



DUCHENNE MUSCULAR DYSTROPHY

- A **progressive muscle-wasting** condition caused by a faulty gene on the **x-chromosome**.
- Babies **appear normal at birth**, but by the **age of 8-11** they can **no longer walk** and by their **late teens or early 20's** the condition is severe enough to be **life threatening**.
- Usually **only affects boys**. Girls can be **carriers**, which means that for this condition they could have **subtle signs** but won't develop the **full-blown disorder**.
- Around **100 boys** with DMD are **born in the UK each year**.
- There's **no cure**, but many scientists are **cautiously optimistic** that one could become available in the near future.

USEFUL LINKS

- **Muscular Dystrophy Campaign:**
www.muscular-dystrophy.org
More on living with muscular dystrophies.
- **Kids Health:** <http://kidshealth.org>
• Easy to understand information about a range of conditions including Duchenne Muscular Dystrophy.

About Connor: 15 years old.

Genetic disorder: Duchenne Muscular Dystrophy

Likes: Competing in the national wheelchair slalom championships, computer games, the cinema.

Dislikes: His little brother taking all his things, shops without wheelchair access, people ignoring him.

Home town: Liverpool

Mum: Donna

Stepdad: Michael

Unaffected siblings: Adam (age 1)

Affected siblings: Luke (age 4)

GENETIC DISORDERS

- Others are **dominant**, meaning a **single copy** of the faulty gene is enough to cause the condition.
- **X-linked** disorders are caused by a faulty gene on the **x-chromosome**, of which **girls** have two (**XX**) and **boys** only one (**XY**).
- **Genetic disorders** are the **biggest cause of death** for children **aged 14 and under**.
- Some other examples of genetic disorders include **Cystic Fibrosis**, **Sickle Cell Anaemia**, **Huntington's Disease** and **Haemophilia**.
- **Genes** are made out of **DNA** and most contain **instructions for making proteins**.
- A **genetic disorder** happens when a **change** in one or more genes causes **vital proteins** in the body to be **missing or faulty**.
- Most disorders are **recessive**, occurring when someone inherits **two copies** of the faulty gene – one from each parent.

CURRICULUM LINKS

- **KS3 Science:** Variation and classification; Inheritance and selection.
- **GCSE Science:** Genetics and inheritance; Ethical and social issues in science.
- **KS3/4 PSHE and Citizenship:** Identities and diversity; Prejudice and discrimination; Human Rights; Community cohesion.

FOR MORE RESOURCES LIKE THESE AND TO SIGN UP FOR JEANS FOR GENES DAY, VISIT US AT WWW.JEANSFORGENES.ORG

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A Centre for Genetics in Healthcare

