

Reducing Delays in Syphilis Testing and Treatment: The Role of Organizational Policy at Local Health Departments



Background

Syphilis remains a significant public health challenge in the United States. Provisional CDC data indicate that 190,242 cases of syphilis were reported in 2024, which remains 42% higher than in 2020. Congenital syphilis trends are especially alarming, with 3,941 cases reported in 2024, representing a nearly 700% increase over the past decade.¹ Syphilis is easy to treat, but untreated infections can contribute to further transmission, congenital syphilis, and other serious health consequences.

Local health departments (LHDs) play a critical role in addressing these gaps through surveillance, testing, treatment, and community partnerships. This brief examines how organizational policies can help LHDs improve the accessibility and timeliness of syphilis testing and treatment.

The Role of Organizational Policies

Organizational policies play a central role in shaping how syphilis services are delivered at LHDs. For the purposes of this brief, “organizational policy” refers to internal rules, protocols, and standing orders that guide how LHDs allocate resources, implement programs, and deliver services. These policies determine who can provide testing and treatment, where and when services are offered, and how patients move along the testing to treatment continuum.

Because these decisions are often within local control, organizational policy is a powerful lever for improving access and reducing delays. At the same time, organizational policy choices are shaped by federal and state policy and guidance, resources, and data systems.

Terminology

Standing orders: Written authorizations approved by a licensed clinician (e.g., Medical Director) that allow designated staff to carry out specific clinical actions without obtaining an individual patient-specific order each time.

Protocols: Standardized step-by-step procedures that guide how services are delivered. Protocols help ensure consistency, quality, and safety across staff and settings. In some settings, this could also be called a standard operating procedure.

Methods

To better understand how organizational policies influence the accessibility and timeliness of syphilis testing and treatment, the National Association of County and City Health Officials (NACCHO) engaged an existing advisory group of LHD STI, HIV, and hepatitis staff in December 2025. In March 2026, NACCHO convened a listening session with 56 health department representatives from 20 states to identify common challenges and emerging practices. The listening session was open to all interested LHD STI staff, and participants were recruited via NACCHO’s existing LHD networks. Following the listening session, NACCHO conducted follow-up discussions with 12 health departments to learn more about specific organizational policies or service delivery approaches they had described. These engagements informed the themes, examples, and considerations presented in this brief.

Syphilis Testing and Treatment

Diagnosis

CDC guidelines recommend using both treponemal and nontreponemal tests to support syphilis diagnosis.² In practice, diagnosis and treatment decisions may incorporate a combination of test results, clinical symptoms, and patient history. For example, providers will typically treat a symptomatic infection immediately, without waiting for test results. In public health settings, LHD protocols may also guide staff in considering factors such as pregnancy status, exposure to a confirmed case, surveillance data, and likelihood of loss to follow-up when determining whether to wait for additional test results or initiate treatment.

Testing Terminology

Treponemal tests (often rapid, point-of-care tests) detect antibodies associated with current or past infection. Nontreponemal tests identify active infection, support staging of the infection, and help determine appropriate treatment. The following terms may be used interchangeably by LHD staff when discussing syphilis testing:

Screening	Confirmatory testing
Treponemal testing	Nontreponemal testing
Rapid testing / Point-of-care testing	RPR, VDRL
Name of Test [e.g., First To Know, Syphilis Health Check, Chembio dual test]	

Treatment

Syphilis is typically treated with Bicillin L-A (benzathine penicillin G) administered via intramuscular injection. Recommended treatment varies by stage of infection: one dose for primary, secondary, or early latent syphilis, or three doses given at one-week intervals for late latent syphilis or infection of unknown duration.²

Oral doxycycline is an alternative option for nonpregnant patients in certain circumstances, such as when a patient has a documented penicillin allergy. In practice, LHDs may also use doxycycline when Bicillin L-A is unavailable due to supply constraints or when injectable treatment is not feasible. However, Bicillin L-A remains the preferred treatment for syphilis, and doxycycline requires a multiweek regimen, which may make treatment completion less certain.³

Gaps in Diagnosis and Treatment

Significant gaps in syphilis diagnosis and treatment remain, contributing to preventable outcomes, including congenital syphilis. A 2023 study found that 37% of congenital syphilis cases were associated with gaps in timely testing, 11% with lack of (documented) treatment, and 40% with inadequate treatment, underscoring the need to address gaps across the testing-to-treatment continuum.⁴

Traditional service delivery models often require separate visits for screening, confirmatory testing, diagnosis, treatment initiation, and follow-up. Each added step creates opportunities for delay, disengagement, and loss to follow-up. These barriers can be especially significant for people experiencing unstable housing, transportation challenges, substance use disorder, competing priorities, stigma, or limited trust in healthcare systems.

Reducing these gaps requires service delivery models that make testing and treatment faster, simpler, and easier to access. Organizational policies are one important tool LHDs can use to streamline the testing-to-treatment continuum and improve timely care.

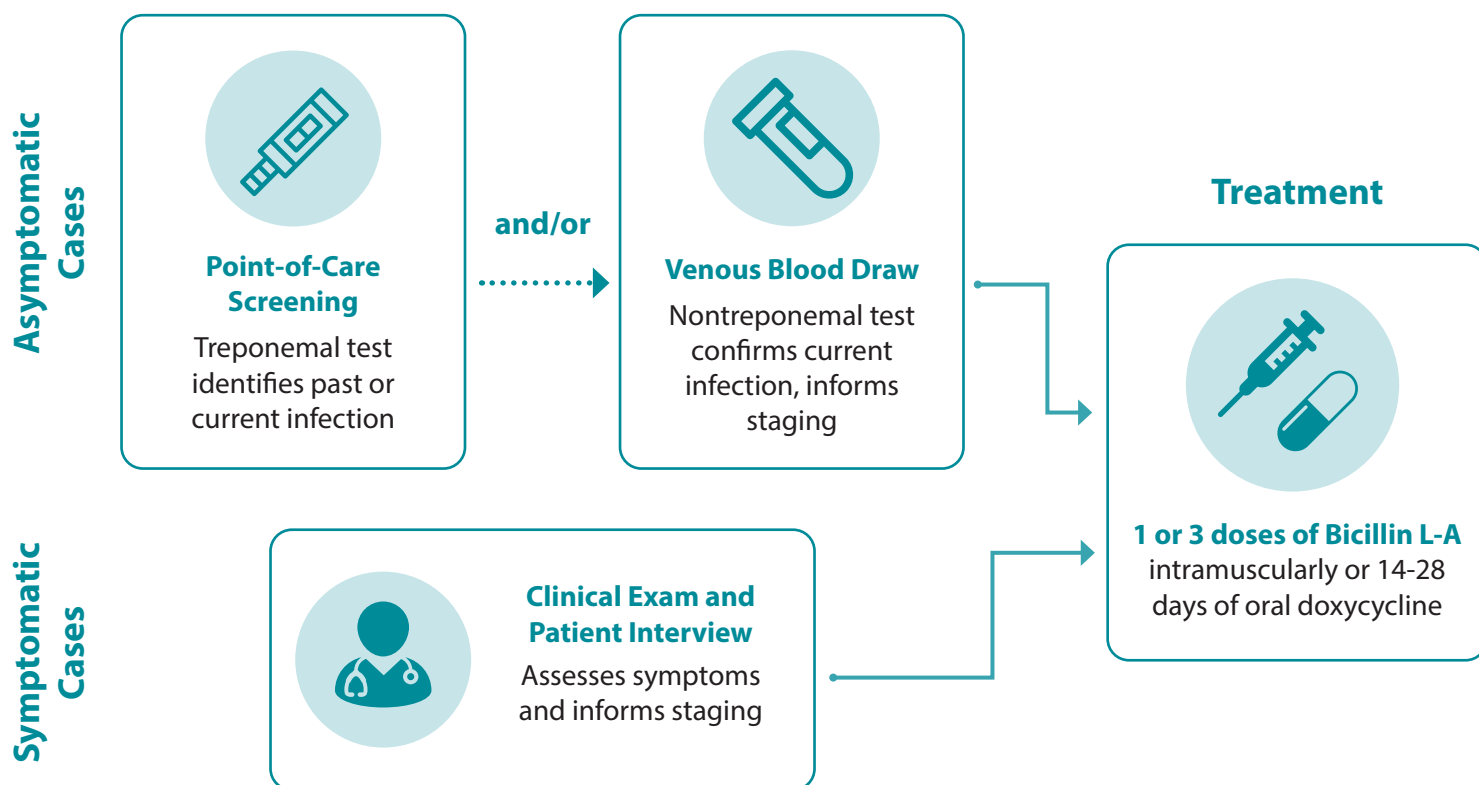


Key Takeaway: Each added step creates opportunities for delay, disengagement, and loss to follow-up.

The Testing-to-Treatment Continuum

Syphilis is typically diagnosed based on symptoms or a combination of treponemal and nontreponemal tests. In traditional service delivery models, each diagnostic step requires an additional clinical visit.

Diagnosis



Policy Factors that Affect Syphilis Testing and Treatment at LHDs

Through LHD engagement, NACCHO identified several ways organizational policies shape access to timely syphilis testing and treatment models.

Testing Access and Diagnostic Pathways

Where Testing is Conducted

Organizational policies shape where, when, and how syphilis testing is offered. Standing orders and protocols can enable testing in community-based and innovative settings by authorizing staff working in those settings to conduct tests and by outlining processes for additional testing, referral, and linkage to treatment. LHDs described expanding testing through mobile units, street outreach, shelters, correctional facilities, and other partner sites.

Several LHDs shared that healthcare partners, particularly emergency departments, were more willing to routinely test for syphilis when protocols clarified that the LHD would manage reporting, follow-up, partner services, and treatment coordination.

Given that many populations most affected by syphilis may have limited engagement with traditional healthcare settings, expanding testing opportunities across the community can be critical to earlier diagnosis and treatment.

Local Example: Strengthening Emergency Department Syphilis Screening Through Partnership and Referral Protocols

Approach: To strengthen congenital syphilis prevention efforts, Norfolk Department of Public Health established standardized referral and follow-up protocols with local emergency departments and hospitals. These workflows enabled emergency department providers to rapidly notify the health department when a patient tested positive for syphilis, allowing Disease Intervention Specialists to conduct record searches, coordinate care, provide partner services, and facilitate timely linkage to treatment. By clearly defining roles and reinforcing that the health department would manage follow-up activities, these protocols reduced barriers for providers and increased confidence in expanding syphilis screening efforts within emergency department settings.

Results: Emergency departments have increased syphilis testing and are more frequently providing presumptive or preventative treatment while relying on the health department for continuity of care and follow-up. There has also been a notable increase in screening among women of childbearing age, and patients who test positive are being referred directly to the health department for evaluation and treatment coordination. Collaboration between emergency department providers and the health department has also improved, particularly regarding referral workflows, review of prior syphilis history, and development of treatment plans.

Next steps: The next phase of this initiative is focused on encouraging emergency departments to adopt point-of-care syphilis testing for women of childbearing age to further reduce delays in diagnosis and treatment.

Who Can Conduct Testing

Organizational policies also shape who can conduct different types of syphilis testing, including required training, supervision, and competency standards. These requirements often vary by specimen type (e.g., venipuncture, fingerstick, dried blood spot) and must align with federal and state regulations. (See NACCHO's [Point-of-Care Testing for Sexually Transmitted Infections Toolkit](#) for more information.)

LHDs described expanding testing capacity and opportunities by training and authorizing non-clinical staff to conduct point-of-care tests and, in some cases, collect blood samples. Several jurisdictions highlighted the role of Disease Intervention Specialists (DIS) and outreach staff, particularly those working in programs responding to the infectious disease consequences of the opioid epidemic. Authorizing staff working in these programs to conduct testing can be especially important given the association between substance use and syphilis, including congenital syphilis outcomes. LHDs also noted that even when testing is geographically accessible, some individuals may be reluctant to seek services from a clinician because of stigma, distrust, or prior negative experiences. In these situations, authorizing trusted, non-clinical staff such as peers to conduct testing may increase uptake.

Testing Eligibility and Frequency

Protocols may define who is offered testing and how often. Some LHDs conduct routine testing at intake for individuals entering correctional facilities or accessing substance use-related services. Others offer universal testing in sexual health clinics or broader screening for pregnant patients across LHD programs such as Women, Infants, & Children or immunization clinics.

In some jurisdictions, access to free testing is also shaped by policy constraints. For example, one LHD shared that state-provided testing supplies could only be used for people under age 26, those with symptoms, or contacts of someone diagnosed with an STI.

“Standing orders always help with the speed and efficiency of treatment initiation. Since we’ve had those in place, the nurses or whoever is working that day don’t have to think as much about what the next steps are.”

– LHD



Testing Workflow and Diagnostic Criteria

Organizational policies shape how patients move from screening to diagnosis and, when appropriate, to treatment. Even when testing is available, delays can occur if confirmatory testing is required and/or requires additional appointments, if staff lack authority to collect needed specimens, or if providers must wait for additional information before initiating care.

Many LHDs described **reflex testing protocols** that allow staff to automatically collect a blood specimen for confirmatory testing following a reactive screening result. These workflows can reduce delays between screening and diagnosis and may eliminate the need for an additional visit. When paired with point-of-care screening, reflex testing can allow LHDs to obtain all needed specimens during a single brief encounter. This can be especially valuable in field settings where transportation barriers, scheduling challenges, competing priorities, or distrust of institutions may make additional clinical interactions less likely.

In the public health setting it is always acceptable to treat a client for syphilis if client may be lost to follow-up.
– Washington County Health and Human Services, Syphilis Algorithm, Standing Orders, and Treatment Guidelines

Some LHDs also described **concurrent specimen collection** approaches, in which a rapid screening test and venipuncture specimen are completed during the same encounter. In some cases, treatment decisions may be initiated based on the rapid result while confirmatory testing helps determine stage of infection and whether additional treatment is needed (see *Presumptive Treatment* below).

LHDs further emphasized that diagnosis, in practice, may rely on more than laboratory results alone. **Policies and protocols may guide staff to incorporate clinical symptoms, patient interview information, prior treatment history, surveillance data, and electronic health records to determine next steps.** In this way, organizational policies help translate available information into timely and consistent treatment decisions.

Treatment Delivery Models

Through engagement with LHDs, NACCHO heard that treatment policies are increasingly designed to address a central challenge in syphilis response: many patients who test positive or are identified as exposed do not ultimately receive timely treatment. In response, LHDs are adopting standing orders, protocols, and workflow changes that support field-based and presumptive treatment.

Field-based or field-delivered treatment refers to providing treatment outside traditional clinic settings, such as mobile units, encampments, shelters, correctional facilities, street outreach locations, community partner sites, or a patient’s home. Bringing treatment directly to community settings can reduce loss to follow-up and better align services with patients’ realities.

Presumptive treatment refers to initiating treatment before completion of a full diagnostic workup. However, LHDs noted that the term can be misleading. In many circumstances, staff may have substantial diagnostic confidence based on a combination of factors, such as a reactive rapid treponemal test, symptoms consistent with syphilis, exposure to a confirmed case, reported treatment history, pregnancy status, and/or review of surveillance and medical records.

Several LHDs shared that the risk of losing a patient, particularly a pregnant patient, to

Field-based Treatment	Presumptive Treatment
<i>Where care occurs</i> Treatment is provided outside traditional clinical settings (e.g., outreach locations, patients’ homes).	<i>When care is initiated</i> Treatment begins before every traditional diagnostic step is complete.
<i>Benefit</i> Brings treatment directly to patients and reduces loss to follow-up.	<i>Benefit</i> Balances diagnostic certainty with the risk that delayed care may prevent treatment.

follow-up outweighs the risk of overtreatment. As a result, some jurisdictions have developed nuanced protocols that balance diagnostic certainty with treatment assurance.

NACCHO identified several common types of organizational policies used to support field-based and presumptive treatment. Some jurisdictions maintain multiple separate policies, while others use a single comprehensive protocol that addresses several of the areas described below:



Standing orders that identify and expand who can administer treatment. Some jurisdictions have developed policies that authorize trained staff who regularly encounter clients in the field to provide treatment under defined protocols. For example, Spokane Regional Health District (WA) shared a standing order allowing DIS to provide doxycycline for syphilis in certain circumstances. DIS in Washington are not typically licensed prescribing clinicians, but they often have specialized training in STI case management, patient interviewing, partner services, field outreach, and linkage to care. Expanding treatment authority to this workforce can help close the gap between case identification and treatment.



Protocols defining when field-based or presumptive treatment is appropriate. LHDs described policies that specify eligibility criteria and decision pathways for treatment outside traditional clinic workflows. For field-based treatment protocols, a laboratory-confirmed diagnosis and/or referral from a provider is often required, although some jurisdictions also authorize treatment of partners of confirmed cases. In contrast, presumptive treatment policies may authorize treatment based on one or more factors such as a reactive point-of-care test result, symptoms consistent with syphilis, pregnancy status, or risk factors indicating a high likelihood of loss to follow-up. Some health departments shared policies that provide guidance for both presumptive and field-based treatment. For example, Oklahoma State Department of Health's syphilis field protocol is intended to support field-based treatment for confirmed cases, but also authorizes presumptive treatment for individuals with symptoms of primary or secondary syphilis, a reactive screening test, recent exposure to a confirmed case, or who are considered unlikely to return for treatment, noting that this may be necessary for certain transient or hard-to-reach populations. **Clear criteria can promote consistency, reduce staff uncertainty, and expedite care.**



Protocols that provide guidance on treatment and field logistics. LHDs emphasized the importance of protocols that provide detailed treatment guidance, including dosing, allergy screening, and follow-up steps. Protocols may also specify where treatment can occur, what staffing is required, and which supplies are needed. For example, many protocols require the presence of two staff members for both patient and staff safety. Several include checklists for items that should be brought into the field. LHDs also shared examples of policies related to medication dispensing, storage, and transport. [Arapahoe County Public Health](#) developed procedures for offsite medication dispensing that address labeling, documentation, inventory management, temperature monitoring, and medication return workflows. Similarly, [Pima County Health Department](#) developed cold-chain protocols to safely store and transport treatment in the Arizona heat. Together, these systems help make field-based treatment safe, compliant, and feasible.

Additional Treatment-Related Policies

While LHDs emphasized the importance of field-based and presumptive treatment policies, several additional organizational policy factors influencing syphilis testing and treatment emerged. Standing orders can expand who is authorized to provide treatment in clinical settings, in addition to field/community settings, helping reduce delays related to provider availability. Treatment protocols may also restrict use of Bicillin L-A to pregnant patients, even among confirmed cases. Although these decisions are often driven by supply constraints associated with the ongoing Bicillin L-A shortage, they are operationalized through organizational policy.

Collectively, these policies allow LHDs to balance standard clinical guidelines with accessibility considerations and create flexibility to meet patients where they are. They also allow LHDs to respond to changing public health trends and tailor service delivery models to the needs of different populations.

Considering “Confirmatory” Testing and “Presumptive” Treatment

Terms such as “confirmatory testing” and “presumptive treatment” are commonly used in syphilis service delivery. However, LHDs emphasized that diagnosis and treatment decisions often rely on multiple sources of information beyond laboratory confirmation alone.

In practice, providers and public health staff may consider:

- Reactive rapid treponemal test results;
- Clinical symptoms consistent with syphilis;
- Exposure to a confirmed case;
- Prior treatment and laboratory history;
- Surveillance and electronic health record data;
- Pregnancy status; and/or
- Likelihood of loss to follow-up.

As a result, treatment initiated before completion of every traditional diagnostic step may still reflect a high degree of diagnostic confidence. In this case, initiating treatment without a lab-based diagnosis would not be “presumptive.” Instead, the lab-based test result would be used to determine the stage of infection and whether additional treatment doses are needed.

Considerations

Considerations for LHDs

LHDs seeking to streamline and expedite the syphilis testing-to-treatment continuum may consider developing or refining the following organizational policies:

- **Standing orders that expand who can provide testing and treatment, and in what settings.** Where legally permissible, broaden authority to staff (with appropriate training and supervision) operating in clinics, outreach settings, mobile units, and partner sites.
- **Reflex and streamlined testing workflows.** Enable automatic confirmatory testing following reactive screening tests and reduce unnecessary steps that delay diagnosis or treatment initiation.
- **Treatment protocols that balance diagnostic certainty with timely care.** Establish clear guidance on how laboratory data, symptoms, exposure history, prior treatment history, and patient characteristics should inform treatment decisions.
- **Field-based treatment protocols.** Develop criteria, staffing models, documentation workflows, and medication logistics that support treatment outside traditional clinic settings.
- **Presumptive treatment protocols.** Define circumstances in which immediate treatment is appropriate when the risk of delayed care outweighs the benefits of waiting for additional results.
- **Partnership and referral protocols.** Formalize workflows with emergency departments, correctional facilities, and other partners to support testing, referral, and treatment follow-up.

Implementation Considerations

Many LHDs are already making do with limited resources and fragmented systems. Through NACCHO's engagement with LHDs, several factors emerged that can affect whether organizational policies are feasible to implement and sustain in practice. Key implementation considerations include:

- **Data access and modern infrastructure:** Timely access to surveillance systems, DIS databases, and electronic health records can help determine prior treatment history, identify priority populations, and target high-yield settings for testing and treatment.
- **Sustained staffing, training, and workforce capacity:** Field-based and rapid treatment models require sufficient staffing, including DIS, nurses, and outreach workers. Staff may also need training in phlebotomy, medication administration, and trauma-informed engagement.
- **Operational capacity:** LHDs may need point-of-care testing supplies, telehealth equipment and infrastructure, and mobile units or outreach vehicles to effectively implement accessible, rapid treatment models.
- **Flexible funding for engagement and supportive services:** Flexible funding can help LHDs conduct outreach and navigation, provide incentives for treatment completion, and offer supportive services that often build trust and address practical needs and barriers to care.
- **Supportive state-level policy frameworks:** State health departments can support local innovation by developing state standing orders and treatment protocols, improving data access, and reducing administrative barriers that delay service delivery.

Navigating Penicillin Allergies in the Field

Penicillin allergies are commonly reported but often not clinically confirmed. Although approximately 10% of U.S. patients report a penicillin allergy, only 1% are truly allergic.⁵

To navigate reported and confirmed penicillin allergies, LHD field-based treatment policies often include some combination of the following guidelines:

- Require two staff to be present, both of whom have been trained to respond to anaphylaxis and other allergic reactions;
- Exclude patients with reported penicillin allergies;
- Require virtual consultations between field-based staff and clinic-based providers for patients with reported penicillin allergies;
- Prompt staff to interview patients to evaluate the severity of penicillin allergy.

Conclusion

Syphilis is both preventable and treatable, yet cases remain high, and many infections go undetected, resulting in preventable complications and congenital syphilis outcomes. Delays between testing, diagnosis, and treatment continue to undermine prevention efforts, particularly for people facing structural barriers to care. These challenges are often compounded by the broader syndemic of syphilis, substance use disorder, housing instability, and other social and health conditions that create barriers to timely services.

LHDs are uniquely positioned to help close these gaps. Through their surveillance capacity, direct service delivery roles, and community partnerships, LHDs can redesign how syphilis services are delivered to better meet community needs. As this brief demonstrates, organizational policies such as standing orders, streamlined testing workflows, and treatment protocols can meaningfully improve access to, and the timeliness of, care.

Many LHDs are already advancing innovative approaches with limited resources. Supportive policy frameworks, capacity building, and continued sharing of effective practices can help more jurisdictions strengthen the syphilis testing-to-treatment continuum and prevent avoidable complications and congenital syphilis outcomes.

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1201 Eye Street, NW • 4th Floor • Washington, DC 20005

P 202.783.5550 F 202.783.1583

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