



September 1, 2024

The Honorable Shannon Bird
Chair, Joint Budget Committee

The Honorable Rachel Zenzinger
Vice Chair, Joint Budget Committee

The Honorable Rhonda Fields
Chair, Senate Health and Human Services

The Honorable Lindsey Daugherty
Chair, House Health and Human Services

Representative Bird, Senator Zenzinger, Senator Fields, and Representative Daugherty:

The Colorado Department of Human Services, in response to reporting requirements set forth in Section 26-1-310, C.R.S., respectfully submits the attached Colorado Traumatic Brain Injury Program Report.

“Notwithstanding section 24-1-136 (11)(a)(I), on September 1, 2009, and each September 1 thereafter, the board shall provide a report to the joint budget committee and the public health care and human services committee of the house of representatives and the health and human services committee of the senate, or any successor committees, on the operations of the trust fund, the money expended, the number of individuals with brain injuries offered services, the research grants awarded and the progress on such grants, and the educational information provided pursuant to this article 1.”

If you have any questions, please contact Angelica Granados, CDHS’ Legislative Analyst, at 303-877-0562.

Sincerely,

Christina Beisel

Christina Beisel
Deputy Executive Director, Financial Services



**MINDSOURCE - Brain Injury Network and Colorado Brain Injury Trust Fund Board
Report to the Joint Budget Committee and Health and Human Services Committees
July 1, 2023 - June 30, 2024**

This report is provided in response to the requirement set forth in Section 26-1-310, C.R.S., for the Colorado Brain Injury Trust Fund Board to “provide a report...on the operations of the trust fund, the money expended, the number of individuals with brain injuries offered services, the research grants awarded and the progress on such grants, and the educational information provided pursuant to this article 1.”

Overview

MINDSOURCE - Brain Injury Network (MINDSOURCE) was created in Title 26, Article 1, Part 3 of the Colorado Revised Statutes to be operated by the Colorado Department of Human Services (CDHS) and is housed within the Office of Adult, Aging, and Disability Services. The purpose of MINDSOURCE is to improve the lives of Colorado residents who have brain injuries. This statute created the Colorado Brain Injury Trust Fund (Trust Fund) to finance MINDSOURCE activities and the Trust Fund Board (Board) to advise the program on Trust Fund operations. MINDSOURCE staff work closely with the Board to perform the following functions for the program: financial management, policy development, program development and implementation, contract management, program monitoring, administrative support, website maintenance, public assistance and information, reporting, marketing, and public relations.

Revenue and Expenditures

MINDSOURCE receives revenue in the Trust Fund from surcharges assessed for convictions of driving under the influence of drugs or alcohol (DUI), driving while ability is impaired (DWAI), speeding, and riding a motorcycle or motorized bicycle without a helmet (for youth under the age of 18).

In FY 2023-24, the total revenue for MINDSOURCE was \$2,501,650.67, \$113,803.49 of which was donated to the Trust Fund and \$450,000 General Fund appropriated. The program expended \$2,419,651.47 in FY 2023-24. The following table shows the breakdown of Expenditures by Program Type.

MINDSOURCE Cash Fund & General Fund Expenditures by Program Type Fiscal Year 2023-2024				
Brain Injury Services	Research Grants	Education / Community Grants	Administrative Costs & In-Directs	Total
\$1,779,097.16	\$296,115.58	\$57,815.3	\$286,623.43	\$2,419,651.47

Services

Every five years MINDSOURCE issues a competitive request for proposals for an entity to provide outreach, intake and eligibility, case management services (including resource facilitation and self-management), and education consultation (for youth 0-21). MINDSOURCE currently has a contract for the five year period through FY 2025-26 with the Brain Injury Alliance of Colorado (BIAC) for these services. In addition, MINDSOURCE has an interagency agreement with the Colorado Department of Education (CDE) to build the capacity of school and community providers to better support and serve children/youth with brain injury. Please

see the addendum for detailed information on the services and educational information provided through BIAC and CDE in FY 2023-24.

Research

MINDSOURCE awards grants to support research in Colorado related to the treatment and understanding of brain injuries. The Research Program released a request for proposals (RFP) for new projects which began on 7/1/22. The projects entered into their second year under this RFP on 7/1/2023. In addition, a supplemental research grant was awarded in 2022 which also concluded its second year in the 2023-2024 fiscal year. CDHS ensures an equitable procurement process by soliciting for competitive bids, posting on a public website, and securing diverse evaluators without conflicts of interest. Equity, diversity, and inclusion principles are built into the RFP as well as the resulting contracts with the program. Five applications were received with one applicant awarded funds after a formal evaluation process. Research is funded at two levels: Type I (up to \$50,000/year for two years) and Type II (up to \$150,000/year for two years); the awarded applicants received a Type II grant. Please see the addendum for detailed information on the research grant awarded and the progress on such grants in FY 2023-24.

Community Grants

MINDSOURCE awards grants to community agencies for projects that promote the awareness and education of brain injury. Eight community grants were awarded in FY 2023- 2024. The entities funded were:

- Brain Injury Alliance of Colorado
- Brain Injury Hope Foundation
- Center Toward Self Reliance
- Children's Hospital
- Colorado State University
- Craig Hospital
- Metropolitan State University - Denver
- Get Schooled on Concussions

Please see the addendum for detailed information on the progress of community grants issued in FY 2022-23 during FY 2024.

Addendum

In addition to the information provided partners below, MINDSOURCE partnered with CDHS Offices, Divisions and Programs, as well as other state and community agencies, by providing training and implementation support on identification of brain injury and guidance for supporting individuals with brain injury in their respective systems to help them achieve improved outcomes among our shared client population.

Services

Brain Injury Alliance of Colorado (BIAC)

During FY 2023-24, 966 adults (aged 22 and above) and 66 youth (aged 21 and below) received support from BIAC services as described below:

- *Resource Facilitation* is intended to be quick and responsive support provided via phone, email, or in person. Examples of resource facilitation include, but are not limited to: finding medical providers, completing paperwork, securing benefits, understanding brain injury, and connecting to community resources.
- *Self-management/Skill-building* is a program designed and available for survivors of brain injury who want to invest time in improving their skills in specific areas that can be challenging after a brain injury. Participants meet with their Brain Injury Advisor for an average of 4 hours per month to work on skill-building. Areas of focus for self-management include Home Skills, Personal Skills, and Vocational Skills. Participants have regular homework outside of meetings with their Advisor that is reviewed each time the participants and Advisors meet. BIAC Advisors work one-on-one with each participant to assess individual strengths and weaknesses, identify natural supports in the participant's life, and develop strategies for building specific skills with the goal of greater self-sufficiency.
- *Youth Education Consultation*. After a brain injury, children and youth may have challenges in the classroom and families may need support navigating the education system. BIAC has a Youth Education Liaison specialist on staff to provide consultation and support services to children and youth, ages 0-21. Consultation and support may include, but are not limited to, the following: providing parent/guardian education about services and programming options available in schools, assisting in the partnership between parents and schools, educating parents and school teams about how a student has been impacted by the individual's brain injury, collaborating with schools on intervention planning, attending transition, individual education planning, multi-tier support systems, other planning meetings, partnering with hospitals to help with transition to school, and any other student specific educational needs/concerns/questions.
- *Classes & Workshops*. BIAC offered 91 classes and workshops with a combined total attendance of 1,271. Classes and workshops ranged in topics. FY 2023-24 topics included: grief and loss, mindful brain, movement with music, adaptive yoga, survivor stories writing, art, social skills & recreation therapy for youth, Tai Chi, language of poetry, and meditation. Classes and workshops were either held remotely or in a hybrid environment. Remote and hybrid activities reduce barriers for clients with transportation limitations to be able to participate.
- *Outreach*. MINDSOURCE contracts with BIAC to provide training and outreach. During FY 2023-24, BIAC coordinated 180 outreach and training activities with approximately 2,473 attendees. The following is the breakdown of locations for outreach efforts:

- 47% Denver Metro
- 1% Central Mountain Region
- 18% Southern Colorado
- 7% Northern Colorado
- 10% Western Slope
- 17% Statewide

Outreach typically consists of meeting with community providers to share information about services and to encourage referrals to brain injury supports and services. Training and capacity building efforts support the development and strengthening of skills, processes, and resources for organizations and communities to serve survivors. BIAC collects post data about the educational training provided to better understand effectiveness. During this reporting period:

- 98% of participants increased their understanding of how people get brain injuries
- 90% of participants increased their knowledge of the common signs and symptoms of brain injury
- 92% of participants strongly agreed or agreed that their understanding of how to support people with brain injury increased
- 94% of participants strongly agreed or agreed that their knowledge about available resources for survivors increased

Colorado Department of Education (CDE)

As indicated above, MINDSOURCE has an interagency agreement with CDE. The focus of the CDE interagency agreement is to build the capacity of the school districts, Board of Cooperative Educational Services (BOCES), Charter School Institutes (CSI) personnel, and community providers to better support and serve children/youth with a brain injury. This past year activities completed by CDE that support this mission included:

- Trained BrainSTEPS (Strategies Teaching Educators, Parents, & Students) Colorado teams to support children/youth with moderate to severe acquired brain injury, as well as individuals with protracted recovery from concussions or mild Traumatic Brain Injuries (mTBI). During fiscal year 2024, CDE hosted two trainings:
 - Two-day BrainSTEPS CO New Team/New Team Member in-person training in October, 2023.
 - Three-day BrainSTEPS CO New Team/New Team Member virtual training in January, 2024.

These trainings prepared two additional BrainSTEPS CO Brain Injury Consulting Teams and added 80 new team members to existing teams to keep them adequately staffed. There are currently 28 Districts and 3 BOCES Level BrainSTEPS CO Teams with 265 team members serving approximately 53 districts in Colorado (covering approximately 30% of the Colorado school districts and 75% of enrolled students).

- Advanced the skills of existing BrainSTEPS CO team members through an Updated Training in February with speakers who provided knowledge on students with brain injuries in the areas of auditory processing, privacy practices, and trauma-informed mental health supports.
- Furthered the skills of BrainSTEPS CO team leaders (each BrainSTEPS CO team has at least one team leader) through a specific Team Leader Training that included speakers who provided knowledge in leadership and ethnographic interviewing.
- Held monthly virtual meetings with BrainSTEPS CO Team Leaders to disseminate information and answer questions regarding brain injury, consultation, and training.
- Provided ongoing consultation and mentoring to BrainSTEPS CO team members.

- During Brain Injury Awareness Month (March), a 1-hour informational webinar was hosted to educate school personnel, pediatricians, and family healthcare practitioners about how schools support students with a brain injury using evidence-based practices.
- Hosted monthly Return to Learn Concussion Management Team (CMT) Communities of Practice (CoP) featuring guest speakers who are experts in concussion.
- Provided bi-monthly Concussion Action Team webinars / meetings to keep district personnel up-to-date on return to learn concussion information and practices. These events create a place for school personnel to ask questions on policy and procedure.
- Trained Return to Learn CMTs in schools throughout the state via the following available free evidenced based practice courses:
 - BrainSTEPS COonline Return to Learn CMT training, 549 school personnel have completed the Return to Learn CMT training; and
 - CDE Concussion Management Training for Health Technicians, 145 school personnel have completed this training; and
 - CDE Concussion Management Training for School Counselors and School Mental Health Professionals, 40 school personnel have completed this training,
- Updated concussion guidelines to reflect the most recent updates to practice. For the 2024/25 school year, CDE will use the CO REAP (Remove/Reduce, Educate, Adjust/Accommodate, Pace) Manual. REAP is recognized as a set of evidence-based guidelines and is endorsed by the National Association of State Head Injury Administrators (NASHIA).
 - REAP includes the new CO School Concussion FlowChart that was developed by a multidisciplinary team of school professionals in consultation with CDE.
 - REAP and the latter flowchart include the recommended use of the Teacher Acute Concussion Tool (TACT), which automatically provides communication and real time training about a student's concussion and needed return-to-learn engagement strategies to school personnel for 4 weeks. As of 07/03/2024, 1,294 teachers have been trained using TACT.
- Managed the Traumatic Brain Injury (TBI) and Concussion Action Team listservs to disseminate information.
- Disseminated brain injury information at state conferences and professional meetings.
- Managed the following websites: ColoradoKids with Brain Injury (<https://www.cde.state.co.us/cokidswithbraininjury>) and CDE mTBI (<http://www.cde.state.co.us/healthandwellness/braininjury>)

Research

Below are summaries provided to MINDSOURCE by the grantees from FY 2022-23 that include a synopsis of the grantees purpose and progress. Each of these projects were initiated after a competitive RFP process. CDHS ensures equity by soliciting for competitive bids, posting on a public website, and securing diverse evaluators without conflicts of interest. Equity, diversity, and inclusion principles are built into the RFP as well as the resulting contracts with the program.

Title: *University of Colorado - Restoring Efficient Sleep after TBI (CU-REST)*

Principal Investigator: Lisa Brenner

Institution: University of Colorado

Aim: Evaluate the efficacy (i.e., how well the treatment works) of guided Path to Better Sleep among those with moderate to severe traumatic brain injury (TBI) and insomnia.

Progress: As of 6/30/2024, 104 individuals consented and enrolled in the study. Of those, 7 individuals were ineligible and 3 discontinued during the baseline visit. In summary, the study

team has completed baseline data collection for 94 individuals. In addition, 50 individuals completed the post intervention assessment. Recruitment and data collection is ongoing. This project has received an additional one year no-cost extension and it is expected the proposed number of individuals will complete study procedures.

This study was presented at the North American Brain Injury Society's 17th Annual Conference on Brain Injury – also known as ABI 2024 – held March 27-30, 2024. In addition, the protocol for this study was published: Sullan MJ, Kinney AR, Stearns-Yoder KA, Reis DJ, Saldyt EG, Forster JE, Cogan CM, Bahraini NH, Brenner LA. A randomized clinical trial for a self-guided sleep intervention following moderate-severe traumatic brain injury: Study protocol. *Contemp Clin Trials*.

Title: *Risk Profiles for Posttraumatic Psychopathology Following Traumatic Brain Injury (TBI)*

Principal Investigator: James Graham

Institution: Colorado State University

Progress:

Aim 2: University of Colorado Hospital electronic medical records were linked with the Colorado All-Payer Claims Data to provide one-year look back and one-year follow-up observation periods relative to the index TBI-related hospital stay. We then performed successive multiple logistic regression analyses to produce a parsimonious model. We initially included 23 potential predictor variables, but that was reduced to 8 variables in the final model.

Aim 3: Using the coefficients from the logistic regression model, staff selected base categories for each predictor and calculated the magnitude increase or decrease for each category within each variable. Next, the change constant to multiply by the difference in category magnitudes from the previous step was determined. This established the point system, which can then be converted to probabilities. A (printable) scorecard was created showing the points assigned to each risk factor category, the probability associated with all possible point totals, and a figure demonstrating the risk trajectory distributed over the total point range. In addition, an interactive version (in Excel) with pull-down menus for each risk factor so clinicians can enter a patient's profile and receive a real-time estimate of posttraumatic psychopathology over the next year for that patient at hospital discharge.

Title: *Vocational Rehabilitation (VR) for Coloradans Living with Traumatic Brain Injury*

Principal Investigator: Cristina Parsons

Institution: Colorado State University

Progress: Individuals with brain injuries experience higher rates of unemployment than people with other disabilities. In Colorado, access to vocational rehabilitation services, intended to support people with disabilities in preparing for and obtaining employment, is problematic for those living with brain injury. The purpose of this study is to assess how Coloradans with traumatic brain injury (TBI) encounter vocational rehabilitation services as they work towards employment.

In the 2021 program year, only 125 of the 5,320 open vocational rehabilitation cases were individuals with TBI. These individuals were mostly white males in their mid-thirties. Almost half were self-referred to vocational rehabilitation. Only about one third of these individuals were employed when they exited vocational rehabilitation. This study employed descriptive statistics to examine demographic and program-related characteristics of Coloradans with TBI and logistic regression to analyze factors influencing the ways Coloradans with TBI exit VR services. This research was approved by Colorado State University's Institutional Review Board

(IRB). This study includes 846 Coloradans with TBI involved with VR services from June 30th, 2018 to July 1st, 2021.

This study found that Coloradan clients of VR with TBI are mostly white males in their mid-thirties who have not received a Bachelor's degree. Almost a fifth of individuals identified as Hispanic. Most receive less than two VR services during their time in the program and of those who exit without competitive employment, many cite they are no longer interested in receiving VR services. Over a third (37%) achieve competitive, integrated employment (CIE) and this is comparable to nationwide trends in VR outcomes for those with TBI. Participants were more likely to achieve CIE if they had a job when starting VR, held a Bachelor's degree or higher, or identified as Hispanic. Clients who received job placement assistance, short term job supports, and supported employment services were especially more likely to obtain CIE upon program exit.