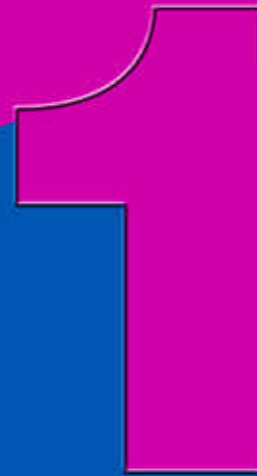


It's easier to deal with the side effects of HIV drugs if you are informed about them before they happen. When you start any HIV treatment, temporary side effects such as headaches, nausea and diarrhoea are common. This factsheet focuses on the most common side effects of efavirenz, and includes people's personal stories explaining how they dealt with them. This information is intended to prepare and inform you, so that you don't feel scared if something comes up. The fact sheet does not aim to provide all the available information about efavirenz. It does not endorse efavirenz or warn against it and is not a substitute for your doctor's advice.



How does efavirenz work?

Efavirenz belongs to a group of medicines called non-nucleoside reverse transcriptase inhibitors (NNRTIs). Efavirenz works by interrupting the formation of new HIV particles in already infected cells. This helps reduce the amount of virus in the blood.

Efavirenz is always taken with two or more other HIV drugs. For adults and children weighing more than 40kg, the normal dose is 600mg once a day, preferably on an empty stomach. Efavirenz is available as one 600mg tablet, and smaller doses in different formulations are also available.

Efavirenz interacts with a number of drugs, including some HIV drugs. If you are taking other drugs that interact with efavirenz, your doctor will compensate for this by altering the dosing. Efavirenz should not be taken with St John's Wort (*Hypericum perforatum*), a herbal product sold as a dietary supplement.

Efavirenz helps most people with HIV infection, but it may have unwanted side effects. Not everyone who takes efavirenz gets side effects. However for those that do, the most common appear to be

- dizziness
- trouble sleeping
- drowsiness
- trouble concentrating
- unusual dreams.

Trials have shown that these side effects can occur in more than 50% of people and may last an average of two to four weeks.

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General tips to minimise efavirenz side effects

- Take care driving or operating machinery until you know how efavirenz affects you.
- Efavirenz may cause dizziness, drowsiness or affect concentration in some people, especially during the first few days. Alcohol and recreational drugs, especially during the first few weeks, may increase the likelihood and severity of side effects. Their after-effects could also be mistakenly attributed to efavirenz side effects.
- If your concentration is affected, avoid mentally demanding activity like multi-tasking and situations that require intense concentration. Use appointment books and diaries to remind yourself of commitments.
- It may be useful to start efavirenz when you are more relaxed and less worried or stressed, such as at the weekend or when you have some time off work.
- Taking efavirenz with food can increase drug levels by 60%, which in turn may lead to increased side effects. If you are having problems with side effects and have been taking efavirenz with food, try taking it on an empty stomach.

- Some doctors say side effects can be minimized if patients start on a lower dose (400mg) for the first 10 days, then increase it to the full daily dose (600mg). Others claim that dose-splitting (taking same of your dose in the morning and the rest 12 hours later) during the first few weeks of therapy can minimize side effects. Discuss these unproven strategies with your doctor.

Individual side effects vary from person to person

Dizziness

Try taking efavirenz at bedtime if dizziness is a problem. Remember that dizziness is a side effect that is usually temporary and goes away by itself after a few weeks. If you have sick leave or holiday leave, consider taking some time off when starting efavirenz.

Theresa: My husband has been positive for three years. He started on efavirenz, 3TC and d4T. He was really dizzy and shaky at first. It took him about a month and a half to feel better. He is doing great with the trio now.

Robert: The most serious side effect was dizziness, which my doctor didn't warn me about. I took efavirenz at night. The dizziness was so severe that I would be stumbling into walls when I got up at night to go to the toilet. Moving to a bedroom nearer the toilet helped. The dizziness went away after a few weeks.

Susan: The dizziness was so bad that I was falling over at times. I was taking the drug at about 5pm each day. After discussing it with my specialist he suggested that I take it when I went to bed. Taking it at bedtime stopped me experiencing the dizziness. I found the drug is working very well for me in combination with 3TC and tenofovir. My viral load is undetectable and my T Cells are 1120.

Mood changes

It is important to remember that mood swings can be related to efavirenz. Any sudden onset of crankiness and irritability will almost certainly be due to the temporary side effects of efavirenz. Dosing at bedtime can be helpful.

Michael: I've been on efavirenz for five years. I take it just before I go to sleep. If I take it earlier, two hours afterwards I get an uncomfortable feeling of edginess.

Tony: My doctor told me to take efavirenz in the morning. I started taking it at 7.30am with a cup of coffee – I don't eat breakfast. The first noticeable side effect was that a couple of hours after the morning dose I'd feel anxious, jittery and nervous. This went on for three months till I brought it up with my doctor, who suggested taking it at night. When I changed to night-time dosing the side effects went away.

Unusual dreams & insomnia (sleeplessness)

Consider these strategies for managing insomnia:

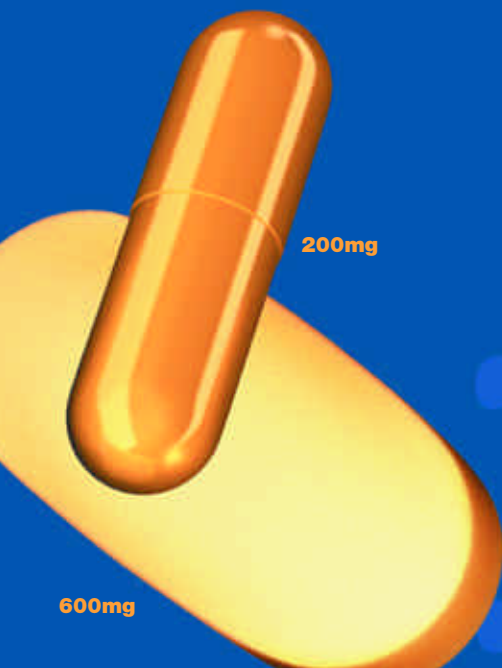
- Discuss with your doctor whether altering the time you take your efavirenz (eg. from bedtime to early afternoon or morning) might help
- Avoid caffeine, chocolate in the afternoon and evening
- Try relaxation techniques like yoga, breathing exercises, a warm bath
- Discuss with your doctor whether sleeping medication is an option
- Mood management before bedtime may help with dreams. Try doing, reading, or watching something bland or pleasant prior to bedtime.
- Practice good sleep routines – go to bed at the same time each night and use the bed for sleep and sex only

Michael: When I started efavirenz, my doctor warned me to expect some insomnia and offered me sleeping medication. I don't like taking sleeping pills and I've found alternative sleeping medication at bedtime that provides a good nights sleep. The vivid dreams haven't gone away but they are not nightmares.

Patrick: I still get insomnia occasionally. I am not sure if this is due to the efavirenz or that I am experiencing the same amount of insomnia as many other people. Perhaps it is a consequence of living in a busy part of the city.

Rebecca: The sleeplessness has never gone away. My doctor prescribed some sleeping medication but that gave me a hangover. Now I take another sleeping medication which works very well and doesn't cause a hangover.

Susan: I still had the vivid dreams for a while but that soon stopped. Taking it at bedtime stopped me experiencing the dizziness and sleep disturbance.



600mg

General Disclaimer:

This information is intended to inform and educate. It is not intended to replace the advice of your health care professional. If you have or suspect you may have a health problem, consult your health-care professional.

Rash

Mild to moderate rash (pinkish, itchy swellings on the skin) during the first few weeks of therapy has been reported in clinical trials with efavirenz. Fortunately the rash usually goes away without any need to discontinue efavirenz. Always report a rash to your doctor.

Avoid things that can aggravate a rash such as:

- sun exposure
- sunscreen products
- perfumes
- heavily scented creams, lotions or soaps
- hot baths/showers.

Avoid scratching or rubbing the rash as this may cause it to bleed or become infected. A rash and its surrounding area should be cleaned using a gentle soap and patted dry. Non-allergic moisturizers and creams can help keep the skin moist and control itching (check with your doctor or dermatologist). If itching and scratching are severe, ask your doctor about medications to reduce itchiness.

Severe depression, suicidal thoughts (rare)

There can be a wide variety in the way people process efavirenz in the body. This means some people may have blood levels of efavirenz that are below or above the recommended level. In a small number of cases, abnormally high blood levels of efavirenz have been identified as the cause for depression and abnormal thinking. Therapeutic drug monitoring – measuring blood levels of efavirenz – enables doctors to fine tune the dose so that effective drug levels are maintained and side effects are minimised. Never change your dose of efavirenz without consulting your doctor.

Patrick: I began treatment including efavirenz in the first week of March 2000. I started experiencing suicidal thoughts in July 2001 which was 16 months after commencing efavirenz. Around that time I had problems at work which were causing me discomfort and they became the trigger for suicidal thoughts. I made preparations for suicide but thankfully I hesitated. I just could not take that next step. I rang a friend, explained everything and she was with me within minutes. The next morning I rang the clinic to ask for help. The medical and psychological staff were amazing. They were able to bring sense to a senseless situation. I felt I was going crazy but it was suggested and later proven to be a result of high levels of efavirenz. When my levels of efavirenz were measured they were six times the level they needed to be to contain the HIV. Four times the level is where they would normally expect the development of neurological side effects. My dose was lowered to 400mg daily of efavirenz. Within several weeks my mental state improved. The new dose appears to be working. My viral load remains undetectable and my CD4 count is still increasing.

Long term side effects: efavirenz vs other HIV drugs

Glucose is a simple sugar found in the blood, and is the body's main source of energy. A class of HIV medication called protease inhibitors can interfere with the way the body uses glucose. In some cases this can increase a person's risk of developing diabetes.

Some protease inhibitors can also interfere with blood fats and cholesterol levels, potentially increasing the risk of heart disease. Switching from a protease inhibitor to a non-nucleoside reverse transcriptase inhibitor (NNRTI) may improve bloodfat and cholesterol levels. However efavirenz, which is a NNRTI, has been shown to raise cholesterol levels in some people. Medication is available which can lower cholesterol levels.

Robert: I had to stop taking my previous drug combination after two years of successful suppression of the virus, because of lipodystrophy, raised cholesterol, lipid imbalances and insulin intolerance. I switched my protease inhibitor for efavirenz eighteen months ago (but kept two other drugs from my previous combination) because I was worried about a history of heart problems on both sides of my family. The switch has been very successful for me, though some of the brain chemistry changes have been challenging to deal with – sleep disturbance, mood swings and lethargy. I'm getting used to these now with the help of antidepressants and a very understanding and long-suffering partner.

Rebecca: The protease inhibitors were causing lipid/blood sugar problems which would only become worse as time went on. Efavirenz, therefore, is a credible alternative to the protease inhibitors for me personally. The need for effective viral suppression outweighs the side effects.

The bottom line

- Efavirenz is a potent, simple, once-daily therapy.
- It generally has few side effects after the first few weeks of therapy
- It has a low rate of long-term side effects

Not everyone experiences some or all of the side effects. Starting or changing HIV medication can be stressful itself. Keep in mind that some symptoms could be caused by stress rather than efavirenz. Although the personal stories in this fact sheet describe some difficult experiences, they demonstrate that side effects are either short-lived or, together with their doctors' assistance, manageable. Remember that help is available and don't hesitate to ask for it.

Contacts

Services provided by the AIDS Council of NSW (ACON):

- **Counselling and Assessment Team**
☎ 02 9206 2000. Outside Sydney 1800 647 750 between 10.00am and 6.00pm Mon–Fri. Trained and professional offer a free & confidential service to people living with, affected by or at risk of HIV/AIDS as well as gay men, lesbians, bisexuals and transgender people, regardless of their sero-status.
- **ACON'S Treatment Information Officers**
☎ 02 9206 2013 or 9206 2036 Freecall 1800 816 518 Call for up to date information about treatments for HIV.
- **ACON's Women's HIV Peer Support**
☎ 02 9206 2012. Information, education, support and referral services to women living with HIV/AIDS.

Services from other organisations:

- **People Living with HIV/AIDS (NSW) Inc.**
☎ 02 9361 6011/02 9360 3504 Freecall 1800 245 677
A non-profit community organisation representing the interests of people living with HIV/AIDS in New South Wales.
- **Albion Street Centre Psychology Unit** Mon–Fri 9am–7pm Psychology Unit Manager. ☎ 02 9332 9600
24hr Crisis ☎ 02 9382 2222 (ask for Albion St counsellor on call) Free and confidential psychological and counselling services to HIV positive people, their partners, carers, family and friends.
- **Gay and Lesbian Counselling Service of NSW**
Counselling Line (4pm–Midnight, 7 days) ☎ 02 9207 2800 Freecall 1800 18 4527. A free, anonymous and confidential telephone counselling, information and referral service across NSW on sexuality and life issues.
- **Heterosexual HIV/AIDS Service (Pozhet)**
Project Coordinator ☎ (02) 9515 3095. Freecall 1800 812 404 (national) between 10am–5pm, Mon–Fri. Peer support, workshops, social activities and retreats, freecall phone counselling for positive heterosexual men and women, their partners and family members.
- **Multicultural HIV/AIDS Service** ☎ 02 9515 3098
Freecall 1800 108 098 Mon–Fri 9am–5pm. Bilingual/bicultural co-workers providing emotional support, advocacy and information to people living with HIV/AIDS from non-English speaking backgrounds.

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