

## Infectious diseases & vaccines

World demand for **antibiotics** remains high due to escalating resistance and the increased risk of serious infections in both **immune-suppressed patients** and **ageing populations**. Our goal is to transform people's lives and to improve public health by fighting infectious diseases worldwide.

To that end we are leveraging solid foundations in science and innovative thinking to bring break-through solutions to key unmet medical needs such as **HIV, tuberculosis, hepatitis C** and **antibiotics for serious infections**. We are pioneering unique collaborations to develop a portfolio of solutions, consisting of more effective drugs, preventive treatments, diagnostics and biomarkers to distinguish between various sub-types of a disease.

### Living on the brink

AIDS has killed 25 million people to date, making it one of the **most destructive pandemics** in history. It is caused by the **HIV virus** which invades immune system cells, leaving sufferers open to life-threatening infections. The HIV virus writes itself into a cell's DNA so that the cell manufactures viruses. HIV is a poorer proof-reader than your own cells and often copies its DNA incorrectly so that the new viruses are quite different from the original. It is because HIV is **constantly changing**, that it is **difficult to treat**.

- [See the movie on our approach to HIV / AIDS](#)
- [Learn more about the HIV virus and our treatment](#)
- [Read our Response to the Stop AIDS Campaign \(UK\), 4th April 2011](#)
- [Read our Statement about Access to Our HIV Medicines and the Patent Pool, 27 April 2011](#)

### A bug in the system

One-third of the world's population is currently infected with the bacteria that cause **tuberculosis (TB)**, and anyone infected has a 10% chance of suffering from TB during their lifetime. People with **weakened immune systems** are especially at risk of developing this often deadly lung disease. **AIDS sufferers**, for example, are ten times more likely to develop TB and often live in **developing countries** where TB infection is also more prevalent. In Africa, for example, 30-50% of the population is infected with TB, compared to 5% in the west.

### Hope for a cure

The first **antibiotic** to treat TB was discovered 50 years ago, but treatment remains very difficult. Sufferers need to take four antibiotics **continuously for six to nine months**, which many find difficult to do. The one-in-ten-million bacteria surviving treatment has time to multiply and spread if no antibiotics are taken. The hunt continues, therefore, for a drug that can treat TB faster and kill the bacteria that survive treatment with existing antibiotics.

## Did you know ?

Janssen has a range of product specific and disease area websites for patients and their care-givers. You can find useful information about HIV/AIDS, tuberculosis and hepatitis C on our **specialized websites** :

- [www.tibotec.com](http://www.tibotec.com)
- [www.tibotec-hev.com](http://www.tibotec-hev.com)