**Physiological and emotional responses to injury and illness in children.**

Children cannot always be regarded as small adults from a First Aid point of view. Guidelines and principles are similar but there are further considerations.

Children have different physiology and first aiders need to be aware of this when assessing vital signs. Additionally a child’s response to injury and stress can also be markedly different. Take a look at the table below.

|  |  |  |
| --- | --- | --- |
| **Age** | **Breathing Rate** | **Pulse** |
| 1-5 | 20-30 | 120-150 |
| 5-12 | 15-20 | 80-110 |
| >12 | 12-20 | 60-90 |
| Adult | 12-18 | 60-90 |

So it follows that an adult with a breathing rate of 25b/min and a pulse of 120/min may be extremely unwell but for a child this would be within normal range.

* Young children are small so multi system injury is common – organs are closer together so chest and abdominal injuries often occur at the same time
* The same amount of force is transmitted to a small child as a larger adult, so a minor collision for an adult may well cause substantial damage to the child.
* A child’s bones are less brittle than an adults bones so the force of an impact to the head and chest is transmitted to the underlying structures - rib and skull fractures are less common but contusion (lung bruising) and compression (brain swelling/squashing) are more likely
* Children have fewer oxygen stores than adults so airway problems rapidly lead to life threatening conditions. Effective early airway management is crucial
* Shocked children are difficult to detect as their elastic arteries allow them to compensate for deterioration – can lead to sudden onset of decline.
* A child’s psychological state complicates matters. Crying and stress increases heart, pulse and breathing rates.
* Children have a large surface area to volume ratio and their thermoregulatory (ability to keep warm) mechanisms are not quite as effective as our own. They lose heat quickly and can be more prone to hypothermia than adults.

**What we can do?**

* Adopt a confident, friendly approach
* Ask for consent/permission if need to assess injuries
* Explain what you’re doing and why.
* Accept that pain thresholds and response to stress can differ markedly from person to person and child to child. Reassure and do not belittle a child’s response to a situation.
* Respect a child’s dignity (being stared at = intimidating, stressful)

**Protecting yourself from allegations of abuse:**

* Always work in an open environment – ensure you are protected from suspicion or allegation
* Avoid being with children on your own. If necessary for privacy to take child somewhere make sure you have another adult with you – leave doors open etc.
* Always ask for consent and explain what you are doing and why.

**Swift First Aid – January 2021**