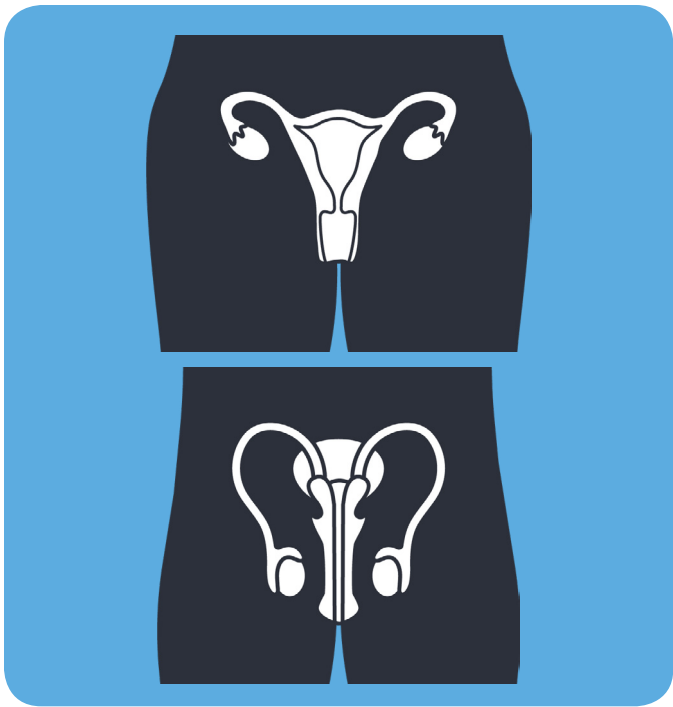
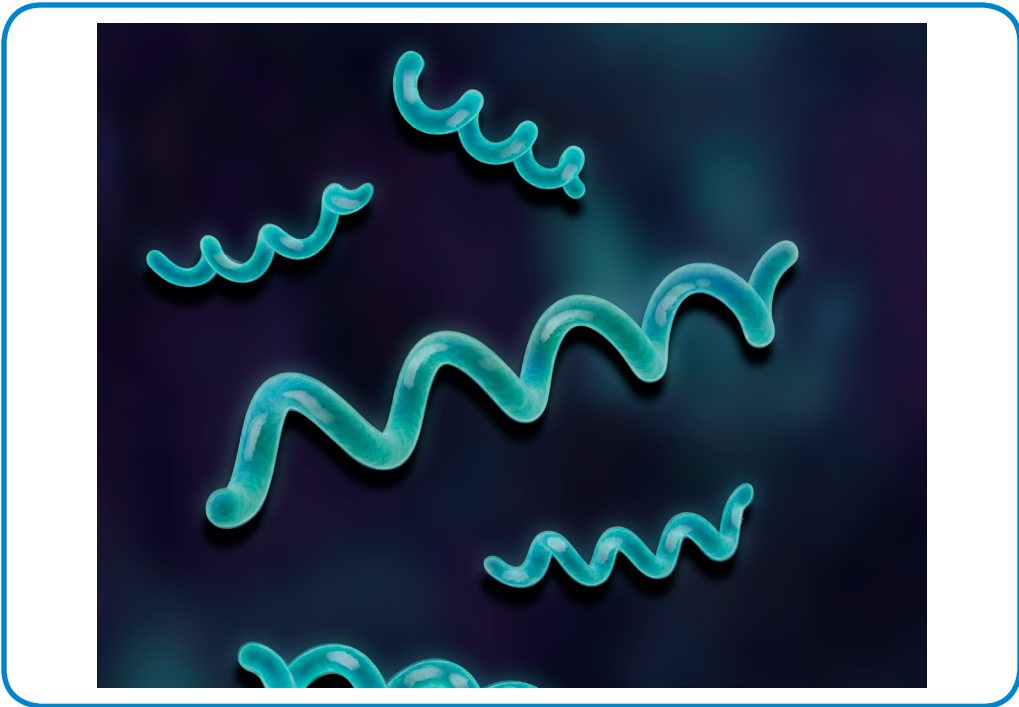


TOPIC: SYPHILIS



Bacterial

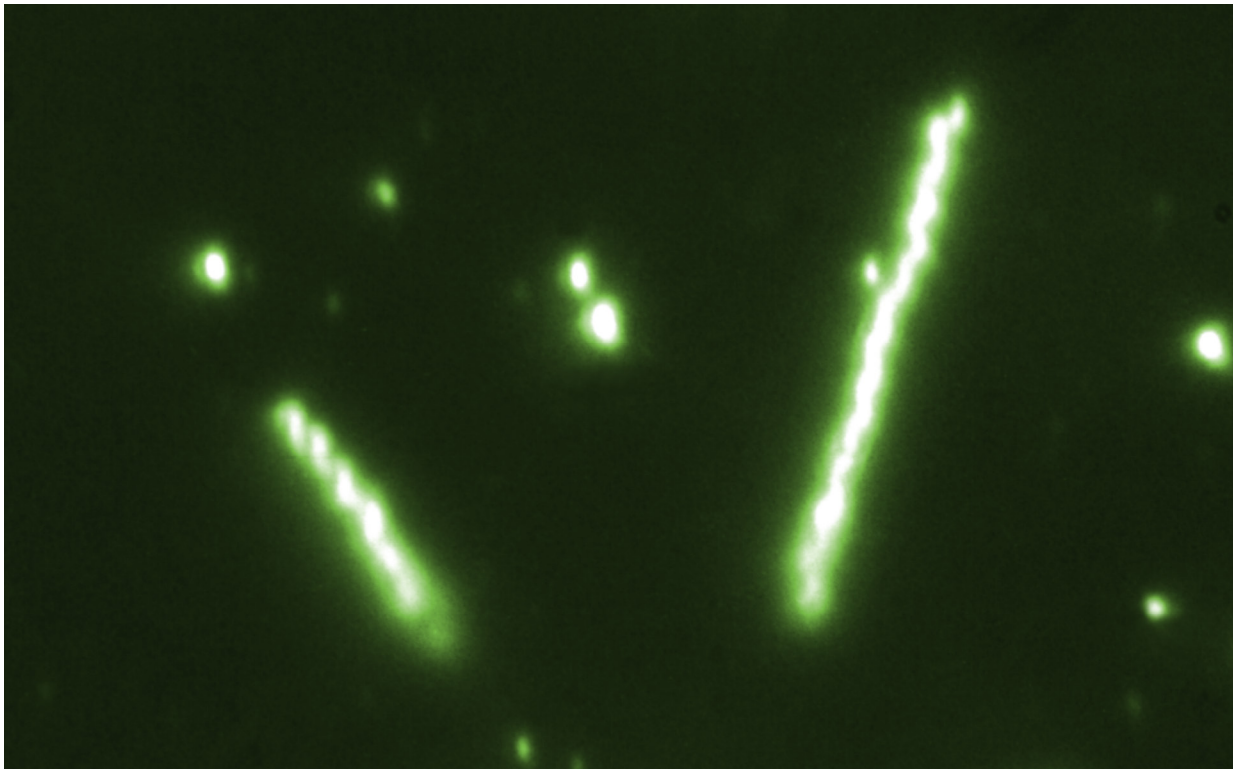
GRAM _____
SHAPE: Spirochete (corkscrew)



CAUSE

Treponema pallidum (*T. pallidum*).

- ◆ Invades host tissues rapidly from initial infection site – unique _____ provides motility.
 - Varies its surface _____ (antigenic variation), avoiding detection by immune system.
- ◆ Untreated infection will _____ and can cause serious chronic ailments.



(CDC)

SPREAD

Direct contact with a syphilis _____ (chancre).

- Chancre contains highly _____ fluid at the center.
- Most often spread sexually but can infect other _____ membranes or breaks in skin.

Can be transmitted from pregnant woman to _____ (congenital syphilis).

SYMPTOMS

- ◆ **Primary stage:** small, painless, hard _____ (lesion) at site of infection.
 - May go unnoticed (e.g., on _____ in females/in urethra in males).
- ◆ **Secondary stage:** weeks later, infectious skin rashes & _____ sores.
 - Patient may also experience fever, malaise, patchy hair loss.
- ◆ **Latent stage:** period of _____ symptoms; may last _____ years.
- ◆ **Tertiary stage:** hyperimmune response; occurs in ~25% of _____ cases.
 - Gummas (rubbery lesions) on skin & bones, blindness, paralysis, dementia.

DIAGNOSIS

Method depends on stage of disease.

- ◆ **Primary stage:** _____ observation of *T. pallidum* from sample.
- ◆ **Secondary stage:** _____ antibody tests.
 - Non-treponemal antibody tests: antibodies indicative of _____ damage.
 - Treponemal antibody tests: antibodies against *T. pallidum*.

TREATMENT

Penicillin G.

IMMUNITY

N/A.

References:

[Photomicrograph of two *Treponema pallidum* spirochetal bacteria]. (n.d). Centers for Disease Control and Prevention. <https://phil.cdc.gov/Details.aspx?pid=29916>

EXAMPLE

Correctly match the stages of syphilis with their symptoms:

	_____	a) Period of no symptoms; can last over a decade.
	_____	b) Characterized by a painless, highly infectious chancre at site of infection.
	_____	c) Extremely severe hyperimmune response; can be fatal.
	_____	d) Characterized by skin rash, fever, malaise, patchy hair loss.

PRACTICE

The MHA-TP test is a type of treponemal antibody test. What exactly is it testing for?

- a) Presence of human antibodies that target the bacteria that cause syphilis.
- b) Surface antigens found on the bacteria that cause syphilis.
- c) Presence of human antibodies that indicate tissue damage that is consistent with a syphilis infection.
- d) Antigens released from damaged tissue consistent with a syphilis infection.

PRACTICE

During which stages of syphilis is the disease generally considered highly contagious through sexual contact?

- a) Primary only.
- b) Primary and secondary stages.
- c) Secondary and tertiary stages.
- d) All four stages are considered highly contagious.