If your baby is premature and in the Newborn Intensive Care Unit, you will hear many words that are new to you. These may include medical terms like necrotising enterocolitis.

What is necrotising enterocolitis?
Necrotising enterocolitis (NEC) is a type of inflammation of the bowel.

- Necrotising means causing damage to tissue
- Entero refers to the small bowel
- Colo refers to large bowel
- Itis means inflammation.

NEC may only affect the innermost lining of the bowel or the entire thickness of the bowel. It may also affect variable amounts of the bowel.

Why do premature babies get NEC?
Premature babies have immature and fragile bowels. They are sensitive to changes in blood flow and to infection. We usually do not know why an individual baby develops NEC.

Is NEC serious?
Some babies can lose part of their bowel from NEC, if surgery is required. Unfortunately, some babies will also die from NEC. As this is a serious problem, doctors may start treatment simply on the suspicion that your baby may be developing symptoms of NEC. This suspicion is sometimes referred to as ‘possible NEC’.

What will happen if my baby has NEC?
Your baby may show any or all of the following:

- general signs of being ‘sick’:
  - less active
  - increased breathing problems
  - difficulty keeping the body temperature normal
- a change in the ability to absorb milk, such as increasing amounts of fluid removed from the tummy which is often green in colour
- a firm, tender and swollen tummy
- discolouration of the tummy
- blood in their poo.

What can be done to treat NEC?
If your baby’s doctor thinks your baby might be developing NEC, any or all of the following treatments might be followed:

- all regular feeds, oral medicines and probiotics are stopped for several days. Your baby will have a drip and be fed directly through a vein (intravenous feeding)
- a tube will be placed into the stomach either through the mouth or nose to remove air and fluids from the stomach and bowel
- x-rays of the tummy
- a sample of blood will be sent to the laboratory to look for an infection
- antibiotics will be given
- more frequent blood tests may be taken
- poo is checked for blood.

What can be done to reduce the risk of NEC?
Some steps are recommended to reduce the risk of NEC. These include:

- Feeding your baby breast milk. Babies who are given breast milk are less likely to get NEC than babies who are fed formula. If your breast milk supply is reduced or taking time to come, consider using donated breast milk. Your baby’s doctor or midwife can tell you more about donor breast milk.
- Probiotics are given to babies to reduce the risk of NEC but do not completely prevent NEC occurring.
What happens if part of my baby’s bowel is damaged?

If only the inner lining of bowel is damaged, it will heal normally. If the entire thickness of a piece of bowel dies, the bowel may perforate (develop a hole in it) and your baby will need surgery to remove that piece of bowel.

The surgeon will remove any part of the bowel where tissue has died. The ends of the bowel above and below the part removed may be brought to the surface of the skin (called an ostomy). At some later time, after your baby has recovered and grown bigger, the two ends of the bowel are sewn back together and put back into the tummy in a second operation.

Occasionally, the ends of the bowel can be sewn together during the first surgery, and then no further surgery is needed. The surgeon decides this at the time of surgery.

Are there any long-term problems from NEC?

Most babies recover from NEC and do not have further problems; but, future problems are possible, especially if there has been surgery to the bowel.

These include:

- short bowel – which means there is too little bowel to absorb all the nutrients needed by the body
- long-term use of intravenous feeding
- scarring and narrowing of the bowel causing ‘obstruction’ or blockage of the bowel
- scarring within the tummy causing later pain.

For more information

Newborn Intensive Care Unit
Royal Women’s Hospital
Cnr Flemington Rd and Grattan St
Parkville VIC 3052
T: (03) 8345 3400
www.thewomens.org.au

Recommended website
Great Ormond Street Hospital for Children
Conditions and Treatments Information Sheets
www.gosh.nhs.uk/medical-information/search-medical-conditions/necrotising-enterocolitis