TREATMENT & MANAGEMENT GUIDE

# Syphilis in Pregnancy

HEALTH CENTER ASSOCIATION OF NEBRASKA

## Purpose

Standardize screening, diagnosis, treatment, and fetal/newborn management of syphilis in pregnancy to prevent congenital infection and ensure appropriate maternal treatment response.

## ACOG Screening Algorithm

Universal Screening (All Pregnancies)
All pregnant patients should be screened:

- First prenatal visit
- 28–32 weeks gestation
- At delivery

Additional Testing Indications
Repeat or additional testing if:

- New STI diagnosis or risk factors
- Symptoms suggestive of syphilis
- Fetal ultrasound concerning for congenital infection

## Disease Classification

Early Syphilis

- Infection within < 1 year
- May include primary or secondary symptoms

Latent Syphilis

- Asymptomatic infection-can have unknown duration

Subtypes:

- Early latent: infection within 12 months, no symptoms
- Late latent / unknown duration: reactive testing but no prior history of infection

## Clinical Presentation/Maternal Symptoms

Primary Syphilis

- Painless chancre
- Regional lymphadenopathy

Latent Syphilis (Most common in pregnancy)

- Asymptomatic
- Detected only via serology

Secondary Syphilis

- Diffuse rash (including palms and soles)
- Condyloma lata
- Mucous patches
- Flu-like symptoms

## Syphilis Testing Overview

Treponemal Tests (EIA, CIA, TP-PA)

- Detect antibodies specific to T. pallidum
- Typically remain positive for life
- Used for confirmation of infection history

Nontreponemal Tests (RPR, VDRL)

- Reflect disease activity
- Used for monitoring treatment response

## Key Interpretation Rule

Interpreting Titers

- Titers reflect disease activity
- Use the same test and lab for comparison
- A fourfold change (2 dilution steps) is clinically significant

Examples:

- 1:32 → 1:8 = appropriate response
- 1:8 → 1:32 = concern for reinfection or treatment failure

Expected Response

- Early syphilis: decline within 6–12 months
- Late latent: slower decline



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# Syphilis in Pregnancy, Cont'd

HEALTH CENTER ASSOCIATION OF NEBRASKA

## Treatment in Pregnancy

Critical Principle

- Penicillin G is the ONLY recommended treatment in pregnancy

**Early Syphilis** (Primary, Secondary, Early Latent <1 year)

- Benzathine penicillin G 2.4 million units IM x 1 dose

**Late Latent or Unknown Duration**

- Benzathine penicillin G 2.4 million units IM weekly x 3 doses

**Administration Rules:**

- Doses must be given 7 days apart
- ⚠️ If >9 days between doses → restart full series

## Follow-Up and Retesting

Monitoring Schedule

- Monthly titers if:
  - High risk
  - Recent infection
- Otherwise:
  - 28–32 weeks gestation
  - At delivery
- Repeat sooner if reinfection suspected
- Treatment Goal: Document a fourfold decline in titers

## Penicillin Allergy Management

Critical Rule

- 🚨No safe alternatives in pregnancy

Management

- Inpatient penicillin desensitization (in hospital) required
- Follow immediately with standard penicillin therapy

## Congenital Syphilis – Neonatal Evaluation

May include:

- Full physical exam
- Quantitative RPR/VDRL
- CBC and liver function tests
- CSF VDRL
- Long-bone radiographs

## Congenital Syphilis Treatment

Standard Regimens

- Aqueous crystalline penicillin G IV x 10 days

OR

- Procaine penicillin G IM daily x 10 days

Selected Lower-Risk Cases

- May consider:
  - Single-dose benzathine penicillin G
- Requires:
  - Close follow-up and monitoring



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