

# ***Treponema pallidum***

## Syphilis

*T. pallidum* is a risk group 2 bacterium. It is considered a **reproductive pathogen** as it is the causative agent of syphilis, which is transmitted via sexual contact and during pregnancy. Transmission can occur during any stage of pregnancy or delivery, leading to high rates of stillbirth, miscarriage, or neonatal death.

### **How can I be exposed to *T. pallidum*?**

- Exposure occurs via direct contact with an infectious lesion during sexual activity.
- Laboratory personnel may be exposed via direct skin and mucosal contact, parenteral inoculation, and indirect contact via fomites to infectious materials.
- Vertical transmission can occur during pregnancy or delivery.

### **How can I protect myself from exposure?**

- Avoid mucous membrane exposure by wearing eye/face protection and using primary containment devices.
- Avoid parenteral inoculation by strictly limiting the use of sharps and using sharps engineering controls whenever possible.
- Additional precautions are recommended for working with animals or large-scale activities.
- Avoid exposure to broken skin by wearing lab coat, gloves and waterproof bandages or avoiding agent until healed.

### **What should I do if I think I've been exposed to *T. pallidum*?**

Wash the affected area immediately for 15 minutes with soap and water and seek medical attention.

### **What symptoms should I look for after a potential exposure?**

Primarily, lesions at the site of infection. Systemic symptoms include fever, headache, sore throat, anorexia, swollen lymph nodes, malaise.

### **How long does it take for symptoms to develop?**

Initial lesions and mild to moderate swelling of lymph nodes develop approximately 3 weeks after infection.

### **Is there a treatment or vaccine?**

There is no vaccine, however post exposure treatment includes penicillin G benzathine.

### **Can I transmit it to other people?**

Yes, it is transmitted sexually and via blood. Transplacental transmission may occur at any time during gestation. Congenital syphilis may be transmitted through direct contact of an infected lesion during birth.

### **Can I transmit it to my pets?**

No, *T. pallidum* is not transmissible to other animals.

### **Can it survive on surfaces?**

*T. pallidum* does not survive outside of the host. Cells die upon drying or exposure to atmosphere.

See *Pathogen Safety Data Sheet for More Information*

