## RRCA: Safe Event Guidelines

Empowering Everyone to Run
RRCA.org

## Introduction

Anyone contemplating hosting a road or trail race must realize the potential for personal injury and damage associated with running on roads or trails. Risk management is one of the primary responsibilities of a race director. The RRCA's Safe Event Guidelines clearly outlines steps involved in organizing and directing safe road or trail events.

This guide is meant to be used as a planning tool. It is not an all-inclusive plan for your event, and as a race director, you have a duty to ensure your event has detailed safety and security plans in place that are specific to your event in your location.

Legal Notice: RRCA is NOT a regulatory body. We do not sanction events. The RRCA National Organization does not provide direct oversight for the conduct of local events. RRCA member events are locally governed, owned and operated. The RRCA issues guidelines, not rules, for the conduct of safe events and provides a general liability insurance program that covers certain activities for running clubs and events. All members insured by the RRCA are expected to follow the RRCA's Safe Event Guidelines.

Race directors have permission to copy checklists and forms throughout the guide and tailor them to your event needs.

## Safe

 Event Guideline Topics
> General Planning
> Key Race Personnel
> Course Design
$>$ Volunteers
> Registration Forms and Waivers
> Pre-Race Information and Packet Pick-Up
> Event Alert System
$>$ Start Line
> Traffic Control

- Communications
> Participant and Spectator Control
> WaterStations
> Medical Assistance
$>$ Weather
> Finish Area
$>$ Special Considerations for Youth Events
$>$ Special Considerations for Challenged Athletes

The planning phases of the event will benefit from adequate advance planning. In particular, the safety of the participants, volunteers, and spectators can best be served by addressing the following matters well in advance of the event start date.

Allow a minimum of 6-12 months advance time to plan the event. In addition to the items listed below, you may need to devote time to obtaining race sponsorship and advertising

Budget. Putting on a running event costs money. Before committing to directing a race, create a budget to determine if expenses will be covered by registration fees and sponsorships. Costs to consider include t-shirts, awards, race timing, advertising, insurance, bib numbers and pins, refreshments, portable toilets, sound system, entertainment, water station supplies, permits, facility rental and banners.

Date Selection. Select a date that does not conflict with other events in the area, either running or non-running related, and try to schedule around the "bad" weather months. Do not take for granted that you can get the same date year after year. Each year, select your date as early as possible. If your event date does fall on a day that another local running organization has an event, consider a courtesy call to that organizer.

Site Selection. In determining a site, consider whether shelter from possible weather conditions will be needed. Consider whether there is adequate parking, if the site is safely accessible, or will participants be required to cross busy streets, thus requiring additional traffic control. Also consider existing sites of other road races that are already certified at the distance you plan to hold. (Visit www.USATF.org to view current certified courses) Avoid crossing railroad tracks and major intersections. Contact local police and park authorities to obtain permits for your race. Good options for races include office parks, which generally have a lot of empty parking spaces on weekends. Consider where the port-a-johns and registration tables will go and also where participants will line up for the start. Limit the total participants in a trail race to the number of runners a trail can safely accommodate, with limited environmental impact. Select a trail race course that uses officially designated open public trails. Consider car pooling by giving preferential parking to those who arrive with multiple participants in their car or offer a bike corral service.

Course Design. Site selection works hand-in-hand with a safe course configuration. Consider the fact that the local authorities may have plans that would turn what you see today as an acceptable race-course into the center of a major street repair tomorrow. Check with local authorities as you begin planning for the event to avoid this problem. When contacting your local authorities contact all relevant authorities. Think about spectators, race crew, and medial movement around the course.

## General Planning

Meet With Local Authorities. Any required authorization from local authorities must be obtained long before the event date. Local authorities should be made aware of your date, site selection, and details of your course design. They should be asked specifically about plans they have that would impact these items. Arrangements with local authorities for traffic control
 should be among the initial steps taken in planning the event. When contacting your local authorities contact all relevant authorities For example, contact the parks and police departments and the local County Commissioner's office. Permits may be required with associated fees.

Meet With Key Race Personnel. Meetings should be scheduled far enough ahead of the event to allow for proper coordination and planning. These key persons should be experienced in the area of which they are assigned or in turn be well instructed in their duties prior to the event.

## General Planning

Communicate With Residents of the Race Area. Maintaining good public relations with businesses and residents impacted by the event should be a high priority. Make sure that affected persons and entities are informed well in advance as to what they may expect on race day, (i.e. specific street closings, length of the event), so they can take the steps necessary to alleviate any inconvenience to themselves, their customers, guests or families. It is suggested that churches, hotels, theaters, and other businesses be contacted directly. Residential areas can be forewarned by placing signs in the community in advance of the event. Many events go
 door to door along a racecourse to leave flyers or personally talk with residents. This can go a long way to prevent an angry resident from complaining to the authorities and jeopardizing the following year's event.

## Examples of key race personnel include:

- Race Director,
$>$ Medical Director (read more below),
> Lead Course Marshall,
> Volunteer Coordinator,


## Key Race Personnel

$>$ Marketing and Communications Director, Start/Finish Line Director,
> Packet Stuffing and Packet Pick-Up Coordinator.
> Also consider assigning a "Green Team
 Leader" who is responsible for the placement of
 recycling containers, and sweeping the course post-race for trash.

The Medical Director. One of the primary considerations in the planning of the event should be the selection of a Medical Director. Even in a small race, there should be one person assigned as the go to person if someone is injured.

## The Medical Director should:

## Key Race Personnel

$\checkmark$ Help outline the safety plans including on sight medical assistance for the event.
$\checkmark$ Make timely and direct contact with the person(s) involved in the incident and witnesses.
$\checkmark$ Assure any injured person that they will receive proper medical or other required attention.
$\checkmark$ Remain with or arrange for persons associated with the event to remain with the injured. person, to insure that the injured person receives proper attention.
$\checkmark$ If not already contacted, to contact medical personnel to attend to the insured person.
$\checkmark$ Gather necessary information in order to report the incident to the police, and if necessary, to the insurance carrier. The information to be gathered should include details as to how, where, when and why the incident occurred, names, addresses and phone numbers of the injured parties and witnesses, and if possible, photographic documentation of the scene.

The Medical Director should be accessible via the race communication systems at all times during the event and positioned so that s/he may be contacted immediately upon the occurrence of an incident, accident, or injury, and then be able to go directly to the scene or provide guidance to other race officials.

All race volunteers should be instructed that in the event of a medical incident, the Medical Director should be among those persons to be contacted immediately.

## Course Design

## A course design that takes into account the following factors should help maximize the safety of the race participants:

Avoid Narrow Lanes at Start. Narrow lanes at the start are hazardous. This is where the race is most congested and runners may end up running into each other, running on medians, running over curbs or up and down sidewalks, all of which increase the chance of injury. Consider "seeding" runners based on finishing time and start runners in "waves" in order to keep the start less congested. The number, age and experience of participants will drive the space needs.

Avoid Abrupt and Sharp Turns. Abrupt turns at the start and sharp turns within the course can be hazardous. Making the turns "too tight", or having too many turns within the course can increase the risk of injury to participants, and also increases the need for additional course marshals. Only adult volunteers, in safety vests, with flags, should direct runners on the course, and keeping traffic from participants. Minors should never be used as traffic marshals without direct adult supervision

Avoid Busy Streets and Intersections if Possible. This will cut down on the amount of traffic control needed (and save money), lessen the exposure of the runners to someone disobeying traffic control, and reduce the number of "irate" drivers. If the race is near or crossing train tracks, check the train schedule to ensure a passing train will not interfere with the race.

## Course Design

Avoid hospitals and railroad tracks. For security reasons, railroads usually do not disclose their schedule. The last thing you want is to have your race stopped in the middle of the field by a train; making it a risk for runners who think they can race a train. Secondly, avoid hospitals. Inbound ambulances and community need access to their hospital, and planning to close roads for a road race isn't a good plan.

## Course Design

Make Course Markings Visible. It is recommended that each mile be marked so runners may visually see the mark well in advance. Locate the marker so that it is not a hazard to the participants or the spectators. Do not place the markers at water stops as this causes an inconvenience to runners recording splits on their watches. Clearly mark all turns on the course with orange cones, chalk, and/or a course marshal holding a flag to ensure runners do not get lost or run into traffic. A real "plus" of any race, especially half marathons and marathons, is to use "Water Ahead" signs. This gives runners who use power gels a chance to down their gel then grab the water needed to wash it down.

Employ Trained Persons For Proper Course Measurement. Proper course measurement is a matter for persons with the proper training, certification and knowledge. It is a disservice to the race participants and a possibly fatal mark against your event to have an inaccurately measured course. It is highly recommended that you employ a USATF certified measurer to measure and certify your course.

The recruiting, coordinating and instructing of volunteers in a race event is essential in maximizing the safety of the race participants. Factors involved in volunteer coordination include the following:

Designate a Volunteer Coordinator. Assign a volunteer

## Volunteers

 coordinator to gather and assign volunteers to specific jobs. The volunteer coordinator can supervise the pre-race organization of the volunteers and on race day will be the person who will inform volunteers where they are to go. The volunteer coordinator can also make sure that each volunteer has signed a volunteer waiver

Recruit Volunteers well in advance of race day. Determine how many volunteers you will need and in which areas you will need them. This will depend on the size of the event, the course itself; i.e. busy streets with many intersections will require more adult volunteers or police presence, and whether or not your race will have an "expo" or festival associated with it. Recruit high school students, or youth groups to volunteer. Plan for more volunteers than are needed, and use age-appropriate volunteers. For example, only adults should be part of the course marshal group. Teen volunteers can assist with packet stuffing or handing out water and food at the conclusion of the race.

Volunteer Waivers. Ensure all volunteers have signed a waiver and ensure the guardians of minors have signed a waiver on behalf of minors volunteering for the event. Use an online volunteer management system to capture contact and emergency contact information.

Train Your Volunteers. Organize key volunteers to lead various areas of the race and make sure they fully understand the needs of their group. Key volunteers should be tasked with training others and supervising duties of volunteers assigned to their group. Make a check list of duties and information to be passed onto the volunteers. Instruct volunteers when to arrive on race day and advise them of predicted weather conditions to ensure they dress appropriately. If youth are permitted in the event, all event volunteers must undergo Abuse Awareness and Reporting Training and be made aware of all Safe Sport Act compliant policies for the event.

Volunteer Control on Race Day. The volunteer coordinator should meet volunteers at the designated volunteer check-in location and direct volunteers to their posts. It is helpful if all volunteers wear an special "race volunteer" shirt, or a vest to indicate they are helping with the event. Let the volunteer know that someone will come by to relieve them of their duties or let them know when it is ok to leave their post. There have been several incidents when volunteers have left their posts and accidents have occurred. Ensure volunteers have a cell number or contact process if they need to leave their post early.

Thank Your Volunteers. Allow volunteers to partake in the post race festivities, including refreshments. After the conclusion of the event, send a thank you to each volunteer and solicit their feedback. Pave the way for next year's event.

The event registration form offers a substantial opportunity to communicate safety and related information to the participants while collecting vital information from them. Whether using online or paper registration forms, or both, they should include:

## Registration \& Waiver Forms

Name of the event.
Event date, start time, and start location of the event.
$\square$ Course description.
Race logo, RRCA logo (if insured through RRCA), and sponsor logo(s).
Rules of the event.
Registration transfer policies to other runners/refund policies.
$\square$ Location, date and time of packet pick-up.
Overall and age group awards to be presented.
Type of timing device being used.
Course distance, and, if the course is USATF certified with the USATF certification number.

## RUNNER ESSENTIALS

Packet Pick-up I Gear Check I Pasta Dinner I Pace Leaders I Start Area I Timing I Transportation I
Aid Stations | Runner Tracking | Finisher Certificates
Look up your Marathon Bib here
Date
Sunday, May 26, 2019
Start Time
7:00 Wheelchair
7:03 Marathon \& Marathon Relay
Location
Battery Park - Burlington, Vermont
Registration Limit
3600 Marathoners
Average Temperature for Race Weekend

REGISTER
MARATHON REGISTRATION
relay registration
mini marathon

## Collect from participants:

Full name (discourage aliases)Mailing addressEmail
Cell number (for emergency text message alerts)

## Registration

 \& Waiver FormsEmergency contact information
Shirt size (if shirts are being given to participants)
Entry fee amount (include pricing tiers for early registration and information about group registration discounts)
Waiver and release form that has language that is specific to your event.
Check box for agreeing to race rules (include warnings against baby strollers, inline skates, scooters, bikes, pets, etc. )
$\square$ Check box for having read and agreeing to the refund policy for the event (clearly outline your refund policy even if you do not provide refunds in the event of a cancellation due to acts of God - weather, pandemics, etc. or civil unrest).

Keep in mind not everyone has a credit card so online only registration may prevent people from participating. Host a pre-race registration drive a few weeks before the event with a local run specialty store, or other partner, to capture race registrations online and collect payment from participants in cash or check. If a check doesn't clear, you should have time to address the issue with the participant or withhold the race packet for non-payment.

## Registration

 \& Waiver FormsAll RRCA members utilizing the general liability insurance program are required to obtain waivers from all participants. This includes all members for a running club along with all participants and volunteers for events. Online and paper registration forms MUST contain a waiver or release of liability to be signed and consented to by the individual club member, race participant, or volunteer. If a participant or member is a minor, his or her guardian must sign a waiver.

Organizers should edit stock online waivers utilized by online registration providers to ensure the waiver is specific to their event and/or club activities. It is suggested that each individual sponsor, local authority or club be specifically named in the waiver or release. It would be a good idea to include the name of the entity hosting the packet pick-up as well. The more detail you can provide about the event dangers in the waiver, the more useful the waiver will be in the event of an incident resulting in a legal action.

Find waiver templates at RRCA.org>>>>>>>

## Pre-Race \& Packet Pick-Up

Send a variety of pre-race emails. Keep in mind people need to see things a few times before they read and retain information. Find the balance between consistent messaging without spamming participants.

## Remind participants about:

$\checkmark$ Key information about the event, including event rules or policies, packet pick-up information, and sponsor spotlights.
$\checkmark$ Share information about possible adverse weather conditions and race-day plans.
$\checkmark$ Share information about course layout, spacing of water stations, availability and location of electrolyte replacement drinks, and placement of medical personnel and distance markers on course.
$\checkmark$ Educate participants in advance about the Event Alert System and encourage them to allow for race-day text for emergency information.
$\checkmark$ If you have a race App, promote it.
Packet Pick-Up: Runners come to the packet pick-up to receive a bib, timing chip, and/or race shirt. Packet-pickup needs include ample available parking or easy mass transit nearby and enough volunteers to keep the lines moving. Organize bibs/numbers in a manner that allow for easy distribution. Most modern timing systems allow for a process of dynamic bib assignments, which can save time. Discuss this option with your timing vendor. Have a plan in place if your require ID for picking up a race number and if you require participants to sign a hard-copy of the event waiver.Involve sponsors and charity partners in your packet pick-up plans.

## Event Alert System

The Event Alert System, or EAS, is a color-coded method of quickly communicating to participants the potential for adverse weather conditions that can affect the race event. A series of color codes is used to indicate the increasing severity of adverse conditions as outlined on the next page.

These adverse conditions are most usually related to heat stress. However, the system could also be used to warn of other potentially dangerous situations, such as cold, storms, tornadoes, or even non-weather situations like auto accidents, fires, or civil unrest on or near the course.

This system, and the scientific measurements behind it, was originally developed by the United States military, as a guide to the level of heat stress soldiers might experience during training exercises in varying weather conditions. The system was adopted by the American College of Sport Medicine and now the RRCA is encouraging all events to implement a similar system. This system has been used by events such as the Bank of America Chicago Marathon,the IMT Des Moines Marathon and the Medtronic Twin Cites Marathon.

|  | ALERT LEVEL | EVENT CONDITIONS | RECOMMENDED ACTIONS |
| :---: | :---: | :---: | :---: |
|  | EXTREME | EVENT CANCELLED/EXTREME AND DANGEROUS CONDITIONS | PARTICIPATION STOPPED/FOLLOW EVENT OFFICIAL INSTRUCTIONS |
| Alert System | HIGH | POTENTIALLY DANGEROUS CONDITIONS | SLOW DOWN/OBSERVE COURSE CHANGES/FOLLOW OFFICIAL INSTRUCTIONS/CONSIDER STOPPING |
| B' | MODERATE | LESS THAN IDEAL CONDITIONS | SLOW DOWN/BE PREPARED FOR WORSENING CONDITIONS |
|  | LOW | GOOD CONDITIONS | ENJOY THE EVENT/BE ALERT |

## Event Alert System

## Heat Stress Calculation

The heat stress is calculated using a special scientific instrument, designed for that purpose. There are versions that can be permanently mounted in a fixed position, such as the side of building, and there are portable, handheld versions. The proper term for what is being measured is the Wet Bulb Globe Temperature Index, or WBGT Index. This index is expressed in either degrees of Celsius or degrees of Fahrenheit, depending on how you want your device to report. The WBGT Index is calculated using an accepted mathematical formula that takes into account the following variables:
> Ambient temperature (the usual "weatherman forecast" temperature)
$>$ Relative humidity
$>$ Solar radiation (not the "glow in the dark" kind, but rather the "sunshine on a black car hood" kind)
$>$ The cooling effect of wind
The color codes correspond to specific parameters of the WBGT Index, with each color changing as the severity of the WBGT Index rises.
$>$ Green - low risk - a WBGT Index of less than or up to 84.9F (29.3C)
$>$ Yellow - moderate risk - a WBGT Index of between 85 F to 87.9 F (29.4C and 31C)
$>$ Red - high risk - a WBGT Index of between 88F to 89.9F (31.1C and 32.1C)
$>$ Black - extreme risk - a WBGT Index of more than 90F+ (32.2C)

Be sure to include information in your race packet and your event emails about the Event Alert System. Display signs or flags at your packet pick-up that coordinate with the current conditions so people are aware of what to look for on course.

## Event Alert System

On race day, place the EAS near your start line to indicates the current Event Alert code. Take readings several times during the course of the event hour and change the color codes on signs or flags as the WBGT Index readings change. Place EAS signs or flags at several locations along the course. These signs should be placed close to aid stations, as most participants tend to slow down near aid stations and instructions can be given if the EAS code is red or black. Ensure you have a system in place and a volunteer ready to update the EAS codes as weather conditions on the course change.

If the course needs to be closed to due to "black" conditions, follow these guidelines:
$\checkmark$ Have a course closure plan in place well before your race day.
$\checkmark$ Have the announcer at the start/finish line announce that the race has been shut down due to dangerous heat/weather conditions.
$\checkmark$ All Event Alert System signs on the course will be changed to the black color code.
$\checkmark$ On-course personnel, course marshals, and aid stations will be informed of the course shut down so that they can then communicate the information to participants on course.
$\checkmark$ Require ALL AID STATIONS TO REMAIN OPEN until the course has been cleared of participants and the aid station receives official instructions to close down.
$\checkmark$ Follow-up with participants following the event to remind them that safety is paramount and apologize for making the tough call to cancel the event due to dangerous weather conditions.

## Start Line Safety \& Security

The start line provides an important opportunity to communicate safety information to the race participants. Safety considerations to review at the start line are as follows:

Water. Provide water at the start to assist participants in maintaining hydration when it is hot out.

Communicate with Participants. Clearly identify the start line so that the runners know where it is located. Signage, signage, signage. Use an easy to hear public address system to ensure participant in the back of the pack can hear announcements. Address warnings about sharing the road with moving traffic, course conditions, hydration, weather, etc.
Give a reliable countdown starting several minutes before the start to make sure the participants are given ample time to assemble for the start.

Congestion. If you have done your homework, you have designed a course that is not too narrow at the start, and is without sharp turns in the beginning.
Therefore you do not have to be concerned about runner congestion at the start. However, you will still want to manage for slower runners/walkers in front of faster runners at the start. This situation can be addressed with start line instructions. Remind walkers and slower runner to start in the middle to back of the pack, or stay to the side of the course and not impede faster runners at the start.

Assign a course marshal that can address people that showup with scooters, bikes, strollers (if not allowed), or pets (see Special Considerations for Challenged Athletes).

## Start Line Safety \& Security

Work with law enforcement to monitor the start area and remove non-participants that have backpacks or are in areas without an official race credential.

Wheelchairs, hand cycles, adaptive chairs. Start any wheeled participants in advance of the start time for runners. Plan for a 10-to-15 minute advance start for wheeled participants.


## Traffic Control is essential for producing safe events.

## Traffic Control

Police. Persons both on and off the course will recognize the authority of the police over that of race officials or volunteers. Police should be used to control all stop-light intersections, and any other significant traffic intersections on the course. The course should be reviewed with the police as one of the initial event planning steps. Remind police in advance of the event of the start date and of the specific duties that will be required of them. Prior to race day the race director, or
 other knowledgeable race personnel should ride the course with the law enforcement officer(s) assigned to the race. Make sure they know the course, especially if they lead runners on course. Ensure police understand that motor vehicles are not to be allowed on the race course. Remind police to be careful about allowing cars to cross on cross streets in front of runners.

Traffic Barriers. Barricades or cones are essential for traffic control. Determine well before race day who will provide the barriers and when they will be set out on the course. Also ensure someone is specifically designated to pick them up. Some communities have specific requirements for coning for events and a trained "coner" may be required for placing traffic cones or barricades.

Course Marshals. Often police cannot close every single intersection, parking lot exit, or driveway on a race course. Police will often concentrate on busy intersections and depend on support from trained course marshals to monitor and restrict traffic on secondary roads, parking lots, etc. Supply course marshals with visible vests or race official
 shirt.

Reminder >> Teens and children should NEVER be used as course marshals. They may assist if an adult is present to provide direct supervision at all times at an intersection. If the race is long - marathon, half marathon - check in with your course marshals throughout the event and offer water, snacks, and check on them if the weather is cold or rainy and they need a break or need to leave their post.

A reliable communication system is essential to the coordination of all aspects of a race in progress.

Communication Systems. Your communication system should connect key race personnel, police, and medical personnel throughout the event. Ensure your communication devices can work in ALL weather.

## Communications

Communicate Effectively. Inform all these parties when the race has started. Remind people to limit chatter on communication devices to ensure only the most important race information is shared. Devise a plan and communicate when the last runner returns. Use a "sweeper" who is tasked with trailing the last person on course. This may be an end cyclist, a policy sweeper, or a vehicle to pick-up people unable to finish a course. Make all efforts to ensure no one is left out on the course. The sweeper(s) or supporting volunteers can act as the "Green Team" and collect trash the runners leave behind.

Aid Stations. All medical aid stations, as well as water stops, should be coordinated through hand held communication devices in order to address any emergencies that may arise. This assures that runners are no further away than an aid station or water station when informing a volunteer of a problem and requesting assistance.

Key Personnel. All key personnel should be on the communication network during the course of the event.

Radio Operation. All personnel connected with the race, in any capacity, should know where the radios are located and where the radio operators are stationed. All persons

## Communications

 who are to use the communication system should be made familiar with its operation prior to the start of the event. The radios should be tested and the power supplies checked in advance of the race date.A note about using cell phones as a means of communication. Cell phones can be a great way to communicate before and after a race, but should not be relied upon as a primary means of communication during a race. Depending on cell phones in rainy conditions may not be a safe plan. Walkie-talkies (with fresh batteries or a full charge) are the preferred form of communication, as all key race personnel can be alerted at once if a problem should arise. The system can allow for specific channels for specific team leaders. This will result in more expeditious problem solving.

## Participant

Good course markings and course management can prevent runners from going off course and prevent unauthorized vehicles from coming onto the course.

## Spectator Control

## Consider the following to manage participants on course:

Lane Size/Course Width. Ensure the course lanes/width are wide enough to accommodate the number of runners in the event. This is of extreme importance if the race is held on a road with one lane for runners and the other lane will remain open to traffic.

Marking the Course. Place cones along the course for runners to follow. Obtain permission in advance if you paint lines on a road. In addition to police presence at road intersections, utilize adult volunteer course marshals to direct runners at pivotal turns on the course. Place signage to help people remain on course. Properly placed course marshals can communicate to race officials if a runner is in distress and needs assistance. Make sure vehicles do not enter the race course. This is of the utmost importance to the safety of the runners and can be avoided by properly placing cones, police, and volunteers at crucial road intersections.

## Participant

 \&
## Spectator Control

Water Stations. Advise participants in advance as to the location of water stations on course (i.e.: every two miles), as well as which side of the road they are located on. This will make for a more orderly use of the water stations. Don't require people to cross over a lane to get water if the course is an out and back. Place a water stop on both sides of a road to prevent runners colliding while trying to access the water stop.

Pace Vehicle. If using a lead pace vehicle, have a knowledgeable and reliable volunteer operating the vehicle or directing the driver. It is not advisable to use the police for this function as they may not know the course. Consider having a second pace vehicle (or bicycle) in the event that the lead runners lose the pack and those behind lose their way. The pace vehicle should be marked in the front and back "Pace Vehicle" so that an over zealous road guard or police person does not try to divert the vehicle from the course. The pace or lead vehicle should always have at least 2 people in it. The driver needs to focus on the road and the observer can focus on the runners and route.

## Participant

## Spectator Control

## Consider the following to manage race spectators:

Spectator Barriers. Fencing will be needed to keep spectators off the race course and out of the flow of traffic, especially at the start and finish areas. It's best to have a solid barrier that cannot be inadvertently moved by persons leaning up against it. For smaller events or areas leading to or from the start and finish, cones may be appropriate in place of a solid barricade.

Finish Line Area. The finish line area is most likely to encounter larger crowds. Allocate sufficient barricades and flagging for use in this area. Manage spectators so they don't crowd the finish line area. Don't allow spectators to hop in at the end to run in with family and friends. It may impede other on course preventing them from freely crossing the finish line. Develop a finish line chute where family/friends can see runners finish and then meet up with them away from the finish area where there is space for people to congregate.


Volunteer Instruction. Volunteers should wear some type of identification, such as an orange safety vest, or special t-shirt, so they can be easily identified by spectators and participants. Consider providing credentials that can hang on a lanyard if you have limited access areas that only certain race personnel can access. This is particularly help for managing people in the start/finish area.

Police. For larger races, having police present at the start and the finish, where the crowd will be the biggest, can help gain the attention of spectators who fail to heed the barriers and requests of the volunteers.

## Water stations considerations include:

## Water Stations

Distance Between Water Stations. Consider the time of year, the weather conditions, the length of the race and the number of participants when making the determination about how many water stations to have in your race. Make sure the runners are well informed in advance of the start as to their location. In a colder weather 5 k it is acceptable to provide water at the end of the race. In a summer hot weather $5 k$, it is recommended that water is provided at mile 2 and the finish. In races longer than $5 k$, hydration should be provided at least every 2 miles. Many events choose to provide hydration every mile, and always at the finish.

Location. Do not locate the water station on a downhill. It is important as to place the water station at a point where there is sufficient room for runners to slow and get the water while other runners who chose to bypass the station can run unobstructed past the slowed or slowing runners. Also consider the tangent of the course when selecting the water station location. If the course is making a turn to the right and you locate the station on the left, the runners are more likely to bypass the station in order to take advantage of the tangent. The water stations should not be located exactly at a mile marker but either before or after the actual marker as the attention of many of the runners will be diverted to their watches instead of watching for runners who have slowed to drink. Avoid intersections or high traffic areas and remember the trash factor. All those empty cups will get tossed.

## Water Stations

Staffing. Water station volunteers should arrive several hours before the start of the race in order to fill enough cups before participants begin to arrive. People with obvious signs of sickness should not be handing out water, and everyone handling water should wear plastic gloves.

Cups. As a rule of thumb have, at a minimum, one cup per entrant at each water station. If a hot and humid day is predicted have as a minimum two cups per entrant at each water station (anticipate that the runners will drink one cup and dash the other on themselves to help cool off). In order to minimize the amount of spillage use a smaller cup, 7-8 ounce cups are recommended. Always try to use paper cups in place of hard plastic cups, and NEVER use Styrofoam cups. The hard plastic cups and Styrofoam cups tend to break when grabbed by the runners and are not biodegradable. Be sure that the water station volunteers have been instructed in proper cup handling. Cups should be filled no more than $3 / 4$ full, and placed on the palm of the hand or held gently on the sides of the cup when held out to passing participants.

Some trail events and bridge runs require cup-less races. If going cup-less, you MUST promote this fact early and regularly with participants. Just because a race is cup-less doesn't mean you should not have water on course. Providing access to water is an important risk management action item. Put an affirmative check box with registration to verify that participants know the event is cup-less. Train volunteers how to assist with water refiling.

## Water Stations

Water and other replacement Fluids. Arrange for water and any replacement fluids (i.e.: Gatorade) to be delivered to the water stations several hours before the start of the race. Be sure any concentrate, coolers, and stirring sticks are also delivered along with mixing instructions. Pay special attention that water is placed in a different cup than the electrolyte replacement drink and is located in a different section of the water station. I.e.: water should be offered at the first table, and Gatorade at the last. Make sure concentrated mixes are mixed correctly with the proper ratio of water to product. For each water station, have rakes on hand so that cup debris can be cleared from the road as soon as possible. Make sure that specific volunteers are assigned to the task of continually removing the debris from the course. This is imperative on a course where the same water station is used by participants more than once during the race. Locate trash receptacles strategically at the end of the water tables and a few yards past the water tables to encourage runners to discard the cups there. Make sure to provide plastic trash bags for clean-up, and recycling of the paper cups.

A Special Note, for races held during winter months. One potential hazard of a water station in a freezing location is the water left on the ground from spilled cups can freeze causing runners to slip and injure themselves. Plan to supply these water stations with salt or sand to toss on the ice if this occurs.

## Available on-site medical assistance is a mandatory requirement regardless of the

 race size or distance:
## Medical Assistance

Quantity and Quality of Medical Team. Make sure that medical personnel are appropriate for your event. Contact local community medical providers such as EMT's operating out of fire stations, private ambulance services, local hospitals, or private consultants. Make sure that you provide a sufficient amount of medical personnel to attend to the needs of the participants. This determination will be based upon the number of race participants, anticipated weather conditions, type of course and training of the medical team. When determining the proper quantity of medical personnel, consider the scenario where two emergency situations arise and the only medical team or ambulance has already left the event due to the first occurrence.

Space for Medical Team and Ambulance. Provide a convenient area for the medical team and ambulance to set-up at the finish. If your race is large, consider having a second ambulance available at the half-way point of the race. Plan ahead so that if the ambulance must leave the race area, it will be able to do so quickly and efficiently and will not need to cross the path of the participants.

Heart Attacks. Can happen at anytime during a race and anyone experiencing a cardiac issue needs Advance Life Support in 4-6 minutes. If a race participant suffers illness or injury, know how fast can you get EMS to a person's location on course. Consider allowing a few safety runners or cyclists as course officials located throughout the event that can provide emergency CPR until EMS can arrive.

## Medical Assistance

## The foundation of your medical coverage is communication

Communication with the Medical Team. The foundation of your medical coverage is communication. Part of your medical plan should include contacting your local ER to alert them to the event date so they may be aware of potential incoming patients. This is important for large events. Remind the medical team prior to race day of the time they needed to show up and set-up. Include them in the communication network you have organized, and make sure that they have been informed as to the proper operation of the communication equipment and designated channel(s) you are using. Consider in your plans how accessible each part of the race course will be for the medical team in case of an emergency, and make sure to go over this plan with the medical team in advance so they will know what to do should a medical emergency arise.

Supplies. Review with the medical team those supplies they will provide and what they will need that the race will provide. First aid supplies are critical items. Always arrange to have ice available to the medical team prior to the start of the race.

## Medical Assistance

Identification. Make sure that the medical team and medical tent are marked in an obvious way. Inform all volunteers as to the location of the medical teams and how best to communicate with them if they are needed.

Medical Emergency. Make sure that the volunteers are also instructed as to what actions they are to take in the event of a medical emergency. Common sense, such as not moving a person who has sustained head, neck, or back injury need to be reviewed at the volunteer meetings in advance of the race date.
>> Download the Race Emergency Protocol to use in training and guiding volunteers on emergency procedures.

Privacy \& Confidentiality. Have a plan. Your medical team coordinator needs to be aware of the HIPAA Privacy and Confidentiality of medical information. Volunteers should not speak to the media or answer inquiries about a participant's condition or treatment. A specific person should be designated as the spokesperson if an incident arises.

One of the most crucial factors involving any road race event is also the least predictable: the weather. The following is a list of considerations involving weather:

## Adverse Weather

Plan Ahead. As the race date gets nearer, the weather conditions will become more predictable. If it is going to be extremely hot, additional water stations and ice should be considered. The location of the finish line medical team should be moved as close to the finish line as possible. As a rule of thumb, plan with the thought in mind that the conditions will be more extreme than predicted.

Medical Team. If extreme weather is predicted make sure to contact the medical team so that they are able to prepare in advance for any additional material or personnel they will need. Lightning. An electrical storm within the race course area within 1 hour of the start time should be considered potentially life threatening to runners. A determination should be made at the time as to whether the race should be continued as scheduled, delayed until the storm has passed or cancelled altogether.

Shelter. In both hot and cold extreme conditions, shelter from the elements for the runners becomes important. Obviously shelter is something that must be arranged well in advance and therefore must be considered as part of your initial planning. If it is pouring or freezing at the start of an event, runners will want and seek shelter. It's the same at the end of the race. Runners will want shelter while waiting for the awards ceremony.

## Adverse Weather

Dehydration and Heat Exhaustion. In extreme heat conditions, the possibility of dehydration and heat exhaustion are increased dramatically. Adjustments can be made in advance of the race date by making sure that the runners are warned to maintain their hydration before, during and after the event, and also by making sure that water is provided at the start of the race. Under extreme conditions, the distance and time of the event must be considered. If the combination of the length of exposure of runners to extreme conditions presents a life threatening situation, cancellation of the event must be considered. Consult with your medical director or other health officials. Included in the Appendix are information sheets concerning cold and hot weather racing which should be included in the race packets if applicable.

Start Time. If a race is held in an area where extreme heat is common, then a start time earlier than 8:ooam should be planned.

Course Conditions. If the general condition of the course has become extremely hazardous due to the weather, then a decision to delay or cancel the event must be made. Common sense should prevail. Consult with local authorities in making your decision. Understand that local authorities may expect you to make the call to cancel the event to protect them from cancellation liability.

## Adverse Weather

## When to Cancel/Postpone/Modify a Road Race due to Adverse Weather Conditions

$\checkmark$ Heat and Humidity - The dew point is 8oF or above at the start time. This information is available on the weather channel and from your local weather service. The American College of Sports Medicine (ACSM) recommends canceling or modifying a road race when the WBGT is 82 F .
$\checkmark$ Lightening is present. Send runners home if there is not adequate safe shelter for everyone to wait out the storm. Remember, trees are not safe shelter and lightning can strike up to 10 miles away.
$\checkmark$ Hazardous footing on a race route, caused by ice, snow, mud, etc. Detour the race route from these areas.
$\checkmark$ Snow-storms. Many runners will want to run. Get input from local police. As mentioned above, it's not just hazardous footing. There is significant danger from vehicles and snow removal equipment if the course is shared with traffic. Visibility and safety of volunteers should also be considered.
$\checkmark$ Cold. When the combined temperature and wind chill is below $5 \mathrm{~F}_{,}$there is the risk of flesh freezing and hypothermia.

## Adverse Weather



Remember: When races are being held in extreme temperature conditions, either hot or cold, try to make an effort to educate the running community on proper dress, hydration and medication precautions. Refer to the RRCA hot and cold weather guidelines for further information. When holding a race in the heat, always provide adequate fluids at the start, finish and frequent stops along the course. Whenever holding races in a cold environment, make sure
 that shelter, space blankets, and hot liquids (i.e. bouillon, sugared tea) are made available for after the race. Be aware of local weather conditions for your area, such as tornadoes, and advise runners accordingly.

Sponsors should be made aware about complications due to weather conditions that could change the race format.

## Finish Area

Wheelchairs, Handcycles, Adaptive Chairs. The finish line should consider the width of the wheelchairs finishing the race. It's important that they move quickly through the finish line process and not cause a delay or bottle-neck of finishers.

Lead Car. Make sure that the lead car turns off the race course prior to entering the finish area. Ensure there is a safe method to do this as finish areas are generally congested with spectators. Make sure there are race personnel stationed at the turn-off point to direct the lead runners into the finish line area. The finish line should be clearly marked and visible from a distance.

Anticipate Mid-Pack Surge. The work of the finish line volunteers will intensify and be tested as the middle of the pack comes in. The volunteers should be warned of this from the beginning so that they are not caught unaware and can avoid a pile-up at the finish.

## Finish Area

Water. Have water readily available for all finishers in close proximity to the finish line. Runners in Distress. Have the finish line workers instructed in the necessary procedures to contact the medical team in the event that a finishing runner is in distress. A runner often goes down with medical issues shortly after finishing.

Equipment. Make sure that the volunteer in charge of the finish line equipment has sufficiently secured the equipment to prevent it from being blown down in high wind. Make sure that finish and start banners are placed high enough to allow trucks to pass underneath without hitting them.

Do a thorough job of cleaning the start-finish area. Repair and restore the trails used in an event. Pick-up all course markings, trash, cast-off clothing, and more immediately after your event. If your event has been financially successful, consider making a donation that supports running in your community (high school teams, youth program, etc.) or the RRCA.

## Finish Area

RRCA

The purpose of these guidelines is to provide information for event directors and athletes. It is hoped that these guidelines will facilitate the inclusion of athletes with disabilities in road racing events. While the safety of all participants in a running event remains the paramount concern of any event director, these guidelines will help event directors focus on real safety concerns and not concerns based on false perceptions, stereotypes or generalizations about athletes with disabilities. We use the term wheelchair to include push-rim, hand-cycle, and adaptive pushed chair.

## Application Form

$\checkmark$ If a separate wheelchair division is planned, it should be identified on the race entry form. Include an affirmative check box where a participant can verify their equipment is wellmaintained and safe to use in the event.
$\checkmark$ On the race entry form, state that athletes with disabilities are encouraged to register early (prior to race day) so race officials can make necessary preparations. Provide a phone number or email where challenged athletes may call to review information about the race, including course terrain, elevation, conditions, time limitations availability of an early start, and additional accommodations.

Keep in mind participants with prosthetics may elect to register as a regular participant and not need or request any accommodations. Race officials should not single out runners with prosthetics and require them to start in any special wave if the athlete does not need or want an accommodation. Wheelchair or adaptive chair athletes should be required to start in their designated wave, which is typically sent off before all runners.

## Special Considerations

$\checkmark$ If toilet facilities are provided, provisions for wheelchair athletes should also be made. Wheelchair accessible porta johns should be available.

Considerations for Challenged Athletes
$\checkmark$ Additional safety or other concerns should be disclosed as far in advance of the event as possible
$\checkmark$ Elevation: Most courses do not present a problem in this area. However, hills with severe elevation changes (greater than 10\%) might be difficult for some wheelchair athletes to negotiate. This information can be given to the athlete in advance in writing or an elevation profile displayed on the event website.
$\checkmark$ In the event of wet weather, wheelchair athletes and the event director should discuss whether to proceed
$\checkmark$ Event directors should consider consulting with athletes with disabilities in the planning stages of the event to provide a safe and manageable course.
$\checkmark$ Use a separate timer for the wheelchair division or carefully note and add time elapsed between the two starts to the finish time of the wheelchair athletes.
$\checkmark$ Start and finish chute(s) for wheelchair athletes should be clear and at least 32' wide. A separate chute devoted to wheelchair athletes may be considered.
$\checkmark$ Equity should be observed when issuing award categories. Don't exclude challenged athlete categories from age group awards.

Considerations for Challenged Athletes

In determining the amount of an early start, consider all relevant factors including police scheduling, the length of time the course is open, course terrain, and number of participants. An early start should be provided for the safety of both wheelchair athletes and runners.

## The following guidelines are recommended:

- $5 \mathrm{~K}-2$ to 3 minutes
- $10 \mathrm{~K}-4$ to 5 minutes
- Marathon - 10 to 15 minutes


## During the Race

$\checkmark$ Lead wheelchair athletes with a lead vehicle or bike to ensure they remain on course. Whether or not a lead vehicle is available, course monitors should be notified that wheelchair athletes may precede the rest of the field. Monitors should be familiar with course direction to properly direct athletes along the race route. Monitors should also be alert to direct wheelchair and runners to avoid collisions at turn around points.
$\checkmark$ Wheelchair athletes who are involved in mishaps may be assisted in remounting. While remounting, the athlete can't impede the progress of other racers. No forward assistance may be provided.
$\checkmark$ A wheelchair racer can be disqualified for causing a crash or a spill as a result of unsafe racing tactics or inadequate maintenance racing wheelchair components.
$\checkmark$ Formal documentation on legal racing wheelchair specifications can be found in the Adaptive track \& Field USA website (http://www.atfusa.org/RULES/RULES.htm) . The winner of the wheelchair division will be determined when the front wheel of the chair or cycle breaks the forward plane of the finish line.

## Considerations

 for Challenged Athletes
## Athletes Using Crutches

When competing, people using crutches should be given a 5 - minute early start. This will provide a level of safety for both the challenged athletes and runners. Some athletes may need more time. The early start should be calculated by subtracting the length of time the course will be open by the anticipated finish time of the athlete. Athletes needing an early start should be advised that athletes are responsible for their own safety until the course is officially opened. If the course is on a roadway, athletes can participate on the sidewalk or the side of the road. The sense of competition and accomplishment is much greater if the athlete finishes when the course is still open.

## Visually Impaired Runners

$\checkmark$ Visually impaired runners should supply their own guides. Alternatively, race officials could request a volunteer guide from the pack of runners. Contact United in Stride to help pair visually impaired runners with guides.
$\checkmark$ If the course requires everyone on the course to have a number, the guide should be issued a special number since the guide is not competing. Only the visually challenged athlete should pay an entry fee and the guide should be included in the fee, but they must be required to sign the event waiver.
$\checkmark$ Visually impaired runners are generally capable of starting with the pack and will complete with other members of their age group. A separate division for visually impaired runners may be considered whenever a large number of visually impaired runners participate in the event.
$\checkmark$ Accommodations should be made for visually impaired runners that run with a guide dog and a guide dog does not fall under a no pet policy.

## Considerations

 for Challenged AthletesPushing disabled athletes in a sport chair. From time to time, RRCA members have struggled with having a "no stroller" policy and complying with ADA accommodations for events. If the persons seeking to enter the event meets any age restrictions placed on participation, the event needs to make reasonable accommodations to allow a disabled athlete to be pushed in a wheelchair by an able-bodied participant. This is in accordance with providing access to the event. It is the discretion of the event whether this team is one registration or two. Waivers should be signed by both participants or the participant's legal guardian. Groups of runners pushing an adaptive chair should be reviewed with an event director. If more than two people want to participate to push a chair athlete, they should register for the event and pay the race fee like other participants.

If the participants seeking to enter DO NOT meet the minimum age restriction for the event, then the event director does not have to allow them into the event, as this would violate the events "no stroller" policy. While sport chairs are not strollers, a participant that does not meet the age restrictions does not have to be given special treatment considering an able-bodied person below the age requirement would not be allowed to participate in the event.

From a real-world scenario: A 5 K has a strict no stroller policy and an age requirement of 6 years old for the event. A family demands to push their disabled 2-year-old in the event under ADA access requirements. In this situation, the event does not have to allow the toddler in the event, because the child does not meet the age requirements for the event.
$>$ From a real-world scenario: An athlete requests to be pushed by an able-bodied athlete in a half marathon. The athlete requesting to be pushed is over 25 years old. In this case, the event needs to make every effort to try to include this team of athletes.

Considerations for Youth Events

Closely review the information about the US Safe Sport Act, and the requirements for events directors when hosting youth events or adult events with youth participants included. Develop a plan for training your volunteers and race officials if youth are permitted in your events.

Review the RRCA's FUNdamental of Youth Running for establishing age restrictions for various event distances.

Consider making your run a kids-only event so parents can volunteer and cheer on participants. If you host a run that invites adults to run with kids, emphasize that the goal is youth participation, as opposed to being a competitive adult race.

Whether your event is youth-only or includes both kids and adults, use multiple starting waves to ensure the safety of younger runners. Allow older kids to start first, followed by younger kids. Adults may start after all kids have crossed the starting line and may catch up with their child on course. Kids wanting to run with a parent may start when the adults start.

Consider the ability levels of all participants, including those using wheelchairs and assistive devices, when developing the course.

Safety is the top priority when putting on a youth run. Ensure your course is designed with kids in mind. Plan a relatively flat course, as most children are accustomed to running on tracks or flat playground areas. Station course marshals at regular intervals to keep kids on course. Develop and communicate plans for efficiently connecting kids with their families at the finish line.

The RRCA is grateful to everyone who has contributed to the preparation of these guidelines.

