

Neisseria gonorrhoeae

Gonorrhea

N. gonorrhoeae is a risk group 2 bacterium. It is considered a **reproductive pathogen** as cervical infection is associated with 10-20% of cases of pelvic inflammatory disease (PID) and 15% of patients with PID develop infertility from tubal scarring and increased risk for reproductive tract complications and ectopic pregnancy. Urogenital gonococcal infections have been associated with chorioamnionitis, premature rupture of membranes, preterm birth, low birth weight, and spontaneous abortions.

How can I be exposed to *N. gonorrhoeae*?

- Exposure is primarily via sexual contact.
- Gonococcal infections can occur in neonates from exposure to infected cervical secretions during delivery.
- Laboratory workers may be exposed by hand to face contact, contact of mucous membranes with fomite or liquid splash/spray, and percutaneous injuries.

How can I protect myself from exposure?

- Avoid direct skin contact by wearing protective clothing and gloves.
- Avoid mucous membrane exposure by using eye/face protection for procedures that may produce splashes.
- Avoid respiratory exposure by using a biosafety cabinet or other primary containment device and wearing a respirator for procedures that may produce aerosols, particularly centrifugation, resuspension of pellets, and washing.
- The use of needles, syringes, and other sharp objects should be strictly limited, and additional precautions should be taken when working with animals.

What should I do if I think I've been exposed?

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

How long does it take for symptoms to develop?

Symptoms develop 2-14 days after exposure.

What symptoms should I look for after a potential exposure?

In females, the most common manifestation is cervicitis characterized by increased vaginal discharge, dysuria (pain/discomfort during urination), abdominal pain, and menstrual abnormalities, however up to 70% are asymptomatic. In males, symptoms include purulent urethral discharge and dysuria.

Is there a treatment or vaccine?

There is currently no vaccine available. Treatment includes third generation cephalosporins as there is rising resistance to other antibiotics.

Can I transmit it to other people?

Yes as described in the exposure section via sexual contact, transmission to newborns during birth, and exposure to contaminated fomites.

Can I transmit it to my pets?

No, *N. gonorrhoeae* is human-specific.

Can it survive on surfaces?

N. gonorrhoeae can survive for 24-48 hours on a towel, up to 2 hours on a toilet seat, and up to 3 hours on toilet paper.

See Pathogen Safety Data Sheet for More Information

