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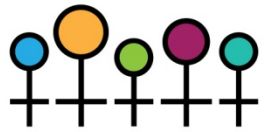
# Women and Viral Load

*Together, we can change the course of the HIV epidemic...one woman at a time.*

#onewomanatatime

[www.thewellproject.org](http://www.thewellproject.org)

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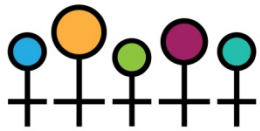


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# What Is Viral Load?

## **Viral load is the amount of HIV (number of viruses or copies) in your bloodstream**

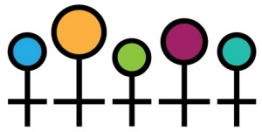
- HIV enters immune system cells called **CD4 cells** and turns them into “virus factories” that produce thousands of copies of HIV
- As the virus grows, it damages or kills CD4 cells, weakening your immune system
- The higher the amount of HIV, the more your damaged your immune system becomes



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# How Is Viral Load Measured?

- Viral load can be measured by different lab tests:
  - **Polymerase chain reaction (PCR)** test
  - **Branched DNA (bDNA)** test
  - **Nucleic acid sequence-based assay (NASBA)**
- Each lab test measures the amount of virus differently
  - It is best to stick with the same kind of test to compare over time
- Viral load results are reported as the **number of copies of HIV in one milliliter (ml) of blood**
  - The lower the number, the less virus there is in your blood
  - Numbers can range from several million copies to as few as 20 copies

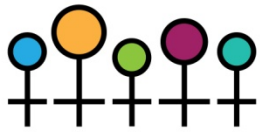


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# What Does

# “Undetectable” Mean?

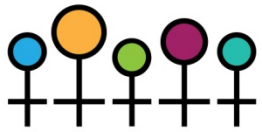
- If you have very few copies of HIV per ml in your blood, your health care provider may say that your viral load is "undetectable"
  - Being undetectable is a great result; it means your virus is under control
  - Undetectable means that there is not enough HIV in your bloodstream to be measured by the test
  - It does **not** mean that you have been cured of HIV; HIV is still in your body
  - If you stop taking your HIV drugs, the virus usually starts reproducing and your viral load will increase
- With effective HIV treatment regimens, viral load can be reduced to undetectable in many people



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# What Does “Undetectable” Mean?

- Labs that test viral load may have different cut-offs below which they cannot detect HIV
- For example, you could have 35 copies of HIV in your blood, and:
  - At Lab #1, which cannot detect any HIV below 50 copies, your viral load would be considered undetectable
  - At Lab #2, which cannot detect any HIV below 20 copies, your viral load would be considered detectable
- Practically speaking, if you stay at or below 50 copies, the virus is considered well-controlled and your HIV treatment regimen is working well



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# “Undetectable” = very low risk of transmission

- **A lower viral load means you are much less likely to transmit HIV to others (treatment as prevention)**
- **Studies of couples with one HIV-negative partner and one partner living with HIV have shown an extraordinarily low risk of sexually transmitting HIV when the HIV+ partner has an undetectable viral load**
- **Researchers do not yet know if the risk is conclusively zero**



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# How Are Viral Load Results Used?

## **To Check HIV Progression:**

- A viral load test tells you how active HIV is in your body
- When compared over time, viral load results show if the amount of HIV in your bloodstream is higher or lower than it was before
- The higher your viral load, the more actively HIV is reproducing and the more likely you are to lose CD4 cells in the future



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# How Are Viral Load Results Used?

## *To Measure How Well HIV Drugs Are Working:*

- Your viral load will usually go down within a few weeks to six months of starting your drug regimen
- If this doesn't happen, if your viral load stays detectable on stable therapy, or if your viral load keeps increasing, your drug regimen may not be controlling HIV as well as it should
  - Possible reasons may include problems with drug absorption, adherence, drug resistance, or drug interaction with other drugs



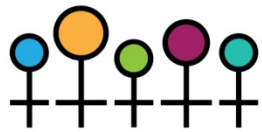


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# How Are Viral Load Results Used?

## **To Enhance Motivation and Promote Treatment Adherence:**

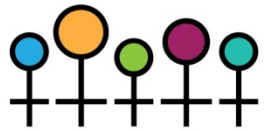
- Finding out that you have an undetectable viral load can be both reassuring and motivating
- Shows that your efforts to control the virus by taking your HIV drugs as prescribed are working well



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# When Should You Be Tested?

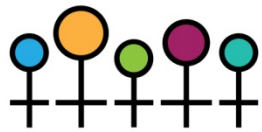
- **If you are not on HIV treatment**, have a viral load test:
  - When you start receiving HIV care; repeat test every 3-4 months
- **When you start treatment**, have a viral load test
  - When starting and 2-8 weeks after starting treatment; repeat test every 1-2 months until viral load becomes undetectable
- **Once you are on a stable treatment regimen and your viral load is undetectable**, have a viral load test
  - Every 3-6 months
- **When you change HIV drugs**, have a viral load test
  - When changing and 2-8 weeks after treatment change; repeat test every 1-2 months until viral load becomes undetectable



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# Women and Viral Load

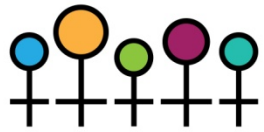
- Some studies comparing viral load levels between men and women have found sex differences in viral load
  - At similar CD4 cell counts, women tend to have lower viral load levels than men
  - Differences seem greatest during the early course of HIV acquisition
  - These early differences do not result in any overall sex-based difference in the speed at which HIV advances



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# Women and Viral Load

- Studies have shown that when taking HIV drugs, men and women are equally likely to achieve **viral suppression** (a lower, or undetectable, viral load)
  - Studies **have not** found that pregnancy causes HIV to become more advanced
- One study found that HIV lives and multiplies more often in female genital fluids than in semen (cum), even when the person has an undetectable viral load

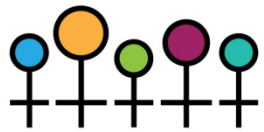


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# Women and Viral Load

- Later studies have shown that the female genital tract serves as a **reservoir** or place where HIV continues to live and reproduce despite effective HIV therapy
- Researchers have noticed that viral load and the level of certain HIV drugs go up and down during the course of a single menstrual cycle
  - This could have an impact on drug dosing and the timing of viral load tests in women

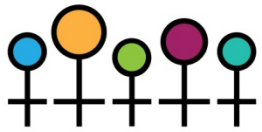
**More research is needed in these and other areas**



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# Women and Viral Load

- Understanding more about sex differences in viral load may lead to better care for women living with HIV
- In the meantime, **the strongest single factor that predicts the health of people living with HIV – women or men – is taking HIV drugs**
- Successful HIV treatment and maintaining an undetectable viral load is the best way to stay healthy and avoid spreading HIV to partners



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## Learn More!

- To learn more about this topic, please read the full fact sheet on this topic:
  - Fact sheet: [Women and Viral Load](#)
- For more fact sheets and to connect to our community of women living with HIV, visit:
  - [www.thewellproject.org](http://www.thewellproject.org)
  - [www.facebook.com/thewellproject](http://www.facebook.com/thewellproject)
  - [www.twitter.com/thewellproject](http://www.twitter.com/thewellproject)