

## HIV/AIDS

### Diseases fact sheet

#### HIV/AIDS

Acquired immune deficiency syndrome (AIDS) is a set of symptoms and infections resulting from the damage to the human immune system caused by the human immunodeficiency virus (HIV). The condition progressively reduces the effectiveness of the immune system and leaves individuals susceptible to opportunistic infections and tumors. The HIV virus can be spread through the exchange of bodily fluids through sexual intercourse, sharing needles, blood transfusions, pregnancy and breastfeeding.

HIV is a global pandemic: it is estimated that 33 million people around the world are currently infected and that 25 million people have died of HIV since the pandemic began in 1981. The virus is particularly widespread in sub-Saharan Africa – the African countries that lay south of the Sahara Desert, such as South Africa, Zimbabwe, and Mozambique.

Sources: *Wikipedia, World Health Organisation, NHS Direct*

#### Tuberculosis

Tuberculosis (TB) is a disease caused by an infection when the bacteria *Mycobacterium tuberculosis* are inhaled in the form of microscopic droplets, spread through coughing, speaking. It primarily affects the lungs, but can spread via the blood to all organs in the body, developing in the bones, reproductive organs and intestines. The infection will remain dormant in a healthy immune system, but may be reactivated in different organs if it is weakened. Typical symptoms include a chronic cough, weight loss and night sweats. It is most common in areas of the world where poverty, malnutrition, poor general health and social disruption are present.

TB was responsible for up to a quarter of deaths in Europe during the 19th century; the death toll began to fall as living standards improved at the start of the 20th century, and from the 1940s, effective medicines were developed. However, there are now more people in the world with TB than there were in 1950, and 3 million individuals will die this year from this disease – mainly in less developed countries.

Sources: *netdoctor.co.uk, Wikipedia*

#### Cholera

Cholera is an infectious disease caused by a bacterium, *Vibrio cholerae*, that affects the absorption of water in the small intestine. The bacteria accumulate in the stomach and begin to produce toxins that cause the symptoms of the disease which include nausea, stomach pains and diarrhoea, leading to extensive dehydration.

The dangerous aspect is the vast loss of fluid that, if untreated, can be fatal within 24 hours. Treatment is simple, however: replace the fluid with the right mix of sugar and salts - water alone is not adequately absorbed; although the most severe cases require hospital admission.

Cholera remains an important indicator of social development. It is not really a tropical disease, but is related to standards of hygiene and the quality of drinking water; improving these is at the foundation of fighting cholera. It was a single well in London in the 1850–60s that was the source of several separate epidemics. Densely populated areas with poor sanitation and no clean water supply are most at risk as the bacteria can easily pass around and come into contact with food. It is particularly dangerous for children in developing countries as they have a greater chance of becoming infected, their symptoms can be more serious (e.g. cardiac arrest) and they are less likely to receive appropriate medical care.

Sources: *World Health Organisation, netdoctor.co.uk*