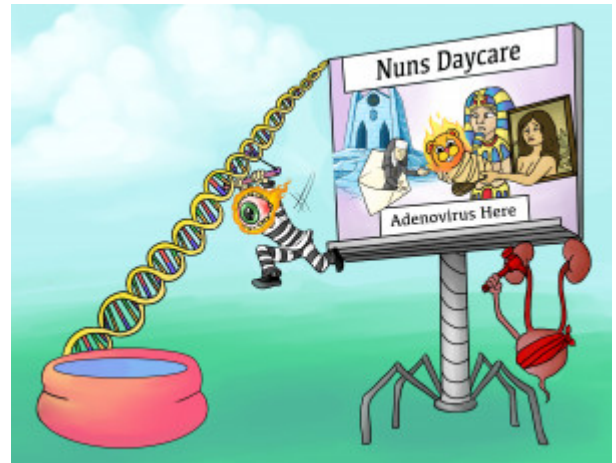


## Adenovirus

Adenovirus is a non enveloped double stranded linear DNA virus that can cause a variety of diseases. Adenovirus infections most commonly infect the respiratory system but can also affect the GI tract, cause conjunctivitis as well as cystitis. Pharyngoconjunctival fever is a specific presentation of adenovirus that includes a high fever, pharyngitis, and conjunctivitis. It is often found in summer camps and can be spread via public swimming pools and daycare centers. A typical question one might find on exams: Two days after summer swim camp, a seven year old boy presents to his school nurse complaining of irritated watery eyes. On exam, the nurse discovers bilateral conjunctival injection. She notes that several other children have presented with similar symptoms since the swim camp opened up. Which of the following features is true of the virus most likely affecting the children at school? Answer: Non-enveloped linear double stranded DNA virus.



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### Characteristics

#### Non-enveloped

##### Nun-envelope

Many viruses have viral envelopes covering their protein capsids. Adenoviruses do not.

#### Icosahedral

##### Ice-cathedral

Adenovirus has an icosahedral capsid with 20 identical, equilateral triangular faces.

#### Linear

##### Line

This genome is linear as opposed to circular.

#### Double Stranded DNA

##### DNA Double-helix

Adenovirus genome consists of double-stranded DNA.

### Signs and Symptoms

#### Pharyngitis

##### Pharaoh

Adenovirus can present with a sore throat caused by pharyngitis.

#### Conjunctivitis

##### Convict-eye-on-fire

This virus can cause conjunctivitis, which is inflamed eyes, usually without pus formation.

#### Fever

##### Fever-beaver

Adenovirus can cause a high fever that lasts 4-5 days.

### **Summer Swimming**

#### [Swimming-pool](#)

Adenovirus is often found in summer camps and referred to as pool fever because it can be spread in public swimming pools.

### **Day Care Centers**

#### [Day Care advertisement](#)

Adenovirus is commonly spread in day care centers.

### **Acute Hemorrhagic Cystitis**

#### [Bladder with Hemorrhage-hammer](#)

Hemorrhagic cystitis is defined by dysuria, hematuria, and hemorrhage. Adenovirus is the most common cause of acute viral hemorrhagic cystitis in children.

### **Pneumonia**

#### [Nude-Mona](#)

Adenovirus can cause a viral pneumonia.