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## Patent Ductus Arteriosus or PDA

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### What is a Patent Ductus Arteriosus or PDA?

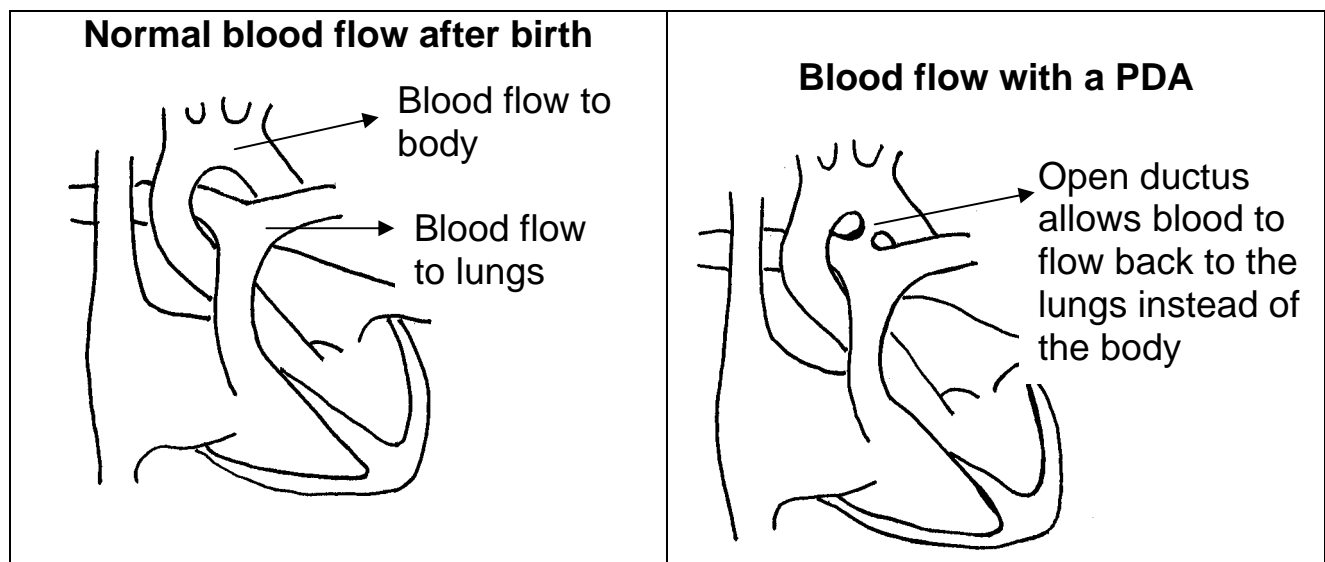
The word patent means 'open'. A ductus arteriosus is a small connection between two large blood vessels near the heart. In an unborn baby, the ductus should be open to allow blood to bypass the lungs, which are not yet being used for breathing.

After birth, the ductus should close so that blood goes to the baby's lungs. For babies born near their due date, the ductus usually closes within 1 to 2 days. For babies born more than 3 weeks before their due date, closing of the ductus is often delayed.

A patent ductus arteriosus or PDA means that the ductus arteriosus remains open after birth. There is still a connection between blood vessels near the heart that allows blood going to the body to flow back to the lungs.

Depending on the size of the ductus, a small or larger amount of blood may flow back into the lungs. This can put a strain on the heart and lungs by making them work harder.

### A Close Up View of Some Blood Vessels in the Heart



Please turn over →

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## How often does PDA happen?

The ductus remains open in:

- 1 out of every 5 babies born more than 3 weeks before their due date
- at least 6 out of every 10 babies born 12 weeks or more before their due date

A PDA is more common in premature babies who weigh less than 1,000 grams or 2.2 pounds and in babies with breathing problems.

## How does the health care team know my baby has a PDA?

Your baby may have these signs of a PDA:

- a heart murmur which is heard with a stethoscope
- pulses that feel "bounding"
- breathing which is faster, deeper and more laboured
- a heart which you can see beating under the skin

A chest x-ray and an ultrasound of the heart called an echocardiogram can help diagnose a PDA.

## What is the treatment for a PDA?

In most babies, a ductus closes on its own and no treatment is needed. A smaller premature baby may need treatment to close the PDA.

### Treatment may include:

- Reducing the amount of intravenous fluids or feeds to decrease the work of the heart and lungs
- Using a ventilator and/or oxygen to help decrease the work of breathing
- Using a medication called indomethacin to close the ductus. When it can be used, this medication is successful in closing the ductus in 70% of babies. When unsuccessful, an operation to close the ductus may be needed.
- An operation to put a clip on the ductus.

**If you have any questions about your baby or PDA, please talk with your baby's nurse or doctor.**

