AkozEAa4

Communicate and get everyone on board!

– Ensure you have management support
– Inform your supervisors
– Work in pairs to draft the plan

As the first responders are likely to be the fire service, ensure your safeguarding plan is clear, simple and effective, and remains usable even in disaster conditions.

6 STEPS TO SAFEGUARDING

Ready to go? Just follow the steps in these guidelines!
Developing your safeguarding plan will require a little time and a smidgen of organisation. There is a sequence of 6 main steps, each of which corresponds to a specific theme. They are each symbolised by a pictogram so that you can easily visualise where you are with respect to the various tasks and plan them within an appropriate time frame. A printable reverse schedule provides you with step-by-step details of the tasks. Based on takeaway from the workshops, gradually work through each step in order. It may take up to two months to move from one step to the next, but if you already have most of the information, you'll be able to progress faster!
Now, over to you!

REVERSE SCHEDULE

1 2 3 4 5 6

D-0 | D+2 MONTHS | D+4 MONTHS | D+6 MONTHS | D+8 MONTHS | D+10 MONTHS | D+12 MONTHS

Gather information

Contact the emergency services responsible for your area.

Gather together all the available museum floor plans (site map, floor plan of each level, roof access, etc.)

Your existing emergency response plans for public buildings should also be consulted.

On the museum floor plan, indicate the location of each access and the central control room (CCR).

For each zone and floor, indicate the location of fire protection information and equipment (CCR, fire door, fire hose reels (FHR), main equipment (ME) and emergency exits).

For each zone and floor, indicate high-risk areas (e.g.: plant, boiler and computer rooms).

Check that all spaces have a clear address. If they do not, create the relevant addresses (building, floor, room, row of shelving, bay, shelf).

Prioritise collections

Prioritise heritage items to be evacuated or protected on site (maximum 2 levels of priority).

Indicate on the general floor plans those areas where priority items are located (see CHSP template).

Indicate where these items are located on each floor.

Draw up a general inventory and a factsheet for each of the priority items.

Similarly, make a list of documents / archives and equipment to be safeguarded.

Identify safe spaces and treatment areas

Identify on-site safe spaces based on standard criteria and accessibility.

Indicate on-site safe spaces on the general floor plan.

Identify off-site safe spaces and treatment areas selected according to standard criteria and accessibility.

Determine needs in terms of human and material resources

Inventory and locate all existing museum equipment that can be used in the event of a disaster (based on list in Appendix 3 “List of equipment”).

Identify equipment that can be provided by the local community and/or partners.

Budget and order any priority equipment that needs to be acquired.

Enter the personal phone numbers of agents on the organisation chart.

Call on volunteers to assist outside of the institution's working hours.

Define how the call chain will work. Identify internal roles and who are the essential contacts for the crisis cell.

Create first response factsheets.

Finalise CHSP

Organise an inspection visit by the fire service and jointly verify the effectiveness of your evacuation and protection strategy.

Check all museum floor plans, ensuring that the general inventory and individual factsheets are consistent, with indications clearly and simply marked.

Print out the CHSP and laminate factsheets.

File in an A3 binder.

Store the plan safely in an appropriate space.

Determine and implement a schedule for updating and training of staff as needed.

Conduct a drill

Create an appropriately scaled scenario to meet a specific objective (testing the plan, internal training, etc.).

Organise the administrative aspects (set date, check spaces and available staff members and assign documentation and feedback missions: arrange for a photographer to document each step of the operation evaluate the impact of the exercise on conservation conditions and implement remedial solutions, if necessary).

Prepare material (corpus of fake heritage objects, version of the CHSP based on the scenario, preparation of relevant material for firefighters and staff or rescue team.).

ASSESS BUILDINGS, GATHER FLOOR PLANS

This step allows you to get to know your building and equipment better by analysing the floor plans. It is also the best time to get your team on board and ensure you have the support of your supervisors. It is also appropriate at this point to contact the local emergency services for your area to inform them about the plan and organise a site visit.

Management of information gathering and collective involvement

- **At this stage, raise awareness on the project both:** Within the institution and local authorities if applicable to your situation: identify who are the resource people and organise the workflow with your teams (regular meetings, working groups, etc.).
- **At an early stage, draw up an organisation chart - a list of managers and volunteers with their contact details -** to be included in the organisational part of the plan.
- **Make the most of external resources:** workwithyourlocal network (museums, archives or libraries in your town or area who have already drawn up their own CHSP).

- **Take into account the fact that data will always be subject to change** - due to building work, new acquisitions, staff changes, etc. Ensure any relevant updates are dealt with quickly.
- **Work in pairs:** This is essential throughout the drafting phase to prevent disruption due to unavailability and it is also a major advantage in the event of an emergency.

Draw up the floor plans for the building

- Collect all available museum plans (Google Maps or similar, floor plan of each level, roof access, etc.). Do not hesitate to use the existing emergency response plans for buildings open to the public.
- Indicate on the site plan the location of each access as well as the central control room (CCR).
- For each zone and floor, indicate the location of fire protection equipment (CCR, fire door, fire hose reels (FHR), and emergency exits).
- For each zone and floor, indicate high-risk areas (e.g.: plant, boiler and computer rooms).
- Check that all spaces have a clear name and/or number. If they do not, create the relevant addresses (building, level, room, shelving row, bay, shelf).

An efficient addressing system will allow spaces where priority objects are located and high-risk areas to be easily identified (by the emergency services and staff).
Such spaces must be clearly indicated on the floor plan and employees of the institution must know names and locations.

OUR ADVICE

All plans should be in a uniform style (character fonts, pictograms and graphic symbols) and comply with the ISO 7010:2019 Graphical symbols – Safety colours and safety signs (subject to the approval of the fire service).

Delete any superfluous pictogram from the "legend" box.

Indicate fire vehicle access with clearly visible arrows.

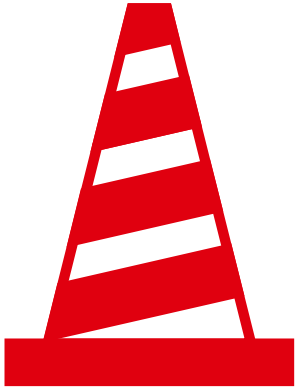
Assessment of major risks

By collecting data on your building, you will be able to analyse the risks specific to your institution and assess how vulnerable spaces and collections are. This assessment must imperatively lead to the implementation of corrective or preventive measures aimed at reducing the potential impact of these risks.
This work should be carried out in tandem with the drafting of the plan. Identify in advance the specificities of each conservation space. Evaluate exposure to fire damage or flooding by determining the degree of structural resilience of buildings in terms of construction materials, layout, etc. *(see: Appendix 1)*.

STEP 1: TEMPLATES

List of documents to complete:

- first response sheet
- list of pictograms
- site plan
- floor plan of zones
- floor plan by specific zone
- floor plan by level



Over to you!

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(pp. 7-16 of the CHSP template)
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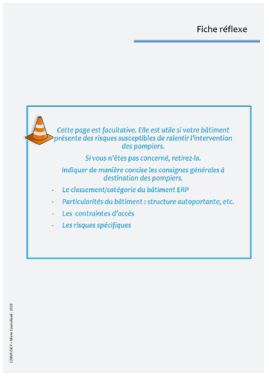

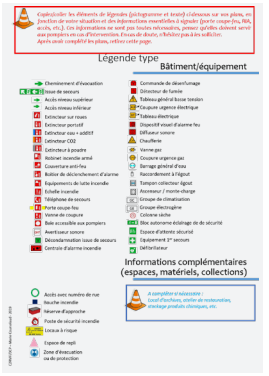

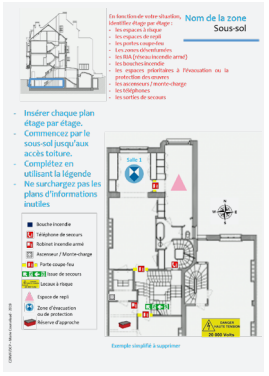

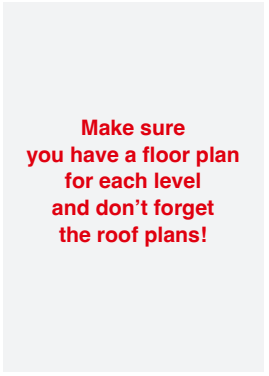

PRIORITISATION OF COLLECTIONS

“If everything is a priority, then everything becomes secondary”
Prioritising items and heritage collections is absolutely essential to safeguarding the most important objects in the event of a major disaster (by evacuation or on-site protection). This applies not only to permanent and temporary exhibitions but also to the objects and heritage collections that are kept in storage rooms.
Drawing up a list of priority collections in advance is key to enabling the fire and rescue services to intervene within a realistic timeframe.
This step often slows the overall progress on drafting the plan as choices can indeed be hard to make but this is a key element for a successful plan. Be courageous and make rational choices!

OUR ADVICE

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Make sure you ask yourself the right questions:
Think topography: are rooms contiguous (no dividing elements, fire doors…)? How would the risk (fire, water) likely propagate? If so, the overall connected space will be considered as a single zone in terms of prioritisation.
If not, each room or space must be prioritised independently. This may lead to a larger total number of priority items.

2 levels of prioritisation and - on-site protection!
Heritage items and collections can be attributed one of two levels of priority:
- P1 for items to be evacuated or protected immediately
- P2 for items that can be evacuated or protected later.

Any further degrees of prioritisation are not necessary since other objects can be dealt with once the disaster is under control.

Who ?

Prioritisation is the responsibility of curators, either working individually or as part of a working group. The head of the institution validates the final list of prioritized items.

How to go about it

The layout of the building largely determines the approach to prioritisation. For example, it is easier to remove a large number of works of art from an easily accessible ground floor room than from an attic space that is difficult to reach. Prioritisation of objects and collections should therefore be done topographically, by compartmentalised space (taking fire risk into account). Depending on exposure to risk and the constraints of the various spaces, the number of priority items may differ from one building/space to another.
If in doubt, the building manager or fire department will be able to help you.
As a rough guide, priority items should account for between 2 and 3% of the overall volumetry of collections but must never exceed 5%. To ensure a manageable number of items are listed, carry out a simulation (evaluate the time needed to take them down, transport them, etc.). Be realistic in your expectations.

Remember that there is no predefined quota.

- To ensure that you make a rational selection, a range of criteria - scientific, historical, artistic and ethnographic value, etc. - can be applied
- uniqueness/rarity,
- significance of the work or collection (local/national/international),
- insurance value or restoration cost,
- legal status):. Deposits in museums can be evaluated in the same way as the rest of the collections but any decision as to their priority rank should be agreed upon with the legal owner of the work.

Works of art and artefacts should also be evaluated based on material criteria:

- sensitivity of the material to specific risks,
- fragility,
- state of conservation,
- ease of handling,
- accessibility.

Based on this analysis, appropriate priority levels can be determined, as well as whether the work should be evacuated or protected on-site.
To be suitable for evacuation, the work must be accessible,

OUR ADVICE

—

Think practically and realistically
- Bear in mind that the firefighters will be intervening in challenging conditions using heavy equipment, and therefore handling will be difficult.
- Simplify the titles of works of art and the names of artists. The main goal is for the emergency services and/or institution staff to be able to identify them quickly. To help firefighters identify priority items:
- Provide photos of the location of items: photo of the room or shelving unit.
- Include a large photo of the work on the individual fact sheet (or alternatively, an overall photo of small objects in a display case).
- Once this is completed, your list of priority items must be jointly reviewed with the fire service to assess the feasibility of the salvage operations as initially planned.

What about display cases?
- Display cases can be difficult to open due to locking systems or size. In this case, consider in situ protection by means of protective fireproof sheeting. Glass could also be cut with a power tool (care should be taken with the resulting glass dust).
- If the display case is opened, bear in mind that all the objects inside it will then be at risk. In this case, evacuate all objects (possibly according to an order of priority).

can be handled by two people and sufficiently robust to be transfered in terms of condition.. Items that are very fragile, restored or difficult to handle may be more severely damaged by handling than if protected in situ.

However, due to their weight, size, bulk, location or fragility, it is not possible to evacuate certain priority items. In this case, they must be protected on-site.

Once prioritised, items must be clearly marked on the CHSP floor plans and listed floor by floor, with key information briefly set out on an individual factsheet.

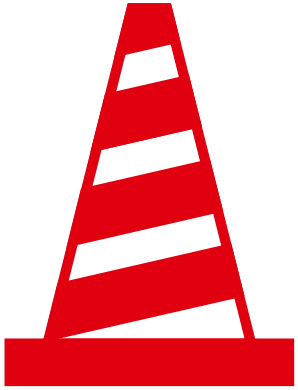
To facilitate identification by the fire and rescue services, priority items and their locations may be indicated by a system of barricade tape or reflective logos.

Specific equipment must be provided for the fire and rescue services for evacuation or protection *in situ* *(see : Step 4 “Equipment”)*.

STEP 2: TEMPLATES

List of documents to be filled in:

- list of priority items
- list of priority items by room
- individual factsheets



Over to you!

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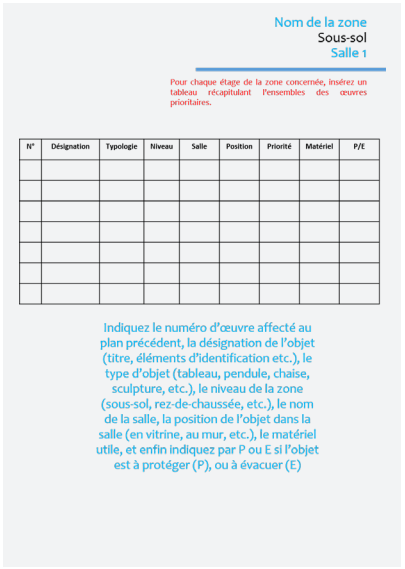
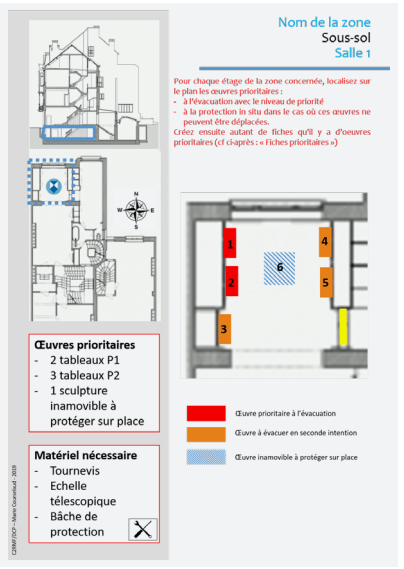
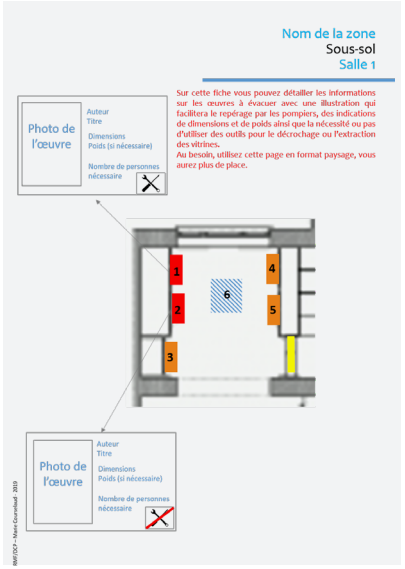
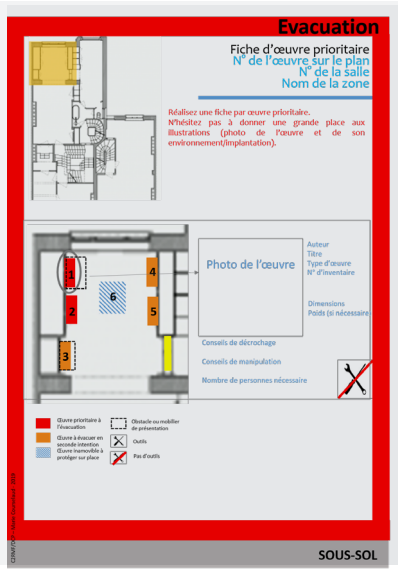








IDENTIFY SAFE SPACES AND TREATMENT AREAS

Safe space: definition
A safe space is a designated area where collections can be temporarily stored in the event of an emergency. It is the area where evacuated collections can be initially deposited by firefighters before being transferred to the treatment area. It is generally a short-term solution: from a few hours to a few days maximum. It can be used by both external emergency services (firefighters) and museum teams. Depending on its layout, a museum may decide to identify one or several safe spaces (for different scenarios).

Characteristics

- inside the museum and/or outside,
- accessible and allowing for ease of movement
- risk-free and weather-proofed, etc.,
- close enough to the area of the disaster to keep transport of fragile items to a minimum
- secure - the safety of the evacuated items must be guaranteed (arrange for them to be guarded by security agents or police),
- clean, hygienic and unencumbered: unaffected items are not stored there (risk of contamination),
- relatively large, because it is likely to fill up quickly.

What are the relevant criteria for choosing a safe space?

Risks are greater on a vertical axis: heat, smoke and flames tend to rise up through the levels, while water from fire hoses flows downwards.

- When possible, opt for a horizontal evacuation strategy, which will also be more effective as lifts and goods lifts cannot be used in a disaster situation.

The nature and specificities of the building should also be taken into account in your choice of safe spaces:

- in a recent building that complies with current fire safety standards, compartmentalisation (the presence of fire doors) enables a horizontal evacuation strategy for collections to be envisaged,
- in an old building, fire standards are sometimes difficult to implement, and the building's air and water tightness levels are generally poor: in this case, a vertical evacuation strategy may be preferable (with safe spaces being located on the ground floor, or even outside). If the internal partitioning presents serious weaknesses, a simple vertical transfer may be unsuitable. The safe space could therefore be located - depending on the architectural layout - in a different wing separated by a shear wall, or in another building within walking distance (town hall, community centre, etc.). It must be possible to evacuate objects without using a vehicle.

The nature of the disaster scenario may also be a decisive factor:

- in the event of a fire, the number of fire partitions and barriers must be taken into consideration
- in the event of flooding, a vertical approach is to be preferred, with collections being taken to upper levels.

OUR ADVICE

Using the risk analysis carried out in Step 1 (Gather information) designate one or more safe spaces appropriate to your building and in line with the risks identified.

Contingency plans and precautions

Beforehand:

Once safe space(s) have been identified, check their suitability by imagining a range of different scenarios, following the planned evacuation route and using appropriate evacuation equipment (boxes, trolleys, etc.).

In a disaster situation:

In the case of intervention by the emergency services, the fire brigade will determine the most suitable safe space from among those you have identified.

If you have no alternative but to use spaces containing cultural heritage objects as a safe space, make plans for them to be removed or have them removed beforehand and stored together in a suitable area.

Case of an off-site safe space

If there is no alternative, damaged items may be evacuated to an off-site location.

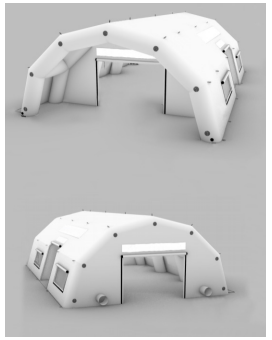
Security should be a priority:

- prefer private secure areas (courtyard, museum garden),
- ensure that items are kept under close surveillance, particularly if the safe space is in a public area (street).

Protect collections from the elements: use a tent or a modular inflatable structure – check that these structures can be easily and rapidly installed.

TENT

Modular inflatable structure



OUR ADVICE

In the case of an off-site treatment area, remember to sign an agreement with the owner of the premises. Depending on the nature of your collections, identify in advance your nearest freezing and freeze-drying providers.

Treatment area: definition

A treatment area is a space dedicated to managing and salvaging damaged items, used for:
– inventorying,
– condition assessment and sorting (damp / wet / mouldy, etc.),
– drying,
– cleaning,
– consolidation, stabilisation / possible emergency interventions.
Unlike the safe space, which is only used for a very short time, the treatment area is likely to be used over a longer period (time needed to restore items and repair damaged areas of the museum, etc.).

NB: If your safe space is large enough and located outside of the risk zone, it can also be used as the treatment area.

Characteristics

- Identify one or several treatment areas
- inside your institution if the layout is suitable, or - more probably - outside the museum grounds: sports hall, community centre, etc.,
- easily accessed and allowing for an easy flow of movement, and ideally equipped with 2 doors to avoid items criss-crossing,
- risk-free and protected from weather hazards,
- guaranteeing the safety and security of items,
- providing a clean, healthy and unencumbered space,
- large enough for collections to be spread out to dry on tables and for staff / restorers to be able to work: generally, the surface should be 2-3 times greater than that of the collections,
- naturally or mechanically ventilated, or failing that, well-aired to improve drying efficiency,
- equipped with power sockets to allow for equipment such as dehumidifiers and fans to be used
- if possible, the thermo-hygrometric conditions should be controlled.

OUR ADVICE

Ensure that you plan and organise the transfer of collections between the various zones (wet / damp / dry).

Designate one or more treatment areas based on standard criteria and access.

If off-site spaces are considered, check the possibility of signing an agreement with local authorities or other nearby cultural establishments.

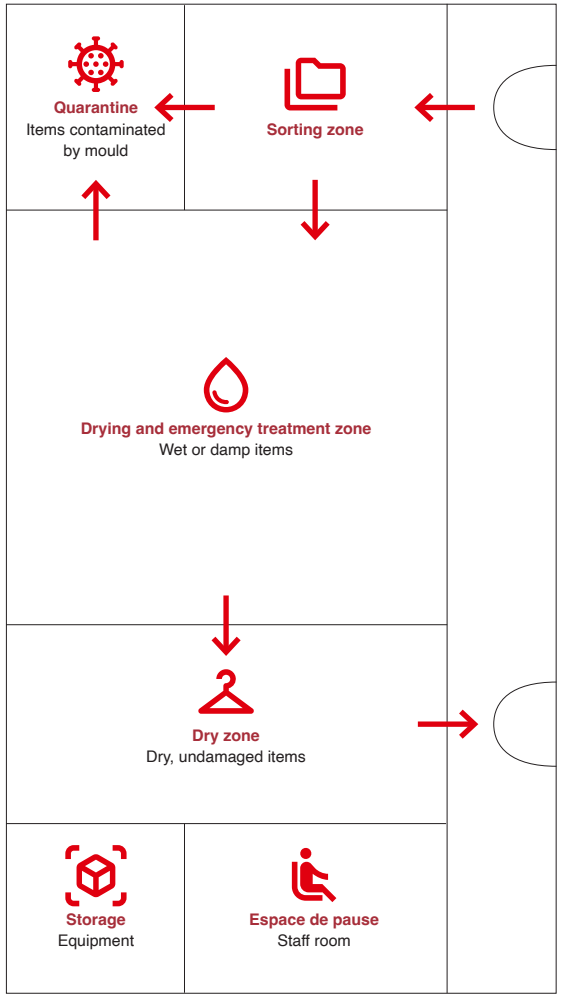
Organisation of the treatment area

The treatment area should be divided up into separate spaces:

- to identify and separate the different operations to be carried out on the items
- to avoid, as far as possible, the cross-contamination of items. A quarantine space must be set up to store any items displaying fungal developments while they await treatment.

The flow of movement between the different areas must be planned and organised.

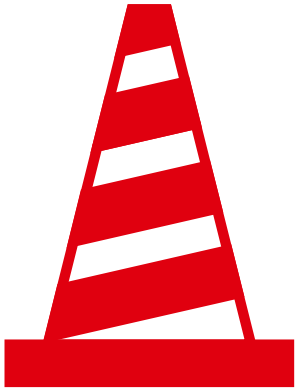
Example of the organisation of a treatment area



STEP 3: TEMPLATES

List of documents to be completed:

– List of safe spaces and treatment areas with precise details
– Identify safe spaces and/or treatment areas by level on the CHSP floor plans (Step 1), (a pink triangle on the CHSP template)



Over to you!

Download the following pages
(p. 28 of the CHSP Template)
https://c2rmf.fr/sites/c2rmf/files/modele_psbc_a_utiliser.pptx

Complétez et adaptez le tableau des espaces de repli / espaces de traitement

Liste des espaces de repli et de traitements

NOM DE LA ZONE DE REPLI	LOCALISATION	PRECAUTIONS PARTICULI7RES	
XXXXX	XXXXX	XXXXX	

NOM DE LA ZONE DE TRAITEMENT	LOCALISATION	PRISES ELECTRIQUES	POINT D'EAU	TRAITEMENT D'AIR
Gymnase municipal	23 rue ...., 75011 Paris	Oui / non	Oui/ non	Ventilation / chauffage / climatisation, etc.

DETERMINE NEEDS IN TERMS OF HUMAN AND MATERIAL RESOURCES

This step refers to the second phase of the safeguarding plan i.e., the "operational plan".

Human resources

Efficient organisation of staff is fundamental to ensuring the success of the salvage operation, to avoid issuing contradictory instructions and exhausting team members.

Therefore, missions should be planned in advance and be appropriate to the skills and role of each stakeholder. Overall, human resources include:

- staff (across various levels of responsibility: crisis cell, CHSP coordinator, building manager, etc.),
- volunteers from nearby institutions,
- volunteers, members of non-profits (eg. Blue Shield, professional associations, Friends of the museums etc.)

The institution is legally responsible for staff

Even in the event of a crisis, the labour code applies, including respect for shifts, rest periods and of course staff safety. Think about staffing needs outside of working hours (evenings/nights and weekends): the call method (chain of calls or automated calls via a platform).

Volunteers: who, when, how?

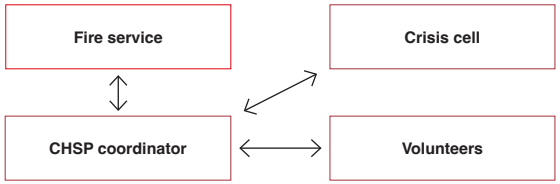
Observe health and safety regulations as applicable to your institution. Agents will then need to be trained and informed about their missions: you should therefore plan a training programme (knowledge of the CHSP, handling of damaged items, etc.)

OUR ADVICE

- Make sure everyone understands their role and consents to it.
- Try and think through proceedings in advance. Estimate team requirements by role (how many people needed for the safe space(s), how many to organise equipment? etc.).
- Opt for different coloured hi-vis vests and/or armbands so that teams and roles are instantly recognisable.
- Rest breaks are essential - plan snacks and refreshments.
- And, above all, make sure all contact information is up to date!

Coordination of the emergency response

Triggering the CHSP automatically leads to the mobilisation of a crisis unit which needs to have been set up beforehand, especially since external aid is being requested.



Who are the key actors in the crisis cell?

- Local department of cultural affairs or supervisory authority,
- management,
- security manager,
- safeguarding plan coordinator,
- building manager,
- the following external partners who can provide technical assistance:
  - National Institutions (depending on your country, all state or local institutions dedicated to heritage that can provide technical or financial assistance or are required to be informed about the conditions of your collections): subsidies, leveraging
  - National Committee of Blue Shield: initial guidance, operational support, leveraging support from their network
  - National Federation of Conservators-Restorers: qualified restorers and specialists in preventive conservation and/or disaster management
  - Insurers: coverage can vary greatly depending on the contract - it is advisable to have read the policy in advance. Please note that there may be a deadline for claiming insurance.

Special role of the CHSP coordinator

The CHSP coordinator plays a key role and is expected not only to have a thorough knowledge of the building and the main cultural heritage objects to be safeguarded but also to be familiar with all the possible emergency response scenarios. In most cases, they will be the only person to liaise with the Head of the 'Safeguarding Cultural Heritage' service or, alternatively, the fire service command post during the acute phase of the crisis. This ensures communication channels are fully controlled, thereby reducing the risk of "noise" and the potential confusion this could cause. They assess the problems,

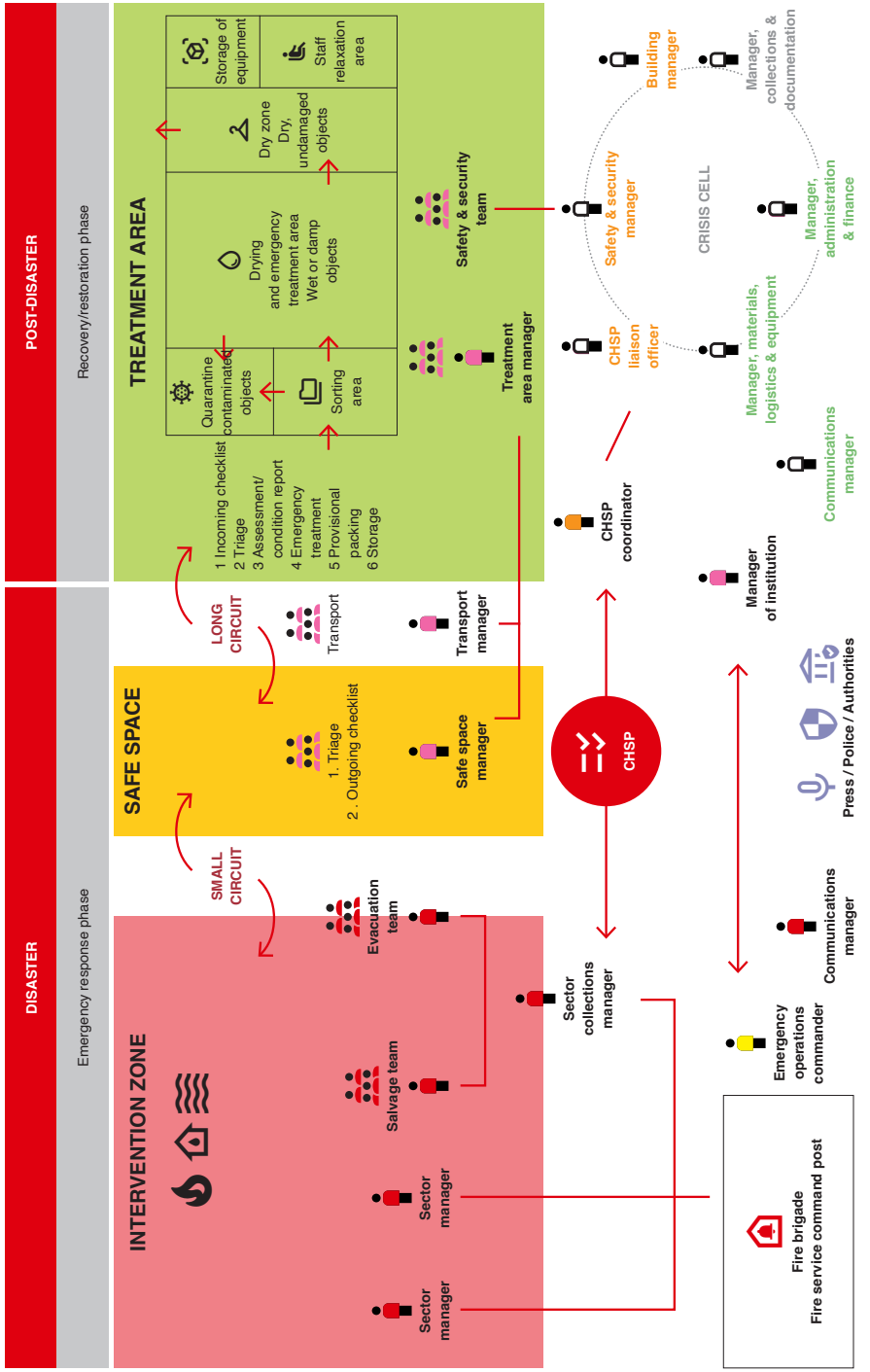


Diagram credits: Stéphane Caumontat

deploy initial emergency responses, establish the schedule, produce progress reports, check and make adjustments. Their role is to set appropriate objectives for each situation. They provide information and are a member of the crisis cell.

OUR ADVICE

- Pack supplies to make them easy to transport and identify (avoid excess packaging),
- do not number bins: this could lead to confusion for traceability. If you want to label them, use the name of your establishment or a logo,
- do not underestimate the need for plastic sheeting to insulate surfaces from dirt and humidity (floors, tables, shelves) and hard foam cushioning (to allow air to circulate between the objects and the floor or walls),
- ensure you provide sufficient extension cords, power strips, small tools, available surfaces, etc.

Equipment

CHSP equipment must be acquired and reserved solely for this purpose

No CHSP salvaging equipment, apart from large items such as pallet trucks, must under any circumstances be used for other purposes. Otherwise, there will be difficulties in locating the equipment if an incident occurs.
Equipment must be accessible and operational at all times. It must be inventoried and checked annually, and the equipment checklist in the CHSP must be kept up to date.

The checklist should include at least the following information:

- the type of equipment
- the exact quantity of equipment
- where it is located

You can also add the contact details of the supplier or provider of any material on loan, as well as the exact product references and the date of the last inventory. A simplified list of equipment can be integrated into the operational part of the plan, as the fire service have access to this section.

Where should equipment be stored?

At least 2 storage zones:

- an emergency reserve: located as closely as possible to the collections, containing emergency response equipment (a few boxes, specific tools, rolls of paper towel, plastic sheeting, etc.);
- a general reserve: for the storage of evacuation and treatment equipment. The location of this space is important: on-site (easy access/outside the risk zone) or off-site (nearby/easy access/outside the risk zone). In institutions with limited space available, all equipment may be stored in a single, easily accessible, ground floor area.

Categorise material (supplies and equipment) by whether it is used to:

- protect staff,
- remove and evacuate items (or protect them on site),
- equip the safe space and treatment area,
- dry, air and examine objects,
- carry out treatments,
- record and document.

(see : Appendix 3 “List of equipment”)

Think in terms of the typology of collections and the layout of rooms

- Are the objects to be evacuated mainly small? If so, go for openwork crates. Are they mainly paintings and graphic arts? If so, you’ll need pads of cushioning foam, paper towels and blotting paper.
- Does your museum have stairs or long corridors? If so, you’ll need to provide trolleys and organise human chains, and so on.

Think in terms of secure external resources (reduction of costs and storage space)

- Does your supervisory authority have extra equipment that is available at all times? (Additional small tools, tables, shelves, fans, dehumidifiers, ladders, vehicles, etc.),
- Can you pool resources with neighbouring institutions (staff, vehicles, premises, large stocks of supplies due to the size of their collections, etc.)?
- Does the fire service have specific equipment specifically dedicated to heritage rescue, available?-t-il des outils spécifiques mobilisables, une berce ?

If you decide to depend on external resources: make an appointment, and check that the relevant resources are actually available and in good condition. Remember to make lists of up-to-date contact numbers, and how premises and vehicles can be accessed (authorised drivers).

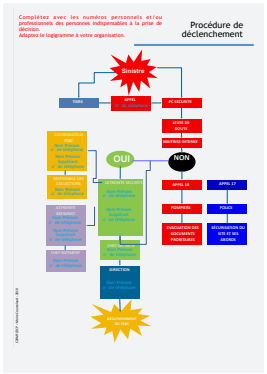
Costing

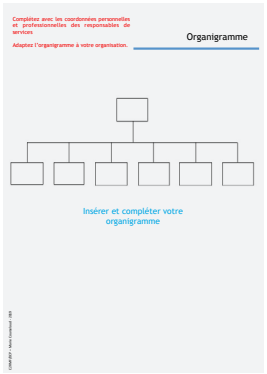
Evaluate the budget on the CHSP application:
https://c2rmf.fr/sites/c2rmf/files/documents/Application_PSBC_2021.xls

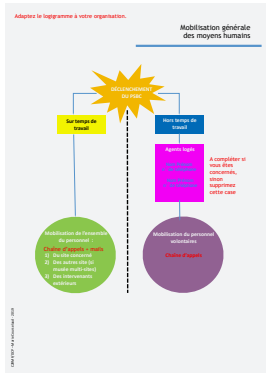
STEP 4: TEMPLATES

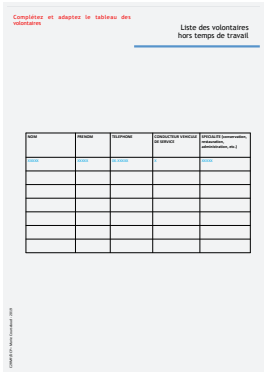
List of documents to be completed:

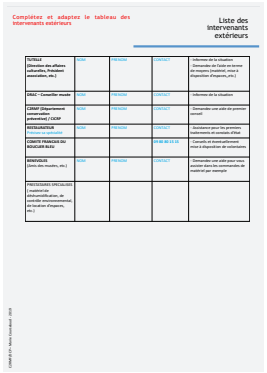
– Activating the emergency procedure” flowchart
– Organisation chart of the institution
– “Mobilising volunteer human resources” flowchart
– List of volunteers outside of working hours
– List of external responders
– List of equipment

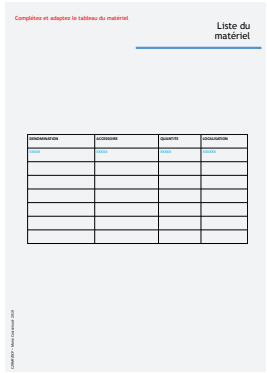


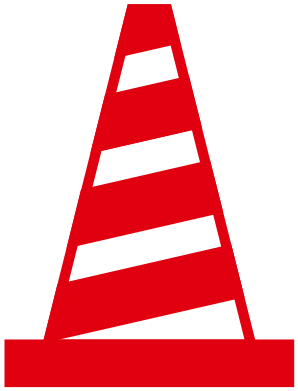










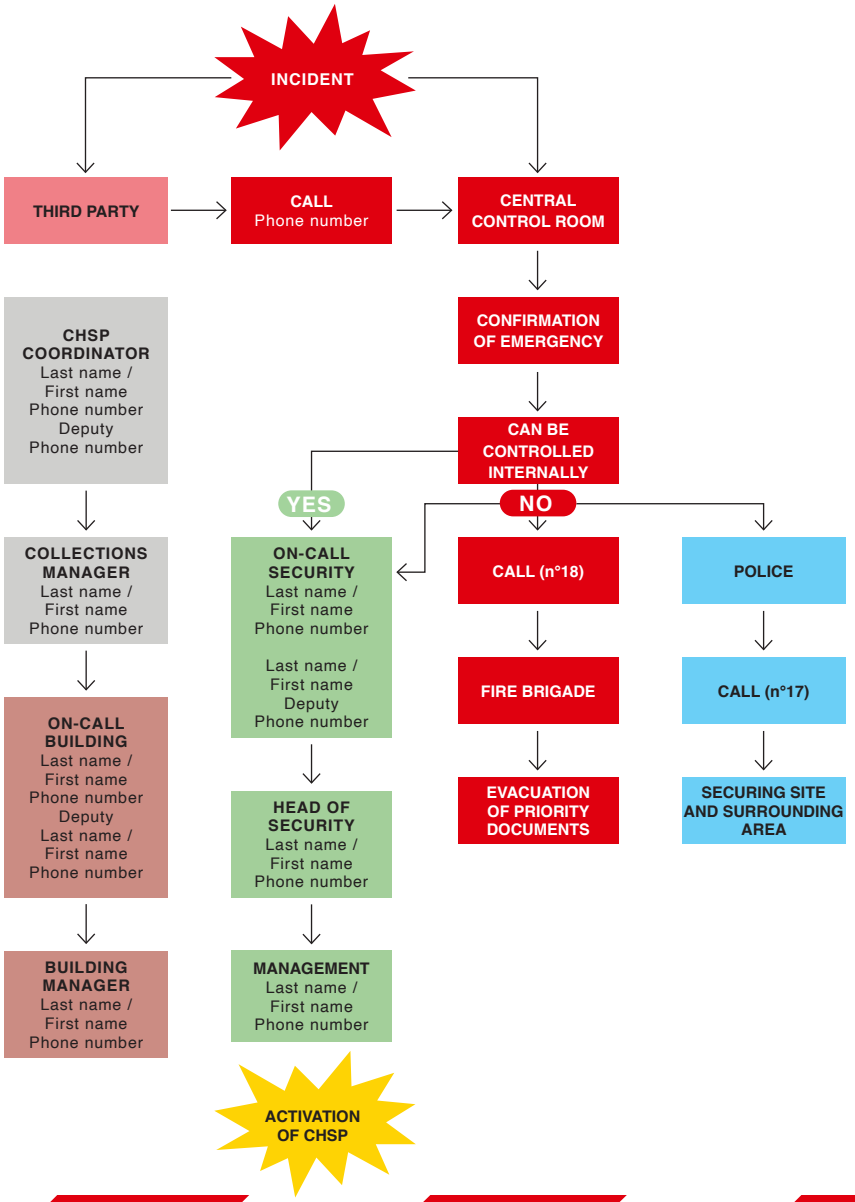


Over to you!

Download the following pages
(pp. 21-26 of CHSP Template)
https://c2rmf.fr/sites/c2rmf/files/modele_psbc_a_utiliser.pptx

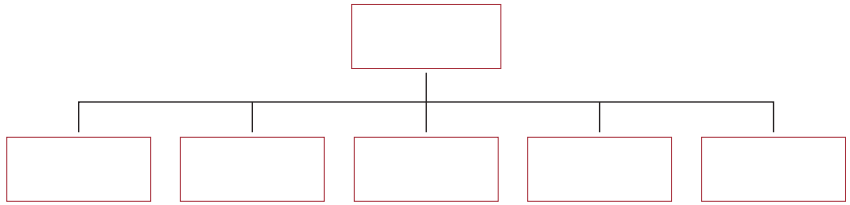
Activation plan

Complete with the personal and/or professional numbers of essential decision-makers.
Adapt the flowchart to your organisation



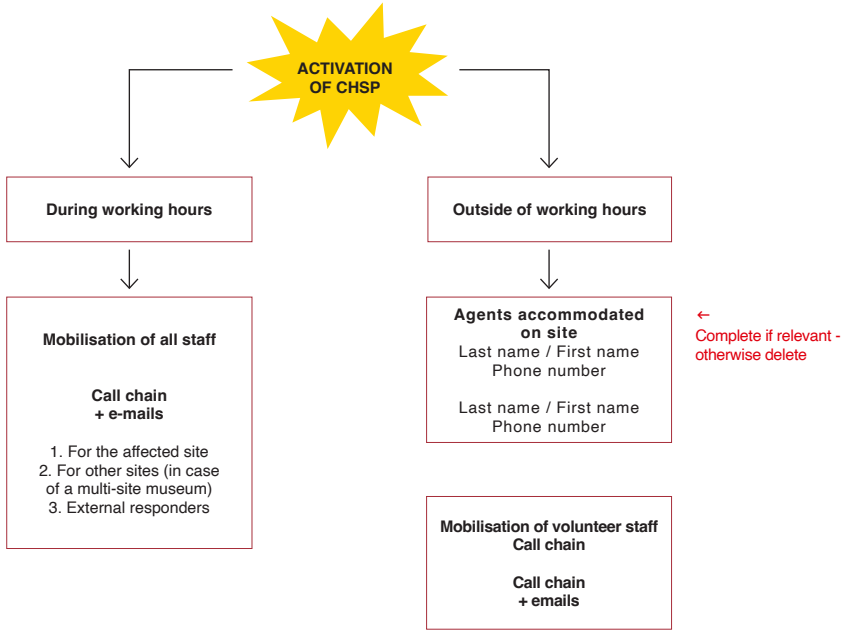
Organisational chart

Complete with the personal and professional details of department managers.
Adapt the flowchart to your organisation.



General mobilisation of human resources

Adapt the flowchart to your organisation



List of volunteers for outside of working hours

Complete and update the table of volunteers

Last name	First name	Phone number	Driver of service vehicle	Speciality (Conservation, restoration, administration, etc.)

List of external responders

Complete and update the table of external responders

Supervisory authority (Department of Cultural Affairs, President Of NGO, etc.)	**Last name**	**First name**	**Contact**	Inform of situation. Ask for assistance with resources (equipment, provision of spaces, etc.)
Specialised laboratory	Last name	First name	Contact	Ask for emergency response advice
Restorers *Indicate speciality*	Last name	First name	Contact	Assistance for first treatments and producing condition report
National Committee of Blue Shield or association specialised in emergency intervention on heritage sites	Last name	First name	Contact	Advice and possible provision of volunteers
Volunteers (Friends of the Museum, etc.)	Last name	Prénom	Contact	Request help for tasks such as ordering equipment
Specialist providers (Dehumidification, environmental control equipment, rental of space, etc.)				

List of equipment

Complete and update the table of equipment *(see Appendix 3 : p. 57)*

Name of equipment	Accessory	Quantity	Location

FINALISATION OF PLAN

You have now completed drafting the main operational and organisational sections of your CHSP. Congratulations! You've nearly finished - all you need to do now is finalise the plan.

Check the document

Every detail is important. Ensure that lists of objects correspond to individual fact sheets and that evacuation and protection measures have been clearly indicated.

Inspection visit with the fire department

Organise an inspection visit with the fire department to check that your preparedness strategy is sound. Make any necessary changes.

Validation

The plan must be validated by the museum management and may be presented to the supervisory authority or local authorities for information as part of the local government safeguarding plan. Carrying out a joint drill with the fire department will enable the plan to be fine-tuned and validated in the field.

Printing

The document should be printed in A3 format so that it can be easily read, and information sheets should be in landscape format, depending on the layout of spaces. Remember to laminate all the information sheets so that firefighters can annotate them with markers and to ensure they can be used in disaster conditions. The sheets should be placed in an A3 binder, with dividers for each zone or level to facilitate access to the information. Cutter notches can be made next to perforations to enable the removal of cards without having to open the binder.

Storage of plan and data retention

As it may contain sensitive information, 2 printed copies of the document must be kept, one of which should be stored in the central control room, if there is one, or in the same place as the security register in other cases. Wherever the CHSP is stored, it must be safe, secure and easily accessible. Access to digital copies must be restricted to the institution's stakeholders only. Remote access is also important to ensure that it can be consulted even in the event of a disaster situation.
Dematerialisation of the plans is allowed but. in any case it must not replace a printed version of the document. Dematerialised versions that can be consulted on the web or any other online application must be subject to a cyber-security process.

All information contained in the CHSP is the property of the institution and is its sole responsibility. The emergency services should not keep copies of the plans.

Keeping the CHSP up to date

Once completed, the CHSP must be continuously updated as and when objects are moved, and in the case of deposits/acquisitions, new museum layouts, staff changes, and the purchase/use of new equipment, etc. Rigorous updating is required if the document is to remain operational. Update and verify data periodically on specific dates. Remember to keep everyone informed, ensure staff are trained and maintain links with partners and the emergency and fire services.

CONDUCTING A PRACTICE DRILL

OUR ADVICE

- If you organise a drill that involves volunteers sorting objects in the treatment area, don't forget to "damage" them to make it more realistic: by scorching, soiling, wetting them etc.
- Items can be damaged prior to the drill if you have access to a storage area where there are no other cultural heritage objects displayed or stored. Otherwise, on the day, you will need to arrange for someone to damage the objects between the safe space and the treatment area.
- If you plan to scorch replicas, ensure the fire service is on hand!

Objectives of the drill

Improve the CHSP and optimise its implementation in the event of a real disaster by:

- checking that it is effective in real-life conditions;
- training the emergency services to intervene in your institution;
- building volunteers' confidence by encouraging them to take greater ownership of the CHSP.

Scope of the drill

A drill does not necessarily lead to the full deployment of the CHSP. Overall, it should not exceed 2-3 hours with the fire services and 2-3 hours for the follow-up/processing part (including reporting): it is a training session, so it is important to avoid discouraging officers and volunteers.

Example of possible objectives:

Example 1 : Participation of both emergency services and CHSP volunteers

This aims to:

- test the coordination between the emergency services and your institution,
- validate the preparedness strategy defined in the CHSP.

It will also provide an opportunity for volunteers to learn about good practices and teamwork in a different context in a common approach to the preparedness strategy.

Example 2: Intervention of the emergency services only

The objective is to test the coordination between the emergency services and your institution and validate the preparedness strategy defined in the CHSP.

Example 3: Participation of volunteers only

This aims to:

- provide internal training on best practice,
- test internal procedures,
- rehearse teamwork in an emergency situation.

Frequency

Ideally, carry out a fire drill and/or CHSP drill every year.

Preparation

Creating a scenario:
Depending on the type of drill, design a potential scenario defining:
- where the fire starts and spreads to,
- safe spaces and/or treatment area,
- whether there are victims or not,
- whether fake artefacts are to be evacuated or not,
- whether fake artefacts are to be protected or not,
- whether evacuated objects are to be treated or not.

If you are planning a joint drill with the emergency services, work with them beforehand to create the scenario.

Preparation of fake artefacts:
Prepare fake objects with similar shapes, weight and hanging systems to the originals. Give free rein to your colleagues' creative skills to produce these imitations. Set aside a budget for the purchase of low-end fine art supplies and organise workshops: at lunchtime, for example. You can also use everyday objects: a framed poster, photo or watercolour that is hanging in a corridor, and even office furniture can replace a chest of drawers or a console from your collections, etc. Allow time to prepare the fake artefacts and remove and secure the originals.

Preparing a mock CHSP:
For the drill to be effective, you should create a realistic mock CHSP for the fake objects, based on essential elements in your plan:
- draw up a list of priority fake items,
- make an individual fact sheet for each fake
- create a general checklist.

Schedule the drill:
Make sure that the safe spaces and treatment areas are free on the day of the drill. If the areas specified in the CHSP are not available, identify alternative spaces and indicate them on the plans of the mock CHSP.

OUR ADVICE

Volunteers may suffer from stress and fatigue: ensure regular breaks are planned and provide a rest area with refreshments and snacks available!

Lauching the drill

Lay the groundwork:
Ensure the fakes have been deployed and that the originals are out of harm's way. If using a smoke machine, put it in place and check that it is in working order.
NB: Opt for a smoke machine that uses demineralised water and propylene glycol rather than a one which uses mineral oil as this can leave a greasy deposit on the surface of exhibits.
As a precaution, you should keep exposure time to a minimum and ensure that fumes can be properly extracted from the room; otherwise, consider protecting cultural heritage objects and/or equipment with plastic sheeting.

Brief your teams:
- 15 - 30 minutes before the start of the drill, brief internal teams: observers and/or volunteers.
- If CHSP volunteers are involved, remind them briefly of their assignments and the drill procedure.
- If volunteers are playing the role of victims, tell them where they should be located.
- Give observers specific roles: taking photos and/or videos, note-taking or timekeeping. Plan for observers to be deployed in each relevant location (fire service / safe space / treatment area).
- Ensure that observers are identifiable by means of a specific hi-vis vest! There may be outside observers, such as from the emergency services – check this out before starting the drill.

Triggering the drill

Once all the teams of volunteers and observers are in position, you can trigger the drill by setting off a fire alarm in the relevant area.

Sequence of a typical drill

Fire detection > confirmation
Alarm > general evacuation of staff and/or the public, if applicable
Arrival of firefighters > liaison > reconnaissance > emergency care of any victims > deployment of firefighting equipment > activation of CHSP > setting up of a "Salvaging" unit > evacuation of relevant objects.
Role of volunteers > liaison with firefighters – CHSP coordinator > assignment of roles and organisation of teams of volunteers > preparation of spaces > management of transfer of evacuated items from safe space to treatment area > triage and first aid for damaged items.

Concluding the drill

Ensure you plan time afterwards to tidy up the spaces used in the drill and for debriefing, storing equipment and putting objects back.

Hot debrief
Straight after the drill, organise:
- A debriefing with all volunteers and observers (at least 15 minutes).
- The firefighters should also organise their own hot debriefing.
- Joint debriefing of observers, volunteers and firefighters (approximately 15 minutes).

Cold debrief
Over the next few days, write up the feedback, focussing on the timing, sequence of events, procedure, highlighting the aspects that went smoothly and the areas for improvement.

OUR ADVICE
—
Obviously, not all members of the fire service will be available to participate in the drill at any one time: contact your local emergency services regularly to organise site visits, so that as many firefighters as possible are familiar with your institution. Provide short training courses on handling works of art and artefacts.

APPEN-DICES & VSEFVL DOCV-MENTS

Cultural Heritage Safeguarding Plan
Annexes
& documents utiles

Appendix 1 Risk analysis toolkit

Risk analysis table

Type of risk	Indicators	✓	Resources
Location of site	Flooding, shrinkage / swelling of clay soils, ground movements, underground cavities, earthquakes, pipelines for hazardous substances, nuclear installations, radon, soil pollution, former industrial sites, industrial sites in use		Local government safeguarding plan
			Local government major risk assessment
			Local risk report: http://www.georisques.gouv.fr/
			European Centre for Flood Risk prevention: https://www.cepri.net/
Site access and movement flow in buildings	Emergency service access (from street, vehicle access, ladder access), internal access (width of doors and stairs, lift), keys (location, centralised, controlled management, spare emergency set)		Specific plans that can be drawn up by the fire brigade
			Internal fire safety register
			Museum safety / building manager (or failing that, local authority equivalent)
Nature and properties of building	Building structure (self-supporting structure, insulation, fire resistance of walls and floors), compartmentalisation (fire doors, type of smoke extraction, ducts with automatic fire dampers, control of fire detection), roofing (verification of lightning rod, chimney maintenance)		Other local authority services in the case of joint activity, to reach common areas with the high-risk site or premises (however, information relating to the security of the building and collections must remain confidential)
Internal equipment	Furniture and curtains (fire resistance of materials: M0, M1, M2, M3, M4), electrical installations (standards, control, insulation, earthing, high/low current separation, connection of appliances), HVAC network (standards, maintenance, shut-off valve, location of emergency shut-off valve)		
Fire detection equipment	Main fire safety post, addressable fire evacuation alarms, surveillance agents, material means to enable confirmation of emergency, direct phone line to emergency services		
Fire extinction resources	Fire hydrants, Emergency equipment: extinguishers (type, number, access), fixed automatic extinguishing equipment (sprinkler, water mist), FHR (fire hose reel), monitoring agents.		

Type of risk	Indicators	✓	Resources
Emergency resources available to firefighters	Keys, radio and unlocking device (special keys), emergency access plans, dry risers, wet risers, fire hose reel, fire lookout tower		Specific plans that can be drawn up by the fire brigade
			Fire safety register
			Museum safety / building manager (or, if unavailable, local authority equivalent)
Evacuation preparedness	Evacuation plans (updated and displayed), emergency exits (signage, lighting), thorough knowledge of evacuation instructions		Specific plans that can be drawn up by the fire brigade
			Fire safety register
			Museum safety / building manager (or if unavailable, local authority equivalent)
Specific, regular activities	Calorific potential (congestion, waste management), high-risk areas (storage of flammable products or gases, electrical sources), reserve of high-risk collections.		Other local authority services in the case of joint activity, to reach areas common with the high-risk site or premises (however, information relating to the security of the building and collections must remain confidential)
Surveillance procedures	Team (internal/service provider, on-call duty), rounds (frequency, 24/7), system of safety checks (devices disconnected, bins emptied, doors closed)		
Verification procedures for safety measures	Safety commission inspections, fire safety register (logging of accidents, list of phone numbers), regular servicing of fire detection and fire-fighting equipment, staff training (extinguishing and evacuation drills)		
Building-related tasks	Fire permit, mandatory daily rounds		

Appendix 2 *Excel* tool for automatic CHSP generation (in French for now)

Link to tool:
https://c2rmf.fr/sites/c2rmf/files/documents/Application_PSBC_2021.xls

Instructions:
https://c2rmf.fr/sites/c2rmf/files/documents/Mode%20d%27emploi%20application%20PSBC.pdf

Examples of pages produced:
https://c2rmf.fr/sites/c2rmf/files/documents/Exemple%20de%20fiches%20produites%20via%20l%27application.pdf

Based on a mathematical matrix developed by the French national fire brigade school (*http://crd.ensosp.fr/doc_num.php?explnum_id=7963*), this tool automatically calculates the priority level of items, generates the relevant fact sheets, locates objects on a map and facilitates the management of emergency equipment. The tool is mainly suitable for temporary exhibitions or for collections composed of a limited number of items because it requires the individual entry of each object in the Excel database.

Organisation of tabs:

Tab 1: "Set up Prioritisation List" provides a priority ranking of cultural heritage objects based on their reputation, historical / artistic / scientific value and rarity. It provides information on how objects should be handled in the event of an emergency (evacuation or protection in situ) and indicates the appropriate treatment to be carried out in a post-disaster situation. Up to 5,000 lines of cultural heritage references can be entered.

Tab 2: "Print Prioritisation List" allows you to filter, sort and order data in each column and easily print selected columns.

Tab 3: "Priority sheet" provides automatically generated prioritisation sheets

Tab 4: "Labels" allows you to print out a page of labels to be cut out, inserted in minigrip bags and placed near relevant objects to indicate their level of priority and facilitate post-disaster inventorying.

Tab 5: "Plan" produces floor plans on which fire detection and fire-fighting equipment are marked and indicates the location of priority items to be evacuated or protected on site (plans can be modified and updated to take into account any movement of objects).

Tab 6: "List of materials" provides a reference list of emergency equipment products and suppliers, enabling available equipment to be accounted for and additional needs in terms of equipment to be budgeted for and ordered.

Appendix 3 List of equipment (step 4)

You can enter suppliers, quantities ordered, unit prices, dates of inventories and the appropriate time frame for re-ordering.
For further information, see:
https://c2rmf.fr/sites/c2rmf/files/documents/Application_PSBC_2021.xls

Catégory / function	Required / optional	✓	Item
Personal protective equipment (PPE)	***Required***		FFP3 face masks + valve + white (set of 60)
			Protective gloves
			Overalls (size M)
			Overalls (size L)
			Overalls (size XL)
			Pairs of boots
			Safety shoes
			Adjustable hard hats
			Different colour hi-vis vests
			Reflective armbands (various colours)
Note-taking equipment	***Required***		A4 notebooks with small squares (set of 10)
			Ballpoint pens (set of 12)
			Labels (set of 500)
			Whiteboard
			Coloured markers
Evacuation equipment	***Required***		Openwork and/or foldable stacking containers (60 × 40 cm, 32cm)
			Rolling chassis
			Plastic pallets
			Pallet truck
			Trolleys
			Handy trolley
			Removal blankets
			Ratchet Tie-Down Straps
			Torches
			Screwdrivers (lot)
			Saw
	Optional		Rolling cabinet
			Sack truck
			Trolley for bin (60 × 40 cm)
			Telescopic ladder

Category / function	Required / optional	✓	Item
Protection equipment	***Required***		Plastic protecting sheet (roll, 2 m × 500 m)
			Fire protection tarpaulins
			Transparent packaging adhesive (roll)
			Stanley knife
			Stanley knife blades
	If possible		Adhesive dispenser
			Window adhesive (roll)
Processing equipment	***Required***		Smoke sponge
			Staedler rubbers (set of 20)
			Weights (2 kg)
			Japanese paper (type Bolloré) (750 mm × 1000 m, roll)
			Freezing bags (different sizes)
			Nitrile gloves (box of 100, size S)
			Nitrile gloves (box of 100, size M)
			Nitrile gloves (box of 100, size L)
	If possible		Tweezers (120 mm)
			Brushes (set)
			Neutral tissue paper (100 × 75 cm, pack of 500 sheets)
			Polyethylene foam film (roll)
			Tyvek (roll, 1.5m × 30m)
			Melinex (roll, 1m × 20m, 100 microns)
			Polypropylene (sheet 120 × 80 cm, 3-4 mm, pack of 10)
			Minigrip bags (pack of 1000, 18 × 12 cm)
			Minigrip bags (pack of 1000, 28 × 22cm)
			Rinse tank
			Neutral cardboard (120 x 80 cm, 2mm, set of 5)
Drying equipment	***Required***		Wet vacuum cleaner
			Large capacity vacuum cleaner
			Ethafoam polyethylene foam (plates, 60 × 60 cm)
			All-white paper towels without pattern (rolls)
			White blotting paper 220g/m² (65 x 50 cm, set of 125 sheets)
			White blotting paper 300g/m² (1360 x 75 cm, set of 50 sheets)
			Twine (roll)
	Optional		Electric wastewater pumps
	If possible		Plastazote polyethylene foam (1×1m sheet, 2 cm, set of 3)

Category / function	Required / optional	✓	Item
Regulation and control equipment	***Required***		Ventilators
			Dehumidifiers
			Thermohygrometers
Matériel divers	***Required***		Hydroalcoholic hand solutions
			Extension cord (10 m)
			Scissors
			Screwdriver drill
			Drill set
			Screwdriver bit set
			Large capacity trash bags (set)
			AA/LR6 alkaline battery (set)
	If possible		Aluminium stapler nailer Powercurve 3 strengths
			Staples (set)
			Semi-flush cutting pliers
			Allen keys
			Measuring tape (5 m)
			Brown sponges
			LED headlamp
			Autonomous LED projectors
			Construction electric hose reel (40 m)
	Optional		Generator 2600

Appendix 4 Acronyms

CCR
Central control room

CHSP
Cultural Heritage Safeguarding Plan

ERP
Emergency response plan

FHR
Fire hose reel

HVAC
Heating, ventilation and air conditioning

ME
Main equipment

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