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To: Acute and Long Term Care Facilities, Ambulatory Care Facilities, Hospice and Home Care Programs Administrators, Local Health Department Directors

From: New York State Department of Health, Bureau of Tuberculosis Control

HEALTH ADVISORY: SHORTAGE OF PURIFIED PROTEIN DERIVATIVE (PPD) SOLUTION FOR TUBERCULIN SKIN TESTING

Please distribute to the Chief Medical Officer, Infection Control Department, Infectious Disease Department, Director of Nursing, AND Primary Care Clinics.

SUMMARY

On June 6, 2019 the Centers for Disease Control and Prevention issued a Health Advisory (CDC-HAN-00420) providing notification of an anticipated three to ten-month shortage of Aplisol ®, a product of Par Pharmaceuticals. At this time there is availability of the other FDA-approved solution, Tubersol ®, a product of Sanofi Pasteur.

In many circumstances, interferon-gamma release assay (IGRA) blood tests are preferable to tuberculin skin tests. The two FDA-approved IGRA tests are T-SPOT®.TB, Oxford Immunotec and QuantiFERON-TB Gold Plus ®, Qiagen.

It will be important to maintain tuberculosis (TB) testing capability for persons at risk of tuberculosis. At this time New York State regulations (NYCRR Title 10) still require serial TB testing for health care personnel in various clinical settings. These regulations are under review at this time but remain in effect. However, the New York State Department of Health is temporarily recommending an adjustment to tuberculosis testing procedures, for employee testing programs if institutions experience a shortage of testing product. For persons with appropriate baseline testing and no new risk for infection or disease on annual assessment, repeat testing can be deferred.

RECOMMENDATIONS

Highest priority persons for testing include:

1) persons who are contacts to infectious cases

2) persons being evaluated for suspected active TB

3) persons at increased risk for TB due to medical conditions

4) persons who recently arrived from countries with a high incidence of TB (http://www.stoptb.org/countries/tbdata.asp)

Any of the available IGRA blood tests or tuberculin skin tests can be used in these situations, based on availability of product, population group and provider preference, in accordance with

current guidance.

For persons starting work, in settings where pre-employment screening is required, a TB history (TB exposure, infection or disease and any prior diagnostic testing or treatment) along with a review of symptoms suggestive of active disease, should be recorded and for persons without prior history of TB, one of the 4 approved tests (IGRA or TST) should be done as available. A chest radiograph and other diagnostic assessment should be done as clinically indicated on any persons with history of active TB or symptoms suggestive of TB. Chest x-rays (CXR) should also be done on asymptomatic persons with past or current documented positive IGRA or TST tests, unless an earlier CXR report can be documented. If there is no indication of current infectious tuberculosis the employee can start work but unless previously diagnosed with infection or disease, must be tested by one of these tests as soon as possible to complete the initial assessment and to identify persons who need treatment for TB infection.

Any change in preemployment or serial testing procedures must be documented and lists of persons needing screening should be tracked.

Similarly, clients should be evaluated for signs or symptoms of active tuberculosis prior to entry into long term care or other DOH regulated settings, and can be subsequently tested with IGRA or TST when feasible to do so, as soon as possible.

FOR MORE INFORMATION

Questions about TB testing or this advisory can be directed to the NYS DOH Bureau of Tuberculosis Control at (518) 474-4845 or tbcontrol@health.ny.gov. Questions about employee or client screening regulations can also be directed to the OPCHSM unit which oversees the particular health setting.

Please see attached CDC HAN advisory which provides further general information on TB testing.

This is an official

CDC HEALTH ADVISORY

Distributed via the CDC Health Alert Network
June 6, 2019, 1130 ET (11:30 AM ET)
CDCHAN-00420

Nationwide Shortage of Tuberculin Skin Test Antigens: CDC Recommendations for Patient Care and Public Health Practice

Summary
The Centers for Disease Control and Prevention (CDC) is expecting a 3 to 10 month nationwide shortage of APLISOL®, a product of Par Pharmaceuticals. APLISOL® is one of two purified-protein derivative (PPD) tuberculin antigens that are licensed by the United States Food and Drug Administration (FDA) for use in performing tuberculin skin tests. The manufacturer notified CDC that they anticipate a supply interruption of APLISOL® 5 mL (50 tests) beginning in June 2019, followed by a supply interruption of APLISOL® 1 mL (10 tests) in November 2019. The expected shortage of APLISOL® 1 mL (10 tests) could occur before November 2019, if demand increases before then. The 3-10 month timeframe for the nationwide shortage is the manufacturer's current estimate and is subject to change.

To monitor the status of this supply interruption, visit FDA's "Center for Biologics Evaluation and Research (CBER)-Regulated Products: Current Shortages" webpage: https://www.fda.gov/vaccines-blood-biologics/safety-availability-biologics/cber-regulated-products-current-shortages.

Background
Two types of immunological methods are used for detecting *Mycobacterium tuberculosis* infection: tuberculin skin tests (TSTs) and interferon-gamma release assay (IGRA) blood tests. TSTs and IGRAs are used for diagnosing latent TB infection and may aid in diagnosing TB disease. Additional evaluation and testing is necessary to distinguish between latent TB infection and TB disease, and to determine the correct treatment (1). When findings, such as chest radiography and mycobacterial cultures, are sufficient for confirming or excluding the TB diagnosis, the results from a TST or an IGRA blood test might not be needed (1). Most TB cases in the United States are diagnosed with a set of findings including results from one of these tests.

Two FDA-approved PPD tuberculin antigens are available in the United States for use in performing TSTs: TUBERSOL® and APLISOL®. In controlled studies, the concordance between the two products is high (2).

When TB disease is strongly suspected, specific treatment should be started regardless of results from TST or an IGRA blood test (3,4).

Recommendations
CDC recommends three general approaches to prevent a decrease in TB testing capability because of the expected shortage of APLISOL®.

- Substitute IGRA blood tests for TSTs. Clinicians who use the IGRA blood tests should be aware that the criteria for test interpretation are different from the criteria for interpreting TSTs (3).
- Substitute TUBERSOL® for APLISOL® for skin testing. In cross-sectional studies, the two skin test products give similar results for most patients.

- Prioritize allocation of TSTs, in consultation with state and local public health authorities. Prioritization might require the deferment of testing some persons. CDC recommends testing only for persons who are at risk of TB (5-7). High-risk groups for TB infection include:
    - People who are recent contacts exposed to persons with TB disease;
    - People born in or who frequently travel to countries where TB disease is common;
    - People who currently or used to live in large group settings, such as homeless shelters or correctional facilities;
    - People with weaker immune systems, such as those with certain health conditions or taking certain medications that may alter immunity; and
    - Children, especially those under age 5, if they are in one of the risk groups noted above.

While overall test concordance is high, switching between PPD skin test products or between TSTs and blood tests in serial testing may cause apparent conversions of results from negative to positive or reversions from positive to negative. This may be due to inherent inter-product or inter-method discordance, rather than change in *M. tuberculosis* infection status (3,8). Clinicians should assess test results based on the person's likelihood of infection and risk of progression to TB disease, if infected (1).

In settings with a low likelihood of TB exposure, the deferment of routine serial testing should be considered in consultation with public health and occupational health authorities. Annual TB testing of health care personnel is not recommended unless there is a known exposure or ongoing transmission (8).

References

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Health Update	Unlikely to require immediate action; provides updated information regarding an incident or situation
HAN Info Service	Does not require immediate action; provides general public health information

##This message was distributed to state and local health officers, state and local epidemiologists, state and local laboratory directors, public information officers, HAN coordinators, and clinician organizations##