

To schedule an appointment with one of our concussion management experts at a location near you, please call **216-983-PLAY** (7529).

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).

## CONCUSSION INFORMATION For Parents and Coaches



### **The University Hospitals Concussion Management Program**

is a multidisciplinary 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.

**BE PREPARED**

Parents, coaches and referees should all understand what a concussion is, how to identify it in athletes, and what to do if you suspect a concussion in an athlete.

What is a concussion? It is a complex process where a blow to the head or body results in forces on the brain that move it inside the skull. This leads to physical symptoms (e.g., headache or dizziness), cognitive symptoms (e.g., memory loss or confusion) or emotional symptoms (e.g., being unusually tearful).

**CONCUSSIONS USUALLY DO NOT SHOW UP ON CT/MRI.**

See the following for more information on concussion.

- [cdc.gov/concussion/headsup](http://cdc.gov/concussion/headsup)
- [healthy.ohio.gov/vipp/concussion](http://healthy.ohio.gov/vipp/concussion)
- [uhhospitals.org/concussion](http://uhhospitals.org/concussion)

If 12 and younger, obtain a Youth Baseline Concussion Test **before the sports season**. This can be obtained by calling 216-983-PLAY.

If 13 or older, obtain an ImPACT Baseline Concussion Test **before the sports season**. This can be obtained through your school athletic trainer/physician or by calling 216-983-PLAY.

**AT THE TIME OF INJURY**

Which symptoms after a blow to the head or body are suspicious for concussion?

- Headache
- Dizziness
- Nausea
- Change in vision
- Light or noise sensitivity
- Change in behavior
- Confusion about basic information (day of the week, opponent, plays, recent events, etc.)

If a concussion is suspected, does the child have any of the following?

- Breathing problems
- Unconscious one minute or longer
- Neck pain or numbness/tingling
- Seizure
- Worsening headache
- Worsening confusion
- Persistent balance or walking abnormality
- >1 episode of vomiting

YES

**URGENT TRANSPORT TO HOSPITAL FOR EVALUATION**

NO

- Remove from play
- Encourage rest and restrict physical/cognitive activity
- Limit exposure to loud noises/bright lights
- Monitor for change in symptoms
- Team coach and parents establish plan for physician evaluation

**IF ATHLETE WAS TRANSPORTED TO EMERGENCY DEPARTMENT**

- ED should not make return-to-play decision.

**MAKE AN APPOINTMENT WITH DOCTOR IMMEDIATELY!**

- **Within 72 hours**, follow up with physician (e.g., pediatrician, primary care or sports medicine) for reassessment, recovery plan, possible school restriction and/or additional medical referrals
- Symptoms can worsen in the initial days after a concussion

If athlete has severe/worsening headache, vomiting two or more times, increasing confusion/irritability, seizure or weakness/numbness at any time following concussion, **rapid physician referral or transport to emergency department**

*Ohio Youth Concussion Law: Any person removed from practice or play because of a suspected concussion may not return that day and needs written clearance by an appropriate medical provider before return to play.*

**RECOVERY AND RETURN TO PLAY**

Encourage brain rest and avoid additional injury:

- No activities that could cause other concussions (e.g., sports, bike riding, etc.)
- No exercise unless cleared by a doctor
- If symptoms worsen during or after an activity, stop and wait 48 hours before trying again
- Get a good night's sleep; no late nights or sleepovers
- **You do not need to wake the athlete every hour**

Avoid loud noises, bright lights and overly stimulating activity:

- Limit TV time, cell phone use/texting, video games, computer time, etc.
- No loud music, including concerts and dances
- No sporting event attendance
- Limit homework/reading or any activity that requires extended periods of concentration to 20 – 30 minute blocks
- Stop activity if symptoms worsen

For some athletes, changes in school may be needed. Possible changes include:

- A break from school and homework
- A progressive return to school (half days, regular breaks in a quiet space during the school day, etc.)
- Avoiding classes with loud noises (choir/band), bright lights (computers) or physical activity (PE)
- Temporary changes in schoolwork may be needed (no or reduced tests/homework, extra time on work, etc.)

**WHEN TO SEEK A REFERRAL FOR A SPECIALIST:**

- If symptoms persist for three to four weeks or more
- If symptoms are worsening or interfering with school
- If two or more concussions
- If history of ADHD/learning disorder, neurological disorder, depression/anxiety or other medical problem that can interfere with recovery

YES

Refer to physician/neuropsychologist who specializes in concussion

NO

**12 OR YOUNGER:** Symptom-free at rest, youth concussion testing (if available) is read as normal by a specialist, and physician recommends return to play

**13 OR OLDER:** Symptom-free at rest, concussion testing (if available) is read as normal by a specialist, and physician recommends return to play

YES

Complete progressive return to sport under the supervision of a physician, athletic trainer, physical therapist, or other qualified member of your sports concussion management team.

**OHIO LAW REQUIRES WRITTEN CLEARANCE BEFORE RETURN TO PLAY**

**ONE SIZE FITS ALL DOES NOT APPLY TO CONCUSSIONS.**

A concussion treatment plan should be targeted to a specific athlete and his/her specific symptoms. Not all of these recommendations may apply for a given athlete. Also, additional recommendations may be needed. **Consult your doctor for the best recovery plan.**

**Symptoms usually recover in the initial weeks after injury.**



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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)**.



## 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, 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)
- Youth Baseline testing – including ImPACT Pediatric (ages 5-12)

**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

**EMS**

NO

- 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 Law: 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 concussion testing?

YES

NO

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

YES

NO

Refer to concussion specialist for further evaluation and additional treatment as treatment.

- 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.



## Concussion Testing at University Hospitals

University Hospitals believes that concussion testing is an essential component of management, aligning with international guidelines for concussion management. We work closely with schools and sports organizations, youth through professional, to provide valid and reliable computerized concussion testing that is done at multiple sites across Northeast Ohio. Athletes are encouraged to undergo baseline computerized testing prior to the season. If they have a concussion, testing is repeated and interpreted by a concussion specialist to identify any meaningful changes that would indicate that a concussion has not fully recovered. All UH-affiliated organizations are provided computerized concussion testing services for free, including assistance in implementing the testing at their school or facility, education regarding administration and interpretation of the testing by specialized experts, and consultation as needed in complex cases. Individual athletes and unaffiliated teams can also schedule baseline testing directly at a UH facility by calling **216-983-PLAY**. Following concussion, some athletes may be asked by their treatment provider to complete more comprehensive face-to-face testing to assist in concussion management and evaluation.

### **ImPACT™ Computerized Concussion Testing**

University Hospitals has partnered with ImPACT to provide baseline and post-injury computerized concussion testing. ImPACT is the most researched and widely recognized concussion management tool available, with more than 200 publications in scientific journals since the time of its development. ImPACT is in use by more than 7,000 high schools, 1,000 colleges and universities, and 200 professional sports teams to assist in concussion management and return-to-play.

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

#### **The ImPACT Test is:**

- One important piece of the overall concussion evaluation and management process
- A sophisticated cognitive test that measures verbal memory, visual memory, processing speed and reaction time
- A tool that can help health care professionals track recovery following concussion
- A tool to help communicate post-concussion status to athletes, coaches, parents and clinicians

#### **The ImPACT Test is not:**

- A "panacea" or cure-all for concussion, as there is no such thing; as long as contact to the head occurs, concussion will continue to happen
- A tool to diagnose concussion, which should always be diagnosed by a qualified health care provider
- A substitute for medical evaluation and treatment
- An intelligence test or a test that is meant to be used outside of the context of concussion management

Baseline concussion testing is only useful if the information gets to your doctors when they need it. To help make this process easier, your child will be given a secure personal identification code (ImPACT Passport ID) at the time of his or her baseline test at one of our testing sites. This identification code is very important and should be stored in a safe place for future reference. If your child has a concussion in the future, you can make your child's baseline test results immediately available by sharing the Passport ID with an ImPACT-trained specialist.

### **Call 216-983-PLAY to schedule your baseline concussion testing today!**

UH Sports Medicine Concussion Management Program offers baseline ImPACT testing for both individuals and affiliated groups/teams at several convenient locations in Northeast Ohio. At this time, ImPACT testing is appropriate for ages 13 and up. Youth Baseline Testing (which includes ImPACT Pediatric) is also available for ages 5-12.

# ImPACT and Concussion Testing Locations

## **UH Geauga Medical Center**

### **Rehab at the YMCA**

12460 Bass Lake Road  
Chardon, OH 44024  
440-214-3100

## **UH St. John Medical Center/ Westlake Family Health Building\***

26908 Detroit Road, Suite 300  
Westlake, Ohio 44145  
440-414-6050

## **UH Parma Medical Center**

OP Rehab - North Royalton YMCA  
11409 State Road  
North Royalton, OH 44133  
440-877-9120

## **UH Fairlawn Health Center**

3800 Embassy Parkway, Suite 110  
Akron, Ohio 44333  
330-664-8080

## **UH Rehabilitation Services at**

### **UH Parma Medical Center\***

#### **Medical Arts Center 1**

6681 Ridge Road, Suite 102  
Parma, Ohio 44129  
440-473-4025

## **UH Rehabilitation Services at**

### **UH Richmond Medical Center**

27100 Chardon Road  
Richmond Heights, Ohio 44143  
440-585-4151

## **UH Rehabilitation Services & Sports Medicine at UH Mayfield Village Health Center**

730 SOM Center Road, Suite 330  
Mayfield Village, Ohio 44143  
440-684-1833

## **Rehabilitation & Sports Medicine at Mandel Jewish Community Center**

26001 South Woodland Boulevard  
Beachwood, OH 44122  
216-285-7868

## **Warrensville Outpatient and Neuro Rehab Center**

4480 Richmond Road  
Warrensville Heights, Ohio 44128  
216-765-2830

\* Group baseline testing available

## Information for Parents and Athletes on the Day of Testing

An athlete completes ImPACT testing by sitting in a quiet location, in front of a computer and following the instructions of the test administrator. Testing will take 30 – 45 minutes to complete. Though the athletes cannot be accompanied by parents during the testing, parents should accompany the athlete to the baseline testing session and plan to stay for the duration of the testing. The test taker should wear comfortable clothes, be free from distractions, leave cell phones outside of the testing area, and be prepared to and expect to be seated quietly at a computer for the duration of the test.



UHSports.org

*Among the nation's leading academic medical centers, University Hospitals Case Medical Center is the primary affiliate of Case Western Reserve University School of Medicine, a nationally recognized leader in medical research and education.*

## Mild Traumatic Brain Injury Work Recovery Plan

Patient's name: \_\_\_\_\_ Provider's name: \_\_\_\_\_

Date of evaluation: \_\_\_\_\_ Duration of recommendations: \_\_\_\_\_

This patient has suffered a mild traumatic brain injury or concussion. The following employment accommodations may help to reduce post-concussion symptoms and any delay in recovery that can occur if a patient returns to work without needed accommodations. These restrictions must be considered as part of medical care and treatment for this diagnosis. Needed accommodations may vary by a given patient, the nature of the patient's concussion, and/or the nature of the patient's job. The employee and employer are encouraged to discuss and establish accommodations with the workplace until they are deemed no longer necessary by the patient's treatment providers.

### Attendance

- No work for \_\_\_\_\_ work day(s)
- Partial work days as tolerated
- Partial days as tolerated, advance to full days as symptoms decrease
- Full days as tolerated

### Breaks

- Allow breaks during work day if symptoms are worsening (recommend resting 20 – 30 minutes)
- Allow employee to go home if symptoms do not subside with breaks

### Work Restrictions

- Light duty nonrisk work activity
- Up to moderate duty nonrisk work activity

### Environmental Restrictions

- Avoid heights (ladders, scaffolding, etc.)
- Avoid heavy lifting
- Limit computer use
- Limit driving

### Additional Restrictions/Accommodations

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**For additional information or to schedule an appointment, call 216-983-HEAD (216-983-4323) or 216-983-PLAY (216-983-7529).**

## Post-Concussion Symptom Inventory (PCSI-P) Parent Report Form Pre- and Post-Injury

Student's name: \_\_\_\_\_ Today's date: \_\_\_\_\_

Birthdate: \_\_\_\_\_ Age/grade: \_\_\_\_\_

Diagnosis: \_\_\_\_\_

Person completing form: \_\_\_\_\_ Relation: Mother \_\_\_ Father \_\_\_ Other \_\_\_

**Instructions:** We would like to know if your child had problems with these symptoms before the injury. Next, we would like to know if these symptoms have changed after the injury. Please rate the problem at two points in time:

**Before the Injury/Pre-Injury** and **Current Symptoms/Yesterday and Today**.

Please answer all the items the best that you can. Do not skip any items. Circle the number to tell us how much of a problem this symptom has been for your child.

**0 = Not a problem    3 = Moderate problem    6 = Severe problem**

		Before the Injury/ Pre-Injury	Current Symptoms/ Yesterday and Today
1	Complains of headaches	0 1 2 3 4 5 6	0 1 2 3 4 5 6
2	Complains of nausea	0 1 2 3 4 5 6	0 1 2 3 4 5 6
3	Has balance problems	0 1 2 3 4 5 6	0 1 2 3 4 5 6
4	Appears or complains of dizziness	0 1 2 3 4 5 6	0 1 2 3 4 5 6
5	Appears drowsy	0 1 2 3 4 5 6	0 1 2 3 4 5 6
6	Sleeping more than usual	0 1 2 3 4 5 6	0 1 2 3 4 5 6
7	Sensitivity to light	0 1 2 3 4 5 6	0 1 2 3 4 5 6
8	Sensitivity to noise	0 1 2 3 4 5 6	0 1 2 3 4 5 6
9	Acts irritable	0 1 2 3 4 5 6	0 1 2 3 4 5 6
10	Appears sad	0 1 2 3 4 5 6	0 1 2 3 4 5 6
11	Acts nervous	0 1 2 3 4 5 6	0 1 2 3 4 5 6
12	Acts more emotional	0 1 2 3 4 5 6	0 1 2 3 4 5 6
13	Acts or appears mentally "foggy"	0 1 2 3 4 5 6	0 1 2 3 4 5 6
14	Has difficulty concentrating	0 1 2 3 4 5 6	0 1 2 3 4 5 6
15	Has difficulty remembering	0 1 2 3 4 5 6	0 1 2 3 4 5 6
16	Has or complains of visual problems (blurry, double vision)	0 1 2 3 4 5 6	0 1 2 3 4 5 6
17	Appears more tired or fatigued	0 1 2 3 4 5 6	0 1 2 3 4 5 6
18	Becomes confused with directions or tasks	0 1 2 3 4 5 6	0 1 2 3 4 5 6
19	Appears to move in a clumsy manner	0 1 2 3 4 5 6	0 1 2 3 4 5 6
20	Answers questions more slowly than usual	0 1 2 3 4 5 6	0 1 2 3 4 5 6
<b>PCSI Total Symptom Score</b>		<b>Pre-Injury</b> _____	<b>Post-Injury</b> _____
In general, to what degree is your child acting "differently" than before the injury (not acting like himself or herself)?		<b>No Difference   0   1   2   3   4   Major Difference</b> Circle your rating with "0" indicating "Normal" (No Difference) and "4" indicating "Very Different" (Major Difference)	



## Post-Concussion Symptom Inventory for Children (PCSI-SR5) Pre/Post Version 5 to 12

Name: \_\_\_\_\_ Today's date: \_\_\_\_\_

Birthdate: \_\_\_\_\_ Age: \_\_\_\_\_ Grade: \_\_\_\_\_

**Instructions:** We would like to know if you have had any of these symptoms before your injury. Next, we would like to know if these symptoms have changed after your injury.

I am going to ask you to tell me about your symptom at two points in time – Before the Injury and Yesterday/Today.

Interviewer: Please circle only one answer.

	0 = No   1 = A little   2 = A lot	Before the Injury/ Pre-Injury	Current Symptoms/ Yesterday and Today
1	Have you had headaches? Has your head hurt?	0 1 2	0 1 2
2	Have you felt sick to your stomach or nauseous?	0 1 2	0 1 2
3	Have you felt dizzy? (like things around you were spinning or moving)	0 1 2	0 1 2
4	Have you felt grumpy or irritable? (like you were in a bad mood)	0 1 2	0 1 2
5	Has it been hard for you to pay attention to what you are doing? (like homework or chores, listening to someone or playing a game)	0 1 2	0 1 2
<b>Continue if age 8 or older</b>			
7	Have you felt more drowsy or sleepier than usual?	0 1 2	0 1 2
8	Have bright lights bothered you more than usual? (like when you were in the sunlight, when you looked at lights or watched TV)	0 1 2	0 1 2
9	Have loud noises bothered you more than usual? (like when people were talking, when you heard sounds, watched TV or listened to loud music)	0 1 2	0 1 2
10	Have you had any balance problems or have you felt like you might fall when you walk, run or stand?	0 1 2	0 1 2
11	Have you felt sad?	0 1 2	0 1 2
12	Have you felt nervous or worried?	0 1 2	0 1 2
13	Have you felt like you are moving more slowly?	0 1 2	0 1 2
14	Have you felt like you are thinking more slowly?	0 1 2	0 1 2
15	Has it been hard to think clearly?	0 1 2	0 1 2
16	Have you felt more tired than usual?	0 1 2	0 1 2
17	Has it been hard for you to remember things? (like things you heard or saw, or places you have gone)	0 1 2	0 1 2
18	Have things looked blurry?	0 1 2	0 1 2

**All Ages – Do you feel “different” than usual? (Circle one)   0 = No   1 = A little   2 = A lot**

**PCSI Total Symptom Score**

Pre =	Post =
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Subscale scores (Age 8 – 12) Pre/Post	Physical	Cognitive	Emotional	Fatigue
	/	/	/	/

## Concussion Referral

Patient name: \_\_\_\_\_ MR#: \_\_\_\_\_

Patient phone #: \_\_\_\_\_ Date of birth: \_\_\_\_\_

Diagnosis: \_\_\_\_\_

Date of onset: \_\_\_\_\_

Imaging and results: \_\_\_\_\_

Call to schedule appointments with the indicated specialties checked below:

**Dentistry:** Tapper Dental Clinic – Pediatric 216-844-3080; or \_\_\_\_\_

**ENT-Otolaryngology:** *UH Ear, Nose & Throat Institute* 216-844-6000; or \_\_\_\_\_

**Neurology/Neurosurgery:** *UH Neurological Institute* Pediatric 216-844-7700; Adults 216-844-3192

**Neuropsychology:** *UH Neurological Institute* 216-844-3422

**Ophthalmology:** *UH Eye Institute* 216-844-3601; or \_\_\_\_\_

**Psychiatry:** *UH Neurological Institute* Pediatric 216-844-3881; Adult 216-844-2400

**Physical therapy:** (See reverse side for locations and phone numbers): Cervical | Leddy protocol | Balance Master | Vestibular Rehab | ImPACT™ testing

**Speech therapy:** (See reverse side for locations and phone numbers): Speech & Language | Cognitive Rehabilitation

**Other:** \_\_\_\_\_

Special instructions: \_\_\_\_\_

Physician signature: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Physician name printed: \_\_\_\_\_

Phone #: \_\_\_\_\_ Fax #: \_\_\_\_\_

### Patient first visit instructions:

Arrive 15 minutes before your appointment time.

For rehabilitation services: Bring this form, a photo ID and insurance card and precertification, if required.

For neuropsychological evaluations: Avoid alcohol consumption, get a good night's rest, adult must accompany if under 18, bring a list of current medications, and bring a record of previous tests/brain scans.

## University Hospitals Rehabilitation Service Locations

### WEST

#### **UH Rehab Services and Sports Medicine at Avon Health Center**

1997 Healthway Drive, Suite 202  
Avon, OH 44011  
Phone: 440-988-6890  
Fax: 440-988-6895

#### **St. John Medical Center Westlake Family Health Building**

26908 Detroit Road, Suite 300  
Westlake, OH 44145  
Phone: 440-414-6050  
Fax: 440-925-5194

#### **UH Elyria Medical Center – North Ridgeville**

39000 Center Ridge Road  
North Ridgeville, OH 44039  
Phone: 440-329-7527  
Fax: 440-329-7318

#### **LifeWorks of Southwest General**

7390 Old Oak Boulevard,  
Middleburg Heights, OH 44130  
Phone: 440-816-8010  
Fax: 440-816-4850

#### **UH Parma Medical Center Medical Arts Center 1**

6681 Ridge Road, Suite 102  
Parma, OH 44129  
Phone: 440-743-4025  
Fax: 440-743-4627

#### **UH Westlake Health Center**

960 Clague Road, Suite 3100  
Westlake, OH 44145  
Phone: 440-250-2040  
Fax: 440-250-2041

#### **UH Rehab Services & Sports Medicine at T3 Performance**

1965 Recreation Lane  
Avon, OH 44011  
Phone: 440-328-3499  
Fax: 440-328-3495

### EAST

#### **UH Cleveland Medical Center**

Bolwell Health Center, Suite 4100  
11100 Euclid Avenue  
Cleveland, OH 44106  
Phone: 216-844-7868  
Fax: 216-201-7210

#### **UH Conneaut Medical Center**

158 West Main Road  
11100 Euclid Avenue  
Conneaut, OH 44030  
Phone: 440-593-0356  
Fax: 440-593-6710

#### **UH Mayfield Village Health Center**

730 SOM Center Road, Suite 330  
Mayfield Village, OH 44143  
Phone: 440-684-1833  
Fax: 440-684-1856

#### **UH Twinsburg Health Center**

8819 Commons Boulevard, Suite 201  
Twinsburg, OH 44087  
Phone: 330-486-9610  
Fax: 330-486-9611

#### **UH Geauga Medical Center Rehab – YMCA**

12460 Bass Lake Road,  
Chardon, OH 44024  
Phone: 440-214-3100  
Fax: 216-201-5467

#### **Rehabilitation & Sports Medicine at Mandel Jewish Community Center (JCC)**

26001 South Woodland Boulevard,  
Beachwood, OH 44122  
Phone: 216-285-7868  
Fax: 216-201-5489

#### **Warrensville Outpatient and Neuro Rehab Center**

4480 Richmond Road,  
Warrensville Heights, OH 44128  
Phone: 216-765-2830  
Fax: 216-765-2835

#### **UH Geauga Medical Center Rehab at Concord Health Center**

7500 Auburn Road, Suite 1375  
Concord Township, OH 44077  
Phone: 440-358-5475  
Fax: 216-201-6437

#### **UH Geneva Medical Center**

870 West Main Street  
Geneva, OH 44041  
Phone: 440-415-0178  
Fax: 440-415-0215

#### **UH Mentor Health Center**

9000 Mentor Avenue, Suite 206  
Mentor, OH 44060  
Phone: 440-974-4433  
Fax: 440-974-4430

### SOUTH

#### **UH Fairlawn Health Center**

3800 Embassy Parkway, Suite 110  
Akron, OH 44333  
Phone: 330-664-8080  
Fax: 216-201-6376

#### **UH Independence Health Center at Park Center Plaza II**

6150 Oak Tree Boulevard, Suite 150B  
Independence, OH 44131  
Phone: 440-743-8175  
Fax: 216-201-6225

#### **UH Samaritan Rehabilitation Services**

2163 Claremont Avenue,  
Ashland, OH 44805  
Phone: 419-281-1330  
Fax: 419-281-4850

## University Hospitals Neurological Institute Locations

#### **UH Case Medical Center UH Rainbow Babies & Children's Hospital**

11100 Euclid Avenue,  
Cleveland, OH 44106

#### **UH Chagrin Highlands Health Center**

3909 Orange Place, Suite 2300  
Beachwood, Ohio 44122

#### **Neurology/Neurosurgery:**

*Headache, vestibular, neuro-ophthalmological, nerve injury, post-acute management of skull fracture/hemorrhage*  
Pediatric 216-844-7700; Adult 216-844-3192

#### **UH Medina Health Center**

4001 Carrick Drive  
Medina, Ohio 44256

#### **UH Twinsburg Health Center**

8819 Commons Boulevard  
First Floor, Suite 202  
Twinsburg, Ohio 44087

#### **Neuropsychology:**

*Baseline testing (ages 5+), post-concussive testing, complex post-concussion assessment/management, neuropsychological rehabilitation*  
Pediatric and Adult 216-844-3422

#### **W.O. Walker Center**

10524 Euclid Avenue  
Cleveland, Ohio 44145

#### **UH Westlake Health Center**

950 Clague Road – WW6/WW7  
Suite 101  
Westlake, Ohio 44145

**Psychiatry:** *Medications for mood symptoms; cognitive-behavioral therapy for stress, anxiety and depression; biofeedback training*  
Pediatric 216-844-3881; Adult 216-844-2400

[UHhospitals.org/Neuro](http://UHhospitals.org/Neuro)

Among the nation's leading academic medical centers, University Hospitals Cleveland Medical Center is the primary affiliate of Case Western Reserve University School of Medicine, a nationally recognized leader in medical research and education.

# Concussion Management Program

## Youth Concussion Management Like the Pros

### Youth Concussion Testing

University Hospitals works closely with schools and sport organizations to provide state-of-the-art concussion management services for all ages, from youth to professional. With the recent emphasis on the importance of safely managing sports-related concussion and return-to-play, professional leagues have made significant changes to how concussions are evaluated and treated, as well as how athletes are determined ready for a return to sport. We believe that you should not have to be a pro athlete to receive the best concussion care, especially since most sports concussions in the United States do not happen at the professional level of sport.

### What Is Different About the UH Youth Concussion Testing Program?

With our youth concussion testing model, we have taken the protocols used at the professional level of sports (NFL, NHL, MLS, etc.) and made them available to our youth athletes. The pros don't rely on computerized concussion testing alone. They do what is called a "hybrid battery" of testing, which includes both computerized testing as well as traditional neurocognitive testing administered by a specialist in concussion evaluation. We are now offering this same model in our Youth Concussion Testing Program, using testing that is specifically designed for children ages 5 – 12.

#### Baseline testing (prior to injury) includes:

- Computerized concussion testing designed for children ages 5 – 12 (ImPACT™ Pediatric Concussion Testing)
- Traditional neurocognitive testing designed for children ages 5 – 12
- Administration by a trained specialist in concussion testing
- Educational materials about concussion management and what to do should you suspect a concussion

#### Post-injury management includes:

- Rapid access to a concussion specialist physician for an appointment within 72 hours of initial contact by calling **216-983-PLAY (7529)**
- Education and information for how to help your child recover as safely and as quickly as possible
- Repeated youth concussion testing to assist with concussion management and return-to-play decisions
- Concussion evaluation and management by the same providers working with our highest level athletes

### How Is Concussion Testing Used?

Concussion testing is one important step in an overall concussion evaluation and management process. Athletes undergo baseline testing before their season begins. If an athlete is suspected of having a concussion, he or she should first seek evaluation/treatment by a doctor familiar with concussion management.\* After a period of recovery, concussion testing would then be repeated and interpreted by a concussion specialist to identify any meaningful changes and to help determine when it is safe to return to play. Concussion testing is not administered at the time of injury or in an emergency department, and it does not replace the necessary initial evaluation by a physician.

#### Concussion testing is utilized in one of two ways:

1. To confirm that an athlete has fully recovered prior to return-to-play
2. To assist in concussion management and return to school (i.e., return-to-learn) if necessary

\*With partner organizations, concussion specialists from University Hospitals Sports Medicine and University Hospitals Neurological Institute will be available to youth organizations throughout all steps of concussion management, including diagnosis, treatment/recovery and final clearance.

## Scheduling and Cost

Each baseline test will take approximately one hour to complete. Partnering organizations will schedule designated baseline testing days, with testing slots available for all interested athletes. For individuals who are unable to complete testing during these designated days (or if your sport organization has not yet partnered with UH), individual times can be scheduled separately. University Hospitals understands the critical need for making these services available to athletes at all levels of sports. In order to make these services more accessible to our region's youth, the cost has been reduced from \$250/baseline to \$80/baseline.

Many youth organizations have also worked to further reduce the cost to their athletes through fundraisers or other means. Should post-injury management be needed after a concussion, fees will be processed through standard insurance coverage.

## Baseline Testing Locations

UH Cleveland Medical Center  
11100 Euclid Avenue  
Bolwell Building, Fifth Floor  
Cleveland, Ohio 44106

UH Twinsburg Health Center  
8819 Commons Boulevard  
First Floor, Suite 202  
Twinsburg, Ohio 44087

UH Chagrin Highlands Health Center  
3909 Orange Place, Suite 2300  
Beachwood, Ohio 44122

UH Westlake Health Center  
950 Clague Road – WW6/W79  
Suite 101  
Westlake, Ohio 44145

UH Medina Health Center  
4001 Carrick Drive  
Suite 140 – Dr. Walter  
Suite 210 – Dr. Devereaux  
Medina, Ohio 44256

To schedule baseline testing with your youth athlete, contact your partnering sport organization to identify your baseline testing days. If your organization has not yet partnered with UH, individual tests can be scheduled by calling **216-983-PLAY (7529)** and asking for a youth baseline concussion test.

