

Nearly everyone with HIV uses drugs of some kind. Some people opt for legal drugs such as coffee (caffeine), tea (theine), alcohol or tobacco, while others consume illegal drugs.

The use of drugs before or during sexual activity increases the chances of higher-risk sexual practices and therefore of contracting or transmitting HIV and/or other sexually transmitted infections.

In people with HIV, there may also be significant interactions between drugs and antiretroviral medication (ARVs). These interactions could reduce the effectiveness of treatment and increase the side effects of both the medication and the drugs. Another cause for worry is that most drugs are not very pure and may be cut with substances that also interact with ARVs, which makes antiretroviral therapy even more difficult to manage.

### Interactions and drugs

The exact interactions between recreational drugs and ARVs are difficult to establish. Because they are illegal substances, there are legal obstacles to running clinical studies.

Interactions between ARVs and drugs may increase or decrease their levels in the blood. Drugs may stop the ARVs from working properly because there are not high enough medication levels in the blood.

Drugs may also cause ARV levels to rise and therefore increase the chances of side effects. The opposite may also occur: HIV medication may make drug levels in the blood rise and cause greater toxicity (overdose).

The body processes most ARVs through the liver. The level of the drugs broken down by the liver may therefore vary considerably.

### Alcohol

There is no evidence that moderate consumption of alcohol is detrimental to the health of people with HIV. However, even minimum consumption may be harmful to people who also have hepatitis and/or high blood fat levels. Alcohol can interact with some commonly prescribed medication. It is therefore advisable to consult a doctor or a chemist about the risk of interactions. There are nevertheless no significant interactions between any ARVs currently available and alcohol.

### Cannabis (THC: marijuana, hashish and hash oil)

There have been no reports of interactions between cannabis and ARVs. However, protease inhibitors may increase levels of THC, the active component of marijuana, hashish and hash oil. It is thought that there may be more interaction if the marijuana is swallowed rather than smoked.

### Cocaine

The method used by the organism to process cocaine is not the same as that used for ARVs. It is therefore unlikely that there are significant interactions between the two.

### Crystal meth (methamphetamine)

This drug is metabolised by the same pathway as protease inhibitors. It is therefore very likely that there will be significant interactions. Ritonavir (Norvir®), even when used in low doses as an enhancer of other protease inhibitors, may raise methamphetamine levels in the blood and, therefore, its toxicity.

### Ecstasy (MDMA)

The body metabolises this drug mainly in the liver. Because protease inhibitors use the same pathway of metabolism, there is a risk that blood ecstasy levels may increase when the two are taken jointly. Ecstasy can cause dehydration, which may increase the risk of kidney stones in people who also take the protease inhibitor indinavir (Crixivan®).

### GHB

GHB is generally eliminated from the body through the lungs (by breathing). However, protease inhibitors may increase GHB levels.

### Ketamine (K, Special K)

This drug is metabolised mainly by the liver. There have been no reports of interactions between ARVs and ketamine. Theoretically, however, protease inhibitors may increase levels of ketamine and, therefore, its side effects (greater drowsiness).

and an increase in heart rate and blood pressure). When taken jointly with ritonavir (Norvir®), there may be a higher risk of drug-induced hepatitis.

### LSD

The precise way in which the body processes this drug is unknown. Although it may interact with ARVs, it is not known whether this interaction is clinically significant.

### Poppers

There is no knowledge of interactions between poppers and ARVs. Inhaling poppers after taking medication for erectile dysfunction (Viagra®, Cialis® and Levitra®) may, however, cause a potentially dangerous and even fatal drop in blood pressure. This risk may be intensified if a protease inhibitor antiretroviral regimen is being taken. These types of ARVs increase concentration in the blood of the erectile dysfunction medication. People who take protease inhibitors are therefore advised to reduce doses of erectile dysfunction medication and not to take poppers at the same time.

### Help and recommendations

Many recreational drugs interact with ARVs. Information on the reciprocal effects of ARVs and drugs is incomplete and sometimes not available. In order to prevent your medication from becoming less effective or a greater risk of side effects of your medication and recreational drugs, you should keep your HIV doctor informed if you consume either occasionally or regularly.

Drugs may alter perception of reality. People who consume drugs or intend to do so may therefore need to develop strategies by which they may take their medication at the right time and according to the method prescribed. Some resources and organisations help you not to neglect your antiretroviral treatment while you consume drugs.

Lastly, it is worth remembering that snorted drugs can damage the membranes of the nasal orifices and cause bleeding wounds and occasional erosion. Cases have been reported of the transmission of the hepatitis C virus through shared snorting gear.