NATIONWIDE CHILDREN'S
When your child needs a hospital, everything matters.℠

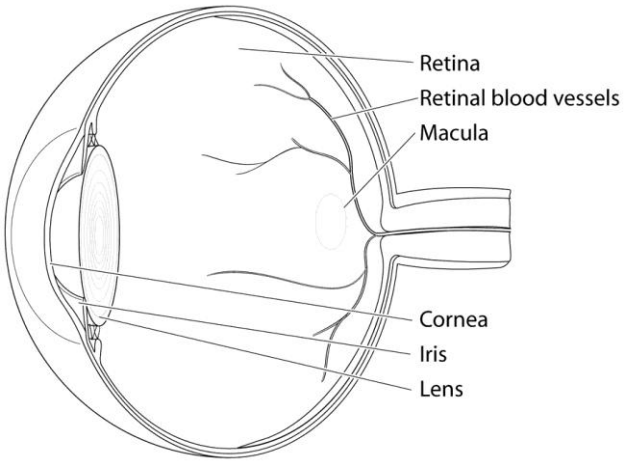
Helping Hand™

Retinopathy of Prematurity (ROP)

Doctors who take care of newborn babies are called **neonatologists.** These doctors know that premature babies are at risk for ROP, a certain type of eye problem. ROP stands for **retinopathy of prematurity** (ret in OP uh thee of pree mah TURE it ee). Eye doctors who specialize in the care of children's eyes (**pediatric ophthalmologists**) are asked to examine the babies who are at risk and check for ROP.

What Is Retinopathy of Prematurity?

When babies are born early, the blood vessels in the back of the eye are not fully grown. They need to finish growing so the retina can receive the oxygen and nutrients that it needs to work properly. The retina is the inner lining on the back of the eye. It is the part of the eye that has the photocells we need to see. If the eye were a camera, the retina would be the film.



Picture 1 With ROP blood vessels in the retina are affected.

The retina is a very important but very delicate part of the eye. When the blood vessels in the retina are affected by prematurity, ROP can occur. The smaller the baby, the more likely it is to develop ROP. For example:

- More than 80% of infants who weigh less than 1,000 grams (2 lbs., 3 oz.) at birth get ROP.
- Only about half of infants whose birth weight is between 1,000 and 1,250 grams (up to 2 lbs., 12 oz.) will get ROP.
- If a baby weighs more than 3 1/2 pounds at birth, the chance of developing ROP is very, very small.

How Does ROP Affect My Baby?

Most babies with ROP see normally for their age. It is only when ROP progresses to the most severe stages that vision is in danger. The worst outcome of ROP is retinal detachment and total blindness. Fortunately, most ROP goes away without scarring or vision loss. The trouble is, no one can predict which babies will do well and which ones will develop problems. That is why all low birth weight infants need to be examined for ROP.

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What Is the Treatment for Severe ROP?

If your baby shows signs that ROP is getting worse, the ROP Coordinator and your doctor will contact you. Some infants can benefit from a laser treatment. This procedure is done under anesthesia in the Operating Room. Laser treatment has helped in cases where abnormal blood vessels have put the retina at risk for detachment.

Can ROP Be Prevented?

Modern medical care in the NICUs and special care nurseries has helped smaller babies survive. Because there are more premature infants than ever before, doctors are also seeing more ROP. We have taken part in several studies of ROP. These research projects studied the treatment of severe ROP and the outcome of children with mild or moderate ROP. In most cases, children who have ROP that does not require treatment have good vision. Rarely, they can be affected by the same scarring and retinal detachments that affect eyes with severe ROP. Some children who have had ROP need glasses sooner than children who were not premature and did not have ROP. We continue to do research on infants with ROP. We hope someday we can prevent all vision loss from this disease.

If your baby is sent home, be sure to ask your doctor or nurse when your follow-up appointment will be. If you have any questions please call (614) 722-4080.