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Event & Entertainment
Management Association

HSE

QUICK REFERENCE GUIDE
For Events in India

Issued by the

Event and Entertainment
Management Association.

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Health, Safety & Environment
Quick Reference Guide

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President's Note

It gives me immense pride to introduce this ***Health & Safety Quick Reference Guide for Events in India*** - a landmark initiative by the Health, Safety & Environment (HSE) Committee of EEMA.

As India's events and experiences industry continues to expand its horizons, the responsibility we carry as creators of large-scale gatherings, immersive spectacles, and intimate celebrations only grows deeper. Our work touches the lives of millions on-ground and behind the scenes, and with that comes the urgent and ongoing duty to ensure that every individual involved in an event is safe, secure, and cared for.

This guide is more than just a manual. It is a **manifesto of intent**. It represents a shift in mindset, from reactive compliance to proactive responsibility. From ticking boxes to building a culture where safety is a core value. It is a call to action for every member of our industry to embed a **safety-first ethos** into every design, every rehearsal, every contract, every load-in and load-out.

I congratulate **Siddhartha Chaturvedi and the entire HSE Committee** for leading this important movement with clarity and commitment. Their tireless efforts, informed by expert consultation and real-world experience, have created a resource that is at once **technically robust and practically usable**.

My heartfelt gratitude to all the advisors, collaborators, and young minds who contributed to this initiative. I would especially like to acknowledge the brilliant team at **Momentum India** for helping transform these safety standards into an accessible, user-friendly tool for our entire community through the companion app.

At EEMA, we've always believed that excellence in execution must go hand-in-hand with integrity in intent. With this guide, we raise the bar, not only for ourselves but for every stakeholder who touches our world of events and entertainment.

Let this be the beginning of a **new chapter**, one where safety is not a protocol, but a promise we make to each other.

Warm regards
President - EEMA

Foreword

It is with great pride and a deep sense of responsibility that I present the **Health & Safety Quick Reference Guide for Events in India on behalf of the Event and Entertainment Management Association (EEMA).** This document is the culmination of months of rigorous research, cross-industry consultation, and collaboration among event professionals, safety experts, and policymakers who share a collective commitment to uplifting safety standards across India's vibrant event landscape.

India's event industry is among the world's most dynamic, characterized by its immense diversity-of formats, venues, climates, and crowds. As our sector has rapidly evolved, so too have the challenges of protecting the well-being of every participant: attendee, staff member, vendor, or volunteer. Recent years have underlined the urgent need for **unified, pragmatic, and nationally relevant safety protocols that are grounded equally in global best practice and the uniquely complex realities of the Indian environment.**

This guide serves as both a **practical toolkit and a strategic reference**, drawing upon statutory frameworks-including the Occupational Safety, Health & Working Conditions Code, Disaster Management Act, and FSSAI regulations-while reflecting proven international standards and EEMA's deep operational experience. It is designed not as a static manual, but as a living resource: one that event organizers of all scales and profiles can adapt to their own needs, whether planning open-air festivals, community melas, sporting extravaganzas, or exclusive indoor gatherings.

Beyond its technical detail and checklists, the heart of this guide is an ethos of safety-first thinking—wherein accountability, care for each other, and continuous learning are embedded in the culture of every event organization. By mainstreaming robust risk assessments, incident planning, and behavioral safety practices, we are proactively shaping a safer, more sustainable future for our industry.

I extend my sincere gratitude to every committee member, subject matter expert, and industry partner who contributed to this effort. **Special thanks to Mankaran Singh, Avishkar Tendle, Vincent Samuel, Sumant Jaykrishnan, Warren D'souza, Sidhesh Kandiyil, Gaurav Vasan**i for their key inputs and decision making all along.

My deep gratitude to our President- Samit Garg, General Secretary- Ankur Kalra and the entire NEC for giving a free hand to this committee to operate.

I cannot end without giving a big shout out to Rohan Oberoi, Vimal Vasudevan, R Prahaasa, Anushka Nain, Amith Kumar, Rene Desai, Ashwin Pal and all other young team members of Momentum India, our industry partner in this endeavor, to compile such a fantastic document and creating a dynamic and practical app for self-analysis and practical check list verification with a handy pictorial guide as well to keep our events relatively safe going forward.

Let us use this guide not just to meet minimum compliance, but to set new benchmarks for excellence in event health and safety throughout India.

Siddhartha Chaturvedi
Chair – HSE Committee, EEMA

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Event & Entertainment
Management Association

Health, Safety, Environment Committee

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Event Crafter

Taranbir Sahani

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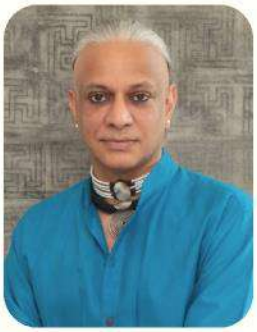

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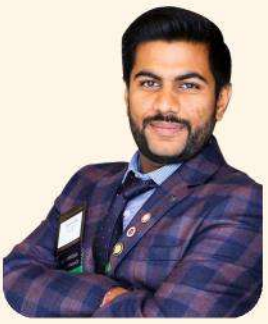

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Health & Safety Quick Reference Guide for Events in India

A. Introduction

This guide serves as a comprehensive resource for event organizers, professionals, and stakeholders involved in planning and executing events in India. It aims to consolidate essential health and safety guidelines, drawing from both Indian regulatory frameworks and global best practices, to foster a safer environment for all participants.

B. Purpose

The primary purpose of this guide is to provide a quick reference and actionable insights for managing health and safety risks associated with various types of events. It is designed to assist in proactive planning, effective response during emergencies, and continuous improvement in safety standards across the Indian event industry.

C. How to Use

This guide is structured into several sections, each addressing a critical aspect of event health and safety. Users are encouraged to:

- Familiarize themselves with the entire document.
- Refer to specific sections as needed for detailed guidance on particular topics.
- Utilize the checklists and templates provided to ensure compliance and preparedness.
- Adapt the guidelines to suit the specific nature, scale, and location of their events.

D. Disclaimer & Legal Note

This guide provides general information and recommendations on health and safety for events. It is not intended to be a substitute for professional legal advice or specific regulatory requirements. Users are responsible for ensuring compliance with all applicable local, state, and national laws and regulations in India, as well as any international standards relevant to their event operations. The information contained herein is subject to change and should be cross-referenced with the latest official publications.

E. Emergency Contacts & National Helplines

It is crucial for all event personnel to have immediate access to emergency contact information. A comprehensive list should be prominently displayed at the event site and distributed to all key staff.

Health, Safety & Environment
Quick Reference Guide

Emergency Contact	Emergency Contact Number
Emergency Response Support System (ERSS)	112
Police	100
Fire	101
Ambulance/Medical Emergency	102,108
National Disaster Management Authority (NDMA):	1078
Child Helpline	1098
Women Helpline	1091

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Event-Specific Contacts	Name	Contact Number
Event Director		
Site Manager		
Medical Team Lead		
Security Head		
Fire Safety Officer		
Venue Management		

SECTION A: FOUNDATION

1. What is HSE in Events?

Health, Safety, and Environment (HSE) in the context of events refers to the systematic management of all aspects that could impact the well-being of individuals and the environment during event planning, setup, execution, and dismantling. It encompasses a broad range of considerations, from preventing accidents and injuries to ensuring environmental protection and compliance with legal obligations.

1.1. Definition and Scope

HSE in events is about creating a safe and healthy environment for all participants, including attendees, staff, performers, vendors, and contractors. Its scope includes:

- **Health:** Protecting individuals from illness, disease, and physical harm, including provision for medical aid, sanitation, and food safety.
- **Safety:** Preventing accidents, injuries, and property damage through risk assessment, hazard control, and emergency preparedness.
- **Environment:** Minimizing the environmental impact of events, including waste management, energy consumption, and pollution control.

1.2. Why HSE Matters in Indian Event Industry

HSE is paramount in the Indian event industry due to several factors:

- **Legal Compliance:** Adherence to national and local laws and regulations is mandatory, and non-compliance can lead to severe penalties, legal action, and reputational damage.
- **Moral and Ethical Responsibility:** Event organizers have a moral obligation to ensure the safety and well-being of everyone involved in or attending their events.
- **Reputation and Brand Image:** A strong commitment to HSE enhances an event organizer's reputation, builds trust with stakeholders, and attracts more attendees and sponsors.
- **Financial Implications:** Accidents and incidents can result in significant financial losses due to medical costs, property damage, legal fees, insurance premiums, and event cancellation.
- **Crowd Management:** India's large population often leads to massive gatherings at events, making effective crowd management and safety

protocols critical to prevent stampedes and other crowd-related incidents.

- **Diverse Venues and Conditions:** Events in India take place in a wide array of venues, from open grounds to indoor stadiums, often under varying climatic conditions, requiring adaptable HSE strategies.

1.3. Legal Mandates (Brief Overview of Relevant Laws like Factories Act, Disaster Management Act, etc.)

Event organizers in India must navigate a complex web of legal mandates. Key legislation and regulations include:

- **The Factories Act, 1948:** While primarily for factories, its principles regarding worker safety, health, and welfare can be applied to event setup and dismantling activities where temporary structures and labor are involved.
- **The Disaster Management Act, 2005:** This act provides for the effective management of disasters and matters connected therewith or incidental thereto. It mandates the creation of disaster management plans, which are highly relevant for large-scale events and mass gatherings.
- **Local Municipal Laws and By-laws:** These vary by state and city and cover aspects such as building codes, fire safety regulations, licensing for public gatherings, and sanitation standards.
- **Fire Safety Acts and Rules (State-specific):** Each state has its own fire safety legislation, which dictates requirements for fire prevention, firefighting equipment, emergency exits, and fire safety certificates for venues.
- **The Indian Penal Code, 1860:** Sections related to negligence, causing hurt, or endangering life can be invoked in cases of serious accidents due to negligence.
- **Environmental Protection Act, 1986:** Relevant for managing waste, noise pollution, and other environmental impacts of events.
- **Motor Vehicles Act, 1988:** Applicable for traffic management, parking, and vehicle movement within and around event premises.

2. HSE Roles & Responsibilities at Events

Effective HSE management at events requires a clear delineation of roles and responsibilities among all stakeholders. Collaboration and communication are key to ensuring a safe environment.

2.1. Event Organizers

Event organizers bear the ultimate responsibility for overall HSE planning and implementation. Their responsibilities include:

- Developing a comprehensive Event Safety Plan.
- Conducting thorough risk assessments for all event activities.
- Ensuring compliance with all legal and regulatory requirements.
- Appointing competent personnel for HSE management.
- Providing adequate resources for safety measures.
- Establishing clear communication channels for emergencies.
- Overseeing vendor and contractor compliance.
- Conducting pre-event briefings and training.

2.2. Vendors & Contractors

Vendors and contractors are responsible for the HSE aspects of their specific services and operations. This includes:

- Adhering to the event organizer's safety plan and all relevant regulations.
- Conducting their own risk assessments for their scope of work.
- Providing safe equipment and materials.
- Ensuring their staff are adequately trained and competent.
- Implementing safe work procedures (e.g., for rigging, electrical work, catering).
- Reporting incidents and near misses to the event organizer.

2.3. Volunteers & Crew

Volunteers and event crew play a crucial role in the day-to-day operations and are responsible for:

- Understanding and following safety instructions and procedures.
- Wearing appropriate Personal Protective Equipment (PPE) as required.
- Reporting any hazards, incidents, or concerns to their supervisors.
- Assisting with crowd management and emergency evacuation procedures.
- Familiarizing themselves with emergency exits and first aid points.

2.4. Security & Emergency Responders

Security personnel and emergency responders (medical, fire, police) are critical for maintaining order, responding to incidents, and ensuring public safety. Their responsibilities include:

- Implementing security plans and crowd control measures.
- Responding promptly to emergencies (fire, medical, security threats).
- Coordinating with event management and other emergency services.
- Providing first aid and medical assistance.
- Facilitating safe evacuation if required.
- Managing access control and perimeter security.

2.5. Resource Recruitment

For any event, it is crucial to have competent professionals overseeing and managing its Health and Safety.

Please refer to the table in the Annexure, which outlines the full event lifecycle-highlighting how various specialists contribute across each phase (planning, setup, event, de-rig) from consultation to on-ground operations.

SECTION B: SAFETY GUIDELINES

3. Venue Safety

Venue safety is the cornerstone of any successful event. It involves meticulous planning, thorough inspections, and continuous monitoring to ensure the physical environment of the event is safe for all attendees, staff, and equipment. This section covers key aspects of venue safety, including site inspection, temporary structures, and access/egress management.

3.1. VOC – Venue Operations Centre

- Surveillance & Monitoring
    - Utilizes a network of CCTV cameras to provide real-time visuals of critical areas across the venue.
    - Help monitor crowd movement, entry/exit points, emergency zones, and VIP areas.
- Incident Response & Coordination
    - Ground teams can report issues directly to the Command Centre (e.g., crowding, technical faults, medical situations).
    - The command team coordinates with security, first aid, logistics, or tech teams to resolve issues swiftly.
- Communication Hub
    - Acts as the main point of contact between various departments—security, hospitality, tech, venue operations, etc.
    - Ensures clear communication and avoids miscoordination during the event.
- Decision-Making & Escalation
    - Senior officials or event managers present here make quick, informed decisions based on ground reports and CCTV feeds.
    - Escalate matters to local authorities if needed (e.g., police, fire, ambulance).
- Documentation & Post-Event Review
    - Logs incidents, actions taken, and overall event data for post-event analysis, improvement, or legal purposes.

Core Components of VOC

- **Workstations** with multiple monitor displays for CCTV and communication lines.
- **Radio/Walkie Systems** for direct communication with ground teams.
- **PA System** Access for emergency announcements.
- **Power Backup** systems (UPS/generator).
- **Schematic Maps** and layout plan of the venue.
- **Emergency Contact Directory** (internal and external).
- Whiteboards or **Digital Dashboards** for live tracking.

Recommended SOPs to be Present in a VOC

- Emergency evacuation procedures
- Fire safety & response.
- Medical emergency response
- Lost & found protocol.
- Crowd management & control.
- Technical failure escalation
- Suspicious object or threat protocol
- Communication hierarchy and escalation matrix
- Vendor or staff misconduct response
- Post-incident documentation procedure

Personnel in the VOC

- Event Operations Head / VOC Manager
- Security Chief / Head of Security
- CCTV Operator(s)
- Ticketing Manager
- Medical Officer
- Fire Safety Officer
- H&S Officer
- Communication Coordinator (Radio/ Walkie-talkie control)
- Police / Local authority

Location of the VOC at a Venue

- Should be at a strategic yet secure location with clear access routes for key officials and emergency response teams.
- Must have an unobstructed view or camera feed of main crowd zones and critical infrastructure.
- Ideally, it should be placed away from high-traffic public areas, but not too far from the main event operations.
- Accessibility for emergency vehicles, if required, should be considered.

3.2. Site Inspection Checklist

A comprehensive site inspection is critical before, during, and after an event. It helps identify potential hazards, assess risks, and ensure compliance with safety standards. The checklist should cover:

General Site Conditions:

- Overall cleanliness and waste management plan.
- Adequacy of lighting, especially in pathways, emergency exits, and restrooms.
- Presence of any trip hazards (uneven surfaces, loose cables, debris).
- Accessibility for people with disabilities (ramps, accessible restrooms, clear pathways).
- Weather preparedness measures (shelter, drainage, wind mitigation).

Structural Integrity:

- Stability and condition of permanent structures (buildings, walls, fences).
- Inspection of temporary structures (stages, tents, scaffolding) for proper installation and certification.
- Load-bearing capacity of floors and elevated platforms.

Utilities and Services:

- Electrical systems: proper wiring, grounding, overload protection, and emergency power.
- Water supply and drainage systems: potable water, adequate pressure, and effective wastewater disposal.
- Sanitation facilities: sufficient number of clean toilets, handwashing stations.
- Communication systems: reliable network coverage, public address systems, emergency communication.

Emergency Preparedness:

- Clear and unobstructed emergency exits clearly marked and illuminated.
- Adequate firefighting equipment (extinguishers, hose) and trained personnel.
- Designated assembly points, clearly signed and accessible.
- First aid stations and medical personnel are readily available.
- Emergency vehicle access routes to be always kept clear.

Security Measures:

- Perimeter security and access control points.
- surveillance and monitoring.

- Bag check and screening procedures.
- Presence of trained security personnel.

3.3. Access/Egress & Crowd Flow

Effective management of access, egress, and crowd flow is vital for preventing overcrowding, stampedes, and ensuring smooth movement of people, especially during emergencies. This requires careful planning of entry and exit points, pathways, and internal circulation.

Entry and Exit Points:

- Clearly mark all entry and exit points, including emergency exits.
- Ensure sufficient number and width of exits to accommodate peak crowd flow and emergency evacuation requirements.
- Keep all exits unobstructed and easily accessible at all times.
- Implement controlled entry systems (e.g., turnstiles, managed queues) to prevent surges.

Pathways and Circulation:

- Design clear, wide, and unobstructed pathways throughout the venue.
- Avoid bottlenecks and pinch points that can restrict crowd movement.
- Use signage, barriers, and stewarding to guide crowd flow and prevent congestion.
- Ensure flooring surfaces are non-slip and free from trip hazards.

Emergency Evacuation Routes:

- Establish primary and secondary evacuation routes.
- Ensure routes are well lit, clearly marked, and regularly inspected.
- Conduct drills to test the effectiveness of evacuation plans and familiarize staff with procedures.
- Communicate evacuation procedures to attendees through announcements and signage.

Queue Management:

- Implement effective queue management strategies at entry points, food stalls, and restrooms.
- Use barriers and clear lines to organize queues and prevent crushing.
- Deploy sufficient staff to manage queues and provide information.

Capacity Management:

- Strictly adhere to the venue's approved capacity limits.
- Implement systems to monitor crowd density in real-time.

- Be prepared to stop entry or divert crowds if capacity is approached or exceeded in certain areas.

3.4. PPE for Technical Crews

Personal Protective Equipment (PPE) is vital for technical crews involved in rigging and installations to protect them from specific hazards. The selection and use of PPE must be based on a thorough risk assessment.

Head Protection:

- **Hard Hats/Helmets:** Mandatory for protection against falling objects and impacts, especially during overhead work.

Eye Protection:

- **Safety Glasses/Goggles:** Protect against flying debris, dust, and chemical splashes during cutting, drilling, or other installation tasks.

Hand Protection:

- **Gloves:** Heavy-duty gloves for rigging to protect against cuts, abrasions, and pinch injuries from ropes, cables, and metal components.

Foot Protection:

- **Safety Footwear (Steel-toed boots):** Protect against falling objects, crushing injuries, and punctures from sharp objects on the ground.

Fall Protection (for Work at Height):

- **Full Body Harnesses:** Essential for riggers working at height, connected to a suitable anchor point via a lanyard or fall arrest system.
- **Lanyards/Retractable**: Designed to limit the distance of a fall and absorb impact forces.
- **Anchor Points:** Must be certified and capable of withstanding the forces generated during a fall.

Hearing Protection:

- **Earplugs/Earmuffs:** Necessary in noisy environments, such as near generators, loud music systems, or during construction activities involving power tools.

High-Visibility Clothing:

- **Vests/Jackets:** Improves visibility, especially in low-light conditions or areas with vehicle movement.

Other Specialized PPE:

- **Flame-Retardant Clothing:** For tasks involving hot work or potential fire hazards.
- **Respiratory Protection:** If working in dusty environments or where fumes are present.

3.5. General PPE Guidelines:

- All PPE must be properly fitted, maintained, and inspected for functionality regularly.
- Training on the correct use, care, and limitations of PPE is mandatory.
- PPE is the last line of defense and should not replace engineering controls or safe work procedures.

4. Fire & Electrical Safety

Fire and electrical safety are paramount at any event, given the concentration of people, temporary structures, and extensive use of electrical equipment. A single oversight can lead to catastrophic consequences.

This section outlines critical measures for fire prevention, suppression, and safe electrical practices.

4.1. Fire Equipment Placement

Strategic placement and regular maintenance of firefighting equipment are essential for rapid response to fire incidents. The type and quantity of equipment should be determined by a fire safety expert based on the event's size, nature, and venue characteristics.

Accessibility:

- Fire extinguishers, hose reels, and fire blankets must be easily accessible and clearly visible.
- They should not be obstructed by equipment, decorations, or crowd movement.
- Placement should be along escape routes and near high-risk areas (e.g., catering, generator points, hot work zones).

Type and Quantity:

- Provide appropriate types of extinguishers for potential fire classes (e.g., A for ordinary combustibles, B for flammable liquids, C for electrical fires).
- Ensure sufficient quantity to cover the entire event area, adhering to local fire codes and standards.

- Consider the travel distance to the nearest extinguisher; typically, this should not exceed 15-20 meters.

Signage and Training:

- Clearly mark the location of all firefighting equipment with standardized signage.
- Ensure event staff are trained in the proper use of fire extinguishers and basic fire safety procedures.
- Conduct regular checks to ensure equipment is in good working order, fully charged, and has not been tampered with.

4.2. Hot Work

(IS 3016, NBC 2016 Part 4, ISO 45001)

Hot work activities like welding, cutting, or grinding are common during setup and maintenance phases. Their safe execution requires a structured permit process, supervision, and fire safety measures tailored to the site's conditions and activity type.

Permit and Personnel:

- Never start hot work without an approved Hot Work Permit.
- Only trained and authorized workers must perform the task, with a fire watch assigned during and 30 minutes after.

Preparation and Protection:

- Use only inspected, well-maintained tools.
- Clear or shield all flammable materials, secure gas cylinders upright, and ensure fire extinguishers and fire blankets are ready and accessible.

Safety Measures:

- Wear flame-resistant gear, gloves, face shields, and safety shoes.
- Ensure proper ventilation to avoid gas or fume build-up and conduct a thorough inspection for smoldering before closing the permit.

4.3. Fuel Storage & Refilling

(Petroleum Rules 2002, NBC 2016 Part 4)

Fuel storage and refilling zones, if not carefully planned, can easily become high-risk areas. This checklist ensures that these operations are organized, clearly marked, and safely managed from start to finish.

Designated and Secure Fuel Storage:

- Store fuel only in clearly marked, approved, and well-ventilated areas, away from ignition sources.
- Keep these areas locked with access restricted to authorized personnel, and ensure clear hazard signage is installed (e.g., “Flammable,” “No Smoking”).

Approved Containers and Equipment Checks:

- Use certified, spill-proof fuel containers with proper labeling. Inspect tanks, hoses, and containers daily for leaks or damage. Keep spill control kits at all storage and refueling points

Fire and Static Safety:

- Keep suitable fire extinguishers (ABC/foam) accessible near fuel zones.
- Ensure grounding of tanks and equipment to control static electricity.
- Strictly prohibit smoking, open flames, or spark-producing tools near fuel areas.

Refueling Protocol:

- Refuel during daylight hours where possible or use explosion-proof lighting. Engines and equipment must be shut off during refueling, which must be conducted only by trained personnel under supervision.

Personal Protection and Waste Handling:

- Refueling staff must wear anti-static clothing, gloves, and eye protection.
- Dispose off used absorbents, rags, or containers safely, following hazardous waste protocols

4.4. Temporary Kitchen Set up

(IS 8758, 2190, 6044; NBC 2016 Part 4)

Efficient setup and operation of temporary kitchens are vital to ensure food safety and seamless service during events. Layout, ventilation, equipment placement, and hygiene controls must be thoughtfully planned based on scale, menu, and duration of use.

Location & Structural Safety:

- Install kitchens in a fire-safe, well-ventilated structure, using only non-combustible or fire-retardant walls. Ensure clear, unobstructed exits with visible signage. Exhaust hoods with

grease filters must be installed to prevent smoke and fume buildup.

Gas Bank Safety:

- Use only ISI-marked LPG/PNG cylinders, regulators, and rubber hoses. Cylinders must be secured upright and fitted with leak detectors.
- Gas banks must be installed at least 3 meters away from vehicle access gates or driveways and maintain a minimum 1-meter clearance from open drains, pits, or sewer lines to avoid gas accumulation.
- Enclosures, if there are any, must be ventilated at the bottom to safely disperse leaked gas.

Fire Safety & Equipment:

- Equip the area with Class K and ABC fire extinguishers, fire blankets, and conduct monthly inspections of firefighting systems.

4.5. Combustible Waste Generation & Storage

(NBC, CPCB SWM Rules 2016, HWM Rules 2016, BMWM Rules 2016, E-Waste Rules 2022)

Managing combustible waste during events requires a proactive approach to prevent accumulation, reduce fire load, and ensure safe temporary storage. Designated zones, timely clearance, and separation from ignition sources are key to maintaining a secure event premises.

Storage and Fire Safety Measures:

- Store combustible waste like paper, packaging, cloth, and wood in clearly marked, fenced zones with at least 10 meters clearance from ignition sources.
- Use metallic or heavy-duty lidded bins, plastic bins only if fire-retardant. Protect waste from wind and rain using temporary roofed shelters.
- Place ABC-type fire extinguishers near waste storage zones and post “Combustible Waste – No Smoking” signage.

Waste Segregation and Specialized Storage:

- Segregate waste at source into appropriate bins. Use color-coded bins for e-waste (wires, electronics) and biomedical waste (PPE, first-aid waste).
- If storing flammable material, use secondary containment and label it clearly.

Disposal, Compliance, and Team Safety:

- Remove combustible waste daily or as per site threshold. On-site burning is strictly prohibited.
- Maintain daily waste logs, handover slips, and manifests for hazardous or e-waste. Ensure disposal is handled by CPCB/SPCB-authorized agencies.
- Waste handling teams must wear gloves, boots, reflective jackets, and masks.

4.6. Fire Risk Assessments

(NBC 2016 Part 4, IS 2190, 2189, 3844, 15105)

Fire risk assessments help anticipate and manage potential ignition sources, fuel loads, and escape route challenges. In dynamic event environments, they guide practical decisions on layout, material use, and emergency planning.

Identify Hazards and At-Risk Groups:

- List all fire hazards, including ignition sources (e.g., welding, electrical panels, smoking), fuel sources (paper, fuel, waste), and the presence of oxygen.
- Identify people at risk—workers, contractors, and visitors—especially those near kitchens, fuel storage zones, confined spaces, or crowded areas.

Risk Evaluation and Control Measures:

- Eliminate or isolate ignition sources where possible, improve storage of combustibles, enforce no-smoking areas, and use fire-rated enclosures where required.

Fire Detection, Alarm Systems, and Escape Planning:

- Install fire detectors, alarms, and assign fire watch duties based on the level of risk.
- Ensure escape routes are clearly marked, well-lit, unobstructed, and that exit doors open outward.

4.7. Fire tender Placement

(NBC 2016 Part 4, IS 2190, 1641)

Fire tender placement must consider unobstructed access, proximity to high-risk zones, and quick maneuverability across the site. It's more about integrating its response capability into the event's overall fire strategy.

Positioning and Accessibility:

- Place the fire tender near high-risk zones like fuel storage, generator yards, or kitchens, maintaining a safe standoff distance.
- Ensure 24/7 unobstructed access routes of at least 6 meters width for approach and exit. Locate the tender near static water tanks, hydrants, or other reliable water sources.
- Mark the fire tender location clearly on the site maps and with on-ground safety signage.

Readiness and Crew Requirements:

- Fire tender must be manned, fueled, and response-ready throughout working hours, especially during hot work or peak crowd periods.
- Only trained fire crew with valid heavy vehicle and firefighting licenses are allowed to operate the tender.

Communication:

- Maintain radio or mobile connectivity between the fire tender, emergency control room, and site ERT.
- Include tender deployment routes and procedures in the site's Fire and Emergency Response Plan

4.8. Pyrotechnics

(NFPA 1123, NFPA 1126, NBC 2016, and Explosives Rules 2008 – India)

Pyrotechnics involve intentional ignition sources within live event environments and are classified as high-risk activities. Their use must be strictly controlled, allowed only after detailed risk assessment, with certified operators, dedicated fire control measures, and clearly marked exclusion zones to ensure the safety of workers and attendees.

Approvals & Licensing:

- Use only certified pyrotechnicians with valid licenses. Obtain all necessary written permissions from local police, fire brigade, district magistrate, and venue authorities.
- Keep documentation of permits, inventories, and incident logs ready and accessible.

Site Risk & Safety Planning:

- Conduct a detailed site-specific risk assessment, factoring in wind, proximity to crowds, flammable structures, and combustibles (like drapes, props, fuel, and electrical setups).
- Maintain a minimum 10m clearance from audience and crew, and integrate pyro scenarios into the event ERP with ERT standby.

Storage, Conditions & PPE:

- Store and transport pyros in dry, approved containers away from heat, sparks, or flames. Avoid use during high wind or rain. Operators must wear fire-resistant clothing, gloves, face shields, and anti-static boots.

Fire Safety Measures:

- Before the show, conduct a dry run in presence of EHS, fire brigade, and security teams. Place ABC/CO_2 extinguishers, fire blankets, and sand buckets within 10m of the setup. Enforce strict no-smoking rules in and around the pyro zone.

Public Safety & Post-Show Checks:

- Clearly announce pyrotechnic sequences and install visible warning signage near public viewing areas. After the show, perform a full sweep for unexploded material, smoldering debris, or residue before closing the area.

4.9. Cable Management

(IS 732 ,3043, 1646; NBC 2016 Part 8)

Poor cable management is a common hazard at events, leading to trip risks, electrical faults, and potential fires. Effective cable management ensures safety, maintains aesthetic appeal, and facilitates smooth operations.

Hazard Identification:

- Identify all areas where cables will be laid, considering pedestrian traffic, vehicle movement, and potential for damage.
- Assess power requirements for all equipment to prevent overloading circuits.

Routing and Protection:

- Route cables away from high-traffic areas whenever possible.
- Use cable ramps, covers, or matting to protect cables and prevent trip hazards in pedestrian zones.

- Elevate cables overhead using appropriate rigging where ground routing is impractical or unsafe.
- Ensure cables are not run through doorways, windows, or across emergency exits.

Securing and Labeling:

- Secure cables to prevent movement and entanglement using cable ties, gaffer tape, or cable clips.
- Avoid coiling excess cable tightly, as this can lead to overheating.
- Clearly label all cables, especially at connection points and distribution boards, to facilitate troubleshooting and emergency isolation.

Inspection and Maintenance:

- Regularly inspect cables for damage, fraying, or exposed wires.
- Ensure all connections are secure and weatherproof, especially for outdoor events.
- Implement a system for reporting and repairing damaged cables immediately.

4.10. Generator & Power Backup Protocols

Generators and power backup systems are critical for events, especially those held in remote locations or requiring significant power. Their safe operation and maintenance are vital to prevent electrical hazards, power outages, and fire risks.

Sizing and Placement:

- Properly size generators to meet the event's total power demand, including peak loads and contingency.
- Place generators in well-ventilated areas, away from combustible materials, public access, and noise-sensitive zones.
- Ensure adequate clearance around generators for cooling and maintenance.
- Protect generators from adverse weather conditions.

Fuel Management:

- Store fuel in approved, clearly labeled containers in a secure, well-ventilated area away from ignition sources.
- Implement strict refueling procedures, ensuring generators are turned off and cooled before refueling.
- Have spill kits readily available and train staff on their use.

Electrical Connections:

- All electrical connections from generators to distribution boards must be made by qualified electricians.

- Ensure proper grounding and earthing of all generator systems.
- Use appropriate circuit breakers and RCDs (Residual Current Devices) for overload and shock protection.
- Regularly inspect all cables and connections for wear and tear.

Monitoring and Maintenance:

- Continuously monitor generator performance, fuel levels, and temperature.
- Implement a schedule for routine maintenance and pre-event checks.
- Have a backup generator or alternative power source plan in case of primary generator failure.
- Ensure emergency shutdown procedures are clearly understood by all relevant personnel.

5. Rigging & Technical Installations

Rigging and technical installations are critical components of most events, involving the suspension of lighting, sound, video, and scenic elements. These operations carry significant risks, and proper planning, execution, and adherence to safety standards are paramount to prevent equipment failure, falls, and structural collapse.

5.1. Temporary Structures (Stages, Trusses, Tents)

Temporary structures are integral to most events but pose significant risks if not properly designed, installed, and maintained. These include stages, lighting trusses, sound towers, tents, marquees, and temporary seating. Adherence to engineering standards and local regulations is paramount.

Design and Certification:

- All temporary structures must be designed by competent personnel.
- Designs must account for anticipated loads (e.g., equipment, performers, wind, rain).
- Certification of design and installation by a qualified professional is mandatory.

Installation and Dismantling:

- Installation and dismantling must be carried out by trained and experienced personnel.
- Follow manufacturer's instructions and approved engineering plans.
- Ensure proper anchoring and ballasting, especially for outdoor structures susceptible to wind.

- Implement exclusion zones around structures during construction and deconstruction.
- Conduct pre-use inspections to confirm stability and safety before public access.

Materials and Equipment:

- Use materials that meet relevant safety standards (e.g., fire-retardant fabrics for tents, displaying relevant load charts/ industry specific certifications).
- Regularly inspect rigging equipment (hoists, shackles, slings) for wear and tears.
- Ensure all electrical components used with structures are weather-protected and properly insulated.
- All temporary metal structures (such as stages, trusses, towers, and scaffolding) must be equipped with properly installed lightning arrestors and connected to an effective earthing system to prevent electrical hazards during thunderstorms.

Ongoing Monitoring:

- Regularly inspect structures for signs of stress, damage, or movement.
- Monitor weather conditions using data from the Meteorological Department and have contingency plans for high winds, heavy rain, or lightning.
- Implement procedures for safe evacuation or dismantling if weather conditions become hazardous.

5.2. Lifting Plans

A detailed lifting plan is essential for any rigging operation, regardless of its scale. This plan should be developed by a competent person and reviewed by all parties involved.

Scope and Objectives:

- Clearly define what is being lifted, its weight, dimensions, and center of gravity.
- Specify the lifting points on the load and the structure.
- Outline the sequence of lifting operations.

Equipment Selection:

- Specify all rigging equipment (hoists, shackles, slings, trussing) with their certified Safe Working Load (SWL).
- Ensure all equipment is inspected and certified for use – periodic / annual inspections.
- Consider the type of hoist (manual, electric) and its suitability for the task.

Structural Sign-Off:

- Obtain a structural analysis of the venue or temporary structure where loads will be suspended.
- Use of load cells to monitor real-time loads is highly recommended for enhanced safety and load management.
- Ensure the structure can safely support the proposed loads, including dynamic loads.
- Identify approved rigging points and their certified capacities.

Personnel and Communication:

- Identify all personnel involved, their roles, and responsibilities (e.g., lead rigger, hoist operator, ground crew).
- Ensure all personnel are trained, competent for their roles.
- Establish clear communication protocols (e.g., hand signals, radio communication) during lifting operations.

Safety Procedures:

- Define exclusion zones below and around the lifting area.
- Outline procedures for emergency lowering or securing of loads.
- Specify pre-lift checks and post-lift inspections.
- Address potential hazards such as swinging loads, pinch points, and entanglement.

5.3. Load Calculations

(IS 875, Part 2)

Accurate load calculations are fundamental to safe rigging. Overloading can lead to catastrophic failure of rigging equipment or the supporting structure. Calculations must account for all forces acting on the system.

Static Loads:

- The dead weight of all suspended equipment (lighting fixtures, speakers, video screens, scenic elements, trussing).
- This is the most straightforward calculation and forms the baseline.

Dynamic Loads:

- Forces generated by movement, acceleration, or deceleration of loads (e.g., moving lights, automated scenery).
- Shock loads from sudden stops or impacts.
- These can significantly exceed static loads and must be factored in with appropriate safety margins.

Environmental Loads:

- **Wind Loads:** Crucial for outdoor events, especially for large surfaces like video screens or banners. Wind pressure can exert immense force. (e.g. – use of scrim fabric)
- **Rain:** Temporary event structures (e.g., stages, trusses, tents, canopies) must be designed to withstand rain loads in accordance with expected local rainfall intensity. Fabric tensioning is critical — all tent/fabric surfaces must be tightly tensioned to prevent water pooling.

Shock Effect (While using Kinesys/motorized rigging):

- Avoid sudden start/stop
- Preload management: Ensure motors are evenly preloaded before lift initiation to avoid unbalanced tension or sudden jerks.
- Emergency Stop (E-Stop) Handling: Avoid using E-Stop for routine stopping as it can induce shock loads due to abrupt halting.
- Avoid Mid-Air Holding Under Load

Safety Factors:

- Apply appropriate safety factors to all calculations to provide a margin of error and account for unforeseen circumstances or material imperfections.
- Industry standards often dictate minimum safety factors (e.g., 5:1 or 7:1 for certain rigging components).

Weight Distribution:

- Ensure loads are evenly distributed across rigging points and supporting structures to prevent localized overloading.
- Strictly adhere to the rigging plan and engineer's recommendations to ensure structural safety.

6. Civil Activities

6.1. Excavation and Trenching

(NBC 2016, IS 3764, OSHA 1926 Subpart P)

Excavation and trenching work involve managing soil behavior, preventing collapses, and keeping crews safe in constantly changing conditions. Planning and daily checks are non-negotiable before anyone steps into a trench.

Permit & Pre-Checks:

- Begin work only with an approved Permit to Work (PTW) and verified underground utility clearance (electrical, gas, telecom).

Conduct hazardous atmosphere testing for deep or confined trenches before entry.

Barricading, Access & Edge Safety:

- All excavations must be physically barricaded with warning signs and reflective tapes. Provide ladders or safe access within 7.5 meters for trenches deeper than 1.2 meters. Keep spoil, materials, and vehicles at least 0.6–1 meter away from edges to prevent cave-ins.

Structural Protection:

- Trenches over 1.5 meters must be supported with shoring, sloping, benching, or trench boxes based on soil conditions.

Drainage & Water Control:

- Prevent water accumulation using pumps, channels, and drainage systems. Do not permit entry into waterlogged areas.

Inspections:

- A competent person must inspect all excavations daily and after any weather changes, vibrations, or nearby load shifts.

6.2. Scaffolding & Staging

(IS 3696 (Part 1), NBC 2016 Part 7, OSHA 1926 Subpart L)

Scaffolding and staging are essential for elevated tasks and must be properly designed, assembled and maintained. Their safety depends on structural stability, safe access and routine inspections.

Certified Materials & Structural Safety:

- Use only ISI-marked or structurally tested pipes, couplers, and planks—free from damage, rust, or deformation. Scaffolds must be designed, erected, and dismantled by trained workers under a competent person's supervision.
- Install on compacted, level ground using steel base plates and sole boards to prevent shifting or sinking.

Platform Design & Load Management:

- Ensure platforms are minimum two boards wide, securely tied, and rated for the specific load type (light/medium/heavy). Never overload scaffolds or use makeshift extensions like bricks or pallets.
- Use of outriggers for scaffold towers

Fall Protection & Access:

- All platforms above 2 meters must have guardrails (0.9–1.15 m), toe boards (≥150 mm), and safe access ladders or stairways. Climbing on scaffold frames is strictly prohibited. Workers must wear full-body harnesses with lanyards with shock absorbers when working at height, especially during erection or dismantling.

Anchoring & Stability:

- Securely tie scaffolds to nearby structures at regular horizontal and vertical intervals to prevent collapse or swaying.
- Integrating ballast within the structure to prevent uplift/torsion & any kind of lateral displacement

Inspection & Monitoring:

- Perform daily inspections before use and recheck scaffolds after storms, structural changes, or long periods of inactivity.

6.3. Manual Material Handling

(IS 7969, Model Factory Rules, NBC 2016 Part 7, OSHA 1910.176–178)

Material handling by hand is common on work sites, but it's also one of the leading causes of strain injuries. Using the right posture, limiting load weight, and introducing lifting aids where possible helps reduce the risk.

Weight Limits & Team Lifting:

- Follow safe lifting limits -max 55 kg for adult males, 30 kg for females (less for repetitive or awkward lifts). Use two-person or group lifting for heavy/oversized loads, with a lead person coordinating.

Safe Lifting Technique & Ergonomics:

- Keep your back straight, bend at the knees, hold the load close, and lift using your legs. Avoid twisting and lifting above shoulder height. Store heavy materials between knee and chest level; use ladders or platforms if needed.

Use of Equipment & PPE:

- For loads over 25 kg or long distances, use aids like trolleys, wheelbarrows, or hand trucks. Wear gloves, helmets, safety shoes, and back support belts if trained.

Path Safety & Work Practices:

- Keep movement paths clean, dry, and free of tripping hazards. For repetitive lifting tasks, rotate workers and allow rest breaks to prevent fatigue and injuries.

6.4. Temporary Flooring & Turf Laying

(NBC 2016, Turf Safety Guidelines, and Event Industry Best Practices)

Ensuring safe, stable, and hazard-free temporary flooring/turf installations is critical in high-footfall or vehicle-access areas at events.

Site & Surface Preparation:

- Assess ground conditions—soil stability, slope, drainage, and moisture—before installation to prevent instability.

Material & Load Suitability:

- Use anti-slip, fire-retardant flooring/turf with interlocking edges and rated load-bearing capacity appropriate for pedestrian or vehicular movement.

Installation & Anchoring:

- Secure all turf/flooring using stakes, pins, or ballast to avoid movement in high-traffic zones. Ensure tightly locked panels with no gaps, curls, or overlaps.

Trip Hazard Prevention:

- Provide edge ramps or marked transitions where level changes occur, especially at turf ends, joints, or intersections.

Drainage Planning:

- Ensure adequate sub-surface drainage to prevent pooling, slippage, or material degradation.

6.5. Ladder/MEWP Use

(IS 3696 Part 2, NBC 2016, OSHA 1926 Subpart X)

Working at height (WAH) is a high-risk activity. This checklist ensures control measures are in place to prevent falls and equipment-related incidents during event setup or dismantling.

Permits, Training & Authorization:

- Obtain a valid Work-at-Height (WAH) permit.

- Only trained and certified personnel should operate MEWPs or work on ladders.

Equipment Condition & Setup:

- Conduct pre-use checks for cracks, oil, loose rungs, tire/brake condition, and stability.
- Ensure MEWPs/ladders are on level ground with outriggers, chocks, or pads as needed.

Fall Protection & Usage Protocols:

- Use full-body harnesses with lanyards on MEWPs. Maintain 3-point contact on ladders.
- Do not lean outside ladder rails or MEWP platforms.

Safe Operating Conditions:

- Avoid use during rain, wind, or near live overhead lines unless isolated. Always barricade the work zone and place safety signage.

6.6. Water Supply/Drainage Setup

(NBC 2016 Part 9, IS 1172, 2065, CPCB Guidelines)

Ensuring safe, hygienic, and efficient water distribution and drainage is critical to avoid contamination, waterlogging, and health risks in event or construction setups.

Water Line Segregation & Protection:

- Clearly separate potable (drinking) and non potable (toilet/cleaning) lines. Prevent backflow contamination by installing NRVs or air gaps. Avoid mixing sewage and fresh lines.

Storage & Infrastructure Hygiene:

- Use covered PVC/HDPE/steel tanks with overflow and drainage systems. Disinfect storage before use.
- Install shut-off valves and post clear signage for quick emergency response

Drainage Safety & Greywater Handling:

- Design runoff to avoid electrical/work zones.
- Channel greywater to soak pits or STPs as per CPCB rules. Cover or barricade open drains, inspect leaks daily, and fix pooling promptly.

6.7. HVAC Installation

(NBC 2016 Part 8, IS 659, IS 1391)

Installing HVAC systems safely requires strict adherence to certified equipment standards, electrical safety, handling of refrigerants, and working-at-height precautions to prevent accidents and ensure system efficiency.

Certified Equipment & Skilled Installation:

- Use only ISI-certified HVAC units. All electrical and refrigeration work must be handled by licensed technicians trained in HVAC safety.

Lifting, Height & Fall Safety:

- Move heavy units using cranes, MEWPs, or trolleys with tag lines and signalers. For rooftop or elevated installs, ensure full-body harnesses, guardrails, and fall arrest systems are used.

Electrical Safety & Isolation:

- Implement Lockout–Tagout (LOTO) procedures during electrical connections. Proper earthing of all casings is mandatory to prevent shocks or fires.

Refrigerant & Duct Safety:

- Handle refrigerants with PPE and leak-proof tools in ventilated areas. Use fire-retardant duct insulation and ensure secure support to avoid sagging or leaks.

Drainage & Final Testing:

- Route condensate lines to safe discharge points. Conduct leak tests, airflow calibration, and pressure checks before handover, and document all results.

7. Crowd Management

Effective crowd management is crucial for the safety and success of any event, particularly in India where large gatherings are common. It involves planning, organizing, and controlling the movement and behavior of people to prevent overcrowding, stampedes, and other crowd-related incidents. A robust crowd management plan ensures a positive experience for attendees while minimizing risks.

7.1. Traffic Diversion Setup

(IRC:SP:55, MoRTH Safety Manual, NBC 2016, and OSHA Construction Standards)

Effective traffic diversion during construction or event activity is essential to ensure road user safety, emergency access, and smooth vehicle and pedestrian movement around the work zone.

Traffic Management Planning & Permits:

- Prepare a detailed, site-specific Traffic Management Plan (TMP) including diversion routes, barricading, pedestrian paths, and emergency access. Secure NOCs from local authorities and notify the public in advance.

Signage, Markings & Night Visibility:

- Install advance warning signs 50–100 m before diversion points. Use reflective signs, arrow boards, road paint, cat-eyes, and blinker/solar lights to ensure round-the-clock visibility.

Barricading & Speed Control:

- Guide vehicles using cones, fences, rumble strips, and speed signage. Barricades must be stable, visible, and clearly separate work zones from traffic.

Manpower & Communication:

- Deploy trained traffic marshals or flagmen in high-traffic or critical points, equipped with high-visibility vests. Display emergency contacts and supervisor numbers prominently.

Pedestrian & Emergency Provisions:

- Provide safe, lit walkways for pedestrians and maintain a continuously open, clearly marked emergency vehicle route.

Closure & Restoration:

- Once work is complete, remove all temporary signage and barriers, and restore the road for normal use promptly.

7.2. Entry/Exit Gate Planning

Careful planning of entry and exit gates is fundamental to controlling crowd flow and preventing bottlenecks. The design and operation of these points directly impact safety and efficiency.

Capacity and Throughput:

- Determine the maximum safe capacity of each entry and exit point based on the expected crowd size and flow rate.
- Ensure that the number and width of gates are sufficient to handle peak arrival and departure times without causing congestion.

Clear Signage and Lighting:

- Clearly mark all entry, exit, and emergency exit points with highly visible and well-lit signage, using universal symbols and local languages.
- Ensure pathways leading to and from gates are well-illuminated, especially at night.

Controlled Access:

- Implement controlled access systems (e.g., turnstiles, managed lanes, security checks) to regulate the flow of people and prevent unauthorized entry.
- Consider staggered entry times for large events to distribute arrival peaks.

Emergency Egress:

- All exit gates, especially emergency exits, must remain unobstructed and fully operational at all times (if has to be used)
- Design emergency exits to open outwards in the direction of escape and be easily identifiable.
- Ensure that emergency exits are not locked or chained but can be secured against unauthorized entry while allowing immediate egress.

Staffing:

- Deploy sufficient trained personnel at all gates to manage queues, provide information, conduct security checks, and respond to incidents.
- Staff should be identifiable (e.g., uniforms, high-visibility vests) and equipped with communication devices.

7.3. Temporary Surveillance Systems Installation

(NBC 2016 (Part 8), IS 13252, IEC 62676, NDMA Security Guidelines)

Temporary worksites or event venues require strategic CCTV deployment to monitor critical zones, ensure safety, prevent theft, and support incident investigations.

Planning & Coverage:

- Conduct a site survey to map high-risk zones such as entry/exit points, fuel storage, cash areas, and equipment yards. Install cameras at 2.5–4 m height for wide, unobstructed views and to eliminate blind spots.

Equipment Specifications:

- Use weatherproof (IP66/IP67-rated), anti-vandal cameras for outdoor use. Ensure adequate lighting or use IR/night vision cameras in low-light areas.

Installation & Power:

- Securely mount cameras on stable structures with protective casing for wiring. Provide uninterrupted power with surge protection and a 2–4-hour UPS/inverter backup.

Monitoring & Control Room:

- Set up a secure control unit or kiosk with DVR/NVR systems, live monitoring screens, intercom connectivity, and controlled access.

Network & Data Security:

- Encrypt camera feeds, password-protect systems, and avoid open Wi-Fi. Ensure data retention for 15–30 days with timestamping and audit trails.

Signage & Shutdown:

- Display mandatory “CCTV in Operation” signage at all relevant locations.
- On project completion, properly deactivate systems, secure footage, and safely dismantle hardware.

7.4. Barricading & Zoning

Barricading and zoning are essential tools for guiding crowd movement, creating safe areas, and managing access within the event venue. They help to define pathways, separate different functions, and control density.

Purpose of Barricades:

- **Crowd Control:** Directing pedestrian flow, forming queues, and preventing access to restricted areas.
- **Safety Barriers:** Protecting attendees from hazards (e.g., stage edges, technical equipment, vehicle routes).
- **Security:** Creating perimeters and secure zones.

- **Queue Management:** Organizing lines for entry, food, restrooms, etc.

Types of Barricades:

- **Crash Barriers Barricades (Mojo Barriers):** Robust and effective for high-density crowd control, often used near stages or entry points.
- **Cycle Racks** Lighter, more flexible, suitable for defining pathways or low-risk areas.
- **Fencing (GI Tin):** For perimeter security or separating large zones.

Strategic Placement:

- Place barricades to create clear pathways and prevent uncontrolled surges.
- Avoid creating pinch points or dead ends that can trap crowds.
- Ensure barricades are stable and cannot be easily toppled or moved by crowd pressure.
- Maintain sufficient space behind barricades for staff and emergency access.
- Barricade the critical areas such fuel storage areas, DG areas, Special effects storage, kitchen or any electrical area etc.

Zoning:

- Divide the event area into distinct zones (e.g., performance area, food court, medical station, VIP area, emergency assembly points, general public access areas).
- Use signage, different flooring, or lighting to differentiate zones.
- Control the number of people within each zone to prevent overcrowding and manage density.
- Ensure clear routes between zones for attendees and emergency services.

7.5. PA System Steup

(Aligned with NBC 2016 Part 4, IEC 60268, NDMA Event Guidelines, IS 1885 & IS 15330)

A well-planned PA system is essential on large sites or event spaces to communicate safety instructions, coordinate operations, and issue emergency alerts quickly and clearly.

Coverage & Zoning:

- Install weatherproof (IP65/IP66) speakers at 3–4 m height across key areas- work zones, entry/exit points, and emergency routes.

- Divide into zones (general, back-of-house, critical) for targeted announcements without overwhelming the entire site.

Control & Power:

- Place control units (mic, amp) in a secure, staffed control room. Ensure at least 2-hour UPS/inverter backup for uninterrupted broadcast capability.

Emergency Integration:

- Link PA system with the fire alarm and ERT panel for auto-triggered or manual emergency messages. Prepare multi-language pre-recorded alerts for quick deployment (fire, evacuation, medical).

Clarity & Accessibility:

- Regularly test volume and clarity against ambient site noise. Pair audio with visual messaging via LED boards or digital signage for critical communication.

Daily Use & Safety Briefings:

- Use the PA for scheduled announcements like shift-start safety briefings, PPE reminders, and emergency contact sharing.

7.6. Accreditation

(NDMA Event Guidelines, IS 14990, OSHA 1910.145, and ISO 22320)

A controlled access control system ensures only authorized personnel enter specific zones, enhances accountability, and supports emergency response. This is crucial for large events, industrial sites, or multi-contractor operations.

Access Matrix & ID Types:

- Define access levels by role (worker, supervisor, visitor, ERT, VIP, etc.) in a site-specific matrix. Use color-coded bands/lanyards with breakaway safety features to distinguish roles.

Badge Essentials & Issuance:

- Every ID must display name, photo, company, role, emergency contact, and QR/barcode (if applicable). Issue only after induction, and maintain a log of all issued IDs with unique numbers.

Visitor Protocols:

- All visitors must register, undergo a safety briefing, wear visitor lanyards, and be escorted at all times.

Zone-Based Control & Monitoring:

- Enforce restricted access in high-risk areas via manual checks or digital scans. Prohibit ID sharing or duplication.

Emergency Readiness & Security Sync:

- Use glow-in-the-dark or reflective IDs for night workers and emergency teams. Share daily access rosters with security staff. Recover all IDs upon task completion or revocation.

Lost ID Handling:

- Report missing IDs immediately. Issue temporary tags with limited validity as a stop-gap.

7.7. Handling Overcrowding, Stampede Prevention

Overcrowding is a precursor to stampedes and other dangerous crowd incidents. Proactive measures and rapid response protocols are vital to prevent and manage such situations.

Monitoring Crowd Density:

- Implement real-time crowd monitoring systems (e.g., CCTV, drone surveillance, manual counts) to track density in different areas.
- Establish critical density thresholds that trigger intervention protocols.

Early Warning Systems:

- Train staff to recognize early signs of overcrowding (e.g., people unable to move freely, crushing sensation, distress signals).
- Establish clear communication channels for staff to report overcrowding immediately.

Intervention Strategies:

- **Stop Entry:** Halt further entry into an overcrowded area or the venue itself.
- **Redistribution:** Direct incoming crowds to less dense areas or open up new zones.
- **Communication:** Use public address systems to calmly instruct the crowd, provide clear directions, and reassure them.
- **Controlled Release:** Gradually release people from an overcrowded area to a safer zone.

- **Emergency Access:** Ensure emergency services can access and extract individuals from dense crowds.

Stampede Prevention:

- **Designated Holding Areas:** Create temporary holding areas outside gates to manage surges.
- **One-Way Flow:** Implement one-way systems in narrow passages or stairwells.
- **Clear Pathways:** Keep all pathways, especially those leading to exits, clear of obstructions.
- **Emergency Drills:** Conduct regular drills with staff and security to practice stampede response protocols.
- **Public Awareness**: Educate attendees through signage and announcements about safe crowd behavior and emergency procedures.

Post-Incident Response:

- Secure the area and provide immediate medical attention to those injured.
- Conduct a thorough investigation to determine the cause and implement corrective actions.
- Provide psychological support to affected individuals and staff.

8. Weather Preparedness

Weather conditions can significantly impact event safety and operations. Unpredictable weather events like thunderstorms, high winds, or heavy rain can pose serious risks to attendees, staff, and infrastructure. A robust weather preparedness plan is essential for mitigating these risks and ensuring a safe event environment.

8.1. Lightning Protocols

Lightning is a severe weather hazard that can cause serious injury or death. Events, especially those held outdoors or in temporary structures, must have clear protocols for lightning detection and response.

Monitoring and Alert Systems:

- Utilize professional weather monitoring services that provide real-time lightning detection and proximity alerts.
- Establish a clear chain of command for receiving and disseminating lightning warnings.
- Consider using a dedicated weather station on-site for immediate data.

Safe Sheltering Areas:

- Identify and clearly mark designated safe sheltering areas within the venue (e.g., permanent buildings with plumbing and electrical wiring, large enclosed vehicles).
- Temporary structures like tents, open-sided marquees, or stages do NOT provide adequate lightning protection.
- Ensure sheltering areas have sufficient capacity for the expected number of people.

Evacuation and Communication:

- Develop a clear protocol for when to initiate a lightning warning and when to evacuate.
- Communicate warnings to attendees and staff promptly and clearly via public address systems, digital screens, and staff announcements.
- Provide clear directions to safe sheltering areas.
- Consider a '30-30 rule': if lightning is seen and thunder is heard within 30 seconds, seek shelter. Remain in shelter for 30 minutes after the last thunder is heard.

Suspension of Activities:

- Implement procedures for suspending outdoor activities, including performances, rides, and setup/dismantling work, when lightning is detected within a predetermined safe radius.
- Ensure all electrical equipment is disconnected or protected during a lightning storm.

8.2. Wind Monitoring

High winds can pose a significant threat to temporary structures, signage, and equipment at events, leading to structural failure and flying debris. Continuous wind monitoring and pre-defined action plans are crucial.

Wind Speed Thresholds:

- Establish specific wind speed thresholds that trigger different levels of response (e.g., caution, partial shutdown, full evacuation).
- These thresholds should be determined by structural engineers based on the design and stability of temporary structures.

Monitoring Equipment:

- Install anemometers (wind speed meters) at various points across the event site, especially near tall structures.
- Monitor official weather forecasts for wind advisories and warnings.

Action Plans for High Winds:

- **Secure Loose Items:** Ensure all loose items (e.g., banners, signage, props, waste bins) are secured or removed.
- **Lower Structures:** Implement procedures for lowering or partially dismantling tall structures (e.g., video screens, lighting towers) if wind speeds approach critical thresholds.
- **Evacuation from Structures**: Evacuate temporary structures like tents or marquees if wind conditions become unsafe.
- **Communication:** Keep staff and attendees informed of wind conditions and any necessary actions.
- **Suspension of Activities:** Suspend activities that could be hazardous in high winds, such as work at height or use of inflatables.

8.3. Rain Contingencies

Heavy rainfall can lead to slippery surfaces, water accumulation, electrical hazards, and discomfort for attendees. Effective rain contingency plans are necessary to manage these impacts.

Drainage and Water Management:

- Assess the venue's drainage capabilities during the planning phase.
- Implement measures to prevent water accumulation in key areas (e.g., pathways, stage areas, electrical zones) through trenching, pumps, or elevated platforms.
- Ensure all electrical connections and equipment are waterproof or adequately protected from rain.

Shelter and Cover:

- Identify and provide sufficient covered areas or temporary shelters for attendees and staff.
- Ensure these shelters are structurally sound and do not create new hazards (e.g., overcrowding).

Surface Management:

- Use non-slip matting or temporary flooring in high-traffic areas prone to becoming slippery when wet.
- Regularly clear standing water from pathways and common areas.

Communication and Comfort:

- Communicate weather updates and available shelters to attendees.
- Consider providing ponchos or other rain protection if feasible.

- Have plans for managing muddy conditions, including provision of temporary walkways or cleaning services.

Event Suspension/Cancellation:

- Establish clear criteria for when to suspend or cancel parts of the event due to heavy rain, especially if it impacts safety (e.g., visibility, electrical hazards, flooding).
- Develop a communication plan for informing attendees and stakeholders about changes to the event schedule.

SECTION C: HEALTH & MEDICAL

9. Medical Services & First Aid

Comprehensive medical services and readily available first aid are critical components of event safety, ensuring prompt and effective response to injuries, illnesses, and medical emergencies. The scale and type of medical provision should be proportionate to the event's size, duration, nature, and the demographic of attendees.

9.1. Mandated Medical Setups

Medical setups at events in India are often governed by local regulations and licensing requirements. These mandates typically specify the minimum level of medical personnel, equipment, and facilities required.

Risk Assessment-Based Provision:

- The type and level of medical services should be determined by a thorough medical risk assessment, considering factors like:
  - Expected attendance numbers.
  - Demographics of attendees (e.g., elderly, children, persons with pre-existing conditions).
  - Nature of the event (e.g., high-intensity sports, music festival, family fair).
  - Venue characteristics (e.g., remote location, urban setting, multi-level).
  - Environmental factors (e.g., heat, humidity, altitude).

Personnel Requirements:

- Minimum requirements often include qualified doctors, paramedics, nurses, and first aiders.
- The ratio of medical personnel to attendees should be adequate to ensure timely response.
- All medical staff must be clearly identifiable (e.g., uniforms, vests).

Facility Requirements:

- Designated first aid posts or medical centers, clearly marked and easily accessible.
- These facilities should be equipped with necessary medical supplies, equipment, and privacy screens.
- Consider dedicated areas for triage, treatment, and recovery.

Communication and Coordination:

- Establish clear communication channels between medical teams, event control, and external emergency services.
- Develop protocols for escalating medical incidents and requesting external support.

9.2. First Aid Station Readiness

First aid stations serve as the primary point of contact for minor injuries and illnesses, and as a triage point for more serious conditions. Their readiness is crucial for effective initial response.

Location and Accessibility:

- Strategically locate first aid stations throughout the event venue, ensuring they are easily accessible from all areas.
- Clearly mark stations with universal first aid symbols and directional signage.
- Ensure unimpeded access for both patients and emergency vehicles.

Equipment and Supplies:

- Stock first aid stations with a comprehensive range of supplies, including bandages, antiseptic wipes, pain relievers, rehydration salts, and basic medical equipment.
- Ensure all equipment is in good working order and within its expiry date.
- Consider specialized equipment based on event type (e.g., splints for sports events, nebulizers for dust-prone areas).

Staffing and Training:

- Ensure first aid stations are staffed by certified first aiders or medical professionals at all times during event operating hours.
- Staff should be trained in basic life support, wound care, and recognition of common medical emergencies.
- Regular refreshers and scenario-based training are recommended.

Record Keeping:

- Maintain accurate records of all incidents, treatments administered, and patient details.
- This information is vital for post-event analysis, legal compliance, and continuous improvement.

9.3. Ambulance Access Routes

Clear and unobstructed ambulance access routes are vital for rapid transportation of patients to off-site medical facilities. Any delay can have severe consequences.

Designated Routes:

- Identify and clearly mark primary and secondary ambulance access routes within and around the event venue.

- These routes should be wide enough to accommodate emergency vehicles and allow for easy maneuvering.

Obstruction-Free:

- Ensure that ambulance routes are kept clear of all obstructions, including parked vehicles, temporary structures, equipment, and crowds, at all times.
- Implement strict parking and access control policies along these routes.

Surface and Lighting:

- Ensure the surface of access routes is stable, even, and suitable for emergency vehicles in all weather conditions.
- Provide adequate lighting along routes, especially during night events.

Communication and Coordination:

- Communicate ambulance access routes to all relevant staff, security personnel, and external emergency services.
- Establish a system for guiding ambulances to the exact location of an incident and facilitating their swift departure.
- Consider dedicated entry/exit points for emergency vehicles to minimize disruption to general crowd flow.

10. Food & Water Safety

Ensuring the safety of food and water at events is critical to prevent foodborne illnesses and maintain public health. Large gatherings can be breeding grounds for outbreaks if proper hygiene and safety standards are not rigorously enforced. This section covers essential guidelines for vendor hygiene, water provision, and compliance with food safety regulations.

10.1. Vendor Hygiene Checklist

All food and beverage vendors operating at an event must adhere to strict hygiene standards to prevent contamination and ensure the safety of the food served. A comprehensive checklist should be used for all vendors.

Personnel Hygiene:

- All food handlers must maintain high standards of personal cleanliness (clean uniforms, hairnets, gloves).
- Regular handwashing with soap and water, especially after using the restroom, handling raw food, or touching waste.
- No sick personnel allowed to handle food.

Food Handling and Storage:

- Raw and cooked foods must be stored separately to prevent cross-contamination.
- Perishable foods must be kept at appropriate temperatures (cold foods below 5°C, hot foods above 63°C).
- Food preparation surfaces and utensils must be clean and sanitized.
- Food must be protected from pests, dust, and other contaminants.

Waste Management:

- Adequate number of covered waste bins must be available and regularly emptied.
- Proper disposal of food waste to prevent pest attraction and odor.

Equipment and Facilities:

- All cooking and serving equipment must be clean, in good working order, and regularly maintained.
- Access to clean water for washing and sanitation purposes.
- Proper dishwashing facilities (three-sink method or dishwasher).

Licensing and Certification:

- Verify that all food vendors possess the necessary licenses and permits from local health authorities.
- Ensure compliance with FSSAI (Food Safety and Standards Authority of India) regulations.

10.2. Water Station Guidelines

Access to safe and potable drinking water is a fundamental requirement at any event, especially in warm climates. Well-managed water stations are essential for attendee hydration and health.

Source and Quality:

- Ensure that all drinking water sources are safe, potable, and regularly tested for quality.
- If using municipal supply, verify its potability. If using tankers or other sources, demand quality certificates.

Accessibility and Distribution:

- Strategically locate water stations throughout the event venue, ensuring easy access for all attendees.
- Provide a sufficient number of water points to minimize queues and ensure continuous supply.

- Consider providing both bottled water (if necessary) and refillable water stations.

Hygiene and Maintenance:

- Maintain high levels of hygiene at water stations, regularly cleaning dispensing nozzles and surrounding areas.
- Ensure proper drainage around water stations to prevent waterlogging and slippery surfaces.
- Regularly replenish water supplies to prevent shortages.

Signage:

- Clearly mark water stations with visible signage.
- Provide instructions for use, especially for refill stations, to maintain hygiene.

10.3. FSSAI Compliance

The Food Safety and Standards Authority of India (FSSAI) is the apex body responsible for regulating food safety and standards in India. All food businesses, including event caterers and vendors, must comply with FSSAI regulations.

Licensing and Registration:

- All food businesses must obtain the appropriate FSSAI license or registration based on their turnover and nature of business.
- Event organizers should verify the FSSAI compliance of all their food vendors.

Food Safety Management System (FSMS):

- Vendors should have a robust FSMS in place, which includes:
- **Hazard Analysis and Critical Control Points (HACCP):** Identifying and controlling potential hazards in food production.
- **Good Manufacturing Practices (GMP) and Good Hygiene Practices (GHP):** Ensuring cleanliness and safety throughout the food chain.

Labeling and Packaging:

- Ensure food products are correctly labeled with ingredients, nutritional information, manufacturing date, expiry date, and FSSAI license number.
- Packaging materials must be food-grade and safe.

Training:

- Food handlers must undergo mandatory food safety training as prescribed by FSSAI.

Audits and Inspections:

- Event organizers should conduct their own checks and audits to ensure vendors are adhering to FSSAI guidelines.
- Be prepared for inspections by FSSAI authorities.

11. Sanitation & Hygiene

Effective sanitation and hygiene management are fundamental to public health at events, preventing the spread of diseases and ensuring a comfortable experience for attendees. This includes adequate provision of toilets, efficient waste disposal, and vector control, especially in diverse climatic conditions.

11.1. Toilet Ratios

Providing an adequate number of clean and accessible toilets is crucial for public health and attendee comfort. Insufficient facilities can lead to unsanitary conditions and long queues, impacting the overall event experience.

Recommended Ratios:

- The number of toilets required depends on the expected attendance, duration of the event, and whether food and beverages are served.
- General guidelines suggest a minimum of 1 toilet per 100-150 attendees for events lasting a few hours.
- For longer events or those serving alcohol, the ratio should be increased.
- Separate facilities for males and females are mandatory.
- Provide accessible toilets for people with disabilities, ensuring they are spacious and equipped with grab bars.

Placement and Maintenance:

- Strategically locate toilet blocks throughout the venue, ensuring easy access and clear signage.
- Ensure adequate lighting and ventilation within toilet facilities.
- Implement a rigorous cleaning schedule, with dedicated staff for continuous maintenance and replenishment of supplies (toilet paper, soap, hand sanitizer).
- Ensure proper handwashing facilities with running water and soap are available.

11.2. Waste Disposal Plan

An efficient waste disposal plan is essential for maintaining cleanliness, preventing environmental pollution, and managing health risks associated with accumulated waste. This involves systematic collection, segregation, and disposal of all waste generated at the event.

Waste Segregation:

- Implement a clear system for waste segregation at source (e.g., separate bins for dry waste, wet waste, recyclables).
- Educate attendees and vendors on waste segregation practices through clear signage and communication.

Bin Provision and Placement:

- Provide a sufficient number of clearly labeled waste bins throughout the venue, especially in high-traffic areas, food courts, and near exits.
- Ensure bins are regularly emptied to prevent overflow and odor.

Collection and Transportation:

- Establish a schedule for regular waste collection from bins and transportation to designated waste accumulation points.
- Use covered vehicles for waste transportation to prevent spillage and odor.

Disposal and Recycling:

- Ensure waste is disposed of in an environmentally responsible manner, adhering to local municipal regulations.
- Prioritize recycling and composting where facilities are available.
- Minimize waste generation through sustainable practices (e.g., encouraging reusable cups, reducing single-use plastics).

11.3. Vector Control (especially in monsoon zones)

Vector control is crucial, particularly in India, where events often take place in diverse climatic conditions, including monsoon seasons, which can lead to increased populations of disease-carrying vectors like mosquitoes and flies.

Mosquito Control:

- Eliminate breeding grounds: Remove stagnant water from all areas (e.g., puddles, open containers, clogged drains).
- Use larvicides in unavoidable water bodies.
- Consider fogging or spraying in and around the venue before and during the event, especially during dawn and dusk.
- Encourage attendees and staff to use insect repellents.

Fly Control:

- Maintain strict hygiene in food preparation and serving areas.
- Ensure all food is covered and waste bins are lidded and regularly emptied.
- Use fly traps or screens where appropriate.

Rodent Control:

- Implement measures to prevent rodent access to food storage areas and waste disposal sites.
- Ensure proper sealing of food containers and secure waste bins.

General Measures:

- Regularly inspect the venue for signs of vector infestation.
- Educate staff on vector-borne diseases and prevention methods.
- Coordinate with local public health authorities for advice and assistance, especially during outbreaks of vector-borne diseases.

SECTION D: EMERGENCY RESPONSE

12. Emergency Planning

Effective emergency planning is the cornerstone of a safe event. It involves anticipating potential emergencies, developing clear procedures for response, and ensuring all stakeholders understand their roles. A well-crafted emergency plan minimizes chaos, reduces injuries, and facilitates a swift return to normalcy.

12.1. Types of Emergencies (fire, riot, medical, etc.)

An emergency plan must address a wide range of potential incidents. A comprehensive approach involves identifying all foreseeable risks and categorizing them to develop specific response protocols.

Medical Emergencies:

- Individual medical incidents (e.g., heart attack, stroke, allergic reaction).
- Mass casualty incidents (e.g., food poisoning outbreak, structural collapse with multiple injuries).
- Heat-related illnesses, dehydration.

Fire Emergencies:

- Small fires (e.g., electrical short, waste bin fire).
- Large-scale fires requiring evacuation.
- Fires involving hazardous materials.

Security Incidents:

- Active shooter/terrorist threat.
- Bomb threat/suspicious package.
- Assault, theft, or other criminal activity.
- Unruly behavior, fights, or public disorder.

Crowd-Related Emergencies:

- Overcrowding and congestion.
- Stampedes or uncontrolled crowd surges.
- Lost children or vulnerable persons.

Natural Disasters:

- Severe weather (e.g., thunderstorms, lightning, high winds, heavy rain, dust storms).
- Earthquakes, floods, or other localized natural phenomena.

Structural Failures:

- Collapse of stages, temporary structures, or seating.
- Equipment malfunction (e.g., power outage, rigging failure).

Hazardous Material Incidents:

- Spills of chemicals, fuels, or other dangerous substances.
- Gas leaks.

Communication Failures:

- Loss of power, internet, or radio communication.

12.2. Incident Reporting Formats

Standardized incident reporting is crucial for effective emergency management, post-incident analysis, and legal compliance. Clear and concise reporting ensures that all necessary information is captured accurately and promptly.

Purpose of Reporting:

- To document facts, actions taken, and outcomes of an incident.
- To facilitate immediate response and resource allocation.
- To identify root causes and implement corrective actions to prevent recurrence.
- To comply with legal and regulatory requirements.
- To provide data for insurance claims and post-event reviews.

Key Information to Capture:

- **Date and Time of Incident:** Precise timestamp of when the incident occurred and was reported.
- **Location of Incident:** Specific area within the event venue.
- Type of Incident: Categorization (e.g., medical, fire, security, crowd).
- **Description of Incident:** Factual narrative of what happened, including any contributing factors.
- **Individuals Involved:** Names, contact details, and roles of affected persons, witnesses, and responders.
- **Actions Taken:** Detailed account of immediate response, first aid, evacuations, and communication.
- **Resources Utilized:** Equipment, personnel, and external services deployed.
- **Injuries/Damages:** Description of any injuries sustained or property damage incurred.
- **Witness Statements:** Any relevant observations from witnesses.
- **Reporting Person:** Name, role, and contact details of the person completing the report.
- **Follow-up Actions:** Recommendations for further investigation or preventive measures.

Format and Accessibility:

- Use pre-designed forms (digital or physical) to ensure consistency and completeness.
- Ensure forms are easily accessible to all relevant staff.
- Establish a clear process for submitting and reviewing reports.

12.3. Night Watch Team

(NBC 2016, & Best Practices)

Night watch teams are deployed during off-hours to maintain site security, monitor critical zones, and ensure emergency readiness. Their role is vital in preventing theft, accidents, or damage during idle periods.

Coverage & Patrol Scope:

- Deploy guards throughout non-working hours, especially in critical areas like fuel zones, scaffolding, kitchens, material yards, electrical panels, and access points. Patrols should include adverse weather checks (wind, water, faults).

Personnel Safety & Communication:

- All guards must wear hi-vis jackets, helmets, safety shoes, and carry torches or portable lights. Equip them with walkie-talkies or phones for instant alerts and coordination. (Ref: OSHA 1926.28, IS 2925, IS 14435 Cl. 6.1.2)

Access Control & Reporting:

- Prevent unauthorized entry. Verify ID of late-night workers or deliveries. Report hazards, trespassing, or abnormalities immediately to the control room or site in-charge.

Fatigue Management & Handover:

- Rotate shifts every 4–6 hours and provide hydration/shelter points. Conduct a written handover at dawn noting any risks, incidents, or site conditions for the incoming team.

12.4. Emergency Escape Lighting

(NBC 2016 Part 4, IS 10322 (Part 5/Sec 8), and NFPA 101)

Emergency lighting ensures visibility during power failure, supporting safe evacuation from enclosed and open venues during incidents or blackouts.

Placement & Coverage:

- Install emergency lights in escape routes, corridors, stairs, exits, assembly areas, and high-risk zones like fuel yards and generator rooms. Mount units 2–2.5 meters above ground, ensuring unobstructed visibility.

Functionality & Backup:

- Lights must auto-activate on power failure, have minimum 90-minute battery backup, and provide ≥1 lux at floor level. Outdoor/temporary areas may use rechargeable or solar-powered lights.

Signage & Power Isolation:

- Illuminated exit signs should be clearly visible from all directions. Use photoluminescent signage where electric lighting is not feasible. Connect lighting to independent circuits to avoid outages from general electrical faults.

Visibility & Safety:

- Ensure lights are glare-free and do not obstruct evacuation paths or disorient evacuees.

12.5. Evacuation Plan & Assembly Areas

A robust evacuation plan is vital for safely moving people away from danger during an emergency. This plan must be well-communicated, regularly practiced, and clearly understood by all staff and attendees.

Clear Evacuation Routes:

- Identify multiple, unobstructed evacuation routes from all areas of the venue.
- Routes should be wide enough to accommodate the expected flow of people.
- Ensure routes are well-lit and clearly marked with internationally recognized signage.
- Evacuation routes should be away from any electrical or fire source

Designated Assembly Areas:

- Establish primary and secondary assembly areas that are safe, spacious, and located a sufficient distance from the event site.
- Assembly areas should be easily accessible and have clear entry/exit points.

- Ensure assembly areas can accommodate the entire expected crowd capacity.
- Consider amenities at assembly areas, such as water, first aid, and temporary shelter, if evacuation is prolonged.

Communication Strategy:

- Develop clear and concise messages for initiating evacuation, to be delivered via public address systems, digital screens, and staff announcements.
- Use calm and authoritative language to avoid panic.
- Provide instructions in multiple languages if applicable.

Staff Roles and Responsibilities:

- Assign specific roles to staff members during an evacuation (e.g., marshals, sweepers, first aid providers).
- Ensure staff are trained to guide people calmly, assist vulnerable individuals, and prevent congestion.
- Staff should know all evacuation routes and assembly points.

Vulnerable Persons:

- Develop specific procedures for assisting people with disabilities, elderly individuals, children, and others who may require extra assistance during an evacuation.
- Identify designated staff or volunteers to provide this support.

Re-entry Procedures:

- Establish clear protocols for when and how people can re-enter the venue after an evacuation, if it is deemed safe to do so.
- This should only occur after a thorough assessment by emergency services.

Drills and Exercises:

- Conduct regular evacuation drills and tabletop exercises with staff and emergency services to test the plan's effectiveness and identify areas for improvement.
- Debrief after each drill to refine procedures.

13. Emergency Teams & Protocols

Effective emergency response hinges on well-defined roles, clear lines of authority, and robust communication protocols. Establishing dedicated emergency teams and protocols ensures a coordinated and efficient response to any incident, minimizing its impact and safeguarding lives.

13.1. Incident Commander

The Incident Commander (IC) is the individual responsible for overall management of an incident. This role is critical for providing leadership, making key decisions, and ensuring a unified response. The IC should be a highly trained and experienced individual with strong leadership and communication skills.

Key Responsibilities:

- **Overall Command:** Assumes ultimate authority and responsibility for all incident operations.
- **Assessment:** Conducts initial and ongoing assessment of the incident situation.
- **Objective Setting:** Establishes incident objectives and priorities.
- **Resource Management:** Directs and coordinates all resources (personnel, equipment) involved in the response.
- **Communication:** Serves as the primary point of contact for external agencies and senior management.
- **Safety:** Ensures the safety of all responders and affected individuals.
- **Documentation:** Oversees the accurate documentation of all incident-related activities.
- **Strategy Development:** Develops and implements the overall incident strategy.

Qualities of an Effective IC:

- Strong decision-making under pressure.
- Excellent communication and interpersonal skills.
- Thorough understanding of the event layout and potential hazards.
- Knowledge of emergency procedures and relevant regulations.
- Ability to remain calm and authoritative during crisis.

Location:

- The IC typically operates from a designated Command Center or Control Room, which provides a comprehensive overview of the event site and access to communication systems.

13.2. On-Scene Coordinator

The On-Scene Coordinator (OSC) is responsible for managing operations at the immediate sight of an incident, reporting directly to the Incident Commander. This role is crucial for tactical execution and direct supervision of response activities.

Key Responsibilities:

- **Direct Supervision:** Oversees and directs all personnel and resources at the incident scene.
- **Tactical Implementation:** Implements the tactical objectives set by the Incident Commander.
- **Information Gathering:** Gathers real-time information from the scene and relays it to the IC.
- **Resource Deployment:** Deploys resources (e.g., first aid teams, security personnel, fire extinguishers) as needed at the scene.
- **Scene Safety:** Ensures the safety of responders and the public within the immediate incident area.
- **Perimeter Control:** Establishes and maintains an inner perimeter around the incident site.
- **Initial Assessment:** Conducts a rapid initial assessment of the situation upon arrival at the scene.

Communication:

- Maintains continuous communication with the Incident Commander, providing updates on the situation and resource needs.

Location:

- The OSC is physically present at the incident site, directing operations on the ground.

13.3. Communication Chain & Contact Cards

Clear and reliable communication is the backbone of any effective emergency response. A well-defined communication chain ensures that information flows efficiently and accurately, both internally within the event team and externally with emergency services and stakeholders. Contact cards provide essential information for rapid communication.

Communication Chain:

- **Tiered System**: Establish a clear hierarchy for communication, ensuring that information is escalated and disseminated appropriately.

- **Internal Communication:** Protocols for staff to report incidents to their supervisors, who then escalate to the On-Scene Coordinator or Incident Commander.
- **External Communication:** Procedures for contacting external emergency services (police, fire, ambulance) and informing relevant authorities or stakeholders.
- **Public Communication:** A designated spokesperson should manage all public announcements and media inquiries to ensure consistent and accurate information.

Communication Methods:

- **Two-Way Radios:** Essential for immediate, on-site communication among response teams.
- **Mobile Phones:** For external calls and backup communication.
- Public Address (PA) System: For mass communication to attendees.
- **Digital Signage/Screens:** For displaying emergency messages and instructions.
- **Runners:** For relaying messages in case of communication system failure.

Contact Cards:

- **Purpose**: Provide quick access to critical contact information for all key personnel and external agencies.
- **Content:** Each card should include:
  - Name and Role of the individual.
  - Primary and secondary contact numbers.
  - Radio channel/frequency.
  - Emergency services numbers (Police, Fire, Ambulance).
  - Key venue contacts (e.g., security control room, medical center).
  - Event control room number.
- **Distribution:** Distribute laminated contact cards to all staff, security personnel, medical teams, and key volunteers.
- **Accessibility:** Ensure cards are kept in an easily accessible location (e.g., attached to lanyards, in a designated pocket).

Communication Drills:

- Regularly practice communication protocols during drills to identify and rectify any weaknesses or bottlenecks.
- Test all communication equipment before each event.

14. Drills & Preparedness

Regular drills and comprehensive preparedness activities are vital for ensuring that emergency plans are effective and that all personnel are proficient in their roles during a crisis. Drills provide an opportunity to test procedures, identify weaknesses, and build confidence within the response teams.

14.1. Fire Drill / Medical Drill Essentials

Fire and medical drills are fundamental to emergency preparedness. They simulate real-life scenarios, allowing teams to practice their response in a controlled environment.

Planning the Drill:

- **Objectives**: Clearly define the goals of the drill (e.g., test evacuation time, assess communication, evaluate first aid response).
- **Scenario:** Develop a realistic scenario (e.g., simulated fire in a specific area, mass casualty medical incident).
- **Scope:** Determine which areas of the venue and which teams will participate.
- **Safety:** Ensure the drill itself is conducted safely, with clear boundaries and safety officers.
- **Notification:** Inform relevant authorities and stakeholders (e.g., local fire department, medical services) about the drill in advance.

Execution of the Drill:

- **Briefing:** Conduct a pre-drill briefing for all participants, outlining the scenario, their roles, and safety instructions.
- **Simulation:** Activate the simulated emergency, using props or actors to enhance realism where appropriate.
- **Observation:** Deploy observers to monitor the response, noting strengths and weaknesses in real-time.
- **Communication:** Test all communication systems and protocols.
- **Timeliness:** Record response times for key actions (e.g., alarm activation, evacuation initiation, first aid arrival).

Medical Drill Specifics:

- Practice triage procedures for multiple casualties.
- Simulate transportation of patients to first aid stations and ambulance loading areas.
- Assess the availability and readiness of medical supplies and equipment.

Fire Drill Specifics:

- Practice activation of fire alarms and public address systems.

- Evaluate the effectiveness of evacuation routes and assembly points.
- Assess the use of firefighting equipment by trained personnel.

14.2. Roles During a Drill

Each participant in a drill has a specific role, contributing to the overall effectiveness of the exercise. Clear role definition ensures accountability and a structured learning experience.

Drill Coordinator:

- Plans, organizes, and oversees the entire drill.
- Ensure all resources are in place and objectives are met.
- Leads the pre-drill briefing and post-drill debriefing.

Participants/Responders:

- Act out their assigned roles as if they are in a real emergency.
- Follow established procedures and protocols.
- Provide feedback on the effectiveness of the plan and their training.

Observers/Evaluators:

- Monitor the drill without interfering with the participants.
- Document observations, including response times, adherence to procedures, communication effectiveness, and areas for improvement.
- Provide objective feedback during the debriefing session.

Safety Officers:

- Ensure the safety of all participants throughout the drill.
- Intervene if any unsafe conditions arise.

Actors/Simulated Casualties:

- Portray victims or other scenario elements to add realism.
- Provide feedback on the effectiveness of first aid and rescue efforts.

14.3. Reporting Post-Drill Observations

Detailed reporting after a drill is crucial for learning and continuous improvement. The observations and findings should be documented systematically to inform future planning and training.

Debriefing Session:

- Conduct an immediate debriefing session with all participants and observers.
- Encourage open and honest feedback on what went well, what could be improved, and any unexpected challenges.
- Focus on learning and improvement, not blame.

Drill Report Format:

- **Executive Summary:** Brief overview of the drill, objectives, and key findings.
- **Scenario Description:** Details of the simulated emergency.
- **Observations:** Detailed notes from observers, covering:
  - Communication Effectiveness (internal and external).
  - Response times and adherence to protocols.
  - Coordination between different teams.
  - Adequacy of resources and equipment.
  - Identification of any bottlenecks or confusion points.
- **Strengths:** Areas where the plan or response was effective.
- **Areas for Improvement:** Specific weaknesses identified.
- **Recommendations:** Actionable suggestions for improving the emergency plan, training, equipment, and procedures.
- **Action Plan:** Assign responsibilities and deadlines for implementing recommendations.
- **Lessons Learned**: Key takeaways that can be applied to future planning.

Distribution:

- Share the drill report with all relevant stakeholders, including event management, emergency services, and venue operators.

Follow-up:

- Regularly review the action plan to ensure that recommendations are implemented and improvements are made.

SECTION E: BEHAVIOURAL SAFETY & TRAINING

15. Safety Culture at Events

A strong safety culture is the foundation of effective health and safety management. It goes beyond mere compliance with rules and regulations; it represents the shared values, beliefs, and attitudes towards safety within an organization or event team. In a positive safety culture, everyone takes responsibility for safety, actively participates in safety initiatives, and prioritizes safety over other considerations.

15.1. Leading by Example

Leadership commitment is crucial for fostering a robust safety culture. When leaders demonstrate a genuine commitment to safety, it sends a powerful message throughout the organization and encourages others to follow.

Visible Commitment:

- Leaders should visibly participate in safety meetings, inspections, and training sessions.
- They should wear appropriate Personal Protective Equipment (PPE) when required, setting an example for others.
- Regularly communicate the importance of safety through various channels.

Prioritizing Safety:

- Ensure that safety is always a top agenda item in meetings, alongside operational and financial discussions.
- Allocate sufficient resources (time, budget, personnel) to safety initiatives.
- Demonstrate that safety will not be compromised to deadlines or cost savings.

Accountability:

- Hold themselves and others accountable for safety performance.
- Recognize and reward positive safety behaviors.
- Address unsafe acts or conditions promptly and fairly.

15.2. Peer Reporting Encouragement

Encouraging peer reporting of hazards, near misses, and unsafe behaviors is a hallmark of a mature safety culture. It empowers individuals to speak up without fear of reprisal and contributes to a proactive safety environment. This culture helps rectify problems before it turns into an incident/accident.

Creating a Non-Punitive Environment:

- Assure staff that reporting safety concerns will not lead to blame or punishment, but rather to learning and improvement.
- Focus on identifying systemic issues rather than individual faults.

Easy Reporting Mechanisms:

- Provide simple, accessible, and confidential channels for reporting (e.g., apps, online forms, suggestion boxes).
- Ensure that reports are acted upon promptly and feedback is provided to the reporter.

Training and Awareness:

- Train all personnel on how to identify and report hazards and near misses.
- Educate them on the benefits of reporting for overall safety improvement.
- Share lessons learned from reported incidents to demonstrate the value of their contributions.

Recognition and Reinforcement:

- Acknowledge and appreciate individuals who actively report safety concerns.
- Highlight how reported issues have led to positive changes.

15.3. Accountability Without Blame

Establishing a culture of accountability without blame means that while individuals are responsible for their actions, the focus after an incident is on understanding why something happened rather than simply who was at fault. This approach promotes learning and systemic improvement.

Fair and Just Culture:

- Distinguish between human error, at-risk behavior, and reckless behavior.
- Treat human error as an opportunity for system improvement.
- Address at-risk behavior through coaching and education.
- Deal with reckless behavior through appropriate disciplinary action, but only after a thorough investigation.

Systemic Approach:

- Investigate incidents to uncover underlying system failures, inadequate training, poor procedures, or design flaws.
- Implement corrective actions that address the root causes, not just the symptoms.

Open Communication:

- Encourage open discussion about mistakes and challenges without fear of retribution.
- Use incidents as learning opportunities for the entire team.

Training and Empowerment:

- Empower employees to make safe decisions and intervene when they observe unsafe practices.
- Provide them with the necessary training and resources to perform their tasks safely.

16. Training Essentials

Comprehensive and ongoing training is essential for ensuring that all personnel involved in an event are equipped with the knowledge and skills to perform their duties safely and respond effectively to emergencies. Training should be tailored to specific roles and responsibilities and should be a continuous process.

16.1. Toolbox Talks

Toolbox talks are short, informal safety meetings conducted at the beginning of a work shift or before a specific task. They are an effective way to address immediate safety concerns, reinforce safe work practices, and promote a safety-conscious mindset.

Purpose:

- To discuss specific hazards related to the day's tasks.
- To review safe work procedures and best practices.
- To provide an opportunity for workers to ask questions and raise concerns.
- To reinforce the importance of safety.

Content:

- Topics should be relevant to the immediate work being performed (e.g., work at height, manual handling, electrical safety).
- Keep the content concise, focused, and easy to understand.
- Use visual aids (e.g., diagrams, photos) to enhance understanding.

Frequency and Duration:

- Typically conducted daily or before high-risk tasks.
- It should be brief, usually lasting 5-10 minutes.

Documentation:

- Keep a record of topics discussed, attendees, and any issues raised.

16.2. Daily Briefings

Daily briefings are more formal meetings that bring together team leaders, supervisors, and key personnel to coordinate activities, discuss safety issues, and ensure everyone is aligned to the day's plan.

- Purpose:
  - To review the overall event schedule and key activities for the day.
  - To discuss any incidents or near misses from the previous day.
  - To identify potential hazards and implement control measures.
  - To coordinate between different teams (e.g., security, medical, technical).
  - To communicate any changes in plans or procedures.

Attendees:

- Event manager, safety officer, security head, medical team lead, technical director, and other key supervisors. These leaders to disseminate information to their team members.

Agenda:

- Review of previous day's activities and incidents.
- Weather forecast and its implications.
- Schedule of events and key timings.
- Specific safety concerns for the day.
- Resource allocation and coordination.
- Emergency preparedness updates.

Timing:

- Conducted at the beginning of each day before the event opens to the public.

16.3. Signage & Communication Material

Clear and effective signage and communication materials are vital for conveying important safety information to attendees, staff, and contractors. They play a crucial role in guiding behavior, warning of hazards, and providing instructions during emergencies.

Types of Signage:

- **Informational Signage:** Provides directions to key facilities (e.g., first aid, restrooms, exits, assembly points).
- **Warning Signage:** Alerts people to potential hazards (e.g., high voltage, slippery surfaces, work at height).
- **Prohibitory Signage:** Indicates actions that are not allowed (e.g., no smoking, no entry).
- **Mandatory Signage:** Specifies required actions (e.g., wear PPE, use hand sanitizer).
- **Emergency Signage:** Clearly marks emergency exits, firefighting equipment, and evacuation routes.

Design and Placement:

- Use universal symbols and clear, concise language.
- Consider using multiple languages if appropriate for the audience.
- Ensure signs are well-lit, highly visible, and placed at eye level.
- Avoid cluttering signs, as this can cause confusion.

Communication Materials:

- **Event Maps:** Clearly show the layout of the venue, including key safety features.
- **Safety Briefing Cards**: Laminated cards for staff with key safety information and emergency contacts.
- **Public Announcements:** Use pre-scripted safety messages to be broadcast at regular intervals.
- **Digital Screens:** Display safety information, weather updates, and emergency alerts.
- **Website/App:** Provide safety information on the event's digital platforms.

Consistency:

- Ensure all signage and communication materials are consistent in design, color, and messaging to avoid confusion.

SECTION F: DIGITAL TOOLS & DOCUMENTATION

17. Checklists & Forms

Checklists and forms are indispensable tools for effective health and safety management at events. They provide a structured approach to ensure that all necessary tasks are completed, risks are assessed, and incidents are properly documented. Standardized checklists and forms promote consistency, reduce oversight, and facilitate compliance.

17.1. Venue Checklist

A comprehensive venue checklist is essential for evaluating the safety and suitability of an event location. It should be used during site visits and pre-event inspections to identify potential hazards and ensure all necessary infrastructure and safety measures are in place.

General Site Conditions:

- Accessibility for attendees and emergency services.
- Adequacy of lighting (general, emergency, task-specific).
- Presence of trip hazards, uneven surfaces, or obstructions.
- Waste management facilities and cleanliness.
- Noise levels and potential for disturbance.

Structural Integrity:

- Condition of permanent structures (walls, roofs, floors).
- Certification and stability of temporary structures (stages, tents, scaffolding).
- Load-bearing capacity of stages, floors and elevated platforms.

Utilities and Services:

- Electrical systems: wiring, grounding, circuit protection, emergency power.
- Water supply: potability, pressure, drainage.
- Sanitation: number and cleanliness of toilets, handwashing facilities.
- HVAC systems: ventilation, temperature control.

Fire Safety:

- Fire alarm systems: functionality, testing records.
- Firefighting equipment: type, quantity, placement, inspection dates.
- Emergency exits: clear, unobstructed, illuminated, outward-opening.
- Fire suppression systems (sprinklers, hydrants).

Emergency Preparedness:

- Emergency exits and assembly points clearly marked.
- First aid stations and medical personnel availability.
- Emergency vehicle access routes.
- Communication systems (PA, radio, mobile network).

Security:

- Perimeter security and access control.
- CCTV surveillance.
- Security personnel deployment.

17.2. Medical Checklist

A medical checklist ensures that all necessary medical provisions are in place and ready for operation, from personnel and equipment to communication protocols.

Personnel:

- Number and qualifications of doctors, paramedics, nurses, and first aiders.
- Medical staff identification and communication devices.
- Clear roles and responsibilities for medical team members.

Facilities:

- Location and setup of first aid posts/medical centers.
- Adequacy of space for triage, treatment, and recovery.
- Privacy screens and comfortable seating.

Equipment and Supplies:

- Comprehensive stock of medical supplies (bandages, antiseptics, medications).
- Essential medical equipment (stretchers, oxygen, defibrillators).
- Emergency medical kits for mobile teams.
- Sterile instruments and waste disposal.

Ambulance Services:

- Number and type of ambulances on standby.
- Ambulance access routes and clear pathways.
- Coordination with local hospitals and emergency services.

Documentation:

- Incident reporting forms for medical events.
- Patient consent forms.
- Medical waste disposal records.

17.3. Pre-Event Walkthrough Format

A pre-event walkthrough is a critical final inspection conducted shortly before the event opens to the public. It involves key stakeholders physically inspecting the venue to ensure all safety measures are in place and operational.

Attendees:

- Event Manager/Director
- Safety Officer
- Security Head
- Medical Team Lead
- Venue Manager
- Relevant contractors (e.g., electrical, rigging, catering)
- Representatives from local authorities (e.g., Fire Department, Police) if required

Checklist Items:

- Verify all emergency exits are clear, unlocked, and properly marked.
- Confirm firefighting equipment is accessible and charged.
- Inspect temporary structures for stability and proper installation.
- Check electrical connections and cable management.
- Ensure first aid stations are fully stocked and staffed.
- Walk through all crowd pathways and identify any new obstructions or hazards.
- Test communication systems (PA, radios).
- Review weather forecast and contingency plans.
- Confirm sanitation facilities are clean and operational.
- Verify security checkpoints are ready.

Documentation:

- Use a standardized form to record observations, issues, and corrective actions.
- Assign responsibility and deadlines for addressing any identified deficiencies.
- All attendees should sign off on the walkthrough report.

SECTION G: ANNEXURES & RESOURCES

This section provides a collection of supplementary materials, including a glossary of terms, sample signage, equipment lists, and templates, to support the practical implementation of the health and safety guidelines outlined in this guide.

18. Glossary of HSE Terms

- **HSE:** Health, Safety, and Environment.
- **Risk Assessment:** The process of identifying hazards, analyzing the risks associated with them, and determining appropriate ways to eliminate or control them.
- **Hazard:** A potential source of harm or adverse health effect on a person or person.
- **Risk:** The likelihood that a person may be harmed or suffers adverse health effects if exposed to a hazard.
- **Incident:** An unplanned event that has the potential to cause injury, illness, or property damage.
- **Near Miss:** An incident that did not result in injury, illness, or damage, but had the potential to do so.
- **PPE (Personal Protective Equipment):** Equipment worn to minimize exposure to hazards.
- **WLL (Working Load Limit):** The maximum mass or force which a product is authorized to support in general service.
- **Incident Commander (IC):** The individual responsible for overall management of an incident.
- **On-Scene Coordinator (OSC):** The individual responsible for managing operations at the immediate site of an incident.
- **Toolbox Talk:** A short, informal safety meeting.
- **FSSAI:** Food Safety and Standards Authority of India.

19. List of Equipment & Minimum Specs

- **Fire Extinguishers:** ABC type, 4/6kg capacity, with valid inspection tags.
- **First Aid Kits:** Comprehensive kits including bandages, antiseptic wipes, pain relievers, gloves, and a first aid manual.
- **Generators:** Sized to meet event power demand, with proper grounding, circuit protection, and sound insulation.
- **Cable Ramps:** Heavy-duty, non-slip ramps to cover cables in pedestrian areas.
- **Barricades:** Interlocking steel or water-filled plastic barriers.
- **Two-Way Radios:** With sufficient range and battery life for the event duration.
- **Public Address System:** Capable of delivering clear announcements to all areas of the venue.

20. Indoor v/s Outdoor venue

Event Scale	Indoor Venue	Outdoor Venue
Small	**Venue Examples:** - Banquet halls - Indoor auditoriums - Hotel ballrooms **Focus areas:** - Fire extinguishers at entry/exit - Fire alarm system - Emergency lighting near stage - Load assessment for sound/LED - Proper earthing of electrical panels - No loose wires near walkways - First aid kit + trained staff - Clear exit signage - Simple evacuation map - Crowd density monitoring - CCTV + PA System - Manual crowd control by ushers - Emergency contact list shared - Announcements for crowd behavior - Emergency exit drills (dry run) - Security guards at all access points	**Venue Examples:** - Lawn or garden setups - Small open-air stages - Courtyard events **Focus areas:** - Fire Equipment - fire extinguishers, and buckets & tender - Weatherproofing for cables - Earthing rods for sound/DG - Cable guards at crossing points - Portable extinguisher near DG - Backup lighting setup - First aid kits at control point - Security at perimeter & critical areas - Emergency contact board displayed - Zone barricading - PA system for evacuation - Dry/wet waste bins - Marshals at entry/exit - kitchen - gas bank (away from and source of ignition)
Big	**Venue Examples:** - Exhibition halls - Convention centers - Sports arenas **Focus areas:** - Load-tested DG with auto-cutover - Cable guards and elevated wiring - HVAC isolation with emergency trip - Fire alarm system + PA system - Multiple first aid points - Ambulance on call - Marshals assigned to zones - Clear evacuation signage - CCTV at stage, entries, exits - Temporary barricades for flow - Emergency exit marking on walls - Announcer booth linked to QRT - Walkie system for team response - Verified security check-in points - Full access control (ID/lanyards)	**Venue Examples:** - Grounds/stadiums - Semi-covered outdoor concerts - Public parks **Focus areas:** - DG load mapping - Earthing with salt/charcoal pits - Cable trenching for safety - Emergency DG for egress lighting - Fire extinguishers per 15 m - Ambulance parked in area for quick access - Marshals (traffic & fire) and walkie coordination - Perimeter lights - Stage-to-exit crowd flow mapped - CCTV towers at major nodes - Control room with surveillance - Fuel refilling zones barricaded - Fire post signage - Safety announcements every hour - Zonal access passes issued

21. Resource Recruitment

Phase	Resource	Role
Planning	HSE Manager	Review site layout, fire extinguisher locations; prepare safety documentation & SOPs (fire safety, hot work, work at height, SFX)
	Emergency Response Specialist	Assess site for potential emergency scenarios; plan ingress, egress & emergency routes; prepare medical & rescue strategies
	Electrical Specialist	Review & verify load calculations; DG placement, identify high-risk electrical zones; review cabling plan and temporary power layout
	Crowd Management Specialist	Prepare crowd flow plan, exit, calculations; weather response & communication plans; show pause/stop procedures
Setup	HSE Manager	Oversee installation safety; conduct site safety briefings for crew/vendors; supervise barricading, fire safety equipment placement
	Emergency Response Specialist	Position emergency equipment; brief medics and fire marshals; ensure emergency access is clear Supervise gate setups, access control, backstage entry points
	Electrical Specialist	Monitor electrical installations; ensure cable management and grounding; conduct on-site electrical safety checks
	HSE Manager	Monitor overall safety compliance; respond to

Event day		incidents; report to command centre
	Emergency Response Specialist	Standby for rapid deployment; liaison with medical team, if respond to first-aid scenario. Handle fire, and evacuation situations Monitor crowd flow in real-time; manage ingress/egress and high-density areas
	Electrical Specialist	Remain on standby for electrical troubleshooting; ensure safe operations of power systems
	Crowd Management Specialist – To run Command Centre	Facilitate team coordination, address vendor and crew safety concerns, and make informed decisions through comprehensive event knowledge, situational awareness, and proactive risk management. Liaison with Local law enforcement, medical and fire team Accident/Incident Reporting
De-rig	HSE Manager	Ensure dismantling follows safety protocols; incident reporting; site safety closeout
	Electrical Specialist	Oversee safe shutdown of electrical systems; removal of temporary power lines

22. Rigging Focus Points

Focus Area	Indoor Venue
Structural Load Limits	Must follow venue's approved load charts; clearance from structural engineer required
Ceiling Attachment Points	Use only certified pre-installed rigging points (beam clamps, etc.)
Access & Clearance	Limited space; use MEWPs and fall protection for ceiling access
Truss Suspension	Suspended from roof beams or grids; check beam deflection and sway
Fire & HVAC Obstruction	Do not block sprinklers, HVAC ducts, or emergency exits
Electricity Proximity	Keep clear of internal wiring, MEP services, and lighting conduits
Permitting	Venue-specific approval needed, usually no civic permits
Focus Area	**Outdoor Venue**
Temporary Structures	Use self-supported systems (truss towers, scaffolding, goalposts)
Wind Loading	Structures must be wind-rated; use guy wires, anchors, ballast
Rain & Water Load	Tension fabric tops to prevent water pooling; ensure drainage slopes
Ground Condition	Ensure flat, compacted surface for ballast and baseplates
Load Distribution	Use ground support systems; consider slope, access, crane lifting
Lightning Protection	Install lightning arrestors and earthing on all metal structures
Civic Approvals	May require civic approvals from local PWD/municipal bodies

23. Legal Obligations

Act	Legal Obligation	Consequence of Non-Compliance
Fire Safety		
State Fire Services Act (varies by state)	Obtain **Fire NOC** for temporary or permanent structures where public gathering is expected.	Cancellation of event, criminal charges, penalties under the Act.
Explosives Act, 1884	Mandatory for events involving **pyrotechnics**, fireworks, or flammable materials. License required for storage and handling.	Imprisonment, fine, or both.
Electrical safety		
Electricity Act, 2003	All electrical installations must be installed and operated by licensed personnel & an Electrical Safety certificate must be obtained; must comply with safety provisions of the Act.	Penalty; imprisonment for hazardous installations.
	Ensure safe supply/distribution of electricity in public areas.	Civil/criminal liability for accidents or electrocution.
Construction, Setup & Labor Safety		
Building and Other Construction Workers (BOCW) Act, 1996	Provide safety gear, medical aid, safe working conditions, and welfare facilities for all construction and rigging workers.	Penalties and/or imprisonment for negligence.
Contract Labor (Regulation & Abolition) Act, 1970	Contractors must be registered; organizers must ensure workers are paid and insured.	Liability on both principal employer and contractor.
Factories Act, 1948	Ensure workplace safety and health for temporary staff in production areas.	Fines or prosecution for any injury or unsafe conditions.

Fuel Storage, Refilling and Pyro Use		
Petroleum Act, 1934	Approval from Chief Controller of Explosives (PESO) for storage and handling of **diesel, petrol, or kerosene** on site.	Seizure of fuel, imprisonment, and fine.
Explosives Act, 1884	Compulsory for **storage, transport, and use** of fireworks or pyrotechnics at events.	Cancellation of license, seizure, or imprisonment.
Crowd Management & Emergency Response		
Disaster Management Act, 2005	For events >1,000 people, mandatory to coordinate with district authorities and prepare a **disaster management plan**.	Legal action for negligence or obstruction.
Indian Penal Code (IPC)	In case of stampede, fire, or electrocution—organizers can be charged under **negligence, endangering public safety, or culpable homicide**.	Arrest, criminal prosecution
Police Act / Model Police Act (State-wise)	For crowd control and traffic diversion, approval and coordination with local police are mandatory.	Events can be shut down; arrests possible for non-cooperation.
Environmental Clearance		
Environment (Protection) Act, 1986	This is the umbrella legislation under which all environmental rules (e.g., SWM, e-Waste, Bio-medical, Hazardous Waste, etc.) are notified. Organizers must ensure compliance with all applicable rules notified under this Act.	Central Pollution Control Board (CPCB) or State Boards may issue closure directions, impose fines, or prosecute responsible persons.
Air (Prevention and Control of Pollution) Act, 1981	Applicable to **DG sets, dust generation, burning, and vehicle emissions** at outdoor venues. Prior consent from SPCB needed for emission-causing activities.	Fine or imprisonment

Water (Prevention and Control of Pollution) Act, 1974	No discharge of untreated water, sewage is allowed into public drains or natural water bodies during or after the event. Consent is needed for discharge.	SPCB may seize equipment, shut down water/sewage facilities, or file criminal complaints.
Food safety & Hygiene		
Food Safety and Standards Act, 2006	All vendors or event organizers selling, preparing, or serving food must obtain an FSSAI License or ensure their vendors are licensed. Food must be prepared in hygienic conditions, using potable water, and with pest control.	Food inspectors can seal stalls, impose fines, or file criminal complaints for food poisoning or unhygienic conditions.

24. Necessary License/Permissions

License / Permission	Legal Obligation	Consequences of Non-Compliance
Drone Usage Permission	Permission from DGCA required. Must comply with NPNT and airspace notifications.	Drone confiscation, fine, and FIR for unauthorized aerial activity.
Excise License	Needed to serve or sell alcohol at events. Issued by State Excise Dept.	Event may be raided or shut; penalties under Excise Act.
Public Liability Insurance	Recommended third-party damage, injury, or accident coverage.	Not compulsory, but organizers bear full liability for claims.
Local Municipal License / Trade License	Required to host public events at open grounds, halls, or temporary structures. Must follow zoning, noise & time regulations.	Shut down by local authorities; penalties under Municipal Corporation Act.
GST Registration	Mandatory if turnover exceeds ₹20 lakh (₹10 lakh for NE states). Needed to bill clients, claim ITC.	Fines, GST cancellation, or audits by tax authorities.
Business Registration	Required to operate as a legal entity (Sole Proprietorship, LLP,	If does not legally conduct business. May face penalties

	Pvt Ltd). Needed for contracts, accounts, and invoicing.	under GST, tax laws, or Companies Act.

25. Insurances requirements in India

Mandatory/Highly Recommended		
Insurance Type	**What it Covers**	**Key Considerations**
Public Liability Insurance	Third-party injury or property damage caused during the event.	Often mandatory for large-scale events; required for event permits in many jurisdictions.
Workmen's Compensation Insurance	Compensation to staff/labor in case of injury or death during the event.	Legally required under the Workmen's Compensation Act for any hired workers.
Fire and Special Perils Insurance	Fire, explosions, natural disasters, riots, etc. affecting event setup and infrastructure.	Especially crucial for indoor and large outdoor structures (like tents, stages).
Third-Party Motor Insurance	For vehicles used during the event.	Mandatory under Indian Motor Vehicles Act. Applies to crew vehicles, VIP transport, etc.
Optional/Recommended		
Insurance Type	**What it Covers**	**Suggested For**
Event Cancellation Insurance	Losses due to event cancellation from weather, strikes, venue unavailability, etc.	High-budget weddings, concerts, corporate events with heavy investments.
Property / Equipment Insurance	Damage or theft of sound, lighting, rigging, or rented gear.	Events using expensive technical equipment.
Personal Accident Insurance (for crew/staff)	Medical expenses and compensation for event personnel.	Helpful for temporary event staff or technical teams.

Professional Indemnity Insurance	Protection against claims of negligence/errors.	Event organizers, HSE consultants, decorators, planners.
Terrorism Insurance Extension	Loss or damage due to terrorist acts.	High-profile events, political gatherings, religious events.
Cyber Liability Insurance	Covers data breaches or tech failures in online ticketing, registration, etc.	Events with online bookings, live streaming, or app-based engagement.
Sector Specific/Specialized Insurances		
Sector	**Additional Insurances**	
Sports Events (e.g., Formula E, marathons)	Athlete injury cover, spectator liability, weather insurance	
Weddings / Private Functions	Jewelry insurance, damage to venue property	
Film Shoots / TV Events	Cast insurance, production insurance, shooting location insurance	
Exhibitions / Trade Shows	Exhibitor liability, product liability insurance	

26. References

- The Occupational Safety, Health and Working Conditions Code, 2020. Ministry of Labor and Employment, Government of India.
- National Building Code of India 2016. Bureau of Indian Standards.
- National Disaster Management Authority Guidelines for Managing Crowd at Events. NDMA, Government of India.
- The Event Safety Guide (Purple Guide). Health and Safety Executive, UK.
- HSE Event Safety Guidance. Health and Safety Executive, UK.
- HSE Common work at height tasks at events. Available at: https://www.hse.gov.uk/event-safety/common-work-at-height-tasks.htm
- Safety Guidelines for the Live Entertainment and Events Industries. Live Performance Australia.
- Food Safety and Standards Authority of India (FSSAI) Regulations.
- Various industry sources and safety organizations for best practices in hot work, cutting, grinding, and manual handling.

27. Conclusion

This Health & Safety Quick Response Guide is designed to be a practical and comprehensive resource for event companies in India. By adhering to the guidelines and best practices outlined herein, organizers can significantly enhance the safety and security of their events, ensuring a positive and memorable experience for all participants. Continuous vigilance, proactive planning, and commitment to safety culture are paramount in the dynamic environment of event management. We encourage all stakeholders to utilize this document as a living guide, adapting its principles to specific event contexts and continuously striving for excellence in health and safety.

28. Contact Info

Reach out to make your events safer, secure and accident free.

- Organization: Momentum India Pvt Ltd
- Email: info@momentumindia.in
- Instagram: momentumindia
- LinkedIn: https://www.linkedin.com/company/momentum-pvt-ltd/
- Landline: 0120- 4135557, 4113998