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At the end of today you will have:

Developed an understanding of:

- the story of brain development and the impact of trauma
- the importance of safety in responding to trauma and healing from
- Fetal Alcohol Spectrum Disorder and its impacts on children and young people

Explored:

- the story behind behaviour
- activities and strategies that can help heal the impacts of trauma and support young people with FASD

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Trauma and Fetal Alcohol Spectrum Disorder (FASD)

“The trauma our communities have sustained has brought into being complex harms, of which FASD is one of the most damaging. With better understanding of trauma, we will overcome its harmful effects and ‘Make FASD History’ . We will allow our societal strengths to flourish again, as we confront, heal and put an end to all forms of harm caused by intergenerational trauma.”

June Oscar AO, Aboriginal and Torres Strait Islander Social Justice Commissioner, 2017

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Children and young people are like trees

What helps trees grow?

How does where a tree grows change the tree?

Survival Strategies



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Children's brains grow in relationship with others

Carers, family
Community
Culture

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Connecting the parts of the brain

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Hard times can affect children and young people's development

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Defining trauma

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Trauma

- Intergenerational trauma
- Transgenerational trauma

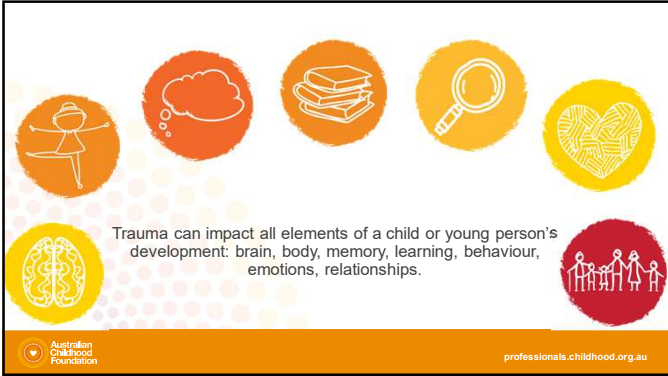
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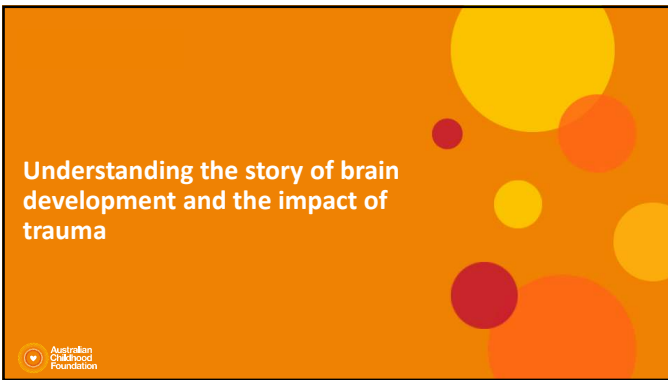
- What are some of the hard things you see your children and young people experiencing?
- What are the strengths you see in your children and young people?

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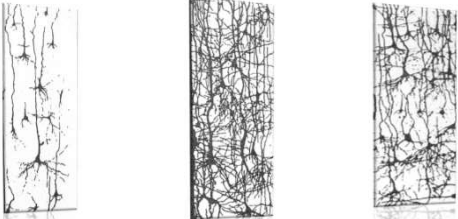
Brain parts talk to each other through wires



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Growing and shedding pathways



Newborn 6 years old 15 years old

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Neuroplasticity- Our brains' capacity to change



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Hand model of the brain (Dan Seigel)




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Basic life functions- Brainstem

- Basic life functions
- First part of our brain to develop
- This is the most developed brain part at birth
- Responsible for our heart beat, breathing, sucking, temperature control, blood pressure



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Brain stem under stress and trauma


- may experience fast or slower heart rate
- shortness of breath or breathing difficulties
- sleep disturbances and unsettledness
- sucking and swallowing and digestion difficulties
- may feel hot or cold or not notice changes in temperature

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Movement and balance- Cerebellum

- Helps us to know where our body is in space
- Helps us with our posture and balance
- Helps us not to fall over and to control our movements

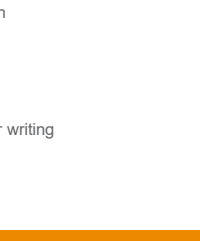


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Cerebellum under stress and trauma

- difficulty in maintaining posture, balance coordination
- difficulty in doing tasks that require balance
- don't know where our bodies are in space
- difficulty with voluntary movement tasks – walking or writing




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Sorting & sending centre- Diencephalon

- develops mainly after birth
- sorts out messages coming into the brain and sends them to the rest of the brain and body
- uses hormones to send signals to body
- hormonal signals tell your body what it needs, eg. food, water, love



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Diencephalon under stress and trauma


- can't sort the information coming into the brain
- can't send information to the memory and thinking parts of the brain – that pathway shuts down
- children and young people may not know what they need eg thirsty, hungry
- it sends messages to the amygdala which is the part of the brain that helps keep us safe

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Emotions centre- Limbic centre

- The part of the brain that helps us attach an emotion to an experience or memory
- This part of the brain is particularly involved with the emotions of fear and anger
- Involved in attachment processes
- This area develops mainly after birth



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Amygdala & Hippocampus

Amygdala

- the 'smoke alarm' of the brain
- is mature at birth
- processes & stores implicit memories

Hippocampus

- matures between 2-3yrs of age
- provides the story to memories & puts them into long-term memory



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The amygdala under stress and trauma

- can be over active or under active
- reminders and flashbacks of the trauma
- difficulty in managing emotions
- difficulty in reading facial expressions
- Constantly 'firing' – can hijack the thinking brain (cortex)

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The hippocampus under stress and trauma


- Can't place memories in time or place
- Working memory, retention and recall (retrieval) capacity is severely impacted
- Narrative/autobiographical memory is affected

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Complex thinking- Cortex

- The largest part of the brain
- Responsible for thought and action
- Examples of what it does:
 - Reasoning
 - Decision making
 - Logic
 - Judgement
 - Voluntary movement
- Last part of the brain to fully mature



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Cortex areas under stress and trauma

Unable to:

- use foresight and anticipation, focus or sustain attention
- plan, organise or prioritise or make decisions well
- reflect or have self-awareness
- be enthusiastic, motivated or persist with activities
- use impulse control

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Rhythmic, Repetitive, Relational

Desktop drumming with Hoani and James

<https://www.youtube.com/watch?v=2-MpzjxEVBU>

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Safety & the Brain

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Feeling safe-Neuroception

"Before we can engage in social behaviour and learning we must first feel safe."
 (Porges, 2015, p.115).

Safety
 When do you feel safe?
 When do our children and young people feel safe?

http://fewinstitute.com.au/wp-content/uploads/2017/08/img-0rategie2.jpg

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Line of my day

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I feel safe

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I don't feel safe- Fight, Flight and Freeze

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I don't feel safe- Collapse

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The River Story

CALM TRIGGER CALMING

What's going on under the water?

Worries Worries Worries

TRIGGER POINT CALMING

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Developmental trauma healing

<https://beaconhouse.org.uk/wp-content/uploads/The-Three-Rs.pdf>

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Supporting healing

- **Relationships** (safe)
- **Relevant** (developmentally-matched to the individual)
- **Repetitive** (patterned)
- **Rewarding** (pleasurable)
- **Rhythmic**
- **Respectful** (of the child, family, and culture)

Bruce Perry, as cited by <https://attachmentdisorderhealing.com/developmental-trauma-3>

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Strategies

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Mindfulness and co-regulation- Dadirri

Dadirri
the deep inner
spring inside us

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Trauma can impact all elements of child and young person's development: brain, body, memory, learning, behaviour, emotions, relationships.

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Fetal Alcohol Spectrum Disorder

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Marulu Strategy



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What is FASD?

- FASD is a lifelong disability
- Causes challenges in daily living, motor skills, physical health, learning, memory, attention, communication, emotional regulation, and social skills
- There are more children born each year with FASD than with ASD, Spina Bifida, Cerebral Palsy, Down Syndrome and SIDS combined (Mather Wiles & O'Brien, 2015)



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Who is at risk?

Prenatal alcohol exposure is a risk to babies from all cultures and socio-economic backgrounds.....

.....wherever there is alcohol, there is the potential for FASD



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Why we need to know about FASD

- Children with FASD can have high rates of mental illness and trauma due to neglect, abuse and inappropriate support
- The disability is missed- behaviour and learning challenges are often seen as trauma or behaviour disorders;
- The developmental age of a child with FASD is unlikely to match their chronological age.
- Without supports tailored to the areas of disability and strengths, interventions fail. This can lead to further trauma and negative outcomes.



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Why do we need to know about FASD

- The Banksia Hill Youth Detention Centre Study in Western Australia found that 36% of young people detained had FASD, while 89% were found to have at least one form of severe neurodevelopmental impairment.
- International research has reported a high prevalence of FASD in young people and adults in prison and correctional facilities – 60% of youth with FASD become involved with the justice system and people with FASD are 19 times more likely to be jailed compared to those without FASD
- High rates of false confessions; FASD affects as many as 30% of incarcerated adults; those adults had an average of 15 convictions as youth

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What is currently happening in Youth Justice in the NT?

- Assessment when young people are detained
- Court requested for Youth Court – using to inform sentencing
- Telehealth - PATCHES

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FASD in Youth Justice

<https://www.nofasd.org.au/parents-carers-and-families/resources/#police-cards>

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FASD Assessment includes:

- History – presenting concerns, developmental, medical, mental health, behavioural and social
- Birth defects- dysmorphic facial features, other major or minor birth defects
- Adverse parental and postnatal exposures, including alcohol
- Known medical conditions – including genetic syndromes and other disorders
- Growth information

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Impact of FASD

- Brain structure
- Motor skills
- Cognition
- Language
- Academic achievement
- Memory
- Attention
- Executive function
- Emotional regulation
- Adaptive behaviour

<https://www.fasdhub.org.au/fasd-information/understanding-fasd/what-is-fasd/brain-impairment-in-fasd/>

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Morgan Fawcett-living with FASD



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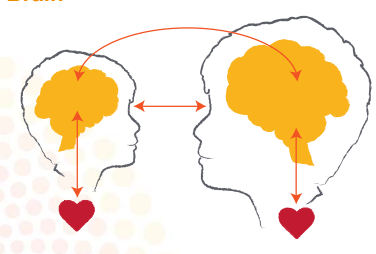
Common challenges

- Structure e.g. time, multi-step task
- Sequence e.g. understanding more than 2 instructions
- Cause and effect relationships e.g. difficulty learning from mistakes
- Concepts of time
- Understanding other people's emotions and feelings
- Learning and relearning tasks

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External Brain




A diagram showing two human profiles facing each other. Inside each head is a yellow brain. A double-headed arrow connects the two brains. Below each brain is a red heart. A red arrow points from the brain to the heart in each profile, and another red arrow points from the heart back to the brain. A curved red arrow also connects the two hearts.

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Considerations for your practice.....

- Keep it simple**
 - Avoid distractions, bright things, lighting, too much stimulus
- Change your expectations**
 - Think could this be the brain
 - Think- they cannot do it: not that they won't
- Focus on their strengths** and work with these
- Prevent problems**
 - Do not react to the problems
 - Think: could this be brain?
- Try not to judge** behaviors and try to see them differently.
- Consider the environment** and if it works for the person with FASD



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Supporting young people to succeed- Questions you could ask

- What is the task or expectation the young person is expected to do (and failing at/refusing to do)?
- What does the brain— anyone's brain— have to be able to do in order to successfully complete that task or meet that expectation?
- What do you know about how the young person's brain functions in those areas? Do they have those skills?
- How old is the young person developmentally (which might be different than their chronological age)?
- What are the behaviours you see in this environment or with this situation?
- What are the young person's strengths and interests?

Based on all the information what can we do to help this child be successful?

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What's behind behaviour



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What's behind the behaviour?

- What is the behaviour telling me?
- What might have triggered this behaviour?
- How does this behaviour serve to protect the young person or child or help them survive?
- Could this behaviour related to FASD and if yes, how?
- How can I support meeting the young person's need?
- What is its impact on me?
- How can I get support?

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Looking after ourselves

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