

Necrotizing enterocolitis

What is necrotizing enterocolitis?

Necrotizing enterocolitis (NEC) is an inflammation that hurts the inside of the bowel.

NEC may be caused by:

- prematurity
- infection from viruses or bacteria

NEC occurs mostly in premature babies, but can occur in full-term babies.

How do you know my baby has NEC?

Some of the signs of NEC are:

- your baby does not tolerate feedings
- your baby's stomach is very full and tender to touch
- your baby's abdomen has a red or blue colour
- vomiting
- blood in the stool or diarrhea (watery stool)

Sometimes there are other changes in your baby's condition, such as:

- your baby is very sleepy or has a low activity level
- the body temperature changes, sometime too low or too high
- pauses in breathing, called apnea
- slowing of the heart rate, called bradycardia or sometimes a high heart rate even when your baby is sleeping
- your baby's colour becomes blue

Tests for NEC include:

- regular x-rays of your baby's abdomen
- testing stool for blood
- frequent blood tests to check for infection

Will my baby be in a lot of pain?

Your baby may have some pain. You can help your baby feel more comfortable by:

- putting your baby in a comfortable position
- handling your baby gently
- talking quietly to your baby
- offering a soother to help your baby settle

If your baby's condition is stable, you may be able to hold and cuddle your baby. Discuss with your baby's nurse when you can hold your baby. If your baby appears to be in pain, he or she may be given pain medication.

How will my baby be fed?

Your baby may not be able to eat for 7 to 10 days or more. This allows your baby's bowel to heal. During this time your baby will be fed through the intravenous tube. The fluid in the intravenous gives your baby all the nutrients of sugar, protein, vitamins and fat he or she needs. This is called **total parental nutrition or TPN**.

Will my baby be hungry?

As your baby gets better, he or she will feel hungry. To keep your baby comfortable:

- offer a soother
- wrap your baby in a blanket
- try not to wake your baby when he or she is sleeping

It is important not to feed your baby too soon, as the bowel needs to rest and heal from the infection.

What can be done to help my baby get better?

The health care team will take these actions to help your baby:

- Regularly check your baby's heart rate, blood pressure and breathing.
- Place a tube through your baby's nose, down into the stomach.
 This tube drains fluid and air from your baby's stomach. It will remain in place until your baby is ready to feed.
- Give your baby fluids, nutrition and antibiotics through the intravenous tube. Antibiotics help your baby to fight the infection.
- Help your baby breathe with a ventilator, when necessary.
- Give your baby pain medication, when needed.
- Give your baby a blood transfusion, if needed.

Is NEC serious?

Most babies with NEC make a complete recovery. As they grow up, there is no sign that they had this problem.

However, NEC can become serious if not treated early. If the NEC becomes very serious, the baby's bowel may stop working. NEC may cause infection in the bloodstream. It can also damage the tissues of the bowel and make small holes in the bowel wall. This is called bowel perforation. Surgery will be necessary for a bowel perforation and sometimes the damaged bowel will need to be removed.

It is possible that strictures or narrowing of the bowel can remain after the baby has recovered from NEC and this may also require surgery.

If you have any questions about NEC or your baby's health, please speak with a member of your health care team.