**ORGANIZATION NEWS**

**Information/Education Page**

**Memory and Traumatic Brain Injury**

**What kind of memory is affected by traumatic brain injury?**

Memory is not just one kind of ability. There are several kinds of memory, and traumatic brain injury (TBI) affects some more than others.

**Long- and short-term memory**

TBI-related memory problems does not work the way you might see amnesia portrayed on television. You do not forget everything from your past and remember what happens going forward. In fact, you are more likely to remember things from the past, including much of what you learned in school. This is known as long-term memory. However, after a TBI, you may have trouble learning and remembering new information, recent events, or what is happening from day to day. This is known as short-term memory. Here are some short-term memory problems that are common in people with TBI:

- Forgetting important details of a conversation, such as remembering to pass along a phone message.
- Forgetting where you left things, such as keys, a cell phone, or a planner.
- Feeling unsure of what you did or said this morning, yesterday, or last week; this can lead you to say things or ask the same questions many times.
- Losing track of time or feeling unsure of what day it is.
- Being unable to retrace a route you took earlier in the day or week.
- Forgetting all or part of what you read in a book or what you saw in a movie.

**Prospective memory**

TBI may also affect prospective memory, or remembering to remember. This means remembering plans and intentions long enough to act on them. Here are some prospective memory problems that are common in people with moderate to severe TBI:

- Forgetting to keep appointments or showing up at the wrong times.
- Telling someone you will call or visit at a certain time, then forgetting to do so.
- Forgetting what you were supposed to do or intended to do at home, work, or school or in the community.
- Forgetting important occasions, such as birthdays, holidays, and family events.
- Forgetting to take medicines at the right time.
- Forgetting to pick up children at a certain time.

Although TBI affects new memories more than old ones, people with TBI may have trouble retrieving the correct information when needed. For example, you may recognize your aunt and know who she is, but have trouble remembering her name. Or you may be able to define all of the words on a vocabulary test, but have trouble remembering the exact word when you are talking.

**Memory of the injury**

People with TBI may not remember the injury itself. In this case, the brain has not stored the injury as a memory or series of memories.

People may remain confused and unable to store memories for some time after the injury. The loss of memory from the moment of TBI onward is called posttraumatic amnesia. It can last from a few minutes to several weeks or months, depending on the severity of brain injury.

If you cannot remember the events of your TBI, you likely never will. That is because your brain did not store those memories. The best way to learn about the injury is to ask family members, friends, or medical personnel who may have objective information.

**What can you do to help your memory?**

After a moderate to severe TBI, you may have more trouble remembering things from day to day. Research has found very few ways to restore the brain’s natural ability to learn and remember. One or 2 medicines may be worth trying (ask your doctor). However, brain training programs and memory drills do not really help.

Using compensatory strategies is the best way to tackle memory problems and still get things done. This approach uses memory devices that we all use to make up for limited memory storage in the brain (eg, a grocery list, address book, notepad, alarm on a cell phone).

Some people think that these methods weaken memories, but that is not true. When you write down information or enter it into a phone or computer, you may actually strengthen the memory trace.
in your brain, and the information will always be available for you if you need it.

Here are some compensatory strategies to help work around memory difficulties:

- Get rid of distractions before starting on something that you want to remember.
- Ask people to talk slower or repeat what they said to make sure you understand it.
- Give yourself extra time to practice, repeat, or rehearse information you need to remember.
- Use organizers, notebooks, or a cell phone calendar or apps to keep track of important information, such as appointments, to-do lists, and telephone numbers.
- Keep all items that you need to take with you (e.g., wallet, keys, phone) in a memory station at home, such as a table by the door or a special section of the counter.
- Use a pill box to keep track of and take your medicines accurately.
- Use checklists to keep track of what you have done or different steps in an activity. For example, make a checklist of bills that you need to pay each month and the dates on which they are due.

Having memory problems after TBI may make it harder for you to remember to use some of these strategies. At first, ask a family member or friend to remind you of these strategies. Over time, the strategies will become a habit, and you can use them on your own.

Other support

Memory problems can make it especially difficult for people with moderate to severe TBI to succeed in school, or to perform well in jobs that demand a lot of learning and memory. If you are having difficulty developing strategies on your own, it may be helpful to seek the help of a rehabilitation professional, such as a speech-language pathologist, neuropsychologist, or occupational therapist. College students can contact the disability support services office at their school to receive assistance with note-taking and other services to support learning. The vocational rehabilitation services available in every state may be able to supply job coaching or counseling to assist workers who need memory supports and may provide additional help to college students.

Authorship

Memory and Traumatic Brain Injury was developed by Tessa Hart, PhD, and Angelle Sander, PhD, in collaboration with the Model Systems Knowledge Translation Center. Portions of the material were adapted from educational materials developed by Angelle Sander, Laura Van Veldhoven, and Tessa Hart for the Rehabilitation Research and Training Center on Developing Strategies to Foster Community Integration and Participation for Individuals With TBI (National Institute on Disability, Independent Living, and Rehabilitation Research [NIDILRR] grant no. 90DP0028).

Source

Our health information content is based on research evidence and/or professional consensus and has been reviewed and approved by an editorial team of experts from the Traumatic Brain Injury Model System.

Disclaimer

This information is not meant to replace the advice of a medical professional. You should consult your health care provider regarding specific medical concerns or treatment. The contents of this publication were developed under grants from the NIDILRR (grant nos. 90DP0012, 90DP0037, 90RT5007, 90DP0028, and 90DP0060). NIDILRR is a center within the Administration for Community Living, Department of Health and Human Services. The contents of this publication do not necessarily represent the policy of Department of Health and Human Services, and you should not assume endorsement by the Federal Government.

Copyright © 2016 Model Systems Knowledge Translation Center. May be reproduced and distributed freely with appropriate attribution. Prior permission must be obtained for inclusion in fee-based materials.