

Impulse Youth Arts Organization Concussion, Heat and Hydration Policies

Impulse Youth Arts Organization (IYAO) Definitions

1. Health Staff: includes, but not limited to; athletic trainer, nurse, physician, physician's assistant, nurse practitioner
2. Administrative Staff: corps director, assistant corps director, tour director
3. Instructional Staff: caption heads, technical staff

ROLES AND RESPONSIBILITIES

All Staff

1. Safety should be at the forefront of everything we do.
2. All Staff are required to read and understand the IYAO Health Procedures annually.

Instructional Staff

1. Should guide or assist members to Health Staff when an actual or suspected medical/psychological issue or injury is identified.
2. Shall be certified in first aid and basic CPR with AED training.
3. Will collaborate with health staff regarding the members': assessments, warmup and conditioning, visual and choreography elements.

Health Staff

1. Shall be certified in first aid and basic CPR with AED training.
2. Primary objective is the health and safety of the corps members and staff.
3. Shall participate in annual concussion training as specified by California law.
4. Will collaborate with visual instructional staff regarding the members': assessments, warmup and conditioning, visual and choreography elements.
5. Certified health staff will have the final decision-making authority regarding members' participation in activities.
 - a. Will not attempt procedures that are out of their scope of practice.

Administration Staff

1. Shall be certified in first aid, basic CPR and AED.
2. Shall participate in annual concussion training as specified by California law.
3. In the absence of certified health staff, will have the final decision- making authority regarding members' participation in activities.

Concussion Management

Per California law, coaches must receive concussion education. Parents and members (over age 12) must receive and attest to concussion education.

Signs and Symptoms of a Concussion:

<u>Cognitive Symptoms</u>	<u>Physical Symptoms</u>	<u>Emotional Symptoms</u>
Poor attention/Concentration	Headaches	Nervousness/Anxiety
Problems remembering	Vacant stare	Sad
Difficulty following conversation	Appears dazed or stunned	Irritability
Answers questions slowly	Dizziness	Personality changes
Asks same question repeatedly	Clumsiness/Balance problems	Plays less
Mentally foggy	Fuzzy/Blurry vision	
	Sleeps more/less than usual	
	Appears fatigued, tired or sleepy	
	Vomiting/Nausea	

Response

1. Staff will immediately inform the health staff of any member that sustains an injury during rehearsal that involves trauma to the head.
2. The health staff will: obtain injury details and assess the member. If symptoms are noted by the health staff, then the member will be excluded from all participation, until such time as the member is medically cleared to return to participation. If the member is under 18, the health staff will contact the parents directly within 24 hours.
3. The health staff will notify the director, appropriate staff and include the status of concussed members in the daily injury report.
4. If the member is taken to an urgent care or emergency room the member will be accompanied by health staff. The member will then need to follow -up with the health staff as well as a licensed provider for retesting and medical re-evaluation before returning to physical activity/sports, unless clear guidelines are given by the licensed provider during the initial visit.
5. The member cannot participate in any performance or events until they have successfully completed the suggested full three-day progression and remained symptom free. Return to rehearsal progression will be as follows:

Horns/Drumline

Day 1: Marching basics and stand still playing only

Day 2: Marching basics, drill and stand still playing (no ensemble)

Day 3: Full participation

Color Guard

Day 1: Flag/ Weapon basics, no tossing. Dance, no across the floors

Day 2: Sectionals, spinning on the move. Dance with across the floors (no ensemble)

Day 3: Full participation

Staff cannot override the decision of the health staff to exclude a marcher from participation.

Heat--Related Illnesses

High temperatures can present a dangerous situation for members and staff, but with reasonable precautions those situations can be mitigated. The health staff must be consulted for the official temperature and the proper course of action for each day. Whenever possible, the acting director and health staff should consult with each other as early as possible during an individual day in order for all concerned parties to be notified of possible changes to practice schedules/activities appropriately. The acting director will communicate any changes to the schedule or activities.

The following policies are the minimum standard for all outdoor activities within IYAO. The use of more stringent policies is up to the director. Health staff and acting director should collaborate prior to each rehearsal to discuss specific conditions and planned activities for rehearsal. The acting director will communicate any change.

Staff should be aware of the signs and symptoms of **dehydration**:

- Dry mouth
- Thirst
- Irritability
- General discomfort
- Headache
- Apathy
- Weakness
- Dizziness
- Cramps
- Chills
- Vomiting
- Nausea
- Head or neck heat sensations
- Excessive fatigue and/or decreased performance

*If any of these signs or symptoms are observed notify the health staff immediately. Early detection of dehydration decreases the occurrence and severity of the illness.

The Wet Bulb Globe Temperature (WBGT) is a measure of the heat stress in direct sunlight, which takes into account: temperature, humidity, wind speed, sun angle and cloud cover (solar radiation). This differs from the heat index, which takes into consideration temperature and humidity and is calculated for shady areas. If you work or exercise in direct sunlight, this is a good element to monitor. Military agencies, OSHA and many nations use the WBGT as a guide to manage workload in direct sunlight

Utilize the Wet Bulb Globe Test (WBGT) Index, if using a device to measure WBGT (preferred).

Wet Bulb Globe Temperature * This is not the same as air temperature		EASY - standstill		MODERATE - basics, dance, + instruments		HARD - music + drill, run-throughs	
		Water quarts/hr	Rest* min/hr	Water quarts/hr	Rest* min/hr	Water quarts/hr	Rest* min/hr
< 82°F	CLEAR	½	6	¾	6	¾	9
82-84.9°F	GREEN	½	6	¾	9	1	12
85-87.9°F	YELLOW	¾	9	¾	12	1	16
88-89.9°F	RED	¾	12	¾	16	1	20
90-92+°F	BLACK Limit outside activity	1	16	1	20	1+	24

*rest includes, but not limited to: opportunity to hydrate, out of direct sunlight, sit down, allow chance for heart rate and body temperature to return to baseline

Heat Cramps

Cramps that occur during exercise.

Treatment

Hydrate the member and replace sodium losses with a sports drink or other source of salt.

Relax, stretch, and massage the involved muscle to reduce acute discomfort.

Prevention

Adequate conditioning, acclimatization, hydration, electrolyte replacement, and appropriate dietary practices

Heat Exhaustion

Inability to keep up with exercise due to intensity of effort and environmental heat factors.

Symptoms

- High pulse rate and low blood pressure
- Extreme weakness
- Dehydration and electrolyte losses
- Coordination problems, fainting, lightheadedness
- Profuse sweating, paleness, other heat sensations
- Headache
- Abdominal cramps, nausea, vomiting, diarrhea
- Persistent muscle cramps
- Mild confusion which can quickly resolve with rest and cooling

Treatment

- Move member to shaded or air-conditioned area to rest
- Remove extra clothing or gear
- Cool with cold water, fans, or cool towels (replaced every 2-3 minutes)
- Lay with legs raised above level of heart
- Give member cool/cold fluids to drink if not vomiting
- If symptoms do not improve within 30 minutes, call 911 or send member to hospital

Exertional Heat Stroke

High core body temperature along with organ dysfunction. The longer the body is at an elevated temperature, the more dangerous. Temperature is usually 104 degrees or above.

Symptoms

- Disorientation, headache, irrational behavior, irritability, emotional instability, confusion, altered consciousness, coma, or seizure
- Hyperventilation, dizziness, nausea, vomiting, diarrhea, weakness, profuse sweating, dehydration, dry mouth, thirst, muscle cramps, loss of muscle function, and ataxia

Treatment

- **Call 911. This is a MEDICAL EMERGENCY!**
- In meantime, initiate cooling measures “cool first, transport second”
- Move member to shaded or air-conditioned area to rest
- Remove extra clothing or gear
- If available, put in tub with cold/ice water; place in cold shower; douse with water from hose
- Cool with cold water and fans, or cool towels (replaced every 2-3 minutes). Lay with legs raised above level of heart
- Give member cool/cold fluids to drink if not vomiting
- Cool until member begins to shiver OR for 15-20 minutes of active cooling OR medical help arrives.

Sources: Binkley, H. M., Beckett, J., Casa, D. J., Kleiner, D. M., & Plummer, P. E. (2002). National Athletic Trainers' Association Position Statement: Exertional Heat Illnesses. *Journal of Athletic Training*, 37 (3), 329–343.

Lightning Protocol

It is imperative that all personnel are aware of lightning hazards and the specific safety shelter for their venue. In the event of lightning during a rehearsal or event, precautions must be taken to ensure the safety of both members and spectators. In any event, the health staff, in conjunction with the acting director and/or public safety officials (i.e. police) if necessary will be responsible for monitoring inclement weather.

Lightning Detection

Lightning awareness should be heightened at the first flash of lightning, clap of thunder, and/ or other criteria such as increasing winds or darkening skies, no matter how far away. The health staff is responsible for monitoring the progress of inclement weather by primarily using a Weather App. Another option is to count the amount of seconds between the flash of lightning seen and the thunder that follows, divided by 5. That number represents the amount of miles the lightning is from the site.

The indicator for clearing the field of rehearsal with the weather app is 6 miles or less. In the event that members need to be removed from rehearsal site, the health staff must notify the corps director who will then notify the staff. Once the staff has been notified they must immediately comply, end rehearsal and move to a safe shelter.

Safe Shelter

Instructional staff should all be aware of the closest safe shelter to the rehearsal site and how long it takes to reach that shelter. A safe structure or location is defined as- “any sturdy, fully enclosed, substantial, and frequently inhabited building that has plumbing and/or electrical wiring that acts to electrically ground the structure”. Examples of locations that routinely DO NOT meet the criteria include-

- Baseball / softball dugouts;
- Baseball / softball “covered”
- batting cages;

- Soccer covered benches;
- Under metal bleachers;
- Outside storage sheds; and/or
- Canopy / awning / tent

In the absence of a sturdy, fully enclosed, substantial, and frequently inhabited location as described above, a secondary structure such as a fully enclosed vehicle or tour bus with a hard metal roof, rubber tires, and completely closed windows can provide a measure of safety. Persons should not touch the sides of the vehicle!

Persons should avoid taking showers and using plumbing facilities (including indoor and outdoor pools, whirlpools, Jacuzzis, and hot tubs) and land-line telephones during a thunderstorm.

If no safe structure or location is within a reasonable distance, personnel should find a thick grove of small trees surrounded by taller trees or a dry ditch. Everyone should assume the “lightning safe” position- a crouched position on the ground with the feet together, weight on the balls of the feet, head lowered, and ears covered. **DO NOT LIE FLAT!** Minimize the body’s surface area and minimize contact with the ground.

If unable to reach safe shelter, persons should stay away from the tallest trees or objects (i.e. light poles, flagpoles, etc.), metal objects (i.e. fences, bleachers, etc.), individual trees, standing pools of water, and open fields. Persons should avoid being the highest object in an open field.

Members should not rehearse outside until 30 minutes has passed since last lightning/thunder is seen or heard.

Asthma

Members diagnosed with asthma should have a rescue inhaler available during all rehearsals and performances.

Prior to move--ins members should obtain 2 rescue inhalers, one to keep with themselves in their backpack, and the other as a back-up. At NO time should a member take an inhaler if they are not diagnosed with asthma. NO staff member will advise any member to take an inhaler that is not prescribed to them.

Notify the health staff immediately if you notice the following:

- Significant increase in wheezing that you can hear
- Chest tightness
- Fast breathing
- Inability to speak in full sentences
- Uncontrolled cough
- Nasal flaring

Procedure

- Immediately notify the athletic trainer.
- Remove the member from activity
- Have member take their rescue inhaler
- Assist member with nose breathing technique
 - o Have the member take a deep breath through the nose and out the mouth or Raising the arms will help the lungs expand
 - o Try to calm the member, panicking increases the respiration rate.
- Activate EMS if no improvement is observed in 10 minutes.

Allergies/Anaphylaxis

Members who have been diagnosed with severe allergies should notify the athletic training staff, directors, and food staff of the nature and severity of their allergies. **Members requiring epinephrine auto-injector should acquire 2 injectors prior to move-ins, one to keep with themselves in their backpack, and the other as a back-up.** The food staff will be given a list of all members with food allergies by either the athletic training staff or administrative staff.

Symptoms

- hives, redness
- difficulty breathing
- Wheezing
- tongue swelling
- feeling like throat is closing

Treatment Health Staff present

- If member is able to administer their own epinephrine auto-injector the athletic training staff will supervise proper administration. If member is not able to administer their own epinephrine auto--injector health staff will administer it for them, by injecting it in the mid/outside thigh. Health staff will then activate EMS for transportation to the ER for further treatment.
- Health staff will note the time the epinephrine auto--injector was administered, if available a 2nd epinephrine auto--injector will be administered 15 minutes after the first one. If a 2nd epinephrine auto--injector is not available, health staff will provide the member with Benadryl.
- Upon EMS arrival, health staff will provide EMT/Paramedics with the administered epinephrine auto-injectors and times of administration. If member is under the age of 18, the member's parents will be contacted directly. Health staff will accompany member to the hospital.

Health Staff is not present

- If member is able to administer their own epinephrine auto--injector instructional staff will assist if needed. If member is unable staff will administer it for them, by injecting it in the mid/outside thigh. Staff will then activate EMS for transportation to the ER for further treatment.
- Instructional Staff will note the time the epinephrine auto--injector was administered, if available a 2nd epinephrine auto--injector will be administered 15 minutes after the first one. If a 2nd epinephrine auto--injector is not available, instructional staff will provide the member with Benadryl.
- Upon EMS arrival, instructional staff will provide EMT/Paramedics with the administered epinephrine auto-injector and times of administration. If member is under the age of 18, the member's parents will be contacted directly. Staff will accompany member to the hospital.

Common Injuries

Sprains- overstretching or tearing of the ligaments. Treat with ice, rest and wrap

Strains- overstretching or tearing of the muscle or tendon. Treat with ice, rest, wrap

Lower leg pain/shin splints- overuse or improper technique. Treat with ice on rehearsal breaks, medications, reassess footwear used. Refer for X-rays if problem worsens.

Fractures- Broken bones. Treat initially with ice, elevation, immobilization if needed. Refer for X-rays and

professional treatment

Pain/soreness- Any number of reasons of muscle pain/soreness having to do with over-use, improper technique or strain. Treat initially with ice, then move to heat, gentle stretching and medication if needed.

Cramps- Involuntary muscle spasms causing pain. Slowly stretch against the cramp, massage when possible. If heat is a factor increase electrolytes.

Skin -

- **Rashes-** - if itching, try Benadryl 50 mg orally, try hydrocortisone cream, Telemedicine or Urgent Care if concerning
- **Abrasions-** - Clean with tap water twice daily, antibiotic ointment, bandage, protect from sun
- **Blisters-** - clean with tap water, antibiotic ointment, bandage to help keep clean and moist, change bandage if wet or dirty
- **Lacerations-** - clean with tap water twice daily, antibiotic ointment, bandage to help keep clean and moist, protect from sun for up to 6 months to prevent scarring, change bandage if wet or dirty
- **Redness** -- cellulitis (infection of skin) or infection of wound.

Infections- - Redness, swelling, heat. skin infections need antibiotics wound infections need antibiotics

Groin pull- - Treat as sprain- ice, rest

Testicular pain-- Initial treatment, ice, supportive underwear, refer to ER

Abdominal Pain- - this can be many things. If concerning, refer to ER

Vomiting/Diarrhea-- decrease food intake, encourage frequent small amounts of fluids and increase as tolerated. If significantly dehydrated, refer to ER

Suicidal- - someone should stay with the person at all times, refer directly to ED

Tylenol- - overdose can cause liver damage, limit to 3,000 mg per day (9 regular or 6 extra--strength pills per day)

Ibuprofen- - overdose can cause kidney damage, can cause ulcers, limit to 3,200 mg per day (16 pills per day)

Suggestions to use telemedicine, urgent care, or emergency.

Telemedicine- Rashes, psychological - depression, anxiety, urinary tract infections

Urgent Care- Strains, sprains, lacerations, fractures, pain/soreness, skin infections, groin/muscle pulls, usually can perform X--rays

Emergency Room- Deformed fractures, complex/deep lacerations, concussions, suicidal, abdominal pain, severe vomiting/diarrhea with dehydration, testicular pain, when CT, MRI, or are needed.

Infectious Outbreaks

Due to the constant close contact of marching members, infectious disease outbreaks present a unique challenge to the drum corps. Historically, gastrointestinal illnesses (e.g. norovirus) have presented as the most common infectious outbreak in the drum corps activity. Interventions to mitigate and prevent the spread of disease can be easily implemented.

Preventing an outbreak

- Establish a cleaning/disinfecting regimen (i.e. disinfecting the buses once per week, cleaning drinking containers with bleach once per week - more often during periods of illnesses, cleaning instruments)
- Increase the frequency of the disinfecting regimen during outbreaks (consider daily)

Recognizing an outbreak

- Multiple members (at least 3) with the same symptoms.
- Members presenting with similar symptoms over a period of consecutive days.

Responding to an outbreak

- Quarantine: isolate ill members with similar symptoms until their symptoms resolve
 - Quarantine area on one bus with at least one empty row between healthy and ill members.
 - Quarantine in sleeping areas with at least an 8-foot buffer between ill and well members.
 - Quarantine to the same bathroom and consider bathing areas.
 - Consider alternative methods to feeding the members.
 - Ill members should not participate in rehearsal or perform in shows.
- Helping ill members and clean up if body fluids:
 - At a minimum, wear gloves.
 - When helping members with active vomiting or diarrhea, wear gloves, gown and protection over the mouth, nose and eyes. Encourage use of containment (vomit/emesis bags)
 - Hands must be washed with soap and water after, alcohol -based cleansers are not enough.
- Disinfecting:
 - Use a cleanser that is shown to kill norovirus.
 - When cleaning, wear gloves, gown and protection over the mouth, nose and eyes.
 - Consider increasing disinfection practices in food prep areas.
 - Wash contaminated clothing or items in the hottest wash available
- Educate the members on the reasons for quarantine, excellent hand hygiene and preventing the spread of disease. Use CDC education
- Staff members with current illness should not prepare food or come in close contact with marching members.

Stop Norovirus!

Norovirus causes diarrhea and vomiting. It spreads easily from an infected person to others, especially in long-term care facilities. Elderly residents are more likely to become very sick or die from norovirus.

Protect yourself and elderly residents from norovirus.

WASH YOUR HANDS



Wash your hands often with soap and water for at least 20 seconds each time and avoid touching your mouth.

CLEAN SURFACES



Use a bleach-based cleaner or other approved product* to disinfect surfaces and objects that are frequently touched.

WASH LAUNDRY



Remove and wash soiled clothes and linens immediately, then tumble dry.

USE GOWN AND GLOVES



Use gown and gloves when touching or caring for patients to reduce exposure to vomit or fecal matter.

STAY HOME WHEN SICK



If you're sick, stay home and don't take care of or visit people in long-term care facilities for at least 2 days after your symptoms stop.

For more information, visit www.cdc.gov/norovirus



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*Use a chlorine bleach solution with a concentration of 1000-5000 ppm (5-25 tablespoons of household bleach [5.25%] per gallon of water) or other disinfectant registered as effective against norovirus by the Environmental Protection Agency (EPA) at http://www.epa.gov/oppad001/ind_g_norovirus.pdf

How You Get Norovirus From People or Surfaces



Norovirus spreads when a person gets poop or vomit from an infected person in their mouth.



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For more information, visit www.cdc.gov/norovirus

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