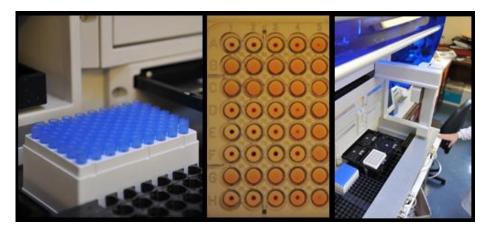


# **Object 18: HIV testing kit**



### What is it?

Human immunodeficiency virus (HIV) is a blood-borne virus that attacks the immune system and leaves those infected susceptible to infections and certain cancers. HIV can be transmitted during transfusion of infected blood and blood products. Donated blood has been tested for HIV since the 1980s.

#### History

HIV was transmitted to some blood recipients during the early 1980s before accurate tests were developed. Since then increasingly sensitive tests have been developed to diagnose the infection early and reduce the risk of the virus being transmitted.

## Pathology

Approximately 2.5 million units of blood components are distributed in the UK every year.

There is a 'window period' between infection with HIV and seroconversion i.e. antibodies being detectable in the blood. This means that even if blood is tested and is negative, it is possible for an infection to be transmitted. HIV tests have been developed to identify very early HIV infection to reduce the window period and minimise the risk of transmission of the virus.

Methods used to test for HIV infection include enzyme-linked immunosorbent assay (ELISA) and nucleic acid testing (NAT).

The risk of contracting HIV from a blood transfusion is 0.014 per 100,000 units transfused. The cost of blood transfusion has doubled over the last ten years because of the expense of testing it for infectious agents.

## Find out more

Learn more about how blood transfusions are tested for infectious diseases on the <u>Give</u> <u>Blood Website</u>.