HPV replication in matured keratinocytes in suprabasal layers of the epithelium

Shedding of infected desquamating cells

HPV infection of a new host

Penetration to cells of the basal layer (mechanism unclear)

Immune mediated viral clearance

HPV infection of a basal layer (mechanism unclear)

Immune mediated viral clearance

Active HPV infection

Clinical HPV infection
Productive infection associated with benign neoplasm. All viral genes are expressed and the infection is transmissible.

Clinical resolution (mechanism unclear)

Activation (mechanism unclear)

Clinical resolution

Subclinical HPV infection
Productive infection without clinical signs. All viral genes are expressed and the infection is transmissible.

Latent HPV infection
Viral gene expression is restricted to early genes that regulate only viral DNA transcription that cannot support a productive viral cycle. The infection is not transmissible.

Clinical Progression

immune mediated viral clearance