



The University Hospitals Concussion Management Program is a certified IMPACT™ Concussion Testing provider. We offer concussion testing for athletes, schools and other sports organizations. For more information regarding testing, please call **216-983-PLAY (7529)**.
To schedule an appointment with one of our concussion management experts at a location near you, please call **216-983-PLAY (7529)**.



Concussion Guidelines



The University Hospitals Concussion Management Program is a collaborative effort comprising the UH Neurological Institute, UH Primary Care Institute, UH Rainbow Babies & Children’s Hospital, UH Rehabilitation Services and UH Sports Medicine, as well as other adult and pediatric specialty providers.

BASELINES

Education for Physicians/ATCs on Testing

- SCAT3 (ages 13+)/Child-SCAT3 (ages 5 – 12)
- IMPACT (normed for age 10+, but limited validity below age 14)
- ANAM (ages 12+, but limited validity below age 14)

Baseline Testing

- At least impact sports
- Prior to contact

Repeat baseline:

- Age < 18: Every 2 years
- Age > 18: Every 4 years

ACUTE MANAGEMENT

Assess any athlete who exhibits symptoms following contact (e.g., headache, dizziness, nausea, change in vision, light or noise sensitivity, change in behavior, change in orientation)

- ABC unstable?
- Unstable C-spine?
- Neck pain?
- Unconscious >1 min.?
- Seizure?
- Worsening headache?
- Worsening cognition/confusion/irritability?
- Persistent balance/gait abnormality?
- > 1 vomiting episode?
- Looks very drowsy/can't be awakened?
- Change in state of consciousness?
- Unusual behavior change?
- Weakness or numbness in arms/leg?
- Focal neurological signs*?

YES

NO

EMS

- Remove from play.
- Administer SCAT3 to gauge severity (vs. baseline).
- Limit exposure to loud noises/bright lights.
- Monitor for change in symptoms.
- Contact team physician for plan before athlete leaves facility.

Refer to Emergency Department

- ED should not make return-to-play decision.
- ED visit should always be followed by primary care or sports medicine physician visit within 72 hours.

Provide Concussion Education and Arrange Follow-Up Care

- Instruct athlete and family on "What-to-do" between ATC care and physician visit. Use handout.
- Instruct athlete to follow up with team physician, primary care, sports medicine or pediatrician for reassessment, recovery plan, possible school restriction and/or medical referrals.

Under Ohio Sub H.B. 143: Any person removed from practice or play because of a suspected concussion may not return to practice or play that day.

POST-ACUTE MANAGEMENT

Athlete/patient should have seen primary care or sports medicine physician and have ongoing outpatient plan of care from that physician.

Encourage rest.
Complete daily symptom scales:

- Ages 5 – 12: Post-Concussion Symptom Inv. (PCSI) OR Acute Concussion Eval (ACE)
- Ages 13+: Post-Concussion Scales-Revised (PCS-R)

- Severe/worsening headache?
- Frequent vomiting?
- Increasing confusion/irritability?
- Seizure?
- Weakness/numbness in arms/leg?
- Focal neurological signs*?

NO

YES

ED or Rapid Physician Referral

Symptoms not remitting and/or significant?

- ≥ 2 weeks, consider referral
- ≥ 4 weeks, should refer

– OR –

History of ≥ 2 concussions, ADHD or LD?

– OR –

Clinical history/presentation concerning for atypical recovery?

NO

YES

Symptom-free and back to baseline on computer retest?

YES

NO

Rest ≥ 48 hr & retest
Symptom-free and back to baseline on computer retest?

YES

NO

Refer to physician/neuropsychologist who specializes in concussion.

Begin return to play (24 hours between steps is recommended) (If symptoms return after any step, contact team physician):

STEP 1 Low levels of noncontact physical activity: walking, light jogging, easy stationary bike. If no symptoms return during or after, advance.

STEP 2 Moderate noncontact physical activity: moderate jogging, brief sprinting, moderate stationary bike, sport-specific drills without contact or collision 30 – 45 minutes. If no symptoms return during or after, advance.

STEP 3 Heavy noncontact physical activity: extensive sprinting, high intensity stationary bike, resistance exercise, free weights, agility and jumping drills for 40 – 60 minutes. If no symptoms return during or after, advance.

STEP 4 Full contact in controlled practice or scrimmage. If no symptoms return during or after, advance.

STEP 5 Full contact in game play.

*Focal neurological signs: Unequal pupils, deviation in gaze, unilateral weakness or numbness in face or body, visual field defect, swallowing difficulty, speech or language difficulties.