



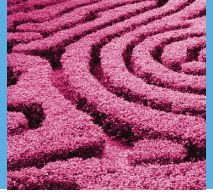


Foetal alcohol spectrum disorder (FASD)

Information for parents, carers and professionals

mencap

NOFAS·UK




Foetal alcohol spectrum disorder (FASD)

What is FASD?

Foetal* alcohol spectrum disorder (FASD) is the umbrella term for a range of preventable alcohol-related birth defects.

FASD is a direct result of prenatal alcohol exposure and can be completely eliminated if pregnant women do not drink alcohol.

FASD includes:

- foetal alcohol syndrome (FAS)
- alcohol related neurodevelopmental disorder (ARND)
- alcohol-related birth defects (ARBD)
- foetal alcohol effects (FAE)
- partial foetal alcohol syndrome (pFAS).

There is no way to know for sure how alcohol might affect an unborn baby. It could have different effects at different times during pregnancy, and it might affect one baby but not another.

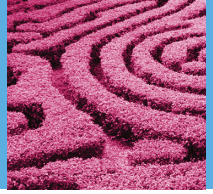
Because there is no proven safe level for alcohol consumption during pregnancy, the only risk-free approach is to avoid alcohol completely, during pregnancy, when trying to conceive and when breastfeeding.

At any stage of pregnancy, a woman can benefit her baby by avoiding alcohol.

The cause of FASD

FASD is a result of alcohol consumption during pregnancy. Alcohol is a teratogen – a substance that interferes with the development of the embryo or foetus.

When a pregnant woman drinks, the alcohol in her blood passes freely through the placenta into the foetus's blood. Because the foetus does not have a fully developed liver, it cannot filter out the toxins from the alcohol as the mother can. Instead, the alcohol circulates in the foetus's blood system. It can kill brain cells and damage the nervous system of the foetus throughout the entire nine months of pregnancy.

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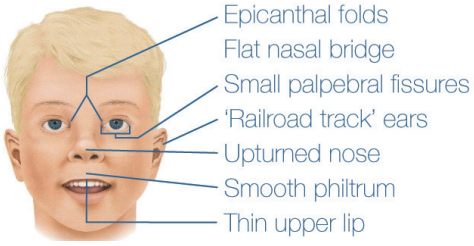
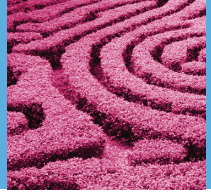
The effects of FASD

The effects of FASD can be mild or severe, ranging from reduced intellectual ability and attention deficit disorder to heart problems and even death. Many children experience serious behavioural and social difficulties that last a lifetime.

Although alcohol can affect the development of cells and organs, the brain and nervous system are particularly vulnerable. We can't see the neurological brain damage that is caused, but there are also a number of possible physical effects that may include:

- smaller head circumference
- heart problems
- limb and skeletal damage
- kidney damage
- damage to the structure of the brain
- eye problems
- hearing problems
- specific facial characteristics.



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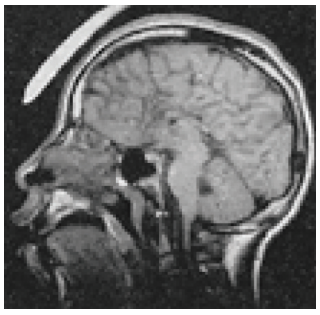
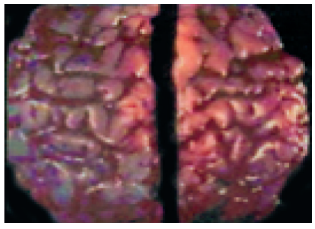
There are also a number of invisible FASD characteristics, which may include:

- attention deficits
- memory deficits
- hyperactivity
- difficulty with abstract concepts (eg maths, time and money)
- poor problem-solving skills
- difficulty learning from consequences
- poor judgement
- immature behaviour
- poor impulse control
- confused social skills.

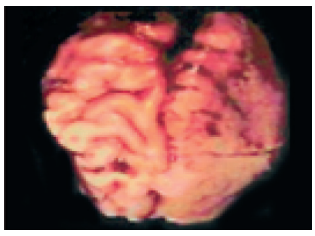
Brain scan of a 13-year-old female without FAS. The arrow points to the corpus callosum.



Brain scan of a 14-year-old male with FAS. The corpus callosum is absent.



Brain of baby without FAS



Brain of baby with FAS

Images courtesy of Dr Sterling Clarren

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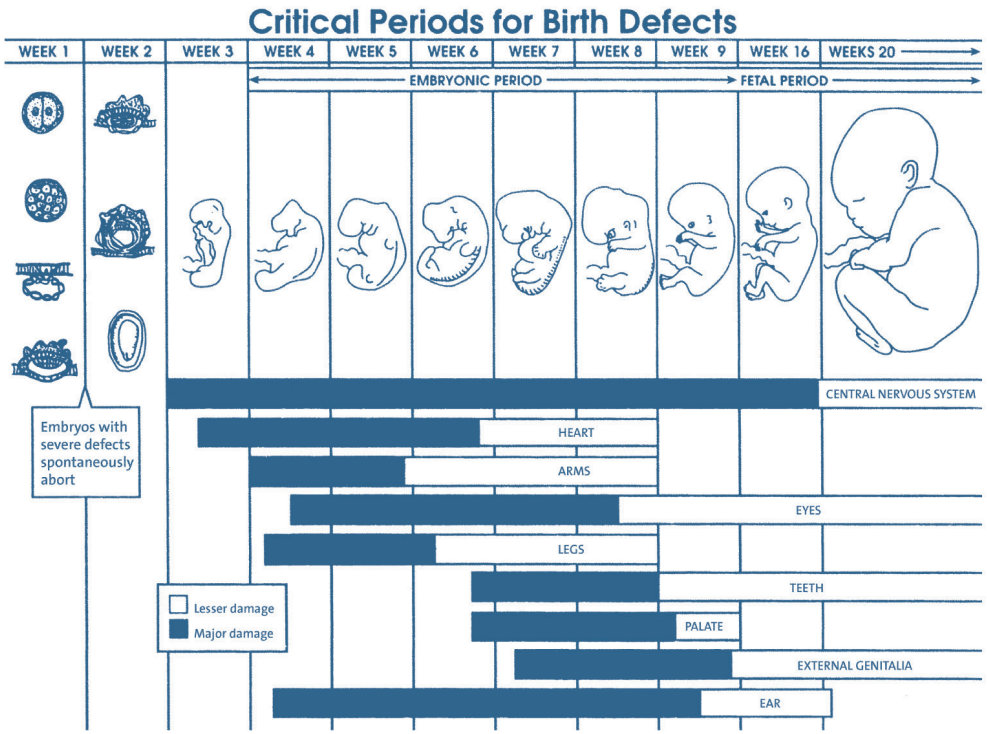
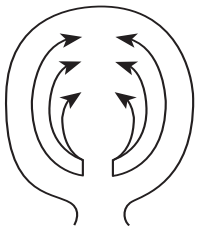
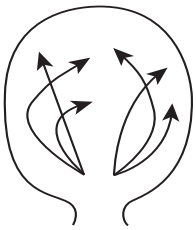


Understanding the effects of FASD on thought processes



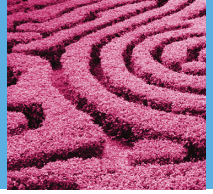


Non-FASD thought process

- Orderly, organised and sequential.
- Many opportunities for links and interconnections.

FASD thought process

- Inconsistent growth, undergrowth, disorganised, gaps and clusters.
- Clusters can appear as areas of strength eg in art, music etc.




Foetal alcohol spectrum disorders (FASD)

How many people are affected?

The exact prevalence of FASD in the UK is not known. International prevalence studies in countries such as the United States, Canada, Australia, Finland, Japan and Italy state that at least 1 in 100 children are affected[1]. This would equate to at least 6,000–7,000 babies born with FASD each year in the UK.

Diagnosis and management of FASD

Foetal alcohol syndrome (FAS) is the most clinically recognisable form of FASD. It is diagnosed based on the presence of a characteristic set of facial features, combined with growth and neurocognitive defects. The characteristic facial features may include a thin upper lip, a flat nasal bridge, an upturned nose, small wide-set eyes and a smooth philtrum (the vertical groove between the upper lip and nose).

The clinical features of other forms of FASD are less well defined and more complex to diagnose.

Foetal alcohol spectrum disorders (FASD)

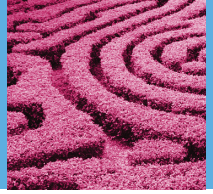
Diagnosing FASD can provide an explanation for a child's behaviour. It also helps families to begin to understand the range of problems associated with FASD.

For example, children and adults with FASD often have difficulty dealing with information. They may find it hard to translate hearing into doing, thinking into saying, reading into speaking, or feeling into words. They may also have difficulty applying specific learning to new experiences or situations, and in perceiving similarities and differences.

Early diagnosis can decrease the risk of secondary problems that are commonly associated with FASD. These include psychiatric problems, disrupted school experience and alcohol and drug problems.

To support people with FASD effectively, management programmes should be tailored to the individual, taking into account the extent to which their learning and life skills

1 World Health Organization Bulletin, 2011




are affected. Healthcare professionals should work closely with education and social service providers to make sure individuals are appropriately assessed in terms of their communication and social skills, emotional maturity, verbal and comprehension abilities, use of language and healthcare requirements.

Further information

The National Organisation for Foetal Alcohol Syndrome UK is dedicated to supporting people affected by FASD and their families. It promotes education for professionals and public awareness about the risks of alcohol consumption during pregnancy.

For more information about FASD, go to **www.nofas-uk.org**
For specialist advice and support, email **help@nofas-uk.org** or call **020 8458 5951**.

* To access international resources and medical studies outside the UK and online, use the international medical spelling ‘fetal’.

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