



# This is an official CDC Health Advisory

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## 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: <a href="https://www.fda.gov/vaccinesblood-biologics/safety-availability-biologics/cber-regulated-products-current-shortages">https://www.fda.gov/vaccinesblood-biologics/safety-availability-biologics/cber-regulated-products-current-shortages</a>

#### **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:
  - o 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:
  - o People who currently or used to live in large group settings, such as homeless shelters or correctional facilities;
  - o People with weaker immune systems, such as those with certain health conditions or taking certain medications that may alter immunity; and
  - o 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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- 2. Villarino ME, Burman W, Wang Y, et al. Comparable specificity of 2 commercial tuberculin reagents in persons at low risk for tuberculous infection. JAMA. 1999;281(2):169–171. http://dx.doi.org/10.1001/jama.281.2.169
- 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(RR5): 1-25. <a href="https://www.cdc.gov/mmwr/PDF/rr/rr5905.pdf">https://www.cdc.gov/mmwr/PDF/rr/rr5905.pdf</a>
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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: <a href="http://dx.doi.org/10.15585/mmwr.mm6819a3">http://dx.doi.org/10.15585/mmwr.mm6819a3</a>

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.

### DHEC contact information for reportable diseases and reporting requirements

Reporting of <u>suspect and confirmed Tuberculosis (TB)\*</u> is consistent with South Carolina Law requiring the reporting of diseases and conditions to your state or local public health department. (State Law # 44-29-10 and Regulation # 61-20) as per the DHEC 2019 List of Reportable Conditions available at: <a href="https://www.scdhec.gov/sites/default/files/Library/CR-009025.pdf">https://www.scdhec.gov/sites/default/files/Library/CR-009025.pdf</a>

Federal HIPAA legislation allows disclosure of protected health information, without consent of the individual, to public health authorities to collect and receive such information for the purpose of preventing or controlling disease. (HIPAA 45 CFR §164.512).

\* - Reporting is required for TB cases which include signs/symptoms, radiologic evidence, or laboratory evidence of active TB disease. Latent TB infection (LTBI) is not mandatory reportable at this time (those individuals lacking signs/symptoms or radiologic evidence of active disease).

Regional	Public	Health	Offices -	_ 2019
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Mail or call reports to the Epidemiology Office in each Public Health Region

#### MAIL TO:

WAIL TO:						
Lowcountry	Midlands	Pee Dee	<u>Upstate</u>			
4050 Bridge View Drive, Suite 600	2000 Hampton Street	145 E. Cheves Street	200 University Ridge			
N. Charleston, SC 29405	Columbia, SC 29204	Florence, SC 29506	Greenville, SC 29602			
Fax: (843) 953-0051	Fax: (803) 576-2993	Fax: (843) 915-6502	Fax: (864) 282-4373			

#### CALL TO:

Lowcountry	Midlands	Pee Dee	Upstate
Berkeley, Charleston, Dorchester	Kershaw, Lexington, Newberry,	Chesterfield, Darlington, Dillon,	Anderson, Oconee
Phone: (843) 953-0043	Richland	Florence, , Marion, Marlboro	Phone: (864) 260-5581
Nights/Weekends: (843) 441-1091	Phone: (803) 576-2749	Phone: (843) 661-4830	Nights/Weekends: (866) 298-4442
	Nights/Weekends: (888) 801-1046	Nights/Weekends: (843) 915-8845	
Beaufort, Colleton, Hampton, Jasper			Abbeville, Greenwood,
Phone: (843) 549-1516 ext. 218	Chester, Fairfield, Lancaster, York	Clarendon, Lee, Sumter	McCormick
Nights/Weekends: (843) 441-1091	Phone: (803) 286-9948	Phone: (803) 773-5511	Phone: (864) 260-5581
	Nights/Weekends: (888) 801-1046	Nights/Weekends: (843) 915-8845	Nights/Weekends: (866) 298-4442
Allendale, Bamberg, Calhoun, Orangeburg	Aiken, Barnwell, Edgefield, Saluda	Georgetown, Horry,	Cherokee, Greenville, Laurens
Phone: (803) 268-5833	Phone: (803) 642-1618	Williamsburg	Pickens, Spartanburg, Union
Nights/Weekends: (843) 441-1091	Nights/Weekends: (888) 801-1046	Phone: (843) 915-8800	Phone: (864) 372-3133
		Nights/Weekends: (843) 915-8845	Nights/Weekends: (866) 298-4442

For information on reportable conditions, see

https://www.scdhec.gov/health-professionals/report-diseasesadverse-events/south-carolina-list-reportable-conditions <u>DHEC Bureau of Disease Control</u> Division of Acute Disease Epidemiology

2100 Bull St · Columbia, SC 29201 Phone: (803) 898-0861 · Fax: (803) 898-0897 Nights / Weekends: 1-888-847-0902

Categories of Health Alert messages:

**Health Alert** Conveys the highest level of importance; warrants immediate action or attention.

Health Advisory
Health Update
Info Service
Provides important information for a specific incident or situation; may not require immediate action.
Provides updated information regarding an incident or situation; unlikely to require immediate action.
Provides general information that is not necessarily considered to be of an emergent nature.