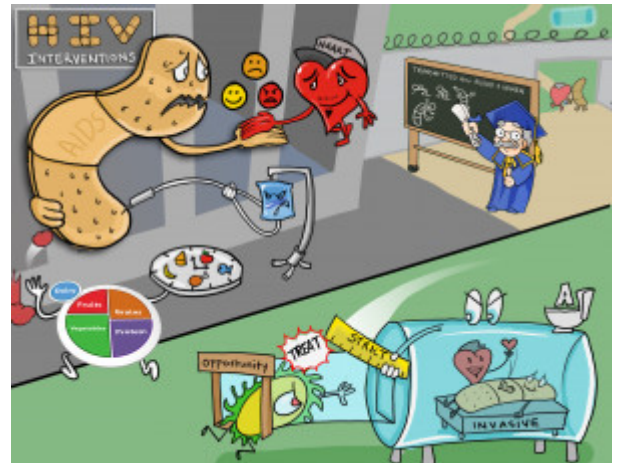


## Human Immunodeficiency Virus (HIV) Interventions

Human immunodeficiency virus (HIV) infection is caused by an RNA retrovirus and leads to immunosuppression. Treatment for HIV varies based on disease progression and presence of opportunistic infections. Adequate nutrition, IV hydration, HIV medications, and emotional support are critical in treating the patient with HIV. Special considerations include HIV transmission education, strict asepsis for invasive procedures, and treatment of opportunistic infections. Refer to the Picmonics on "Human Immunodeficiency Virus (HIV) Assessment," "Human Immunodeficiency Virus (HIV) Diagnosis," and "Human Immunodeficiency Virus (HIV) Stages" for further information.



PLAY PICMONIC

### Interventions

#### Adequate Nutrition

##### Nutritional-plate

As the body tries to fight off infections, the patient with HIV may experience anorexia, nausea, vomiting, and weight loss. Adequate nutrition is critical for promoting a healthy immune system. Maintaining lean body mass and ensuring sufficient amounts of vitamins and minerals will help delay disease progression. Encourage the patient to avoid alcohol and tobacco products to support a healthy immune system.

#### Small Frequent Meals

##### Small Frequent Meals around the clock

Since the patient with HIV may be experiencing anorexia and severe fatigue, encouraging small frequent meals may help maintain a lean body mass and promote a healthy immune system. If the patient in the late stages of HIV is unable to tolerate oral intake, total parenteral nutrition (TPN) may be administered as an energy source.

#### IV Hydration

##### IV Fluids

Administering IV hydration to patients with HIV will help maintain adequate fluid and electrolyte status. Sufficient amounts of vitamins and micronutrients are essential for proper immune function and possibly delaying disease progression.

#### Emotional Support

##### Emoticon Support

Patients with HIV will experience feelings of anxiety, fear, and depression. They may also have feelings of loss, anger, powerlessness, grief, and social isolation. Providing emotional support to all patients with HIV will help them cope with their condition. Refer the patient to mental health counseling and encourage involvement in support groups and community activities. Establishing a consistent relationship with health care providers will encourage the patient to adhere to regularly scheduled appointments.

### HIV Medications

#### HAART

##### Heart

Highly active antiretroviral therapy (HAART) may significantly delay the disease progression. Factors to consider while selecting an HIV drug regimen include the resistance of the patient's HIV to certain drugs, medication side effects, existing co-morbidities, and dosing schedules. Adherence to an effective HAART regimen will help prevent opportunistic infections. To prevent missing scheduled doses that may lead to drug resistance, encourage the patient to set reminders using resources such as calendars, timers, or beepers.

### Considerations

### **Transmission Education**

#### [Transmission Educator](#)

During the asymptomatic stage, patients with HIV may be unaware of their infection status, and thus, may engage in risky behaviors and transmit the virus to other people. Inform the patient about early symptoms of HIV and provide education regarding its transmission. The use of condoms is one of the best ways to prevent HIV transmission from an infected individual to an unaffected person.

### **Strict Asepsis for Invasive Procedures**

#### [Strict-ruler A-septic-tank for Invasive Procedure](#)

The HIV virus causes immunosuppression and increases the patient's susceptibility to develop infections. While performing invasive procedures in patients with HIV, strict asepsis is critical to decrease the risk of infections. Since the immune system is compromised, the patient with HIV may develop life-threatening complications caused by infections.

### **Treat Opportunistic Infections**

#### [Treating open window Opportunity Bacteria](#)

Supportive care specific to the opportunistic infection is critical for the patient with HIV. Patients with *Pneumocystis jiroveci* pneumonia (PCP) will require adequate oxygenation. Since cryptococcal meningitis may cause confusion, maintain a safe patient environment. Administer antiviral medications to patients with cytomegalovirus esophagitis, colitis, and retinitis. Since there are no known effective therapies for patients with encephalopathy, the treatment goal is to preserve immune function. Tuberculosis may be treated with anti-tuberculosis drugs such as rifadin (Rifampin) or isoniazid (INH) while CNS lymphomas are treated with chemotherapy.