

Fetal Alcohol Syndrome: Epidemiology

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Birth prevalence of FAS

per 100,000 live births

USA	60-460
Indigenous Canadians	720
France	230
Sweden	160-250
South Africa	3900
Northern Territory	
Indigenous	170
(+partial, AR)	470)
Western Australia	18
non-Indigenous	2
Indigenous	276

Sources: *Sampson et al, 1997; Williams et al, 1999; Harris et al 2003; Bower et al, 2000*

APSU study 2000-2003

52 confirmed cases of FAS

- 17 FAS, alcohol exposure confirmed
- 33 Partial FAS, alcohol exposure confirmed
- 2 Suspected FAS, exposure not confirmed

22 unconfirmed cases of FAS

- 19 insufficient information to meet case definition

Other substance use in pregnancy* (n=52)

•Nicotine	35
•Marjuana	14
•Cocaine	1
•Heroin	3
•Glue/solvents	2
•Methadone	1
•Benzodiazepines, naltrexone, amphetamines, anti-depressants (Data incomplete)	

* Some children exposed to more than one drug

Alcohol exposure in pregnancy (n=52)

46 (88%) High exposure

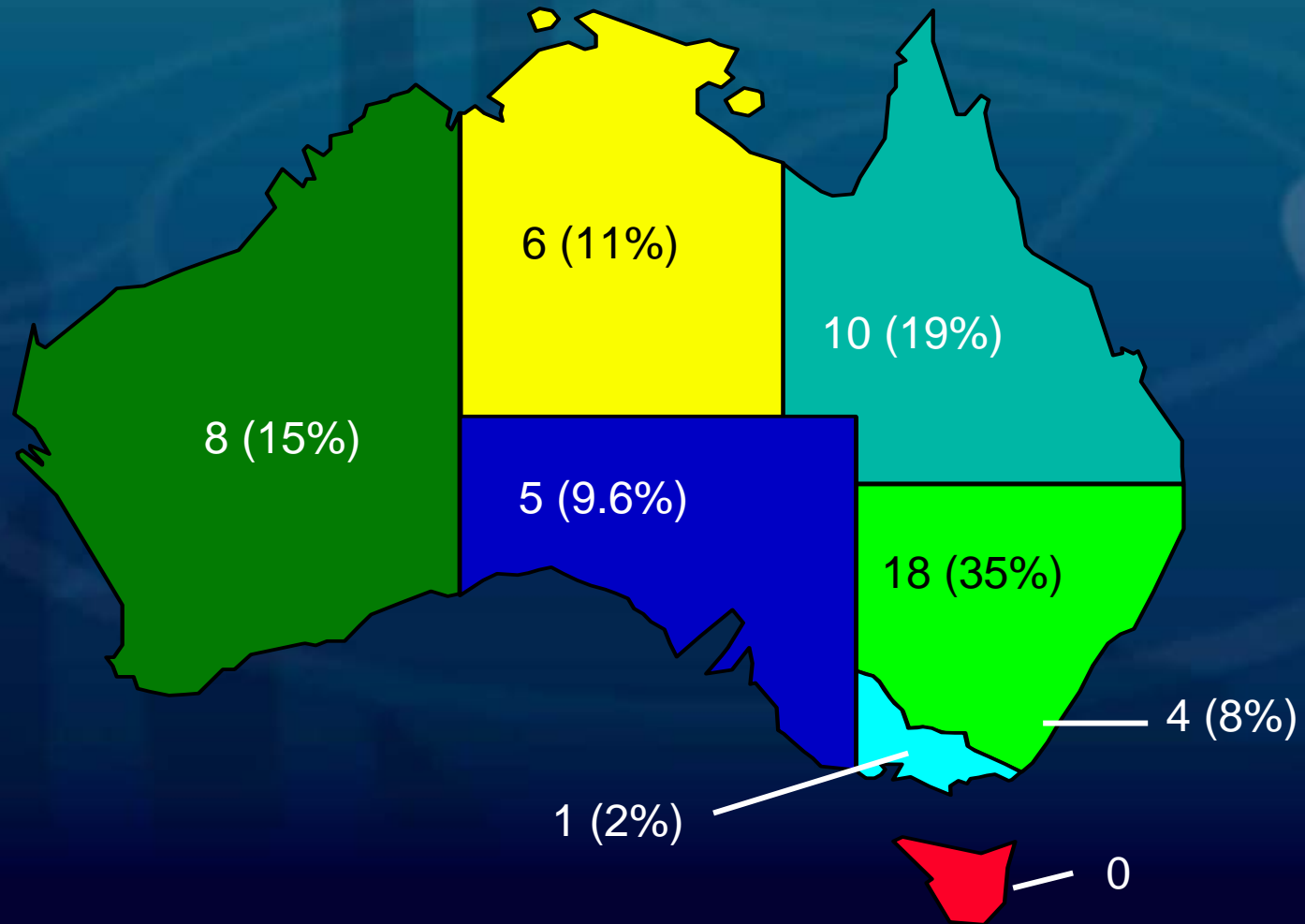
>4 drinks/sitting at least weekly

4 (8%) Some exposure

< 4 drinks/sitting at least weekly

2 (4%) Unknown exposure

FAS cases by state (n=52)



Epidemiology (n=52)

Age at Dx: Median 2.8y, (newborn -12y)

Gender: 29/52 (56%) male

Indigenous: 26 (50%)
11 unknown

Mothers' birthplace:
Australia 50
NZ 1
unknown 1

Family characteristics (n=52)

Mothers' highest level of education

7 Primary (13%)
17 secondary school
1 tertiary
27 unknown

Affected sibling

14 yes (27%)
18 no
20 unknown

Place of residence

22 - biological parent(s)
29 - adopted, fostered, care of relative (58%)
1 - unknown

Comparison with cases not meeting definition

	<i>Definite (52)</i>	<i>Probable (22)</i>
<i>Age at diagnosis</i>	2.8 y	4.7y
<i>Sex (M)</i>	56%	64%
<i>Aboriginal or TSI</i>	50%	68%
<i>Alcohol (high)</i>	89%	68%
<i>Alcohol (unknown)</i>	3.5%	27%
<i>Sibling</i>	27%	59%
<i>Out of home care</i>	58%	77%

* Similar rates of CNS, behavioural and other clinical features

Prevalence of FAS based on APSU data

52 confirmed cases

= cases FAS per 100,000

+ 22 unconfirmed cases

= cases FAS per 100,000

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Why are Australian rates lower than elsewhere?

- Is there a real difference?
- Is FAS less well reported in Australia?

FAS may be under-diagnosed because:

- Paediatricians don't see all children with FAS
- Strictness of diagnostic criteria
- Diagnosis not easy
- Information on alcohol in pregnancy can be difficult to elicit
- Concerns about stigmatisation?

FAS is only the tip of the iceberg

- Fetal alcohol effects (FAE)
- Alcohol-related neuro-developmental problems (ARND)
- Alcohol related birth defects (ARBD)

- Continuing debate about safe levels of alcohol consumption in pregnancy especially for more subtle neuro-developmental outcomes
- A safe amount for alcohol intake in pregnancy has not been established

What are the consequences of FAS?

