

Brain development

0 to 19
TORBAY
for you

Expecting

Nowadays, we know much more about the importance of early brain development, which starts before the baby is born.

Just two weeks after conception, baby's brain has started developing. Throughout the pregnancy the brain will continue to develop.

The brain is about a quarter developed by birth.





Things to know

Your baby's brain has three areas. These are known as the reptilian brain, mammalian brain and higher brain.

- The reptilian brain ('basal ganglia') develops in the early months of pregnancy. It is critical for survival and controls bodily functions (breathing, temperature, digestion, etc.).
- The mammalian brain ('limbic system') is responsible for social behaviour, care of others, playfulness and bonding.
- The higher brain ('neocortex') is responsible for creativity, imagination, self-awareness, empathy, reasoning and reflection. It accounts for around 85% of the brain.

Almost all connections in the mammalian and higher brain areas **develop after the birth** through interactions with caregivers.



Things to try

You can communicate with your baby before they are born, by doing activities such as:

- talking to your baby.
- singing.
- reading stories out loud.
- listening to music.



Amazing facts

By the third trimester, your baby's cerebral cortex (part of the mammalian brain) is mature enough to enable baby to feel and remember things, such as particular tunes or music.

Your baby's heart rate slows when you are speaking, suggesting that your baby not only hears and recognises the sound but is also calmed by it.