

Can TBI be prevented?

Yes. Here are some things you can do to help prevent falls, the most common cause of TBI among older adults.

The most effective way to prevent older adults from falling is to do all of these things.

- **Encourage Exercise.** Help the person in your care begin a regular exercise program, if their doctor agrees. Exercise is one of the best ways to reduce older adults' chances of falling. It helps them become stronger and feel better. Strength training with exercises that improve balance and coordination, like Tai Chi, are most helpful. As a safety precaution, you should check with the older adult's doctor about which exercises are best for him or her.
- **Make the home or surroundings safer.** Nearly half of all falls happen at home. Here are some things you can do to make the home and surroundings safer for the older adult in your care.
 - ▶ Remove things from stairs and floors that might cause a person to trip, like papers, books, clothes, and shoes.
 - ▶ Remove small throw rugs or use double-sided tape to keep the rugs from slipping.
 - ▶ Place items used often within easy reach, so that a step stool is not needed.
 - ▶ Install grab bars next to the toilet and in the tub or shower.
 - ▶ Place non-slip mats in the bathtub and on shower floors.
 - ▶ Improve the lighting in the home. People need brighter lighting as they get older.
 - ▶ Be sure there are handrails and lights on all staircases.
 - ▶ Be sure the older adult wears shoes that give good support and have thin, non-slip soles. They should avoid wearing slippers and socks and going shoeless.
- **Ask the health care provider to review all medicines.** Ask the doctor or local pharmacist to look at all the medicines the older adult takes. These might include some that don't need prescriptions, like cold medicines and various supplements. As people age, the way some medicines work in the body can change. Sometimes those changes can make an older person drowsy or light-headed, which could lead to a fall.
- **Take the person in your care for a vision check.** Make sure an eye doctor checks to be sure eyeglasses are correct and that there are no conditions that limit vision, like glaucoma or cataracts. Poor vision can increase the chance of falling.

What other resources are available?

There are many people who can help you care for someone with a TBI. You don't have to do it alone. Show this brochure to the doctor or health care provider and talk with them about your concerns. The doctor may be able to help you find a health care provider who has special training in the treatment of TBI. Early treatment of symptoms by professionals who specialize in TBI may speed recovery. The doctor may refer you to a neurologist, neuropsychologist, neurosurgeon, or specialist in rehabilitation.

Centers for Disease Control and Prevention (CDC)

CDC's National Center for Injury Prevention and Control works to prevent injuries and reduce disability, deaths, and costs associated with injuries. CDC has a wide variety of resources and materials about TBI and other types of injuries. Call CDC toll-free at 1-800-CDC-INFO (1-800-232-4636) or visit www.cdc.gov/BrainInjuryInSeniors.

Participating Organizations

- Administration on Aging
- American Occupational Therapy Association
- Brain Injury Association of America
- Centers for Medicare and Medicaid Services
- Children of Aging Parents
- Defense and Veterans Brain Injury Center
- Department of Veterans Affairs, Office of Geriatrics and Extended Care
- Easter Seals
- Emergency Nurses Association
- Employee Assistance Professionals Association
- Family Caregiver Alliance/National Center on Caregiving
- Health Resources and Services Administration
- Home Safety Council
- International Parish Nurse Resource Center
- National Adult Day Services Association
- National Alliance for Caregiving
- National Association of Area Agencies on Aging
- National Association of Professional Geriatric Care Managers
- National Association of State Head Injury Administrators
- National Council on Aging
- National Family Caregivers Association
- National Institute on Aging
- National Safety Council
- State and Territorial Injury Prevention Directors Association
- Visiting Nurse Associations of America
- YMCA of the USA



Preventing Traumatic Brain Injury in Older Adults

Information for Family Members and Other Caregivers

Help Seniors Live Better, Longer:
Prevent Brain Injury

This publication is available in a larger print size online at www.cdc.gov/BrainInjuryInSeniors

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION



You may be one of the millions of people in this country who provides care for an older adult—a parent, grandparent, other family member, professional caregiver, or a close friend. For most caregivers, the older adult's health is the overriding concern. Most want to see older adults in their care live better, longer lives and stay mobile and independent. One way you can help is by learning about traumatic brain injury, or TBI—how to prevent it and recognize and respond to it when it does occur.

What is a traumatic brain injury or TBI?

A TBI is caused by a bump or blow to the head that affects how the brain normally works. TBIs may range from mild to severe. Falls are the leading cause of TBI.

What are the signs and symptoms of TBI?

You can't see a TBI. Signs and symptoms can be subtle. They can show up right after the injury or can take days or weeks to appear or to be noticed. It can be easy to miss a TBI, because sometimes the injured person looks fine, but acts or feels differently.

Learn the signs and symptoms of TBI, and watch for them in the older adult in your care. Because TBIs are often missed or misdiagnosed in older adults, be especially alert if you know that the older adult has fallen or has a fall-related injury, such as a hip fracture. If you see any of the signs or symptoms listed on the next page, seek medical attention right away.

TBI is a special health concern for older adults. People ages 75 and older have the highest rates of TBI-related hospitalizations and death. In addition, they recover more slowly and die more often from these injuries than do younger people.

Symptoms of mild TBI include:

- Low-grade headache that won't go away
- Having more trouble than usual remembering things, paying attention or concentrating, organizing daily tasks, or making decisions and solving problems
- Slowness in thinking, speaking, acting, or reading
- Getting lost or easily confused
- Feeling tired all of the time, lack of energy or motivation
- Change in sleep pattern—sleeping much longer than before, having trouble sleeping
- Loss of balance, feeling light-headed or dizzy
- Increased sensitivity to sounds, lights, distractions
- Blurred vision or eyes that tire easily
- Loss of sense of taste or smell
- Ringing in the ears
- Change in sexual drive
- Mood changes like feeling sad, anxious, or listless, or becoming easily irritated or angry for little or no reason

A person with moderate or severe TBI may show the symptoms listed above, but may also have:

- A headache that gets worse or does not go away
- Repeated vomiting or nausea
- Convulsions or seizures
- Inability to wake up from sleep
- Dilation of one or both pupils
- Slurred speech
- Weakness or numbness in the arms or legs
- Loss of coordination
- Increased confusion, restlessness, or agitation

Older adults taking blood thinners (e.g. Coumadin) should be seen immediately by a health care provider if they have a bump or blow to the head, even if they do not have any of the symptoms listed above.

What should you do if you think the older adult in your care has a TBI?

People with a TBI need to be seen by a doctor. Be sure to tell the doctor about any prescription or over-the-counter medicines the older adult takes. Also tell the doctor if they take other blood thinners, such as aspirin, because they can increase the chance of complications.

Here are some questions to ask the doctor:

- When can he or she return to normal activities?
- Are there activities that should be avoided, such as exercise?
- If the injured person drives a car—when can he or she return to driving?
- What drugs should be taken?
- Are any other drugs allowed, such as acetaminophen (Tylenol or Panadol)?
- Is alcohol allowed? If so, how much?
- What complications, if any, should I look for?
- Is there any special treatment or rehabilitation needed?
- When should a return visit be scheduled?

How long will it take for them to get better?

How fast people recover from TBI varies from person to person and depends on many factors, such as:

- How severe their TBI was
- What part of the brain was injured
- Their age
- How healthy they were before the TBI
- How long it took for them to receive proper medical treatment

Older adults in good health tend to have a better and faster recovery than those who are not as healthy, have medical conditions, or problems associated with aging. But remember, healing takes time. So, allowing an older adult with TBI to get rest is very important because it helps their brain to heal.