


### Brainstem - basic life functions



- 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


©Australian Childhood Foundation 2018

Australian Childhood Foundation

SMART Strategies for Managing Abuse Related Trauma

1

### Cerebellum - movement and balance



- 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


©Australian Childhood Foundation 2018

Australian Childhood Foundation

SMART Strategies for Managing Abuse Related Trauma

2

### Diencephalon - sorting & sending Centre



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


©Australian Childhood Foundation 2018

Australian Childhood Foundation

SMART Strategies for Managing Abuse Related Trauma

3

### Limbic Lobe - emotional gateway



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


©Australian Childhood Foundation 2018

Australian Childhood Foundation

SMART Strategies for Managing Abuse Related Trauma

4

### Amygdala & Hippocampus



- Amygdala**
  - the 'smoke detector' of the brain
  - is mature at birth
  - processes & stores implicit memories
- Hippocampus**
  - matures between 2-3yrs of age
  - provides context to memories & embeds into long-term memory


©Australian Childhood Foundation 2018

Australian Childhood Foundation

SMART Strategies for Managing Abuse Related Trauma

5

### Cerebral Cortex – complex thinking



- The largest part of the brain
- Associated with higher brain function such as thought and action
- Examples of functions:
  - Reasoning
  - Logic
  - Judgement
  - Voluntary movement


©Australian Childhood Foundation 2018

Australian Childhood Foundation

SMART Strategies for Managing Abuse Related Trauma

6

### The Prefrontal Cortex- executive function



Final part of the brain to reach maturity in one's mid to late 20s.

- Self awareness
- Reasoning and judgement
- Foresight and anticipation
- Focusing and sustaining attention
- Planning organising and prioritising
- Decision making
- Reflecting
- Enthusiasm, motivation and persistence
- Impulse control
- Working memory

Australian Childhood Foundation 2018

**Australian Childhood Foundation**

**SAFETY**  
Strategies for Managing Abuse Related Trauma