



## Uniting for Brain Injury March Awareness Month

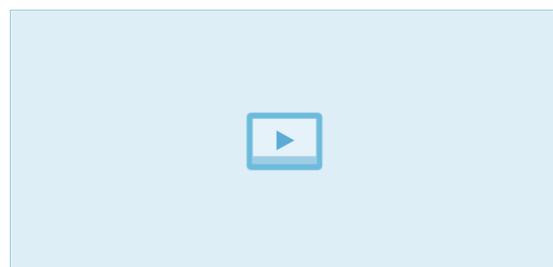
### NASHIA Celebrates March Brain Injury Awareness Month: Spotlight on Hawai'i's Concussion Management Program

During the month of March, the National Association of State Head Injury Administrators (NASHIA) is featuring stories about the impact of brain injury on individuals and families, as well as resources and initiatives developed to provide supports and assistance. This week, NASHIA features the story of Dayna Sur, a Hawai'i student injured during a soccer game. Her story underscores the importance of implementing "Return-to-Learn" and "Return-to-Play" protocols. *Have a story to tell?* Send to Susan Vaughn at [publicpolicy@nashia.org](mailto:publicpolicy@nashia.org).



### Meet Dayna -- Who Shares Her Story

Meet [Dayna Sur](#), a Hawai'i student who suffered a concussion due to a soccer injury. Click on the video to the right and hear her talk about her injury; her symptoms as the result of her concussion; impact on her school work; and accommodations needed to assist her with her academic work. Her story underscores the importance of implementing "Return-to-Learn" and "Return-to-Play" protocols to assist individuals who sustain a concussion in returning to their normal life.





In 2010, the Hawai'i Department of Health (DOH) Neurotrauma Supports program began funding a highly successful statewide collaborative approach to reach Hawai'i high school student athletes at risk for head trauma. The [Hawai'i Concussion Awareness Management Program \(HCAMP\)](#) established by the University of Hawai'i Department of Kinesiology and Rehabilitation (UH KRS), the Hawai'i Department of Education (DOE), and the Neurotrauma Supports program has made tremendous strides in testing student athletes and educating students and the adults who support and mentor them.

HCAMP currently conducts baseline testing for approximately 10,000 Hawai'i high school student-athletes per year in all counties and on all islands, reports approximately 1,000 concussions per year, and implements the Gradual Return to Play Protocol (McCroly et al., 2009) with concussed student-athletes, which is widely accepted as the gold standard for returning to play after suffering from a concussion. The program also provides education to all participating Hawai'i High School Athletic Associations, which includes public and private school administrators, athletic trainers, coaches, physicians, and neuropsychologists on concussion awareness and concussion management protocol.

HCAMP implemented computerized neuropsychological baseline testing using the Immediate Post-Concussion Assessment and Cognitive Testing (ImPACT) and postural stability assessment with the Balance Error Scoring System (BESS). Student-athletes who suffer a concussion are administered the ImPACT post-test and BESS at planned intervals during recovery. Along with a thorough clinical



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Hawaii's Neurotrauma Community

The Hawai'i Department of Health (DOH) Neurotrauma Supports program began in 2002, with the enactment of Act 160, which directs the state to “develop, lead, administer, coordinate, monitor, evaluate, and set direction for a comprehensive system to support and provide services for survivors of neurotrauma injuries”.

In Hawai'i, neurotrauma injury is seen as a severe and chronic disability of a person that is attributable to an injury to the central nervous system, such as traumatic brain injury (TBI), spinal cord injury or stroke, and is likely to continue indefinitely.

The law created the Neurotrauma Special Fund, which generates funding from surcharges for traffic citations that may cause neurotrauma, such as failing to wear a seatbelt and excessive speeding. Administered by the Neurotrauma Supports program with advice and recommendations from the Neurotrauma Advisory Board (also created by Act 160), the fund is used for education; assistance to individuals and families to identify and obtain access to services; and the creation of a state registry of neurotrauma injuries to identify incidence, prevalence, individual needs, and related information.

The state's Neurotrauma Helpline provides information and referrals to survivors and their family members/caregivers. For more information about Hawaii's Neurotrauma Supports program, contact:

**NEUROTRAUMA HELPLINES:**

- O'ahu: (808) 733-2155

exam, the treating physician, athletic trainer, and neuropsychologist interpret the results of the ImPACT test and BESS to make return-to-play recommendations.

HCAMP also provides education on an annual basis to student-athletes, parents/guardians, and coaches on concussion signs and symptoms, short- and long-term consequences of having multiple concussions, and protocol for managing a concussion. Since 2011, HCAMP has conducted an annual concussion summit attended by more than 120 athletic trainers, physicians, nurses, physical therapists and speech language pathologists at which international concussion experts provide the most up to date information.

In order to fulfill the mandate for education and awareness, UH KRS established the Project Head, Neck, Spine with funding through the DOH Neurotrauma Supports program. The project is developing an online educational resource for students between first through ninth grade on the signs and symptoms of head, neck, and spine injuries, prevention measures, and how to assist someone who has had an injury.

The content of the modules aligns with the Hawai'i Content and Performance Standards III, and feedback from teachers, students, and parents will be incorporated to improve the online educational resource. The online modules for grades seven, eight, and nine were launched in the summer of 2018, the online modules for grades four, five, and six are anticipated to launch in the summer of 2019, and the online modules for grades one, two, and three are anticipated to launch in the summer of 2020.

UH KRS is working with all Hawai'i public, private, charter, and home schools to implement this important educational resource in every classroom, on all islands, as the most efficient and effective way to provide

- Hawai'i: (808) 974-4000, ext. 32155
- Maui: (808) 984-2400, ext. 32155
- Kaua'i: (808) 274-3141, ext. 32155
- Moloka'i, Lana'i (800) 468-4644, ext. 32155
- TTY/TDD. (800) 676-3777 Fax. (808) 733-9841
- E-mail: [ntrauma@doh.hawaii.gov](mailto:ntrauma@doh.hawaii.gov)
- Website: <http://health.hawaii.gov/nt/>



### **State Legislation and Policies Paved the Way to Improved Concussion Management**

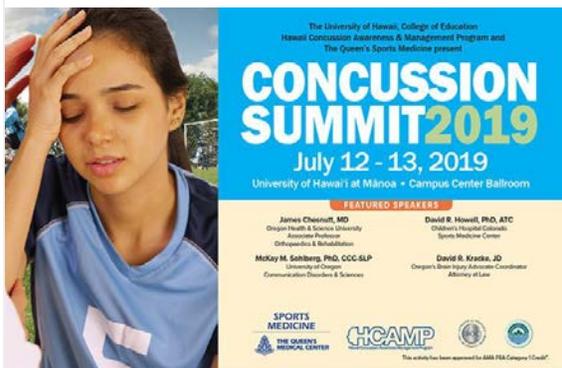
State legislation and policy changes have led the way to improving how concussions among student athletes and at schools are managed throughout the State of Hawai'i, and HCAMP is continuing to grow and expand with these changes.

On July 3, 2012, Act 197, *Relating to Concussions*, was signed into law and mandates:

- the Hawai'i Department of Education and the Hawai'i High School Athletic Association provide a statewide concussion education program to ensure that all public and private high school students, school personnel, and parents receive consistent and up-to-date

education on head, neck, and spine injuries to all of Hawaii's youth. Project Head, Neck, Spine will also provide a database of resources for parents and teachers and encourage parents and teachers to work collaboratively with students using the online modules.

Project Head, Neck, Spine is also developing online modules for educators on awareness and recognition of head, neck, and spine injuries, as well as "Return-to-Learn" protocols, which provide information on how to appropriately assist students as they return to school after having a concussion. The educator modules are anticipated to launch in the summer of 2021.



information on concussions and management of symptoms and injuries relating to a concussion;

- that student-athletes who demonstrate any signs and symptoms of a concussion be removed from athletic activity and a student's licensed health care provider evaluate the student and determine whether the student can return to a particular athletic activity; and
- that a student's return to activity plan is monitored by the school's certified athletic trainer.

HCAMP is successfully fulfilling Act 197's mandate. On July 12, 2016, Act 262, *Relating to Concussions*, was signed into law and mandates:

- the extension of the original Act 197 by including 11- to 18-year-old students;
- baseline cognitive testing for high school students;
- the appropriation of \$450,000 to fund HCAMP to continue its baseline testing and concussion management program; and
- the provision of education and awareness to youth athletics.