

The Concussion Program at Children's Hospital Colorado evaluates and treats children and teens who have sustained concussions and other types of mild head injuries. Our program delivers high-quality, multidisciplinary care, informed by ongoing research into the effects and management of pediatric concussions.

## What is a Concussion?

A concussion is a type of mild traumatic brain injury that disrupts how the brain normally works, caused by a significant blow or jolt to the head. You don't need to be knocked out or lose consciousness to have a concussion. Even though a concussion might be called a "mild" injury, it still must be taken seriously because it is an injury to the brain.



## Signs and Symptoms

Most young people recover completely from a single concussion within a few days to a few weeks, but each person's recovery is different, and the recovery period can take time. In rare cases, severe medical problems occur after a head injury, so it's important to involve a healthcare provider in concussion care. Common concussion symptoms include:

#### **Physical**

- Headache
- · Nausea or vomiting
- · Dizziness or balance problems
- · Low energy or feeling tired

- Blurry or double vision
- · Sensitivity to light or noise
- Sleep problems

#### **Emotional**

- · Irritability or grouchiness
- Nervousness
- Sadness

#### Cognitive

- Slowed thinking
- Trouble paying attention
- Difficulty remembering

- Impulsiveness
- · Personality change
- · Acting "foggy"
- Confusion
- Change in school performance



## SEEK IMMEDIATE HELP if your child:

- Has a headache that gets worse or seems severe
- Is confused, extremely sleepy or having trouble waking up
- Has weakness, numbness or tingling in arms/legs, or trouble walking or talking
- Vomits repeatedly
- Has a seizure or convulsion (arms or legs shaking uncontrollably)
- Has any other sudden change in thinking or behavior



## After a Concussion

Concussions can be stressful and scary, but most problems won't last long. It's okay to take acetaminophen or ibuprofen for headaches, but don't give any other medications without a healthcare provider's approval. During the healing process:

- Keep your child safe. It's crucial that your child does not get another concussion while healing. Your child will need a break from sports and any other activity that risks head injury.
- Have your child take it easy. Doing too much too soon after a concussion may
  worsen symptoms. Especially during the first few days, having your child take a
  break to rest can help reduce symptoms.
- Make sure your child gets extra sleep. Allow short daytime naps if needed, and plenty of sleep at night in the days after a concussion.
- Make sure your child eats healthy foods and drinks plenty of water.
- Allow more time to finish things. Some children may complete tasks a little slower than usual after a concussion.
- Give more chances to learn. Remembering things might be harder for your child until symptoms improve, and he or she might need to hear or see information more times than usual.
- Allow more breaks. Paying attention for long periods of time might be difficult for your child. Allow breaks during homework and other focused tasks.
- **Be patient.** Your child might seem cranky, more easily upset, or more tired and forgetful. Be patient and understanding when this happens. If this behavior continues for more than a week, talk to your healthcare provider.

## **Returning to School**

Most students can return to school within a few days, but they may need some extra help. Tell your child's teacher, counselor, school health professional and administrators, such as the principal, that your child has a concussion. Ask the school to assign a Concussion Comeback Coordinator to take the lead in communicating with you, the school staff, and healthcare providers. A few suggestions are listed below. For more information on helping guide students back into the school environment, visit our website to view the full Concussion Comeback Program.

# If problems arise, talk to your child's Concussion Comeback Coordinator to arrange extra support, such as:

- Not requiring the student to make up all work missed, or giving extra help to catch up
- · Allowing more rest time or breaks during the day
- · Lessening homework and class work
- · Allowing assignments to be turned in late
- · Postponing tests until student is feeling better
- · Allowing extra time to complete tests
- Providing special seating to help the student focus and allow the teacher to carefully watch the student
- Limiting physical education and recess activities that might risk another head injury until a healthcare provider clears the student for these activities

If school problems last more than two to three weeks, have your child re-checked by a medical professional. Ask your child's healthcare provider about any ongoing physical problems, such as headaches and dizziness.

# **Returning to Sports or Physical Activities**

As long as your child still has concussion symptoms, he or she should not do anything that might risk another concussion. Your child should avoid:

- Contact sports (football, hockey, soccer, wrestling, basketball, volleyball, lacrosse, etc.)
- · Riding a bike, scooter, motorcycle, ATV, or horse
- · Driving a car
- · Skateboarding, rollerblading, or ice skating
- · Snow or water skiing, snowboarding, or sledding
- · Martial arts
- Gymnastics
- Trampolines
- · Climbing activities (on playground equipment, in trees, etc.)
- Any other activity that could cause a head injury

An appropriate healthcare provider should help make the decision about when it's safe for your child to return to sports or other physical activities. Your child's healthcare provider will then develop a specific plan to return your child to these activities in a step-by-step, gradual manner.

## Why Choose Children's Colorado?



Our multidisciplinary team of board-certified pediatric experts offers a streamlined, comprehensive approach to concussion and traumatic brain injury treatment tailored to each individual patient's needs. Children's Colorado is consistently ranked in the top 10 pediatric programs in the nation by U.S. News & World Report.

### **Meet our Team**



David A. Baker, PsyD, ABPP



Wendy Pierce, MD



Amy K. Connery, PsyD, ABPP



Aaron J. Provance, MD



Katherine S. Dahab, MD



Tess Simpson, PhD



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Scott R. Laker, MD



Julie C. Wilson, MD\*



Robin L. Peterson, PhD, ABPP



Pamela E. Wilson, MD\*



Christine Petranovich, PhD

\*Co-Directors, Concussion Program

# Concussion Program at Children's Colorado Locations

The Concussion Program offers appointments five days a week in 10 locations throughout the Denver metro area.



Discrimination is Against the Law. Children's Hospital Colorado complies with applicable Federal civil rights laws and does not discriminate on the basis of race, color, national origin, age, disability, or sex. Children's Hospital Colorado does not exclude people or treat them differently because of race, color, national origin, age, disability, or sex.

Children's Hospital Colorado provides free aids and services to people with disabilities to communicate effectively with us, such as. Qualified sign language interpreters, written information in other formats (large print, audio, accessable efectionic formats, other formats). Children's Hospital Colorado provides free language services to people whose primary language is not English, such as. Qualified interpreters, information written in other languages.

If you need these services, contact the hospital main line at 720,777 1234.

If you believe that Children's Hospital Colorado has failed to provide these services or discriminated in another way on the basis of race, color, national origin, ag disability, or sex, you can file a grevance with Corporate Compliance Officer, 13123 E 16th Avenue, B450, Aurora, Colorado 80045, Phone, 720,777,1234, Fax 720,777,7257, corporateCompliance@childrenscolorado.org, You can file a grevance in person or by mail, fax, or email. If you need help filing a grevance, the Corporate Compliance Officer's available to help you.

You can also file a civil rights complaint with the U.S. Department of Health and Human Services. Office for Civil Rights, electronically through the Office for Civil Rights complaint Portal, available at https://corportal/hbs.gov/ocr/portal/hobby.jef, or by mail or phone at: U.S. Department of Health and Human Services 200 Independence Averue, SVH Room S09F, HHH Building Washington, D.C. 20201 1-800-368-1019, 800-537-7697 (TDD) Complaint forms are available at http://www.hhs.gov/ocr/office/fileigndox.html

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ATENCIÓN: si habla español, tiene a su disposición servicios gratuitos de asistencia lingüística. Llame al 1-720-777-1234

CHÚ Ý. Nếu bạn nói Tiếng Việt, có các dịch vụ hỗ trợ ngôn ngữ miễn phí dành cho bạn. Gọi số 1-720-777-1234.

주의: 한국어를 사용하시는 경우, 언어 지원 서비스를 무료로 이용하실 수 있습니다. 1-720-777-1234 번으로 전화해 주십시오

注意: 如果您使用繁體中文。您可以免费獲得語言援助服務。請致電1-720-777-1234。

ВНИМАНИЕ. Если вы говорите на русском языке, то вам доступны бесплатные услуги перевода. Звоните 1-720-777-1234.

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ملحوظة إذا كنت تتحدث الكر اللعة. فإن ختمات المساعدة اللعوية تتوافر الله بالمجلى الصل برقم 1-1234-777-720 (رقم

ACHTUNG: Wenn Sie Deutsch sprechen, stehen Ihnen kostenios sprachliche Hilfsdienstleistungen zur Verfügung. Rufnummer: 1-720-777-1234

ATTENTION: Si vous parlez français, des services d'aide linguistique vous sont proposés gratuitement. Appelez le 1-720-777-1234

ध्यान बनु होस्तुषाइले नेपाल बोल्नहन्छ भन तपाङको निमृत भाषा सहायता सवाहरू नःशल्क रूपमा उपलब्ध छ । फोन गनु होसर् 1-720-777-1234 ।

PAUNAWA: Kung nagsasalita ka ng Tagalog, maaan kang gumamit ng mga serbisyo ng tulong sa wika nang walang bayad Tumawag sa 1-720-777-1234 注意 1941:日本語を語される場合: 無料の言語文誌をご利用いれたけます。1735年77-1234 まで、お電話にてご連絡くれるい

Nti. O buru na asu ibo, asusu aka qasu n'efu, defu, aka. Cali 1-720-777-1234.

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