Medium chain acyl-CoA dehydrogenase deficiency (MCAD)
(Medium chain acyl-CoA dehydrogenase deficiency)

What is MCAD?
Medium chain acyl-CoA dehydrogenase deficiency (MCAD) is a metabolic disorder. This means the body has a chemical imbalance. MCAD is a condition in which the body cannot break down fat and turn it into energy for the body. MCAD is inherited. It is present at birth.

What type of problems occurs with MCAD?
A baby who has this condition may have extreme sleepiness and breathing problems. If left untreated, this condition can lead to seizure, coma and death. Early diagnosis and treatment will help prevent these problems.

What is the chance my baby will have MCAD?
This condition occurs in less than 1 in every 25,000 births. Babies born with this condition have a changed gene from each parent. A person who has one changed gene is called a carrier. A person who is a carrier does not have symptoms. If both parents are carriers, either parent can pass on the changed gene to their baby. If both parents pass on the changed gene, the baby will have the condition. If both parents are carriers, for each pregnancy:
- There is a 25% chance that the baby will be born with this condition.
- There is a 50% chance that the baby will be a carrier for this condition.
- There is a 25% chance that the baby will not be born with this condition and will not be a carrier.

What is the treatment of MCAD?
The treatment of MCAD is to make sure infants keep a regular feeding schedule. They should not go more than 4-6 hours without eating or drinking formula. Routine illness, such as the common cold, can make this condition worse. Be sure to contact your baby’s doctor whenever your baby gets sick. Your baby’s metabolic doctor will help you make sure that your baby gets the right diet and medical care.

Where in Virginia can I take my baby for care?
Please speak to your baby’s pediatrician about obtaining a referral to a pediatric metabolic specialist in your area. If you want to know more about this condition, please contact Virginia Newborn Screening Services, Virginia Department of Health. The Web site is http://www.vahealth.org/gns.