

## Information for Individuals and Family Members

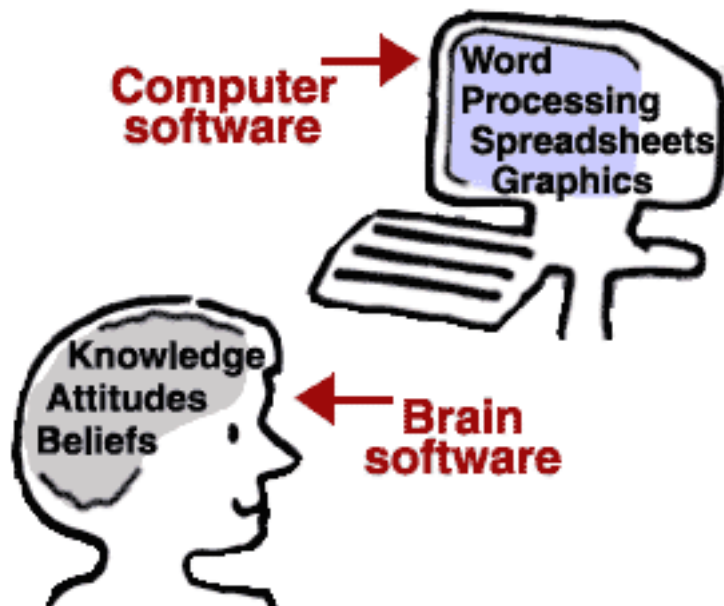
User's Manual for Faster...More Reliable Operation of a Brain After Injury

### Your Brain is Like a Computer

The human brain is often compared to a computer, full of bits of information, able to make swift, steady connections. Just like a computer, the brain has many programs like the ones that allow us to move, think and make decisions.

To operate, a computer uses software, a set of instructions to tell it what to do. Our brains use instructions too. Those

instructions are like software—bits of information that include our knowledge, attitudes and beliefs.



### After Brain Injury You Need New Facts

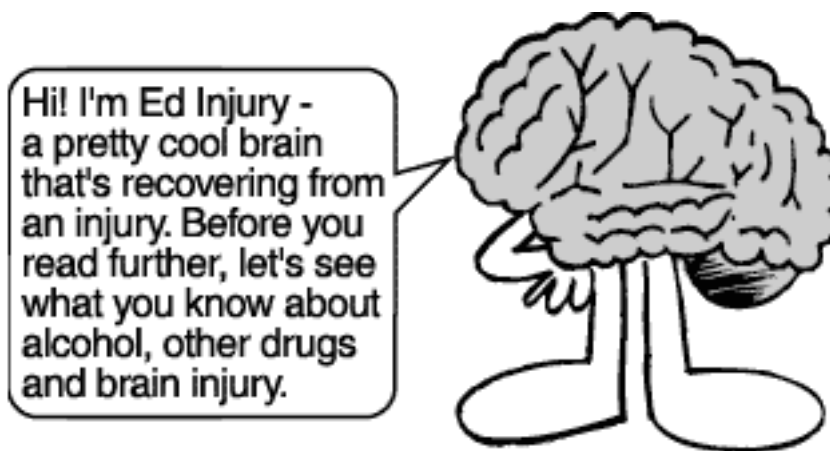
The effects of alcohol and other drugs are different for people after a brain injury. This User's Manual presents facts about how alcohol and other drugs affect people with brain injuries. These facts - like software - are ready to be installed. But you're the



operator.

If you have had a brain injury, take time to study this manual. Read. Think. Decide. We hope after you've done that, you will install new alcohol/other drug software - a new set of facts, attitudes and beliefs - in your brain.

## Before You Begin...



### True or False?

1. People who use alcohol or other drugs after they have had a brain injury don't recover as much.
2. Brain injuries cause problems in balance, walking or talking that gets worse when a person uses alcohol or other drugs.
3. People who have had a brain injury often say or do things without thinking first, a problem that is made worse by using alcohol and other drugs.
4. Brain injuries cause problems with thinking, like concentration or memory, and using alcohol or other drugs makes these problems worse.
5. After brain injury, alcohol and other drugs have a more powerful effect.
6. People who have had a brain injury are more likely to have times that they feel low or depressed and drinking alcohol and getting high on other drugs makes this worse.
7. After a brain injury, drinking alcohol or using other drugs can cause a seizure.
8. People who drink alcohol or use other drugs after a brain injury are more likely to have another brain injury.

# Answers to the Quiz

## The Answers to the Quiz: All TRUE!

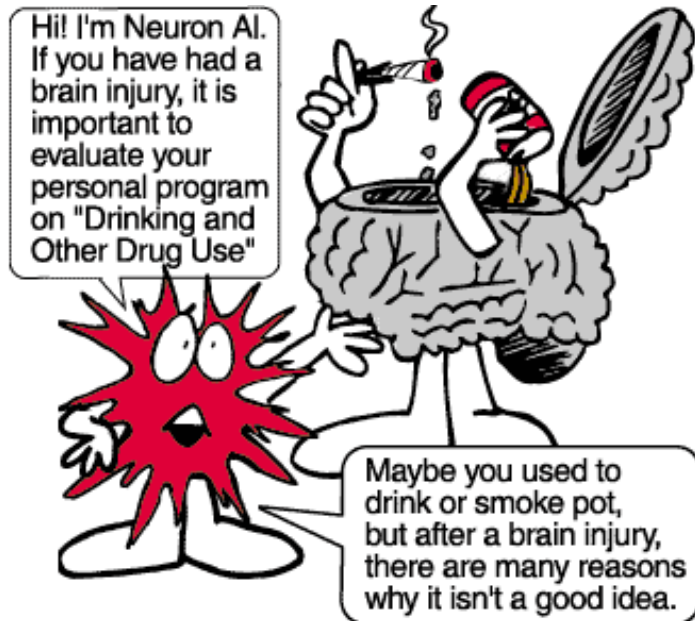
Alcohol, other drugs and brain injury often go together both before and after an injury.

Alcohol is present in more than half of all brain injuries.

Alcohol is a factor in 66% of brain injuries caused by moving vehicles, and 60% of brain injuries involving violence. These numbers do

not include the use of other drugs at the time of an injury.

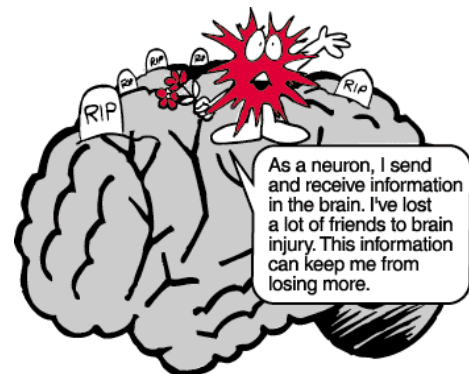
Whether or not a brain injury was caused by using alcohol or other drugs, after an injury the brain reacts differently to these drugs. Everyone who has a brain injury should rethink their use of alcohol and other drugs.



## Effects of Alcohol on Your Brain

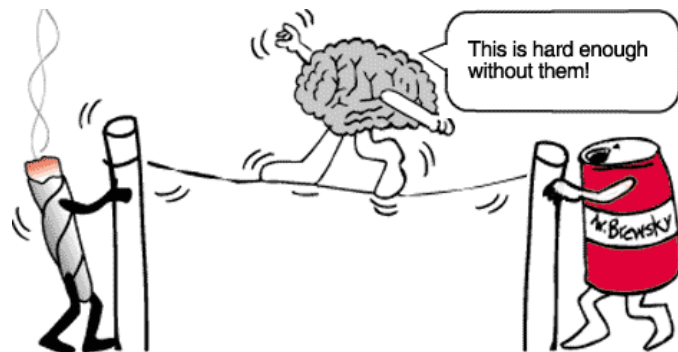
### Effect #1: Less Recovery

Some brain cells (neurons) are killed and others are disconnected at the time of a brain injury. Recovery means relearning by making new connections between neurons. Using alcohol and other drugs after brain injury gets in the way of your recovery by interfering with new connections between neurons.



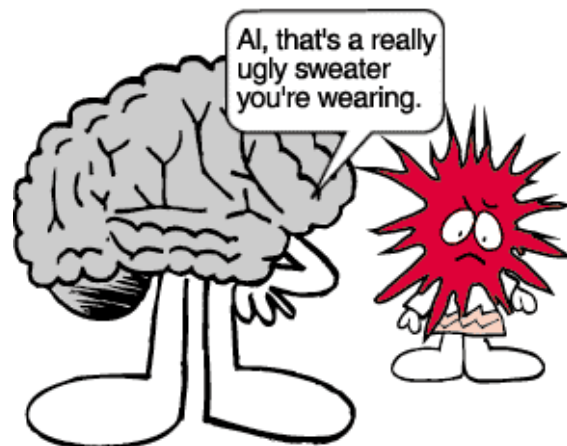
## Effect #2: Problems with Balance, Walking and Talking

Brain injury can cause problems with balance, walking, or talking; alcohol and other drugs make the problems even worse. Without brain injury, alcohol and other drugs can make people lose their balance or fall down. People who have been drinking or using other drugs may slur their speech. Problems walking and talking caused by your brain injury will be increased by alcohol and other drugs.



## Effect #3: Do and Say Without Thinking

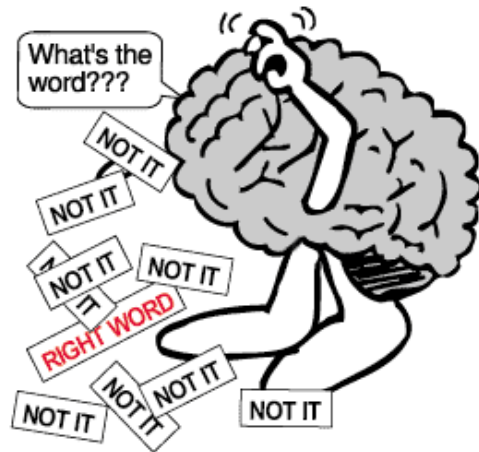
Every brain has a program call, "Good Idea/Bad Idea." The program tells us what is appropriate and what is not. For example, we may think to ourselves that someone's sweater is really ugly, but "Good Idea/Bad Idea" keeps us from saying this out loud. For some people, a brain injury takes away the fine line between good ideas and bad ideas and "lets it all hang out." Alcohol can also cause a person to say whatever comes to mind, no matter how it hurts. Alcohol together with a brain injury shuts off the "Good Idea/Bad Idea" program, and that's a bad idea.



## Effect #4: Problems with Thinking

Many people have to learn new skills, or relearn old ones, following a brain injury. People have trouble with concentration, memory, word-finding, problem-solving and other thinking skills, depending on where the brain is injured.

Alcohol and other drugs also interfere with the ability to think and learn new things. Adding alcohol and other drugs with your brain injury just makes thinking that much harder.



## Effect #5: More Powerful Effect

The brain is more sensitive to alcohol and other drugs after an injury. There are not as many neurons to absorb the alcohol or other drugs. No matter how much alcohol or other drugs a person was able to use before, it's less now.

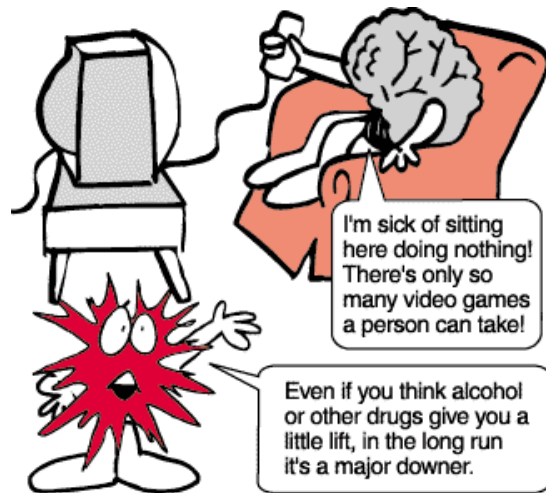
Also, alcohol interferes with prescribed medications. You get drunk faster and lose the good effect of the medicine.



## Effect #6: More Likely To Be Depressed

Being depressed is fairly common after a brain injury. Sometimes it is the injury to the brain that causes depression. It is also the change in a person's life that leads to depression. Everything is different, there are financial worries, and there is boredom.

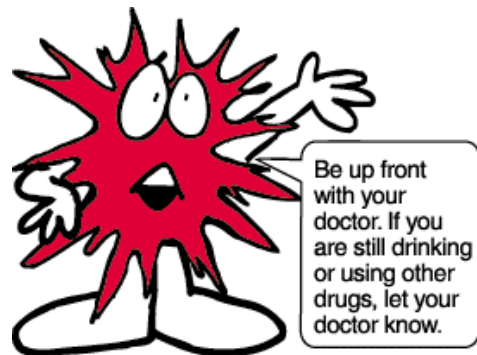
Many people turn to using alcohol and other drugs to try to make this depression go away. They say it makes them less worried, more relaxed and happier. That may be true, for a while, but it quickly makes things worse. Alcohol depresses the brain and that depresses you.



## Effect #7: Seizure

Seizures are a problem for about 5% of people who have a brain injury. Even though that is a low number, seizures are serious and steps need to be taken to avoid them.

Some people require anti-seizure medication. Mixing alcohol and other drugs with these medications is very dangerous and can INCREASE the chance of seizure. Taking yourself off medications to drink is DANGEROUS. Doubling up on anti-seizure medication to drink is DANGEROUS. Get the facts from your doctor and then use your brain.



## Effect #8: Another Brain Injury

Among people who have had one brain injury, the chance of a second injury is three times greater. Brain



injuries may cause problems with balance, coordination, vision and judgment that lead to other injuries. By drinking alcohol or using other drugs after a brain injury, you are more likely to have another injury. Also, with each brain injury it takes less force to cause greater harm.

## Congratulations!

**Your new brain software will help you with:**

- Better Recovery
- Better Thinking
- Better Balance and Coordination
- Better Speech
- Less Chance of Depression, Seizures or Another Brain Injury

