



HEALTH ADVISORY
Monday, May 14, 2018
New HIV cases in Humboldt County

CURRENT SITUATION

During the month of April 2018 in Humboldt County there has been an increased incidence of locally acquired HIV cases. A pattern of co-infection with HIV and syphilis has been noted among these cases. There is strong evidence that some cases are linked and that there is ongoing transmission from individuals not yet diagnosed with HIV or syphilis.

Characteristics of newly infected individuals do not necessarily predict characteristics of future cases, but can help communicate risks to patients reluctant to be tested. Risk factors of recently infected cases include some of the following factors:

- Aged 20-30
- Anonymous sex partner(s)
- Multiple sex partners
- Recent syphilis infection
- Sex partners met through smart-phone applications such as Grindr
- Male, transgender, or gender non-binary
- Male sex partner(s)

No reports of injection drug use amongst documented cases at this time. Nonetheless, people using IV drugs remain a highly vulnerable population.

In addition to an increase in the incidence of HIV in Humboldt County, the incidence of newly diagnosed syphilis cases in Humboldt County has increased to up to 5 cases a week in 2018.

Per the CDC:

“Syphilis, as well as other genital ulcer diseases, are cofactors for HIV seroconversion. Syphilis increases the risk of HIV being transmitted or acquired by several fold. It is easy to see why:

- The ulcers of syphilis disrupt normal epithelial or mucosal barriers, providing a route for HIV to enter or leave the body.
- The base of syphilitic chancres contains large number of activated lymphocytes and macrophages, cells that are potential targets and reservoirs of HIV.”

Clinicians are requested to:

1. Gather a current sexual history on all patients. Be sure to obtain information about the following risk factors:
 - a. Sex under the influence of drugs or alcohol
 - b. Multiple and/ or anonymous sex partner(s)
 - c. Partners met through smart-phone applications and/ or web based hookup sites
 - d. Sex with men- including women having sex with men who have sex with men
 - e. Sex partners who use IV drugs
 - f. Sex or needle-sharing partners who have any of the above risk factors
2. Promote HIV and STD testing for all patients. Stress the increased risk for HIV and syphilis to patients with the above risk factors.
3. If testing for HIV, also screen for other STDs
4. For patients who have risk factors for HIV, offer a prescription for HIV pre-exposure prophylaxis (PrEP) -Contact a PrEP Navigator at Public Health- Healthy Communities for assistance. Call 707-268-2132
5. Follow the HIV and syphilis testing algorithms provided with this advisory.
6. For patients with a new HIV diagnosis, notify Public Health by phone within 24 hours. Call the confidential Communicable Disease Reporting line at 707-268-2182.
7. Stress to patients that syphilis and HIV are treatable but only if diagnosed. Encourage patients to notify past and present partners of any possible risks. Patients can utilize Public Health’s Anonymous Partner Notification System if they prefer. Call 707-268-2182 to leave a message for a communicable disease nurse.

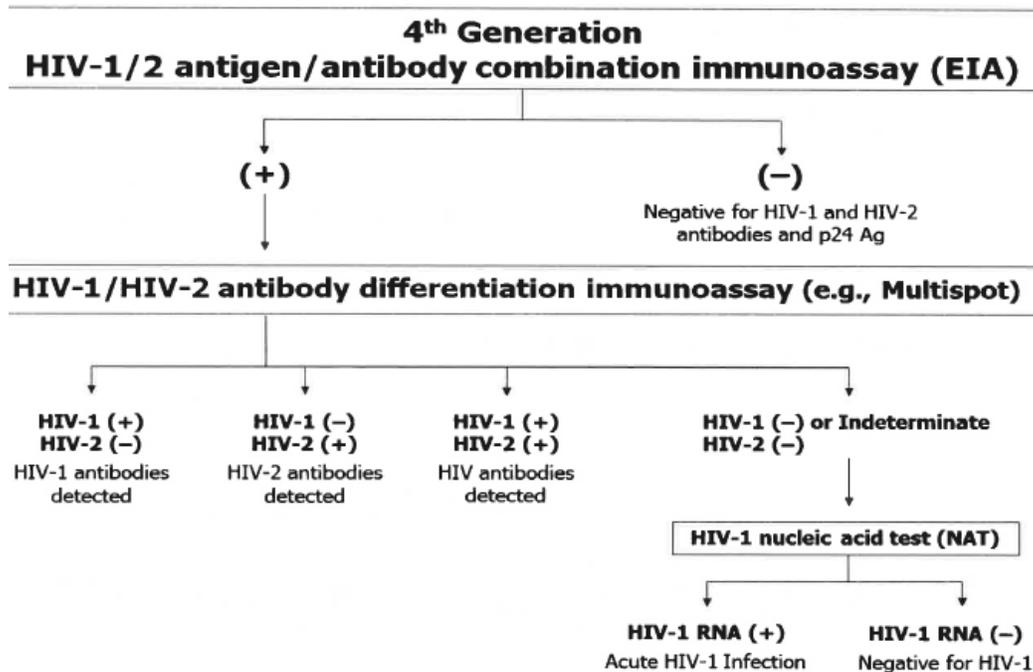
What Public Health is doing:



In close consultation with California's Office of AIDS, Humboldt County Public Health is carrying out:

1. Case finding –actively looking for cases of HIV by conducting patient interviews and contact tracing and by asking the medical community to test individuals at risk for HIV or syphilis exposure
2. Prevention planning – working with county programs and community partners to enhance our HIV and STD prevention efforts
3. Educational outreach – creating educational messages to inform the community of increased rates, potential risks and prevention measures for HIV and syphilis.

CDC-recommended laboratory HIV testing algorithm



Syphilis screening test algorithm

*Specifically order RPR with Reflex to TP-PA on all screening



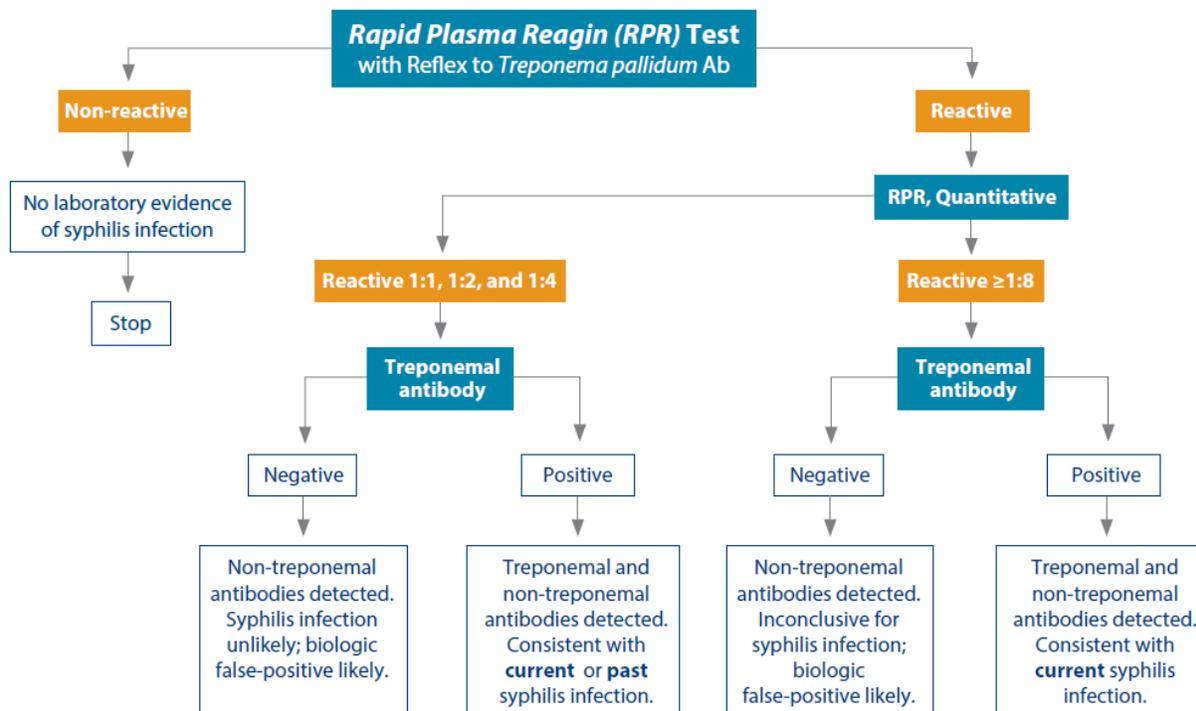


Image Source: Labcorp- <https://www.labcorp.com/assets/5131>

Syphilis lab testing and interpretation guidelines from the CDC

Testing and interpretation guidelines below pulled from: Centers for Disease Control and Prevention. Syphilis testing algorithms using treponemal tests for initial screening—four laboratories, New York City, 2005-2006. [Editorial Note] *MMWR*. 2008 Aug 15; 57(32)872-875.

“Treponemal tests detect antibodies specific to *T. pallidum*. In addition to *T. pallidum pallidum*, which causes syphilis, other treponemal subspecies (e.g., *pertenue*, which causes yaws, and *carateum*, which causes pinta) also can produce reactive results to treponemal tests, but these subspecies are rare in the United States. A reactive treponemal test result indicates that treponemal infection has occurred at some point in the past but cannot distinguish between treated and untreated infections. As such, treponemal tests, such as the *T. pallidum* EIA test, TP-PA test, and FTA-ABS test, can produce reactive results for life, even after adequate treatment for syphilis.

Nontreponemal tests, such as the RPR test and venereal disease research laboratory (VDRL) test, detect antibodies to cardiolipin and are not specific for treponemal infection. Nontreponemal tests are more likely than treponemal tests to produce nonreactive results after treatment; therefore, reactive results from nontreponemal tests are more reliable indicators of untreated infection. Quantitative nontreponemal tests also are used to monitor responses to treatment or to indicate new infections. False-positive nontreponemal tests occur in 1%--2% of the U.S. population, and have been associated with multiple conditions, including pregnancy, human immunodeficiency virus (HIV) infection, intravenous drug use, tuberculosis, rickettsial infection, spirochetal infection other than syphilis, bacterial endocarditis, and disorders of immunoglobulin production. Nontreponemal test results might be falsely negative in longstanding latent infection. Both treponemal and nontreponemal tests can produce nonreactive results when the infection has been acquired recently; approximately 20% of test results are negative when patients have primary syphilis.

(Emphasis added) **When results are reactive to both treponemal and RPR tests, persons should be considered to have untreated syphilis unless it is ruled out by treatment history.**

Persons who were treated in the past are considered to have a new syphilis infection if quantitative testing on an RPR test or another non-treponemal test reveals a four-fold or greater increase in titer (health departments maintain registries of past positive tests).

When results are reactive to the treponemal test but nonreactive to the RPR test, persons with a history of previous treatment will require no further management.

For persons without a history of treatment, a second, different treponemal test should be performed. If the second treponemal test is nonreactive, the clinician may decide that no further evaluation or treatment is indicated, or may choose to perform a third treponemal test to help resolve the discrepancy.



If the second treponemal test is reactive, clinicians should discuss the possibility of infection and offer treatment to patients who have not been previously treated. Unless history or results of a physical examination suggest a recent infection, such patients are unlikely to be infectious and should be treated for late latent infections, even though they do not meet the surveillance case definition. Treatment can prevent severe (i.e., tertiary) complications that can result from untreated syphilis, although the probability of such complications occurring without treatment, while unknown, likely is small. Treatment also allows patients to report that they have been treated for syphilis if they ever receive similar results from future treponemal screening tests. Public health departments determine their own priorities for partner notification and other prevention activities; however, because late infections are unlikely to be infectious, they would likely be considered low priority for health department intervention activities.”

For additional guidance, please contact the Humboldt County Public Health Department- Communicable Disease Nurse line at 707-268-2182.

To download CDC produced apps for your smartphone including guidance for STD treatment:

On your iPhone, go to the app store and perform a search for “CDC.” When the option of “Developer: Centers For Disease Control and Prevention” comes up, click on this. All apps produced by the CDC will be available here for download, including “STD Tx Guide 2015”

For other smartphones, go to the Google Play store, search for “CDC STD Tx”

The CDC has an informational website for providers specifically around STD screening and treatment titled **“Treat Me Right”** “Treat Me Right” is a message from the CDC for both patients and providers. Tips and tools for providers include:

- Guide to taking a thorough sexual history
- List of essential sexual health questions to ask of patients
- Tips for productive conversations with patients
- Guidelines for testing and treatment

