

Senator John McCain Dies at 81

The Republican lawmaker was diagnosed with glioblastoma, an aggressive brain cancer, last year.

August 27, 2018 By [Alicia Green](#)

On Saturday, August 25, Arizona senator, war hero and two-time presidential candidate John McCain died at age 81. His death came just one year after he was diagnosed with an aggressive brain cancer, reports [STAT](#).

In July 2017, doctors detected glioblastoma in McCain's brain.

According to the [American Brain Tumor Association](#), "Glioblastomas (GBM) are tumors that arise from astrocytes—the star-shaped cells that make up the "glue-like," or supportive, tissue of the brain. These tumors are usually highly malignant (cancerous) because the cells reproduce quickly and they are supported by a large network of blood vessels."

Glioblastoma is the most common form of brain cancer in adults; about 14,000 people in the United States are diagnosed with the condition annually. About 15 percent of people with glioblastoma survive five years after diagnosis; not even half live 18 months.

This wasn't the first time McCain battled cancer. He had been diagnosed with melanoma on three different occasions.

McCain's family released a statement just one day before his death that revealed he would be discontinuing his cancer treatment.

"Last summer, Senator John McCain shared with Americans the news our family already knew: he had been diagnosed with an aggressive glioblastoma, and the prognosis was serious," said his family. "In the year since, John has surpassed expectations for his survival. But the progress of disease and the inexorable advance of age render their verdict."

McCain began chemotherapy treatments at the Mayo Clinic in Phoenix following his diagnosis and completed his first round of radiation in August 2017, according to [PEOPLE](#).

He was hospitalized that December as a result of side effects from his cancer treatment but showed signs of improvement through physical therapy.

In April 2018, McCain returned to the Mayo Clinic for an emergency surgery to treat an intestinal

infection related to diverticulitis, an inflammation or infection of small pouches in the digestive tract.

His last months were spent on his Arizona ranch, where many friends visited him.

Glioblastoma is difficult to treat as it's known to be drug-resistant and adaptive to treatment, [STAT](#) reports. It becomes more aggressive the more it's attacked. Zero of two dozen experimental drugs tested in clinical trials for newly diagnosed glioblastoma in the last decade improved survival. The most recent treatment added five more months to patients' lives.

"If there is to be any upshot from this difficult news, it should be greater urgency with which this country rallies to support the nearly 700,000 Americans currently living with glioblastoma or other brain tumor, while honoring the brave that have been taken from us by this disease," said the National Brain Tumor Society in a [statement](#).

McCain is survived by his wife, seven children and five grandchildren. He will be remembered for his 31 years of service as an Arizona senator, his naval career and his two runs for the presidency—one in 2000, when he failed to secure his party's nomination, and one in 2008, when he was the Republican nominee.

[Click here](#) to learn about how cancer-contributing genes make glioblastomas more aggressive and radiation-resistant.