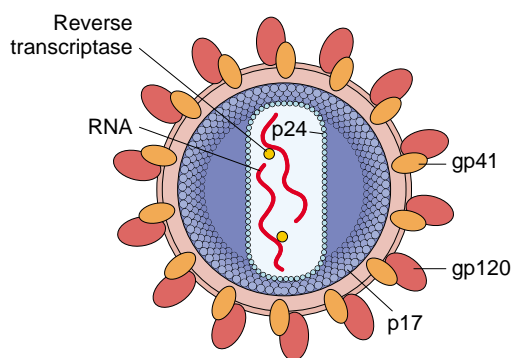


human herpesvirus 7, a virus belonging to the subfamily Betaherpesvirinae, closely related to human herpesvirus 6, but not known to be associated with any disease. See also **human herpesvirus 6**.

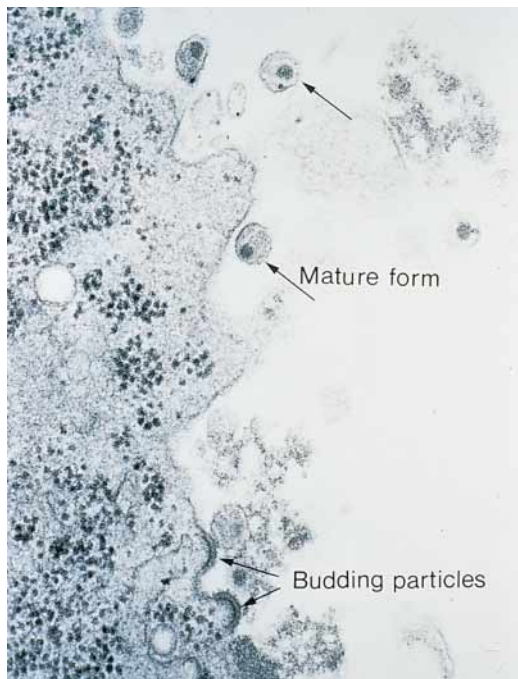
human herpesvirus 8, a virus in the family Herpesviridae that has been implicated as the causative agent of Kaposi's sarcoma and primary effusion lymphoma. Also called **Kaposi's sarcoma-associated herpesvirus**. See also **Kaposi's sarcoma, primary effusion lymphoma**.

human immunodeficiency virus (HIV) /im'yōōnō' difish' ənsē/ [L, *humanus* + *immunis*, free from, *de*, from, *facere*, to make, *virus*, poison], a retrovirus that causes acquired immunodeficiency syndrome (AIDS). Retroviruses produce

the enzyme reverse transcriptase, which allows the viral RNA genome to be transcribed into DNA inside the host cell. HIV is transmitted through contact with an infected individual's blood, semen, breast milk, cervical secretions, cerebrospinal fluid, or synovial fluid. It infects CD4-positive helper T cells of the immune system and causes infection with an incubation period that averages 10 years. With the immune system destroyed, AIDS develops as opportunistic infections such as **Kaposi's sarcoma**, ***Pneumocystis carinii*** pneumonia, candidiasis, and **tuberculosis** attack organ systems throughout the body. Aside from the initial antibody tests (enzyme-linked immunosorbent assay and Western blot) that establish the diagnosis for HIV infection, the most



Human immunodeficiency virus
(Kumar, Cotran, and Robbins, 1997)



Electromicrograph of HIV cultured from a patient with hemophilia

(Monahan and Neighbors, 1997/courtesy Jonathan W.M. Gold, MD)

Signs and symptoms of HIV infection

Chills and fever	Malaise
Night sweats	Fatigue
Dry productive cough	Oral lesions
Dyspnea	Skin rashes
Lethargy	Abdominal discomfort
Confusion	Diarrhea
Stiff neck	Weight loss
Seizures	Lymphadenopathy
Headache	Progressive generalized edema

From Phipps WJ, Sands JK, Marek JE: *Medical-surgical nursing: concepts and clinical practice*, ed 6, St Louis, 1999, Mosby.

CDC classification of HIV infection based on pathophysiology of the disease as immune function progressively worsens

Class	Criteria
Group I	<ol style="list-style-type: none"> 1. Acute infection with HIV 2. Flu-like symptoms; resolve completely 3. HIV antibody negative
HIV asymptomatic	
Group II	<ol style="list-style-type: none"> 1. HIV antibody positive 2. No laboratory or clinical indicators of immunodeficiency
HIV symptomatic	
Group III	<ol style="list-style-type: none"> 1. HIV antibody positive 2. Persistent generalized lymphadenopathy
Group IV-A	<ol style="list-style-type: none"> 1. HIV antibody positive 2. Constitutional disease <ol style="list-style-type: none"> a. Persistent fever or diarrhea b. Weight loss >10% of normal body weight
Group IV-B	<ol style="list-style-type: none"> 1. Same as group IV-A, and 2. Neurologic disease <ol style="list-style-type: none"> a. Dementia b. Neuropathy c. Myelopathy
Group IV-C	<ol style="list-style-type: none"> 1. Same as group IV-B, and 2. CD4+ T lymphocyte count <200/μl 3. Opportunistic infection
Group IV-D	<ol style="list-style-type: none"> 1. Same as group IV-C, and 2. Pulmonary tuberculosis, invasive cervical cancer, or other malignancy

Data from Centers for Disease Control and Prevention, March 1993. From Price SA, Wilson LM: *Pathophysiology: clinical concepts of disease processes*, ed 5, St Louis, 1997, Mosby.