

Heart Defects in New Mexico: *Tetralogy of Fallot*



Congenital heart defects (CHDs) are the most common type of birth defect. A child is said to have a CHD when he or she is born with a heart that is not formed normally. As medical care and treatment have advanced, babies with CHD are living longer and healthier lives.

What is New Mexico doing to catch heart defects early ?

All birthing facilities in New Mexico are required to screen newborns for risk of heart defects, including congenital heart defects (CHDs), such as Tetralogy of Fallot.*

The screen for CHDs, called pulse oximetry, is painless and measures the baby's pulse and the level of oxygen in the baby's blood. Screening performed in the birthing facility before discharge allows immediate referral for follow-up testing. Pulse oximetry alone cannot diagnose a heart defect.

*Parents choosing to forego this screening must sign a waiver.

What are the symptoms of a heart defect?

It's important for parents and caregivers to be able to identify the symptoms of a heart defect. If you notice any of these symptoms, seek medical help immediately.

- Pounding heart
- Weak pulse
- Pale or blue-colored skin, nails, or lips
- Fast or troubled breathing
- Poor feeding
- Very sleepy

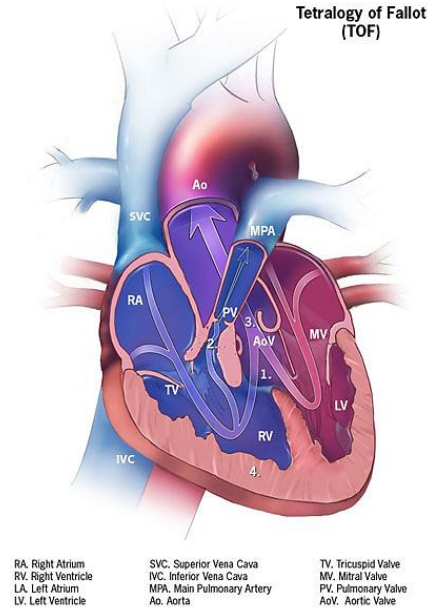
Tetralogy of Fallot (TOF)

What is Tetralogy of Fallot?

Tetralogy of Fallot (TOF) is a complex heart condition made up of four defects of the heart and the blood vessels:

1. Ventricular septal defect—a hole between the two lower chambers of the heart
2. Pulmonary stenosis—the narrowing of the pulmonary valve and main pulmonary artery which limits blood flow to the lungs
3. Overriding aorta—the aortic valve, which pumps oxygenated blood from the heart to the aorta which carries blood to the body, is enlarged and opens from both ventricles allowing oxygen-rich blood and oxygen-poor blood to mix
4. Ventricular hypertrophy—the muscular wall of the right ventricle is thicker than normal

TOF can cause spells which are caused by reduced oxygenated blood flow to the body. These spells can be identified by the baby being very fussy and becoming rapidly bluer. These spells can occur if a baby becomes dehydrated or anemic. Additional health issues include higher risks of seizures due to low oxygen blood levels and delayed growth and development. Approximately 25% of babies with TOF can have other medical problems affecting other organs.



Source: Centers for Disease Control and Prevention, National Center on Birth Defects and Developmental Disabilities: <https://www.cdc.gov/ncbddd/heartdefects/tetralogyoffallot.html>

What can cause Tetralogy of Fallot?

In most cases, the cause of heart defects are unknown. Some known causes include medical conditions of the mother such as diabetes, lupus, rubella infections, or obesity. Smoking, drinking alcohol, or taking certain medications can also increase the risk of a heart defect. Other known causes include alterations to the genes or chromosomes during the development of the fetus.

How is Tetralogy of Fallot treated?

Each case of TOF is different, so it is important to discuss treatment options with a pediatric cardiologist. All cases of TOF require surgery within the first year of life—typically between 4 and 9 months of age. This decision will need to be made by you and your baby's medical team.

How common is Tetralogy of Fallot in New Mexico?

TOF is not common. TOF is considered one of the rarest forms of heart defects. There is not a formal estimate of the number of babies born each year, but it is estimated that there is 1 case out of every 2,000-10,000 live births.