

Yale *Environmental Health & Safety*

Human Papilloma Virus

HPV

HPV is a risk group 2 virus. It is considered a **reproductive pathogen** as it can be passed from mother to newborn through vertical transmission. HPV is a very common sexually transmitted disease (STD) with over 50 types causing anogenital infections. Of those, 25 are proven or likely human carcinogens.

How can I be exposed to HPV?

- Transmission typically occurs through sexual contact, skin-skin contact, and prolonged exposure to contaminated clothing.
- Infected mothers may transmit the virus via vertical transmission.
- Laboratory workers may be exposed by accidental contact with infected wart tissue, mucous membrane or aerosol exposure, and parenteral inoculation.

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.
- 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 to HPV?

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?

Cutaneous infections result in warts most commonly on the hands and feet. Mucosal infections target the lining of the mouth,

throat, respiratory tract, and anogenital epithelium. Mucosal infections can lead to cervical cancer.

How long does it take for symptoms to develop?

Many cases will be asymptomatic. While development of symptoms varies widely, from 3 weeks to several years, most warts develop 2-3 months after infection.

Is there a treatment or vaccine?

Two vaccines have been proven effective against HPV. Screening for and removal of cervical high-grade lesions is a very effective way to prevent invasive cancer in women.

Can I transmit it to other people?

Person to person transmission occurs through sexual contact and from vertical transmission.

Can I transmit it to my pets?

No, HPV is species specific to humans.

Can it survive on surfaces?

Yes, HPV can survive on inanimate objects such as clothing and laboratory equipment.

See *Pathogen Safety Data Sheet* for More Information

