

Foetal Alcohol Spectrum Disorder

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Alcohol Use in Pregnancy

- Foetal Alcohol Syndrome (FAS) was first described over 40 years ago but not defined until 1973.
- The worldwide incidence of FAS is 0.97 cases per 1000 births. Most common cause of non genetic learning disabilities around the world (BMA, 2007)
- The prevalence of Foetal Alcohol Spectrum Disorder (FASD) is unknown in the UK. No standardised approach to making and recording the diagnosis (Winstone et al, 2015)
- When a pregnant woman drinks, the alcohol consumed affects both her and her unborn baby.
- The effects of alcohol can also impact on parenting and safeguarding child/ren

Estimated 250,000 -350,000 children have parents who are problematic drug- users.

1.3 million children live with parents who are thought to misuse alcohol.

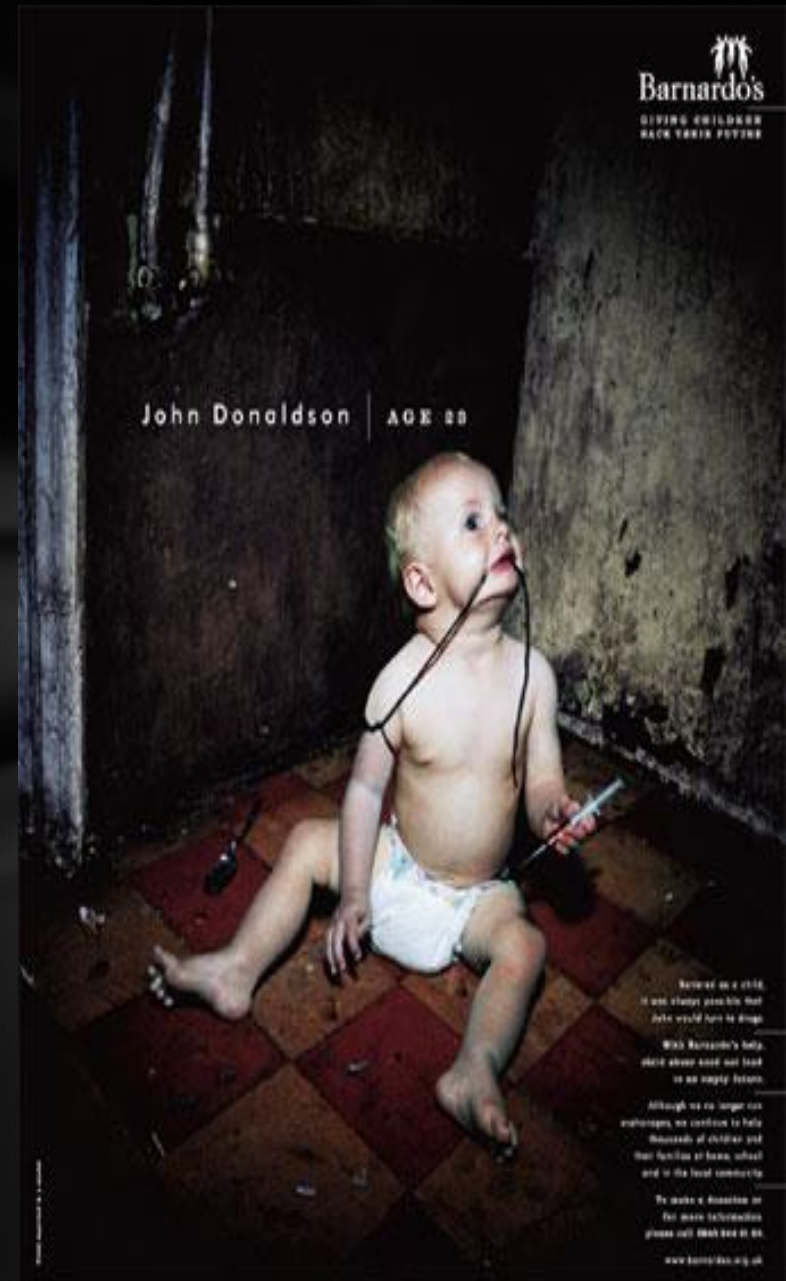
(The Protection of Children in England – a Progress Report', 2009)

Substance or alcohol misuse were factors in 21% <1 year olds who died in Leeds 2006 -2008.

(Fairhead (2008) Child Death Reviews)

Substance misuse present in 57% SCRs 2003 – 2005.

(Analysing Child Death Reviews & Serious Injury through Abuse & Neglect DCSF 2003-2005)



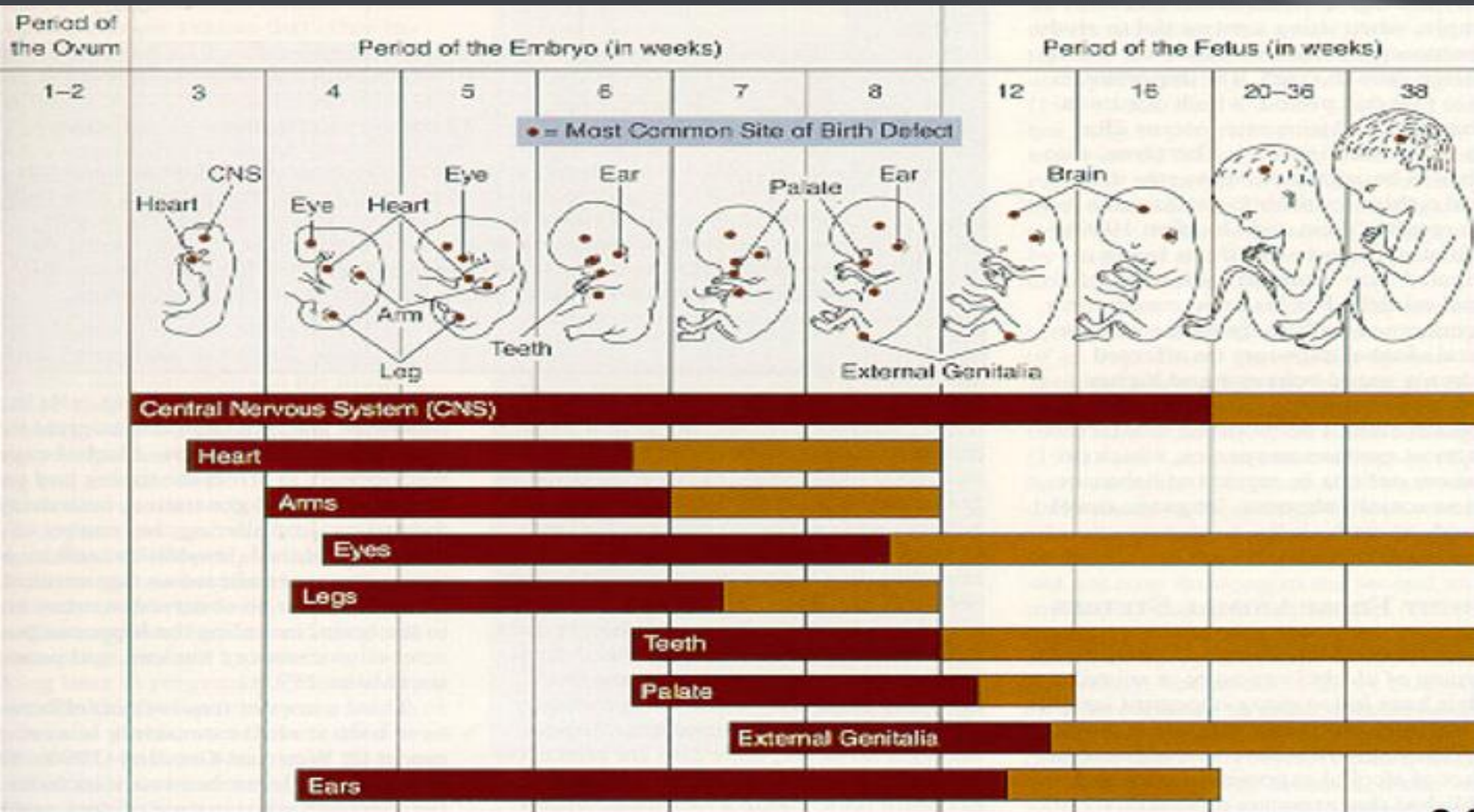
NICE Guidance 2008

- New Pregnant women and women planning a pregnancy should be advised to avoid drinking alcohol in the first 3 months of pregnancy if possible because it may be associated with an increased risk of miscarriage.
- New If women choose to drink alcohol during pregnancy they should be advised to drink no more than 1 to 2 UK units once or twice a week (1 unit equals half a pint of ordinary strength lager or beer, or one shot [25 ml] of spirits. One small [125 ml] glass of wine is equal to 1.5 UK units). Although there is uncertainty regarding a safe level of alcohol consumption in pregnancy, at this low level there is no evidence of harm to the unborn baby.
- New Women should be informed that getting drunk or binge drinking during pregnancy (defined as more than 5 standard drinks or 7.5 UK units on a single occasion) may be harmful to the unborn baby.

Foetal Alcohol Spectrum Disorder

- Alcohol causes more damage to the developing foetus than any other substance including heroin and cocaine. (Institute of Medicine 1996).
- FASD is an umbrella term for a range of effects which may include physical, mental, behavioural problems, and/or learning difficulties.
- The effects can be severe to mild, ranging from loss of IQ, to attention disorders, to heart defects, specific facial features, kidney damage, hearing problems and death. Many children experience serious behaviour and social difficulties which last a lifetime.

Critical periods for alcohol-related birth defects

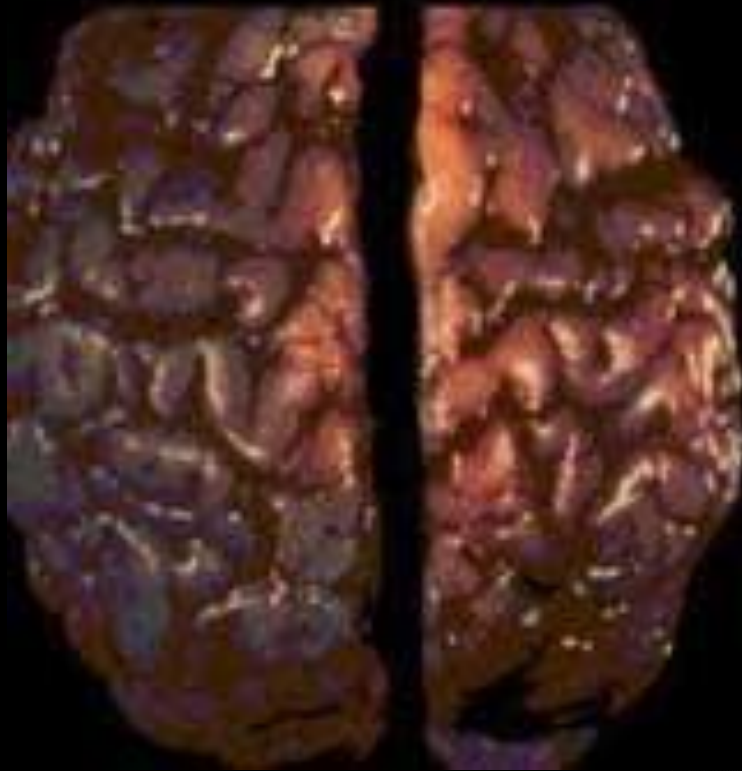


FASD continued

- Alcohol is a known teratogen, which is a substance that can damage the developing embryo and foetus.
- FASD/FAS is the leading cause of preventable birth defects.
- The foetal brain is sensitive to the effects of alcohol exposure. Alcohol robs the brain of oxygen and destroys brain cells that can never be regenerated.

The FASD brain

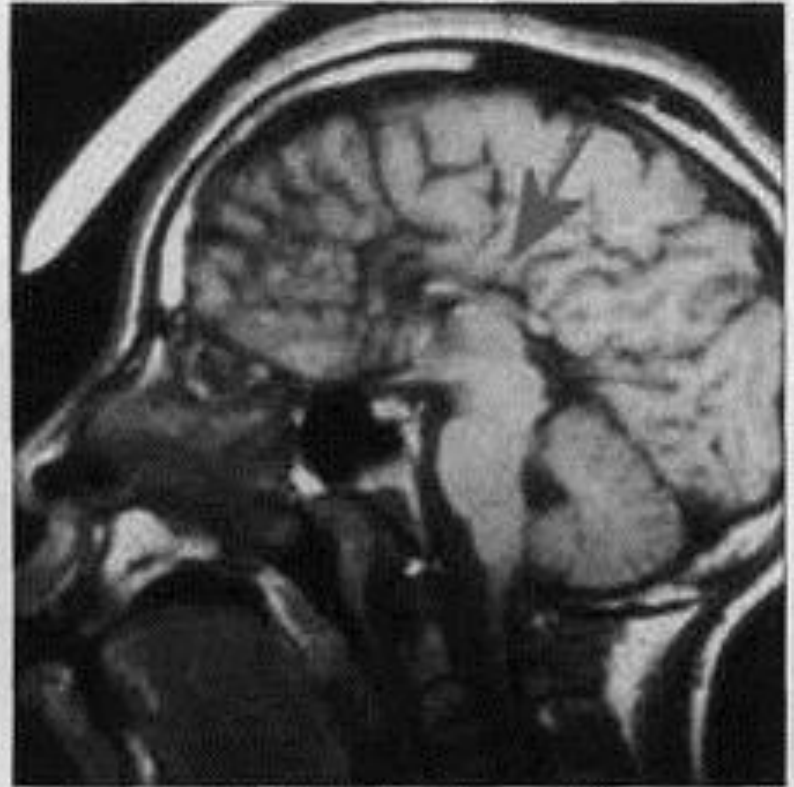
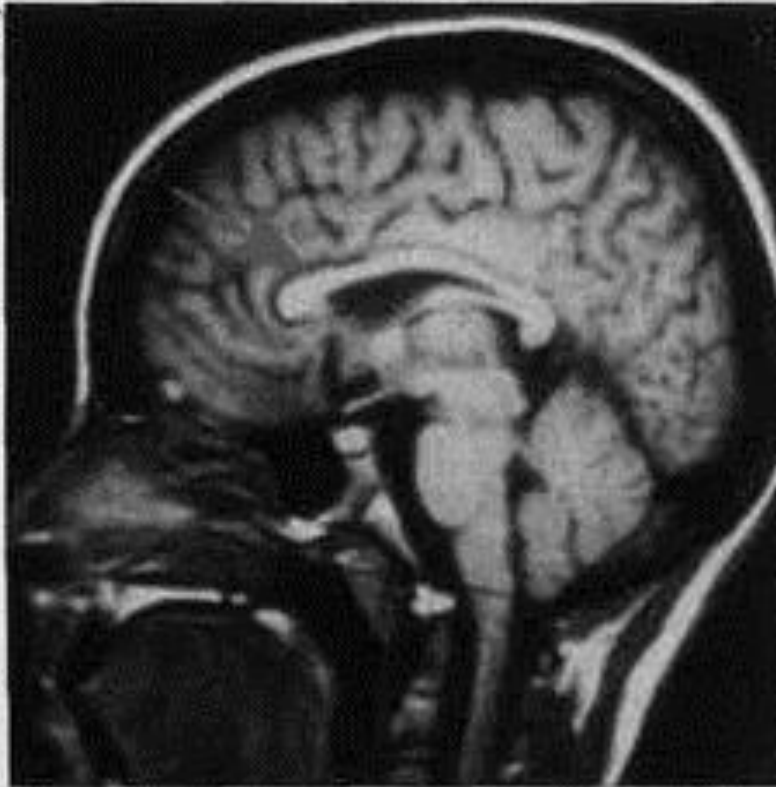
Brain of baby without FAS



Brain of baby with FAS

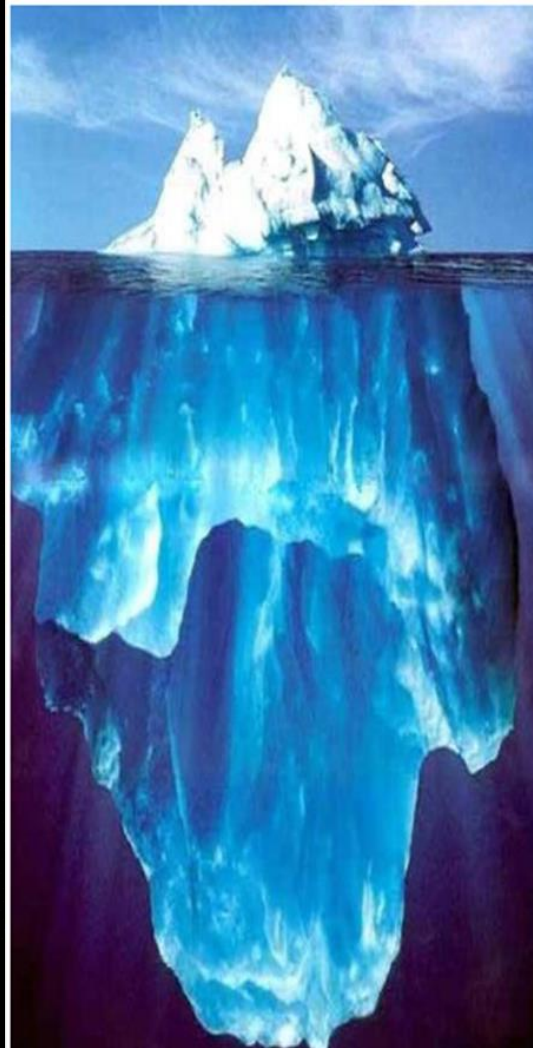


Brain scan of 13 year old child



Arrows indicate the corpus callosum in a normal child (left) and its absence in a child with fetal alcohol syndrome (right).

The FASD Iceberg



FAS

Fetal Alcohol Syndrome

PFAS

Partial Fetal Alcohol Syndrome

ARND

Alcohol Related Neuro-Developmental Disorder

ARBD

Alcohol related Birth Defects

**F
A
S
D**

Features of Foetal Alcohol Syndrome



FAS

Foetal Alcohol syndrome is the only disorder of the spectrum which displays facial characteristics:

- Small head circumference
- Small palpebral fissures – Eye-width shortens with increased prenatal alcohol exposure. Widely spaced eyes
- Flat mid-face
- Short, upturned nose
- Smooth, wide philtrum
- Thin upper lip
- Underdeveloped jaw



Discriminating
Features

Associated
Features

short palpebral
fissures

epicanthal folds

flat midface

low nasal bridge

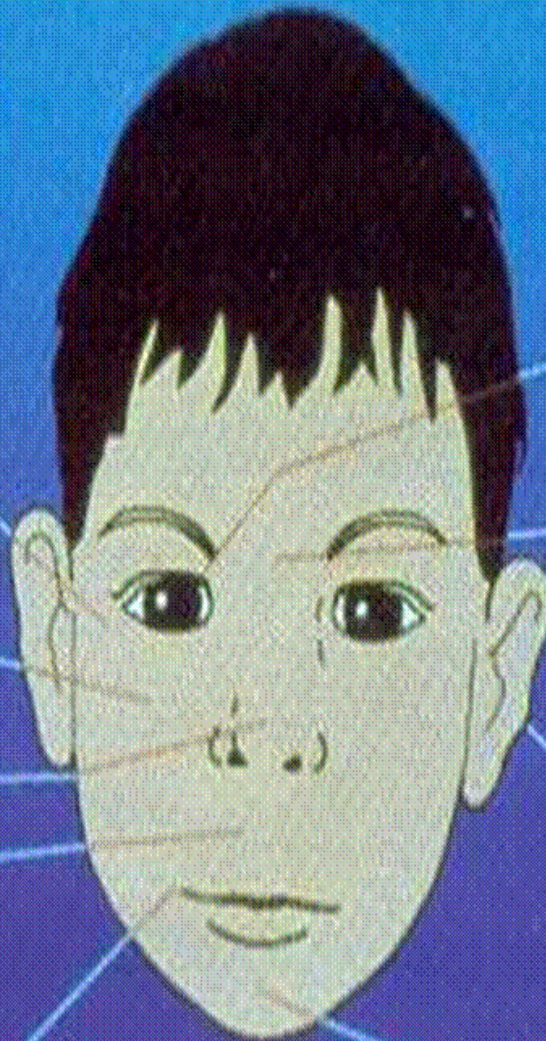
short nose

minor ear
anomalies

indistinct philtrum

thin upper lip

micrognathia



Impact of alcohol on childhood and beyond

- Weak suckle, poor sleep/arousal patterns
- Low birth weight, gain weight slowly, remain small (look failure to thrive)
- Abnormal muscle tone, tight or floppy
- Slow to reach developmental milestones
- Cognitive impairment

Older child:

- Poor abstract thinking, poor impulse control, poor short term memory, poor boundaries
- Developmental age begins to noticeably fall behind chronological age
- Disrupted school experience
- Poor fine and gross motor skills

Impact of alcohol on childhood and beyond continued...

- Frustration leads to poor social judgment, poor interpersonal skills, and antisocial behaviour.
- As alcohol-exposed children grow older, deficits in cognitive, behavioural and socio-emotional function become increasingly noticeable, leading in cases to alcohol/drug use
- Have difficulty maintaining employment and often do not become financially independent.

ALCOHOL ASSESSMENT & TREATMENT IN PREGNANCY

Assessment and
motivational counselling

- Drinking diary
- Decision matrix

Detoxification:

- Chlordiazepoxide
- Vit B

Disulfiram

- contra indicated



DISCUSS

- The issues faced by a family that has a parent/s who is/are problem drinker(s).
- Consider the following:
 - The effect on parenting
 - The effect on the children
- What are the wider issues associated with parental alcohol misuse.

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REFERENCES

National Institute of Clinical Excellence (2008) Antenatal Care, NICE clinical guidelines, NICE, London.

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Winstone A & Varity C (2015) "Antenatal alcohol exposure: An East Anglian study of midwives' knowledge and practice", in British Journal of Midwifery, March 2015, vol. 23, No 3, Pages 180-185.