What is a mental health disorder?
Mental health disorders or mental health problems, such as depression and anxiety, are common after a concussion/mTBI. Symptoms of mental health problems can affect a person’s wellness, ability to function in their everyday life, and relationships with others.

Mental health problems can cause new difficulties to develop and/or existing problems to get worse. Symptoms can include irritability, anxiety, mood swings, depressed mood, and apathy.

Anxiety disorders can sometimes co-exist with depressive disorders, such as generalized anxiety, panic attacks, and Post-Traumatic Stress Disorder (PTSD).

Talk to your primary healthcare provider if you are feeling depressed, anxious, or if you are having sleep difficulties. Treating these problems early will help prevent them from worsening and interfering with your recovery. Also let your primary healthcare provider know if you have mental health problems that existed before your concussion/mTBI.

What causes a mental health problem after a concussion/mTBI?
It is often difficult to know the cause of a mental health problem after a concussion/mTBI. It can be due to the trauma that caused the injury and/or to the negative outcomes that resulted from the injury.

For example, symptoms such as increased irritability, intolerance, impatience, and mood swings can be related to the impact of the injury on the brain, but they can also be a reaction to difficulties in managing daily activities after the injury.

Many concussion/mTBI symptoms are often related to each other. Trauma to the brain and body may affect how a person experiences pain and their ability to sleep. In addition, symptoms can sometimes cause other symptoms to be present.

For example, if a person is having persistent sleep difficulties it may cause them to feel depressed. Identifying and treating their sleep difficulties is likely to help lift their mood.
How will my mental health problem be diagnosed?
If you had a concussion/mTBI, your primary care provider will ask questions to find out if you have any of the following:

- Depression
- Anxiety, including post-traumatic stress disorder (PTSD)
- Behavior changes (such as apathy, mood swings, impulsivity, aggression, irritability)
- Difficulty controlling your emotions
- Alcohol or drug use
- Unexplained physical problems that are not directly related to the concussion/mTBI

Depending on the problem the primary healthcare provider might prescribe medication, provide counseling treatment, and/or refer to a therapist to help manage the symptoms.

It is important to tell your primary healthcare provider when these symptoms started, when they happen, and if they are affecting your well-being. This information will help them decide which treatment will be best for you.

Your primary healthcare provider may also want to talk with anyone who has been helping you after your injury, to find out if they have important information about your symptoms.

How will my mental health problems be treated?
If you have a mental health problem, your primary healthcare provider will select a treatment based on several factors:

- The types of symptoms you have
- The severity of your symptoms
- Your needs and preferences
- Any other active conditions or treatments

You may need counseling, talk therapy, or medications. In some cases, a combination of these may be best. Counseling and talk therapy, such as Cognitive Behavioral Therapy (CBT), can help you learn to manage negative emotions and build your ability to cope with difficult thoughts and situations.

If your mental health problems are more serious or persistent, your primary healthcare provider may prescribe medications. You will likely start at a low dose and increase the dose gradually if necessary. It is important to see your primary healthcare provider regularly to make sure you are on the right medication at the right dose, check for side effects, and to ensure it is not making your concussion/mTBI symptoms worse. Speak with
your primary healthcare provider if you want to stop taking your medication, as they will have to help you wean off gradually so that your symptoms do not return. You may be referred to a mental health specialist if:
- Your symptoms are complex and/or severe
- Treatment is not helping
- You are not able to take the usual medication for the symptoms you are experiencing

Your primary healthcare provider will continue to help you with your mental health symptoms and other medical issues while you wait to see a mental health specialist. They can also help you with other concussion/mTBI symptoms you may be having and arrange any accommodations you may need to return to your usual activities at home, work, or school.

To help you cope with mental health symptoms, you will need to have social support from your close friends and family members. Many people also find peer support groups to be helpful in coping. For Ontario-specific information about peer support groups for adults experiencing persistent symptoms, please see “Concussion Support Services in Ontario” located on page 4 of this document.

Remember, most people will recover in time. It is helpful to have a consistent routine, regular light to moderate exercise, and balanced meals.

**Key Guideline Recommendations for Healthcare Providers**

The following key guideline recommendations for healthcare providers have been included here so you can see what the guideline recommends healthcare providers do in assessing and treating patients after concussion/mTBI.

<table>
<thead>
<tr>
<th>8.1</th>
<th>In assessing common post-concussive mental health symptoms, determine whether the symptoms meet criteria for the presence of common mental health disorders, which include but are not limited to:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Depressive disorders</td>
</tr>
<tr>
<td></td>
<td>• Anxiety disorders including Post-Traumatic Stress Disorder (PTSD)</td>
</tr>
<tr>
<td></td>
<td>• Behavioral changes (e.g. apathy, liability, impulsivity, aggression, irritability)</td>
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<tr>
<td></td>
<td>• Emotional regulation issues</td>
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<tr>
<td></td>
<td>• Substance use disorders</td>
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<td></td>
<td>• Somatoform disorders</td>
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</tbody>
</table>

Elements of the assessment should include taking a comprehensive history (including discussion with support persons), structured clinical interview, use of self-report questionnaires, and behavioral observation.
Concussion Support Services in Ontario

<table>
<thead>
<tr>
<th>Organization</th>
<th>Services</th>
<th>Contact</th>
<th>Address</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ontario Brain Injury Association (OBIA)</td>
<td>Online concussion support group Helpline Peer support program</td>
<td>1 (800) 263-5404 <a href="mailto:obia@obia.on.ca">obia@obia.on.ca</a></td>
<td>3550 Schmon Parkway, 2nd Floor Thorold, ON L2V 4Y6</td>
<td>Provincial</td>
</tr>
<tr>
<td>Ross Rehab</td>
<td>Concussion support group</td>
<td>(905) 777-9838 <a href="mailto:ross@rossrehab.com">ross@rossrehab.com</a></td>
<td>875 Main St. West, Suite 1, Lower Level Hamilton, ON L8S 4P9</td>
<td>Hamilton</td>
</tr>
<tr>
<td>Mind Forward</td>
<td>Concussion services</td>
<td>Mississauga (905) 949-4411 Orangeville (519) 942-0111</td>
<td>176 Robert Speck Parkway Mississauga, ON L4Z 3G1 695 Riddell Road, Unit 3 Orangeville, ON L9W 4Z5</td>
<td>Mississauga, Oakville, and Orangeville</td>
</tr>
<tr>
<td>Brain Injury Society of Toronto</td>
<td>Concussion Support &amp; Education</td>
<td>(416) 830-1485</td>
<td>40 St. Clair Avenue East, Suite 205 Toronto, ON M4T 1M9</td>
<td>Toronto</td>
</tr>
</tbody>
</table>

* This list will be updated when necessary.
** These organizations are the ones we are aware of at this time of publication.
Cautionary Note to Users

The content of the *Guideline for Concussion/mTBI & Prolonged Symptoms, 3rd Edition: for Adults over 18 years*, is based on the status of scientific knowledge available at the time of their finalization (2017) as well as on the consensus of the experts who participated in the guideline development.

This guideline has been created to provide recommendations and help with management of concussion/mild traumatic brain injury (mTBI). It is only for management for adults over 18 years of age. This guideline is not intended for use by people who have sustained or are suspected of having sustained a concussion/mTBI for any self-diagnosis or treatment.

The guideline can be used by patients when speaking with healthcare providers about their care. It covers getting a diagnosis, managing symptoms in the early phase (acute) and management in the longer recovery phase (prolonged symptoms). Patients may wish to bring their healthcare and other providers’ attention to this guideline. It is based on up-to-date, quality research evidence, the expertise of providers and the input of patients.