

Guidelines for the Medical Management of Concussions

As Applied to Cheerleading

This information is not intended to evaluate or treat a concussion or any injury and is not a substitute for a consultation with a medical provider. Each concussion is unique and should be managed on an individualized basis. USA Cheer recommends that you see your physician or a concussion-trained specialist if you suspect a concussion has occurred.

About Concussions

- A concussion is a traumatic brain injury caused by a blow to the head or body that causes the head and brain to move back and forth rapidly, resulting in symptoms that may present immediately or after several hours.

Signs & Symptoms of a Concussion

Symptoms reported by the cheerleader

- Headache
- Nausea
- Balance problems and dizziness
- Blurred vision
- Sensitivity to bright lights or loud noise
- Feeling “sluggish” or “foggy”
- Altered sleep patterns
- Difficulty concentrating
- Problems with memory

Signs observed by coaches & other cheerleaders

- Stunned or confused appearance
- Forgets arm motions or cheers
- Confused about formations in dances or routines
- Unsure of surroundings (i.e., game score)
- Moves clumsily
- Loss of consciousness
- Forgets events right before or after a blow to the head
- Personality or behavior changes (irritable, agitated, sad, etc.)
- Clutches head or slow to get up after a fall or blow to the head

**ANY OF THE SIGNS AND SYMPTOMS LISTED ABOVE MAY INDICATE A CONCUSSION HAS OCCURRED.
WHEN IN DOUBT, SIT THEM OUT, AND KEEP THEM OUT!**

Concussion Management

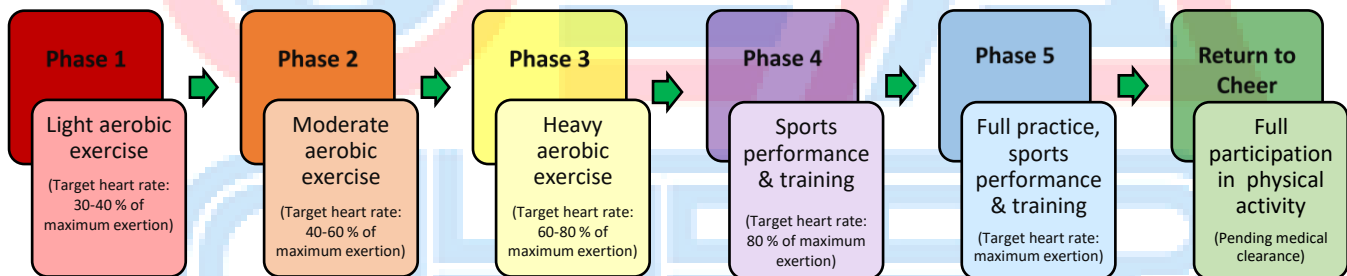
- The medical focus following any concussion should be on any symptoms an athlete might experience.
- Return to cheer should not be allowed until all symptoms are absent, the athlete has completed a five-phase return-to-cheer protocol, and has been cleared by a healthcare professional with experience managing concussions.
- Progression through the protocol is individualized and will be determined on a case-by-case basis. Factors that may affect the rate of progression include previous history of head injury/concussion, duration and type of symptoms, and age of the athlete.
- Depending on the level of symptoms, student athletes recovering from concussion may find it very stressful to keep up with academic demands while not feeling well physically and cognitively. These individuals may require academic adjustments.
- Student-athletes should reintegrate into academic activity with guidance from their healthcare providers when their symptoms are manageable and appropriate academic support can be provided.
- Academic support may include, but is not limited to, the following adjustments: modified school attendance, preferential seating, shortened assignments, extended deadlines, and frequent breaks.
- Care and recovery following concussion are best managed by an interdisciplinary team of healthcare professionals. Members of team most often include physicians, athletic trainers, sports neuropsychologists, nurses, and physical therapists.

GENERAL RECOMMENDATIONS

Pre-Concussion	All participants should have an annual pre-participation physical evaluation.
	If a school's athletic program or affiliated medical center offers pre-season baseline testing (such as ImPACT, SCAT5, etc.), the cheerleading team should participate in that testing when possible to help clinicians in the interpretation of tests performed and return to cheer activities after a concussion occurs.
	All teams should have an identified medical provider (physician or an athletic trainer working under a physician's concussion protocol) for the diagnosis and initial care of concussions.

Post-Concussion	A cheerleader who has a suspected concussion should be removed from the activity immediately and should not be allowed to return to cheer within 24 hours of the incident and without being cleared by a medical professional trained in concussion management.
	A physician and members of the interdisciplinary team shall provide guidance through the return-to-cheer protocol and shall make any decisions regarding return to activity. If baseline assessments were conducted, the athlete should demonstrate performance consistent with baseline scores when symptoms have resolved.
	After a diagnosis of concussion, the athlete should follow a return-to-cheer protocol. Protocols will vary, but should adhere to the general guidelines in the figure below. An example of a return-to-cheer protocol including cheerleading-specific activities and exercises is provided on the following page.

ATHLETE MUST BE SYMPTOM-FREE FOR AT LEAST 24 HOURS AND HAVE A PHYSICIAN'S APPROVAL BEFORE STARTING THE RETURN-TO-CHEER PROTOCOL.



- Phases 1 – 5 should occur in a supervised practice setting
- Athlete must have a minimum of one COMPLETE day in each phase
- Proceed to the next phase if athlete was symptom-free during current phase activity and in the 24 hours following activity
 - Reduce activity to that of the previous phase if symptoms occur during current phase activity



Athletes with persistent headaches, balance, vision, mood, cognitive, or neck issues should be evaluated by specialty-trained clinicians who can develop and supervise rehabilitation procedures (not to be confused with the return-to-cheer protocol).

RETURN-TO-CHEER PROTOCOL

For use by medical providers in conjunction with cheerleading coaches & advisors

	Activity Level	Functional Exercise/Cheer Activities
Phase 1	Light aerobic exercise (Target HR: 30-40% of maximum exertion)	<ul style="list-style-type: none"> Slow walking on a treadmill or stationary bike (15 minutes) Walk through cheers
Phase 2	Moderate aerobic exercise (Target HR: 40-60% of maximum exertion)	<ul style="list-style-type: none"> Stationary bike, elliptical, or jogging on a treadmill (15 minutes) Cheer activity limited to sideline cheers/chants at a low volume Include arm motions while allowing some positional changes and some head movement Light upper-body weight training (50% or less of max)
Phase 3	Heavy aerobic exercise (Target HR: 60-80% of maximum exertion)	<ul style="list-style-type: none"> Stationary bike, elliptical, or jogging on a treadmill (20-30 minutes) 15-yard sprints (as in tumbling passes) Cheer activity limited to sideline cheers/chants including arm motions, but may now introduce quick head movement Mark through dance activity Begin light lower body weight training activities (50% of max) May participate in crunches, push-ups, squats, etc. Balance/proprioception exercises
Phase 4	Sport performance & training (Target HR: 80% of maximum exertion)	<ul style="list-style-type: none"> Full weight lifting, agility, and conditioning activities Light tumbling (hand-supported activities): cartwheels, round off-walk overs, hand springs Cradle catch (no basket tosses or flipping) Simple dismounts for base and flyer Stunting limited to double-legged, chest-level stunts with added spotter Minimum 2-minute break between tumbling passes for a maximum of 30 minutes total participation Moderate dance activity (at ¾ effort) Sideline cheers
Phase 5	Full practice, sport performance & training (Target HR: maximum exertion)	<ul style="list-style-type: none"> Full weight lifting, agility, and conditioning activities Limit stunting to double-legged, extension-level activities with simple dismounts and added spotter Limit gymnastics to basic and moderate tumbling passes: maximum of two rotations with no twisting per any single pass (i.e. round-off back tuck) Minimum of 2-minute break between tumbling passes for a maximum of 60 minutes total participation Full dance participation Sideline cheers
Phase 6	Full sport/physical activity participation (Pending medical clearance)	<ul style="list-style-type: none"> Return to FULL participation/activity including advanced stunts, gymnastics, and dances May practice, compete, and participate in sideline game activities

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