

Foetal Alcohol Spectrum Disorder (FASD)

What is FASD?

FASD describes a range of defects that can occur as a result of a child's mother drinking alcohol during pregnancy.

Alcohol crosses the placenta and can result in physical birth defects as well as learning disabilities caused by brain injury. The unborn child's liver does not have the capability to deal with ethanol and metabolites such as acetaldehyde.

Ethanol interferes with cells division and proliferation as well as cell growth and appropriate differentiation of cells. This effects the development of various foetal tissues including the brain. Alcohol induced brain damage results in the partial or complete agenesis of the corpus callosum which links the two hemispheres of the brain. This is the primary cause of intellectual disability.

The frontal cortex and hippocampus are also affected by alcohol induced brain injury resulting in sometimes severe memory disorders. The cerebellum can also be affected by hypoplasia (decreasing size) leading to difficulties with movement and balance. 80% of the brain's neurons are located in the cerebellum, so when this has been affected it can have devastating impacts on the young person physical and cognitive development.

Young people with FASD are at much higher risk of mental health conditions and drug addiction as they grow up.

Recognising Young people with FASD

Unfortunately, there are no blood tests or brain scans which can detect FASD. The primary method for diagnoses is investigation into the maternal history of alcohol use during pregnancy and by assessment of physical traits which commonly effect young people with FASD. Schools should also monitoring the behaviour patterns of pupils they suspect may have FASD.

Young people with FASD often have the following physical features

- Smaller and weigh less than other children of the same age
- Smaller head size
- Smaller eye openings which hide the corners of the eyes
- The middle part of the face may appear flattened
- Small and upturned nose.
- Flattened philtrum (the ridge between lips and nose)
- Thin upper lip
- Tapering fingers (far wider towards the palm)
- Various heart conditions

Developmental stages and the impact of FASD

Babies

- Low birth weight
- Over sensitive to light
- Irritable
- Unable to feed effectively
- Increased risk of ear infections
- Poor sleep

Toddlers and young children

- Poor muscle development and movement skills (as a result usually of effected cerebellum)
- Co-ordination difficulties
- Language difficulties young children may not meet the normal milestones for speech development
- Difficulty with memory they may need to ask the same question again and again
- Hyperactivity
- Poor sense of self preservation
- Missing usual milestones such as toilet training and walking.

Older Children

- Attention difficulties
- Impulsive
- Difficulties with executive programming and problem solving
- Lack of understanding of cause and effect
- Poor memory young people with FASD appear to not learn from experience and make the same mistakes again and again even if the consequences of the mistake are severe.
- Struggle with managing stress and developing regulation strategies.
- Young people often exhibited outburst of emotional dysregulation and can have poor emotional intelligence.
- Difficulty making friends and understanding social norms.
- Some young people may develop symptoms similar to sensory processing disorder.
- Young people can often develop fantasy worlds and struggle to differentiate between the real world and make believe. Lying can also become compulsive.

 Young people with FASD often present with developed expressive language skills but this masks often very poor receptive language skills. This makes it easy for adults to think learning is occurring when it is only superficial.

Strategies to support young people with FASD

Communication

- Use simple clear language. Slowing the voice and using a deeper tone is sometimes more easily understandable.
- Use the young persons name at the start of instructions to gain attention.
- Try to use positive language tell the young person what you want them to do not what you don't want them to do.
- Praise and encouragement work well. Often the young person understands
 the challenges they face and they need to be told when they are doing well.
 Young people with FASD often suffer with low mood and so anything the
 adults working with the young person can do to improve this is likely to be
 very effective.
- Try to smile at the young person as much as possible.
- If a pupil doesn't understand the question the first time, ask the same question again rather than rephrasing.
- Give additional processing time.
- Using visuals to support instructions or questions can be helpful. Physically demonstrating or modelling can be particularly effective.
- Now and next boards can be helpful. When giving instructions give a clear indication of the order the tasks are to be completed. For example "first we do maths then we have lunch".
- When an instruction has been given, check for understanding not just recall.
 Young people with FASD may have a better ability to recall the instructions in
 the short term than actually understand them to be able to complete the task
 set. Try asking the pupils to demonstrate their understanding practically by
 completing the first set of questions whilst you are near them to support.
- Try to get the message across to the young person in as few words as possible.

Classroom strategies

- Many of the same interventions and practices that work with young people with ASD also work with young people with FASD.
- Humour seems to be the most effective method of de-escalating situations.
- Young people with FASD benefit from structured classroom routines and a consistent classroom environment.
- Repetition of learning will be vital. Distributed retrieval practice can be particularly helpful in achieving this. Pre teaching of key vocabulary or use of a knowledge organiser can be useful.
- If possible, provide the young person with their own learning space as per TEACCH advice.



- Exit strategies from the class should be employed. A timeout card is sometimes useful. Having a safe space with planned regulation strategies located there would be beneficial in most circumstances.
- Try to avoid metaphors or idioms.
- A carefully considered seating plan is often needed. Try to sit away from distractions and near positive role models. Sitting near the teachers locations can be helpful. If a young person needs an exit strategy then sitting near the door may be helpful.
- Reduce the cognitive load on the young person by chunking instructions and using visuals to support learning.
- Now and next boards or task lists to complete are good ideas.
- Provide reading panes or limited the amount of text visible when using handouts to focus the young person on only the information that is needed.
- Consider sensory breaks if a pupil requires them.
- Give as much prior warning about changes that may be occurring.
- Multi-sensory learning strategies prove very effective.
- Think about how instructions can be recorded so the young person can play them back whenever needed.
- Memory games or sorting activities can be particularly helpful.
- Concrete resources can help particularly in Maths.