

# Respiratory Distress (RDS) and Transient Tachypnoea of the Newborn (TTN)

## What is RDS?

RDS is an abbreviation for Respiratory Distress Syndrome.

Neonatal RDS occurs in babies whose lungs have not yet fully developed. The disease is mainly caused by a lack of a substance called surfactant, which helps the lungs inflate with air and keeps the air sacs from collapsing. This substance normally appears in mature lungs.

The earlier a baby is born, the less developed the lungs are and the higher the chance of RDS. Most cases are seen in babies born before 32 weeks gestation. It is very uncommon in babies born at full-term. (40 weeks).

## What are the signs and symptoms?

The symptoms usually appear within minutes of birth, although they may not be seen for several hours. Symptoms may include:

- Bluish colour of the skin
- Noisy breathing, such as grunting when the baby breathes out
- Nasal flaring, the nostrils may flare open when baby breathes
- Rapid breathing
- Shallow breathing
- Shortness of breath
- Breathing is hard with a lot of effort and movement from the chest and drawing back of the chest muscles with breathing

## What is the treatment of RDS?

If oxygen is required this is given with a small amount of continuous positive airway pressure (CPAP). This allows your baby to keep breathing independently and keeps your baby's lungs well inflated.

If your baby's condition gets worse they may need help to breathe. A tube can be inserted to help baby with breathing. It is connected to a breathing machine. This allows surfactant to be given through the tube and into the baby's lungs as required.

Intravenous fluids (IV) may be given to stabilise the blood sugar, blood salts, and blood pressure.

A chest X-ray will be required to confirm RDS.

Blood Tests will be taken (usually via a small heel prick) for assessments.

Your baby may be given antibiotics until an infection has been ruled out.



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## **What is TTN?**

TTN is an abbreviation for Transient Tachypnea of the Newborn.

Before birth a baby does not use the lungs to breathe. The lungs are filled with fluid and all oxygen comes from the placenta.

As the due date nears baby's lungs begin to clear the fluid in response to hormonal changes. Some fluid may also be squeezed out during the birth, as a baby passes through the vagina.

After birth as the newborn baby takes those first breaths, the lungs fill with air and more fluid is pushed out of the lungs. Any remaining fluid is then gradually absorbed into the body.

In infants with TTN extra fluid remains in the lungs or the fluid is cleared too slowly. This makes it more difficult for your baby to breathe properly.

TTN is common in 35+ week gestation babies who are delivered by caesarian section without the mother going into labour.

Newborn babies with TTN have respiratory problems soon after birth. Usually within 1 - 2 hours.

## **What is the treatment of TTN?**

If your baby is breathing very rapidly, feeding your baby may be delayed.

Intravenous fluids (IV) may be given to stabilise the blood sugar until your baby improves.

Your baby may be given antibiotics until an infection has been ruled out.

Most infants with TTN improve within 12-72 hours.

A chest X-ray may be required to confirm TTN. Blood Tests will be taken (usually via a small heel prick) for assessments.

