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Personality Changes After Stroke

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What is Personality Change?

Personality refers to characteristic patterns of behavior, thinking and emotions — and can change and vary greatly after stroke.

Common changes include:

- Impulsiveness
- Apathy
- Pseudobulbar affect
- Depression
- Anxiety
- Anger, irritability and aggression
- Confusion
- Forgetfulness
- Fatigue



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What is Personality Change?

A stroke is an injury to the brain.

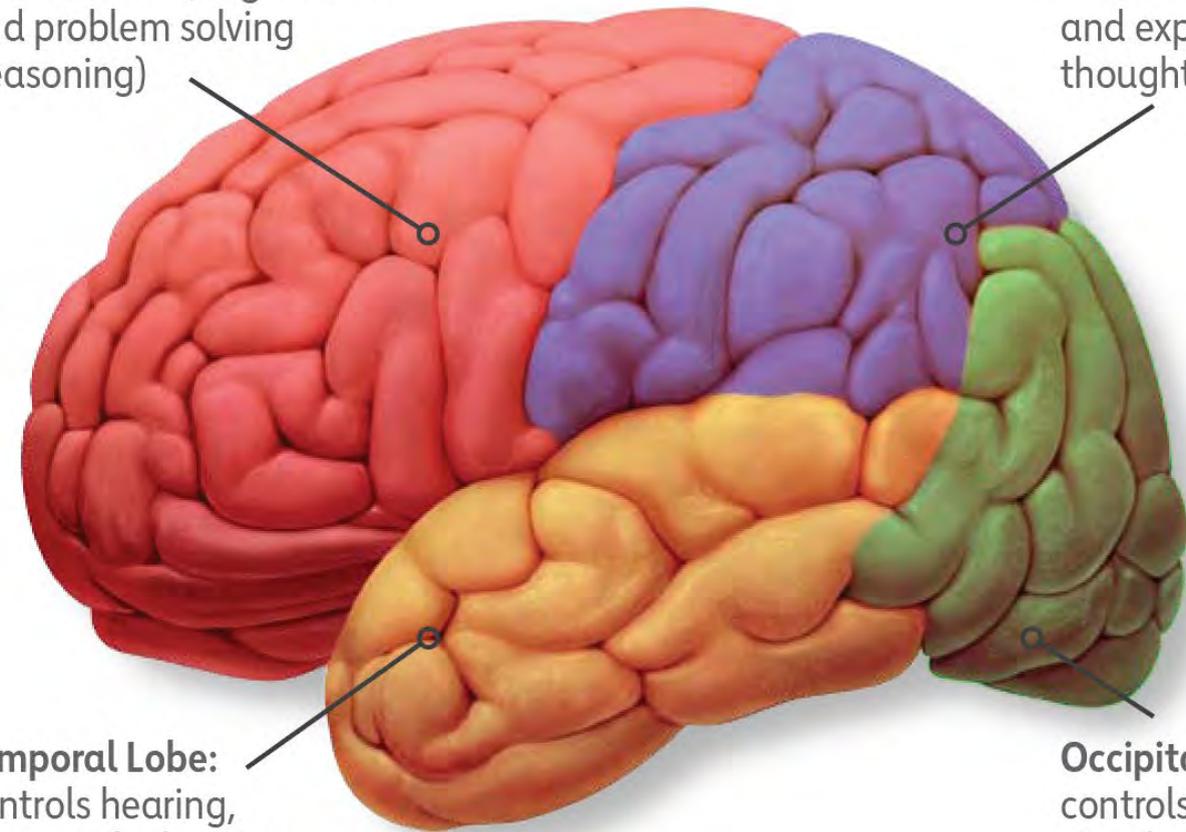
Psychological symptoms vary depending on which part of the brain the stroke affected.

Frontal Lobe:

motor control of voluntary muscles, personality, concentration, organization and problem solving (reasoning)

Parietal Lobe:

controls touch, pressure and temperature, understanding speech and expression of thoughts



Temporal Lobe:

controls hearing, memory for hearing and vision

Occipital Lobe:

controls vision and visual recognition



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Grieving After Stroke

Shortly after a stroke, survivors and families begin to comprehend their losses and go through a grieving process. You and your family may feel like you're on an emotional roller coaster. This is normal.

Recognizing common stages of grief can help you cope with the emotional changes that go along with a stroke. It can also help family members and friends better understand your thoughts, feelings and actions.

Grieving is a gradual healing process and each person moves at his or her own pace.





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Types of Personality Changes

The loss of a person's former identity and the grieving process are closely linked and can take many forms, including depression, irritability, anger, anxiety and apathy.

These symptoms may upset survivors and caregivers, and often negatively influence a person's quality of life as well as clinical outcomes. However, these conditions are not always apparent and often go unnoticed by health care professionals. We'll explore each one of these symptoms in more detail.





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Anger/Irritability/Aggression

About 15% to 35% of survivors show signs of increased irritability following a stroke.

Anger, irritability and aggression occur in many people who get frustrated or lose their tempers more easily than before their stroke. This can include becoming easily angered at their spouses and other family members over trivial matters. Aggressive behavior can also include hitting or hurting others, kicking, biting, grabbing, pushing, throwing objects, cursing or screaming.





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Depression

Depression is a complex disease that may include symptoms such as fatigue, apathy, loss of interest/pleasure and decreased concentration. Approximately 30% of stroke patients develop depression in the five years following stroke.

- **Situational:** A stressful event such as a stroke or another health emergency, divorce, issues with work, personal relationships, etc. may cause depression. It usually resolves with time.
- **Biological:** Abnormalities in brain chemical levels, genetics or even having a personality in which a person is easily overwhelmed may lead to depression.





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Forgetfulness

Memory loss is caused by the loss of nerve cells in the brain. When memory loss is so severe that it interferes with daily functioning, it becomes dementia.

A stroke's effect on memory depends on where and how it injured the brain as well as the overall health of the survivor. Each side of the brain controls different things. A stroke on one side of the brain will cause different problems than a stroke on the other side. This means that memory loss will not be the same for each stroke survivor.





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Types of Memory Problems

Two types of memory can be affected by stroke:

- **Verbal:** Names, stories and information having to do with words
- **Visual:** Faces, shapes, routes and things seen

In this case, **cognitive rehabilitation** may help. This can be as simple as playing games such as Simon Says, matching cards from memory, Sudoku, word search puzzles, finding the difference in two pictures and board games.





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Confusion

Confusion may be better controlled when caregivers minimize clutter and distractions in the survivor's surroundings as well as reduce visual and sound stimulation (such as TV or music). Calm and quiet surroundings can help a person focus on a task.





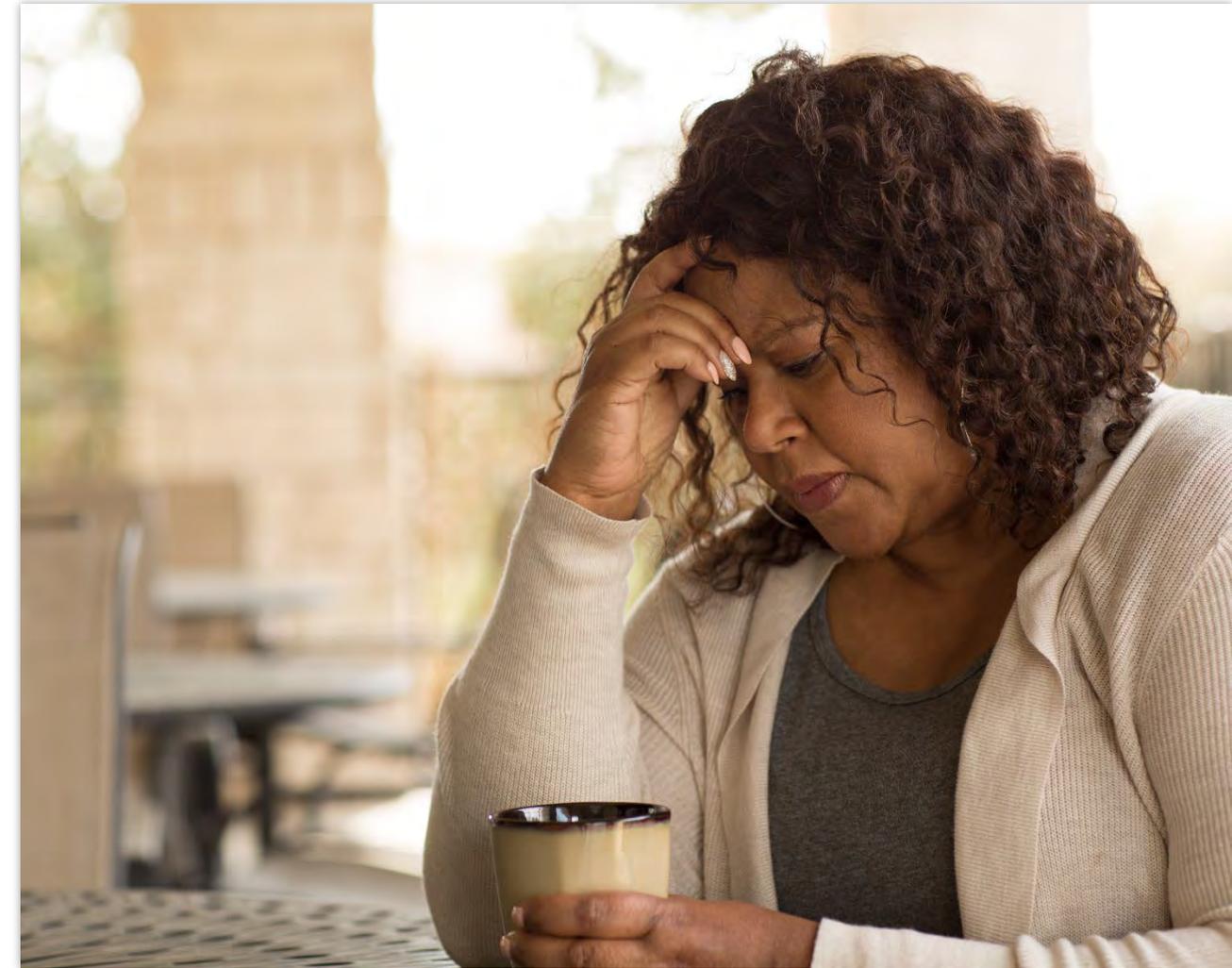
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Anxiety

Approximately 20% of stroke survivors experience significant levels of anxiety at some point after stroke.

Anxiety disorders can differ but are typically characterized by excessive and irrational fear, and difficulty or distress in managing daily tasks. Many people experience significant levels of physical symptoms, such as heart palpitations and shortness of breath, or cognitive symptoms, such as a feeling of losing control. Other times, anxiety manifests itself through behavioral issues such as avoiding activities.





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Apathy

Apathy occurs in as many as 20% to 25% of stroke survivors.

It's often associated with depression and cognitive impairment but may occur on its own. Survivors who suffer from apathy tend to have a harder time recovering after a stroke.





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Pseudobulbar Affect (PBA)

Pseudobulbar affect (PBA), also known as **emotional incontinence or pathological laughing and crying**, is a condition associated with many of the unusual and unexpected behaviors by stroke survivors. Occurrence of PBA has been reported in 6% to 34% of stroke survivors and is more common in women.

PBA is characterized by intense and often inappropriate displays of emotion, which often have nothing to do with the way the survivor feels at the moment. For example, a person struggling with PBA may suddenly laugh when seeing someone who is hurt or cry in response to a joke.





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Pseudobulbar Affect (PBA)

Inappropriate behaviors caused by PBA may have a negative impact on a stroke survivor's relationships, leading to isolation and exacerbating depression and anxiety.

Caregivers can help by making the survivor more aware of the things that trigger these emotions, including fatigue, stress, anxiety and noisy, overcrowded environments. Medication may also help.





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Impulsiveness

Impulsiveness is characterized by an inability to think ahead or understand consequences. It's more common in people with right-side or a frontal lobe stroke.





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Diagnosis

Screening for and identifying post-stroke depression is vital for treatment and management.

Diagnosis is usually based on a clinical assessment along with screening scale tools. One example is the nine-item patient health questionnaire. Questions are about the level of interest in doing things, feeling down or depressed, difficulty with sleeping, energy levels, eating habits, self-perception, ability to concentrate, speed of functioning and thoughts of suicide.





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Coping Techniques

Recognize the symptoms and seek help, especially if the behavior is new.

This may include seeing a therapist or just speaking to a friend or loved one. It's easy for stroke survivors to become isolated, especially if they're struggling with new physical limitations. Engaging with others can make a big difference in recovery.





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Coping Techniques

- Stick to a fixed routine.
- Keep messages short to fit the survivor's retention span.
- Break tasks into simple steps.





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Coping Techniques

Use photographs or images to help the survivor remember things. Keep in mind that a stroke is an injury to the brain, which can affect memory.

Part of rehabilitation therapy can include training the survivor to recognize objects and people they may have forgotten.





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Coping Techniques

As a caregiver/family member, it's important to be understanding and offer feedback. Be patient.





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Coping Techniques

Have a support system.

Many patients and their loved ones have found that support groups can help process difficult emotions. Caring for a loved one who's had a stroke is often draining. So it's important for caregivers to take time to recharge and seek their own support.





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Treatment

It's not uncommon for survivors to experience all of these personality changes.

The good news is that treatment is available, including therapies that will help the person's emotional state, including depression or anxiety:

- **Solution Focused:** Goal-oriented therapy that focuses on solutions instead of the problems.
- **Problem Solving:** Problems are identified, and the therapist teaches the survivor a structured approach to solving them.
- **Cognitive Behavioral:** Looks at the relationships between thoughts, feelings and behavior.
- **Attitude and Commitment:** Survivors are taught to accept and embrace their thoughts, feelings, sensations and memories rather than try to control them.
- **Interpersonal:** Focuses on interpersonal relationships by improving how the survivor communicates and relates to express emotions in a healthy way.
- **Mindfulness:** Helps people who suffer from repeated bouts of depression and chronic unhappiness. It combines cognitive therapy, meditation and mindfulness.



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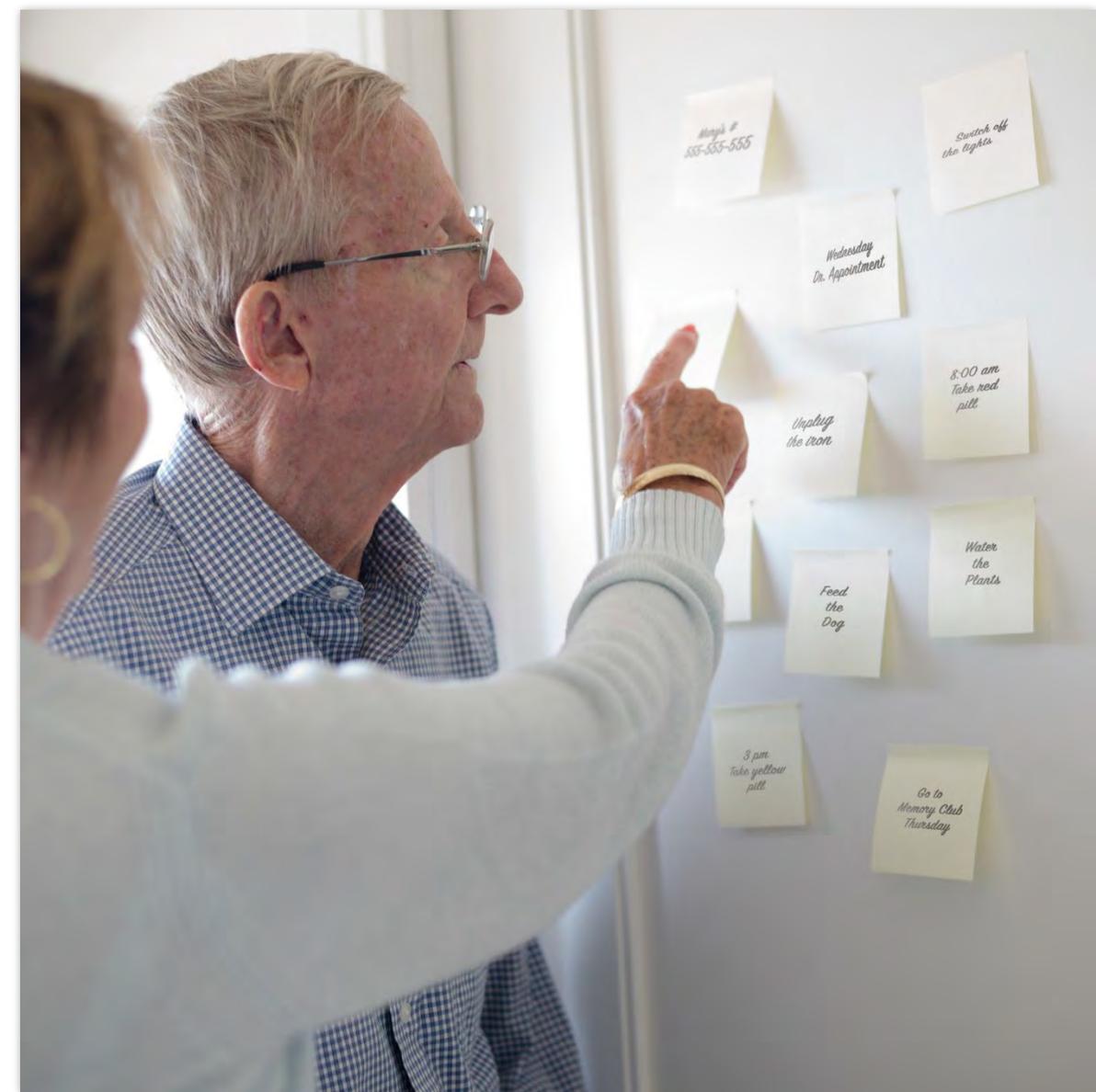
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Treatment

Cognitive Rehabilitation Therapies:

Work to restore functioning and independence after a stroke or another brain injury. They can improve the survivor's quality of life and help them more fully participate in society. Therapies can include:

- **Restorative therapy** helps a person practice skills over and over so that they can improve, building on the idea that the brain can change with practice.
- **Compensatory therapy** helps people work around their injury, often with the aid of special devices. This may include devices that help with speech, calendar and memory tools for people struggling with executive functioning and alarms to regain attention.





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Treatment

Anxiety can be treated with antidepressants or other anxiety-reducing medications, or sometimes both, or with psychological therapy.

Cognitive Behavioral Therapy, which focuses on examining the relationships between thoughts, feelings and behavior, may help survivors suffering from anxiety. This type of therapy explores thought patterns that lead to self-destructive actions and the beliefs that direct them.





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Talking to Your Health Care Professional

Post-stroke personality changes are challenging, but rehabilitation and therapy can help improve your recovery.

Remember to talk to your health care professional. Be open and honest about what you're experiencing.





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Group Discussion



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What are some of the symptoms that may suggest that someone is experiencing post-stroke cognitive, emotional or behavioral changes?





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In your own words, how would you describe post-stroke personality changes and its impact?





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What's important for you to convey to your doctor to accurately evaluate and diagnose post-stroke personality change?





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What are some suggested techniques you will try to help manage your emotional, behavioral or cognitive post-stroke changes?





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For more resources on personality
changes and life after stroke, visit
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