

FACTORS OF SAFETY CONSIDERATIONS FOR PLANNING AND MANAGEMENT OF EVENTS & ACTIVITIES

1. **Suitable use of Place/Venue, Sea &/or Land Route**
 - a. Recce the place/venue, sea &/or land routes to be used during planning
 - b. Time of recce take into consideration actual event time
 - c. Confirm any use of public road or places, sea lane/channel
 - d. Obtain relevant authorities' official approval or you may need to keep them informed for advisory, e.g. Traffic Police, National Parks, MPA....
 - e. Note & mark the hazard & risky areas due to terrain, vehicular & human traffic
 - f. Light condition, illumination required of the venue / stretches of route
 - g. Safe areas for arrival & dispersal of vehicles
 - h. Large area for mass assembly. Safe area for starting and finishing points, off-road/off access way designated rest areas and pit-stop along the route.
 - i. Ease of mass evacuation & quick dispersal of crowd
 - j. Available covers/shelters for taking refuge from lightning & thunderstorm
 - k. Availability of ambulance access & casualty pick-up areas/points
 - l. Re-confirm the safety aspect of the place/route 2 hours before execution or just before the commencement of the activities

2. **Transportation**
 - a. Proper & correct vehicle to be used
 - b. Licensed driver & driving experience, driver must have sufficient rest
 - c. Familiarisation of route & danger areas
 - d. Proper & suitable location for loading & unloading
 - e. Park the vehicles safely. Ensure brakes and wheel-choke are applied, especially parking on slopes
 - f. Carrying of load & people within allowable limits in compliance to Traffic Police Act
 - g. Proper securing of load & bulky objects
 - h. Deployment of traffic cones & marshals
 - i. Use of Vehicular Rear Anti-Collision Device / Cushion while working along public road
 - j. Proper safety distance between vehicles traveling in convoy / group
 - k. Command, Control & Communication in dispatching, control & monitoring of vehicle convey

3. **Material Handling**
 - a. Handling of heavy load, allocation of manpower & equipment
 - b. Use of Material Handling Equipment (MHE) i.e. crane, scissor lift, etc... & licensed operator
 - c. Limitations on height & load bearing
 - d. Cordon & warning of MHE working area
 - e. Each individual must know correct technique of lifting heavy equipment or carrying items in a safe manner

4. **Electrical Work**
 - a. Danger of overloading of electrical power source
 - b. Employment of licensed commercial electricity generator, its area of deployment, preventive cordoning & fire preventive measures
 - c. Additional fire extinguisher to be placed onsite for the generator and ensure the generator is earthed to the ground
 - d. Safe laying, tapping down & covering of wires to prevent trip hazards
 - e. All electrical items used must bear the Singapore safety mark

5. **Structural Work & Hot Work (hot works are not allowed in NUS for students and staff events & activities)**
 - a. All structural & hot works are to be carried out externally at a vendors workshop
 - b. For learning purpose pointer to look for structural and hot works, as follows:
 - i. Overall load bearing on the platform or structure
 - ii. Use suitable material for construction
 - iii. Securing of the platform & its stability
 - iv. Engage licensed contractor & Professional Engineer certification
 - v. Use of proper power tools with proper license, training, proficiency & safety measures in place
 - vi. Use of hot work e.g. soldering, welding, etc... with proper license, training, proficiency & safety measures in place
 - vii. Ensure work place is clean, safe, free of obstacles, dangerous materials, flammable materials & gases
 - viii. Obtain relevant authorities' official approval, if required

6. **Sales or Provision of Food & Drinks**
 - a. Subject to OSHE Directives on the sales of food & Drinks which essentially only allows pre-packed food
 - b. For learning purpose pointers for consideration are:
 - i. Comply with NEA guidelines for trade fair / fun fare permit application for sales of food
 - ii. Engage qualified & certified food caterer/vendor
 - iii. Obtain relevant authorities' official approval, if required
 - iv. Proper hygiene measures & practices in preparing food & drinks
 - v. Length of time between food preparation & consumption
 - vi. Proper & appropriate storage of food & drinks pending consumption
 - vii. Comply and take care of fire safety requirements when heating elements are used

7. **Traffic Control**
 - a. Closure of road/area
 - b. Employment & deployment of Safety Barricades
 - c. Sufficient Traffic Marshals to man the hazards & risky areas along the route
 - d. Traffic Marshals to wear bright colour / reflective clothing
 - e. Use of Safety Vests, traffic control batons & light sticks
 - f. Proper training and safety briefings for traffic marshals before deployment
 - g. Deploy Traffic Marshals at brightly lit, easily observed from oncoming traffic & safe location to manage the risky areas
 - h. Deployment of mobile patrol (using bicycle or motor-vehicle)

- i. Command, Control & Communication
- j. Obtain relevant authorities' official approval

8. Medical Coverage & Evacuation

- a. Command, Control & Communication
- b. Locations & contact numbers of Medical Facilities (hospital, polyclinic, private clinic) to be used in time of emergency
- c. Location of medical post
- d. Availability of medical doctor
- e. Sufficient number of current & qualified medics &/or lifeguards
- f. Identify & employ those organisers & participants who have knowledge on First-Aid, CPR & AED
- g. Availability of medical equipment & supplies (including AED & Resuscitator)
- h. Availability of safety vehicle &/or boat
- i. Licensed driver & driving experience
- j. Availability of Vehicle Commander/Assigned Personnel to accompany casualty/victim/patient to the medical facility e.g. hospital, clinic, etc
- k. Recce & familiarisation of casualty pick-up point
- l. Recce & familiarisation of evacuation route to medical facilities

9. Weather & Its Effects

- a. Lightning risk
- b. Thunderstorm risk
- c. Risk of strong wind & gust of wind
- d. Risk of flash flood, risk near river, streams...
- e. Risk of potential dead fall in vegetated/forested area
- f. Wet weather effect on road conditions for walking, jogging, climbing, competitive running, cycling & vehicular movement
- g. Wild fire & fire prevention during dry spell/session
- h. Command, Control, Monitoring & Communication

10. Hydration Plan

- a. Participants' hydration before events & activities
- b. Number & location of water points
- c. Supply & re-supply of water or other drinkable fluid for mass

11. Special Safety Arrangement / Instructions

- a. Accounting of personnel before, during & after conduct of activities
- b. Health check & declaration of participants before & after activities
- c. Assign buddy system for participants before the start of the event
- d. Risk of snake bite, hornet, wasps & wild animal attack
- e. Risk of sudden drop in water depth (seaside & riverside)
- f. Potential dangerous & high risk areas to be avoided venturing into, especially high areas and slippery terrain
- g. Risk of flash flood risk near river, stream
- h. Risk of potential dead fall in vegetated/forested area

12. Sufficient/Special Training Required

- a. Participants to receive sufficient or special training on risky activity, performance, sports e.g. mid-air flip & free fall in human pyramid

- b. Enforce minimum requirement of participants' proficiency in risky activities
- c. Availability of Qualified Trainer
- d. Compliance to the code of practice, established rules & regulations of Professional Bodies in Singapore
- e. Compliance to NUS Sports safety guidelines, e.g. cheerleading...

13. Attire & Footwear

- a. Proper & appropriate attire & footwear for the safe participation

14. Special Identification/Marking of Participants

- a. Identification of less proficient / weaker / higher risk participants in potentially risky event, e.g., swimming, cycling, etc
- b. Night marking for individuals

15. Participants' particulars

- a. Essential particulars, NOK's contact
- b. Blood Group, special medical condition & any allergy
- c. Photocopy of participants' passports or travel documents (for organized overseas trip) for safe keeping by organizer on site & in office

16. Conduct of Briefing on the Conduct of Activities & Safety Plan

- a. Briefing to cover Preparation, Execution & Recovery phases
- b. Detail briefing to Organisers, helpers & Workers
- c. Detail briefing to Participants