Crowded Places Checklists

Australian Institute for
Disaster Resilience

AUSTRALIAN DISASTER RESILIENCE
HANDBOOK COLLECTION

Crowded Places Checklists

Additional resources to support users of the Safe and Healthy
Crowded Places Handbook.

Australian Government

Department of Home Affairs

ATTRIBUTION

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DISCLAIMER

Contents

01 Developing an event plan

Managing safe and healthy crowded places requires the integration of several responsibilities and activities performed by statutory and private organisations. This resource is designed to assist event planners to consider the range of elements and stakeholders that feed into a comprehensive event plan. It should be tailored to individual needs and context; several aspects will require documentation based on local rules, regulations and approvals.

Event planners should consider the high-level summary questions first; each subsequent page represents a major stage of event planning or delivery, and the associated considerations.

Summary

WHO IS THE PLAN FOR?

- Executive summary
- Historical perspective
- Audience
- Stakeholders, sources of assistance

WHAT IS IT ABOUT?

- Set the context

HOW SHOULD IT BE USED?

- Educational section
- Operational section

Developing the event concept

AIM

Why are you planning the event? Is it viable and marketable?

How will the event be delivered?

SCOPE

What type of event?

When and where?

PARAMETERS

Consider:

- duration
- crowd size
- crowd type
- day/night
- alcohol/drugs
- pyrotechnics
- sound amplification
- traffic/road closures
- site boundaries (if any)
- other.

FINANCIALS

Will there be a charge for attendees?

Consider:

- ticketing
- budget guidelines/ classification
- cost recovery.

CVS

What skills and resources are required in the team?

SPONSORSHIP

Will there be any sponsors?

How will you manage your sponsors?

What will their obligations, rights and responsibilities be?

PLANNING TEAM

Is there any opposition to the venue?

Who coordinates public services/ utilities?

Identify:

- stakeholders
- relevant legislation
- required permits
- building codes
- health regulation.

WORKING COMMITTEES

Engage:

- emergency services i.e. police, fire, ambulance and first aid services
- community
- council
- local traders
- consumer representatives
- event management personnel
- crowd management personnel.

ADMINISTRATION

Consider:

- contracts
- insurance/liability
- timeline
- roles and responsibilities
- contingency planning
- cash management
- asset management.

MEDIA AND PUBLICITY

How will you manage media in the event of a minor or major incident?

Consider:

- direct/delayed
- build and dismantle
- liaison
- accreditation
- advertising and promotion
- public relations
- community consultation
- complaints procedures
- promotional samples.

CONCEPT ACCEPTANCE

Securing relevant approvals

CONTEXT

What relevant legislation exists?

Which authorities and stakeholders do you need to engage? Consider the consultative structure.

OUTCOMES

What plans are the output of your event approval process?

ACCEPTANCE IN PRINCIPLE

Remember that acceptance will be subject to satisfying permit requirements.

What documents do you need to prepare for sign-off?

ADMINISTRATION

What applications do you need to make?

How will you capture relevant acceptance?

Do you require formal documents? What needs to be attached to or form part of the risk assessment?

Consider required:

- agreements
- licences
- permits
- modifications.

Developing event plans

COMMUNICATION PLANNING

Develop a stakeholder management plan.

Who do you need to consult?

Consider:

- external communication
- internal communication
- response phase
- required documentation
- briefings.

INCIDENT AND EMERGENCY MANAGEMENT PLANNING

Do you understand the relevant definitions?

Consider:

- preparation and planning
- response
- recovery and resilience
- debriefing
- exercises
- lessons management.

SITE SAFETY PLANNING

Consider:

- risk management
- work health and safety
- site map
- structures
- communication systems
- environment
- protestors
- information centre
- maintenance staff
- briefings
- specific high-risk areas.

PUBLIC HEALTH PLANNING

Do you understand the relevant definitions?

Identify health risks – how will you monitor them and maintain compliance?

Consider:

- public health management
- context
- health promotion
- public health contingency arrangements
- on-site staffing
- domains
- weather
- food and water
- toilets
- waste management
- animals and vegetation
- swimming and water areas
- infection and personal hygiene
- off-site impacts
- evaluation.

CROWD MANAGEMENT AND SECURITY PLANNING

Consider:

- crowd planning and the site map
- site design
- ingress and egress
- ticketing
- signage and on-site communication
- alcohol, drugs and potential weapons
- crowd dynamics
- security personnel
- recruitment and briefing
- deployment
- police.

FIRST AID, AMBULANCE AND MEDICAL SERVICES PLANNING

What health planning is required?

Carry out early consultation and engagement.

What are the primary coverage concerns?

What on-site services do you need?

RISK MANAGEMENT PLANNING

Do you understand the risk management process and terminology?

Consider:

- managing risk
- crowd context
- risk assessment
- risk analysis
- risk evaluation
- risk treatment
- responsibilities
- monitoring and review.

HOSTILE ACTS

Do you understand the relevant definitions?

Do you understand the nature of the threat?

Consider:

- responsibilities
- guidelines
- Armed Active Offender (AAO) attacks and associated risks.

Delivering the event

Prior to the commencement of the event, there will be a variable time period of preparation and construction of the site facilities.

MERCHANDISING

Who are the vendors?

How will stocktake be managed?

REVIEW

Review the running sheet.

What will be the ongoing review process?

Elements:

- daily (am/pm) briefings
- inter/intra-agency aspects incl. problem resolution and communication
- response
- site inspections
- emergency services
- emergency access/egress routes
- first aid/medical facilities
- crowd management and security
- utilities
- venue
- event coordination/ management/ operations centre
- event log
- emergency access
- staffing.

ENTERTAINMENT

Elements:

- schedules
- back stage area.

MEDIA

Consider:

- facilities
- liaison
- press releases.

MAINTENANCE

Consider:

- site clean-up
- roving repair crews.

ON-SITE TRANSPORT

Consider:

- motorcycles
- bicycles
- golf buggies
- cars/other vehicles.

SECURE COMPOUND

How will you manage contraband issues?

OFF-SITE TRANSPORT COORDINATION

What arrangements will there be for patrons? VIPs?

MONITOR

- health regulation checks
- first aid/medical presentations
- ticketing
- crowd flow
- traffic management
- environmental impact
- alcohol
- drug testing
- hazardous materials
- situation reports
- electronic surveillance
- cash management
- cleaning
- maintenance.

RESPONSE

Be prepared for:

- a hostile act/crime scene
- selling out/ overcrowding
- event disruption/ cancellation
- weather
- incident investigation/ management
- insurance claims
- traffic
- crowd movement.

Consider:

- air traffic control
- services and utilities.

EXITING CROWDS

How will you manage pedestrians? Vehicles?

Consider:

- venue exit
- car park
- separation of vehicles/crowds
- effect on local residents
- amenity (noise, etc.)
- crowd behaviour
- public transport
- people with disabilities.

After the event

DISMANTLING THE SITE

Will the site be returned to its pre-event state? If so, how?

What do you need to do to satisfy permit requirements?

Consider:

- new shifts
- vendors
- EPA inspections.

RETURN OF EQUIPMENT

Do you need to return radios, uniforms or other equipment?

FINANCE/SETTLEMENT

Consider:

- cash control
- financial analysis
- payments
- legal claims.

ASSET PROTECTION

Consider interests related to:

- property
- participants
- officials
- VIPs.

Will there be a post-event inspection?

Consider damage liability.

ACKNOWLEDGEMENTS

Who do you want to thank?

How will you celebrate? Will you organise a post-event party?

DEBRIEFING

Arrange daily debriefing, including:

- incidents requiring investigation/reports
- first aid/medical presentations
- operational debriefing
- security
- traffic
- police and emergency services.

Arrange inter/intra-agency debriefing.

Collate incident reports.

How will you manage records?

Consider:

- organiser counselling
- equipment failure.

What recommendations will you make for future planning?

02 Considerations to avoid critical crowd densities

Critical crowd densities are approached when the floor space per standing person is reduced to about 0.5 square metres.

In a 1981 study, Fruin identified critical crowd densities as a common characteristic of crowd disasters. Fruin proposed a range of approximate minimal mobility requirements that event planners should consider when assessing space, attendee numbers and venue options.

Event planners should consider the following crowd density parameters (Fruin 1981):

Required m² per person	Description
0.5 m²	Minimum floor space per standing person
2.3 m²	Minimum floor space to attain normal walking speed, and to pass and avoid others for pedestrians moving in a stream

As space reduces for pedestrians, the following scenarios are likely to occur:

At m² per person	Scenario
0.93 m²	Walking becomes significantly restricted, and speed noticeably reduced

0.46 m²	The maximum capacity of a corridor or walkway is attained with movement at a shuffling gait and movement possible only as a group. This would be characteristic of a group exiting a stadium or theatre
< 0.46 m²	Individual pedestrian mobility becomes increasingly restricted
approximately 0.28 m²	Involuntary contact and brushing against others occurs. This is a behavioural threshold generally avoided by the public, except in crowded elevators and buses.
< 0.19 m²	Potentially dangerous crowd forces and psychological pressures begin to develop

> "The combined pressure of massed pedestrians and shock-wave effects that run through crowds at critical density levels produce forces which are impossible for individuals, even small groups of individuals, to resist

Fruin 1981

In addition to these parameters, monitoring systems such as closed-circuit television monitoring of crowd movement may be necessary to alert event organisers that action is needed to prevent a major incident.

Reference: Fruin J J, Causes and Prevention of Crowd Disasters, Student Activities Programming, October, 1981

03 Considerations for crowd throughput capacities

Event organisers should consider the following guidelines for crowd throughput capacity at event entry points (Fruin 1981):

Throughput	Considerations
Ticket collectors	• Ticket collectors faced with a constant line can throughput a maximum of one patron per second per portal in a simple pass-through situation. • Allow two seconds per patron if the ticket must be torn and stub handed to patron. • More complicated ticketing procedures (and/or answering the occasional question) will protract time per patron.
Doorways	• A free-swinging door, open portal, or gate can accommodate up to one person per second with a constant queue. • Revolving doors and turnstiles would halve this rate of throughput, or less.
Corridors, walkways, ramps	• Have a maximum pedestrian traffic capacity of approximately 25 persons per minute per 0.3 metre of clear width, in dense crowds.
Stairs	• Have a maximum practical traffic capacity of approximately 16 persons per minute in the upward direction. • Narrow stairs (less than 1.53m) will lower the maximum flow.
Escalators and moving walkways	• A standard 1.2m wide escalator or moving walkway, operating at 36 metres per minute can carry 100 persons per minute under a constant queue.

Reference: Fruin J J, Causes and Prevention of Crowd Disasters, Student Activities Programming, October, 1981

04 Incident and emergency management considerations

The following list has been prepared as a guide to the vast number of incident and emergency management considerations which need to be addressed in the preparation for an event.

INCIDENT ASSESSMENT

Assessment (Decide)

- What is the operational impact of this event?
- What other information do you need to know?
- Who needs to be notified and how? Think primary and secondary stakeholders.
- What needs to be done and when?
- How much time do I have?

Incident assessment

- Has the occurrence been reported and communicated to the right stakeholders?
- Who else should be notified (internal and external)?
- What additional problems is the emergency creating? What and who else could be affected?
- What is the potential best-case outcome and what is the potential worst-case outcome?
- Who else may contact us, how and when?
- What other advice / resources / actions are required?

Response and management

- Decide on a course of action and implement plan (Incident Commander).
- Communicate – disseminate timely and accurate information to all stakeholders and external agencies.
- Act – respond and manage incident until resolution.
- Recovery – commence planning for return to normal operations (business continuity).

DEBRIEF

The main issues to be covered in an event debrief include evaluating:

- adequacy and appropriateness of planning – responsibilities, suitability of documentation, training
- coordination arrangements – involvement of relevant agencies, assigning of tasks to organisations, decision making and priority setting, forward planning
- internal operations and processes – adequacy of facilities, location, size, accessibility
- information management – information systems, records, dissemination of decisions and information
- media and public information – success in distributing key messages, public and media satisfaction with information
- resource management – activation and mobilisation, safety, return of and accounting for resources.

If debrief recommendations are not treated seriously or followed up properly, knowledge of good practices will not be disseminated, and mistakes could be repeated in future events. Reports should be distributed widely, with actions and responsibilities for actions clearly identified and responsibility for action assigned to an individual or agency.

As a result of a debrief, management may:

- amend or revise plans
- change event emergency management structure and procedures
- assess training needs for future events
- change equipment or buy new equipment
- change policy
- analyse problems.

There is sometimes a reluctance to hold a debrief. Reasons for this include:

- pressure of other work – people are sometimes too busy or too pre-occupied to conduct a debrief once the event is over
- concern about criticism – not holding a debrief is sometimes seen as a way of avoiding criticism
- administrative delays – the arrangements for holding a debrief can sometimes just get 'lost in the system', or simply get delayed for so long that the debrief is seen as irrelevant
- a general feeling that 'we all know what to do' – this is a dangerous perception and should be resisted wherever possible. It can prevent a debrief being held at all or can destroy the effectiveness of a debrief should it be held.

05 Sample template: Event organiser / promoter

The following template has been prepared as a guide for event organisers and promoters. It highlights key considerations and requirements when preparing for an event including required documentation and approvals.

Note: This is a guide only and should be adapted as required to suit an event.

EVENT DETAILS

Name of event			
Date of event from		to	
Event time start		finish	
Site			
Site address			
Promoter		Event manager	
Address			
Contact Phone		After hours	
Email			

Site preparation

Start date		Site vacated date	

Brief details of function:

Note: include entertainment and main attractions

Sponsorship details:

Note: include any restrictions

Estimated total attendance

Estimated age composition of audience:

0 - 12 years		% of total audience
12 - 18 years		% of total audience
18 - 25 years		% of total audience
25 - 40 years		% of total audience
40 - 55 years		% of total audience
55 years and above		% of total audience

Admission will be by ☐ pre-sold ticket ☐ free ☐ other: *Specify*

Has this event been conducted previously? ☐ Yes ☐ No

If yes, when? _____ Where? _____

Event Manager _____ Phone _____

Email _____

Is the proposed event to be the same? ☐ Yes ☐ No

If no, detail the changes:

What effects will the changes have?

[   ]

Will alcohol be served/consumed?   [   ] Yes   [   ] No

LEGISLATIVE, REGULATIVE AND LEGAL ISSUES

State legislative/regulative requirements:

[   ]

Local legislative/regulative requirements:

[   ]

Permits required:

For example: liquor, pyrotechnics, fire, laser, food, etc.

Engineering approvals   [   ]

Insurance required   [   ]

Note: The recommended minimum acceptable public liability cover is $5 million

SITE DETAILS

Note: Include details such as: indoor/outdoor, normal use, permanent structure, temporary site, multiple sites, site boundaries, temporary structures, natural features, likely hazards (including weather), historic sites, environmental issues, parking arrangements, access and egress, and facilities, for example, water, toilets, food preparation, waste removal.

KEY STAKEHOLDERS

Name   [   ]   Phone   [   ]

State government dept.(s)			Security personnel	
Local government(s)			Liquor licensing	
Neighbouring councils			Local hotels and businesses	
Police			Accommodation	
Ambulance service			Catering	
First aid service			Transport authority	
Fire service			Neighbours	
Hospital/medical services			Other	
State Emergency Service				

Timeframe necessary for contact with stakeholders

BRIEFING/DEBRIEFING

A full briefing of all the above stakeholders is planned for:

Date   at

A final briefing of stakeholders is planned for   weeks prior to the event.

A debriefing will be conducted with all stakeholders within   days of the event.

EVENT COMMUNICATIONS

Detail the communication systems that will be available/provided/required during the event for:

Event management	
Public address (internal)	
Public address (external)	
Police and emergency services	
Coordination requirements	

EVENT PROMOTION AND MEDIA MANAGEMENT

How might the promotion, ticketing and publicity for the event deliver messages that clarify the focus of the event (for example, family fun, sporting contest, musical entertainment)?

The focus of the event is:

The event promotion and publicity will promote:

Safe drinking practices	☐ Yes	☐ No
Don't drink and drive	☐ Yes	☐ No
Intoxicated and underage persons will not be served alcohol	☐ Yes	☐ No
Bags and eskies may be searched or restricted	☐ Yes	☐ No
Glass containers are not permitted	☐ Yes	☐ No
Water will be freely available	☐ Yes	☐ No
Availability of 'wet' and 'dry' areas	☐ Yes	☐ No
Location of facilities included on ticketing	☐ Yes	☐ No
Health care advice included on ticketing	☐ Yes	☐ No
Smoke-free environment	☐ Yes	☐ No
SunSmart promotion	☐ Yes	☐ No
'Look after your mate'	☐ Yes	☐ No
Anti-drugs focus	☐ Yes	☐ No

SECURITY

Which type of security will be appropriate for the event?

Who will be the appropriate security firm to be contracted?

Event security would commence on [   ] and conclude on [   ]

What will be the role of security?

What counter terrorism or civil disturbance considerations are necessary?

Has a terrorism threat assessment been undertaken? *Consult with police*   [ ] Yes   [ ] No

Have the police been contacted in relation to security?   [ ] Yes   [ ] No

If yes, what will be required of the police?

When would a briefing/debriefing be held involving police, security, bar Staff and licensing personnel?

Briefing (before event) [   ]   Debriefing (after event) [   ]

Will a briefing of all staff and officials be provided regarding helping patrons with amenities and services?   [ ] Yes   [ ] No

SIGNAGE

What signage will need to be developed and obtained, including that required under the provisions of the *Liquor Act*?

Will there be signage in languages other than English?   [ ] Yes   [ ] No

TRANSPORT

Does a transport strategy need to be developed?   ☐ Yes   ☐ No

List representatives of departments, councils and/or agencies that are likely to be involved in developing this strategy.

Name		Organisation	
Name		Organisation	
Name		Organisation	
Name		Organisation	

ACCESS AND EGRESS FOR PATRONS

What provisions can be made for patrons to access, move around and leave the event venue without excessive queuing, or crushes?

For example: gate control, pathways, free space

Will patrons be able to access toilets, food and bar areas and entertainment sites without difficulty?   ☐ Yes   ☐ No

In an emergency, will patrons be able to leave the venue or move to other areas within the venue in reasonable safety?   ☐ Yes   ☐ No

Further comments:

ACCESS FOR PERSONS WITH A DISABILITY

What provisions need to be made for persons with a disability to access and move around the event venue?

Will persons with a disability be able to access toilets, food and bar areas, and entertainment sites without difficulty?　　　　　　　　Yes　　　　No

In an emergency, will persons with a disability be able to leave the venue without significantly impeding the movement of other patrons?　　　　Yes　　　　No

Further comments:

NOISE

What provisions can be made to minimise the level of noise at and around the event?

Provision 1		Provision 2	
Provision 3		Provision 4	
Provision 5			

AIR QUALITY

What provisions need to be or can be made to ensure acceptable air quality for the event site?

Provision 1		Provision 2	
Provision 3		Provision 4	
Provision 5			

MANAGEMENT OF ALCOHOL

Are there any standard conditions of the licensing permit?　　　　Yes　　　　No

If yes, what are they?

How will event personnel, specifically bar and security staff, be trained and informed of the Responsible Service of Alcohol (RSA) legislation and made aware of the responsibilities and penalties?

What types of alcohol (e.g. light/mid/heavy beer, wine and spirits) and other drinks will be available at the event?

In what type of containers will alcohol and other drinks be available? For example, cans or glass or plastic containers?

What provisions will be made for the collection of drink containers during and after the event?

What will be the pricing structure for high-alcohol, low-alcohol and non-alcoholic drinks?

Is it anticipated that the pricing structure will discourage patrons from becoming unduly intoxicated?	Yes	No
Can the event publicity, ticketing and signage for the event inform patrons of the restrictions on alcohol, including that alcohol will not be served to minors and intoxicated people?	Yes	No
Can some, if not all, bars be closed prior to the end of the entertainment?	Yes	No

If the event **is BYO**, what provisions can be made to prevent glass-related injuries, underage drinking and excessive intoxication?

If the event **is not BYO**, what provisions can be made to prevent alcohol being brought into the venue?

If there are to be designated drinking areas, will they be adequate in size and number and supported by toilet facilities to cope with the expected size of the crowd?	Yes	No
Will there be dry areas for families, entertainment and food?	Yes	No

Will the event provide the following facilities to encourage responsible drinking by patrons?

Free drinking water	Yes	No
Cheap non-alcoholic drinks	Yes	No
Range of quality food	Yes	No
Shade or cover	Yes	No
Safe drinking information	Yes	No
Quality entertainment	Yes	No
'Wet' and 'dry' areas	Yes	No

OTHER DRUG USE

Is it possible that drugs including marijuana and amphetamines may be available and used at this event?	Yes	No

List any drugs and related information known from previous experience:

What provisions can be made to address this drug use?

MEDICAL/FIRST AID

What level of medical/first aid service is considered necessary and for what duration?

Who can provide this service?

What will be the cost of the service?

If it is not a local provider, what arrangements have been made to liaise with the local ambulance service?

Have the ambulance service been informed (even if they are not required to attend)?

What facilities will the medical service require (including helipad)?

How can these be provided?

ANIMALS

If the event involves animals, what arrangements will be necessary for their management, care and wellbeing?

If the event may affect animals, what arrangements will be necessary for their management, care and wellbeing?

06 Sample template: Authorising body

The following template has been prepared as a guide for authorising bodies when assessing event applications.

Note: This is a guide only and should be adapted as required to suit an event based on each authorising body's specific requirements.

EVENT DETAILS

Name of event			
Requested day(s) of event	from	to	
Requested event time	start	finish	

Requested site	
Site address	

Promoter		Event manager	
Address			
Contact	Phone	After hours	
	Email		

Requested site preparation start		Suggested site vacate time

Brief details of function:

Note: include entertainment and main attractions

LEGAL REQUIREMENTS

Does the application:

Comply with state and local legislation/regulations? ☐ Yes ☐ No

Provide for adequate general public liability insurance? ☐ Yes ☐ No

Provide for adequate liability insurance for a major incident? ☐ Yes ☐ No

Need to post a bond to cover contingencies? ☐ Yes ☐ No

LICENCES/PERMITS

Does the application require:

Liquor licensing? ☐ Yes ☐ No

Road closures/restrictions? ☐ Yes ☐ No

Food outlet licences? ☐ Yes ☐ No

Fire permits? ☐ Yes ☐ No

Planning or building permits? ☐ Yes ☐ No

Other ☐ Yes ☐ No

Specify

SITE

Is the site appropriate for the type of event? ☐ Yes ☐ No

Are there multiple sites involved in the event? *Specify* ☐ Yes ☐ No

Indoor/outdoor? *Specify* ☐ Indoor ☐ Outdoor

Permanent structure or temporary site? *Specify* ☐ Permanent ☐ Temporary

Normally used for this type of event? ☐ Yes ☐ No

Normally used for large crowds? ☐ Yes ☐ No

Topography? *Specify.* ☐ Yes ☐ No

Any effect on neighbouring councils? ☐ Yes ☐ No

Suitability for camping facilities? ☐ Yes ☐ No

List any environmental issues:

For example: green, flora, fauna, historic site

List any natural features likely to be hazardous:

For example: river, dam, long grass, forest

Anticipated crowd number [ ]

Is site large enough for expected crowd?   ☐ Yes   ☐ No

Tickets being pre-sold? [ ] % of attendance   ☐ Yes   ☐ No

Tickets sold at the gate? [ ] % of attendance   ☐ Yes   ☐ No

Type of crowd expected:

For example: young, old, family, agitated

Is water available at site?   ☐ Yes   ☐ No

Quality of water [ ]   Quantity of water [ ]

Accessibility for people with disabilities/impaired vision?   ☐ Yes   ☐ No

Probability of sabotage of water? *Specify*   ☐ Yes   ☐ No

Fixed sewerage?   ☐ Yes   ☐ No

Adequate sewerage capacity?   ☐ Yes   ☐ No

Accessibility for people with disabilities/impaired vision? *Specify*   ☐ Yes   ☐ No

Further comments:

Other utility supplies:

For example: power, gas and mobile phones

Will they be adequate?	☐ Yes	☐ No
Will emergency water supplies be required?	☐ Yes	☐ No
Will emergency water supplies be provided?	☐ Yes	☐ No
Will emergency water supplies be available?	☐ Yes	☐ No

Further comments

Will emergency electricity supplies be required?	☐ Yes	☐ No
Will emergency electricity supplies be provided?	☐ Yes	☐ No
Will emergency electricity supplies be available?	☐ Yes	☐ No

Further comments

Will emergency gas supplies be required?	☐ Yes	☐ No
Will emergency gas supplies be provided?	☐ Yes	☐ No
Will emergency gas supplies be available?	☐ Yes	☐ No

Further comments

POLICE AND EMERGENCY SERVICES/KEY STAKEHOLDERS

Has applicant consulted and gained support/approval from: *If yes, list by abbreviation*

Police	☐ Yes	☐ No	
Ambulance service	☐ Yes	☐ No	
First aid service	☐ Yes	☐ No	
Fire service	☐ Yes	☐ No	
Medical/hospital services	☐ Yes	☐ No	
State Emergency Service	☐ Yes	☐ No	
Transport authorities	☐ Yes	☐ No	
Liquor licensing authority	☐ Yes	☐ No	
Neighbouring councils	☐ Yes	☐ No	

| Neighbours/community association | ☐ Yes | ☐ No | |
| Other (*Specify*) | ☐ Yes | ☐ No | |

| Have emergency management plans been prepared? | ☐ Yes | ☐ No |
| Have contingency plans been prepared? | ☐ Yes | ☐ No |

If no, are they necessary?

If they are necessary, who will coordinate the preparation?

| Have they been distributed to relevant stakeholders? | ☐ Yes | ☐ No |

SECURITY

| Has a terrorism and civil disturbance threat assessment been undertaken? | ☐ Yes | ☐ No |
| Is special security being provided? | ☐ Yes | ☐ No |

If yes, who is providing it?

| If no, is it considered necessary? | ☐ Yes | ☐ No |
| Is the provider licensed to provide the service? | ☐ Yes | ☐ No |

EVENT SAFETY ISSUES

Natural   Weather

For example: rain, wind, heat, cold

Terrain

For example: cliffs, creeks, reclaimed land

Location

For example: remoteness, access, health and community services

Environmental

For example: animals, forests, pollens, pests, flora, fauna, historical

Technological

For example: power lines, noise, lighting, access and egress

Human

For example: alcohol, hysteria, nuisance, neighbours, fire, lost children and lost property facilities

Event

For example: pyrotechnics, lasers

ACCESS AND EGRESS, PUBLIC TRANSPORT AND PARKING

Is road access and egress suitable?	Yes	No
Is road access and egress suitable in all weather?	Yes	No
Is road access and egress adequate?	Yes	No
Are road closures required?	Yes	No
Will special traffic control be required?	Yes	No
Is public transport liaison required?	Yes	No
Are special public transport services required?	Yes	No
Has consideration been given to access/egress for people with physical disabilities and impaired vision?	Yes	No

Is sufficient suitable off-road parking available?	☐ Yes	☐ No
Will police and emergency services have continual access and egress?	☐ Yes	☐ No
In the event of a major emergency, does access and egress allow for police and emergency services?	☐ Yes	☐ No

FOOD

Refer to: Section 09: Catering/food vendor checklist (pp. 41-3)

                Section 10: Sample template: Food vendor information (pp. 44-6)

TOILETS

What is the anticipated crowd mix of male and female attendees?

Male [   ]   Female [   ]

What are the fixed toilet facility numbers?

Male	WC	[ ]	hand basin	[ ]	showers	[ ]	urinals	[ ]
Female	WC	[ ]	hand basin	[ ]	showers	[ ]		
Disabled	WC	[ ]	hand basin	[ ]	showers	[ ]		

Will toilets be accessible for people with disabilities or vision impairment?	☐ Yes	☐ No
Will separate toilet facilities be available for food vendors?	☐ Yes	☐ No
Will separate toilet facilities be available for medical attendants?	☐ Yes	☐ No
Are there sufficient toilet facilities?	☐ Yes	☐ No

If no, what are the additional requirements?

Male	WC	[ ]	hand basin	[ ]	showers	[ ]	urinals	[ ]
Female	WC	[ ]	hand basin	[ ]	showers	[ ]		
Disabled	WC	[ ]	hand basin	[ ]	showers	[ ]		

Will the existing sewerage system cope with the extra demand?	☐ Yes	☐ No

If no, what additional requirements will there be?

Where additional requirements are unsewered, can service trucks gain easy access? ☐ Yes   ☐ No

What servicing and cleaning of toilets will be provided during the event?

What, if any, plumbing maintenance will be available on-site?

GARBAGE WASTE REMOVAL

Number of rubbish bins available:

Public use ☐   Food outlet use ☐   Medical facility use ☐

Type of rubbish bins:

For example: sharps, wet, dry, hazardous

Program for emptying rubbish bins:

Program for removal of site rubbish:

Program for recycling:

RESTORATION AFTER EVENT

Arrangements for site clean-up:

Arrangements for clean-up of surrounds:

Note: Include access and egress roads

Arrangements for refund of bond money (if applicable):

CAMPING AREAS

What is the proximity to property boundaries?

North ____ metres   South ____ metres   East ____ metres   West ____ metres

What is the requested population density of the camp? ____ persons/hectare

What is the requested maximum site population for each site? ____ persons/site

What separation is planned between sites? ____ metres between rows (minimum)

How will vehicles be separated from pedestrians?

How will vehicles be managed in camping areas?

What emergency access and egress will be available?

What toilet and ablution facilities will be available within campsite?

Male	WC		hand basin		showers		urinals
Female	WC		hand basin		showers		
Disabled	WC		hand basin		showers		

What water supply is available?

Can you estimate whether this is sufficient?   Yes   No

Further comments:

What rubbish bins are available?

01

02

03

Can you estimate whether this is sufficient?   Yes   No

What waste disposal arrangements are being made?

Note: include wet, dry, sharps, sewage

SITE PLAN

Campsite plan available (including access and egress for emergency vehicles; access and egress for service vehicles; parking areas; camping areas; numbered camp sites; toilet and ablution facilities; water points; rubbish bins; food venues; first aid/medical facilities; any other related facilities)

☐ Yes   ☐ No

PRE-EVENT SITE INSPECTION

Has the event organising committee undertaken a pre-event site inspection?

☐ Yes   ☐ No

SUPPORTING DOCUMENTATION

Attach any supporting documentation

07 Considerations for first aid, health and medical services

There are many variables that should be considered in assessing medical risks associated with crowded places and the need for health and medical services. Many tools exist to assist managers of crowded places, as well as first aid, ambulance and health and medical providers to consider adequate first aid, health and medical resourcing for crowded places.

The following are just some of the key considerations for venue owners and managers and event organisers and planners when assessing first aid, health and medical services for an event or crowded place.

Event and venue

Planners should carefully consider features of the crowded place or event that may affect the requirement for medical, health and first aid care. These include the type of event and venue, crowd size, weather, crowd mobility, alcohol consumption and psychosocial behaviour.

Consider:

- What is the duration of the event?
- What is the venue and layout?
  - Consider specific risks associated with the venue or the type of activity.
- What is the crowd demographics including number and type of attendees?
  - Age
  - Gender
  - Cultural diversity
  - Other
- Are there vulnerable people attending the event?
  - Aged
  - Children
  - People with disabilities and special needs
  - People where risk of harm is associated with the location of the venue or event
  - Other

- Are there any special requirements?
  - Attendance by heads of state and VIPs
  - Requirements mandated by governing bodies e.g. drug testing at sports events
- What is the predicted possible crowd behaviour?
  - What is the likelihood of:
    - alcohol/drug problems
    - violence
    - political protests
    - rival crowd groupings
    - other.
- Is the crowd static or will there be fluid crowd flow?
  - Fluid crowd flow may produce more minor injury problems.
- Are there food and beverages available?
  - Access to water is particularly important.
- Is the place or event 'bounded' or does it have controlled access?
  - There is likely to be a higher presentation for medical assistance within a bounded event and less leakage to outside services.
- What proactive prevention and/or mitigation efforts will be used to reduce minor injury or illness, for example, availability of water and shelter?
- What potential disasters or catastrophic emergencies could impact the event?
  - At crowded places, emergency and first aid services are required to manage a relatively predictable patient load. However, health care services should also be prepared for an unexpected catastrophic event; for example, a crowd crush; intentional harm caused by a vehicle-borne attack or IED detonation amongst crowd; or mass overdoses due to illicit substances being readily available at the event.
-

- What biomedical, psychosocial and environmental factors might influence the number and type of patients?
    - Consider the risk of injury to participants and attendees at sporting events compared with gaming conventions.
- Is there a history of similar events and data from previous/repeat events, such as annual festivals, for information on risks and types of injury sustained?
    - New events may present challenges with the ability to predict patient loads.
    - Wide consultation with peer event organisers is suggested.
- What are the likely weather conditions and long and medium range weather forecasts?
    - Hypothermia
    - Heat stroke

Health and medical – general considerations

While the responsibility for mitigation of negative health outcomes relating to crowded places and events rests with the event and venue owners, planners and/or organisers, health and medical services are well-positioned to offer advice about what might be reasonably expected by way of clinical presentations and can advise which resources are best deployed to mitigate the identified risks.

Event planners should seek advice from a range of first aid, ambulance and health and medical providers to fully understand what services are offered, and what is deliverable to the event and at what cost. Copies of the event plan and other relevant event documents should be provided to:

- first aid providers to enable them to both understand the event and to plan for a resource mix to mitigate the risks
- ambulance services to facilitate event familiarity and planning.

Note: Placement of first aid and/or ambulance services at crowded places and events can come at significant cost. Accepting the risk and not engaging appropriate levels of medical cover at venues and events can result in inquiries, commissions and coronial investigations and possible prosecutions in the event of serious injury or death.

For consideration:

- What medical model/mix of on-site pre-hospital emergency care and first aid care may be required given the nature of the event?
- Will the model provided be adequate and capable of reducing injury and suffering?
- What number of personnel will be required on-site:
    - Number of first aiders to manage low acuity presentations?

- Number of and mix of ambulance resources to manage pre-hospital emergency presentations?
- Number of medical practitioners required to provide primary care?
- Who will provide health personnel?
    - How will they be funded?
- Are the health service providers from the local area?
    - If not, how will their services be integrated with local services?
- Are the selected personnel appropriately skilled for the event?
- How will medical supplies be supplied and replenished?
    - Who will do this?
- How will pharmaceuticals be stored securely on-site to meet legislated requirements?
- Will event health services be provided to a crowd that may gather outside of the event or in the near vicinity such as for concerts or fireworks?
- What benchmarks for emergency health care response will be expected?
    - What will be the expected response time in minutes for Basic Life Support (BLS), Advanced Life Support (ALS) and evacuation?
- Will there be a need for any special credentials to allow medical personnel and/or vehicles access to all parts of the venue, especially to any restricted areas?
- Will health staff operate in a facility to which injured people must make their way, or will clearly identified teams patrol areas?
- Will there be appropriate vehicles to transport people to the health facility?
    - What legislation, if any, governs such transport?
- Will vehicles be appropriate for the terrain?
    - Four-wheel-drive vehicles may be required for off-road areas, and specialised stretcher-equipped compact vehicles for high-density spectator areas.
- Where an ambulance is not required, will a 'chauffeur system' be provided to transport people from the health facility to their own transport?
- How will health staff be notified of, or respond to, spectators requiring assistance in widespread spectator areas?
- What means of communication will be available for attending health personnel to communicate with off-site health staff, event organisers, security and other support staff?
- Is there an Emergency Operation Centre at the event?
- Will mobility of health staff be restricted by crowd numbers and site layout?
- Where will health facilities be located?

- – Will they be easily identifiable, clearly marked and have appropriate access for ambulance vehicles to respond?
- What data will be collected to facilitate comparison and improvement of the service for future events?

On-site medical services

Events should have suitably provisioned medical facilities such as a first aid room, tent or vehicles available.

For consideration:

- Are medical services clearly signposted from all directions using the international standard?
  - – Tear drop banners are not acceptable as they often contain branding that is not easily recognised by international visitors.
- Are medical services clearly marked on maps of the event site?
- Access to power for medical appliances includes:
  - – Lighting
  - – Heat
  - – Cooling
  - – Refrigeration
  - – Other

  Note: This should, if possible, include a backup power system.
- Is there access to water and suitable drainage?
- Does this event require specialised treatment facilities?
  - – If so, what specialised treatment facilities are required?
- Are all facilities and vehicles clearly visible and easily accessible?
- Are washroom and dedicated toileting facilities provided, including the provision of an isolation toilet for communicable medical conditions e.g. gastroenteritis?
  - – A separate disabled access toilet should be provided in addition to an isolation toilet.
  - – Handwashing and toilet facilities may be co-located with the first aid post.
- Are medical services locations climate controlled?
  - – Heat
  - – Cold
  - – Dust
  - – Noise
- Provision of basic amenities includes:
  - – Power
  - – Lighting
  - – Heating
  - – Cooling
  - – Other

- Is sheltering to protect from environmental nuisances and to enable private clinical examination/treatment provided?
  - – Privacy in clinical areas should be ensured.
- Is there a secure and comfortable rest area?
- Are clear access roads for emergency vehicles available?
- Is appropriate patient transport to the medical centre from outlying first aid posts or other locations available?
- Do security staff or police assistance have ready access to medical services and locations?
  - – The position should be known by security and other event personnel.
- Are all medical services (mobile and fixed) adequately resourced with supplies and staff for the duration of the event and for attendee arrival and departure periods?
- Are there facilities provided for injured or sick patients to be treated on a stretcher or bed facility?
- What means of communication is available with the primary medical and first aid control point, venue control, and with mobile first aid teams at the venue?
- What provisions and facilities are in place for the disposal of clinical waste including sharps?

On-site medical equipment

For consideration:

- What is the proportion of patients for basic and advanced medical treatment?
- What are the requirements for mobile versus fixed first aid points?
- Are there vulnerable populations attending the event?
  - – What plans are in place to provide care for these groups?
- What are the arrangements to resupply first aid posts as required?
- Is there surge capacity in the event of multiple patients?
  - – For example, in cases of heat or cold-related illness, overdose, trauma, or criminal or terrorist activity.
- Is storage available for medications?
- Will there all equipment and medical supplies be securely located?

Ambulances

The relevant statutory ambulance service should be consulted to determine the ambulance requirements for the event or place. Ambulance agencies will determine the most appropriate resourcing mix required and during which period(s) of activity. This may include command and/or clinical resources.

Ambulance services are tasked for specific roles but may be required to respond within an event to patients experiencing life-threatening medical or trauma-related issues, outside of the initial tasking.

Ambulance agencies should be supplied with event plans, which include emergency event contact numbers that will be used for the event manager and the on-site first aid service. Frequently, calls for assistance from the public are made by mobile phone direct to Triple Zero (000); the ambulance service may know about an emergency before services at the event are aware.

ACCESS FOR EMERGENCY VEHICLES

Transport management is essentially the domain of police, venue security, and transport and local government authorities. Dedicated perimeter roads may be required for emergency services. To provide access and a buffer zone, adjacent streets around a venue may need to be closed, and parking banned, with access restricted to emergency service and resident vehicles. Emergency services need to be informed of any traffic alterations from the norm, such as blocking off public streets. Roadways and access routes should be clearly distinguished, signposted and kept clear.

Planning should consider the needs of emergency services vehicles and personnel for access to, and egress from, the venue, as well as movement around and within all areas of the site, including performance, spectator, parking and camping areas. Planners should seek the professional advice of health and medical services for guidance.

For consideration:

- Is there adequate access to and within the venue?
- Is there a road network, or would emergency responders have to walk significant distances to respond to an incident or emergency?
- Is the venue serviced by a road which could be closed to the public and used only for access and egress of police and emergency service vehicles?
- Are access roads all-weather suitable?
- Is there sufficient room for dedicated parking marshalling, manoeuvring, repositioning or redeployment of emergency vehicles?
- Would departing vehicles be restricted or prevented from leaving by congestion due to other arriving vehicles?
- Are adequate access and marshalling areas available for large numbers of emergency vehicles should a major incident occur?
- Is there a suitable site available for aeromedical services or evacuation?
  - What are the associated regulations regarding such operation?
  - Have landing zones been identified, cleared and made accessible?

Note: Consultation with ambulance and aeromedical services will be required for this specialised service

Requirements may include no power lines, adequate clearing, minimal dust/rocks, no loose objects to be thrown around and road access to transport patients.

- In the event of a mass casualty situation, does the venue layout provide space for an on-site treatment area to permit triage and stabilisation of patients prior to removal?
  - That area should eliminate the need to carry casualties and equipment over long distances.
- Are evacuation points established and clearly marked?
  - Do health service providers have a plan to service evacuation points in the event of a major emergency?
- Is there a common reference map or grid system in use?
  - Has this been provided to all event personnel and participating organisations?
- Are there special challenges for access and rescue?
  - For example, in modern stadiums, access and extrication from fixed seating areas may require special equipment.
- How will patients be transported on-site?
- Will the event itself pose a barrier, for example, 'extended' events such as community runs or a parade?
  - Conversely, will the event land-lock community members due to the event, preventing access by responding agencies?

MULTI-AGENCY HEALTH SERVICES

For events where several agencies will be providing medical or first aid care, the lead organisation should be identified (this is usually the ambulance when present, unless otherwise agreed) and manage a medical sub-committee.

For consideration:

- What may impact on the number and type of patients who will be seen and other aspects of the event that may influence service provision?
- What are the roles of each organisation involved in the provision of care?
- What are the required levels of care?
- What facilities and equipment required?
  - The responsibility for assembling resources to support the event will need to be specified in the operational plan
  - Many problems that arise during an event centre around resource management issues and relate to coordinating what is available or to a lack of resources.
-

- What rules for command and control of the health response will be implemented?
  - The responsibility for overall control of the service and for the command of each organisational element involved will need to be clearly specified in an event operational plan.
  - Decisions on these issues should not be left until an event has begun.
- Have the local health services, police and emergency services been engaged?
  - Is there an ongoing liaison in place?
- Have communications, including protocol, and links to other services been established?
- Have other emergency services been engaged to ensure access and egress routes for patient evacuation?
- What staff accreditation is required and strategies for health service access to all areas of the event?
- What liability insurance and indemnities are required and appropriate?
- Are there strategies to manage security of medical stations and safety of staff?

08 Public health considerations

There are many variables that should be considered in assessing public health risks associated with crowded places. The following are just some of the key considerations for venue owners and managers, and event organisers and planners, when assessing public health requirements and impacts for an event or crowded place.

ENVIRONMENTAL HAZARDS

Possible environmental hazards include:

- rodents
- insects, such as ants, caterpillars, wasps, bees and mosquitoes
- snakes
- spiders
- dogs
- noxious weeds
- marshes
- water courses, depth of water, water currents, water temperature, water clarity
- pollution, dust, noise
- weather, extremes of temperature, wind
- water quality (bacteriological), blue-green algae
- darkness
- chemicals
- neighbouring land use
- animal control.

PHYSICAL AND TECHNOLOGICAL HAZARDS

Possible physical or technological hazards include:

- quarries, pits
- scrap piles
- swamps
- cliffs and steep inclines
- old underground tanks
- ex-council tips
- alcohol, drugs, potential weapons, broken glass

- use of lasers
- UV radiation
- buildings – unstable, old, leaking, ventilation, asbestos
- topography
- road quality, access and egress.

ESSENTIAL SERVICES: LOCATIONS, BACKUP AND MAINTENANCE

Consider:

- potable water
- wastewater disposal
- toilet facilities
- collection, storage and disposal of garbage, particularly scrap foodstuffs.

CAMPING

If overnight camping is permitted, proposed camping areas should be surveyed to ascertain their safety with attention to the following:

- fire risks
- low-lying areas/flooding
- areas adjacent to waterways
- areas near power lines
- trees that may drop branches
- potential for contamination of nearby waterways
- food safety
- separation of camping areas and parking/vehicles
- lighting
- portable toilet pump-out
- garbage removal
- water tankers.

VEHICLE ACCESS AND EGRESS ROUTES

Consider:

- public transport
- car parking (issues may arise with parking at geographically dispersed events)

- essential service and emergency vehicles
- ambulance services
- other.

PEDESTRIAN ACCESS

- Preferably, separate pedestrian access from vehicle access.
- Allow for the needs of people with disabilities and different accessibility requirements.

FOOD HANDLING

Food Safety Standards Australia provides comprehensive information on food handling (http://www.foodstandards.gov.au/foodsafety/standards/Pages/Food-Safety-Standards-(Chapter-3).aspx).

Information provided addresses the following:

- cross-contamination
- handwashing
- thawing, cooking, heating and cooling
- cleaning and sanitising
- training
- personal hygiene
- infectious diseases
- communications
- supervision
- dress
- separate toilet facilities
- monitoring for pest or rodent infestation.
- complaints register.

Food proprietors should ensure a non-smoking policy is implemented in the workplace.

FOOD STORAGE

Food Safety Standards Australia provides comprehensive information on food storage (http://www.foodstandards.gov.au/foodsafety/standards/Pages/Food-Safety-Standards-(Chapter-3).aspx).

Information provided addresses the following:

- appropriate food storage
- storage facilities
- chemical storage
- temperature control
- cross-contamination
- dry goods
- food protection.

TOILETS

To determine the number of toilets to be provided for events or crowded places, the following criteria should be considered:

- duration of the event
- type of crowd
- whether or not the event pre-ticketed, and numbers known or un-ticketed
- staggering finishing times where there are multiple activities
- weather

Table 1   Planning Toilet facilities for events

Patron		Male			Female	
Facility		WC	Urinal	Hand basin	WC	Hand basin
No. of Patrons **Where alcohol is NOT available**	<500	1	2	2	6	2
	<1000	2	4	4	9	4
	<2000	4	8	6	12	6
	<3000	6	15	10	18	10
	<5000	8	25	17	30	17
No. of Patrons **Where alcohol is available**	<500	3	8	2	13	2
	<1000	5	10	4	16	4
	<2000	9	15	7	18	7
	<3000	10	20	14	22	14
	<5000	12	30	20	40	20

- consumption of alcohol
- local and state regulations.

There is no uniform standard for calculating the number of toilets required for an event or crowded place. Where local laws or regulations exist, these must be applied.

Better management of events can be achieved by providing adequate facilities. A 50:50 male:female ratio should be applied unless otherwise advised. Tables 1 and 2 provide an approximate guide.

Table 2   Reduction of facilities based on duration of event

Duration of event	Quantity required
>8hrs	100%
6-7hrs	80%
4-6hrs	75%
<4hrs	70%

The figures in Table 1 may be reduced for shorter duration events as indicated in Table 2.

Other considerations relate to whether or not the event or crowded place is situated indoors or outdoors.

- Hiring temporary, portable toilets is a simple way to provide additional toilets.
- Providing additional toilets may be more difficult and thus unsuitable for indoor settings.
- Convert some men's toilets to women's toilets for events where a predominantly female audience is anticipated or vice versa.
- Provided additional, unisex toilets to be used by either males or females to overcome long line-ups, particularly at female toilets.

Owners and operators should ensure adequate cleaning supplies are available for cleaning staff. Maintenance and cleaning schedules for toilets and handbasins should ensure:

- an adequate supply of toilet paper and soap
- cleaning of toilets to a suitable timetable
- provision for disposal and removal of feminine hygiene products
- availability of a plumber or appropriate maintenance person to repair or remove blockages.

TATTOOING AND BODY PIERCING

Mobile tattoo, body piercing and branding operators have appeared at certain public gatherings. Where this is likely to occur, checks should be made as to the need for proper licensing or registration of such service providers and their compliance with any health legislation and regulations.

Due to the potential of cross-infection, particularly with blood-borne diseases, any such operations should be inspected to ensure (as a minimum):

- disposable, single-use items are utilised
- proper sterilisation equipment and techniques are employed
- clinical sharps containers are utilised for used needle disposal, and these containers are located safely away from children.

No skin penetration procedures should be allowed to occur if the minimum infection control procedures are not followed.

09 Catering/food vendor checklist

The establishment of a temporary catering facility can mean working in conditions that are less than ideal. The following checklist provides guidance on minimum requirements for this type of event catering.

Note: This is a guide only and should be adapted as required to suit an event.

SETTING UP

Food service operation is licensed or registered in accordance with state requirements.	☐ Yes	☐ No
The appropriate permit has been obtained from the local government where the event is to be held.	☐ Yes	☐ No
The area for which the permit applies is clear (caterers know where to set up).	☐ Yes	☐ No

STAFF TRAINING

Staff are trained in food handling and food safety.	☐ Yes	☐ No
Staff have been instructed on machinery operation, food preparation routines and occupational health and safety matters.	☐ Yes	☐ No
There are clear guidelines for staff about what to do if problems occur.	☐ Yes	☐ No

For example: Who to contact and appropriate contact numbers

FOOD HANDLING

Handwashing is carried out thoroughly and regularly by all food handlers, particularly:

before commencing work and after every break	☐ Yes	☐ No
after visiting the toilet	☐ Yes	☐ No
after handling raw food	☐ Yes	☐ No
after using a handkerchief or tissue or touching nose, hair or mouth	☐ Yes	☐ No
after handling rubbish	☐ Yes	☐ No
after smoking.	☐ Yes	☐ No

Correct food temperatures can be, and are being, maintained.	☐ Yes	☐ No
Food is cooled rapidly under refrigeration in trays no more than 100 mm deep.	☐ Yes	☐ No
Tongs are provided and used where possible for food handling.	☐ Yes	☐ No
Gloves, if used, are changed regularly.	☐ Yes	☐ No
Food is thoroughly cooked.	☐ Yes	☐ No
Food is protected from dust, insect pests and other contaminating matter.	☐ Yes	☐ No
Staff wear suitable, clean clothing and have long hair tied back.	☐ Yes	☐ No
Food displayed on counters is protected from contamination from the public by use of covers or guards.	☐ Yes	☐ No
Condiment area is checked and cleaned regularly.	☐ Yes	☐ No

FOOD STORAGE

Sufficient refrigeration space is provided to cope with peak demand.	☐ Yes	☐ No
Refrigerated storage temperatures are able to be maintained during peak loads.	☐ Yes	☐ No
Raw foods are stored below cooked or ready-to-eat foods.	☐ Yes	☐ No
Food containers are covered.	☐ Yes	☐ No
Frozen food is thawed on the bottom shelf in the refrigerator or under cold running water.	☐ Yes	☐ No
Dry food storage space is adequate for peak loads.	☐ Yes	☐ No
Dry foods are protected from dust, insect pests and rodents at all times.	☐ Yes	☐ No
Hot food storage is above 60 degrees Celsius.	☐ Yes	☐ No
Cold food storage is below 5 degrees Celsius.	☐ Yes	☐ No

FOOD TRANSPORT

Transport times are kept to a minimum.	☐ Yes	☐ No
Food temperature requirements are adhered to at all times during transport.	☐ Yes	☐ No
All foods are protected from dust, pests, chemicals and other contaminating matter.	☐ Yes	☐ No

CLEANING AND SANITISING

Cleaning cloths are replaced frequently.	☐ Yes	☐ No
Equipment and surfaces used for the preparation of raw foods are cleaned and sanitised before further use.	☐ Yes	☐ No
Sanitisers are appropriate for use in the food industry and are used in accordance with the manufacturer's directions.	☐ Yes	☐ No

PACKAGING AND LABELLING

All prepacked foods are labelled in accordance with the *Australian and New Zealand Food Standards Code.*	☐ Yes	☐ No

WASTE MANAGEMENT

Waste is removed regularly from food preparation areas.	☐ Yes	☐ No
Putrescible waste removed from food preparation areas is placed in bins with tight-fitting lids.	☐ Yes	☐ No
Capacity to store sullage waste is adequate or connection to the sewer is maintained without leakage.	☐ Yes	☐ No

INFECTIOUS DISEASES

All staff are required to report any gastrointestinal-type illness to the supervisor.	☐ Yes	☐ No
A register of staff illness is kept by the supervisor.	☐ Yes	☐ No
Staff are not permitted to work whilst they have symptoms of gastrointestinal illness or are in the acute stage of a cold or flu-like illness.	☐ Yes	☐ No

SAFETY

The workplace is safe and free from any trip hazards; there are no unprotected hot zones or any unguarded equipment.	☐ Yes	☐ No
Fire precautions are followed, and fire safety devices meet the expectations of the relevant fire authority.	☐ Yes	☐ No

EMERGENCY MANAGEMENT

Food handlers have contact details for all necessary personnel in case of problems.	☐ Yes	☐ No

A list of appropriate contact details is maintained and accessible, including for:

event organiser(s)	☐ Yes	☐ No
environmental health officer	☐ Yes	☐ No
plumber	☐ Yes	☐ No
electrician	☐ Yes	☐ No
refrigeration mechanic	☐ Yes	☐ No
alternative refrigeration suppliers.	☐ Yes	☐ No

10 Sample template: Food vendor information

The following template has been prepared as a guide for food vendors to submit to the relevant local health authority or provider.

Note: This is a guide only and should be adapted as required to suit an event, based on each local health authority or provider's requirements.

OPERATOR DETAILS

Name of operator	
Address	
Contact Phone	Email
Trading as	
Business address	
Main purpose of business	

Is a menu attached, indicating the full range of food to be provided?　　☐ Yes　　☐ No

Indicate which of the following foods you sell directly or will be using as an ingredient:

Milk/milk products	☐ Yes	☐ No
Poultry	☐ Yes	☐ No
Salads/rice dishes	☐ Yes	☐ No
Egg products	☐ Yes	☐ No
Fish/fish products	☐ Yes	☐ No
Raw meat	☐ Yes	☐ No
Ice cream	☐ Yes	☐ No

Shellfish	☐ Yes	☐ No
Cooked meat	☐ Yes	☐ No

Type of operation:

Stall	☐ Yes	☐ No
Mobile unit	☐ Yes	☐ No
Stand	☐ Yes	☐ No
Tent/marquee	☐ Yes	☐ No
Other	☐ Yes	☐ No

Specify

Indicate the type of facilities to be provided on site:

Refrigeration	☐ Yes	☐ No
Freezer	☐ Yes	☐ No
Oven	☐ Yes	☐ No
Deep fryer	☐ Yes	☐ No
Microwave oven	☐ Yes	☐ No
Sink	☐ Yes	☐ No
Handbasin	☐ Yes	☐ No
Other	☐ Yes	☐ No

Specify

Indicate power sources:

LPG	☐ Yes	☐ No
Electrical generator	☐ Yes	☐ No
Other	☐ Yes	☐ No

Specify

Is the food to be prepared or stored in premises other than the temporary food premises or vehicle?	☐ Yes	☐ No

If yes, please state the address:

Will food be delivered to the site by a separate supplier?   ☐ Yes   ☐ No

If yes, what arrangements will be made for receipt of those goods?

Have you or any staff completed a food handler hygiene course?   ☐ Yes   ☐ No

If yes, when and where?

Vendor's name	
Date	
Venue	

Please forward a copy to the local health authority.

11 Sample questionnaire: Gastrointestinal illness

For use at first aid posts during events to record presentations of gastrointestinal illnesses.

PRESENTATION DETAILS

Date		Interviewed by	

Name

Address

Phone number

SYMPTOMS

What symptoms have you had?

Diarrhoea	Yes	No
Nausea	Yes	No
Vomiting	Yes	No
Abdominal cramps	Yes	No
Headache	Yes	No
Fever	Yes	No
Blood in faeces	Yes	No
Joint or muscle aches	Yes	No

Other		Yes		No

Specify

When did the symptoms first start?

Date		Time (am/pm)	

Do you know of others who have been ill with similar symptoms?   Yes   No

Include names and contact details for others for further follow-up on reverse side of form

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What have you eaten since being at this event and where was it purchased or obtained from?

List the food history on reverse side of the form; include all food, drinks, confectionery and any other snacks. It is important to specify from where the food was obtained.

Have you been swimming since being at this event?

Pool		Yes		No
Spa		Yes		No
River		Yes		No
Lake		Yes		No
Other		Yes		No

Specify

Do you suspect anything which may have caused your illness?   Yes   No

Specify

Note: Keep this form for review or collection by the supervisor or public health official. Report anything suspicious and where there are several cases of a similar illness within a short period of time.

12 Considerations for specific events involving high-risk activities

Some events pose a greater risk because of the nature of the activity and/or its patronage. The following sections provide examples of higher-risk events and a guide to some treatment options.

Air shows and displays

Air shows are staged in accordance with aviation standards. Certain factors to reduce the risk of a serious incident should be considered by event organisers, emergency managers and health personnel.

AEROBATIC AREAS

Aerobatic manoeuvres should not take place over built-up areas, but rather over fields, water, airstrips, or other uninhabited areas. Aircraft should not fly over spectator areas. Where aircraft exit a manoeuvre laterally (parallel to the ground) the direction of exit should be away from, or parallel to, the spectators, not towards or over them.

SAFETY

On-site fire services must comply with standards and guidelines and should be capable of delivering foam onto a crashed or burning aircraft. Should an air show not take place at an airport with foam-equipped trucks, alternate arrangements for their provision should be considered, as water-delivering fire apparatus will be unsatisfactory.

In the event of a mishap, organisers should have a clear understanding of the requirements of the Coroner and air crash investigators.

PARACHUTE JUMPS

Parachute jumps should have landing zones safely away from spectators and hazards to the jumpers. There are several recorded cases where parachutists have been blown off course and suffered injury or death as a result. Spectators can also be injured in the scramble to avoid a descending jumper.

Automobile and similar races

Organised auto races conducted by professional racing bodies at permanent facilities normally meet the guidance on safety of participants as outlined in this document. Similarly, professional racing bodies using temporary facilities follow strict guidelines for the conduct of races. However, these race safety guidelines do not necessarily cover the health and safety of the general public. Rallies conducted on public roads are a source of concern due to the very limited control over spectators; fortunately, the incidence of spectator injury is very low to date.

Spectators may position themselves in remote, almost inaccessible, areas where the action is spectacular. The entire track should be monitored, and a suitable communication system should be in place.

HEALTH SUPPORT

The ambulance service should be consulted in the planning phase to ensure that an appropriate and timely ambulance response to any incident is possible. Training for these personnel must include knowledge of the racing rules and the various flags used by race marshals. Often health personnel will need to be accredited by the racing association before working on the track.

Local hospitals should be actively involved in health planning for these events to ensure that there is appropriate hospital staffing, both in terms of quantity and experience, and that there is adequate physical and resource capacity to manage expected presentations.

One major incident can place significant strain on the resources available to the surrounding community.

Ambulance services and first aid service providers can assist event managers in determining the right mix of services.

Effective and safe means for effecting the timely retrieval of injured patients from race tracks must be available. Ambulance vehicles should be positioned for controlled, rapid access to the track. An appropriate communications system and procedures should be in place to activate an immediate ambulance response to a track emergency; while racing is controlled by track marshals.

Guidelines should be established in advance to determine whether:

- the race will continue or stop if first responders/ ambulances enter the track
- the race will continue if ambulance service is reduced; that is, leaves to transport a patient
- the ambulance will be dedicated strictly to participants, and if so, what means are available to assist with medical emergencies among the spectators?

While some races continue to run under caution and other flags when an ambulance or other emergency vehicle is on the track, it is preferable that the race be stopped if possible.

Suitable 'first attack' firefighting and rescue equipment should be available at the event for rapid fire and rescue service response.

The provision of a site medical centre or first aid facility should be considered in view of risk of injury to participants and spectators; the expected number of spectators; distance to the nearest hospital, etc..

SPECTATOR AREAS

Barriers should be in place to isolate spectators from out-of-control vehicles. Safety should be further enhanced by a compulsory 'no person land' to keep spectators away from the barrier fence. Experience has shown that these barriers can be moved or broken by vehicles, resulting in injuries to spectators leaning against the barriers.

The design of barrier height and strength should consider all possibilities such as one vehicle mounting another, somersaulting or multiple impacts.

In addition, parts of automobiles involved in collisions can become projectiles, and wheels can come loose and bounce into spectator areas. A strong wire mesh debris fence may be fixed to barrier fencing and the top of retaining walls as an additional protective mechanism, permitting spectator visibility while serving as a deflection for projectiles.

Spectator access to the track and pit areas at any time, including after the race has concluded, should be carefully monitored if permitted at all. Participants often test vehicles after the event, with neither drivers nor spectators anticipating each other's presence on the track.

Track invasion by spectators, after the winner has passed the finish line and while other competitors are still racing, has caused major problems and injury at several events. All officials should be briefed on ways to control this behaviour and how to respond should those control measures fail.

PIT AREAS

In-race refuelling of cars in pit areas creates a potential for fire if fuel inadvertently contacts hot parts or is ignited by a spark. To combat this threat, appropriate and sufficiently-rated fire extinguishers and other means of extinguishment and containment must be available to be used by trained personnel. Personnel should be reminded that some racing fuels burn with an invisible flame. Spill facilities, ventilation and ignition controls are primary considerations for refuelling arrangements.

The combination of vehicles entering the pit lane at high speed and the drivers' vision possibly being impeded by trackside barriers increases the risk to both drivers and personnel in the pits. Organisers should consider introducing speed limits in pit lanes and enforce suitable penalties for transgressions by drivers. Ideally, a system of notifying pit personnel of vehicles entering the pits, such as a siren or horn, warning lights and signage should also be implemented.

As spectators are generally unfamiliar with pit environs and procedures, access to the pits should be restricted to officials and members of the race crews. If spectators are to be permitted in the pit area, they must be properly controlled, taking into consideration protection from moving vehicles, hot engine parts, sharp metal, and other pit hazards.

Spectators should not be allowed to cross the race track if possible. If this arrangement is not possible, all spectator crossings should be at designated crossing points strictly controlled by race officials. Officials should be equipped with an efficient communication system to the race control area, which can provide information on upcoming race traffic.

Events involving pre-teen and early teen audiences

Crowded places such as festivals and events that involve people under the age of 18 may need to ensure their staff, including volunteers, have undergone a *Working with Children* check.

Concerts that attract younger audiences (for example, pre- and early teens) can create difficulties, including individuals who become lost or separated from friends, miss scheduled return transportation, or lack sufficient funds for alternate transportation.

Parents will often take young spectators to an event but have difficulty finding them at the conclusion. If parents are using their cars to pick up children, traffic jams may

prevent close access to the venue. Prior to entering the venue, parents and their children should identify a specific place to meet at the end of the event.

One concept to alleviate difficulties is to implement a 'Parents' Oasis' adjacent to the venue to provide parents with a waiting area during the concert. Coffee, soft drinks, nibbles and newspapers can be provided to pass any time spent waiting.

The concept of a 'Parents' Oasis' is particularly suited to concert-type events aimed at younger audiences, where parents would not want, nor be wanted, by their children, to attend the actual performance. The efforts in providing such a facility are more than offset by the reduction in effort needed to deal with the young audiences at the end of the event.

Information booths with access to the PA system and clearly identified event staff can assist lost children and their parents.

Consideration should also be given to the potential effects created by a major incident, which may be compounded by the problems of parents attempting to gain access to the area to be reunited with their children or, in the worst-case scenario, trying to find out where their child has been taken to if injured.

Other issues to consider include paediatric trauma and resuscitation with specialised health resources and experienced providers. This may be relevant for running festivals, athletics, martial arts, motocross and the mass hysteria at shopping centre concerts.

Power boat races and similar on-water events

HEALTH SUPPORT FOR PARTICIPANTS

Water events, particularly those involving motorised water craft, require careful planning. A rescue boat(s) should be in attendance. Experienced divers with scuba gear, trained to effect inverted, below-surface releases and under-water extractions, should be available

A dedicated health response boat should be available in the water with appropriately trained personnel and equipment (including spinal board and resuscitation equipment). The health boat should be linked by two-way radio to the rescue boats and ambulance/first aid services. For off-shore boat racing there may be a need for a helicopter with rescue capabilities.

Landing locations appropriate for the transfer of stretcher patients from boats to land ambulances must be identified.

SPECTATOR AREAS

Appropriate buffer walls or 'run off' areas should be in place to prevent out-of-control vessels from entering spectator and pit areas.

Where spectators are permitted to line piers and breakwaters along areas of deep water, the following is suggested:

- In the absence of provision of some physical barrier, a line should be marked to warn spectators away from the edges fronting deep water.
- A dedicated boat should be in attendance to constantly patrol the area, equipped with a loud-hailer to direct spectators who venture too close to the edge. The vessel should also be suitably equipped to provide water rescue and resuscitation of casualties. This vessel should also be in addition to any vessel committed to the event participants.

All boats intended for rescue or health roles should be clearly marked and have some form of hazard lighting to warn other vessels. Any vessels used for participant or spectator control should be staffed with personnel with appropriate lifesaving and emergency medical or first responder training, including Cardio-Pulmonary Resuscitation (CPR).

Any vessel intended for health assistance and/or water rescue should contain sufficient clear space to resuscitate a person, and be equipped, as a minimum, with the following:

- appropriate equipment to effect retrieval from the water/water craft, while maintaining immobilisation and spinal precautions to minimise further injury
- resuscitation equipment, which should as a minimum include a bag-valve-mask unit, preferably with an oxygen assist; supraglottic airway adjuncts and suction should also be included, with advanced airway management equipment as required
- a supply of large pressure dressings
- personnel trained and experienced in the use of the equipment identified above
- personnel trained and attired to enter the water to effect a rescue and removal.

Adequate first aid, security and communications coverage should be provided for spectators, especially if they are dispersed through a wide, remote event site.

Fireworks/pyrotechnics

Fireworks have been responsible for numerous incidents in Australia; hence, they are heavily regulated. In each jurisdiction, their storage, transport and use come under a variety of standards and regulations. Any decision to use fireworks or other pyrotechnics should consider employing a well-known, licensed subcontractor.

Whenever public displays of fireworks are going to take place, local authorities, including police, fire and ambulance services, should be notified and consulted prior to the event. Organisers should check with local authorities for any permit requirements for fireworks or pyrotechnics.

A qualified pyrotechnician must be engaged for any firework display.

Displays need to comply with *Australian Standard AS 2187.3* or *Australian Standard AS 2187.4*.

Site/Fireworks need to:

- be transported to sites according to the Australian Dangerous Goods Code
- be operated by a licensed shotfirer or operator
- have consideration of special permit conditions when near airports or adjacent to aircraft flight paths
- include consultation with fire services, in particular for approval and/or cancellation on days of high fire danger or Total Fire Ban.

PLACEMENT/LAUNCH SITE

Most major incidents involving fireworks can be avoided through careful planning of the launch site.

In establishing a launch site, close attention should be paid to the anticipated wind direction and strength, both of which may affect the flight path of fireworks and the area in which debris may fall. In addition, the possibility of having to abandon the display should be a consideration in site placement and design.

Where possible the launch site should be on water; for example, on a barge or pier as they can be readily abandoned should an accident occur and the supply ignite.

There must be a barrier between the crowd and the launch site, to protect the crowd in the event of a tip-over after ignition; this could result in a lateral, rather than vertical, projection.

Fireworks must not be projected over the heads of spectators, as debris, often hot, from overhead fireworks can fall into spectator's eyes, onto their heads, etc..

Fireworks should not be projected over flammables, trees, bush areas, buildings, or boats (if fireworks are to be launched over water).

Unused fireworks should be stored in covered metal containers to prevent inadvertent ignition, either by staff or by descending hot particles from previously deployed overhead fireworks.

Firefighting equipment, commensurate with location, should be on immediate stand-by including fire extinguishers and trained firefighters at the launch site.

Protective clothing, including face shields, helmets and heavy gloves, should be worn by those deploying and igniting fireworks in case of explosion, or premature or delayed ignition.

The launch site and surrounding area should be carefully inspected after the event to ensure no incipient or rekindled fires are possible. All used fireworks should be soaked in water and removed from the site, along with any securing spikes, wires or other potentially hazardous objects.

Lasers

Laser light shows are frequently included as a form of entertainment at many special events. Health care personnel on duty at such events need to be aware of any potential hazards associated with the use of lasers or accidents that can occur involving laser light equipment.

Lasers should only be operated by properly licensed personnel. The *National Health and Medical Research Council Code of Practice* to be followed for safety at laser light shows, together with compliance with *Australian Standard 2211-1991 Laser Safety*, should mitigate any problems occurring.

Local authorities requested to authorise the use of laser lights should be aware that laser operators are required to maintain a "Display Safety Record" logbook for their equipment. This log includes internationally recognised design features and safety calculations and will provide valuable information for making the decision to permit a display or not; and, where a display is permitted, some warning of potential problems.

Drones

Unmanned aerial vehicles (UAVs) or drones are used for a number of purposes in crowded places.

Drones may be used by the operators and controllers of a crowded place to monitor the crowd and security. At some events, a combination of drones or a swarm is used as a light display.

Loss of control of a drone can occur because of the battery losing power and radio frequency interference. The drone may fall onto the crowd.

Drones have been used to find unattended fencing and security holes for unauthorised entry. They have also been used to deliver forbidden items such as drugs.

Civil Aviation Safety Authority has guidelines for the use of drones. Reference should also be made to licensing requirements (https://www.casa.gov.au/aircraft/landing-page/flying-drones-australia).