Questioning the Test Related Articles

66 Reasons to Think Twice About HIV Tests

Most people are surprised to learn that you don't need to have HIV in order to test HIV positive. More than 60 factors—all documented in the medical literature or acknowledged by test manufacturers—are known to elicit the production of antibodies that can cause false positive results on HIV antibody tests, even in people with no possible exposure to HIV and no potential risks for AIDS.

Before consulting the list, it's important to note that having or having had a condition included here does not necessarily mean that you will register positive on HIV tests. Testing positive depends on what antibodies you have accumulated over the course of your life and the particular characteristics of individual HIV tests.

As a general rule, the more exposure you've had to foreign antigens, proteins and infectious agents, the more various antibodies you will have in your system. Although greater amounts of antibodies increase your potential for cross-reacting antibodies that can cause an HIV test to go positive, having or having had several of the conditions known to produce cross-reacting antibodies does not guarantee you will experience false positive results on HIV tests. Also, certain conditions among those listed are more likely than others to produce antibodies that can cause you to register HIV positive.

Even conditions well known to produce cross-reactions on HIV tests may not cause all people having experienced those conditions to falsely test positive. For example, some but not all people who have had blood transfusions, multiple pregnancies or an organ transplant will make HLA antibodies, and some but not all HIV test kits will be contaminated with HLA antigens to which these persons' HLA antibodies can react. When the two circumstances of HLA antibodies in the person and HLA antigens in the tests coincide, positive HIV tests may result due to HLA cross-reactivity.

Some cross-reacting factors listed have been documented to occur only with ELISA HIV antibody tests while others have been documented for both the ELISA and the HIV Western Blot. However, before we can conclude that factors documented to cross react only on ELISA tests will not affect the outcome of the Western Blot tests, we must consider that both the ELISA and the Western Blot use the same proteins as markers for HIV. In other words, even though the Western Blot is popularly regarded as more accurate than the ELISA (and thus widely used to confirm positive ELISA results), in fact, Western Blot tests use the same proteins as the ELISA making false positive results likely to carry over from the ELISA to the Western Blot and raising serious questions about using one test to confirm the other.

Despite claims that Western Blot is a more accurate test than the ELISA, the Western Blot does little more than separate out the same alleged HIV proteins used on the ELISA into individual categories or bands rather than grouping them all together like on the ELISA. Unlike the ELISA which gives a "yes" (positive) or "no" (negative) answer, the Western Blot test is regarded as HIV positive when enough of the individual bands or proteins add up to the particular total required by whatever institution is interpreting the test result. For example, the US Food and Drug Administration, the US Centers for Disease Control, the World Health Organization, the Red Cross, and the US Department of Defense all have different standards for what proteins indicate a positive HIV Western Blot This means that the same test result may be regarded as positive or negative depending on which institution is interpreting the results. Also, which proteins add up to a positive Western Blot depend on what country you test in. For example, a combination regarded as a positive result in France may be considered negative in Germany or Australia. To make matters more complicated, in the United Kingdom the Western Blot is considered unreliable for use in clinical settings (for use on patients) and a positive HIV diagnosis there is given based on two positive ELISA tests.

In any case, since false positive reactions to every so-called HIV protein have been documented in the medical literature, it is not possible to state that Western Blot bands represent the various proteins to HIV. Instead, a growing number of scientists assert that positive Western Blot bands represent reactions to several different non-HIV antibodies and that all positive HIV test results may be false positive.

Finally, this list cannot be considered complete as conditions may exist that can cause false-positive reactions on HIV antibody tests that have yet to be published in the medical literature

66 Factors Known to Cause False Positive Reactions on HIV Antibody Tests
List and references compiled by Christine Johnson

1. Anti-carbohydrate antibodies (52,19,13)
2. Naturally-occurring antibodies (5,19)
3. Passive immunization: receipt of gamma globulin or immune globulin (as prophylaxis against infection which contains antibodies) (18, 26, 60, 4, 22, 42, 43, 13)
4. Leprosy (2, 25)
5. Tuberculosis (25)
6. Mycobacterium avium (25)
7. Systemic lupus erythematosus (15, 23)
8. Renal (kidney) failure (48, 23, 13)
9. Hemodialysis/renal failure (56, 16, 41, 10, 49)
10. Alpha interferon therapy in hemodialysis patients (54)
11. Flu (36)
12. Flu vaccination (30, 11, 3, 20, 13, 43)
13. Herpes simplex I (27)
14. Herpes simplex II (11)
15. Upper respiratory tract infection (cold or flu) (11)
16. Recent viral infection or exposure to viral vaccines (11)
17. Prior pregnancy (58, 53, 13, 43, 36, 65)
18. Malaria (6, 12)
19. High levels of circulating immune complexes (6, 33)
20. Hypergammaglobulinemia (high levels of antibodies) (40, 33)
21. False positives on other tests, including RPR (rapid plasma reagent) test for syphilis (17, 48, 33, 10, 49)
22. Rheumatoid arthritis (36)
23. Hepatitis B vaccination (28, 21, 40, 43)
24. Tetanus vaccination (40)
25. Organ transplantation (1, 36)
26. Renal transplantation (35, 9, 48, 13, 56)
27. Anti-lymphocyte antibodies (56, 31)
28. Anti-collagen antibodies (found in gay men, haemophiliacs, Africans of both sexes and people with leprosy) (31)
29. Serum-positive for rheumatoid factor, antinuclear antibody (both found in rheumatoid arthritis and other autoantibodies) (14, 62, 53)
30. Autoimmune diseases (44, 29, 1O, 40, 49, 43)
31. Systemic lupus erythematosus, scleroderma, connective tissue disease, dermatomyositis Acute viral infections, DNA viral infections (59, 48, 43, 53, 40, 13)
32. Malignant neoplasms (cancers) (40)
33. Alcoholic hepatitis/alcoholic liver disease (32, 48, 40, 10, 13, 49, 43, 53)
34. Primary sclerosing cholangitis (48, 53)
35. Hepatitis (54)
36. "Sticky" blood (a condition common in people of African origin) (38, 34, 40)
37. Antibodies with a high affinity for polystyrene (used in the test kits) (62, 40, 3)
38. Blood transfusions, multiple blood transfusions (65, 63, 36, 13, 49, 43, 41)
39. Multiple myeloma (10, 43, 53)
40. HLA antibodies (to Class I and II leukocyte antigens) (7, 46, 63, 48, 10, 13, 49, 43, 53)
41. Anti-smooth muscle antibody (48)
42. Anti-parietal cell antibody (48)
43. Anti-hepatitis A IgM (antibody) (48)
44. Anti-Hbc IgM (48)
45. Administration of human immunoglobulin preparations pooled before 1985 (10)
46. Hemophilia (10, 49)
47. Hematologic malignant disorders/lymphoma (43, 53, 9, 48, 13)
48. Primary biliary cirrhosis (43, 53, 13, 48)

49. Stevens-Johnson syndrome (9, 48, 13)
50. Q-fever with associated hepatitis (61)
51. Heat-treated specimens (51, 57, 24, 49, 48)
52. Lipemic serum (blood with high levels of fat or lipids) (49)
53. Hemolyzed serum (blood where haemoglobin is separated from the red cells) (49)
54. Hyperbilirubinemia (10, 13)
55. Globulins produced during polyclonal gammopathies (which are seen in AIDS risk groups) (10, 13, 48)
56. Healthy individuals as a result of poorly-understood cross-reactions (10)
57. Normal human ribonucleoproteins (48, 13)
58. Other retroviruses (8, 55, 14, 48, 13)
59. Anti-mitochondrial antibodies (48, 13)
60. Anti-nuclear antibodies (48, 13, 53)
61. Anti-microsomal antibodies (34)
62. T-cell leukocyte antigen antibodies (48, 13)
63. Proteins on the filter paper used in test kits (13)
64. Epstein-Barr virus (37)
65. Visceral leishmaniasis (45)
66. Receptive anal intercourse (39, 64)

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FAQ's

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