In Australia, around eight per cent of babies are born prematurely (before 37 weeks gestation) every year. Most babies who are premature are born between 32 and 36 weeks gestation, and almost all of these babies grow up to be healthy children.

Sadly, some babies die as a result of being born too early because their organs are too immature to function properly outside the womb.

It is difficult to predict which pregnancies will end prematurely. Most often, no specific cause is found for premature births. We know of a few risk factors, but the mechanics behind premature labour remain a mystery, so it is difficult to prevent.

Risk factors for premature birth
Some reasons for premature birth remain unknown. However, there are a few maternal risk factors, including:

- High blood pressure
- Diabetes
- Severe illness
- Smoking
- Twin or multiple pregnancy
- Previous premature birth.

Delaying premature labour
If a mother goes into labour prematurely, sometimes the birth can be delayed with certain treatments.

As long as the baby is growing normally and the placenta is working properly, every extra day a baby can spend inside the mother's womb increases the chance of survival, particularly if there is time to give the mother steroids. Giving the mother steroid injections before the birth can improve the baby’s lung maturity and chances of surviving.

The chance of survival for premature babies
The chance of survival depends on the baby’s degree of prematurity and birth weight. A full-term pregnancy is said to last between 37 and 42 weeks.

Two thirds of babies born at 24 weeks gestation who are admitted to a neonatal intensive care unit (NICU) will survive to go home. Ninety eight per cent of babies born at 30 weeks gestation will survive.

Complications for premature babies
In general, babies who are born under 36 weeks’ gestation will be admitted to a neonatal unit. Very preterm babies (under 30 weeks’ gestation) and those who require help with breathing will need to be cared for in a NICU.

Larger preterm babies who do not develop breathing problems will be cared for in a special care nursery.

Some of the complications for a premature baby might include:
Lung disease – premature babies often need oxygen via a ventilator or in an incubator until their lungs are fully matured.

Feeding difficulties – premature babies are often unable to suck and need to be fed via a tube into the stomach until the sucking and swallowing reflex is developed.

Temperature control difficulties – the ‘temperature control centre’ in a premature baby’s brain is immature. Babies are therefore cared for under special overhead heaters or in enclosed incubators until they are mature enough to be cared for in a normal cot.

Apnoea – this is when the baby’s breathing stops for a short period of time. Breathing is controlled by a part of the brain called the respiratory centre, which is immature in premature babies.

Bradycardia – is a slowing down of the heart rate, usually caused by apnoea.

Jaundice – the skin takes on a yellow colour, due to a compound in the blood called bilirubin, which breaks down red blood cells. A premature baby’s liver is too immature to process the bilirubin properly, so phototherapy lights are used.

Disabilities for premature babies

In general, the risk of premature babies having severe disabilities depends on their degree of prematurity and the severity of illness they experienced following birth.

Around one third of babies born at 24 weeks will develop a significant disability such as intellectual disability, cerebral palsy, blindness or deafness.

Minor disabilities, such as reading or learning problems, usually do not show up until school age. Babies born close to full term usually have no long-term health problems as a result of their early birth.

Where to get help

- Your doctor
- Your obstetrician
- Maternity hospital staff

Things to remember

- The causes of premature labour aren’t fully understood, so prediction and prevention are difficult.
- The chances of survival for premature babies depend on the degree of prematurity and their birth weight.
- Premature babies who survive are at risk of a range of mild to severe disabilities, including visual impairment, developmental delay and learning difficulties.