What are congenital malformations? Congenital malformations, also called birth defects, are problems that happen while the baby is still in the womb.

Congenital [kuhn-JEN-i-tl] means a problem that is present at birth. Malformation means the structure and often the function of a body part or organ are affected.

There are many types of congenital malformations that may affect organs (such as the heart, lungs or brain) or body parts (such as eyes, hands, fingers or feet).

What causes birth defects? In general, birth defects happen when the body’s genetic material is damaged or the genes are misread during organ formation. In many cases, the exact cause of this damage is not known. Sometimes it is due to a genetic problem passed through families. Other types of defects result from teratogens [tuh-RAT-uh-juhn]. These are factors that damage the genetic material and may include:

- an illness in the mother, such as diabetes
- an infection in the mother, such as the measles, while the baby is in the womb
- a substance the mother may ingest, such as certain medicines, alcohol, or chemicals in the environment
- a lack of certain nutrients, such as B vitamins

What are the long-term effects? The effects differ for each type of problem and depend on which organ or body system is affected. In some, but not all cases, birth defects may result in problems with learning, movement, vision, hearing, and emotional development. In some cases, a group of problems may occur together.

What can parents do? A key step you can take is to be a partner in your baby’s care. As parents, you play a vital role in your baby’s care and in his or her future growth and health. This is a huge task for any parent, but is even more vital if your baby has special health care needs.

Learn about your baby’s needs: As your baby grows, he or she may need to see more than one type of doctor or health care provider. Your baby also may need help with development including movement and motor skills, and learning. You can use the sources listed on the next page to learn about your baby’s unique needs, what help he or she may need, and where you can find support and sources of help.
Talk to your baby’s doctors and nurses: These people are there to help you and your baby. There is so much for new parents to learn and so much more to learn about your baby’s special needs. It is natural to feel confused by all the details. Keep in mind that asking questions helps you to help your baby.

Help make sure your baby receives the services he or she needs: There can be a lot of stress involved with juggling your infant’s needs, finding the right services, and dealing with the many details involved to arrange this care. Health care providers are aware of the stress involved. To help you coordinate the many services your baby may need, begin with finding a primary care provider (your baby’s main doctor) who will care for your baby after discharge.

There are many types of birth defects. Some are listed below. Talk to your baby’s doctors and nurses for more details about the unique problems that affect your baby.

<table>
<thead>
<tr>
<th>Body part(s) affected</th>
<th>Name of malformation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digestive organs (intestines, stomach, etc.)</td>
<td>Tracheo-esophageal fistula/esophageal atresia, diaphragmatic hernia, rectal atresia/stenosis, omphalocele/gastroschisis</td>
</tr>
<tr>
<td>Face</td>
<td>Cleft lip or cleft palate</td>
</tr>
<tr>
<td>Genetic material (chromosomes)</td>
<td>Trisomy 13 (Patau syndrome), trisomy 21 (Down syndrome), trisomy 18 (Edward syndrome)</td>
</tr>
<tr>
<td>Genitals or urinary tract</td>
<td>Hypospadias, indeterminate sex</td>
</tr>
<tr>
<td>Head and brain</td>
<td>Anencephaly, hydrocephaly, microcephaly</td>
</tr>
<tr>
<td>Heart</td>
<td>Atrial septal defect (ASD), ventricular septal defect (VSD), hypoplastic left heart syndrome, transposition of the great vessels (TGV), tetralogy of fallot, coarctation of the aorta</td>
</tr>
<tr>
<td>Skeleton</td>
<td>Spina bifida/meningocele, polydactyly/syndactyly, club foot, congenital hip</td>
</tr>
<tr>
<td>Many body organs and functions</td>
<td>Fetal alcohol syndrome (FAS)</td>
</tr>
</tbody>
</table>

The type of congenital malformation my child has is called: ________________________________

Find out more: these websites may be helpful

Medline Plus®
www.nlm.nih.gov/medlineplus

National Heart, Lung, and Blood Institute
www.nhlbi.nih.gov

Sidelines National Support Network
www.sidelines.org

Health Information on the Net
www.hon.ch/Dossier/MotherChild/prematurity_problems/air_leak.html

Find the research

NICHD Cochrane Neonatal Review Group
www.nichd.nih.gov/cochrane

Neonatology on the Web
www.neonatology.org

This information is for educational purposes only and is not intended to substitute for professional medical advice. Always consult with a health care professional if you have any questions about the health of your baby.