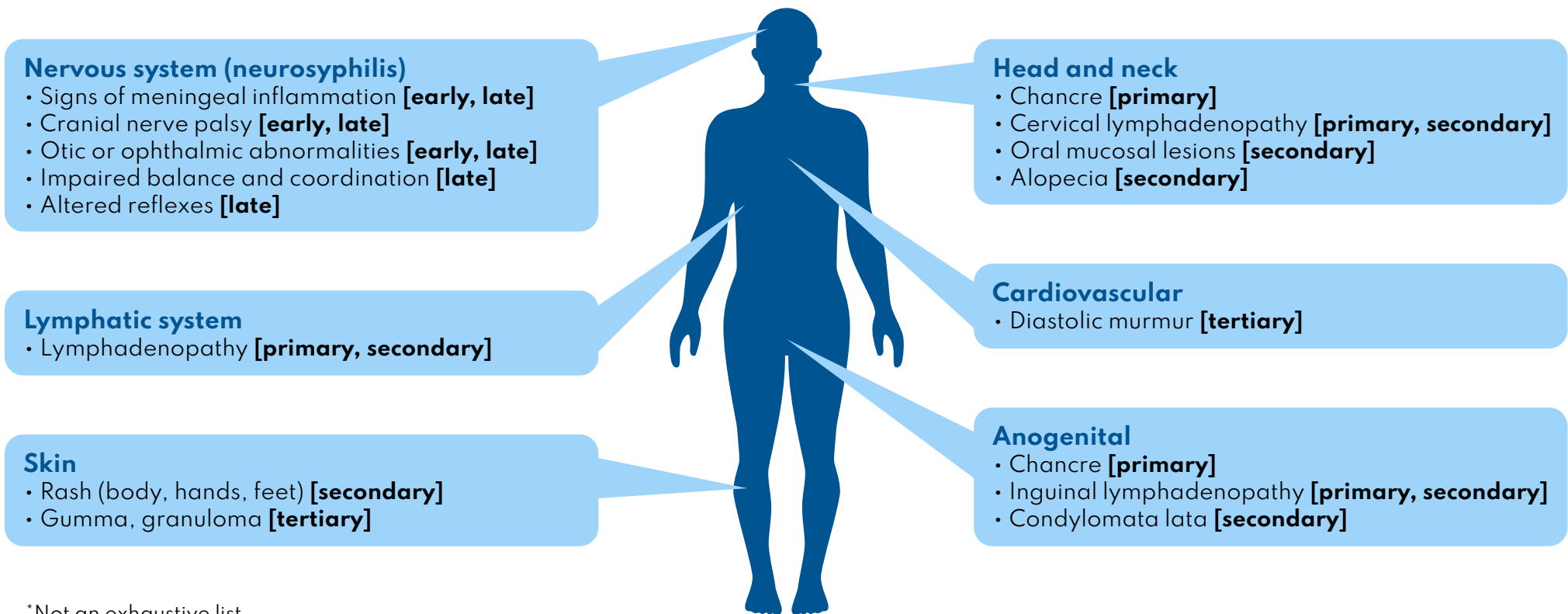




Staging a Syphilis Infection in Adolescents and Adults: Selected Physical Exam Findings According to Stage of Disease*

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.



*Not an exhaustive list.

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 chancre¹



(1.2) Vaginal chancre²



(1.3) Penile chancre³



(1.4) Inguinal lymphadenopathy⁴

**See the [Syphilis Guide for Health Professionals](#) for more information.

Secondary Syphilis

Timing:

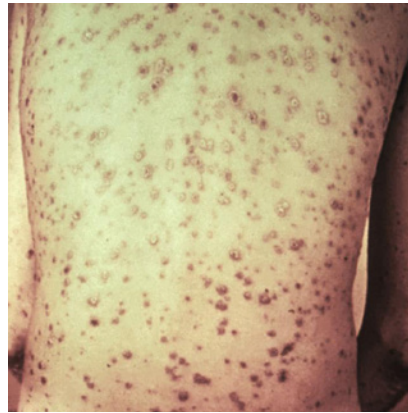
Usually occurs from 2 to 12 weeks after infection, but can occur up to 6 months post-infection.

Signs & symptoms:

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



(2.1) Mucosal lesions on tongue⁵



(2.2) Secondary syphilis rash on body⁶



(2.3) Secondary syphilis palmar rash⁷



(2.4) Vaginal condylomata lata⁸

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, 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 neurosyphilis⁹



(3.2) Intraoral gummatous lesion of the soft palate¹⁰



(3.3) Cutaneous ulcerative lesion on the forearm¹¹



(3.4) Syphilitic gumma of the testicle¹²

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.¹³ If present, signs and symptoms may include mucocutaneous lesions (e.g. maculopapular rash, desquamation), hepatosplenomegaly, anemia, fulminant disseminated infection.



(4.1) Papular rash on the chin and lips and darkly pigmented spots on the feet¹⁴



(4.2) Rhinitis (snuffles)¹⁵



(4.3) Typical desquamating and maculopapular skin lesions¹⁶



(4.4) Copper coloured palmar rash¹⁷

^{***}See the [Syphilis Guide for Health Professionals](#) and the [Canadian Pediatric Society's Position Statement](#) for more information.

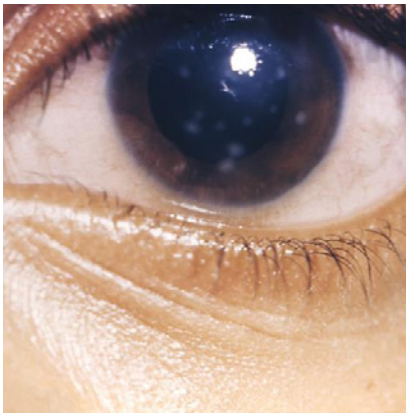
Late Congenital Syphilis

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 keratitis¹⁸



(5.2) Hutchinson's teeth¹⁹



(5.3) Mulberry molar (rounded enamel cusps on the permanent first lower molars)²⁰



(5.4) Osteoperiostitis of the tibia leading to characteristic sabre shins²¹

References

1. CDC. Sumpter RE. Circular lesion diagnosed as a primary syphilitic chancre [internet]. 1967 [cited 2024 January 3]. Available from: <https://phil.cdc.gov/Details.aspx?pid=12623>
2. CDC. Syphilis images [internet]. 2016 [cited 2024 January 3]. Available from: <https://www.cdc.gov/std/syphilis/images.htm>
3. CDC. Fiumara NJ. Penile chancre diagnosed as a primary syphilitic infection [internet]. 1976 [cited 2024 January 3]. Available from: <https://phil.cdc.gov/Details.aspx?pid=6760>
4. CDC. Lindsley S. Inguinal lymphadenopathy due to a case of primary syphilis [internet]. 1977 [cited 2024 January 3]. Available from: <https://phil.cdc.gov/Details.aspx?pid=3477>
5. CDC. Syphilis images [internet]. 2016 [cited 2024 January 3]. Available from: <https://www.cdc.gov/std/syphilis/images.htm>
6. CDC. Hart G. Papulosquamous rash that proved to be a case of secondary syphilis [internet]. n.d. [cited 2024 January 3]. Available from: <https://phil.cdc.gov/Details.aspx?pid=17838>
7. CDC. Papulosquamous rash of secondary syphilitic lesions on the palmar surface of both hands [internet]. 1970 [cited 2024 January 3]. Available from: <https://phil.cdc.gov/Details.aspx?pid=16749>
8. CDC. Ayers J. Condylomata lata lesions atop the labia and perianal region [internet]. 1968 [cited 2024 January 3]. Available from: <https://phil.cdc.gov/Details.aspx?pid=17052>
9. The New England Journal of Medicine. Osman C, Clark TW. Tabes dorsalis and Argyll Robertson pupils, 375:20, e40. Copyright © 2016 Massachusetts Medical Society. Reprinted with permission from Massachusetts Medical Society. Available from: <https://www.nejm.org/doi/full/10.1056/NEJMicm1507564>
10. CDC. Intraoral gummatous lesion of the soft palate, due to tertiary syphilis infection [internet]. n.d. [cited 2024 January 3]. Available from: <https://phil.cdc.gov/Details.aspx?pid=16762>
11. CDC. Cutaneous lesion on the left forearm, diagnosed as tertiary syphilis [internet]. n.d. [cited 2024 January 3]. Available from: <https://phil.cdc.gov/Details.aspx?pid=17837>
12. CDC. Lindsley S. Syphilitic gumma of the testicle [internet]. 1976 [cited 2024 January 3]. Available from: <https://phil.cdc.gov/Details.aspx?pid=6754>
13. The Lancet Infectious Diseases. Keuning MW, Kamp GA, Schonenberg-Meintema D, Dorigo-Zetsma JW, van Zuidan JM, Pajkrt D. Congenital syphilis, the great imitator—case report and review. 2020 Jul;20(7):e173-e179.
14. CDC. Lindsley S. Female infant born with congenital syphilis, with a papular rash on the chin and lips and darkly pigmented spots on the soles of the feet [internet]. 1973 [cited 2024 January 3]. Available from: <https://phil.cdc.gov/Details.aspx?pid=16743>
15. CDC. Cole N. Pathologic morphology indicative of congenital syphilis [internet]. 1963 [cited 2024 January 3]. Available from: <https://phil.cdc.gov/Details.aspx?pid=2246>
16. CDC. Ballard R. Congenital syphilis [internet]. 2021 [cited 2024 January 3]. Available from: <https://www.cdc.gov/ncbddd/birthdefects/surveillancemanual/quick-reference-handbook/congenital-syphilis.html>
17. CDC. Copper-coloured rash characteristic of congenital syphilis. 1970 [cited 2024 January 3]. Available from: <https://phil.cdc.gov/Details.aspx?pid=16746>
18. CDC. Lindsley S. Interstitial keratitis, the result of late congenital syphilis [internet]. 1973 [cited 2024 January 3]. Available from: <https://phil.cdc.gov/Details.aspx?pid=4149>
19. CDC. Sumpter R. Hutchinson's teeth, developed as a result of congenital syphilis [internet]. 1967 [cited 2024 January 3]. Available from: <https://phil.cdc.gov/Details.aspx?pid=12599>
20. CDC. Sumpter R. Mulberry molars, developed as a result of congenital syphilis [internet]. 1967 [cited 2024 January 3]. Available from: <https://phil.cdc.gov/Details.aspx?pid=2386>
21. CDC. Sumpter R. Sabre shin of the right lower leg, due to congenital syphilis [internet]. 1967 [cited 2024 January 3]. Available from: <https://phil.cdc.gov/Details.aspx?pid=2387>

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