

# Understanding and communicating risk

## How HIV is and isn't passed on

For HIV to be passed – transmitted – from one person to another, a certain amount of the virus has to be present. While it can be found in saliva or sweat, the concentration is too low for infection to occur.

HIV is passed on through infected blood, semen, anal mucus, vaginal fluids or breast milk. The most common ways HIV is passed on are:

- ▶ Through unprotected vaginal or anal intercourse with someone living with HIV. Globally, this is the most frequent route by which the virus gets from one person to another.
- ▶ Sharing infected needles, syringes or other injecting equipment.
- ▶ From an HIV positive mother to her child during pregnancy, birth or breastfeeding if no preventative steps are taken. If preventative steps are taken during pregnancy and birth the risk of mother to child transmission is less than 2 per cent.

Oral sex carries a very low risk, but if cuts, ulcers or diseased gums come into contact with infected bodily fluids HIV can be passed on.

## Putting the risks into perspective

While HIV can be passed from one person to another during a single sexual act or sharing needles just once, it is not inevitable. Being exposed (put at risk if HIV is present) does not mean that one is automatically infected and it is important that reporting does not imply this. Of course, the more often someone takes risks, the more likely transmission becomes.

Transmission risks during sex increase greatly if either of the sexual partners has another sexually transmitted infection (STI).

The risks of passing on HIV are much higher in the first few months after someone has become infected. During this time, there is an extremely high level of HIV in the body, and it can take some time before the immune system can react and produce antibodies; a process called 'sero-conversion'. Of course so soon after infection most people are still unaware that they have been infected and therefore HIV can be unwittingly passed on.

HIV treatments, which greatly reduce the amount of HIV in the body, also reduce the chances of onward transmission. However, since the risk is not completely eliminated, unprotected sex or

## Blood transfusions and blood donor bans

Early in the epidemic a number of haemophilia patients became infected with HIV via blood transfusions and blood clotting factors. Blood transfusions may still be dangerous in parts of the world where screening is not rigorous. However, in the UK all blood products are now screened for HIV and most other blood-borne viruses.

Restrictions still apply in the UK on who can donate blood. Currently any man who has ever had sex with another man (MSM) is permanently banned from giving blood. Similar exclusions apply to anyone who has ever been paid for sex and anyone who has ever injected drugs. These restrictions are currently under review by the Safety Advisory Committee on Blood Tissues and Organs and may change soon.

sharing needles remain a transmission risk even if the person living with HIV is on treatment.

### PEP – Post-Exposure Prophylaxis

Post-Exposure Prophylaxis, commonly known as PEP, is a course of treatment lasting one month that may prevent HIV infection after the virus has entered the body. In order for PEP to have a chance of working, it needs to be started as soon as possible and definitely within 72 hours of exposure to HIV. PEP can be prescribed by hospitals including A&E departments, GUM or sexual health clinics and GPs experienced in treating HIV.

### Preventing HIV transmission

The most effective way to prevent HIV being passed from one person to another during sex is by using a condom.

While using condoms properly is very effective in stopping HIV infection, no one method ever provides 100 per cent protection, so 'safer sex' is a far more honest expression than 'safe sex'.

Anal intercourse is considered by many as synonymous with gay men's sexual activity. But many gay men do not practice anal sex and, in many cultures, heterosexuals do. So it is important not to make assumptions.

For injecting drug users, HIV is mainly transmitted through the sharing of needles and injecting equipment – so not sharing needles and injecting equipment but instead accessing clean needles/equipment is an effective way to prevent HIV transmission. In the UK needle exchange centres can provide clean needles free of charge.

### No risk and low risk

HIV is not contagious; it cannot be transmitted through surface-to-skin contact or through the air, so HIV can't be 'caught'. It is inaccurate to suggest HIV can be passed on by:

- ordinary social or physical contact
- kissing (including 'French kissing')
- coughing or sneezing
- sharing toilet seats or washing facilities
- sharing cutlery, food or drink
- using swimming pools
- spitting.

In addition, there are some activities or events which may carry a theoretical risk of infection but where in fact the risk of HIV infection is so negligible as not to warrant concern or any action (see next section, *Misconceptions about risk*).

### Further information

#### Risks of transmission

AVERT – [www.avert.org/transmission.htm](http://www.avert.org/transmission.htm)

#### Preventing HIV

NAM – [www.aidsmap.com/cms1330379.aspx](http://www.aidsmap.com/cms1330379.aspx)

#### PEP

CHAPS Online – [www.pep.chapsonline.org.uk/pep\\_basics.htm](http://www.pep.chapsonline.org.uk/pep_basics.htm)

BASHH, UK Guideline for the use of post-exposure prophylaxis for HIV following sexual exposure, [www.bashh.org/documents/58/58.pdf](http://www.bashh.org/documents/58/58.pdf)