

DISORDERS CAUSED BY RECESSIVE ALLELS

CYSTIC FIBROSIS

- CF is a genetic disorder which affects about 1 in 1600 in the UK.
- caused by an 'inherited' defective gene. recessive gene.
- currently no cure or effective treatment
- produces a lot of thick sticky mucus in the lungs, which has to be removed by massage.
- excess mucus also occurs in the pancreas causing digestive problems
- the blockage in the air passages causes a lot of chest infections
- physiotherapy and antibiotics clear them up but slowly the sufferer becomes more and more ill.

SICKLE CELL ANAEMIA

- causes red blood cells to be shaped like sickles.
- they get stuck in capillaries which deprives cells of oxygen.
- painful disorder, risk of dying young.
- rare in Britain, more common in Africa.
- this is because carriers of the recessive allele are more immune to malaria. Being a carrier increases chance of survival, even though offspring may suffer from sickle cell anaemia.

