

NEW YORK

What Does It Mean to Have ‘Undetectable’ HIV?

By Melissa Dahl | November 17, 2015



“Undetectable viral load” is a phrase you will likely hear a lot this week. Early Tuesday morning — [after a day of rumors online](#) — Charlie Sheen announced live [on the Today show](#) that he is HIV-positive, but that treatment has rendered the virus undetectable in his blood.

“Undetectable” is not cured, as Sheen’s physician, [Dr. Robert Huizenga](#), noted on the show. But it *does* mean that the anti-retroviral treatment is [working](#), and that the amount of HIV in the blood is so low that even the best available tests don’t pick it up. As it’s usually defined now, to have an undetectable viral load means there are fewer than 20 copies of the virus in one milliliter of blood. Compare that to those who have just been diagnosed and not yet treated, whose tests show millions of copies in the same sample size.

The very latest [research](#) is showing that it is highly unlikely for people with an undetectable viral load to transmit the virus to a sexual partner — even without the use of a condom. “Individuals who are optimally treated — who have undetectable viral



loads, who responsibly use protection — have an incredibly low — it’s incredibly rare to transmit the virus,” Huizenga told *Today’s* Matt Lauer. Indeed, this summer, the **results** of a large international study showed that early treatment reduces the risk of transmission by 93 percent. “We can’t say that that’s zero,” Huizenga said, “but it’s a very, very low level.”

Beyond that, an ongoing **study** in the U.K. is following 1,110 couples, in which one partner has HIV and the other does not. The HIV-positive participants in the study are all using anti-retroviral therapy to suppress the virus, and some of the couples are having sex without condoms. In a **presentation** at the Conference on Retroviruses and Opportunistic Infections in March last year, lead researcher Alison Rodger announced the remarkable results of the study so far: In two years, there were *no* instances of transmission of the virus between partners in the study — and that’s including the couples who were not using condoms. In an answer to a question about what this study suggests about the chance of a person with an undetectable viral load transmitting HIV to a sexual partner, Rodgers replied, “Our best estimate is it’s zero.”

The idea of living with an “undetectable” virus is dramatically reshaping the HIV-positive community; it implies that you were brave enough to be tested and conscientious enough to be treated. “Maybe it’s just the view from where I’m standing, maybe it’s because I’m in this somewhat privileged position, but right now it feels that there is change in the air,” **wrote** Matt Hodson, CEO of GMFA, a charity in the U.K. dedicated to the health of gay men. He continued:

Once it seemed inconceivable that someone would choose to be open about their HIV status, but now more and more people are refusing to conceal it. Social media, in particular platforms like Twitter where people can maintain partial anonymity, seem to be filling with more openly HIV-positive commentators. Gradually the avatars are shifting from the artfully concealed faces to full on ‘stare me in the eye and know me’ pictures.

And the talk is no longer just about coming out as a person living with HIV. Increasingly we are talking about embracing an identity where we are openly living, without shame, not just as people with HIV but, crucially, as people with an undetectable virus.

And yet it’s important to remember that it’s still **possible** — however unlikely — to transmit HIV even with an undetectable viral load. Though the person’s blood may contain minuscule amounts of the virus, it may still exist in other bodily fluids, like semen or vaginal or rectal fluids. Additionally, levels of the virus may fluctuate in between tests, meaning the amount in an HIV-positive person’s blood can increase — doctors call this a “viral blip” — even if he or she isn’t aware of it. “Undetectable means exactly what it says — it’s below the means of detection of our very best tools,” Dr. Jeffrey Laurence, a senior scientific consultant for amFAR — the Foundation for AIDS Research — told *Science of Us*. “But we do know if you look hard enough for it, the virus is still there. It’s just growing at very low levels.” And, Laurence added, there is some evidence that having an additional viral infection — even something as seemingly



innocuous as the flu — may increase the risk of transmission, even in those individuals with an undetectable viral load.

And so undetectable does not imply that there is no need for condom use; it also doesn't mean that people who are HIV-positive do not need to disclose their status to their partners. (Indeed, the latter is a **felony** under California state law.)

So this is one unfortunate downside of the excitement over the idea of living with an undetectable level of the virus, Laurence said. “The flip side is, of course, people negotiating with themselves, saying, ‘Oh, well, maybe there’s no risk at all, and maybe I’m not going to tell someone,’” said Laurence, who also **runs** an AIDS lab at Weill Cornell. A few times, people have admitted to him that they’ve done this. “They say, ‘Why should I screw up this date by telling someone I’m HIV-positive?’”

In his interview with *Today*, Sheen straightforwardly acknowledged that a big part of the reason he came forward with this announcement was because he was tired of the “shakedowns” — sexual partners (sometimes prostitutes) who threatened to go public with his HIV-positive status if he didn't pay them off. (He's already paid out “millions,” he told Lauer.) But Sheen also opened up a conversation about what it means to be HIV-positive and under treatment today. “As someone concerned about HIV, about preventing new infections and supporting all people living with the virus, I’ve been eager to see more people be open about their HIV status,” Hodson **wrote** on Tuesday. “I’ll admit that Charlie Sheen isn't the role model I might have hoped for, but I salute him, as I would anyone who has the courage to be open about their HIV status.”

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