

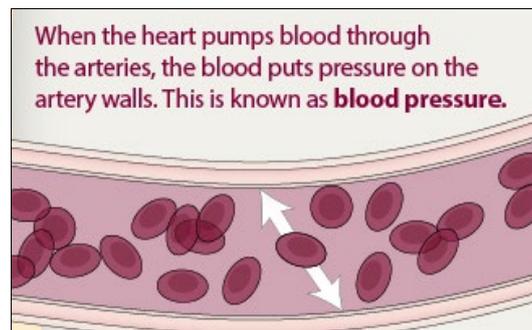


Blood Pressure

Whānau/Family Information – Neonatal Services

Blood pressure (BP) measurement is one of the important vital signs to monitor in infants admitted to a neonatal intensive care unit (NICU). It is part of the assessment of adequate circulation (blood flow).

Blood pressure reflects both the volume of blood and the ability of the heart to pump effectively.



Blood pressure is measured in millimeters of mercury (mmHg) and is given as 2 figures:

- Systolic pressure – the pressure when your heart pushes blood out
- Diastolic pressure – the pressure when your heart rests between beats
- You may hear Doctors and nurses talk about mean arterial pressure (MAP) which refers to an average blood pressure during the systolic and diastolic cycle

Normal BP in newborns varies with gestational age, and birth weight. Low blood pressure is common in very preterm infants. There are several reasons why this might occur including infection, loss of fluid, or when the lungs or heart might need support.

Sometimes intravenous (IV) medications may be given for a short time to help improve the heart's ability to pump effectively. If there has been a loss of fluid, IV fluids may be given for a short time to improve blood volume.

A high blood pressure reading may occur if the infant was in pain, moving or unsettled when the blood pressure was measured. Rarely, there is a disease process responsible for the high blood pressure, which would require further investigation.

Maintaining a stable adequate blood pressure is important for a steady blood flow to the brain, kidneys, gut and other organs.

On the neonatal unit, blood pressure can be measured by a small cuff which is placed around an arm or leg or it can be measured through a line which is placed in the umbilical or hand/foot arteries.

Blood pressure measurements are taken until the measurements are normal, stable and infant is getting better.

