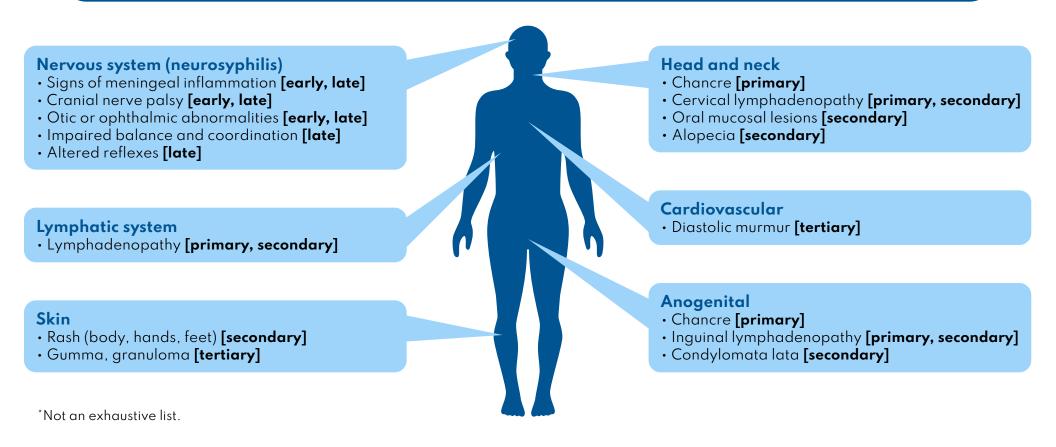
#### March 2024

Canada

## Staging a Syphilis Infection in Adolescents and Adults: Selected Physical Exam Findings According to Stage of Disease\*

The clinical manifestations of syphilis are usually described according to stage of disease: primary, secondary, latent and tertiary syphilis. Early and late neurosyphilis can also occur.





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## Staging a Syphilis Infection in Adults and Adolescents: Signs and Symptoms\*\*

### **Primary Syphilis**

#### Timing:

Usually occurs 3 weeks after infection, but can occur anywhere from 3 to 90 days post-infection.

#### Signs & symptoms:

Painless lesion (chancre), regional lymphadenopathy.



(1.1) Oral chancre<sup>1</sup>



(1.2) Vaginal chancre<sup>2</sup>



(1.3) Penile chancre<sup>3</sup>



(1.4) Inguinal lymphadenopathy<sup>4</sup>

\*\*See the <u>Syphilis Guide for Health Professionals</u> for more information.



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### Secondary Syphilis

#### **Timing:**

Usually occurs from 2 to 12 weeks after infection, but can occur up to 6 months post-infection.

#### Signs & symptoms:

Rash, fever, malaise, mucosal lesions, condylomata lata, lymphadenopathy, patchy or diffuse alopecia.



(2.1) Mucosal lesions on tongue<sup>5</sup>



(2.2) Secondary syphilis rash on body<sup>6</sup>



(2.3) Secondary syphilis palmar rash<sup>7</sup>



(2.4) Vaginal condylomata lata<sup>8</sup>



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### Latent Syphilis

#### Timing:

**Early latent syphilis** is an asymptomatic infection of less than 1 year duration. It is considered infectious because of the 25% chance of relapse to the secondary stage.

**Latent syphilis of unknown duration** is an asymptomatic infection where the duration cannot be confirmed (i.e. no serologic testing within the prior 12 months).

Late latent syphilis is an asymptomatic infection of more than 1 year duration.

#### Signs & symptoms:

All latent syphilis infections are present without signs or symptoms.

### Neurosyphilis

#### Timing:

Early neurosyphilis occurs within the first year after infection.

Late neurosyphilis occurs more than 1 year after infection.

Note that HIV alters the natural course of syphilis and sometimes results in a more rapid progression to neurosyphilis with more aggressive and atypical signs of infection.

#### Signs & symptoms:

**Early neurosyphilis:** Meningitis (e.g. headache, nuchal rigidity), uveitis/retinitis (e.g. blurred vision, red eye, flashers, floaters), otic signs and symptoms (e.g. hearing loss, tinnitus).

Late neurosyphilis: General paresis (e.g. personality and cognitive changes), tabes dorsalis (e.g. Argyll Robertson pupils, ataxia, sensory changes, abnormal reflexes).





### **Tertiary Syphilis**

#### Timing:

Late neurosyphilis, cardiovascular syphilis, or syphilitic gumma can develop years to decades after infection.

#### Signs & symptoms:

Cardiovascular syphilis: Aortic aneurysm, aortic regurgitation, coronary artery ostial stenosis.

**Syphilitic gumma:** Gummatous lesions causing tissue damage, with clinical manifestation depending on the site involved.

**Late neurosyphilis:** General paresis (e.g. personality and cognitive changes), tabes dorsalis (e.g. Argyll Robertson pupils, ataxia, sensory changes, abnormal reflexes).



(3.1) Argyll Robertson pupils, indicative of late neurosyphilis<sup>9</sup>



(3.2) Intraoral gummatous lesion of the soft palate<sup>10</sup>



(3.3) Cutaneous ulcerative lesion on the forearm<sup>11</sup>



(3.4) Syphilitic gumma of the testicle<sup>12</sup>



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# Congenital Syphilis: Signs and Symptoms\*\*\*

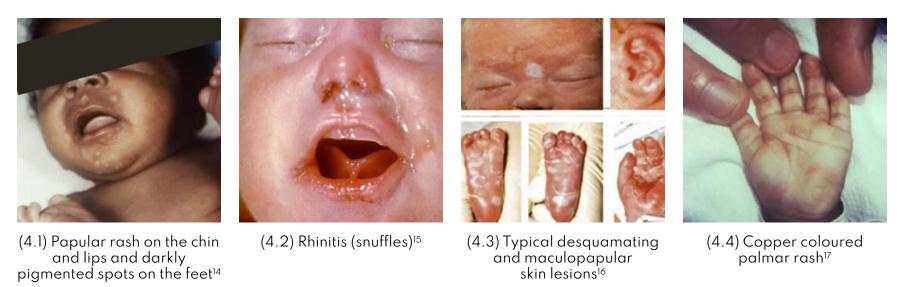
### **Early Congenital Syphilis**

#### Timing:

Presentation before 2 years of age.

#### Signs & symptoms:

More than half of liveborn infants with congenital syphilis are asymptomatic at birth.<sup>13</sup> If present, signs and symptoms may include mucocutaneous lesions (e.g. maculopapular rash, desquamation), hepatosplenomegaly, anemia, fulminant disseminated infection.



\*\*\*See the Syphilis Guide for Health Professionals and the Canadian Pediatric Society's Position Statement for more information.



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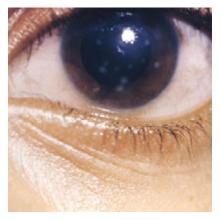
### Late Congenital Syphilis

#### Timing:

Presentation after 2 years of age.

#### Signs & symptoms:

Musculoskeletal involvement (e.g. osteoperiostitis, saddle nose), interstitial keratitis, eighth nerve deafness, dental abnormalities (e.g. Hutchinson's teeth, mulberry molars).



- (5.1) Interstitial keratitis<sup>18</sup>
- (5.2) Hutchinson's teeth<sup>19</sup>



(5.3) Mulberry molar (rounded enamel cusps on the permanent first lower molars)<sup>20</sup>



(5.4) Osteoperiostitis of the tibia leading to characteristic sabre shins<sup>21</sup>



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