

- Some research has suggested that men with XYY are more likely to take part in minor crime than men with only one Y chromosome. Therefore it is very important to have a strong, supportive home environment.

#### Mental illness:

- Those from stable and nurturing families have no more psychological disorders than their brothers and sisters. There is no increased risk of schizophrenia, manic-depression or any other serious mental illness.

#### Employment:

- Around 75% of men with XYY are in employment. Typical jobs include self-employment in business, catering workers, clerks, shop assistants, and community service workers.

#### Reproduction:

- Men with an extra Y chromosome are just as likely to get married and have children as are men with one Y chromosome. Their sexual function and fertility are not affected and their children do not seem to have an extra Y chromosome any more often than by chance.

## For more information

If you need more advice about any aspect of XYY, you are welcome to contact:

Unique, the Rare Chromosome Disorder Support Group, is a source of information, mutual support and self-help for families of children with any rare chromosome disorder, including XYY.

Unique, Rare Chromosome Disorder Support Group

- Telephone: 01883 330766
- E-mail address: [info@rarechromo.org](mailto:info@rarechromo.org)
- Website: [www.rarechromo.org](http://www.rarechromo.org)

*Unique*

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# The XYY Condition

An information leaflet for  
patients and families

If you need more advice about any aspect  
of XYY Condition please contact:

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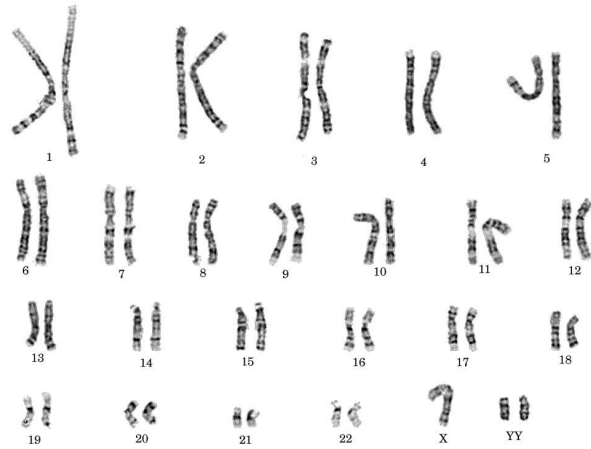
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## Introduction

Humans are usually born with 46 chromosomes, which are arranged in 23 pairs. One of these pairs determines whether the baby is male or female, and these are known as the sex chromosomes. Boys are born with the sex chromosomes XY, and girls with two X chromosomes (XX).



Occasionally, however, a boy is born with an extra Y chromosome and this is known as **XYY**. The picture above shows chromosomes from someone with an extra Y chromosome.

1 in 1,000 boys has an extra Y chromosome, and there are around 25,000 males with XYY in Britain. Even though these boys have an extra Y chromosome, they are 100% male in every way. The majority of them live normal fulfilling lives and are completely unaware that they have an unusual chromosome pattern.

## What causes it?

Most parents who have a son with XYY have normal chromosomes themselves. The extra Y chromosome is thought to be due to a mistake occurring when the cells divide around the time of fertilization. The cause of this is unknown.

## Will it occur again?

This is very unlikely, but some parents do opt to have tests during a future pregnancy to check the baby's chromosomes. The need and options for testing can be discussed at a genetics clinic.

## What are the effects of the XYY condition?

### Medical illness:

- Boys with XYY are no more likely to be born with abnormalities than any other children, and they are no more prone to other medical illnesses.

### Development:

- These boys usually sit, crawl and walk at the usual time, but they may be slower to learn to talk than other children. Half of boys with XYY have some delay in their speech development. Speech therapy can be helpful and can be started when the child is between 3 and 4 years old.

### Growth:

- Boys with XYY tend to be taller than other boys their age, and grow slightly faster in childhood. Their final height is on average around 6 feet 3 inches (188cm). Puberty is normal and comes at the expected time.

### School and IQ:

- The average intelligence (IQ) of boys with XYY is slightly lower than that of boys with normal chromosomes, but still within the normal range. Their IQ is 10-15 points lower compared to their brothers and sisters. However this amount of variation often occurs naturally between children from the same family. Half of boys with XYY may need extra help at school but the majority manage well in mainstream schools. Many will go onto further education after leaving school, but are less likely to do this compared to their brothers and sisters.

### Behaviour:

- Some boys may have behaviour problems such as temper tantrums. They can be easily distractible and more active physically. However if parents can channel the child's energy constructively then this does not need to be a problem.
- Boys with XYY are more vulnerable and seem to cope less well with difficult social circumstances than their brothers and sisters (e.g. dealing with family conflict or stress).