Key messages

- **HIV is a virus** which weakens a person's immune system.
- HIV is **spread when body fluids** containing the virus, such as **blood, semen, vaginal fluid, anal fluid or breast milk,** enter the bloodstream of a person who does not have HIV.
- There are **effective medications** that prevent the transmission of HIV through sexual contact.
- Many people **do not realise they have HIV** because they do not see or feel anything wrong.
- **Using condoms, getting regular testing and not sharing injecting equipment** prevents HIV transmission.
- Today, people living with HIV in Australia are on effective treatment and **rarely develop AIDS.**

HIV (Human Immunodeficiency Virus)

The Human Immunodeficiency Virus (HIV) is a virus which weakens a person's immune system.

Without effective treatment, HIV can multiply within the body and destroy essential immune cells that work to help the body fight off infections.

When HIV enters the body it searches for certain immune cells to make copies of itself (replicates) to increase its presence within the body. In this process, HIV can reduce the function of a person's immune system as HIV destroys immune cells when it makes copies.

As this process occurs, the immune system becomes weaker (compromised) and less able to fight off infections and diseases. When a person living with HIV has a compromised immune system and is unable to fight off more than one infection they may be diagnosed as having developed Acquired Immunodeficiency Syndrome (AIDS).

It is important to remember that HIV is not the same as AIDS, as HIV is a virus and AIDS is a syndrome (set of symptoms) resulting from advanced HIV infection that has not been treated. Most people living with HIV in Australia are on effective treatment and do not develop AIDS.

How is HIV spread?

HIV is spread when body fluids containing the virus, such as blood, semen, vaginal fluid, anal fluid or breast milk, enter the bloodstream of a person who does not have HIV.

This can happen through:

- anal or vaginal sex without a condom
- sharing injecting equipment, particularly needles and syringes

- the natural transfer of fluids from a pregnant person who is living with HIV to the baby during pregnancy, birth or breastfeeding
- unsterile body piercing and tattooing
- receiving unsafe blood via transfusion, organ or tissue transplantation (especially in countries with inadequate regulations for screening the blood supply as well as organs and tissues for presence of HIV - unlike Australia).
- unsafe medical or dental procedures (especially in countries that do no have regulations for HIV testing and prevention - unlike Australia).

People are also at risk if their sexual partner shares injecting equipment, even if they don't.

Oral sex without a condom or dam may also be a risk if there are any cutes or sores in and around the mouth and genital area.

You cannot get HIV from:

- hugging
- kissing
- mosquito or insect bites
- coughing or sneezing
- 'love bites'
- sharing eating and drinking utensils
- sharing the same toilet seats
- swimming in public swimming pools or spas.

HIV **cannot** be spread through contact with saliva, sweat or tears from a person living with HIV.

You are not at risk of HIV in most work places and schools. However, where work, study or sport incudes contact with blood and body fluids, there *may* be some risk. Always follow basic hygiene, including proper hand washing, and safe handling of body fluids such as blood spills.

Treatment

Today, there is effective treatment (medication) which prevents HIV from making copies of itself. Antiretroviral therapy (ART) is the name given to a group of medicines used to treat HIV infection. It is taken daily. A person living with HIV who is taking ART can bring their viral loads down to an 'undetectable' level which means that there is no risk of passing on HIV through **sexual contact**.

Like a number of other conditions which require people to take ongoing medication, HIV is considered to be a chronic but manageable condition, and people living with HIV can lead long and healthy lives, with a similar life expectancy to a person who does not have HIV.

Currently there is no cure for HIV, but there is a lot of research underway looking for both a cure and a vaccine to prevent HIV.

Prevention

There are some medications that can help prevent the transmission of HIV:

PrEP (Pre-exposure prophylaxis) is a medication that someone who does not have HIV takes if they are at higher risk of acquiring HIV through sexual contact. This medication is highly effective at preventing HIV transmission through sexual contact.

PEP (Post-exposure prophylaxis) is a course of medication that is taken within 72 hours of a potential exposure to HIV. These medicines help to reduce the risk of HIV becoming established in the body.

Antiretroviral therapy (ART) is the name given to a group of medicines used to treat HIV infection. A person living with HIV who is taking ART can bring their viral loads down to an 'undetectable' level which means that there is no risk of passing on HIV. This requires continual medication and regular viral load monitoring appointments at a doctors to maintain.

Acquired Immunodeficiency Syndrome (AIDS)

When the immune system is deficient, it is unable to fight off infections and disease caused by a variety of germs (viruses, bacteria, fungi and parasites) that a healthy immune system can normally manage. These infections are called opportunistic infections.

When a person living with HIV, whom has not been able to prevent HIV from replicating by taking effective treatment, reaches a stage where they have a compromised immune system (with one or more opportunistic infections) they may be considered as having developed AIDS.

A person with AIDS has an advanced stage of HIV infection. If medical treatment can be sought and a person with AIDS may recover. The treatment can improve the function of their immune system by reducing the amount of HIV in the body. This means that it is possible to have AIDS, to recover from AIDS, and be diagnosed as no longer having AIDS. However, because HIV results in AIDS, if a person develops AIDS they will still have HIV. This is because currently there is no cure for HIV.

Today, people living with HIV on effective treatment rarely develop AIDS.

Signs and symptoms of HIV infection

Soon after HIV infection, some people feel as if they have the flu, with symptoms such as:

- fever
- headache
- tiredness

Some people may not have any symptoms. You can have HIV and feel and be healthy. Many people do not realise they have HIV because they do not see or feel anything wrong.

As the virus continues to attack the immune system, a person will start to develop symptoms.

These can include:

- constant tiredness
- swollen glands
- rapid weight loss
- night sweats
- memory loss

The only way to establish if a person has HIV is through a blood test. However for a short period (known as the ‘window period’) of a couple weeks just after HIV first enters the body it cannot be picked up with a test. This means that if a person’s results are negative at first and there has been risk behaviour they will need a further test in three months.

Preventing the transmission of HIV

- Always use condoms with water-based lubricant when you have sex.
- People who inject drugs, never share needles, syringes, filters, water or spoons. Always use new, sterile needles and syringes.
- People in a relationship should ensure that both partners have been tested and are aware of each other's HIV status.
- People having casual sex (sex with different people on a regular basis) need to schedule regular STI checks and consider medication like PrEP.
- Before considering body art (such as tattooing or piercing) ensure the body artist uses only sterilised equipment, and new razors, inks and needles each time.

External resources

WAAC

What it means to have HIV - animated video

HIV and AIDS, WA Department of Health

For young people

HIV and AIDS, Get the Facts

Safer sex, Get the Facts

Related learning activities

- Blood-borne virus safety

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