## ACS Statement on Senator Edward Kennedy from Otis W. Brawley, M.D., chief medical officer, American Cancer Society

Atlanta 2008/05/20 -"Our thoughts and prayers are with Senator Kennedy and his family as they manage this difficult situation. Senator Kennedy has been an unparalleled leader in the fight against cancer and for access to quality health care for all Americans throughout his distinguished career in the United States Senate. He yields to no one in his accomplishments and in his efforts to bring all the resources of the nation to bear in fighting cancer and other diseases, to reining in the tobacco industry, and to extending health insurance coverage to all Americans, especially the most vulnerable among us. He is a giant of the Senate.

"We have limited information about Senator Kennedy's situation, and it would not be appropriate for us to speculate on his condition or outlook. The American Cancer Society estimates that 21,810 malignant tumors of the brain or spinal cord will be diagnosed this year in the United States. Approximately 13,070 people (7,420 men and 5,650 women) will die from these malignant tumors. The cancers account for about 1.3 percent of all cancers and 2.2 percent of all cancer-related deaths in the U.S.

"Media reports quote Senator Kennedy's doctors as saying he has a malignant glioma. Glioma is not a specific type of cancer. It is a general category of brain tumor that includes astrocytomas, oligodendrogliomas, and ependymomas. About 42 percent of all brain tumors, including benign ones, are gliomas. About 77 percent of malignant tumors are gliomas. They are uncommon in children, but their incidence rate goes up with age and peaks in the age group from 75 to 84. There are many different forms of glioma, some more aggressive than others. Their treatments differ, and can include surgery, radiation therapy, chemotherapy, or various combinations. The outlook for the different types of these types also differ. There are new approaches to the treatment of certain types of brain cancers with newer targeted therapies that have offered hope beyond what we have seen in the past.

"Malignant (cancerous) tumors of the brain and spinal cord --so called central nervous system, or CNS tumors—differ in several important ways from tumors in other parts of the body. Unlike tumors that start in the rest of the body, whose most deadly aspect is their ability to spread throughout the body, brain tumors almost never spread to other organs. The most dangerous aspect of these tumors is that they can interfere with essential, normal functions of the brain. Because they only very rarely spread to other parts of the body, brain tumors are not 'staged' like other tumors. The most important prognostic factors are the cell type, the grade or aggressiveness of the tumor cells —how fast they are growing and spreading—and the patient's age. Survival rates drop with increasing age.

"We do not fully understand the cause of central nervous system (CNS) cancers. Nevertheless, researchers are making progress toward understanding some of the chemical changes that occur inside normal brain cells that turn them into brain cancer. Most brain cancers develop genetic abnormalities for no apparent reason and are not associated with anything that the person did or did not do or with anything he or she was exposed to in the environment. The brain is relatively protected from things like cigarette smoke and other cancer-causing chemicals that can increase the risk of cancer.

"As with anyone who has been diagnosed with brain cancer or who has had a family member diagnosed with this disease, we wish the Senator well, and hope that his treatment is effective and that he is able to continue the legacy for which he is so well known."