

# Office for Genetics and Children with Special Health Care Needs

## Reduction Deformity: Upper Limbs

### What Is Reduction Deformity: Upper Limb?

- It is the absence of a limb or part of a limb or a shortened limb

### Signs and Symptoms

- Missing limbs - complete or partial absence of the upper arm (humerus), lower arm (radius and/or ulna), wrist (carpals), hand (metacarpals), or fingers (phalanges).
- Shortened limbs

### Associated Conditions

- There are other associated conditions which occur in approximately 30-50% of the children born with Upper Limb Reduction Deformity. Some of the associated conditions are:
  1. Congenital Heart Disease
  2. Eye Malformations
  3. Kidney Malformations
  4. Intestinal Atresia
  5. Birthmarks
  6. Ear Malformations

### What is the cause?

- The cause is often not known, but possible causes include interrupted blood supply during development, "bands" in the amniotic fluid, genetic syndromes, or drugs such as thalidomide
- Recent research has shown that women who get 0.4mg of folic acid per day before they become pregnant and in early pregnancy may have a lower risk of having an infant born with a Upper Limb Reduction Deformity

### Is there any treatment?

- Treatment varies pending the medical issue and associated conditions. However, surgery may be needed as well as prostheses and therapy to improve upper limb use

## Support Groups/Resources

- Helping Hands Foundation  
[www.helpinghandsgroup.org/support\\_groups](http://www.helpinghandsgroup.org/support_groups).
- Kennedy Krieger Institute  
<http://www.kennedykrieger.org>  
443-923-9200
- March of Dimes  
[www.marchofdimes.com](http://www.marchofdimes.com)  
1-410-546-2241
- Office for Genetics and Children with Special Health Care Needs  
<http://fha.maryland.gov/genetics/bdris.cfm>  
1-800-638-8864
- The Parents' Place Of Maryland  
[www.ppmmd.org](http://www.ppmmd.org)  
410- 768-9100