HIV-positive people are living increasingly long lives. Many people living with HIV can expect to live as long as their peers who do not have HIV.

Studies show that a person living with HIV has a similar life expectancy to an HIV-negative person – providing they are diagnosed in good time, have good access to medical care, and are able to adhere to their HIV treatment.

A number of factors can affect the life expectancy of people living with HIV. There are differences in outcomes between different people, depending on these and other factors.

- **Access to effective HIV treatment** and high quality medical care.
- **Starting HIV treatment as soon as possible** after HIV infection, before the CD4 cell count has dropped to a low level. The sooner you are diagnosed and begin HIV treatment, the better the long-term prospects.
- **Having had serious HIV-related illnesses in the past.** This may have occurred before HIV was diagnosed and/or before HIV treatment was begun. These illnesses have a negative impact on life expectancy.
- **Results one year after starting HIV treatment.** Studies show that life expectancy is better for people who respond well within a year of starting treatment than for people who do not. Specifically, people whose CD4 count reaches at least 350 and have an undetectable viral load within a year have very good long-term prospects.
- **Year of diagnosis** – HIV treatments and medical care have improved over the years. People who have been diagnosed in recent years are expected to have a longer life expectancy than people who were diagnosed longer ago.
- **Other health conditions**, such as heart disease, liver disease and cancer. They are
more likely to be the cause of death than HIV.

- **Injecting drug use** – life expectancy is shorter for people with HIV who inject drugs, due to drug overdoses and bacterial infections.

It’s also important to consider things that affect everyone’s life expectancy, whether or not they have HIV.

- **Social and economic circumstances** – there are important differences in life expectancy according to where you grow up, your income, education, social class and so on.
- **Gender** – women usually live longer than men.
- **Lifestyle** – life expectancy is longer for people who have a balanced diet, are physically active, maintain a healthy weight, avoid excess alcohol or drug use, and remain socially connected. Avoiding smoking is particularly important for life expectancy.

**How is life expectancy calculated?**

Life expectancy is the average number of years that a person can expect to live.

More precisely, it is the average number of years an individual of a given age is expected to live if current mortality rates continue to apply. It is an estimate that is calculated by looking at the current situation of a group of people and projecting that into the future.

However, HIV is a relatively new disease and HIV treatment is a rapidly changing area of medicine. It is therefore hard to know whether our current experience will be an accurate guide to the future.

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At the moment, there are large numbers of people living with HIV in their twenties, thirties, forties, fifties and sixties. Current death rates are very low, resulting in encouraging figures for future life expectancy. But we have very little experience of people living with HIV in their seventies or eighties, so we know less about the impact HIV may have later in life.

Also, healthcare for people with HIV is likely to get better in the future. People living with HIV will benefit from improved anti-HIV drugs that have fewer side-effects, are
easier to take and are more effective in suppressing HIV. Doctors’ understanding of how best to prevent and treat heart disease, diabetes, cancers and other conditions in people with HIV is improving. This could mean that people actually live longer than our current estimates suggest.

When reading about life expectancy, it’s important to bear in mind that researchers do not always have access to all the information that is relevant. For example, they don’t usually know how physically active people were, whether they smoked, or whether they used recreational drugs.

Although these factors have a great influence on health, the data aren’t available to produce precise life expectancy estimates according to each one. So, there are estimates according to people’s age at HIV diagnosis and CD4 count, but we don’t have estimates that take lifestyle and social factors into account as well.

It’s important to remember that figures for life expectancy are averages. The unique combination of circumstances in each person’s life – including health, lifestyle and social conditions – will influence the actual number of years a person lives. It may be more or less than the average.

**What is the life expectancy for people living with HIV in the UK?**

A study published in 2014 looked at the outcomes of over 20,000 adults who started HIV treatment in the UK, between 2000 and 2010. The analysis didn’t include people who inject drugs, who tend to have poorer outcomes than other people, but otherwise included a wide range of adults living with HIV.

The key finding was that people who had a good initial response to HIV treatment had a better life expectancy than people in the general population.

Specifically, a 35-year-old man who had a CD4 cell count over 350 and an undetectable viral load (below 400 copies/ml) one year after starting HIV treatment could expect to live to the age of 81. A 50-year-old man with the same results after one year of treatment was predicted to live to the age of 83. In the general population at this time, men in these age groups were expected to live to 77 and 78 years.

A 35-year-old woman and a 50-year-old woman with the same results could expect to live to 83 and 85 years. This compares to 82 and 83 years in the general population.

For people who had a CD4 count between 200 and 350 and an undetectable viral load one year after starting treatment, life expectancy was similar to that of people in the general population. Among men, a 35 year old and a 50 year old could expect to live to 78 and 81 years respectively. Among women, a 35 year old and a 50 year old were predicted to live to 81 and 83 years respectively.

For people whose initial response to treatment was not quite so good, life expectancy
was a little shorter. Results were broadly similar in each of the following scenarios: a CD4 count below 200 and an undetectable viral load, a CD4 count between 200 and 350 and a detectable viral load, and a CD4 count above 350 and a detectable viral load.

A 35-year-old man with any of those results could expect to live to 70-72 years. A 50-year-old man was predicted to live to 75-77 years. Women of the same ages could expect to live around two years longer than the men.

A few people in the study had a poor initial response to treatment – one year on, their CD4 count was below 200 and their viral load was detectable. In this case, a 35-year-old man was expected to live to 61 years and a 50-year-old man to 69 years. Women of the same ages were expected to live to 64 and 71 years respectively.

These days in the UK, very few people die as a direct result of HIV. When deaths do occur, they usually happen in the first year after diagnosis and involve people who were diagnosed with HIV very late, when they were already very ill because of HIV. In many of these cases, the person did not attend an HIV clinic or did not take HIV treatment, or only did so irregularly.

**Summing up**

With the right treatment and care, most people living with HIV in the UK will have a more or less normal lifespan. Very few people in the UK fall ill or die as a direct result of HIV anymore.

In fact, the most important causes of illness and death in people living with HIV are now quite similar to those in the general population. They include heart disease, kidney disease, liver disease, diabetes, depression and cancers.

A wide range of factors affect your risk of developing these conditions. Some of them are things you can’t change, like your age, a family history of certain diseases, or having HIV.

Other risk factors are within your power to change. You can increase your life expectancy by not smoking, being physically active, having a balanced diet, maintaining a healthy weight, avoiding excess alcohol or drug use, and remaining socially connected.