

The Brain and Function

How Stroke Affects Function

A stroke is a loss of function that results from the blood supply to the brain being cut off. The following describe how a stroke affects the function of different areas of the brain:

Frontal Lobe

- Arm, opposite side of stroke
- Leg, opposite side of stroke
- Judgment, personality, attention
- Speaking and writing if stroke is on the dominant side

Parietal Lobe

- Arm, opposite side of stroke
- Leg, opposite side of stroke
- Sensation of touch
- Visual and sensory perception, if stroke is on the non-dominant side

Temporal Lobe

- Sense of smell
- Memory
- Understanding spoken and written language and math skills if stroke is on the dominant side (part of the Parietal lobe as well)

Occipital Lobe

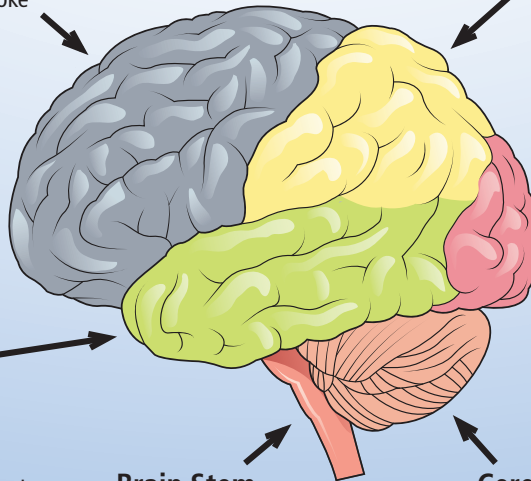
- Vision

Brain Stem

- Breathing
- Modulation of temperature and blood pressure
- Swallowing

Cerebellum

- Coordination
- Balance



Blood Supply and the Brain

The Anterior Cerebral Artery supplies blood to the medial (central) parts of the Frontal and Parietal Lobes.

The Middle Cerebral Artery supplies blood to the lateral (outer) parts of the Frontal and Parietal Lobes and the Temporal Lobe. The Middle Cerebral Artery is the most common site of stroke.

The Posterior Cerebral Artery and Vertebro-Basilar Artery systems supply blood to the Cerebellum, Brain Stem, Occipital Lobe, and the posterior (back) part of the Temporal Lobe.

