

[Brain Stem Glioma - Childhood - Introduction](#) [1]

This section has been reviewed and approved by the [Cancer.Net Editorial Board](#) [2], 05/2016

ON THIS PAGE: You will find some basic information about this disease and the parts of the body it may affect. This is the first page of Cancer.Net's Guide to Childhood Brain Stem Glioma. To see other pages, use the menu. Think of that menu as a roadmap to this full guide.

About the brain stem

The brain stem connects the brain to the spinal cord. It is the lowest portion of the brain, located above the back of the neck. The brain stem controls many of the body's basic functions, such as motor skills, sensory activity, coordination and walking, the beating of the heart, and breathing. It has 3 parts:

- The midbrain, which develops from the middle of the brain
- The medulla oblongata, which connects to the spinal cord
- The pons, which is located between the medulla oblongata and the midbrain

About brain stem glioma

Brain stem glioma is a type of [central nervous system \(CNS; brain and spinal cord\) tumor](#) [3] that begins when healthy cells in the brain stem change and grow out of control, forming a mass called a tumor. A tumor can be cancerous or benign. A cancerous tumor is malignant, meaning it

can grow and spread to other parts of the body. A benign tumor means the tumor can grow but will not spread. A glioma is a tumor that grows from a glial cell, which is a supportive cell in the brain.

Usually, by the time brain stem glioma is diagnosed, it is most often diffuse, which means it has spread freely through the brain stem. This type of tumor is typically very aggressive, meaning that it grows and spreads quickly. A small percentage of brain stem tumors are very localized, called focal tumors. A focal tumor is often less likely to grow and spread quickly.

Brain stem glioma occurs most commonly in children between 5 and 10 years old. Most brain stem tumors develop in the pons and grow in a part of the brain stem where it can be difficult to perform surgery, making brain stem glioma challenging to treat (see the [Treatment Options](#) [4] section).

This section covers brain stem glioma diagnosed in children. Read more about [brain tumors in adults](#) [5].

Looking for More of an Introduction?

If you would like more of an introduction, explore these related items. Please note these links will take you to other sections on Cancer.Net:

- **ASCO Answers Fact Sheet:** [Read a 1-page fact sheet](#) [6] that offers an introduction to CNS tumors. This fact sheet is available as a PDF, so it is easy to print.
- **Cancer.Net Patient Education Videos:** View short videos led by ASCO experts in [childhood cancers](#) [7] and [brain tumors](#) [8] that provide basic information and areas of research.
- **Cancer.Net En Español:** [Read about brain stem glioma](#) [9] in Spanish. [Infórmase sobre el glioma de tronco encefálico en español](#) [9].

The [next section in this guide is Statistics](#) [10]. It helps explain how many children are diagnosed with this disease and general survival rates. Or, use the menu to choose another section to continue reading this guide.

Links

[1] <http://www.cancer.net/cancer-types/brain-stem-glioma-childhood/introduction>

[2] <http://www.cancer.net/about-us>

[3] <http://www.cancer.net/node/31323>

- [4] <http://www.cancer.net/node/18555>
- [5] <http://www.cancer.net/node/31327>
- [6] http://www.cancer.net/sites/cancer.net/files/asco_answers_cns_childhood.pdf
- [7] <http://www.cancer.net/node/27386>
- [8] <http://www.cancer.net/node/27391>
- [9] <http://www.cancer.net/es/node/18219>
- [10] <http://www.cancer.net/node/18549>