

## Will it happen again?

It is known that the risk of recurrence after having a triploid fetus is **NOT** elevated above the population risk.

For more information please contact your local  
NZMFMN Unit



Auckland: 09 307 4949 ext 24951



Wellington: 04 806 0774



Christchurch: 03 364 4557

New Zealand Maternal Fetal Medicine Network  
[NZMFMN@adhb.govt.nz](mailto:NZMFMN@adhb.govt.nz)

## Triploidy



### What is Triploidy?

Triploidy is a rare lethal chromosomal abnormality caused by the presence of an entire extra set of chromosomes. Every normal fetus has 46 chromosomes or 23 pairs. A fetus with Triploidy has 69 chromosomes rather than 46.

### Why does this happen?

This is a random occurrence which is not known to be related to anything that either parent may or may not have done. It arises either when two sperm fertilise one egg or when two cells fail to separate in the formation of the egg resulting in an egg with 46 chromosomes being fertilised by one sperm.

The physical effects of Triploidy differ depending on whether the extra set of chromosomes is inherited from the mother or the father.

Triploidy affects 2% of all recognised conceptions, but only a very small proportion of them are live born (0.1% of triploid conceptions or 1 in 50,000 live births). The vast majority of triploid conceptions spontaneously miscarry.

The prognosis for a baby with Triploidy is not good. A review of literature would suggest that most triploid babies die within the first few hours or days of life with an average postnatal life of 20 hours.

There are a few exceptions with the longest reported survival being ten and a half months.

They will have severe growth restriction and multiple fetal defects, this condition is incompatible with life.

### How is Triploidy diagnosed?

The diagnosis is often suspected in pregnancy due to abnormal growth of the fetus or abnormalities of fetal anatomy seen on Ultrasound.

The diagnosis can be confirmed by chromosomal analysis of fetal cells. The fetal cells are usually collected either by Amniocentesis or Chorionic Villus Sampling (CVS). They are grown in culture and then examined microscopically.