June | 2020

# Nebraska's Brain Injury State Partnership Program Mentor State Grant

**Annual Evaluation Report**JUNE 2019 – MAY 2020





#### Dear Reader:

Traumatic brain injury (TBI) is a serious public health problem in the United States. The Centers for Disease Control (CDC) reports approximately 2.5 million people sustain a TBI annually, and each year TBI contributes to a substantial number of deaths and cases of permanent disability. A TBI is caused by a bump, blow, or jolt to the head or a penetrating head injury that disrupts the normal function of the brain. Most TBIs are mild and their effects diminish over time, but even a mild TBI can result in permanent cognitive, physical, and behavioral changes. Individuals experiencing moderate to severe injuries may require life-long supports for housing, work, and community living.

Many Nebraskans impacted by TBI still struggle to access appropriate services to meet their needs. Nebraska Vocational Rehabilitation (VR) and the Brain Injury Advisory Council remain committed to building a comprehensive, multidisciplinary, easily accessible system of care for individuals experiencing brain injury and to ensuring awareness and training for partners in the system.

Nebraska VR serves as lead agency for a U.S. Department of Health and Human Services, Administration for Community Living TBI Implementation Partnership Grant which provides funding for states to build infrastructure and create systems change to better serve their citizens with brain injuries. The Brain Injury Advisory Council advises Nebraska VR, the Department of Education, Special Education, and the Department of Health and Human Services (DHHS) in implementing grant objectives and goals under the Nebraska State Plan for Systematic Services for Individuals with Brain Injuries.

For more information about the Nebraska State Plan for Systematic Services for Individuals with Brain Injuries, please visit the Brain Injury Advisory Council's website at <a href="https://www.braininjury.ne.gov">www.braininjury.ne.gov</a>.

This report summarizes grant-funded project outcomes for FY 2019-2020. Nebraska VR and the Brain Injury Advisory Council look forward to working with our partners and stakeholders to build better futures for Nebraskans with brain injury and their families.

Sincerely,

Keri Bennett, M.S.Ed, CBIS

Kei Bennett

Nebraska VR Program Director for ABI

**TBI Grant Project Director** 

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Report prepared by



# **Executive Summary**

In FY 2019-2020 Nebraska continued its work under a brain injury partnership grant from the Administration for Community Living (ACL), U.S. Department of Health and Human Services. The overarching goal for Nebraska's brain injury partnership grant is to strengthen Nebraska's system of services and supports that maximizes the independence, well-being and health of people with traumatic brain injuries (TBIs) across the lifespan and all other demographics, their family members and support networks by building a statewide, voice-driven Network of individuals with TBI and their family members that are engaged and equipped to shape policies, programs, and services.

Activities from FY 2019-2020 (June 2019-May 2020) are summarized below.

# **Brain Injury Network Capacity-Building**

Some key activities include:

- Incorporated in the State of Nebraska as the Nebraska Injured Brain Network (NIBN)
- Elected a Board of Directors and established a meeting schedule
- Drafted and finalized a Mission Statement
- Created committees for Business Planning and Website Development
- Planned and delivered a Chapter Capacity-Building Training event in December 2019 to identify new Chapter leaders and to provide them with information to start and grow a new NIBN Chapter
- Transformed the North Platte Support Group into the North Platte NIBN Chapter
- Began efforts to build NIBN Chapters in Kearney, Grand Island, Hastings, and Blair
- Conducted a request for proposals for a website, evaluated proposals, and contracted with a winning vendor to build a website
- Conducted NIBN Board Development training

#### **Dissemination of Information**

- 5,456 letters were delivered to individuals on the TBI Registry.
- 2,256 website sessions occurred on the Nebraska Brain Injury Advisory Council's website.
- 9 information campaigns conducted through Constant Contact with 389 to 408 recipients for each campaign.

#### **Information and Referral**

 A total of 534 individuals received information and referral services from four organizations (Brain Injury Alliance of Nebraska, Disability Rights Nebraska, Hotline for Disabilities, and the Aging and Disability Resource Center).

#### TBI Trainings and Conferences

- A total of 139 individuals were trained across five brain injury trainings, conferences, and presentations this year.
- Participants of the NIBN Chapter-Building Event responded highly positively on a postevent evaluation. Respondents were favorable about the voice-generated approach, John Ferrone's understanding and expertise, and about the opportunity to be involved in a NIBN chapter in their local community, among other areas. All of the respondents were satisfied or very satisfied with the event.
- The vast majority of participants of one of the three BIA Presentations responded positively in terms of improvements in their understanding of brain injury due to the presentation, their knowledge of the signs and symptoms of brain injury, and their understanding of the types of support a person with a brain injury may need.

#### **Living with Brain Injury Survey**

• In FY 2019-2020, plans were made to develop another Living with Brain Injury Survey, this time focusing specifically on the intersection of TBI and behavioral health. The survey is currently under development and will be administered next fiscal year.

#### **TBI Screenings**

- Nebraska VR conducted 172 Acquired Brain Injury (ABI) Screens this year.
- Most individuals have sustained one or two brain injuries and most sustained their injury at a young age, with the median age at time of injury being 19 years.
- The severity of these injuries is shown by the fact that 83.6% have been treated in a hospital or ER for brain injury, 74.4% have lost consciousness due to a brain injury, and 79.9% have ever felt dazed or had a gap in memory resulting from a brain injury.
- The top three difficulties were getting distracted and forgetting to finish tasks, struggling to remember what people said, and having difficulty staying organized or setting priorities.

#### **Brain Injury Advisory Council – Living with Brain Injury State Plan Activities**

- Nebraska VR and the Brain Injury Advisory Council (BIAC) completed a comprehensive review of available state data on TBI, past and current needs assessments and other information to draft the Annual Living with Brain Injury State Plan for 2019-2020.
- Several BIAC committees drafted action steps to accomplish the *Plan*, including timelines and measurable outcomes for each of the goals and objectives.

#### **TBI Registry Data**

- Over the five-year period of 2014-2018, there has been an average of 13,634 cases of traumatic brain injury cases per year in Nebraska
- TBIs appear to occur in the Western area of the state at substantially higher rates compared to all other areas in Nebraska.

# PROGRAM MENTOR STATE PARTNERSHIP ANNUAL EVALUATION REPORT June 1, 2019 through May 31, 2020

#### **Project Purpose**

In FY 2019-2020 Nebraska was awarded a brain injury partnership grant by the Administration for Community Living (ACL), U.S. Department of Health and Human Services. This fiscal year marked the beginning of a new grant cycle with ACL. The overarching goal for Nebraska's brain injury partnership grant is to strengthen Nebraska's system of services and supports that maximizes the independence, well-being and health of people with traumatic brain injuries (TBIs) across the lifespan and all other demographics, their family members and support networks by building a statewide, voice-driven Network of individuals with TBI and their family members that are engaged and equipped to shape policies, programs, and services.

# **Grant Objectives**

Nebraska's brain injury grant project focuses on four core areas which provides the basis for the grant objectives:

- 1. Build capacity within the existing TBI support groups by providing leadership and capacity-building coaching to support group leaders and members in at least 10 of the 13 support groups.
- Equip the Network of people with TBI and their families to advocate for policy, program, and service changes by making data, resources, tools, and strategies accessible to leaders and members of all 13 support groups across the state.
- 3. Engage Network members from all 13 support groups in shaping policies, programs, and services by providing education in advocacy strategies and offering opportunities to advocate.
- 4. Connect newly-injured individuals with TBI and their family members to the Network and the existing system of services and supports in underserved, rural areas of the state by training a TBI Peer Resource Navigator from 6 of the 13 support groups.

# **Brain Injury Network Capacity-Building**

The centerpiece of Nebraska VR's TBI grant is the Network Capacity Building Project. The goal for this project is to build leadership capacity across a statewide network of people with the lived experience of brain injury and their family members. They will be connected with each other to provide support, and they will be able to advocate with one voice for policy, program and service changes that will benefit people impacted by brain injury. The project began in February 2019 with a core group of volunteers from the central part of the state who worked with a contracted consultant to define their shared vision and mission. In the last year, the organization achieved several important accomplishments:

- Incorporated in the State of Nebraska as the Nebraska Injured Brain Network (NIBN)
- Elected a Board of Directors and established a meeting schedule
- Drafted and finalized a Mission Statement
- Formed their first Chapter in another community
- Developed a plan to pursue 501C3 status within the next year
- Created committees for Business Planning and Website Development
- Designed the concept of Local Chapters to engage the injured brain community (peers and family members) in their own communities across the state
- Submitted a proposal to Nebraska VR for a "showcase" meeting and training event
- Planned and delivered a Chapter Capacity-Building Training event in December 2019 to identify new Chapter leaders and to provide them with information to start and grow a new NIBN Chapter
- Transformed the North Platte Support Group into the North Platte NIBN Chapter
- Began efforts to build NIBN Chapters in Kearney, Grand Island, Hastings, and Blair
- Established a bank account, as well as negotiated a line of credit with the bank
- Conducted a request for proposals for a website, evaluated proposals, and contracted with a winning vendor to build a website
- Successfully navigated a transition among some Board members and officers as some individuals experienced personal crisis
- NIBN Support Groups in North Platte and Kearney conducted online meetings due to COVID-19 Pandemic-related social distancing requirements and other directed health measures
- Conducted NIBN Board Development training

A committee consisting of the consultant, BIAC members, Nebraska VR TBI grant staff, NIBN leadership met online every month to provide oversight and support for the project. Leadership from Nebraska VR, NIBN and the BIA-NE also met monthly with the consultant to discuss how NIBN and the BIA-NE can complement each other's work, and to assure there is no duplication of effort between the two organizations. The NIBN organization is creating an infrastructure for networking and building leadership capacity among individuals with injured brains, their family members, and caregivers

#### **NIBN Chapter-Building Event**

On December 14, 2019, a NIBN Chapter-Building Event was held in Kearney. A total of 28 individuals attended the event representing five communities with current or potential NIBN chapters. The communities represented were Kearney, Blue Hill/Hastings, Grand Island, Ogallala, and North Platte. The event was facilitated by John Ferrone, contractor for the Brain Injury Network Capacity-Building project.

Training participants responded highly positively on a post-event evaluation. Respondents were favorable about the voice-generated approach, John Ferrone's understanding and expertise, and about the opportunity to be involved in a NIBN chapter in their local community, among other areas (Table 1, next page). All of the respondents were satisfied or very satisfied with the event (Table 2, next page).

The following quotes were provided by the training participants about the chapter-building event and the prospect of being involved in NIBN.

"I felt very positive with each point that was taught. Great communicators and hope for my future."

"[The most valuable outcome of the event was] getting to meet other survivors and all wisdom tips that they shared with all of us."

"[The most valuable outcome of the event was] getting solidarity, support progress on moving forward for NIBN."

"[The most valuable outcome of the event was] brining voices together for one goal - for us to be heard."

"I've been impressed with startup chapters and the development of future program."

"I'm excited to move forward with everybody. This has become a huge passion for this group, and I learn something about myself all the time. Love it!"

"I like how we were brought together, shared stories, made aware of resources, etc."

"I feel like it was 100% a successful event. However, we need more I feel, or more often."

1	Table 1	NIBN Chapter-Building Event Rat	ings					
			Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Average (1-5)
			[1]	[2]	[3]	[5]		
1.		good understanding of the Nebraska Brain Network (NIBN). (n=22)	0.0%	0.0%	9.1%	31.8%	59.1%	4.5
2.	2. I believe the "voice generated" approach of NIBN will be effective in meeting the diverse needs of individuals with a brain injury. (n=22)			0.0%	4.5%	27.3%	68.2%	4.6
3.	I felt cor event. (r	nfortable sharing my thoughts at this n=22)	0.0%	0.0%	0.0%	36.4%	63.6%	4.6
4.	understa	itator of this event (John Ferrone) ands the unique needs of people injured brain. (n=22)	0.0%	0.0%	0.0%	18.2%	81.8%	4.8
5.	I trust the expertise of John Ferrone (consultant for NIBN) to help us establish an effective network around brain injury. (n=22)		0.0%	0.0%	4.5%	13.6%	81.8%	4.8
6.	I would feel comfortable working with John Ferrone (consultant for NIBN) on activities around brain injury. (n=22)		0.0%	0.0%	0.0%	22.7%	77.3%	4.8
7.	I understand the process for starting a NIBN chapter in my local community. (n=22)		0.0%	0.0%	4.5%	40.9%	54.5%	4.5
8.		thusiastic about being involved in a of NIBN within my local community.	0.0%	0.0%	4.5%	31.8%	63.6%	4.6

Table 2	Overall, how satisfied are you with today's event? (n=22)						
Very dissatisfied		atisfied	Neutral	Satisfied	Very satisfied	Average (1-5)	
[1]		[2]	[3]	[4]	[5]		
0.0%	0	.0%	0.0%	18.2%	81.8%	4.8	

# **Dissemination of Information**

The dissemination of information conducted by the NE VR TBI program is organized under four main areas: Nebraska Brain Injury Registry Letters, Nebraska Brain Injury Advisory Council Website, materials distributed at the Brain Injury Conference, and Constant Contact. Table 3 contains a summary of the information disseminated under each of these four areas.

Table 3	Dissemination of Infor	Dissemination of Information Summary: June 1, 2019 – May 31, 2020				
Nebraska Brain Injury Registry Letters		<ul> <li>Registry letters mailed: 5,737</li> <li>Letters returned undeliverable: 281</li> <li>Total registry letters delivered: 5,456</li> </ul>				
Nebraska Brain Injury Advisory Council Website		<ul> <li>Website visits: 2,256</li> <li>An average of 130 unique visitors per month</li> <li>(see below for more details)</li> </ul>				
	Distributed at Brain ference (March 2020)	Event cancelled due to COVID-19 pandemic.				
Constant C	Constant Contact Statistics  Constant Contact Contact Campaign that was seen out.					

#### Nebraska Brain Injury Advisory Council (BIAC) Website Analytics

Figures 1 and 2 below show unique and total visitors to the BIAC website in six-month time periods (Figure 1) and monthly averages (Figure 2).

Figure 1. Website Analytics: Six-Month Comparisons

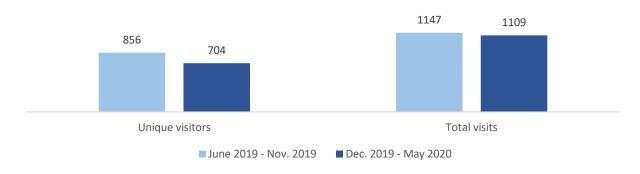


Figure 2. Monthly Average Analytics
June 2019 - May 2020

Total visits this time period: 2,256



The most common drivers to the BIAC website are direct and search engine, comprising over 90% of all traffic. Referrals from other sites make up approximately one-in-eight visits to the site (the most consistent number of referrals come from biane.org). Referrals from social media comprise a very small fraction of all visits (Figure 3)

Referral from another site 7% (105 visits)

Nocial media (Facebook and Twitter) 1% (24 visits)

Direct 47% (484 visits)

Figure 3. Traffic Drivers to the BIAC Website

#### **Nebraska Brain Injury Registry Letter Brochures**

Improving the brochure information (enclosed with a letter) distributed to those added to the Brain Injury Registry continued this year. Nine brochures have been designed and are in the process of distribution. For each of the state's three regions (western, central, and eastern) brochures have been customized by ages 0-21,22-59, and 60 plus. The theme is Living with Brain Injury, Resources Close to Home. Each brochure lists statewide resources such as the Brain Injury Alliance and Nebraska Vocational Rehabilitation. Also listed are resources available in each area including Brain Injury Support Groups, Area Agency on Aging, and Opioid addiction connections.

Previously the Brain Injury Alliance was notified each month the number of letters that were being mailed because their number was the only contact. Starting July 1, 2020 resources listed on the brochures will also receive this information in an email. The resources have been asked to report any calls they receive as a result of the brochures. The message will also include information on webinars, resource updates, etc.

The goal is to also keep the resources supplied with brochures for their use when they work with individuals with brain injury. Training on brain injury is also being offered on brain injury so they can better respond to callers.

In May 2020, the letters enclosed with the brochures included a state website for information on Covid-19.

# **Information and Referral**

Information and referral services for survivors of TBI are conducted by four organizations: The Brain Injury Alliance of Nebraska (BIA), Disability Rights Nebraska, the Hotline for Disabilities, and the Aging and Disability Resource Center (ADRC). Between these four organizations, 534 individuals received information and referral services during this grant year (Table 4).

Table 4	Information and Referra	l Summary: June 1, 2019 – May 31, 2020			
Brain Injury Alliance of Nebraska (BIA) Resource Facilitation		Served  > 155 information and referral clients  > 166 intake and referral clients  > 48 case management clients  A total of 644 referrals were made for these 369 clients during the course of the year.			
Disability I	Rights Nebraska	Provided 32 information and referral services for 30 individuals with a TBI.			
Hotline for	r Disabilities	Provided information and referral services to 15 individuals with a TBI.			
Aging and Disability Resource Center (ADRC)		Served  > 72 information and referral clients  > 42 Options Counseling clients  > 6 Benefits Assistance clients  A total of 133 referrals were made for these clients this year.			
Total		Provided information and referral services to 534 individuals with a TBI.			

# **TBI Trainings**

Five TBI trainings were offered this grant year to a total of 139. The dates and participants of these trainings are detailed below in Table 5.

Table 5 TBI Train	ings: Dates and Partic	cipants	
	Date	Participant Description	Number of Participants
NIBN Chapter-Buildin Event (see pages 5-6 above	December 14, 2019	Survivors of brain injury and family members interested in creating or building a NIBN chapter in their local community	28
BIA Presentation on Intersection of Brain Injury and Domestic Violence	May 19, 2020	Staff and volunteers working with victims of domestic violence	7
BIA Presentation to Metro Area Suicide Prevention Coalition	May 26, 2020	Coalition members	53
BIA Presentation to Behavioral Health Education Center of Nebraska	May 27, 2020	Students and trainees in behavioral health fields	47
TBI Modules	Ongoing	Various professionals and family members serving individuals with TBI	4 (unique) Intro training: 2 Pediatric training: 2 Adult training: 1 Substance training: 1
Total	-	-	139

#### **BIA Presentations**

Table 6 below presents results from the BIA presentation evaluation survey that was sent out to participants of the three presentations conducted by the BIA this year. The vast majority of participants responded positively to the five items on the survey.

Т	able 6	BIA Presentation Evaluation (agg	regated a	cross three	e presenta	tions)		
			Strongly disagree [1]	Disagree [2]	Neutral [3]	Agree [4]	Strongly agree [5]	Average (1-5)
1.	I have a greater understanding of brain injury as a result of this presentation. (n=44)			0.0%	2.3%	34.1%	59.1%	4.4
2.	2. My knowledge of the signs and symptoms of brain injury increased as a result of this presentation. (n=44)			2.3%	2.3%	38.6%	52.3%	4.3
3.	As a result of this presentation, I have a greater understanding of what type of support a person with a brain injury may need. (n=42)		4.8%	2.4%	0.0%	42.9%	50.0%	4.3
4.	I have an awareness of a brain injury screening tool as a result of this presentation. (n=41)		4.9%	7.3%	14.6%	29.3%	43.9%	4.0
5.	<u> </u>		4.7%	0.0%	7.0%	20.9%	67.4%	4.5

The following quotes were provided by training participants of the BIA presentations.

"I really enjoyed learning about how I can support those with a brain injury; whether that's through doing the screening, referring them, or just simply changing the way I interact with them."

"Wow, this presentation was amazing! I learned so much about what it is like to live with a brain injury, including the challenges that may lead someone to experience suicidal ideation. It was also reassuring to know that there are ways that we can support these individuals. Dr. Garlinghouse is a wonderful presenter! Very engaging, fun, and knowledgeable."

"It was great to increase our knowledge about the different areas of the brain and how injury to different areas impact behavior and functionality. Also, the importance of intervention that supports and the target behaviors that may be supported due to the area of the brain injured."

"I've been to a lot of TBI trainings for mental health professionals. This presentation did a very good job of breaking down the connections in the brain that are affected."

# **Living with Brain Injury Survey**

In FY 2018-2019 the Living with Brain Injury Surveys of individuals with a brain injury, family members/caregivers, and service providers were conducted. The purpose of the Living with Brain Injury Survey is to answer questions such as...

- What services are individuals with a brain injury and their family members needing right now?
- What are the barriers to those services?
- And ultimately, how can we address the needs, gaps, and/or barriers facing individuals with a brain injury, their family members, and service providers?

While this survey occurred last fiscal year, a link to the survey was made available on the Brain Injury Advisory Council's website. Responses continued to come in throughout the year as 56 new responses were collected across the three surveys for individuals with a brain injury, family members/caregivers, and service providers. The report of the results was updated to reflect these new responses. Although the overall results did not change substantially with the addition of these new responses, the findings from the previous survey collection were further solidified.

In FY 2019-2020, plans were made to develop another Living with Brain Injury Survey, this time focusing specifically on the intersection of TBI and behavioral health. So far, two stakeholder meetings have been hosted to obtain input on the survey. Additionally, Maria Crowley, the representative from the Technical Assistance and Resource Center (TARC) withing with Nebraska VR on its TBI grant has been actively involved in providing input and providing facilitation for the two stakeholder meetings. At this point in time, Schmeeckle Research is developing survey items based on the feedback from the stakeholder meetings. Further input will be sought from the stakeholders on the survey items, and the survey is expected to be finalized and administered at some point in the summer of 2020.

# **Brain Injury Screenings**

The Nebraska VR Acquired Brain Injury (ABI) Screen is conducted with individuals working with Nebraska VR. The screen is conducted as a follow-up if an individual identifies a history of brain injury during their work with a VR counselor. It is important to emphasize that the findings in this report are only for those who have already indicated a history of brain injury. A total of 172 ABI screenings were conducted this year.

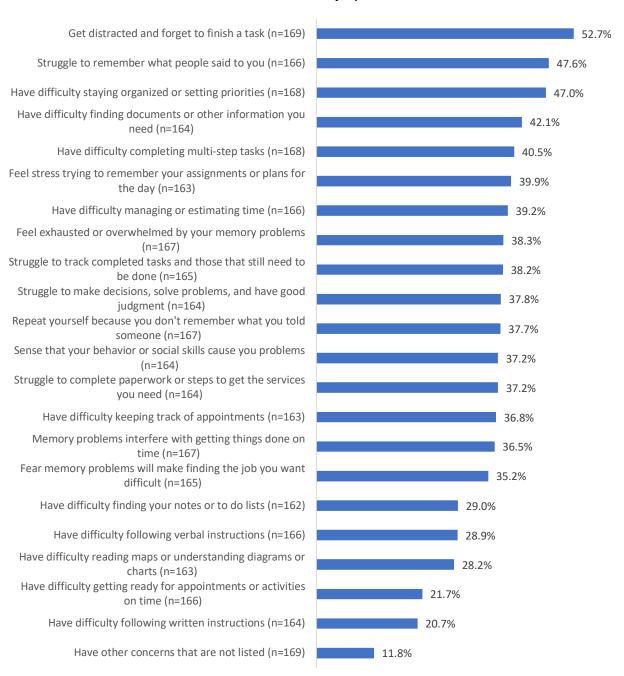
Table 7 presents findings about the history of brain injuries for individuals screened during this time period. Most individuals have sustained one or two brain injuries and most sustained their injury at a young age, with the median age at time of injury being 19 years. The severity of these injuries is shown by the fact that 83.6% have been treated in a hospital or ER for brain injury, 74.4% have lost consciousness due to a brain injury, and 79.9% have ever felt dazed or had a gap in memory resulting from a brain injury.

Table 7	History of brain inju	ıries	
Number of screens collected this time period (June 2019 through May 2020)			
		1	55.7%
		2	31.1%
Number of	brain injuries (n=167)	3	9.0%
ivaniber of	orani injuries (ii 101)	4	4.2%
		Average number of brain injuries	1.6
		reported	
		Under 5 years	10.6%
		5 to 17 years	33.8%
		18 to 24 years	19.7%
_	ne of injury (n=198)	25 to 34 years	18.2%
(includes n	nultiple injuries for some individuals)	35 to 44 years	9.1%
	,	45 to 54 years	6.6%
		55 and older	2.0%
		Median age at time of injury	19 years
		Ever treated in hospital or ER for brain injury (n=165)	83.6%
(lifetime exp	Severity eriences for each screened individual)	Ever lost consciousness due to brain injury (n=156)	74.4%
		Ever felt dazed or have a memory gap resulting from a brain injury (n=139)	79.9%

Screened individuals are asked about how often they experience 22 different difficulties in daily life. Figure 1 presents the percentage reporting they "often" encounter these difficulties since their brain injury. The top three difficulties were getting distracted and forgetting to finish tasks, struggling to remember what people said, and having difficulty staying organized or setting priorities (Figure 4).

Figure 4. Difficulties in Daily Life

Percentage reporting they "often" have these difficulties since the time of their brain injury\*



The average number of difficulties reported as "often" being experienced by screened individuals is 7.6 (out of a possible 22). Figure 5 present the numbers of difficulties in ranges reported as often being experienced. Less than one-fourth (21.2%) reported that they experience none of the difficulties on the screening instrument. The remainder report one or more.

# Average number of difficulties "often" experienced: 7.6 out of 22

Figure 5. Number of difficulties "often" experienced in daily life (out of a possible 22) (n=170)

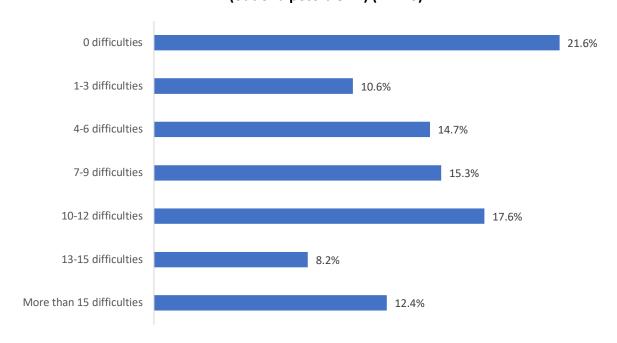


Table 8 presents all of the response options for the 22 survey items on difficulties experienced in daily life.

	Table 8	Difficulties in daily life (all response option	s)			
	In the ti	me since the brain injury, how often	Never	Seldom	Often	Depends
1.	Do your memon time? (n=1	ory problems interfere with getting things done 67)	16.8%	32.9%	36.5%	13.8%
2.	Do you get dis	stracted and forget to finish a task? (n=169)	13.6%	24.9%	52.7%	8.9%
3.	Do you strugg (n=166)	le to remember what people said to you?	13.3%	31.9%	47.6%	7.2%
4.	Do you repeat you told some	yourself because you don't remember what eone? (n=167)	20.4%	29.9%	37.7%	12.0%
5.	Do you have d (n=168)	lifficulty staying organized or setting priorities?	19.0%	25.0%	47.0%	8.9%
6.	Do you have d (n=162)	lifficulty finding your notes or to do lists?	36.4%	28.4%	29.0%	6.2%
7.	Do you have d	lifficulty managing or estimating time? (n=166)	26.5%	24.7%	39.2%	9.6%
8.	Do you have d (n=163)	lifficulty keeping track of appointments?	26.4%	31.3%	36.8%	5.5%
9.	Do you feel ex problems? (n=	chausted or overwhelmed by your memory =167)	24.6%	28.1%	38.3%	9.0%
10.	Do you have d	lifficulty finding documents or other ou need? (n=164)	21.3%	29.3%	42.1%	7.3%
11.	Do you have dactivities on ti	lifficulty getting ready for appointments or me? (n=166)	31.9%	38.0%	21.7%	8.4%
12.	Do you strugg need to be do	le to track completed tasks and those that still ne? (n=165)	23.0%	30.9%	38.2%	7.9%
13.	Do you have d	lifficulty completing multi-step tasks? (n=168)	21.4%	29.2%	40.5%	8.9%
14.	Do you have d	lifficulty following verbal instructions? (n=166)	28.9%	31.9%	28.9%	10.2%
15.	Do you have d	lifficulty following written instructions? (n=164)	39.6%	31.7%	20.7%	7.9%
16.	•	lifficulty reading maps or understanding narts? (n=163)	35.0%	25.8%	28.2%	11.0%
17.	Do you feel st	ress trying to remember your assignments or day? (n=163)	27.6%	23.9%	39.9%	8.6%
18.	•	that your behavior or social skills cause you	26.2%	26.8%	37.2%	9.8%
19.		le to complete paperwork or steps to get the	23.2%	29.3%	37.2%	10.4%
20.	•	le to make decisions, solve problems, and have	17.7%	33.5%	37.8%	11.0%
21.	<u> </u>	emory problems will make finding the job you	23.6%	29.1%	35.2%	12.1%
22.		other concerns that are not listed? (n=169)	79.5%	3.4%	11.8%	5.3%

# Brain Injury Advisory Council – Living with Brain Injury State Plan Activities

Nebraska VR and the Brain Injury Advisory Council (BIAC) completed a comprehensive review of available state data on TBI, past and current needs assessments and other information to draft the *Annual Living with Brain Injury State Plan for 2019-2020*. To obtain public input, the *Plan* was disseminated via electronic mailing list and social media, and printed copies were sent to all local TBI support groups across the state. Nebraska VR and the BIAC hosted a public meeting via videoconference at all Nebraska VR offices, inviting questions and comments from the public. The *Plan* merges the federal TBI grant goals and objectives, and the *Statewide Vision for Brain Injury Policies and Services* with strategies for addressing unmet and insufficiently met needs for people with TBI and their family members and caregivers. The unified *Plan* invites all Nebraska brain injury stakeholders to share accountability for pursuing the same vision.

Several BIAC committees drafted action steps to accomplish the *Plan*, including timelines and measurable outcomes for each of the goals and objectives. BIAC members with the lived experience of brain injury assumed greater leadership roles, chairing three of the five new committees. All of the committees included at least one or more BIAC members with brain injury. Based on committee member input, a decision was made to narrow the focus for the 2020 *Living with Brain Injury Needs Survey* on the topics of mental/behavioral health and substance use issues that impact people with brain injury and their family members. With assistance from Maria Crowley of the TBI Technical Assistance and Resource Center (TARC), Nebraska VR and the BIAC hosted two online stakeholder meetings to gather input for the assessment. We anticipate launching the survey in August 2020.

Nebraska VR negotiated a new contract with the Department of Health and Human Services, Division of Public Health for the TBI Registry follow-up activities. Three new data points were added for inclusion in the next annual TBI Registry report. For those individuals diagnosed with TBI and placed on the Registry, the report will include additional diagnoses related to alcohol and opioid use. A special report on vehicular and motorcycle injuries will also be included.

The BIAC added seven new members, five of whom have the lived experience of brain injury. There are now 24 voting members on the BIAC.

#### **TBI Registry Data**

#### **Future Data Points**

Nebraska VR has added new data points from the TBI Registry to its contract with Nebraska DHHS. These data points will be included on the report provided in the next fiscal year. The new data points are as follows:

- Additional diagnosis of alcohol
- Additional diagnosis of opioids
- Special topic report on TBI due to vehicular and motorcycle accidents based on available department resources

#### **Registry Data**

This section presents data from 2014 to 2018 from Nebraska's Traumatic Brain Injury Registry. The TBI Registry collects data using ICD-10 codes (ICD-9 pre-October 2015) relevant to head injury for individuals who visit the emergency department or are hospitalized.

Over the five-year period of 2014-2018, there has been an average of 13,634 cases of traumatic brain injury cases per year in Nebraska (Figure 6).

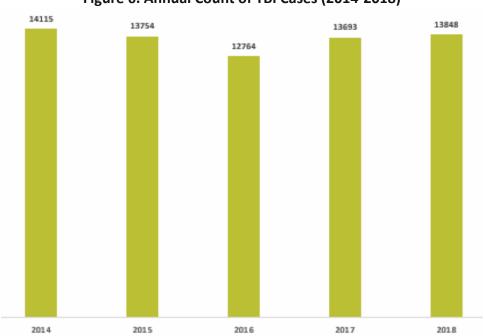


Figure 6. Annual Count of TBI Cases (2014-2018)

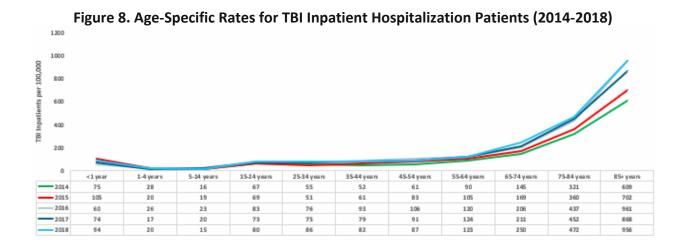
(Source: Nebraska Traumatic Brain Injury Registry)

<sup>\*</sup>Does not include the primary diagnosis "open wound of head" (S01.0-S01.9)

The elderly (those 85 years of age or older) have the highest rates of emergency department visits and inpatient hospitalizations compared to all other age groups (Figures 7 and 8).

ED Visits per 100,000 區 ō 15-24 years 25-34 years 35-44 years 45-54 years 55-64 years 65-74 years 75-84 years <1 year 1-4 years 3.28 2 28 2.24 2.35 2 47 2.28 

Figure 7. Age-Specific Rates for TBI Emergency Department Patients (2014-2018)



The vast majority (91%) of those identified as suffering a TBI and admitted to the emergency department are discharged to home. Whereas, just under half (49%) of those identified as suffering a TBI and are hospitalized as an inpatient are discharged to home (Figures 9 and 10).

Figure 9. Discharge Status for TBI Emergency Department Patients (2014-2018)

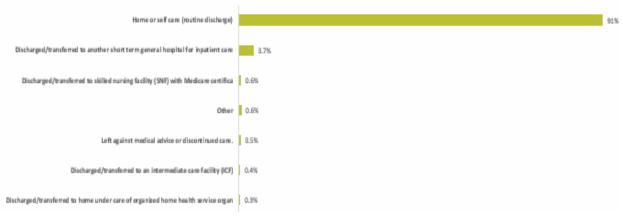
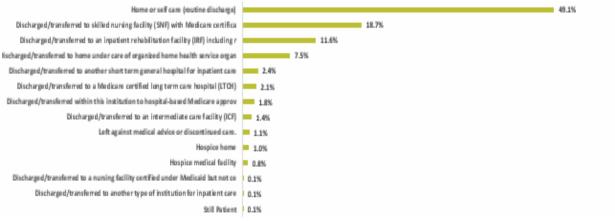


Figure 10. Discharge Status for TBI Inpatient Hospitalization Patients (2014-2018)



Western Nebraska appears to have the highest rates of TBI, as evidenced by the high rates in the Panhandle and West Central Local Health Districts (Figure 11). See map below (Figure 12) of Nebraska's local health districts.

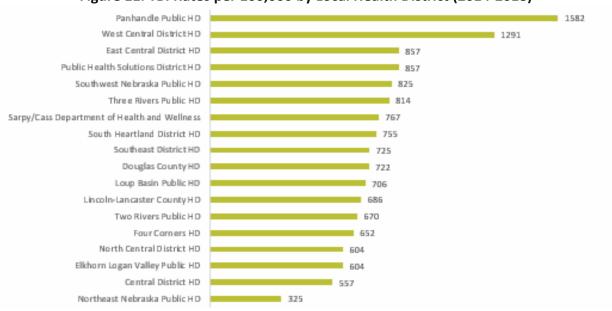
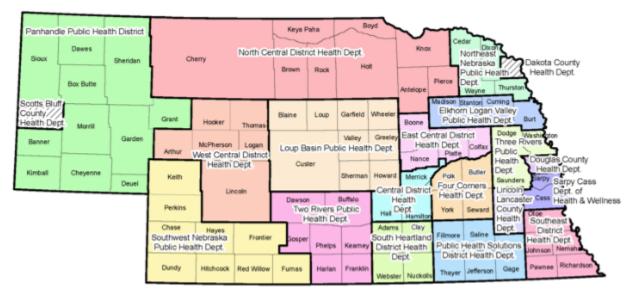


Figure 11. TBI Rates per 100,000 by Local Health District (2014-2018)

Figure 12. Nebraska's Local Health Districts Map



The leading cause of unintentional TBI-related injuries is falls, accounting for nearly half (49%) of cases in the registry (Figure 13).

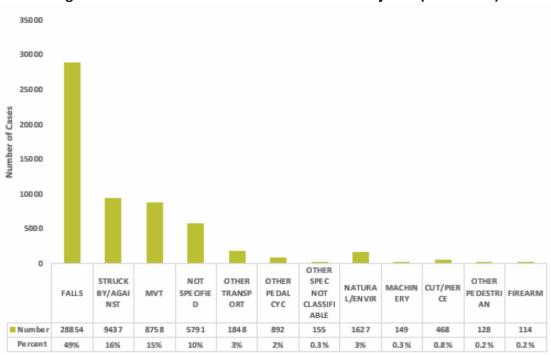


Figure 13. Unintentional Causes of TBI-Related Injuries (2014-2018)

(Source: Nebraska Traumatic Brain Injury Registry)