

The AIDS test paradox and probability

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Is the answer?

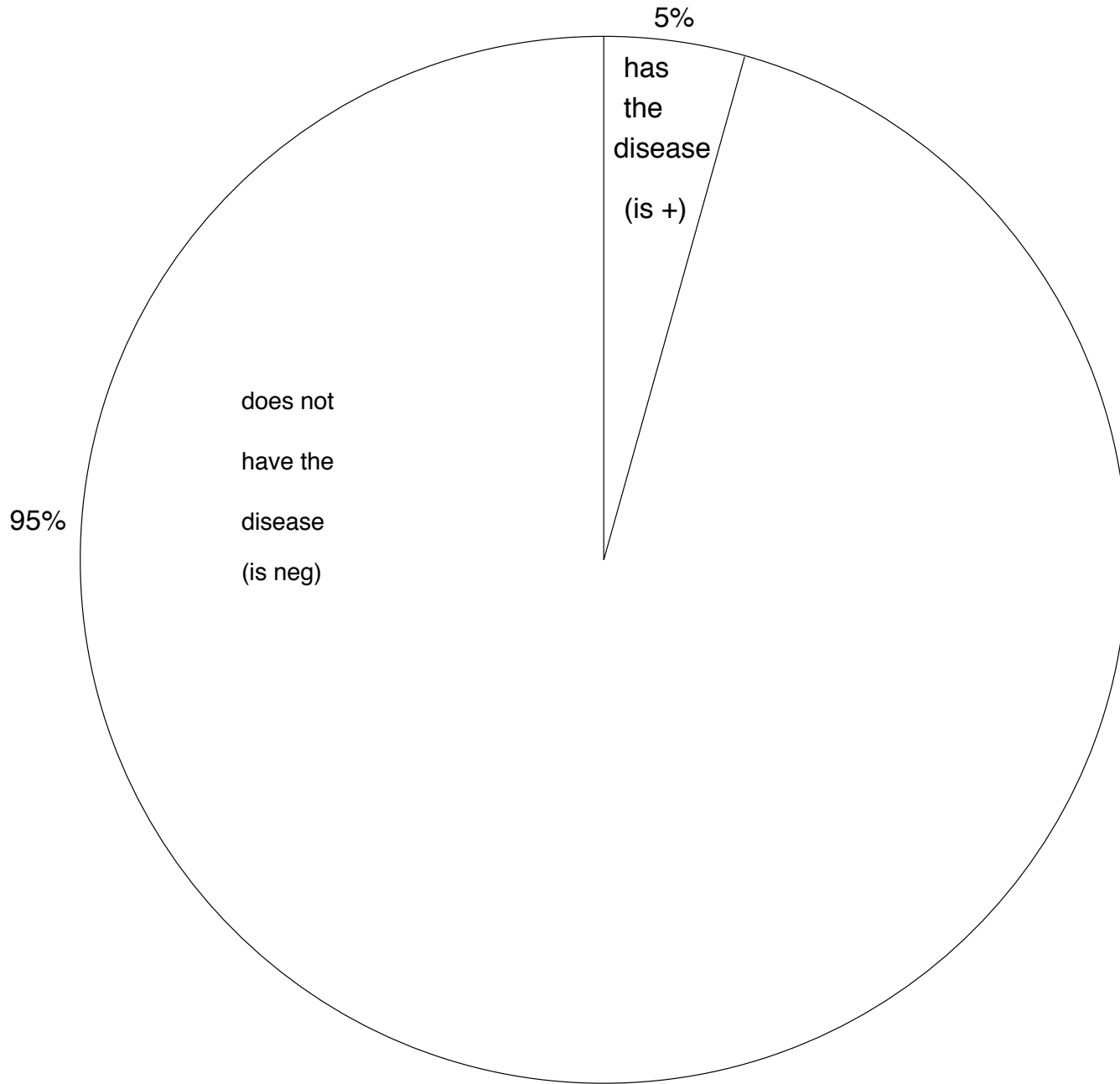
- A) 95%
- B) 90%
- C) 75%
- D) 50%

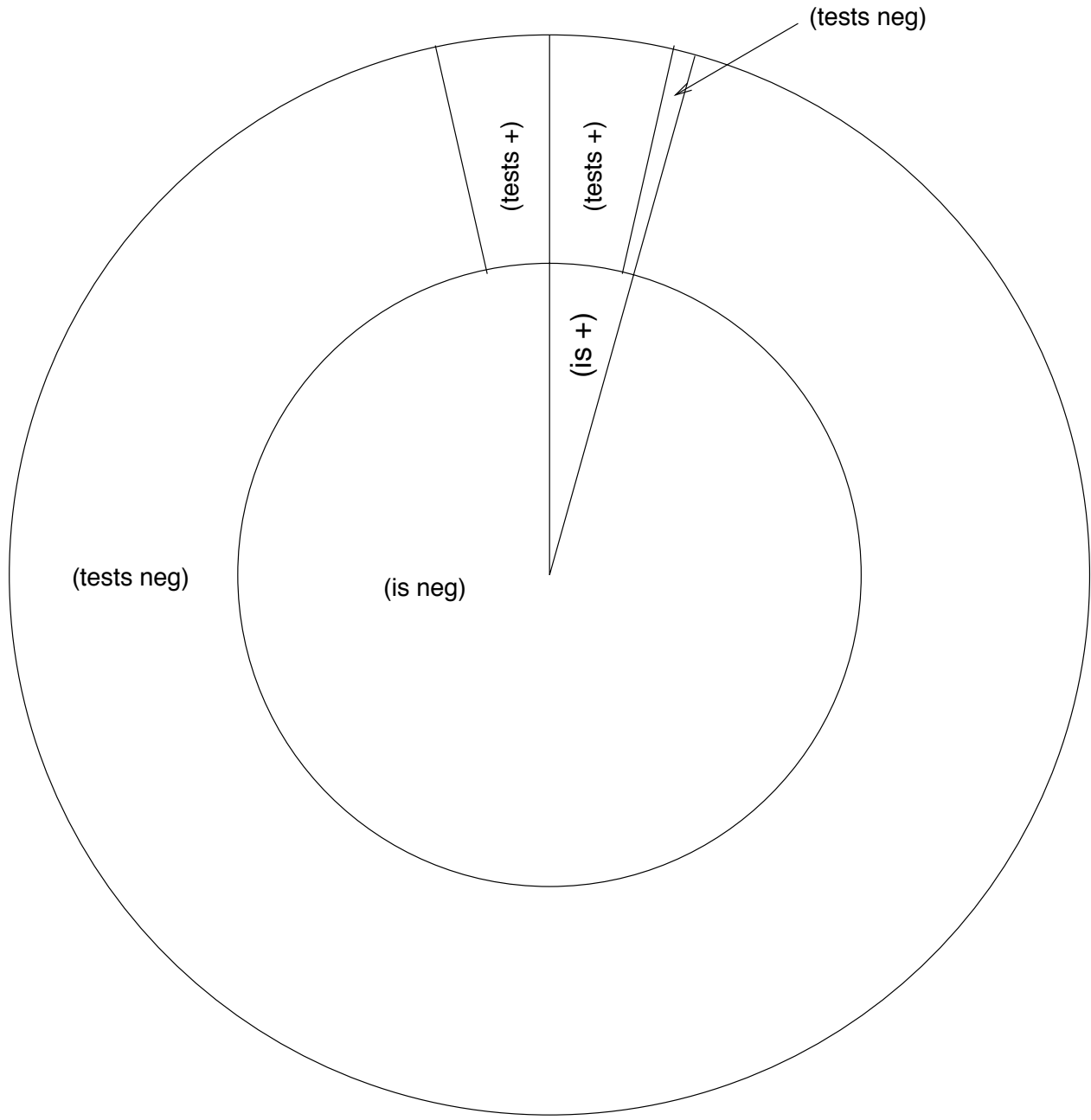
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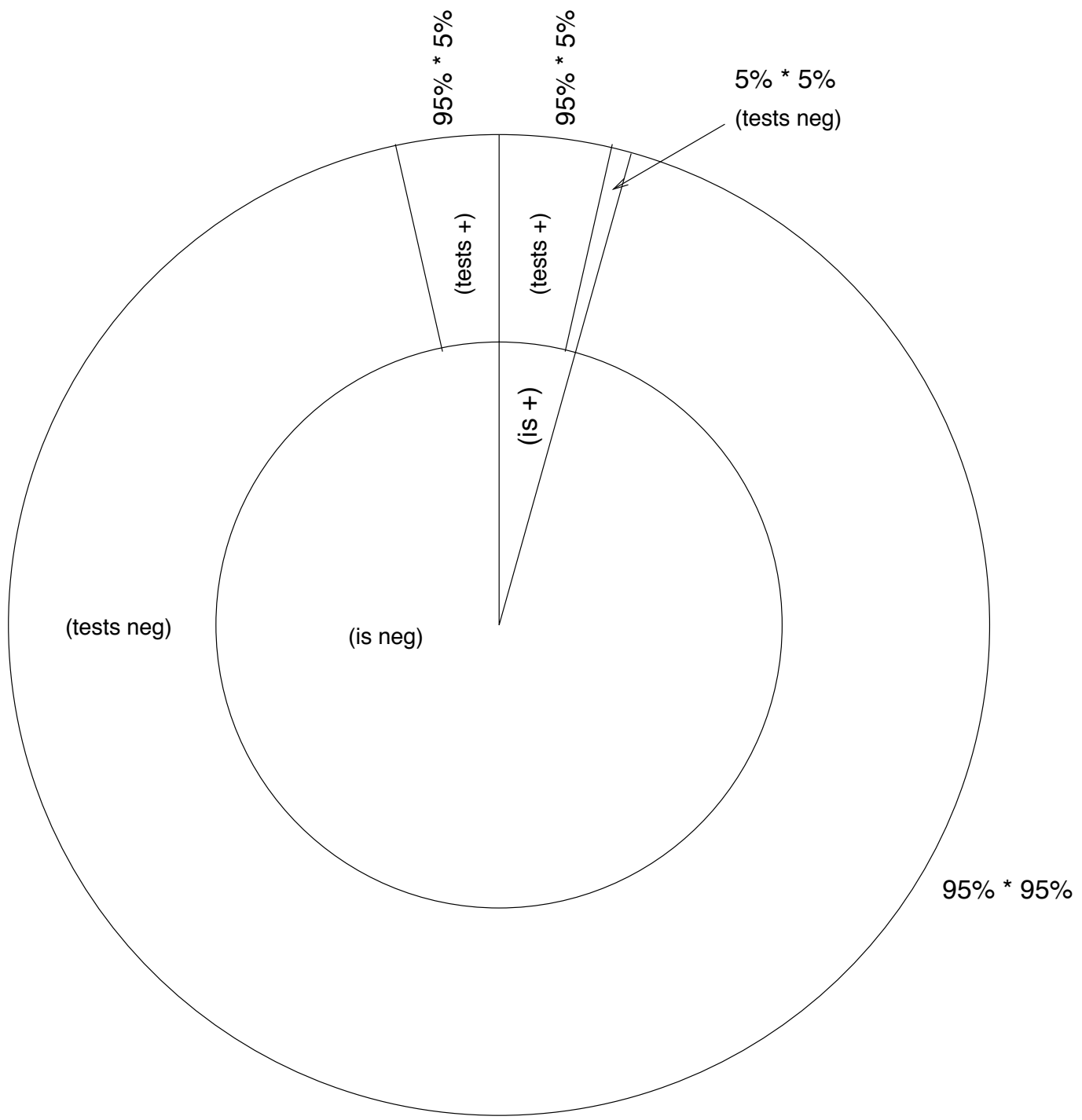
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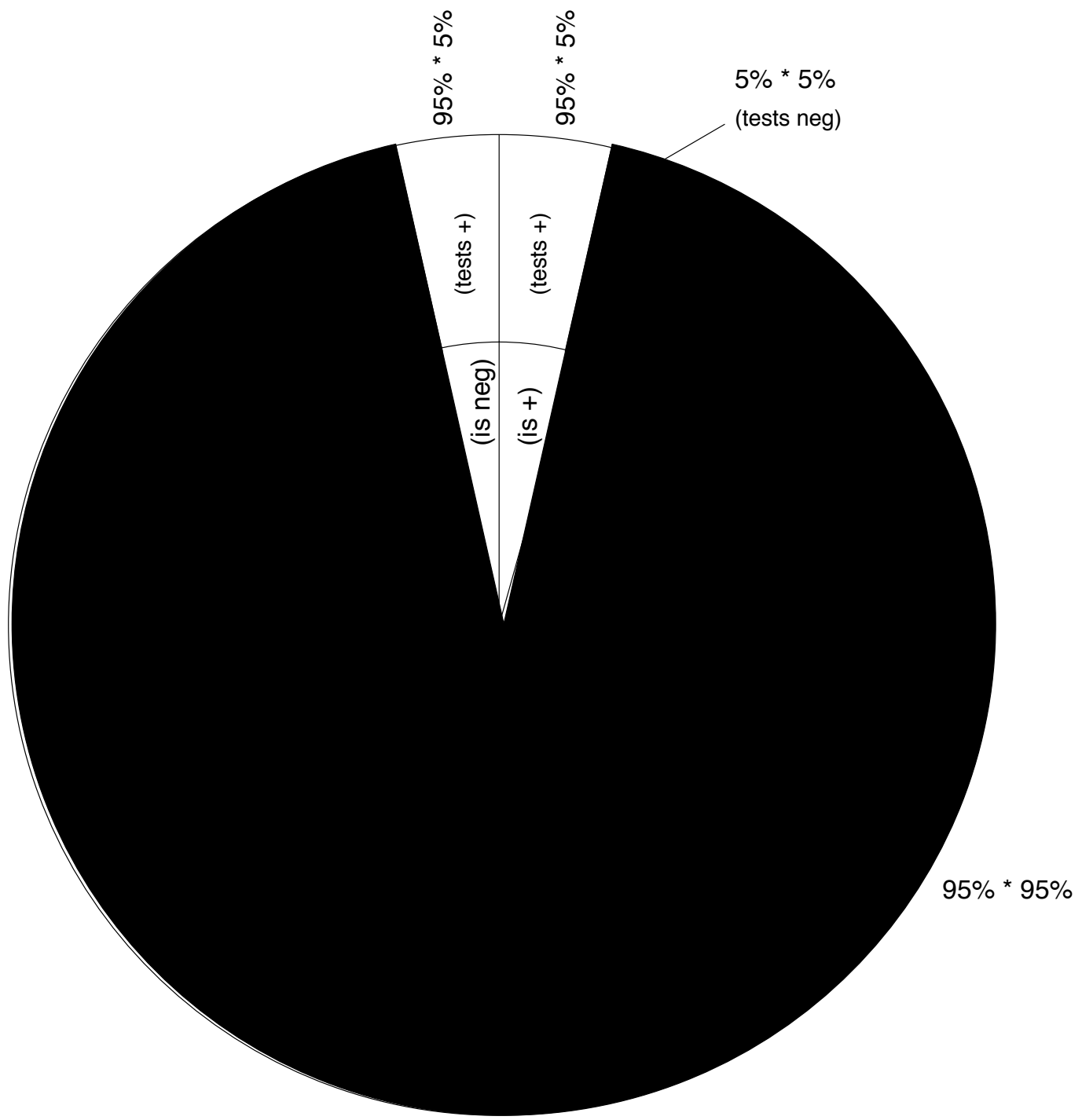
The answer is....

D) 50%









The IFA can be used instead of the WB to confirm ELISA results. Like the WB, it uses a blood sample. Because it is faster than a WB, some labs that use it can get results to the client more quickly.

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"Accuracy" Of Antibody Tests

The accuracy of a medical test is a combination of two factors: **sensitivity** and **specificity**. The ELISA is extremely **sensitive** (about 99.5%), which means it will detect very small quantities of HIV antibody. This high sensitivity reduces the odds of reporting a "false negative" when HIV antibodies are present. Assuming you are being tested beyond the six month "[window period](#)," discussed above, **if the ELISA is "negative," there is virtually no chance you have HIV.**

The high sensitivity of the test creates a slightly lower **specificity**. This means the result could (infrequently) be "false positive." To compensate for this, confirmatory tests are **automatically** performed after a positive ELISA. The WB and IFA are highly specific for HIV antibodies, so they rule out false positive ELISAs nearly every time.

The CDC states that the combined accuracy of the ELISA plus either the WB or IFA is greater than 99%.

The CDC recommends retesting any positive ELISA twice; if either retest is positive, then a confirmatory test is performed. Only when the confirmatory test is also positive is the result reported as HIV positive. Again, reputable test sites automatically follow this procedure, so results reported to you can be relied upon completely.

What does this mean for you?

- If you are beyond the window period and were **reported HIV negative** by an ELISA, and you are not subsequently at risk for HIV, you should consider yourself **HIV negative**. You may have a great deal of anxiety about the remote chance that you may be infected, yet test HIV negative. Although this is technically possible, and has in fact been documented in several people, the **probability is so small** that it stretches the imagination. Think about the tens of millions of HIV tests that have been administered, and only a **handful** of people with HIV have not had detectable antibodies.

If that tiny probability is still bothering you, think about whether there may be other issues you're facing. Are you feeling guilt over an experience that may have placed you at risk -- or one that you **feel** put you at risk, even though it did not? Or are there other sources of anxiety that cannot be alleviated by further HIV testing?

If you want to discuss these issues further -- for example, you want to find out if a certain activity put you at risk for getting HIV -- call an AIDS hotline. Within California, call the San Francisco AIDS Foundation's [California AIDS Hotline](#) toll free at **800/367-AIDS**. Outside California, call the CDC National AIDS Hotline toll free at **800/342-AIDS**.

- Some individuals, seizing on this tiny probability of a "false negative" antibody test, or perhaps wanting results without waiting for the window period, may be curious about PCR or other types of [viral testing](#), but **viral testing is not appropriate in this situation because it was designed for other purposes**. Viral testing allows physicians to track with greater accuracy than ever before the progression of HIV in the body -- thus helping their HIV-infected patients make choices about appropriate treatment strategies. Most people concerned about HIV do **not** need viral load testing. The antibody test is still the cheapest, easiest, and overall most reliable way for individuals to learn their HIV status.

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Anonymous HIV Testing