

Artistic concept and planning

The question “how can we do this safely?” should set the stage for concept development, pre-production, construction, rehearsal and performance. Consideration of health and safety should begin as early as possible in the planning of the production and should continue throughout the production process.

Design

The objective of the safe development process is the creation of production elements (such as scenic units, props, special effects, etc.) that, while meeting the designer’s aesthetic criteria, are appropriately constructed and demonstrated to be safe for use by performers and crew for the specific requirements of the performance. To this end, risk assessments should be conducted at the concept and design stage for:

- Performance and rehearsal venues
- Sets
- Props
- Costumes
- Special effects
- Any other elements

Development

Plan for incremental construction and testing when identified hazards include any of the following:

- Non-standard construction methods or materials
- Moveability
- Unusually hard or unusual usage by performers
- Special effects devices

Risk Control

After hazards have been identified, select appropriate controls for each hazard, taking into consideration time and feasibility. No one should be exposed to a hazard that has not been adequately controlled. If controls cannot be implemented for any reason, the activity should not take place.

When selecting control measures, the following principles should be applied in the following order:

1. **Elimination:** Can the risk be avoided or eliminated?
2. **Substitution:** Can less hazardous materials or different work practices be substituted?
3. **Engineering Controls:** Can the process or task be redesigned to reduce exposure to the hazard?
4. **Administrative Controls:** Can a task be planned & organized to reduce the risk?

The provision of personal protective equipment (and the associated information, instruction and training) should always be considered as a last resort and only after the above controls have been considered.

When a rehearsal or performance involves high risk activities, every member of the company needs to understand what plans are in place to reduce the risk. Incorporate high risk elements gradually, ensuring sufficient time in the schedule for testing and making necessary adjustments.

Production is a fluid process so conditions should be monitored continuously for new or evolving hazards.

Sample Development Process

A production of Macbeth is being planned by the Borneo Community Players. In this production, the three witches will climb a tree positioned left of centre. The tree is part of the set design.

The Director & Designer discuss the concept. The following questions are answered:

- How high will they climb?
- How fast must they get up and down?
- Is the tree supposed to sway or be rigid?
- How big is the tree, in both diameter and height?

The Technical Director is unsure about how to safely build and secure the tree. An engineer is contracted to assist with the design.

The Designer, Technical Director and engineer jointly decide how to attach the tree to the floor, if support cables or braces are required, what materials will be used to construct the tree, etc.

The Wardrobe department is informed early in the design process, so that appropriate footwear is considered.

The sequence of climbing the tree is explored in conjunction with the performers, and with consideration for their footwear. The appropriate “steps” or toe holds are built into the tree.

The tree is tested in the shop and subjected to gradually increasing loads and movements. It is tested to ensure it will bear considerably more weight and more movement than the actual performance calls for.

The tree is tested in the shop by the performers, beginning gradually with each performer testing it on their own and gradually adding the other performers. Sufficient rehearsal time is allocated to ensure the performers are comfortable and all elements are safe.

When the tree is moved and secured onstage, it again goes through a rigorous testing process before the performers are gradually re-introduced. Minor modifications may be made as a result of the additional testing.

Sufficient rehearsal time is provided for the performers to develop comfort with the tree before technical elements (lighting / costumes etc.) are gradually introduced.

During the run of the show, the tree is inspected before **each** performance and performers are asked to report any problems or concerns.

The show is a smash success and the media comment on the beautiful set design and the powerful and theatrical moment when the three witches clamber into the tree to watch as King Duncan announces that Macbeth will be given the title of Thane of Cawdor.

Risk Assessment Checklist

Actsafes has produced a simple, one page *General Risk Assessment Checklist* that can be found on our website at <http://www.actsafe.ca/category/resources/risk-assessments/>

Occupational Health and Safety Regulations

Not all requirements under the Occupational Health and Safety Regulations are discussed in this document. This is not a definitive guide to the legislation and does not exempt readers from their responsibilities under applicable legislation. In case of inconsistency between this resource and the occupational health and safety legislation or any other legislation, the legislation will always prevail.