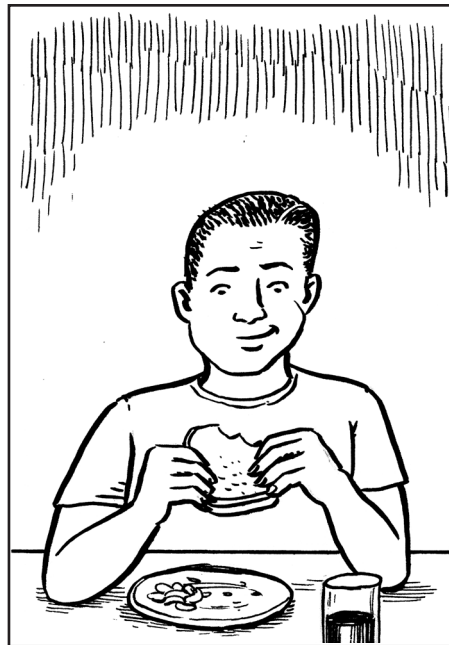


## CREATING A ROUTINE

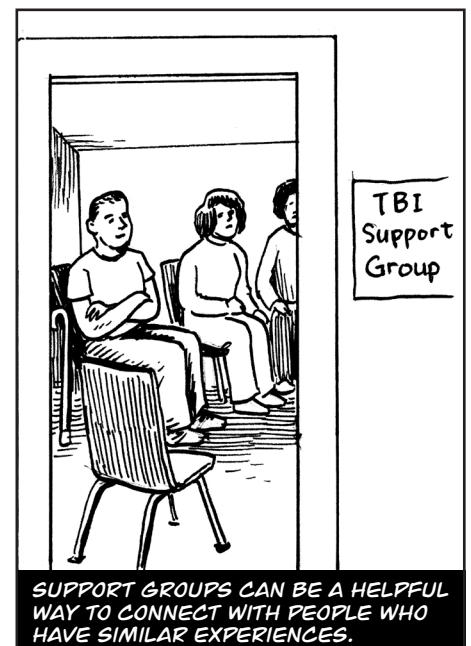
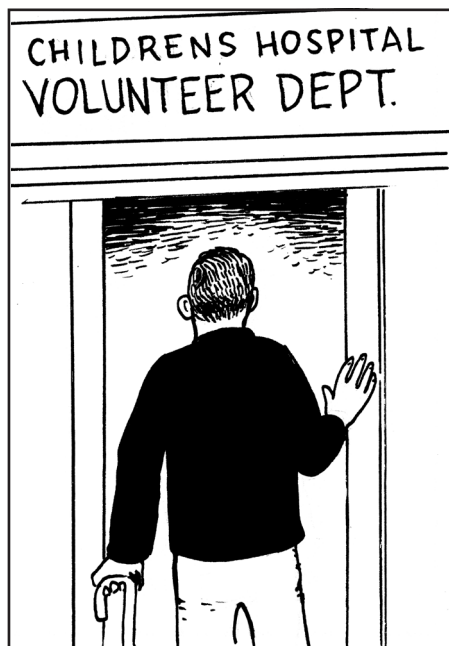
# Understanding Traumatic Brain Injury: Part 3

### RECAP FROM PART 2...

Mike is home from the hospital and his emotional changes are causing his family some stress. They're working to find ways to overcome these challenges.



AS MIKE IS RECOVERING HE HAS LESS APPOINTMENTS. HE'S REPLACING THEM WITH THINGS THAT REINFORCE WHAT HE DID IN THERAPY.



## Providing Structure at Home

Other ways to provide structure for people who've had a TBI. (Some of the following suggestions may not apply to your situation.)

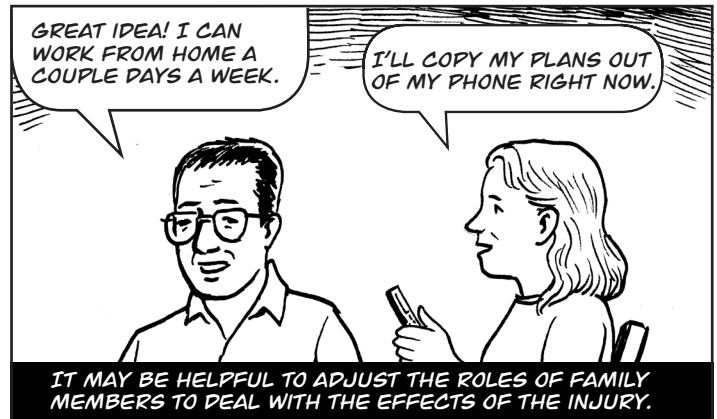
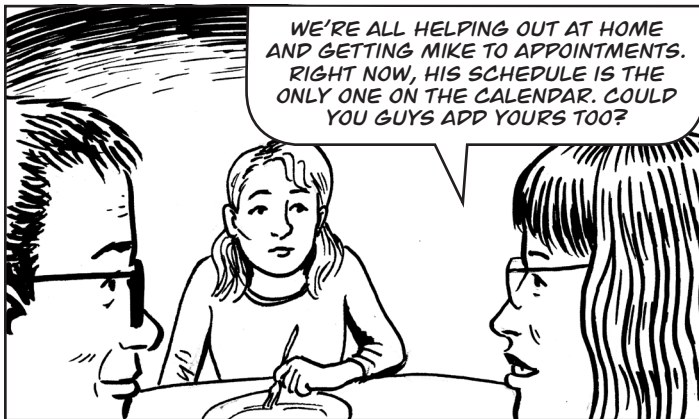
- Maintain a photo album with labeled pictures of friends, family, and familiar places
- Place needed objects within easy reach
- Work to maintain familiar family dynamics (for example, if a person normally got to choose a restaurant for eating out, try to continue this)
- Even if speaking is difficult, include everyone in family conversations and social activities
- Be normal and act natural

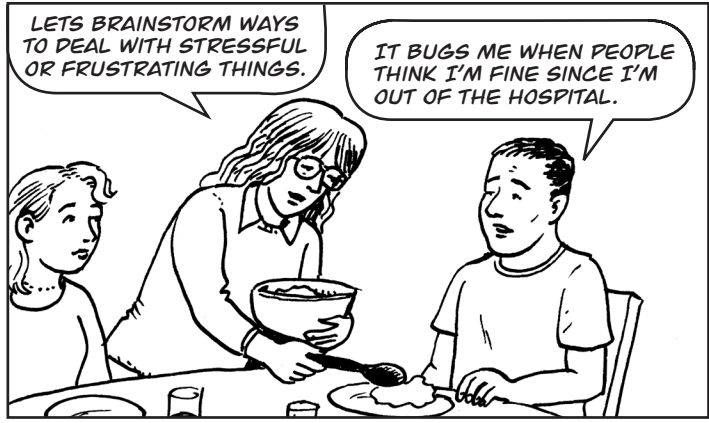
## COPING STRATEGIES



I THINK THAT ON SOME LEVEL WE ALL KIND OF THOUGHT THAT WHEN MIKE CAME HOME THINGS WOULD BE BACK TO NORMAL. BUT THEY'RE NOT.

THERE'S SO MUCH MORE TO DO NOW.

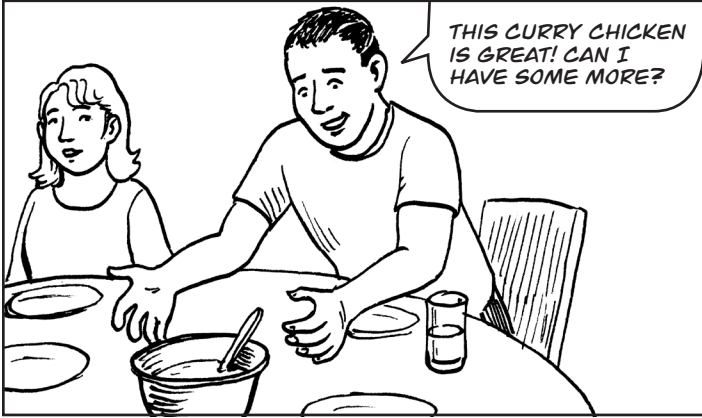


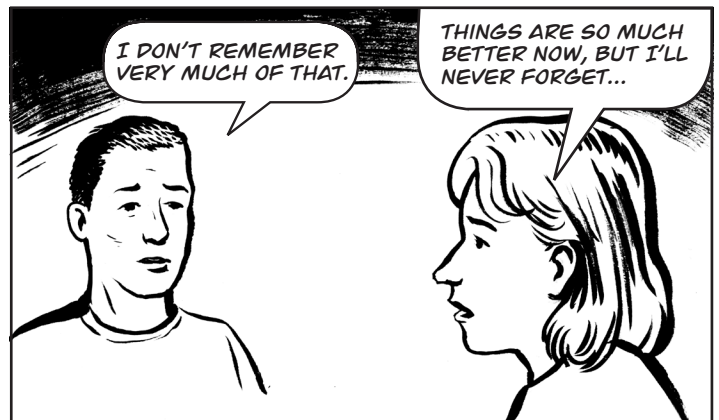
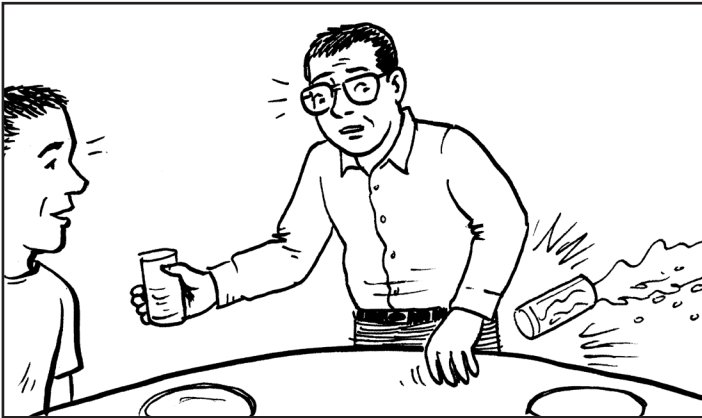


**Common Coping Strategies:**

- Taking time for yourself
- Keeping a regular schedule
- Getting regular exercise such as taking a 20-30min walk each day
- Participating in support groups
- Maintaining a sense of humor
- Being more assertive about getting the support you need
- Changing roles and responsibilities within the family

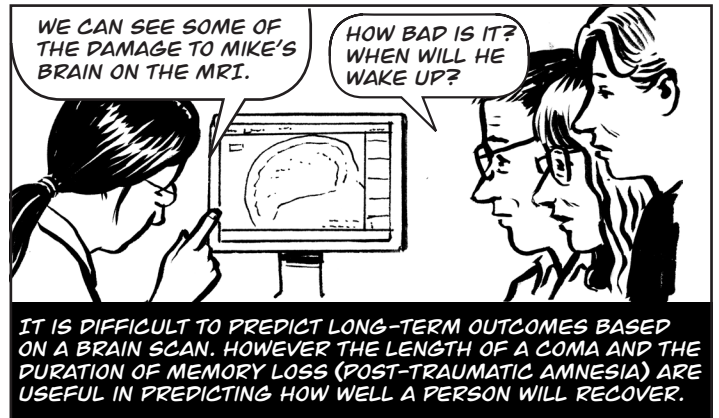
*The best thing you can do is to be open to trying new ways of coping and find out what works for you.*





**THE FIRST WEEKS AFTER INJURY**

In the first few weeks after a brain injury, damage or changes to the brain often affect its ability to function. The person may not show signs of awareness and their eyes may remain closed. Brain function usually improves as swelling decreases, and blood flow and brain chemistry stabilize. In time brain function usually improves, leading the person with a TBI to be more responsive.





### Diffuse Axonal Injury (DAI)

Brain cells are called *neurons*. They are connected to each other with fibers called *axons*. The Axons let the neurons talk to each other. A trauma to the head can harm axons by stretching or pulling them. If an axon is hurt too badly, the neuron it is connected to will not survive.

This happens at a microscopic level throughout the brain so it's not possible to see this on a brain scan.



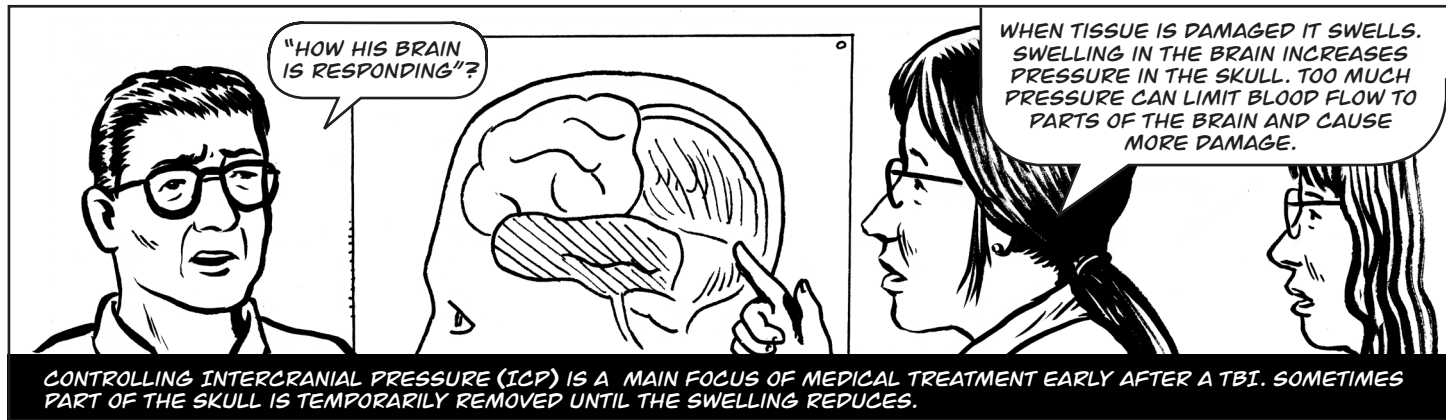
### Neurochemical Response to TBI

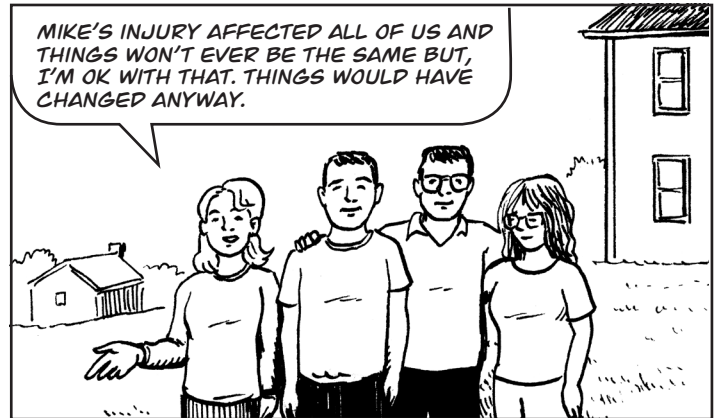
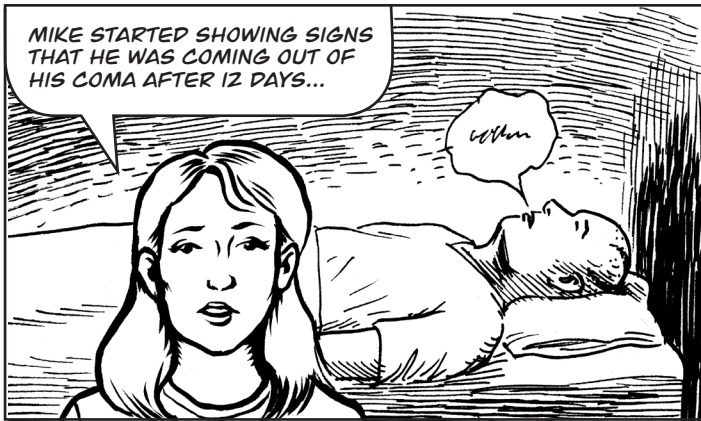
Sometimes the chemical balance of the brain is upset after a TBI. In a normally functioning brain, chemicals called "Neuro-Transmitters" let neurons communicate with each other. Groups of neurons work together to do different things. A TBI can increase or decrease the amount of neuro-transmitters in the brain, changing a person's thinking or behavior. As the chemical balance of the brain returns to normal the person's ability to function will improve. This usually happens within the first few weeks after TBI but can sometimes take months.



### Open Head Injuries

With open head injuries the skull and other layers that protect the brain are penetrated and exposed to the air. A classic example of an open head injury is a gunshot wound to the head. Damage following an open head injury tends to be limited to a specific area of the brain. However these injuries can still be as severe as closed head injuries depending on the path of the bullet or other object in the brain.





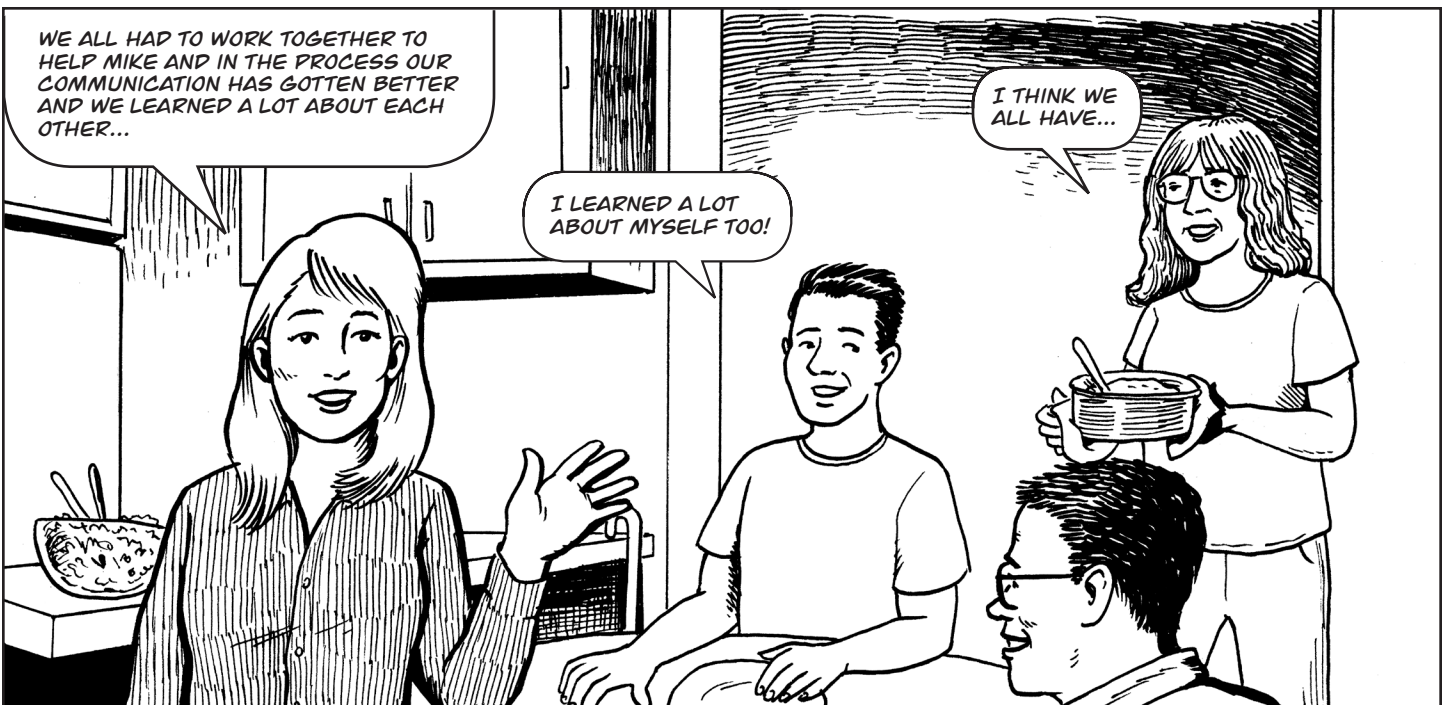
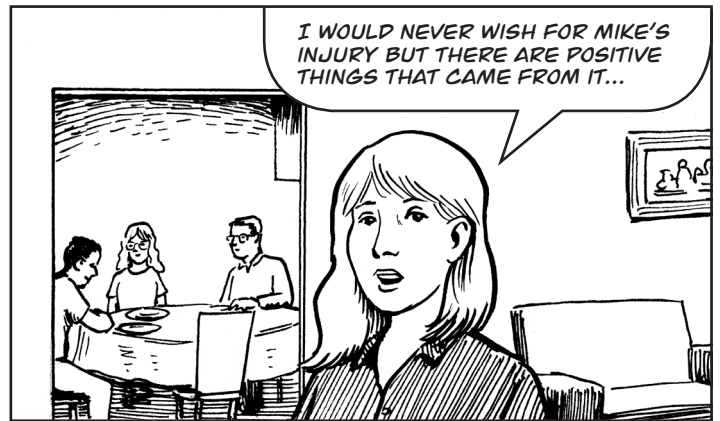
## HEALING OVER TIME



### Post Injury

Information collected by the TBI Model System Study from people who sustained moderate to severe TBIs shows that two years post injury:

- 93% of people are living in private residences
- 34% are living with their spouse or significant other
- 29% are living with their parents
- 34% require some type of supervision during either the day or night
- 33% are employed
- 3% are students
- 29% are unemployed
- 26% are retired for any reason



## AUTHORSHIP AND ILLUSTRATION

This infocomic was written by Silas James and Ayla Jacob and illustrated by David Lasky, in collaboration with the Model Systems Knowledge Translation Center.

Portions of this infocomic were adapted from the factsheet series titled Understanding TBI, which was developed by Thomas Novack, PhD, and Tamara Bushnik, PhD in collaboration with the Model System Knowledge Translation Center (<https://msktc.org/tbi/factsheets/Understanding-TBI>). Portions of this infocomic were also adapted from materials developed by the University of Alabama Traumatic Brain Injury Model System (TBIMS), Baylor Institute for Rehabilitation, New York TBIMS, Mayo Clinic TBIMS, Moss TBIMS, and from "Picking up the Pieces After TBI: A Guide for Family Members", by Angelle M. Sander, PhD, Baylor College of Medicine (2002).

**Source:** The content in this infocomic is based on research and/or professional consensus. This content has been reviewed and approved by experts from the Traumatic Brain Injury Model Systems (TBIMS), funded by the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR), as well as experts from the Polytrauma Rehabilitation Centers (PRCs), with funding from the U.S. Department of Veterans Affairs.

**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 infocomic were developed under a grant from the National Institute on Disability and Rehabilitation Research (NIDRR), Department of Education (ED; grant number: Grant #H133A120028); and a grant from the National Institute on Disability, Independent Living, and Rehabilitation Research (grant number: 90DP0082). NIDILRR is a Center within the Administration for Community Living (ACL), Department of Health and Human Services (HHS). The contents of this infocomic do not necessarily represent the policy of NIDILRR, NIDILRR, ACL, ED, or HHS, and you should not assume endorsement by the federal government. Funding for this infocomic was also provided by Brain Injury Alliance of Washington; University of Washington; Veterans Training Support Center; Washington State Department of Veterans Affairs; the Washington State Department of Social and Health Services; Washington State TBI Council; and King County.

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