- 1. Show them the device and tell them that the cuff will be placed around their upper arm. When you press a button it will inflate and they should expect a squeeze around their arm (assure them that it isn't painful, suggested wording 'it won't hurt but it will feel tight around your arm, the most important thing is to keep your arm really still and floppy). The cuff will then deflate slowly.
- 2. Explain to the child that you are going to take their blood pressure and to do this you need them to sit as still and quietly as possible for a few minutes. Ask them to roll their sleeve up to their shoulder (tight or restrictive clothing should be removed).
- 3. Child should be seated with their arm on the table, palm facing up. Remind the child to keep their arm floppy and not to fidget or talk.
- 4. Record room temperature, state of child (relaxed / nervous; still / restless; silent / not silent), tick whether or not they have exercised or had any food or drink in the previous 30 minutes and enter what cuff size was used.
- 5. All measures are done on the right arm. Place the cuff on the upper arm with the indicator mark over the brachial artery.





- 6. The bladder (the part of the cuff that inflates) cuff is positioned between the elbow and the shoulder with the cuff tubing pointing towards the fingers. Ensure the indicator arrow on the cuff falls within the range. Four cuff sizes are available: child; small adult; large adult.
- 7. The display should show SP. If SP is not displayed press the 'Cycle' button to change it to SP

(manual mode).

- 8. After the child has been sitting in a relaxed stated for at least 3 minutes, take the first reading.
- 9. Record the reading (systolic, diastolic and pulse) in the space provided on the measurement recording sheet.



- 10. If error messages occur, check list overleaf and adjust if necessary before continuing.
- 11. Leave a minimum of 3 minutes before taking the second reading. Repeat steps 3 to 10.
- 12. Check that the 2 readings fall within the normal range (see table overleaf). If any readings are outside this range, or missing due to error take another reading and record on the sheet.
- 13. If errors persist or BP is outside the normal range, only continue for a **maximum of 3** readings per child and record all error messages/BP readings.

14. If you are unable to take any of the readings, record the reason why for each reading in the comments section on the back of the recording sheet.

## ENSURE THAT YOU USE THE ANTIBACTERIAL HAND GEL PROVIDED IN BETWEEN EACH CHILD MEASURED

## Other:

Press Stop to pause measurements

Press Review to look at past readings

To stop inflation or cause rapid deflation pull cuff tubing out of machine

Press Clear to wipe the memory of readings

## Normal BP ranges for different age children

Age	Systolic	Diastolic
7	92-125	55-86
8	94-127	55-88
9	95-130	57-90

## **Error Codes**:

• -- User - cancelled Action: none.

• **E0** weak pulse **Action**: tighten cuff/check for leaks

• **E1** Motion artefact **Action**: reduce motion of child

• **E3 - 6** Inflation/deflation errors **Action**: check for kinks or leaks

• **E20 - 21** Indeterminate BP **Action**: tighten cuff/check for leaks,

reduce motion.

• **E23 - 26** Out of range error Action: mark this on the measurement recording sheet.

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