

because you asked

Therapeutic vaccines

I keep hearing about a vaccine for HIV. Since I've already tested positive, how is a vaccine supposed to work for me?

— *Curious in Victoria*



Dr. Routy replies: Some vaccines are being developed for people already infected with HIV and are aimed at stopping the onset of AIDS by reinforcing the body's original pre-HIV defense system. The idea comes from observing that some people, so-called long-term nonprogressors,

maintain immune control of the virus for up to 25 years without any treatment. These people raise hopes that controlling HIV by boosting the immune system is a realistic possibility.

We know that the immune system is partly able to control HIV infection at first: it reduces the viral load by increasing the number of virus-fighting CD4 and CD8 blood cells. This allows people to remain in good health without treatment for several years. Over time, however, HIV exhausts the limited immune system by killing CD4 cells. This also gives the virus time to mutate or change its appearance so that it can escape detection from the immune system.

The purpose of a therapeutic vaccine is to mimic a new HIV infection and act as a wake-up

call to the immune defense system, triggering it to train a fresh army of virus-fighting cells.

A new strategy in vaccines is being tested that proposes to treat people who are taking antiretroviral therapy. It hopes to restore the highest number of immune cells possible by boosting cells to fight back against HIV. To check if it's worked, the antiretroviral therapy is temporarily stopped to measure the level of viral rebound. In a best-case scenario, the viral load remains undetectable or is very low. The goal of this research is to prove this hypothesis.

If you're interested in participating in an ongoing vaccine trial in Canada, please contact Lina DelBalso, Montreal Chest Institute, at (514) 934-1934 ext. 32186, Linda Lizotte, Hôtel-Dieu du CHUM, at (514) 890-8000 ext. 14645 or Richard Guénette, Ottawa General Hospital, at (613) 737-8879.

You should meet the following criteria to participate: CD4 counts have never been lower than 250, current CD4 is at least 500, viral load has been undetectable for at least two years and you've never developed complications from AIDS.

For more information on HIV vaccines, see Canadian HIV Trials Network (CTN): www.hivnet.ubc.ca or Canadian Network for Vaccines and Immunotherapeutics (CANVAC): www.canvac.qc.ca

Playing it safe

I'm a 35-year-old bisexual woman and recently found out that I'm HIV+. While my doctor provided a lot of information on medication, I was too overwhelmed about being seropositive to ask about transmission. I currently have both a female and a male partner. I understand that

I need to use a condom with my man to be safe, but I've heard that it's difficult to transmit HIV from woman to woman. Is this true?

— *Wants 2B Safe in Winnipeg*

Dr. De Wet answers: Female-to-female sex doesn't usually involve exchange of body fluids, so you're right to think that there's a lower risk of transmission of HIV. Even so, you might still be taking some chances that can affect your partner.

Dr. Jean-Pierre Routy is an associate professor at McGill University and physician in the division of Hematology and Immunodeficiency Service at the McGill University Health Centre in Montréal.

Dr. Joss De Wet is a HIV Primary care physician at Spectrum Health in Vancouver.

Dr. Robert O'Brien is a consulting physician specializing in HIV/AIDS at Clinique médicale l'Actuel in Montréal.



HIV is present in your blood and vaginal secretions (in men, it's in pre-cum and semen), but doesn't show up in significant amounts in saliva, tears, urine or stool. To become infected, your partner has to come in contact with your blood or vaginal secretions, or other body fluids if they contain blood, like menstrual fluids. Contact has to be with the mucous membranes inside her vagina or anus, or in her mouth if she has sores, cuts or bad gum disease. Usually, skin acts as a protective shield and only if it is broken by cuts or sores can HIV be transmitted.

Of course, the safest sex is no sex, or mutual masturbation. Any other form of contact carries some risk. Oral sex is low risk: the chance of passing on the virus during oral sex is remote, but increases if either partner has sores in their mouth. In this case, a dental dam, a latex-based device that covers the entire labia, should be used.

Vaginal and anal intercourse are more risky if you're using sex toys like dildos or vibrators. Treat them as you would a penis. You should each have your own sex toy — so no sharing, ever. If using only one toy between you, wash it thoroughly after each use, adding a little bleach for insurance. Or always put a condom on it, and don't forget to put a new one on every time. The same rules about condoms and dental dams apply when having sex with your male partner.

It's vital that you always practice safe sex by keeping handy a supply of water-based lubricants, latex condoms and dental dams, all available at your local pharmacy or sex shop.

You're brave to ask questions like these, and it's not always easy to talk openly to your partners about staying safe. Just let them know that you care and want to protect them too.

Depression and treatment

I've been HIV+ for two years, and started therapy a few months ago. So far, I've managed to keep an optimistic outlook since the meds are keeping my viral load low. But my partner and I split up recently, and I can't seem to get out of bed. The feelings of loneliness and depression just won't go away. I'm wondering if this is a side effect of the medications? Or is it due to the separation? Should I ask my doctor for antidepressants, or will they interfere with my antiretroviral medication?

— *More than Sad in Halifax*



Dr. O'Brien advises: Your question is very important and requires immediate attention. It's important to consider personal history to better understand the cause of your feelings. Depression and anxiety can sometimes be side effects of antiretrovirals. Review your medications with your doctor or pharmacist — they'll be able to tell you if your meds might be responsible for your feelings of loneliness, isolation and depression. But because your HIV medication is successfully suppressing your viral load, you should speak with your physician before stopping or interrupting your therapy.

A recent separation from a partner can be quite painful and stressful. Your difficulty in functioning at full capacity may be due to this recent loss, and part of the grieving process. If, after speaking with your physician, you decide that you are suffering from a "normal" grief reaction, then time should cure all. Hang in there and look into finding a therapist, psychologist or social worker who can help you get through this rough period — check out the Resources section on pages 8 and 9 to find help near you.

If your grief reaction is prolonged or interfering with your daily life, talk to your physician about antidepressant medication. Your personalized HAART program (see page 15) is very important to consider when making a decision like this and your physician will choose an antidepressant that is safe and compatible with your HIV meds. It's vital to acknowledge depression and take steps to treat it — please speak with your physician or a member of your healthcare team as soon as possible. They are there for you. **R**

