

## What is the heart system check?

To check your child's heart system, we would like to do two simple checks of blood vessels. These are the 'Intima Media Thickness' or *IMT* check, and the 'Pulse Wave Velocity' or *PWV* check. These are painless and described below.

### Getting ready:

- Your child should wear regular clothes such as shorts, skirt or lightweight long pants. Please avoid thick, stiff clothing such as jeans and thick tights.
- **Three hours before coming** your child should avoid drinks with caffeine (for example, hot chocolate, milo, tea, coffee and energy drinks). Water or plain milk is OK.
- **One hour before coming** your child should avoid large meals or being around people who are smoking.

To help make the checks as fun as possible for your child, we encourage you to be in the room. We may need to do the checks on you to make your child feel more at ease.

### What happens in the checks?

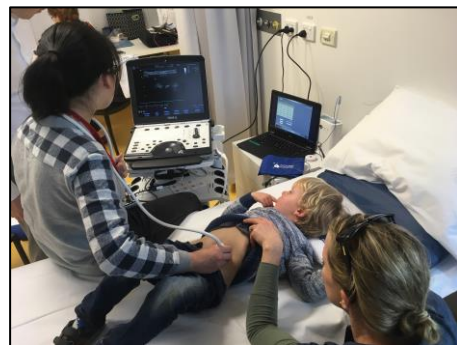
#### 1. Intima Media Thickness (IMT check).

For this check, an ultrasound is used. Ultrasound is a safe and painless test. It is the same test done in pregnancy to check on the baby.

It involves a few easy steps.

1. We will ask your child to lie still on the bed for 5 minutes without talking (or talk as little as possible). We will have some videos for them to watch.
2. We put the ultrasound and some jelly on your child's stomach. The jelly may feel cool on your child's skin.
3. We will then ask your child to lie slightly on their side, and the ultrasound will be placed over a few points of their neck.

We will ask your child keep as quiet and still as possible during this check. It will take about 10-15 minutes.



The Latrobe Early Life Follow-up Study: the child health and development stream of the  
Hazelwood Health Study

## 2. Pulse Wave Velocity (PWV) check

The PWV check involves a few easy steps.

1. A blood pressure cuff will be placed around your child's thigh and on their upper arm.
2. We will measure the distance from the top of your child's breastbone to the blood pressure cuff on their thigh.
3. We will measure the distance from the side of your child's neck to the top of their breastbone.
4. The blood pressure cuff will be inflated on your child's arm, which will cause a squeezing sensation. The cuff will be inflated at least twice until two similar measurements are recorded. At the same time, the ultrasound will read your child's pulse at their wrist.
5. The blood pressure cuff on your child's thigh will be briefly inflated.



We will ask your child keep as quiet and still as possible during this check. It will take about 10-15 minutes.

If at any point you or your child do not want to continue with the checks, you can withdraw. Any information will help the study, even if all the checks are not completed.

Our staff are trained in working with children. They will be on-hand to assist in making your child comfortable. Toys and videos will be available to keep your child occupied during the checks. When they are finished, your child will be given a gift (like stickers or a book) which you can choose.

### Any questions?

Our team are happy to answer any questions before, during or after the checks. You can email [Latrobe.ELF@utas.edu.au](mailto:Latrobe.ELF@utas.edu.au) or call the study support line on 1800 322 102.