

Fact Sheet

Division of Child and Adolescent Health
Pediatric Screening and Genetic Services
Virginia Genetics Program
1-800-523-4019
www.vahealth.org/genetics



Cleft Lip and Cleft Palate

What are cleft lip and cleft palate?

A cleft is a “split.” Cleft lip and cleft palate are types of oral-facial clefts.

The lip and palate (hard and soft tissue forming the roof of the mouth) begin developing in separate parts in a growing baby. These parts fuse together to form the complete lip and palate between weeks 5 and 10 of the baby’s growth. A cleft forms when the sides of the lip or palate do not join correctly as the baby develops.

A cleft lip is, therefore, a split of the two sides of the lip that can include the gums and bones of the jaw. A cleft palate is an opening or split in the roof of the mouth. Cleft lip and cleft palate can occur on one side of the lip or palate (unilateral) or on both sides (bilateral). A cleft may occur only in the lip or only in the palate, or it may occur in both the lip and palate simultaneously.

What types of problems occur with cleft lip and/or cleft palate?

Feeding problems (e.g., taking in too much air while eating, feeding slowly, milk passing through the nose) do not usually occur in children with a cleft lip alone but are common in children with cleft palate. Ear infections due to a build up of fluid in the ear and speech problems can also occur. Depending on the extent of the cleft, problems may also occur with a child’s teeth such as missing, extra, or crooked teeth. Between 15 to 50 percent of children with cleft lip and/or cleft palate have other major birth defects.

How common are cleft lip and/or cleft palate?

Cleft lip and cleft palate are the fourth most common birth defect in the United States, occurring in about 5,000 births yearly. In Virginia about 120 children are born yearly with cleft lip and/or cleft palate. Greater than 70% of babies with cleft lip will also have cleft palate.

What causes cleft lip and/or cleft palate?

It is believed that most cleft lip and/or cleft palate occur due to a combination of environmental and genetic factors. Environmental factors may include maternal illness, medications, maternal smoking, and infections. Most children with cleft lip and/or cleft palate are born into families with no family history of cleft lip and/or cleft palate. Although some families have more than one person with cleft lip and/or palate, clefting does not occur in these families in a set pattern. Parents of a child with cleft lip and/or palate have a higher chance of having another child with cleft lip and/or palate. This chance is about 2 to 8 in 100. For parents who themselves had a cleft lip and/or cleft palate, the chance of having a child with a cleft lip and/or cleft palate is about 4 to 6 in 100.

Cleft lip and/or cleft palate can be the only birth defects a child has (an isolated finding), but they can also occur with other birth defects as part of a syndrome (a collection of findings). The way in which a syndrome is passed through the family is specific to the given syndrome. A genetic counselor or geneticist can help you to determine the risks for your family and situation.

How are cleft lip and/or cleft palate treated?

Surgery is typically done to close the cleft during infancy. Additional surgeries may be needed during childhood and adolescence. Special positioning of the child during feeding or special bottles may help with feeding problems. Children with clefting involving only the lip are likely to have fewer problems. If the clefting involves the gums and/or the palate, the child may need dental care to address the growth of the teeth and may need speech therapy. To prevent hearing loss and ear infection, medications may be given or surgery may be done to drain any fluid in the ear. Often a team of specialists manages the care of a child with cleft lip and/or cleft palate. Treatment may extend over a period of several years.

Where can I go for more information about cleft lip and/or palate?

Cleft Palate Foundation
www.cleftline.org
1-800-24-CLEFT (1-800-242-5338)

Virginia Smiles
www.virginia-smiles.org
703-426-9815

March of Dimes Birth Defects Foundation
www.modimes.org
1-888-MODIMES (1-888-663-4637)

Infant and Toddler Connection of Virginia (Early Intervention Services)
www.infantva.org
1-800-234-1448