Syphilis Testing Algorithm

INDICATIONS FOR TESTING
Persons with signs or symptoms of syphilis infection
Persons being tested for other STIs
Asymptomatic persons for whom screening is indicated; refer to the CDC's testing recommendations

Traditional Sequence Algorithm

PERFORM
Nontreponemal (lipoidal antigen) testing:
Rapid plasma reagin or VDRL testing with reflex to titer

- Nonreactive
  - Consider retesting in 3-12 mos as needed based on risk factors

- Reactive
  - PERFORM Treponemal testing for confirmation:
    Treponema pallidum antibody testing
    - Nonreactive
      - Syphilis unlikely
    - Reactive
      - Unattended or previously treated syphilis

Reverse Sequence Screening Algorithm

PERFORM
Treponemal testing:
Treponema pallidum antibody testing (eg, CIA or EIA)

- Positive
  - Consider retesting in 3-12 mos as needed based on risk factors

- Negative
  - PERFORM Nontreponemal (lipoidal antigen) testing:
    Rapid plasma reagin testing or VDRL testing titer
    - Nonreactive
    - Reactive
      - ORDER
        A different treponemal test than used for initial screening*
        - Nonreactive
          - Syphilis unlikely
        - Reactive
          - Untreated or previously treated syphilis

*Unless the patient has history of known, treated syphilis in the past.

Abbreviations

- CIA: Chemiluminescence immunoassay
- EIA: Enzyme immunoassay
- STI: Sexually transmitted infection
- VDRL: Venereal disease research laboratory

References