State of Montana ***Health Alert Network***

DPHHS HAN

Information Sheet

Date: June 10, 2019

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

Background: 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.

Information: CDC Health Advisory Notice that was issued June 6: Nationwide Shortage of Tuberculin Skin Test Antigens: CDC Recommendations for Patient Care and Public Health Practice

Recommendations: See the attached HAN for the following CDC 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.

• Substitute TUBERSOL® for APLISOL® for skin testing

• Prioritize allocation of TSTs, in consultation with state and local public health authorities.

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.

Recent CDC updates to the 2005 TB screening of health care personnel, notes that annual TB testing of health care personnel is not recommended unless there is a known exposure or ongoing transmission. This applies to low and medium-risk facilities. **CDC HAN 420**

This is an official

CDC HEALTH ADVISORY

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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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3. Centers for Disease Control and Prevention. Updated guidelines for using interferon gamma release assays to detect Mycobacterium tuberculosis infection — United States, 2010. MMWR 2010;59(RR-5): 1-25. https://www.cdc.gov/mmwr/PDF/rr/rr5905.pdf

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8. Sosa LE, Njie GJ, Lobato MN, et al. Tuberculosis screening, testing, and treatment of U.S. health care personnel: recommendations from the National Tuberculosis Controllers Association and CDC, 2019. MMWR Morb Mortal Wkly Rep 2019;68:439–443. DOI: http://dx.doi.org/10.15585/mmwr.mm6819a3

The Centers for Disease Control and Prevention (CDC) protects people's health and safety by preventing and controlling diseases and injuries; enhances health decisions by providing credible information on critical health issues; and promotes healthy living through strong partnerships with local, national, and international organizations.

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Health Alert	Requires immediate action or attention; highest level of importance
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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##