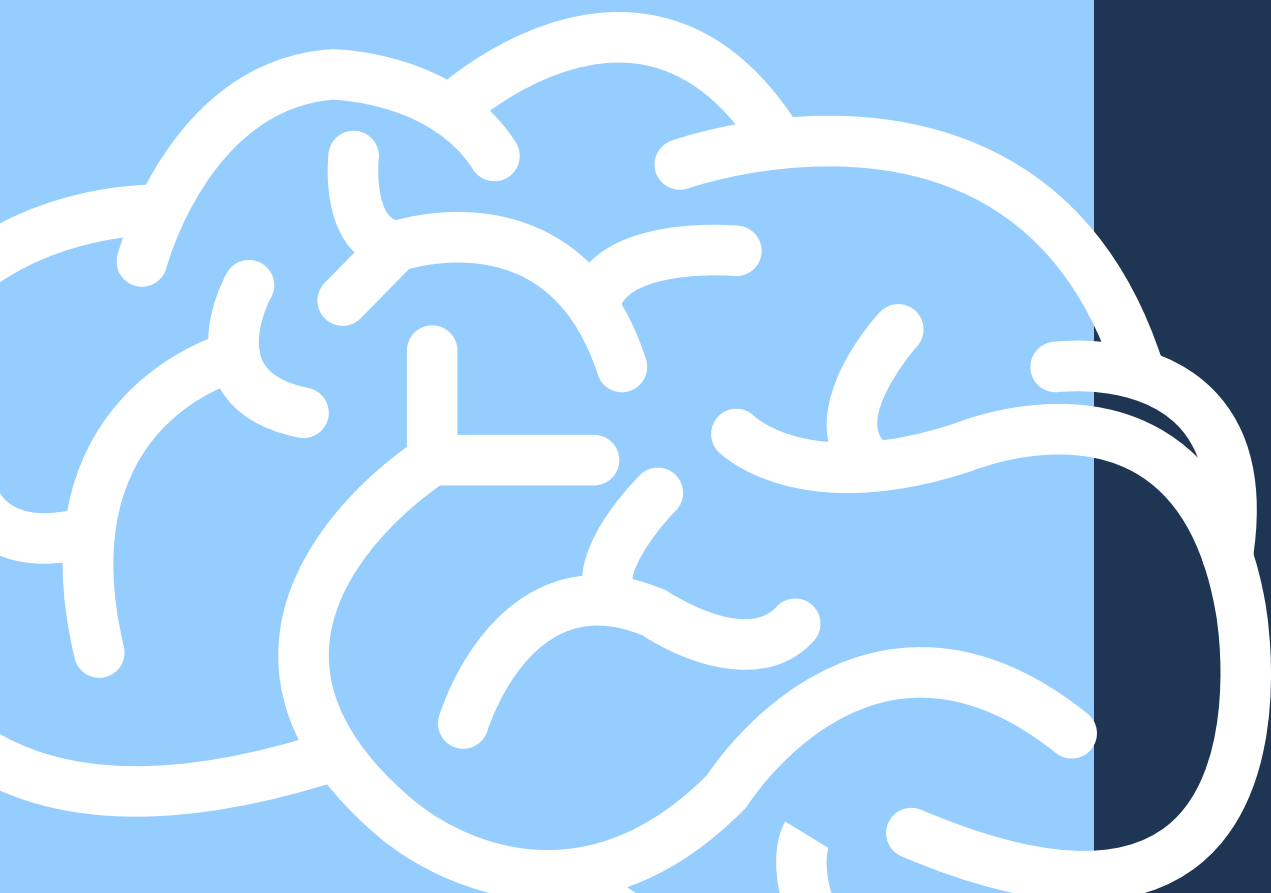


# Traumatic Brain Injury Resources



ST. MICHAEL'S  
UNITY HEALTH TORONTO



Centre for  
Urban Health  
Solutions

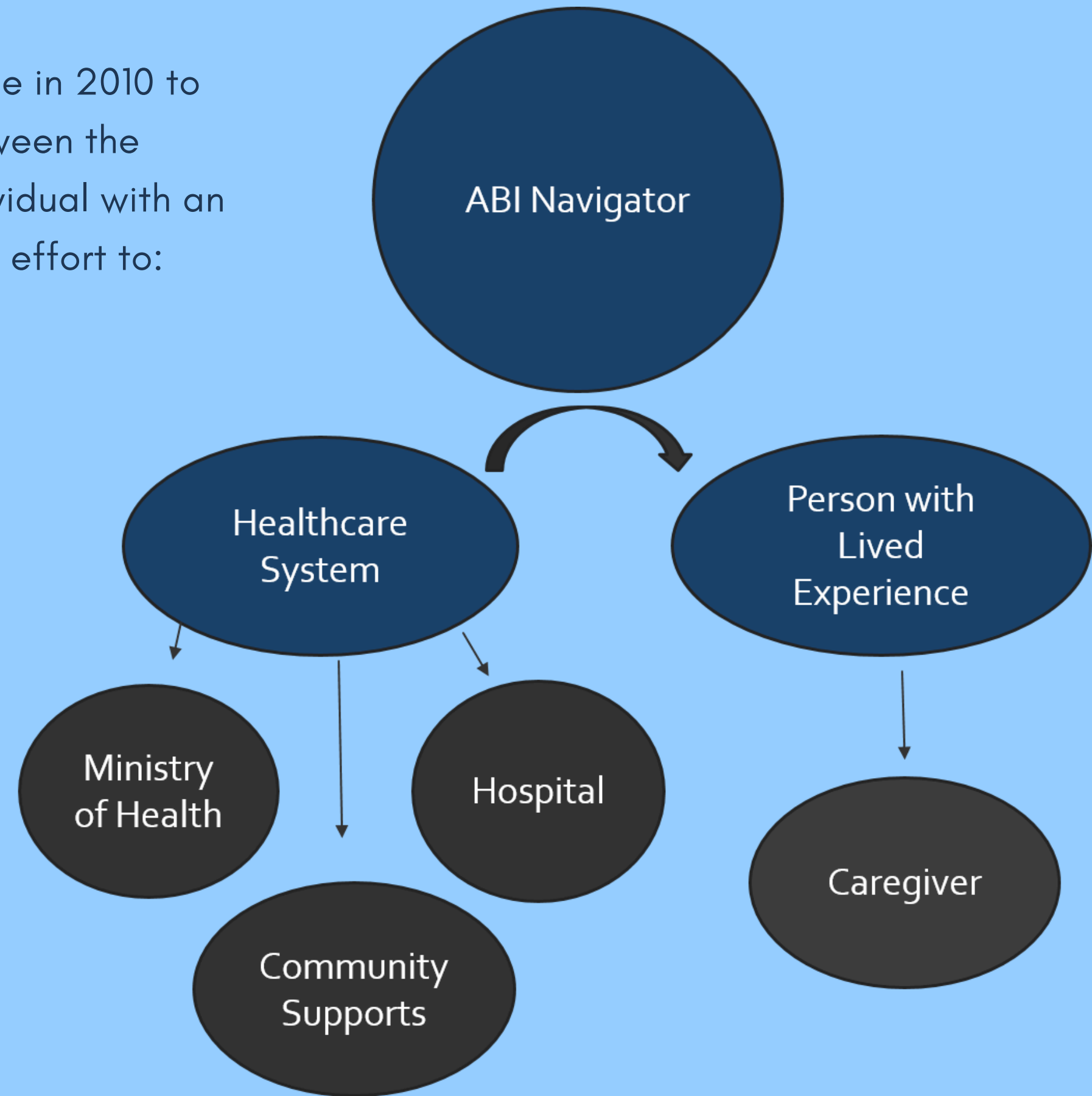


# **THE ABI NETWORK AND NAVIGATING BRAIN INJURY SERVICES**

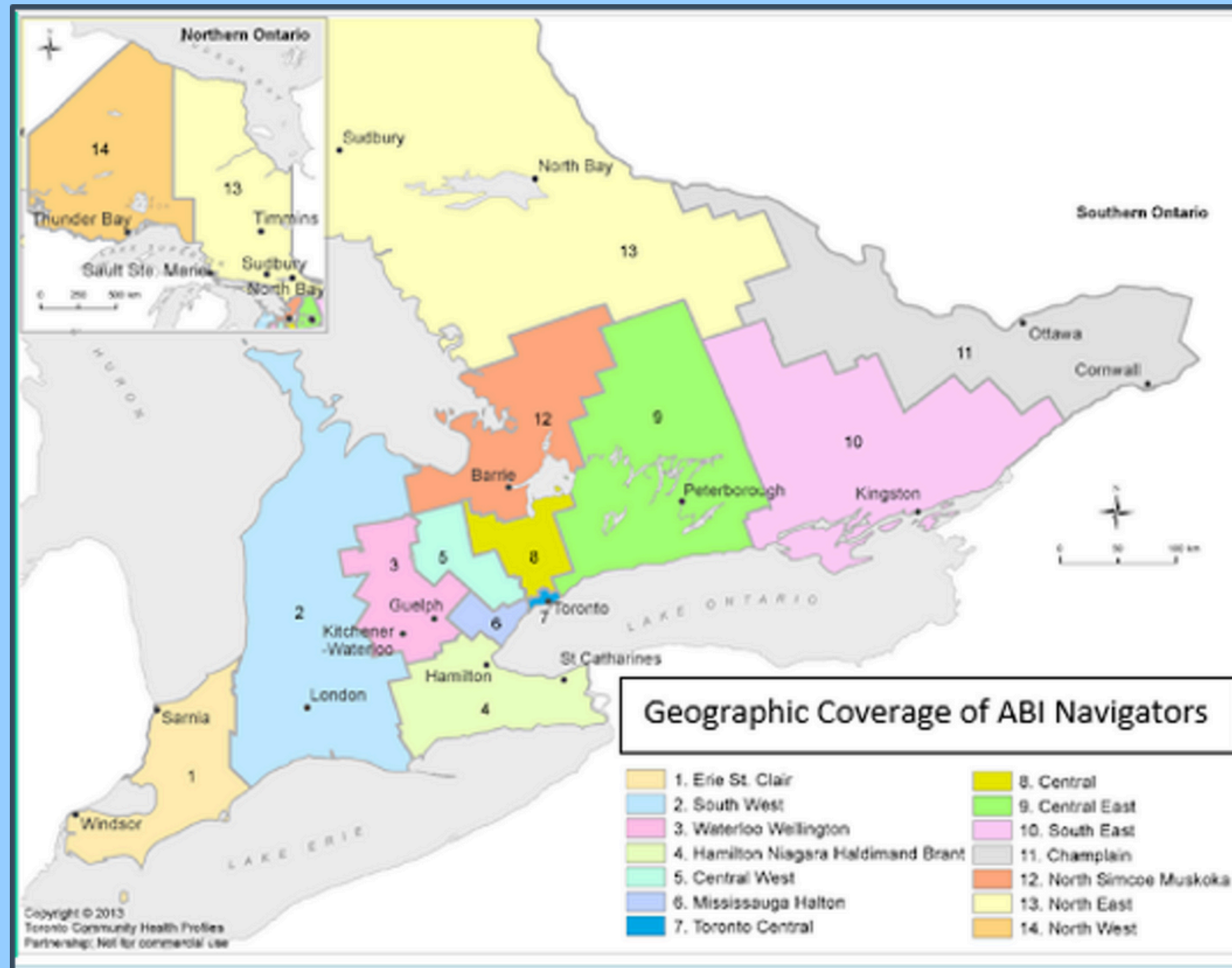
# Purpose of the ABI System Navigator

Created as a Provincial resource in 2010 to provide a navigational link between the healthcare system and the individual with an acquired brain injury (ABI) in an effort to:

1. Promote and improve system access and capacity
2. Improve Outcomes
3. Improve the individual's overall experience



# Where are the ABI System Navigators located?



**13**  
Navigators  
across the  
province

[Link](#)



# Toronto ABI Network

Established in 1995, The Toronto Acquired Brain Injury (ABI) Network is a recognized leader and collective voice in ABI.

## MISSION:

To provide leadership in furthering equitable, accessible, responsive and quality publicly-funded services and support for persons living with the effects of an ABI in the GTA.

## We connect people to services by:

- Simplifying access, as **a single point of entry** to community-based services, for persons with ABI, their families, and service providers.
- **Problem solving** to help individuals with **complex needs** access the services they require.
- Serving as a **central point of information and support** to individuals with ABI and their families to help them navigate and access services.



# ABI Navigator Responsibilities

- **Education:** educate those within and outside the ABI sector; Topics such as: HELPS ABI Screening Tool
- **Resource Navigation:** assisting service providers to link to ABI resources in a more coordinated and timely way
- **Complex Case Coordination:** if services are non-existent or insufficient to provide the needs for an individual, an ABI System Navigator may be called in to assist by making connections; offering education and providing resources
- **Identification of System Gaps and Barriers:** Through involvement in various networks, both within and outside the ABI community, there is opportunity to be change-makers and to bring a voice for those with lived experience and their caregivers.

# Brain Injury Screening- HELPS Screening Tool

- Brain Injury Screening Tool designed by Picard, Scarisbrick, Pauluck; International Centre for the Disabled, TBI-NET, United States 1992
- Intended for professionals whose primary field of practice is other than ABI
- Not sufficient to diagnose ABI as reason for current symptoms and difficulties – other possible causes need to be ruled out
- Recommended by the Ontario Provincial ABI Navigator and Provincial ABI Network

HELPS Brain Injury Screening Tool – NASHIA | National Association of State Head Injury Administrators



# HELPS ABI Screening Tool

**H Have you ever Hit your Head or been Hit on the Head?** ☐ Yes ☐ No

Note: Prompt client to think about all incidents that may have occurred at any age, even those that did not seem serious: vehicle accidents, falls, assault, abuse, sports, etc. Screen for domestic violence and child abuse, and also for service related injuries. A TBI can also occur from violent shaking of the head, such as being shaken as a baby or child.

**E Were you ever seen in the Emergency room, hospital, or by a doctor because of an injury to your head?** ☐ Yes ☐ No

Note: Many people are seen for treatment. However, there are those who cannot afford treatment, or who do not think they require medical attention.

**L Did you ever Lose consciousness or experience a period of being dazed and confused because of an injury to your head?** ☐ Yes ☐ No

Note: People with TBI may not lose consciousness but experience an "alteration of consciousness." This may include feeling dazed, confused, or disoriented at the time of the injury, or being unable to remember the events surrounding the injury.

**P Do you experience any of these Problems in your daily life since you hit your head?** ☐ Yes ☐ No

Note: Ask your client if s/he experiences any of the following problems, and ask when the problem presented. You are looking for a combination of two or more problems that were not present prior to the injury.

- |   |  |
|---|--|
| <input type="checkbox"/> headaches                | <input type="checkbox"/> difficulty reading, writing, calculating              |
| <input type="checkbox"/> dizziness                | <input type="checkbox"/> poor problem solving                                  |
| <input type="checkbox"/> anxiety                  | <input type="checkbox"/> difficulty performing your job/school work            |
| <input type="checkbox"/> depression               | <input type="checkbox"/> change in relationships with others                   |
| <input type="checkbox"/> difficulty concentrating | <input type="checkbox"/> poor judgment (being fired from job, arrests, fights) |
| <input type="checkbox"/> difficulty remembering   |  |

**S Any significant Sicknesses?** ☐ Yes ☐ No

Note: Traumatic brain injury implies a physical blow to the head, but acquired brain injury may also be caused by medical conditions, such as: brain tumor, meningitis, West Nile virus, stroke, seizures. Also screen for instances of oxygen deprivation such as following a heart attack, carbon monoxide poisoning, near drowning, or near suffocation.



# Scoring the HELPS

## Scoring the HELPS Screening Tool

A HELPS screening is considered positive for a *possible* TBI when the following 3 items are identified:

- 1.) An event that could have caused a brain injury (yes to H, E or S), and
- 2.) A period of loss of consciousness or altered consciousness after the injury or another indication that the injury was severe (yes to L or E), and
- 3.) The presence of two or more chronic problems listed under P that were not present before the injury.

### Note:

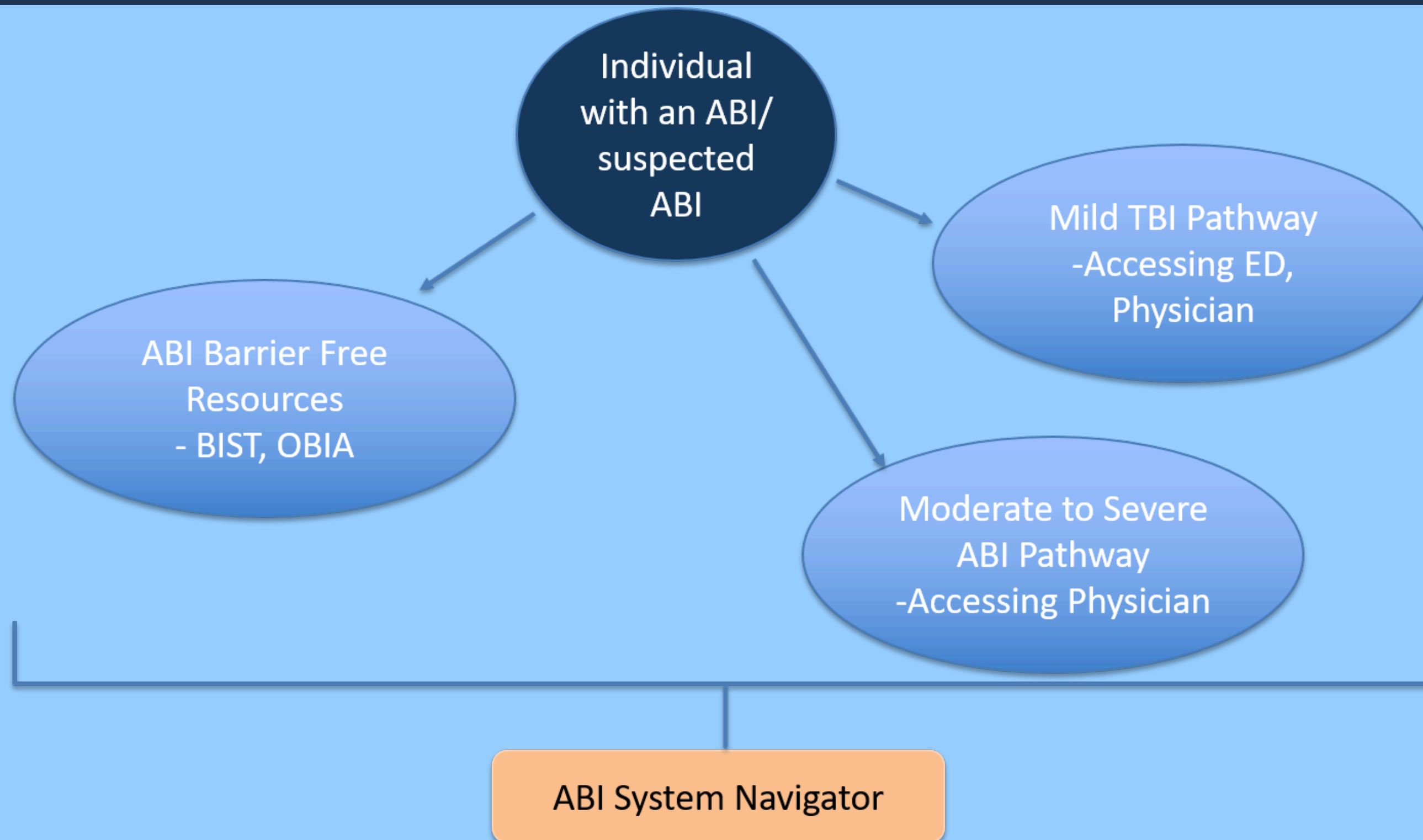
- A positive screening is **not sufficient to diagnose TBI** as the reason for current symptoms and difficulties - other possible causes may need to be ruled out
- **Some individuals could present exceptions** to the screening results, such as people who do have TBI-related problems but answered “no” to some questions
- Consider positive responses within the context of the person’s self-report and documentation of altered behavioral and/or cognitive functioning



# ABI RESOURCES



# Resource Navigation



# Accessing Low Barrier ABI Programs

- **Brain Injury Society of Toronto (BIST)**: is a community non-profit supporting those living with the effects of an ABI. Membership is open to everyone.
- No criteria to join. Free programs offered in-person and online including:
  - Case Coordination Services: Community Coordinator Neha Mistry [bistmneha@gmail.com](mailto:bistmneha@gmail.com); Community Coordinator- Violence impact Program: Keisha Appiah – Kubi [Keisha@bist.ca](mailto:Keisha@bist.ca) 437-241-6751
  - Support Groups and Peer Support
  - Social Drop-Ins
  - Workshops and Weekly Series Programs
  - ABI Justice Online Resource [www.abijustice.org](http://www.abijustice.org)

# How to get a diagnosis?

- Diagnosis can be provided by an emergency professional, a physician or a neurologist utilizing a series of diagnostic imaging tests i.e. CT scan, MRI scan
- Psychiatry may also be involved
- Neuropsychological Assessment: this thorough assessment can also provide a diagnosis.
  - **Community Head Injury Resource Services (CHIRS) Neuropsychological Assessment Clinic:** provides a subsidized assessment to assist in diagnosing a brain injury for those 18 years and older who have a history of trauma sufficient to suspect complicated mild to severe brain injury who are experiencing a cognitive complaint and do not have access to third party funding. Apply through the Toronto ABI Network.

# Accessing Mild TBI/ Concussion Clinics

- **Newly Acquired Concussion/ Mild TBI:** Individuals affected by a new injury/ recently acquired concussion/ mild TBI, the following hospitals have concussion clinics accessible via their **Emergency Departments:**
  - Clinics offer assessment, consultation, sometimes treatment for a concussion or mild TBI
    - University Health Network: Toronto General, Toronto Western Hospital – Hull Ellis Concussion Clinic (up to 7 days post injury); Canadian Concussion Centre
    - Mount Sinai Hospital, Michael Garron Hospital, St. Joseph's Health Centre– Hull Ellis Concussion Clinic (up to 7 days post injury)
    - Unity Health Toronto: St. Michael's Hospital Head Injury Clinic
    - Sunnybrook Health Sciences– Mild TBI Clinic

# Accessing Mild TBI/ Concussion Clinics - ABI Network Programs

- **Concussion/ Mild TBI up to 1 year post injury:**
  - **Toronto Rehab/ UHN ABI Physiatry Clinic** offers assessment, consultation
  - **PACE ABI Community Program:** offers 1:1 life skills support, goal based program;  
**PACE ABI Adult Day Program** (West end programs)
- **Concussion/ Mild TBI over 1 year post injury:**
  - **CHIRS Neuropsychological Assessment Clinic:** provides a subsidized assessment to assist in diagnosing a brain injury for those 18 years and older who have a history of trauma sufficient to suspect complicated mild to severe brain injury
  - **Cota ABI Case Management:** provides individualized community support services to clients living with an ABI. Work collaboratively with a client to provide client-centered support and assist one to live fulfilling lives.
    - Will see individuals with a concussion/ mild TBI on a case by case scenario

# Accessing Moderate to Severe Programs - ABI Network

- **Moderate to Severe ABI:** individuals experiencing a loss of consciousness up to 6 hours or more
  - **ABI Case Management/ Outreach:** Cota ABI Case Management; PACE ABI Community Program; Scarborough Centre for Healthy Communities- ABI Outreach; CHIRS- Community Support Services
  - **Specialized ABI Programs:** CHIRS Clinical Groups and SUBI
  - **ABI Day Programs:** CHIRS, Cota, PACE, West Park Healthcare Centre
  - **Behaviour Supports:** West Park Behaviour Outreach/ Inpatient Services; Cota Behaviour Therapy Supports.
  - **Toronto Rehab/ UHN ABI Psychiatry Clinic**
  - **Toronto Rehab/ UHN Neuropsychiatry Clinic**
  - **ABI Supportive Housing:** March of Dimes Canada, CHIRS, PACE (59 years and older)

# Key ABI Network Resources

(1) **The ABI Community Profile referral form**

Application form to outpatient rehab or community services

(2) **Description of ABI programs/services**

Provides very detailed information on programs

(3) **Wait Times report**

Provides wait times for community services

(4) **Provincial ABI System Navigators**

Contact list for brain injury service navigation across the province

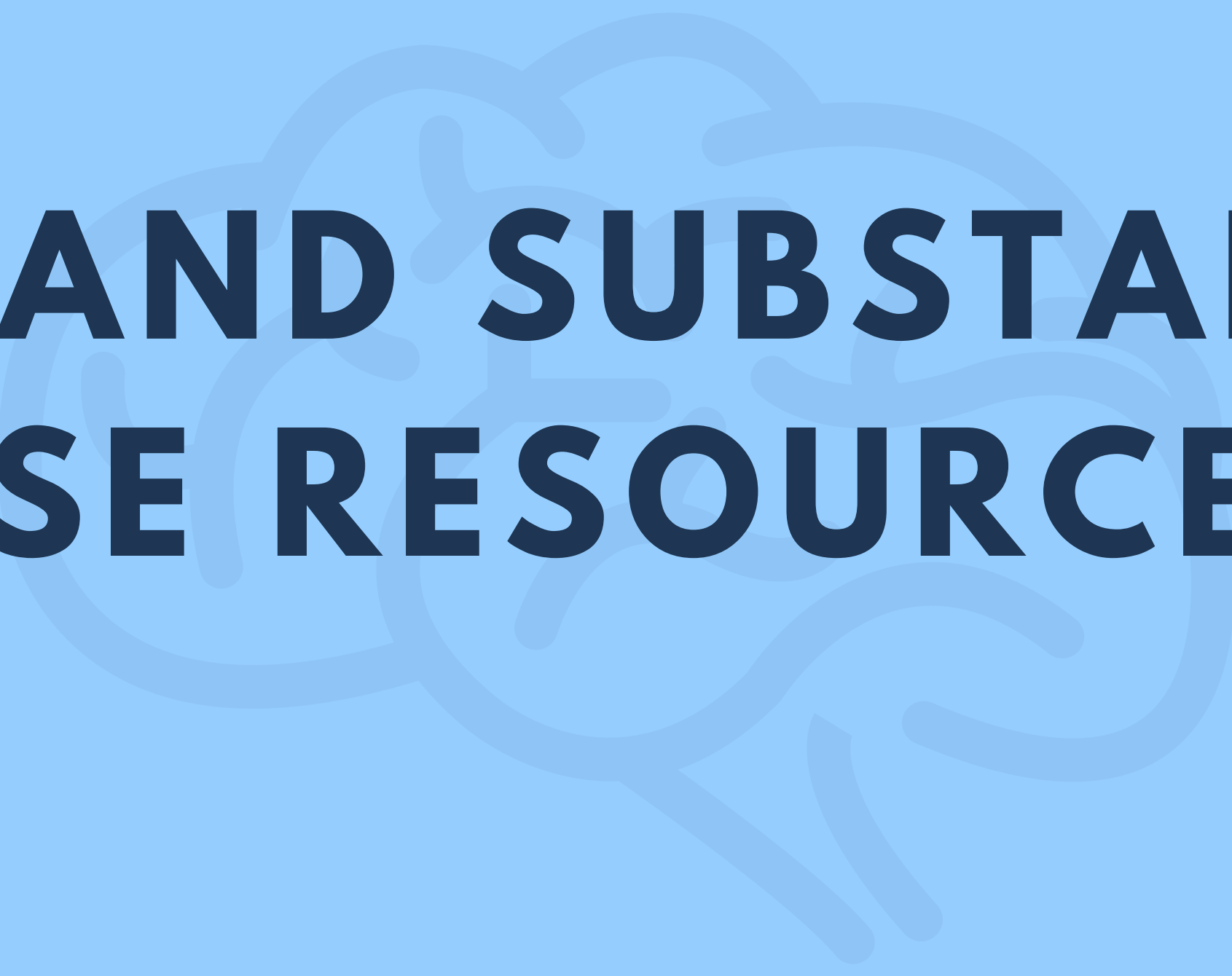


# Brain Injury Associations

- **Ontario Brain Injury Association (OBIA)**: information and resources, a 1-800 toll free helpline, personal advocacy and support, training and education for families and professionals.
- **Brain Injury Society of Toronto (BIST)**: peer mentoring program, educational workshops, and social opportunities for survivors and caregivers.
- **Brain Injury Association of York Region (BIYR)**: education, supports, and social opportunities for caregivers and survivors.

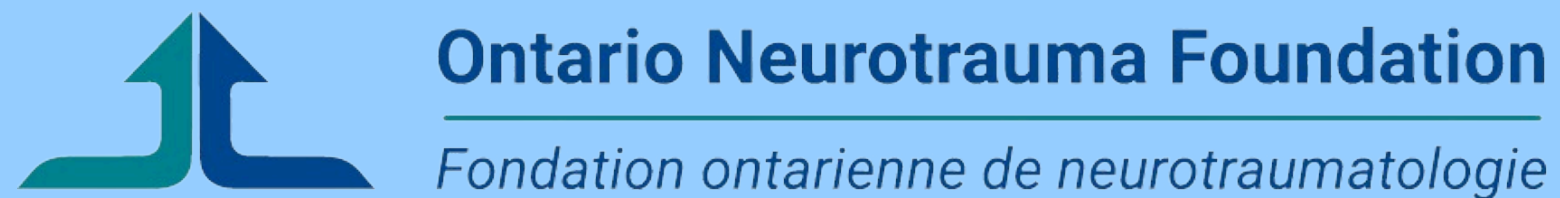
# Brain Injury Associations

- **Brain Injury Association of Durham Region:** support groups, community support coordination/outreach, social/recreational activities, a resource library, injury prevention programs, advocacy, and a day Service/Drop In.
- **Brain Injury Association of Peel Halton (BIAPH):** provides information, promotes the prevention of brain injury and improves the quality of care, education and research.
  - The Yuri Mutiger Memorial Fund provides respite care relief to family and friends providing ongoing care for individuals with brain injury.



# **TBI AND SUBSTANCE USE RESOURCES**

# Substance Use and Brain injury Bridging Project



- Partnership between Community Head Injury Resource Services (CHIRS) and CAMH
- Initial funding from the Ontario Neurotrauma Foundation. Recent funding from the National Association of Brain Injury Administrators (US) and Substance Abuse and Mental Health Services Administration (US: SAMHSA)

**Materials are designed to promote integrated care for substance use disorders and co-occurring neurocognitive impairment.**

# Recommendations for Service Providers



Routine Screening for brain injury and other sources of neurocognitive impairment



Learn to recognize when behaviors are the result of neurological challenges



Making programs more accommodating



Viewing complexity as a rule and develop programming accordingly



Care plans that include long-term supports

# Recommendations for Service Providers

To avoid misattributing a cognitive problem to a lack of motivation ask yourself...

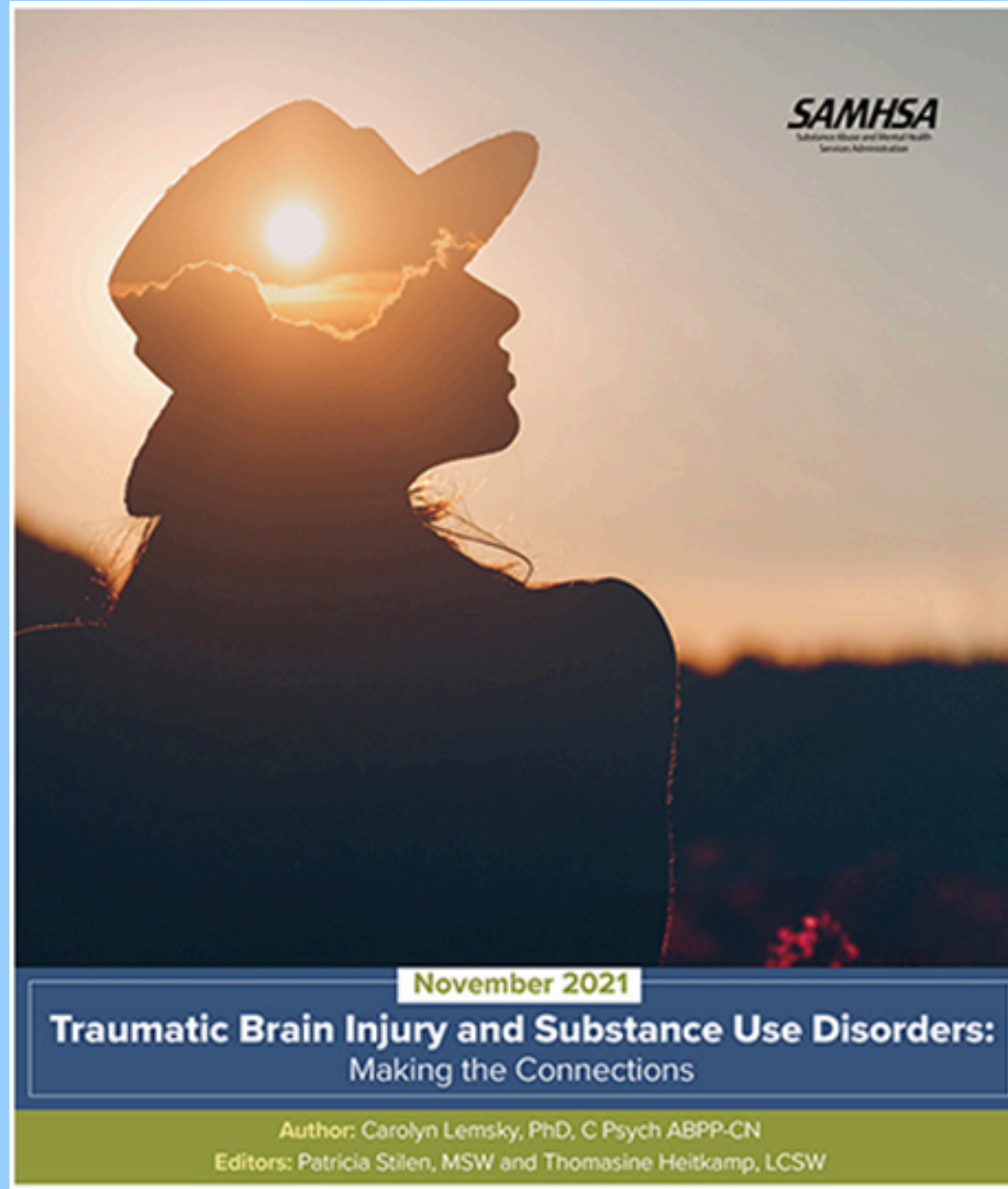
**1**

Could this be related to  
a neurological  
problem?

**2**

What can I do to  
accommodate?

# Substance Use and Brain Injury Provider Manual



- Merges the content on traumatic brain injury and substance use disorders to expand capacity to address both issues in treatment.
- Designed to provide a curriculum for training and recommendations for program accommodations.

[TOOLKIT LINK](#)



**Toxic Effects of Substance Use**

The impact of substance use depends on the substance used and the amount and duration of use. The age when substance use started is also an important factor. Starting substance use while the brain is developing can have long-term consequences. Although the findings from the research are complex and sometimes contradictory, the most common problems associated with substances of all kinds are difficulty, including problems with memory, attention, and executive functioning, including problem-solving, goal setting, and planning.

The table below provides a broad summary of the effects of common substances of abuse. Although more research is needed, it appears that the toxic effects of alcohol and other drugs are more dramatic in people who have had a history of brain injury.

SUBSTANCE	NEUROLOGICAL EFFECTS	COGNITIVE EFFECTS
ALCOHOL <sup>12, 48</sup>	<ul style="list-style-type: none"><li>Associated with brain atrophy, particularly the Hippocampus (memory system).</li><li>Thiamine deficiency may cause a severe short-lived condition (Wernicke's encephalopathy) or result in lasting learning and memory problems (Korsakoff's syndrome).</li></ul>	Memory Executive Functioning: <ul style="list-style-type: none"><li>Visual-Spatial abilities.</li></ul>
CANNABIS <sup>50</sup>	<ul style="list-style-type: none"><li>Some evidence for atrophy in the Hippocampus (memory system) and changes in connectivity between the frontal lobes and limbic system.</li><li>May have a greater impact on the developing brain.</li></ul>	Memory Executive Functioning.
METHAMPHETAMINE <sup>51, 52</sup>	<ul style="list-style-type: none"><li>Widespread damage to dopamine receptors, with cell loss in the emotion and reward system (limbic system), and Hippocampus (memory system).<sup>56</sup></li></ul>	Memory Executive Functioning: <ul style="list-style-type: none"><li>Inability to suppress habitual behaviors.</li><li>Sensitivity to short-term reward.</li><li>Insensitivity to punishment.</li><li>Insensitivity to normal pleasures.</li></ul>
COCAINE <sup>53, 55</sup>	<ul style="list-style-type: none"><li>Weakened connections between the frontal lobe and limbic system (frontostriatal) connections, brain atrophy, and changes in limbic (emotional) and Hippocampus (memory system).</li></ul>	Memory Executive Functioning: <ul style="list-style-type: none"><li>Sensitivity to short-term rewards.</li><li>Insensitivity to normal pleasures.</li><li>Increased sensitivity to pain.</li></ul>
	<ul style="list-style-type: none"><li>Weakened connections between the frontal lobe and limbic system</li></ul>	Memory Executive Functioning: <ul style="list-style-type: none"><li>Sensitivity to short-term</li></ul>

# OTHER SOURCES OF COGNITIVE DIFFICULTIES

## SUBSTANCE USE AND BRAIN INJURY PROVIDER MANUAL

- History of Substance Use
- Overdose

Most of the information is provided in tables for easy access.

## When Should Screening Occur?

The timing of screening for brain injury will depend on the setting you work in and the clients you serve. Questions pertaining to a history of illness or injury affecting the head or brain can be included in intake questionnaires. The best practice is to follow-up with an interview to ensure that the client has understood, remembered, and reported all the important events and information. There are also some important considerations to minimize the possible negative impact of screening.

**Managing Stigma.** While it is very important to screen for brain injury, it is also important to be sensitive to the potential for clients to feel stigmatized by the discussion. It is common for people who have a history of brain injury to feel that others see them as “dumb” or “damaged.” It is important to consider how you, as a clinician, must elicit the history in a respectful manner. **The importance of recognizing and affirming a clients’ individual’s resilience, abilities, and strengths throughout this discussion is critical.** It is also important to recognize and reinforce that having a problem with memory, attention, cognitive slowing, or communication does not mean that a person is unable to make decisions for themselves or make important contributions to others. What it does mean, though, is that understanding these difficulties and compensating for them will allow a person to have more impact. They will, then, be able to make the best possible decisions for themselves and be better understood and more in control.

**Trauma-Informed Care.** For many people, talking about their medical history and, in particular, any injuries to their head or brain may elicit traumatic memories. Before asking direct questions about brain injury, screening for a history of trauma will help avoid unexpected and negative reactions to the assessment. Even with screening, however, a client may have an emotional reaction to being asked about their history of injury. This is particularly true if their injury occurred under traumatic circumstances. The clinician will need to use their judgment regarding the timing of a screening interview and how far to pursue specific information if a client appears distressed.

Clients who may have sustained an injury in the context of intimate partner violence or other trauma may feel more comfortable and, therefore, provide more complete reports on questionnaires that they can complete privately rather than in interviews.<sup>24</sup> Screening tools may need to be modified slightly to include questions related to near strangulation. If you are working in an addiction setting, you may want to ask about overdose episodes explicitly.

### Screening Methods

Screening measures that use only one or two questions to determine whether a brain injury has occurred have been found to miss milder and more remote histories of brain injury.<sup>25</sup> For this reason, researchers have developed screening measures that provide the individual with a clear set of cues to help them think

# SCREENING

## SUBSTANCE USE AND BRAIN INJURY PROVIDER MANUAL

- When
- Stigma
- Trauma-informed Care
- Methods
- Interpretation

Information to support  
program implementation.



## Difficulties with Self-Awareness

**Self-awareness is probably the most complex of human abilities** to form an accurate picture of our strengths and weaknesses. Good self-awareness relies upon many cognitive functions working together, as well as psychological factors such as a person's willingness to accept and acknowledge their strengths and weaknesses. Unlike other cognitive difficulties that may be directly observable, self-awareness can be more difficult to assess. However, understanding an individual's level of self-awareness can be very important in determining the course of intervention.

**Developing self-awareness related to newly acquired problems is often difficult after a brain injury.** To develop self-awareness, an individual must first notice the relationship between a behavior and its consequences. This is often straightforward, but when clients have problems with attention, memory, or understanding their own emotions, and with problem-solving and reasoning, it is not surprising that they have difficulty recognizing when something that they are doing is contributing to the problems they are experiencing. It is also important to note that most injuries occur suddenly, as the result of trauma or illness, and the aftermath of the injury may require a person to radically alter their expectations.

# SELF AWARENESS

## SUBSTANCE USE AND BRAIN INJURY PROVIDER MANUAL

- Self-Awareness Defined
- Assessment of Self-Awareness
- Impact on Programming

Information about  
problems associated with  
brain injury

# KEY PROGRAM CONSIDERATIONS

## SUBSTANCE USE AND BRAIN INJURY PROVIDER MANUAL

### Key Considerations in Program Development:

**Longer-term interventions and smaller caseloads may be required to adequately address clients' needs.** Clients with brain injury present with greater symptom complexity and are likely to require longer periods of intervention along with more integrated aftercare supports.

**Coordination with community partners will be needed.** This will likely require actively reaching out to, and creating partnerships with, brain injury providers and other support agencies in the community.

**Providers should recognize the elevated risks for impulsive behavior, including suicide, and regularly assess suicide risk.**

### Clients are likely to need some support to...



Understand the impact of brain injury and substance use



Remember what to do and when



Make decisions and set clear goals



Make plans and problem-solve



Get started starting



Keep track of goals and evaluate progress





# RECOMMENDATIONS FOR SERVICE DELIVERY

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## SUBSTANCE USE AND BRAIN INJURY PROVIDER MANUAL

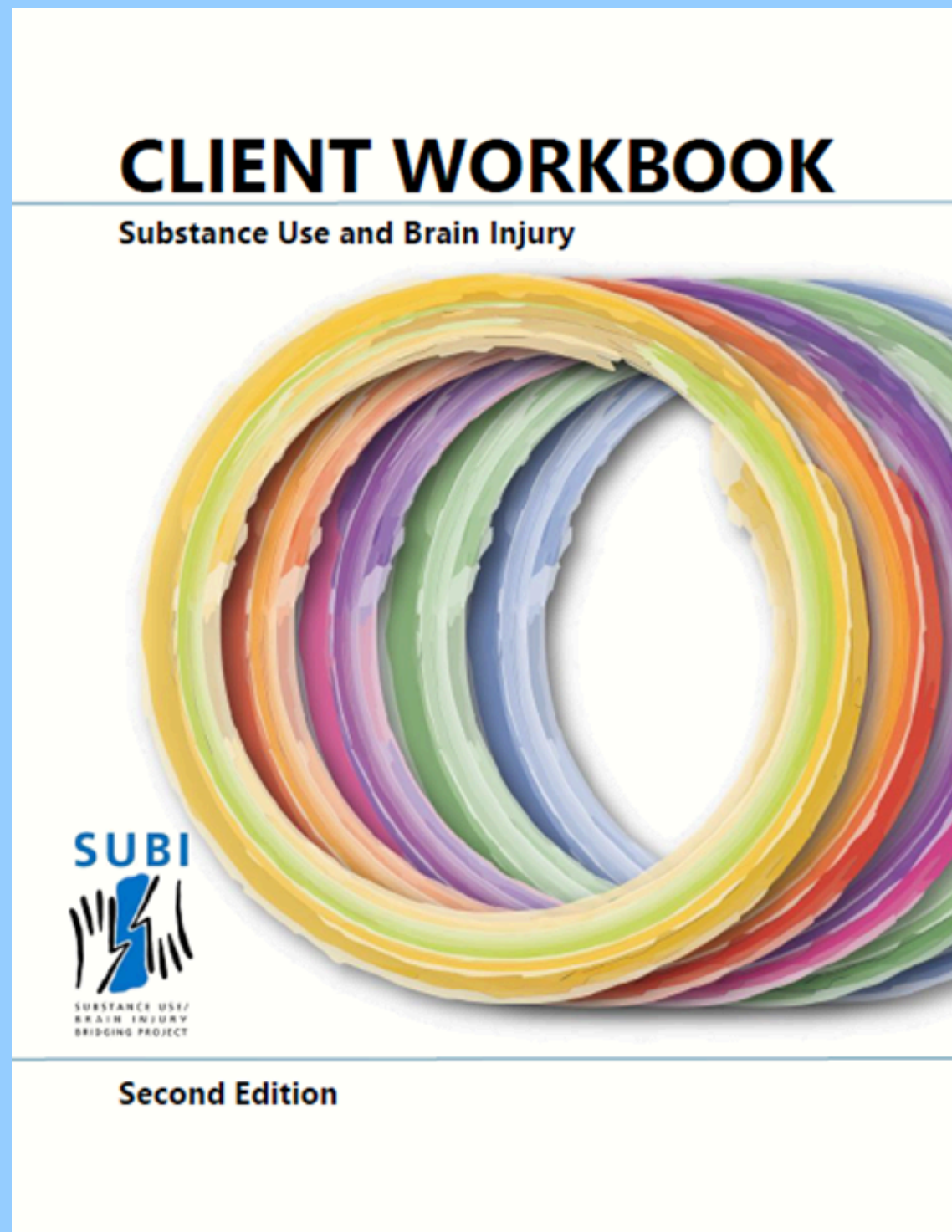
### Adaptation for Outreach Services

Many people living with cognitive impairment have difficulty identifying and seeking out services that would be beneficial. Resources across service sectors will help clients to find and benefit from your services. In addition, having links with providers in other sectors can serve as a source of consultation and referral. Joint training opportunities with providers of ABI services is one way to make connections and ensure that you are aware of services in your area. For example, offering to swap training or provide training on topics such as the identification of substance use disorders and available treatment opportunities with a provider of ABI services, who can provide similar information related to brain injury, will provide an excellent resource for staff members and begin the process of building referral relationships.

Many clients with brain injury will require a more assertive approach to care, which may include meeting clients in the community. They are also more likely to require case management services that include supporting a client to follow through with a referral.

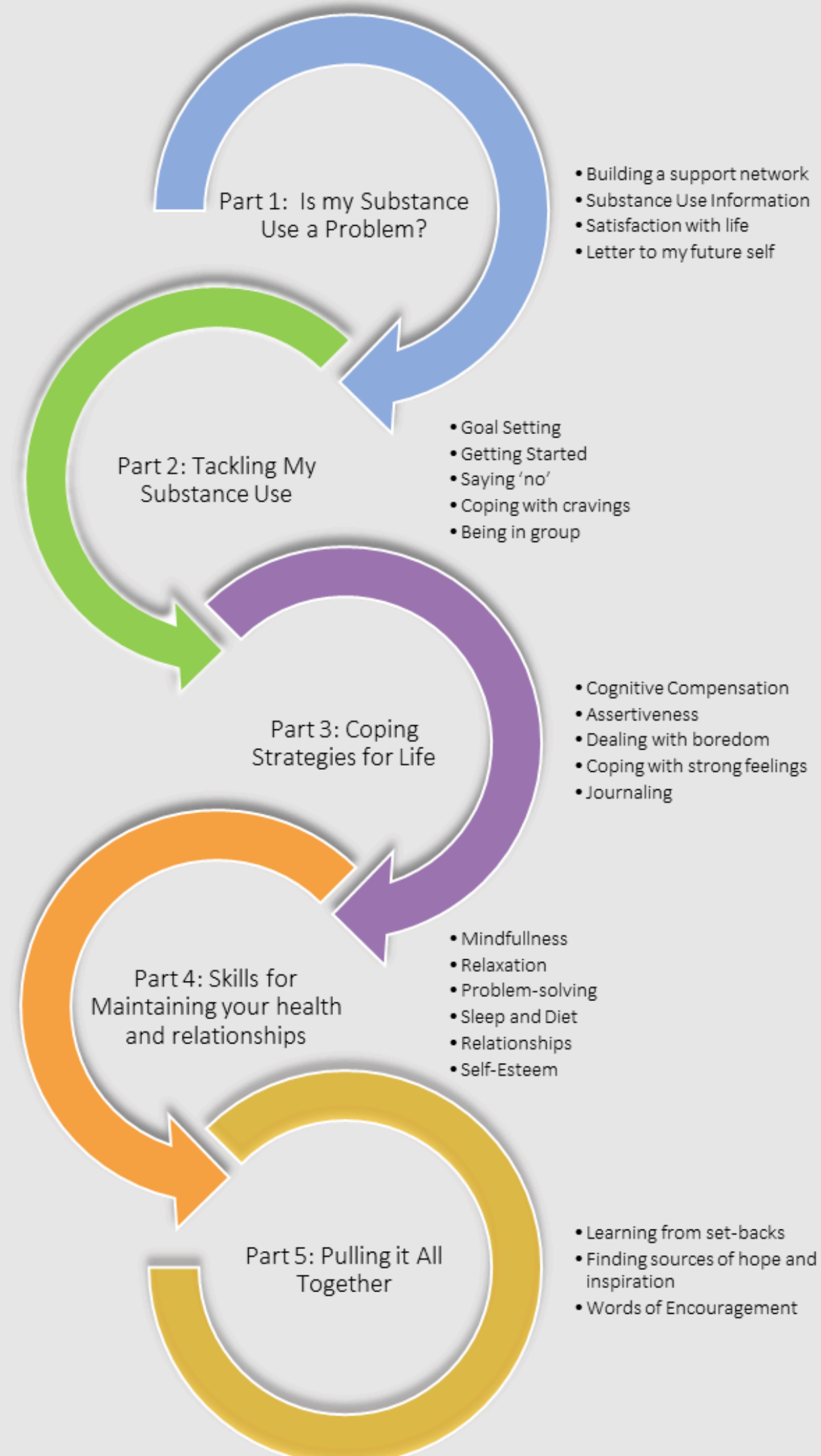
- Outreach services
- Intake
- Community Linkages
- Motivational Interviewing
- Community Reinforcement and Family Approach (CRAFT)
- Specialized Referrals

# Substance Use and Brain Injury Client Workbook



- Designed to illustrate adaptations of common intervention strategies.
- A place to 'get started' for ABI-trained professionals to talk to clients about their substance use.
- Readings to be completed with a client to encourage discussion.
- Exercises to encourage self-reflection.
- MI focus now structured as a treatment program.

[WORKBOOK LINK](#)



Five sections each with four or five 3 or 4 page chapters.





# **ADDITIONAL RESOURCES**

# The CHIRS NBIP Team Welcomes Partnerships

- Case Managers
- Behaviour Therapist
- Nursing
- Occupational Therapist
- Neuropsychologist
- Consulting Specialists
  - Neuropsychiatry
  - Addictions Medicine
  - Pain Medicine
  - Neurology

**Contact:**

[Clemsky@CHIRS.com](mailto:Clemsky@CHIRS.com)

[Triciad@chirs.com](mailto:Triciad@chirs.com)





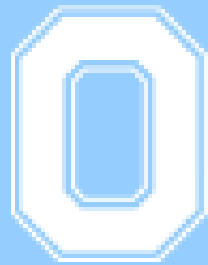
# BrainLine



BrainLine is a national multimedia project offering authoritative information and support to anyone whose life has been affected by brain injury or PTSD: people with brain injuries, their family and friends, and the professionals who work with them.

[www.Brainline.org](http://www.Brainline.org)

# Ohio Valley Center for Brain Injury Prevention and Rehabilitation



THE OHIO STATE UNIVERSITY  
WEXNER MEDICAL CENTER

Improving the lives of people who experience traumatic brain injury, and their families and communities, by creating and disseminating new knowledge about the course, treatment and outcomes relating to their condition.

[www.OhioValley.org](http://www.OhioValley.org)

# Substance Use and Traumatic Brain Injury: Risk Reduction and Prevention Video



VIDEO  
LINK

# ABI Justice Toolkit



Through simplified terms and brief education of the legal system and supporting resources; ABI Justice is a portal for legal information as it pertains to those who have sustained or those who assist clients who live with a brain injury.

[www.abijustice.org](http://www.abijustice.org)

# Compassionate Justice Fund



Their mission is to help those with a TBI who are vulnerable and do not have access to rehabilitation or support services, to improve their ability to live a full and meaningful life.

[compassionatejusticefund.org](http://compassionatejusticefund.org)



# The Abused & Brain Injured Toolkit

## **Abused & Brain Injured**

brought to you by

**ABIR**ResearchLab

Understanding the  
Intersection of Intimate  
Partner Violence and  
Traumatic Brain Injury

[www.abitoolkit.ca](http://www.abitoolkit.ca)

We developed a tool kit that highlight the unique needs of women survivors of intimate partner violence allowing service agencies to both develop new and adapt existing support programs and interventions.

# Supporting People with Experiences of Incarceration and TBI: Training for front-line Service Providers



Formal education program to train front-line staff about TBI, how to screen for TBI, and how to use evidence-based strategies to support and work effectively with clients with a history of suspected or confirmed TBI.

[Take the training](#)

# Additional Information



National Action Plan on Mental Health and Criminal Justice

Homeless Hub – Prison: A Homelessness Factory.

St. Leonard's Society of Canada Policy on the Right to Housing