

# DNA viruses

# Papovaviruses

- Human Papovaviridae
  - Papillomavirus - warts
  - Polyomavirus
    - BK virus – renal disease
    - JC virus – progressive multifocal leukoencephalopathy

# Parvoviruses

- The parvoviridae are the smallest of the DNA viruses.
- Only one member of the Parvoviridae, B19 is known to cause human disease – erythema infectiosum (fifth disease), a common childhood exanthem.

# Adenoviruses

- Adenoviruses were first isolated in 1953 in a human adenoid cell culture.
- Since then, approximately 100 serotypes, at 47 of which infect humans, have been recognized.
- Adenoviruses infect epithelial cells of the pharynx, conjunctiva, small intestine, and occasionally other organ systems.

# Adenovirus infections in humans

- Respiratory diseases
  - acute febrile pharyngitis
  - pharyngoconjunctival fever
  - acute respiratory disease
  - pneumonia
- Eye infections
- Gastrointestinal disease
- Other diseases
  - acute hemorrhagic cystitis in children
  - cervical lesions
  - urethritis

# Human herpesviruses

- Alphaherpesvirinae
  - Herpes simplex type 1
  - Herpes simplex type 2
  - Varicella zoster virus
- Betaherpesvirinae
  - Cytomegalovirus
  - Human Herpes virus 6,7
- Gammaherpesvirinae
  - Epstein-Barr virus
  - Kaposi's sarcoma-related virus

# Poxviruses

- Poxviruses are the largest and most complex of viruses.
- Infections with the most poxviruses are characterized by a rash, although lesions induced by some members of the family are markedly proliferative.
- Poxviruses include the human viruses variola (smallpox) and molluscum contagiosum poxvirus.