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# The basics

## HIV and the immune system



This leaflet can be viewed in large format as a PDF.  
Call NAM on 020 3242 0820.



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### Notes

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### Want to find out more?

**For more information on this topic:**

- read NAM's fact sheet 'Immune system cells'
- read Terrence Higgins Trust's booklet 'Your treatment', or
- speak to an adviser at THT Direct (phone: 0808 802 1221).

**For more information about HIV**

You can get free fact sheets, booklets, email bulletins and a newsletter from our website at [www.aidsmap.com/resources](http://www.aidsmap.com/resources). You can get answers to common questions at [www.aidsmap.com/hiv-basics](http://www.aidsmap.com/hiv-basics) and find local services at [www.aidsmap.com/e-atlas](http://www.aidsmap.com/e-atlas).

**Contact us** by calling 020 3242 0820 or by sending an email to [info@nam.org.uk](mailto:info@nam.org.uk)

**Has this resource been useful to you?**

Please let us know what you think by visiting our website at [www.aidsmap.com/feedback](http://www.aidsmap.com/feedback), phoning us or sending an email to [info@nam.org.uk](mailto:info@nam.org.uk). Your feedback helps us to improve the services we offer you.

You can contact us to find out more about the scientific research and information we have used to produce this leaflet.

**We recommend that you discuss the information in this leaflet with a doctor or other health worker.**

**The immune system is the body's natural defence system. It's a network of cells, tissues and organs inside the body.**



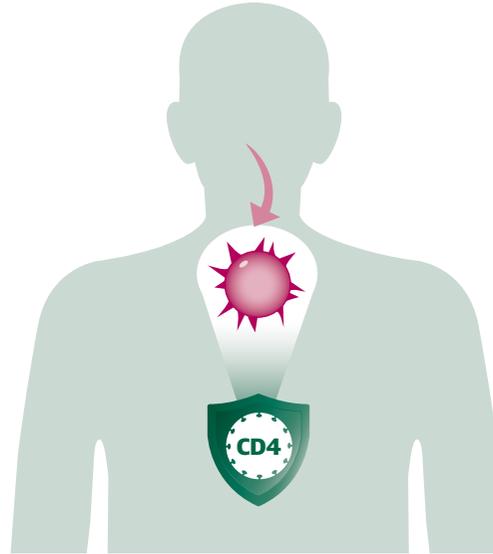
**'Pathogens' (or germs) are living things that can cause disease. Bacteria and viruses are both pathogens.** We come into contact with them all the time - there are pathogens in the air we breathe, in the food we eat and elsewhere in our surroundings.



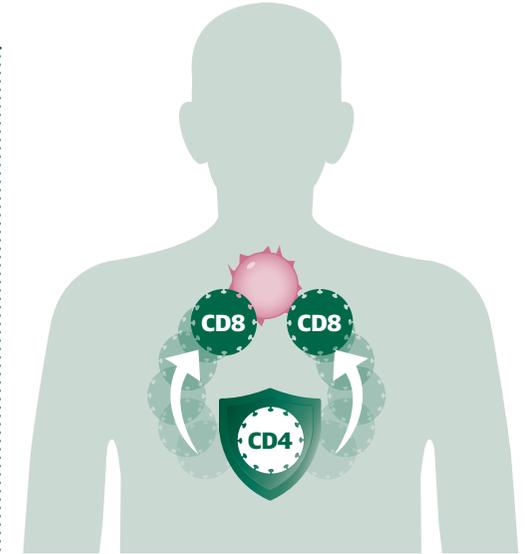
But pathogens don't usually cause problems, because **the immune system attacks them** if they get inside the body.



## When the immune system is strong, you don't get ill

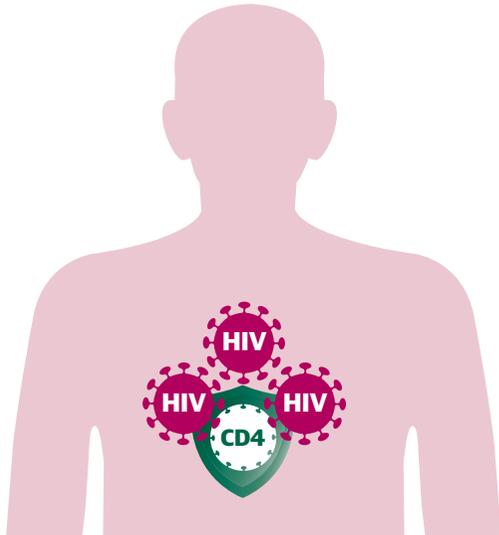


- Once a pathogen has got inside the body, cells in the immune system (called CD4 cells) recognise it as something that doesn't belong there.



- Other immune system cells (including CD8 cells) are sent to attack and destroy the pathogen.

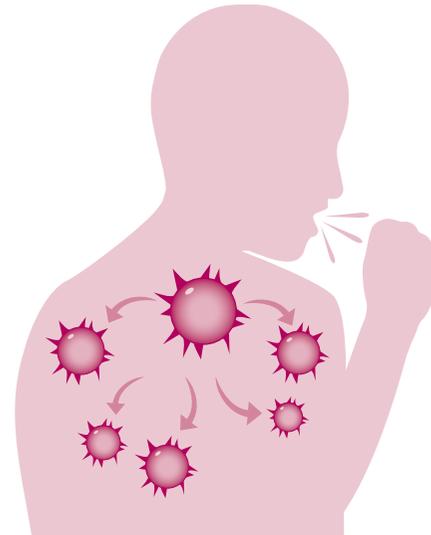
## If the immune system has been made weak by HIV, you may get ill



- HIV has infected and taken over lots of your immune system's CD4 cells.



- When another pathogen gets inside the body, the immune system doesn't know how to fight it.



- The pathogen can multiply in the body and make you sick.

### Important points

- The immune system is the body's defence system, which recognises and fights off pathogens (germs).
- HIV weakens the immune system, which means that common pathogens can cause infections and illnesses.
- HIV treatment strengthens the immune system.