USA TRIATHLON

RACE DIRECTOR RESOURCE GUIDE:

AID STATIONS: LOGISITICS PLANNING

INTRODUCTION:

Nutrition is often referred to as the fourth leg of a triathlon. Athletes participate in events with the expectation they can rely on race management to supply nutritional resources at predetermined locations throughout the course. These Aid Stations are crucial touchpoints that can make or break an athlete's race experience.

Aid Stations function as their own independent race venues, often in remote locations with narrow timeframes for race day setup and breakdown. Detailed logistics planning for installation, staffing, management, and cleanup are essential to ensure seamless execution. The stakes are high as an Aid Station's ability to operate effectively directly impacts athlete health and safety.

In this section, we will review the operational considerations for Aid Station management and execution:

- Key Components
- Bike Course Aid Stations
- Run Course Aid Stations
- Health & Sanitation
- Logistics
- Volunteers & Staffing
- Self-Serve Stations

**Note: While this guide does provide recommendations for aid station management, all planning and decision-making regarding the event is at the discretion of the Race Director. While direction is provided on the competition rules, it is not a replacement for the competition rules. For questions about the rules and their application at your event, please reach out to rulesandofficials@usatriathlon.org.*

KEY COMPONENTS:

Aid Stations are a critical part of an athlete's race day experience, as this support during the race provides them with the resources needed to continue forward. While the size and scale of aid stations may differ depending on the event, the key components of the stations are as follows:

1. **Physical Support:** Aid Stations supply athletes with hydration and nutrition to fuel them with the energy needed to maximize performance. The longer the race distance and duration of physical assertion, the more diverse the Aid Station offerings should be to help replenish what the body is losing. There is a whole science around nutrition and its important role in multisport racing. Here are a few basic tenants to consider when crafting your Aid Station menus:

DID YOU KNOW?

Electrolytes are essential minerals that are crucial for maintaining proper fluid balance, nerve signaling, muscle contraction and regulating pH levels. The primary electrolytes are sodium, potassium, chloride, calcium, and magnesium.

- **Water:** Proper hydration helps the body function optimally, maintains core body temperature, and supports muscle contraction. Dehydration can lead to cramping and affect the body's ability to sweat, which can lead to overheating, heatstroke, and other serious health risks.

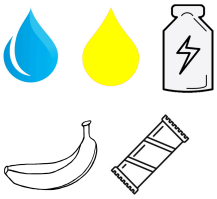
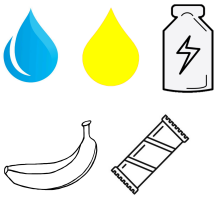
- **Carbohydrates:** Carbohydrates (carbs) are the most important fuel during exercise because they break down quickly to give muscles a boost in energy. It is best to eat a combination of carb sources because they are absorbed through different mechanisms and break down at different rates. Carbs are found in many isotonic sports drinks, gels, bars, bananas, and salty/sweet snacks.

- **Glucose (Blood Sugar):** Carbs metabolize into glucose, a simple sugar that is easily broken down and utilized for energy. Even though glucose is what the body uses for fuel, it is not easily stored and the body can only absorb about 60 grams per hour. While a glucose tablet or gel may be sufficient for a quick burst of energy, for longer-distance races, the body will need more than 60 grams per hour of carbohydrates, which is where other types of carbs come into play to provide other sources of energy.

- **Sodium**: Sodium improves the body's absorption of fluids by pulling water into the bloodstream more effectively than if you just drank water. When athletes sweat during a race, they lose sodium and water and if they only rehydrate with water, this further dilutes blood sodium levels. Sodium is found in isotonic sports drinks and other salty snacks.

- **Potassium:** Like sodium, potassium plays a significant role in muscular contractions and relaxations. Potassium deficiencies lead to cramping and a slowdown in muscle and

The race distance, course terrain, weather conditions, and experience level of participants all come into play when determining the location of aid stations and their food/beverage offerings. Consult your race's Medical Director for input on the nutrition plan for your event. Below is an example of how the number and offerings at Aid Stations increase as the race distance lengthens.

AID STATION OFFERINGS BY DISTANCE		
DISTANCE	**BIKE COURSE**	**RUN COURSE**
SPRINT	**Approx # of Stations**: 0 **Offerings per Station:** N/A	**Approx # of Stations**: 2 **Offerings Per Station:** • Water: ALL • Isotonic: ALL 
OLYMPIC	**Approx # of Stations**: 0* **Offerings Per Station:**: N/A **Consider adding one station with water/isotonic if there is extreme heat forecasted*	**Approx # of Stations**: 4-5 **Offerings Per Station:** • Water: ALL • Isotonic: ALL • Gels: 1 
MIDDLE	**Approx # of Stations**: 3-4 **Offerings Per Station:** • Water: ALL • Isotonic: ALL • Energy Bars: ALL • Bananas: 1 • Gels: 1 	**Approx # of Stations:** 10-12 **Offerings Per Station:** • Water: ALL • Isotonic: ALL • Cola: ALL • Energy Bars: ALL • Bananas: 2 • Gels: ALL • Salty Snacks: ALL • Sweets: ALL 
LONG	**Approx # of Stations**: 7-8 **Offerings Per Station:** • Water: ALL • Isotonic: ALL • Energy Bars: ALL • Bananas: 2 • Gels: 2 	**Approx # of Stations:** 18-22 **Offerings Per Station:** • Water: ALL • Isotonic: ALL • Cola: ALL • Energy Bars: ALL • Bananas: 4-6 • Gels: ALL • Salty Snacks: ALL • Sweets: ALL 

2. **Toilets:** Aid Stations should include toilets for athletes and volunteers to use along the route. As a general rule of thumb, position portable toilets to face away from the course so that if a line of athletes forms, it does not impede course flow.

3. **Medical:** On-course medical support can provide first aid treatment to help athletes with minor injuries such as blisters, muscle cramps, or strains. By helping to bandage, apply ice packs, and clean wounds, on-course medical personnel provide comfort to athletes to allow them to continue with their race. Having trained professionals at these locations can also help to identify risks of more serious complications such as dehydration, heat stroke, or cardiac incidents. They are the first line of responders when it comes to emergencies that may arise along the course.

4. **Emotional Support:** A multisport event is just as much a mental and emotional challenge as it is a physical one. Many athletes use Aid Stations as a checkpoint to assess their progress and readjust their race strategy as needed. Interactions with volunteers working the stations often provide athletes with a renewed spirit and a sense of encouragement to keep going. Energetic Aid Station environments create a more enjoyable experience for all involved. Consider incorporating:

    - **Cheer Zones:** Engage volunteer groups, charity partners, TRI teams, and/or sponsors about opportunities to activate cheer zones at Aid Stations as a way to encourage involvement. Providing elements like motivational signage, cowbells, and/or pom poms can go a long way to help boost the energy and excitement of these zones.

    - **Entertainment:** Incorporating live bands, DJs, and/or other entertainment groups along the course can help provide extra motivation to athletes.

BIKE COURSE AID STATIONS:

Bike course aid stations are mainly used for Middle and Long distance races, but can also be used for Sprint and Olympic races in climates with extreme heat. In most cases, athletes remain on their bikes as they move through the station, grabbing product from volunteers/staff as they pass. By nature, the athletes' level of speed makes these stations a higher safety risk for all parties involved. The station layout and volunteer training are crucial components for mitigating issues.

Distance Between Aid Stations: While each course may have different needs, as a general rule of thumb, World Triathlon recommends that for Middle and Long distance races, bike course aid stations are located every 20K (approximately 12.5 miles).

Location: When selecting the location of aid stations along the bike course, here are a few considerations to keep in mind:

- **Athlete Speed:** Where possible, stations should be positioned in areas immediately following sections of the course where the athletes are naturally forced to reduce their speed. For

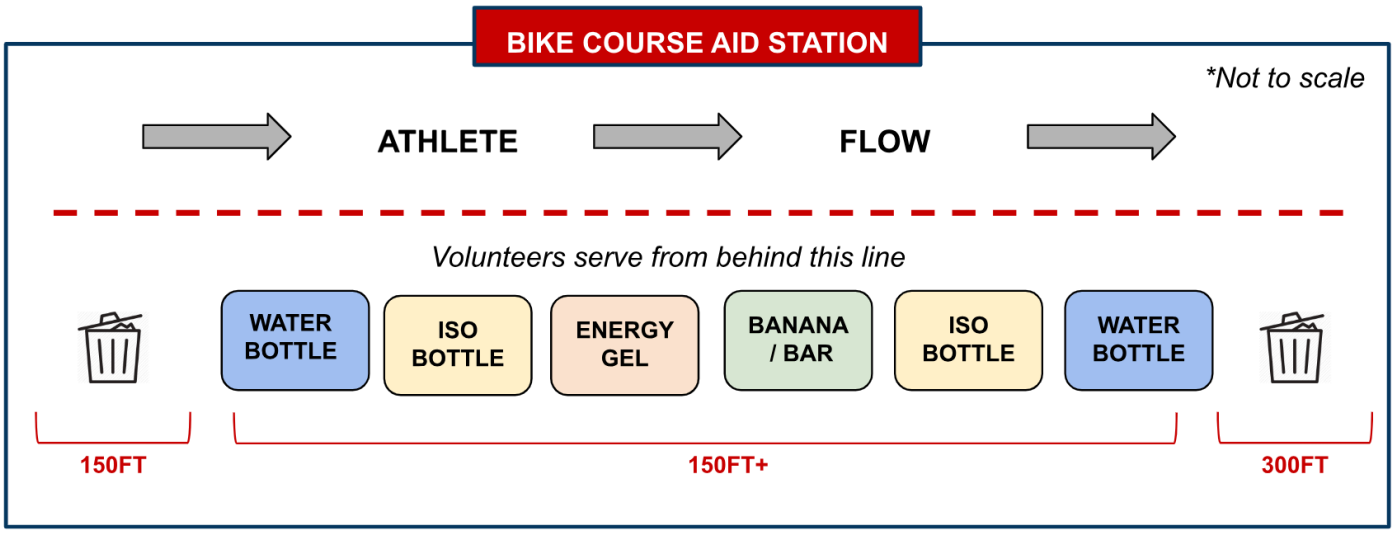
example, a location after an uphill stretch or along a straightaway immediately following a U-turn is preferable to downhill sections where athletes are naturally picking up speed.

- **Length:** Since athletes are riding through the stations, the product offerings will need to be fairly spaced out to allow sufficient time for them to grab and secure multiple items. Most athletes will need to keep one hand on their aero bars for safe steering and will only have one free hand available. Think about it from the athlete's perspective: if they take a water bottle, they will need enough space and time to secure the bottle in their cage and free back up their hand before they are presented with the next item. As a general rule of thumb, World Triathlon recommends that product distribution area extends about 40m (approximately 150 feet), plus space before and after for participants to discard bottles and other waste.

- **Width:** Ensure there is sufficient width for cyclists to slow and get water while other runners who choose to bypass the station can bike unobstructed past the station.

- **Transportation / Parking:** Bike courses for Middle and Long distance races often involve long stretches of highway. When mapping out the locations of Aid Stations on these roadways, consider how staff and volunteers will be able to access the area and if there are places where they will be able to safely park their vehicles without obstructing the course.

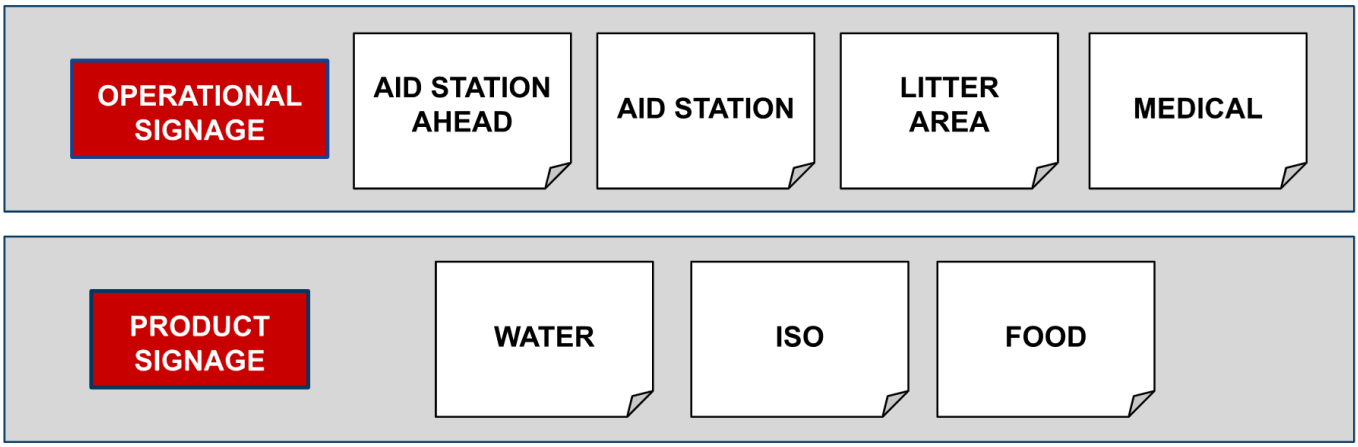
Layout: Bike Aid Stations generally have fewer offerings than run aid stations, but they take up more real estate to spread out the different product offerings. Plan to leave at least 20ft between product tables to help create a clear distinction between distribution areas.



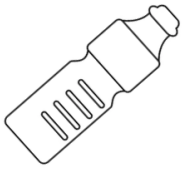
- **Littering Areas:** Designated waste collection areas are particularly important for the bike course as littered items in the roadway become a hazard for surrounding cyclists. Create a large litter area leading up to the Aid Station where athletes can discard empty bottles to clear out

their bike cages to make space for new, full bottles they are about to receive. Also designate a large stretch after the station where athletes can throw empty wrappers, banana peels, and bottles before continuing to the next section of the course. Ensure there are volunteers assigned to continually clean these areas to help clear the debris off the roadway before it becomes a danger for other athletes.

- **Signage:** Clear signage is necessary to capture the attention of riders moving at high speeds. Consider incorporating some of the signage below to warn riders of upcoming stations and help provide additional organization to the product distribution process.



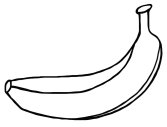
Product Preparation: All product distributed on the bike course should be easy for athletes to eat and drink on the move:



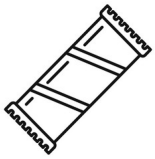
Bottles: Aid Stations should serve liquid in bottles that fit in a standard bike bottle cage, preferably with a sport-cap top (as opposed to a traditional cap). If bottles have a security seal and/or plastic wrap, it should be removed by the volunteers before distribution

DID YOU KNOW?

Many races position baby pools under the tables to ice down the product before it is served to athletes



Bananas: Bananas should be cut in half and distributed with the peels still on to make them easier for athletes to take and store in their jersey pockets. When they are ready to eat, athletes will be able to pull back the edges of the peel with their teeth. Plan to outfit volunteers with gloves, knives, and cutting boards



Bars & Gels: Energy bars and gels can generally be distributed in their original sealed, packaging as the plastic is generally easy enough for athletes to break open with their teeth

RUN COURSE AID STATIONS:

Distance Between Aid Stations: As you determine the number of aid stations needed along the run course, consider the time of year, course distance, weather conditions, and number of participants. World Triathlon best practices dictate that during high heat situations, Aid Stations should be no more than 1.25K (0.78 miles) apart. If it is not possible to maintain this spacing due to course constraints (i.e. water source locations, permitting restrictions, etc), consider incorporating other mitigation efforts, such as spray locations, between Aid Stations to bolster support.

Location: When selecting the location of aid stations along the run course, here are a few considerations to keep in mind:

- **Course Terrain and Difficulty:** Look at the course from the athlete's perspective and consider if there are any critical areas where support may be needed most. Are there long stretches without much shade? Are there steep hills?

- **Elevation**: Refrain from positioning an Aid Station on a downhill as it may be challenging for runners to slow themselves down to stop to drink.

- **Width:** Ensure there is sufficient width for runners to slow and get water while other runners who choose to bypass the station can run unobstructed past the station.

- **Tangent**: Athletes will always seek out the shortest possible route along the course. If the course is making a right-hand turn and the Aid Station is positioned on the left side, athletes are more likely to bypass the station to take advantage of the tangent.

- **Mile Markers**: Refrain from positioning an Aid Station directly at a mile marker as the attention of many athletes will be on their smartwatches and they may not notice that athletes in front of them have slowed to drink.

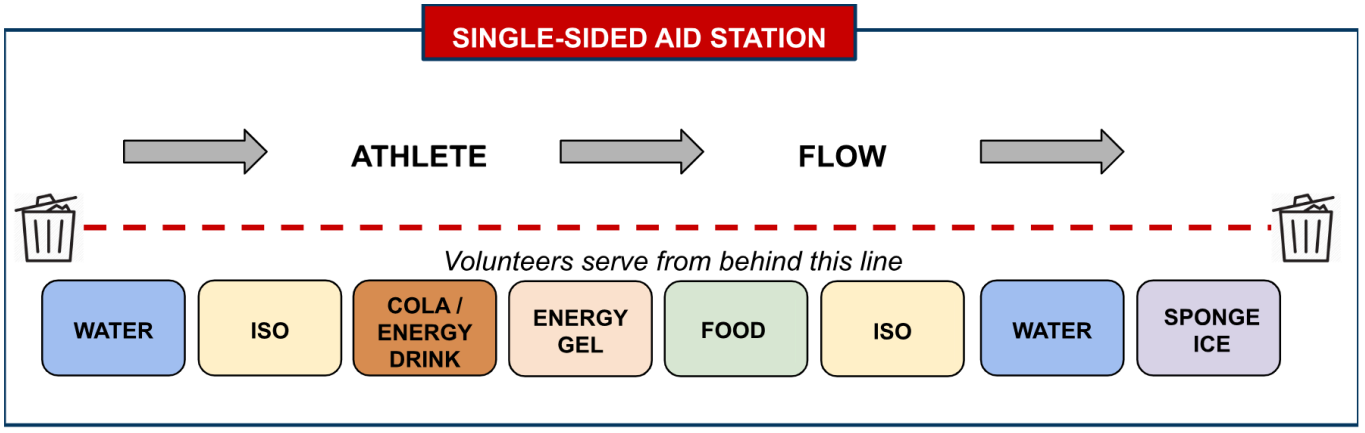
- **Intersections:** Avoid setting Aid Stations within intersections or in high-traffic areas. Remember that once the race begins, there will be a high volume of empty cups and trash along the roadway. Ample time will be needed following the event to clean up the area.

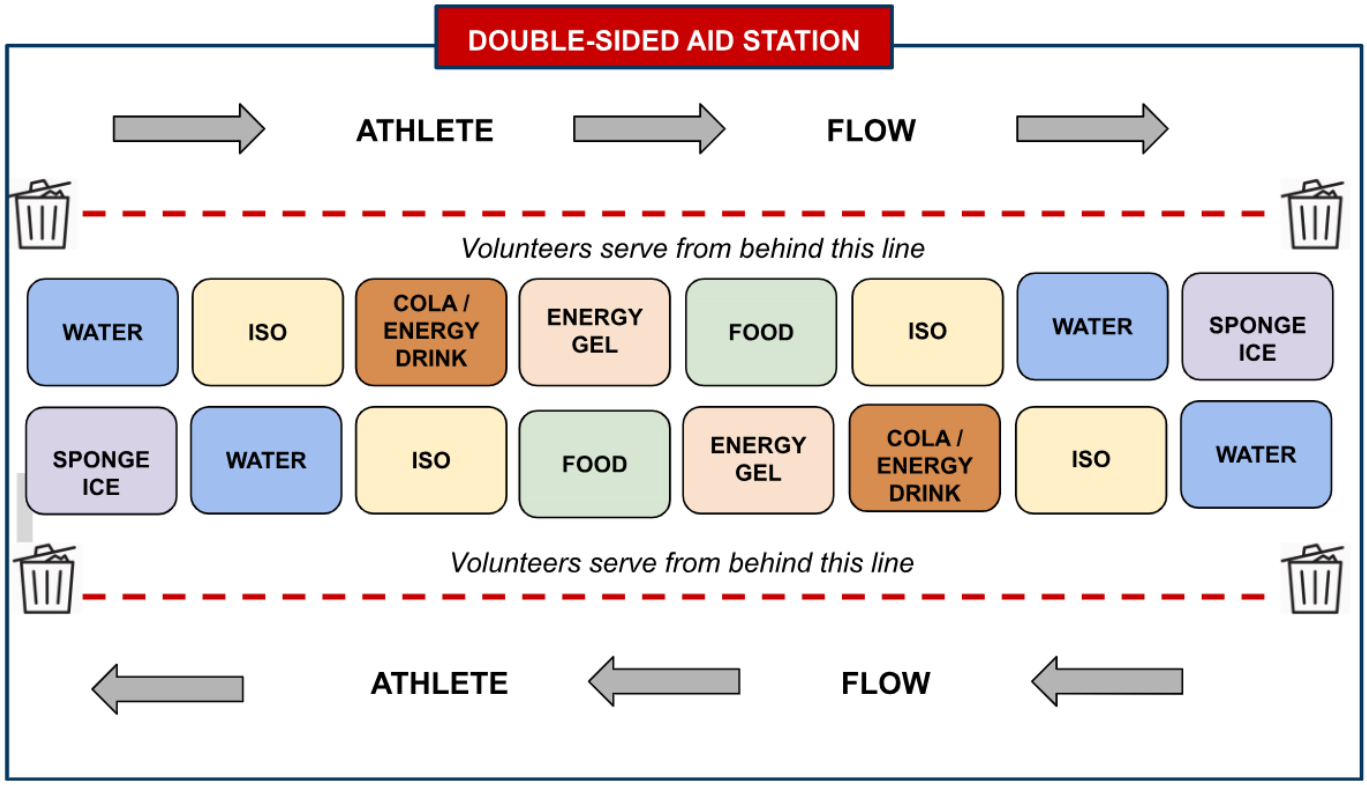
Water Source: The water source that will be used at each Aid Station may also be a large factor in determining if a location is suitable. Think through the logistics of where hoses are safe to run, trucks can stage, and equipment can be positioned before settling on a set-up area. Here are a few common sources of water:

EXISTING WATER SOURCE	WATER VENDOR	GALLON WATER
Be on the lookout for existing water sources via nearby businesses / residences or fire hydrants. Prior to utilizing these sources, you must confirm the water is safe for consumption.	Search for a local vendor that might be able to provide water truck(s) for the event. Prior to the race, the truck(s) would stop at each station and fill barrels of water to be used as the main source of water during the race.	Pre-packaged gallon water can be used to fill water cups at Aid Stations. Keep in mind that this method tends to generate more trash at each station as the gallons, and the boxes they arrived in, are emptied.

Layout: The Aid Station layout will be dictated by the food and beverage items being distributed which may differ depending on the race distance, size, and sponsor partners. Directional flow is also a factor as some aid stations may only be hit by athletes in one direction, whereas other stations along out-and-back portions of the course may be hit simultaneously by athletes in both directions.

The layouts outlined below are recommendations but these can be adjusted based on what product is being served. Once you establish a distribution order for the offerings, ensure all stations are set up the same way. The order in which the athletes interact with the product should be the same every time they approach an Aid Station, including those that they will hit twice on an out-and-back section of the course. **Consistency is key!** Share this information with athletes in advance of the race via the Athlete Guide and Pre-Race Briefings so they know what to expect along the course.



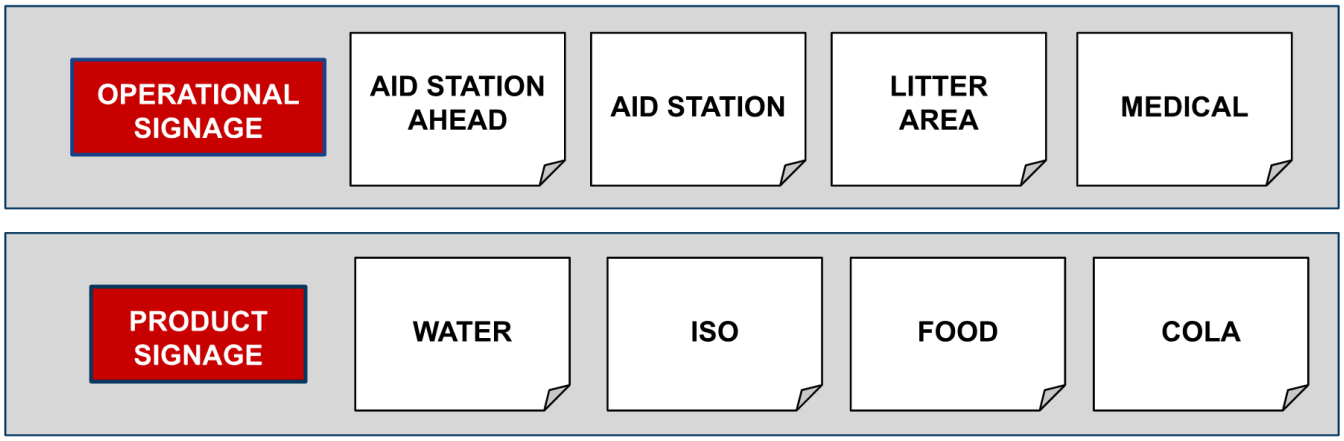


- **Littering Areas:** Set up trash barrels before and after the station to create designated areas for athletes to discard cups, trash, and other waste. To help reduce litter along the course, inform athletes about the existence of these waste collection areas in advance of the event.

DID YOU KNOW?

Intentional littering in prohibited areas is an infraction that may result in a Blue Card penalty

- **Signage:** To the extent that it is possible, plan for on-site signage that can help guide athletes through the Aid Station experience. This includes warning signs that can be placed approximately 500ft in front of the station to provide athletes with a heads-up that they are approaching the area.



- **Product Storage:** As you lay out the station, consider where you will position the backstock of product and supplies so they are easily accessible to staff and volunteers to replenish as needed. Refrain from storing items in areas that require personnel to cross the athlete flow to retrieve them. This can be particularly challenging for double-sided Aid Stations where space is limited. Ensure that supplies and pallets of product are safely stored out of the immediate line of athlete traffic. This may require additional barricades/delineators to clearly separate these areas and prevent any potential tripping/collision hazards.

HEALTH & SANITATION:

If an existing water source is used for on-course Aid Stations, consult with the local governing bodies about their processes and procedures for ensuring the water is safe to drink. Also, consider the safety protocols that will need to be executed by on-course staff and volunteers to keep the

DID YOU KNOW?

Potable water refers to water that is safe for human consumption. It must meet certain quality standards set by regulatory agencies to ensure it does not pose any health threat

Hydrant Flushing: If hydrants will be used as a water source, consult with the local authority for permission and guidance for flushing the hydrant. It is common practice to flush hydrants before the event to remove sediment, rust, or other debris in the pipes that could affect the water quality. The duration of the flushing required will differ depending on the hydrant but generally range between 30-45 minutes. Supplies needed:

HYDRANT WRENCH	HYDRANT ADAPTOR	RPZ ADAPTOR
		
The adjustable hydrant wrench fits the top pentagonal nut of the hydrant to open the hydrant.	*The hydrant adaptor allows a hose to connect directly to the hydrant, allowing the water to pass through.*	*Some agencies may require RPZs (Reduced Pressure Zone Adaptors) to protect against the backflow of contaminated water into the potable water supply.*

Hose Sanitizing Protocols: Before each event, hoses should be sanitized to prevent water contamination. Push a bleach/water-sanitizing solution through the hose and let it sit in the hose for a minimum of 10 minutes. Then connect the hose to the water source and let the hose run for at least 10 minutes before using the water.

Once hoses are sanitized, it is important to keep them that way! Pay careful attention to how the hose nozzles are handled as these are a common point of contamination. For example, contamination occurs when a hose rests on the ground between uses and then is inserted directly into the water dispenser or when someone grabs the hose by the nozzle with their hands (without gloves) and then it is used to fill a container.

RECIPE FOR SANITIZING SOLUTION

MIX

5 tablespoons of bleach per gallon of room temperature water

OR

4 teaspoons of bleach per quart of room temperature water

Pro Tip:

Set the precedent for all aid station staff and volunteers that hoses should remain off the ground at all times:

- ***Fencing:*** *If fencing is nearby, consider zip-tying a clear plastic bag to the fence that the hose nozzle can sit in when it is not in use. This will keep it elevated off the ground and protected from the elements.*

- ***Hose Bib Extenders:*** *Consider investing in hose bib extenders for each Aid Station (pictured left). Submerge the hose bib extender in a bucket of concrete to ensure it remains upright at all times. The hose attaches to the back side and remains in place for the duration of the event. Water is then dispensed from the spigot on the front side as needed. This ensures that the hose nozzle never has an opportunity to touch the ground between uses.*

- **Equipment Sanitizing Protocols:** Before each event, be sure to sanitize all equipment and supplies that may be used to dispense water or food on-site. Gatorade provides the following guidance for equipment washing:

  For smaller items such as hose nozzles, stirrers, pitchers, and other utensils, utilize the 3-sink method outlined below. Each sink should be deep enough to fully submerge the container:

SINK 1	SINK 2	SINK 3
1. **Fill** the sink with soap and hot water	1. **Fill** the sink with hot water	1. **Sanitize** with sanitizing solution (see recipe above)
2. **Scrub** all items thoroughly with sponges	2. **Rinse** all items thoroughly in hot water	2. **Soak** items in the solution for a minimum of 2 minutes
3. **Dump** out excess soap and water		3. **Rinse** items after the 2 minutes

  When washing coolers or other items that are too large for sinks, a clean and sanitize-in-place procedure can be used. For Step #1, fill a clean bucket with water and detergent. Use a sponge or washcloth to lather the cooler with the soapy water. Then rinse the cooler at least three times, and sanitize the inside of the container and the spigot with sanitizing solutions. Let it sit for at least 2 minutes and rinse the cooler one last time.

Pro Tip:
Encourage staff and volunteers to clean and rinse out all coolers immediately after use (especially those used for electrolytes or other beverages besides water). Turn all coolers upside down and allow them time to dry before stacking and storing them for future events. This will help prevent the growth of mold and other bacteria!

- **Handwashing & Gloves**: The most common cause of contamination in food/beverage service is inadequate handwashing. Ideally, all aid stations have handwashing stations available for staff and volunteers, but if this is not possible, take steps to provide an ample supply of hand sanitizer and gloves.

LOGISTICS:

Equipment & Supplies: Develop a master supply list that breaks down the type and quantity of all equipment needed at each Aid Station. While some stations may have specific needs, here is a general list of Aid Station supplies to include in your pack lists:

BIKE AID STATION SUPPLIES

- ❑ Tables
- ❑ Table covers / skirts
- ❑ Tents (medical/shade)
- ❑ Gloves
- ❑ Hand sanitizer
- ❑ Anti-Bacterial wipes
- ❑ Trash barrels & bags
- ❑ Baby pools (for icing product)
- ❑ Tarps (for over pools)
- ❑ Extra toilet paper / paper towels
- ❑ Cutting boards/knives
- ❑ Rakes / shovels
- ❑ Push broom
- ❑ Ice chests
- ❑ Ice & plastic bags
- ❑ Volunteer water / snacks
- ❑ Gels
- ❑ Water Bottles
- ❑ Iso Bottles
- ❑ Food offerings
- ❑ Chafing dishes
- ❑ Signage / hardware
- ❑ Box cutters, zip ties, snips
- ❑ Basic bike repair supplies

RUN AID STATION SUPPLIES

- ❑ Hoses (if applicable)
- ❑ Tables
- ❑ Table covers / skirts
- ❑ Tents (medical/shade)
- ❑ Cups
- ❑ Pitchers
- ❑ Gloves
- ❑ Hand sanitizer
- ❑ Anti-Bacterial Wipes
- ❑ Trash barrels & bags
- ❑ Extra toilet paper / paper towels
- ❑ Cutting boards/knives
- ❑ Sponges
- ❑ Rakes / shovels
- ❑ Push broom
- ❑ Ice chests
- ❑ Electrolyte coolers
- ❑ Electrolyte stirrers
- ❑ Ice & plastic bags
- ❑ Volunteer water / snacks
- ❑ Coroplast sheets (cup stacking)
- ❑ Water gallons / barrels
- ❑ Electrolyte mix
- ❑ Gels
- ❑ Drink offerings
- ❑ Food offerings
- ❑ Chafing dishes
- ❑ Signage / hardware
- ❑ Box cutters, zip ties, snips

Trucking Plans: As you start to build out your Aid Station supply list, consider how these items will be delivered and picked up from each location. Depending on the size and scale of the event, staff and trucking resources, and available on-site parking, there are a few different approaches to this transport plan:

AID STATION TRUCKING OPTIONS:		
TRUCKS	**PRE-RACE**	**RACE DAY**
 **One Truck:** All Stations *(small-scale events)*	> The truck is loaded with all supplies for all stations. Aid Station #1 is loaded last toward the back of the truck > Label items by station and create a clear separation of piles on the truck so there is no confusion about which supplies belong to each station	> Truck drives the course and drops off each station along the way, starting with Aid Station #1. > After dropping the last Aid Station, the truck circles back to the stage at Aid Station #1 (or nearby) to become part of the sweep package and pick up supplies behind the last runner.
 **Multiple Trucks:** By equipment type *(medium scale events)*	> Multiple trucks are used and each truck is assigned to manage the delivery and pick-up of specific equipment > For example, there may be three trucks assigned to the Aid Station operation: 1. Tables 2. Product (Water, Electrolyte, etc) 3. General supplies (coolers, ice, etc)	> Trucks drive the course and drop off at each station along the way, starting with Aid Station #1. > After dropping at the last Aid Station, the trucks circle back to become part of the sweep package and pick up the same items they originally delivered.
 **Multiple Trucks:** By Station *(large-scale events)*	> Each truck is assigned to a particular aid station or station(s). The truck is loaded with all items that will be needed at its assigned station. > If a few stations are sharing a truck label items by station and create a clear separation of items on the truck during the packing process.	> The truck drives directly to its assigned station, is unloaded, and remains parked at the site for the duration of the event. After the last runner passes, all station equipment is loaded into the truck.

In addition to the race day deliveries and pick-ups, a comprehensive trucking plan should also consider the following:

- **Trash Collection**: Establishing a trash collection plan for the aid stations in advance of the event is a key piece of the puzzle to prevent any negative impacts on the community. Trash is generally handled in one of three ways:

If the Aid Station teams are responsible for transporting trash to a particular location post-event, ensure the trucks will have the capacity to be able to accommodate a large volume of trash bags. This may involve repurposing trucks (i.e. a truck that product pre-event, becomes the trash truck post-event) or planning for additional truck(s) that will be dedicated to trash.

- **Supply Restock:** Once the race begins and road closures are in effect, vehicle movement between Aid Stations may not be easy, especially for large trucks. Develop a plan for how your Aid Station team will handle replenishing supplies if a particular station begins to run low on a critical item. This may mean staging additional contingency supplies in centralized areas along the course that are easy to access and/or having designated re-stock vehicles that are on-call to shuttle supplies during the event.

- **Contingency Planning:** Always expect the unexpected! The more trucks you have as part of your race day transportation plan, the greater risk one of the trucks may experience mechanical issues on race day. Think through how you might be able to adjust the operational plans to deal with a curveball.

VOLUNTEERS & STAFFING:

Volunteers play a crucial role in the execution of Aid Stations. Setting these groups up to be successful begins with providing clear pre-race communications, strong on-site staff management, and the delivery of all necessary equipment at the correct place and time.

Pre-Race: For each station, prepare the following materials that can be shared with on-site staff and volunteer group leaders:

- **Site Plan:** A diagram that shows the location of the Aid Station, the directional flow of the athletes, and the to-scale placement of the station components, including but not limited to: delineation, tables, tents, signage, product backstock, vehicle staging, entertainment, and cheer zones.

- **Equipment List:** Document the list of items/quantities the station is slated to receive. Upon arrival at the station, volunteers/staff should double-check these quantities so that if any

equipment is missing there is time to source it from another location.

- **Timeline**: Outline the timetable for the following actions:

TIME	ACTION
xx:xx	Staff / Volunteer arrival
xx:xx	Aid Station equipment delivery
xx:xx - xx:xx	Aid Station setup
xx:xx	Show Ready
xx:xx	Projected first athlete arrival
xx:xx	Projected last athlete arrival (Station to remain set up until the SAG vehicle passes)
xx:xx - xx:xx	Aid Station breakdown
xx:xx	Aid Station equipment pick up
xx:xx	Staff / Volunteer departure

- **Instructions:** If there are special instructions or materials specific to their station, ensure these are communicated in advance of the event and also consider including laminated print-outs within the station supply bins for easy access on-site. Examples include:
    - Hydrant flushing instructions
    - Isotonic mixing instructions
    - Permit for he Aid Station location

During the Race: For Aid Stations to be able to maintain the integrity of the station during the peaks, it is important to assign volunteers to carry out specific roles to ensure all bases are covered. For example, consider dividing the group into the following subsets to tackle these tasks:

PRODUCT PREPARATION	REPLENISH TABLES	PRODUCT DISTRIBUTION	CLEANING CREW
Volunteers dedicated to mixing concentrate, cutting fruit, removing safety seals from sport bottles, etc.	Volunteers dedicated to replenishing prepped product on the tables to allow for easy distribution	Volunteers dedicated to handing out product to athletes as they move through the station	Volunteers dedicated to keeping the area clean: emptying trash cans, sweeping up debris, breaking down cardboard, etc.

A few best practices for Aid Station volunteers while the event is live:

- ☐ Cups do not need to be filled with water / isotonic to the brim. Fill to about 4oz
- ☐ Cups should be stacked on coroplast sheets on the tables to allow for more backstock
- ☐ Volunteers should call out the product they are distributing to athletes as they pass
- ☐ Volunteers should hold cups/bottles in their palm to allow athletes to easily grab the top
- ☐ Designate a “DO NOT CROSS” line for volunteers. For athlete and volunteer safety, volunteers should distribute product from behind the line at all times

Breakdown: The key to an easy Aid Station breakdown is to have a few dedicated volunteers assigned to keep the area clean and consolidate trash as the race is happening. Once the race begins winding down, transition some of the volunteers originally helping with product preparation and replenishing to help with trash collection. A few best practices for Aid Station breakdown:

- ☐ Product should remain available until the last athlete passes the station. Await confirmation from SAG Vehicles and/or the Command Center to confirm the last athlete has passed before breaking down.
- ☐ Bag all trash and break down all cardboard
- ☐ Wipe and rinse out all coolers and lay out upside down to dry. Refrain from stacking wet coolers/barrels
- ☐ Ensure on-site staff and volunteer leaders are briefed on the process for equipment and trash pick-up following the event
- ☐ Before packing and storing extra product for future races, look at the expiration dates to confirm the shelf life
- ☐ Where possible, make arrangements with local food pantries/shelters to be able to donate excess perishable product

Pro Tip:
If you have multiple volunteer groups involved in activating Aid Stations, consider creating a friendly competition between the stations with a prize for the group that exemplifies the most spirit. Introducing themes for each of these areas can also be a fun way to encourage decorations, costumes, and engaging setups that will be fun for athletes to interact with as they move through the course. Provide extra incentives for superlatives that are awarded by race management for: largest number of volunteers, fastest setup, cleanest breakdown, etc.

SELF-SERVE STATIONS:

In the wake of the COVID-19 pandemic, many races adapted their Aid Station setups to be self-serve, in an attempt to reduce the number of touchpoints and the reliance on volunteers to execute product distribution. In many cases, these stations called for athletes to carry their own reusable cups which

brought sustainability benefits, reducing waste and drastically decreasing the amount of trash generated by the event.

While self-serve stations may not be logistically possible for some events, particularly those that have a large participant field, they may be a viable option for smaller-scale events with fewer athletes. As you consider if this is right for your event, weigh the following factors:

OPERATIONS

- Volunteers / Staffing
- Sustainability
- Trash collection
- Equipment setup / costs
- Trucking setup / costs
- Setup time
- Water Source

BALANCE

ATHLETE EXPERIENCE

- Ability for athletes to stay adequately hydrated
- Athlete perception
- Course flow / congestion
- Accessibility of stations
- Energy shift with reduction of staff/volunteer presence

There are many ways to execute these setups, but here are a couple of examples of equipment commonly used by races at self-serve stations:

WATER MONSTERS

Consider purchasing or renting Water Monsters to use for bulk beverage distribution. Each unit has six spigots and the 125-gallon tank capacity is equivalent to:

- 1,000 16oz water bottles
- 3,000 paper cups
- 25 five-gallon water coolers

Foot-pedal attachments are also available to create a touchless experience for participants

PVC MANIFOLD SYSTEMS

PVC pipe can be used to create dispensing stations that connect to a water source. Water Monster makes manifold attachments outfitted for their dispensers or consider creating your own that can be connected to a hydrant / hose hookup.

This system with spaced out spigots helps to keep the flow of athletes moving through the Aid Station and reduce backups.

Switching to self-serve stations can be a big adjustment for athletes. If you plan to convert stations to self-serve, ensure there is ample communication prior to the event outlining what they will see at Aid Stations. If they are expected to carry their own reusable cups, provide opportunities for them to receive and/or purchase these items leading up to the race. For example, consider providing reusable cups to athletes as part of their SWAG giveaway or partnering with a hydration vendor to be on-site at the pre-race expo/packet pick-up to have these available for sale.

Pro Tip:
In situations where athletes are instructed to carry their own reusable cups, plan to have a small supply of extra cups available at each station as a contingency if there are athletes that forget their cups or drop them along the way. Ensuring athletes stay hydrated is an important safety measure and the Aid Stations should not impede their ability to