

SAFETY PROGRAMMES FOR MUSEUMS - (a) THE MEMBERS, (b) THE PUBLIC

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Accident prevention requires a planned approach. It requires an understanding of why accidents happen and, in particular, the relationship between human behaviour and the environment. The environment in the various museums in Australia and New Zealand will be different in every case. Therefore those in charge have the need to relate their accident prevention activities with their own particular circumstances.

Therefore let us look at some of the basic principles involved in accident causation.

What is an accident?

"An accident is any unplanned or unexpected event which may or may not cause injury to people or damage to property".

If you care to ponder over that statement you will see that accident prevention is a much deeper subject than merely the reduction or prevention of injuries to people.

Having defined an "accident", we can then start to look at a sequence of events to find out where preventative measures can be taken.

Firstly let us say that safety is the "prevention of injury or damage".

Then let us ask "Why does injury or damage occur?"

The answer is - because of accidents. At this point there are no obvious preventative measures so let us say "Why do accidents occur?"

The answer is - "because of unsafe acts and conditions caused by people".

This is an area where we can take some action. We can eliminate or reduce unsafe conditions and where we cannot do this, we protect by guarding or other similar means. We can also educate or regulate people so that they do not create unsafe conditions or perform unsafe acts.

But we can also ask the next question - "Why do people create unsafe conditions or perform unsafe acts?" The answer to this one is - because of the normal faults of human behaviour. If we can accept that all people have faults in the way that they behave, that these faults are quite normal, and that people ought not to be blamed because of them, then we can look at these faults as they relate to each one of us personally as well as to others and try to take measures to control or to guard against them.

Some of the more easily recognised faults are:- undue haste, laziness, impulsiveness, lack of forethought, lack of knowledge, irresponsibility, curiosity and, in some cases, lack of intelligence. Other faults are physical such as defective vision, poor sense of balance, faulty hearing and feeling "off-colour" due to perhaps a heavy cold, hangover or whatever.

We can then ask one further question:- "Why do these faults occur in people?" The over-simplified answer is because of their environment, hereditary background and up-bringing. There is little that we can do about this except in the area of bringing up children to be safety-conscious, and that is outside the scope of this paper.

To summarise, we are left with two areas where, with careful planning, effective action can be taken. They are:-

1. Reduction, elimination or guarding against unsafe acts and conditions.
2. Recognising and protecting against the normal human faults of people.

To apply these to your situations, I can only suggest broad guidelines to follow. They are:-

1. Protect the public from their own unsafe acts, (including those of children) and straight-out vandalism by predicting what they may do because of normal human behaviour.
2. Similarly, protect the public from the unsafe acts of your members.
3. Control unsafe conditions.

On the question of how to achieve this I put the following for your consideration.

1. Have an active safety committee, formulate museum safety rules, publish a safety hand-book to suit all situations and give safety training to all members with responsible jobs.
2. Restrict public access to areas which are safe and where they are visible to your supervising members.
3. Give maximum attention to steps, hand-rails and locks where necessary.
4. Use lock-out switches.
5. Have systematic traffic control - and I can only commend the one at St. Kilda to you.
6. Maximise the use of sign-posting.
7. Do not hesitate to control the actions of children - even when their parents are present.

8. Ensure always that emergency devices such as brakes, bells etc. are in first class order.
9. Keep first aid facilities adequate and ensure that trained first aiders are always on roster.
10. Do not economise on fire protection. Seek professional advice.
11. Do not neglect to have a comprehensive public risk insurance policy.

Your workshops should not be neglected in any safety programmes that you may establish. Perhaps in this area the main guideline to adopt is to "protect your members and property from the unsafe acts of your own members".

Some key points which are often overlooked because of lack of planning or good supervision are:-

1. Good housekeeping - especially in respect to fire prevention. Fire cannot burn without fuel, so reduce fuel to a minimum. Another good hint is to have suitably marked bins so that waste can be sorted as it is produced.
2. Make full use of personal protective equipment:- safety glasses, safety boots, welding gloves, respirators etc.
3. There are few second chances against electrical shock - invest in earth leakage relay units to suit all work with extension leads and portable electrical tools.
4. Materials handling can be hazardous. Use mechanical aids where possible - if not, lift with the legs and not the back. Do not put steel to steel when using jacks.
5. A broken grinding wheel can be a fatal missile. Do not let anyone except a genuine expert set up a grinding wheel.
6. Compressed air can enter the bloodstream through the skin at quite low pressures and has the same effect as divers bends - Control its use.
7. Pits are difficult to guard - a bright yellow band around their edges helps to make them more readily visible.
8. Work areas above ground level should have kick-boards and guard-rails.
9. Battery charging produces hydrogen which is highly explosive and lighter than air. Use a spark-free well vented area.
10. Hand and power tools in poor condition are hazardous. Consider the appointment of a suitably skilled member to take charge of these items.
11. When arc-welding, use screens for protection against ultra-violet flash. Insist on safety-glasses for eye protection during chipping off.

Conclusion

I opened this paper with an outline of some of the theory of accident causation which I hope will give you food for thought.

In the latter part I dealt with some more specific items that are worthy of attention but, I hope, will be seen only as examples of the variety of hazardous areas that require attention.

I trust that what I have said will give you the motivation and guidelines required to set up an effective safety programme. The good work that you are doing is too valuable to be destroyed either by accident or by the results of litigation brought about by a blame-worthy act of your organisation or one of its members.