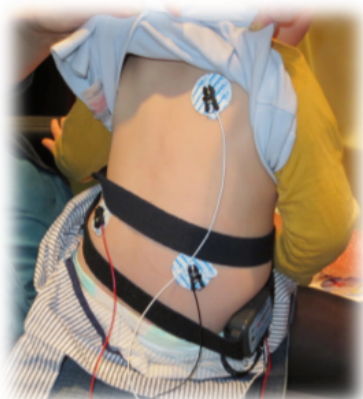


Measures of Alertness

Researchers at the Centre for Brain and Cognitive Development are using equipment to measure arousal and activity levels. This includes measuring heart rate, movement, skin temperature and skin conductance. This helps us to understand how the body responds to particular events or types of information.

You may have seen doctors in hospitals or on television taking ECG (electrocardiography) readings of the electrical activity of the heart. The equipment we use is known as the Biopac system. We place sensors on the back, feet, hands or chest. These sensors can tell us about how different parts of the nervous system influence heart rate. We can also use these sensors to measure skin conductance, skin temperature, and movement. The sensors are attached to a monitor that sits comfortably in an armband.

These techniques are completely safe and non-invasive. There is no risk associated with measuring these types of activity. For some types of measurement, a tiny current is passed between the sensors. This happens with some of the heart rate sensors, and the sensors on the armband. The charge is less than 1/1000000 of the power of a static charge you might receive when touching a door knob in a dry room.



Sensors are placed on the back to measure heart rate and on the foot to measure skin conductance and skin temperature.

If you are happy for us to proceed with the study, this is what will happen:

- You will be with your baby at all times during the study.
- First we will stick the sensors on your child's back and feet (or chest or hand).
- Then we will place an armband around your child's ankle or wrist.
- While we are putting the sensors and armband on we will play with your

baby. Generally babies are quite happy having the sensors and armband on, but if your baby becomes fussy at any point, we can take them off straight away.

- We will also give you a Polaroid photograph of your baby wearing the Biopac system as a souvenir to take home.

Please ask if you have any question