

protease inhibitors (e.g., indinavir, saquinavir, ritonavir, nelfinavir, amprenavir). Combinations of antiretroviral drugs are used to stall the emergence of drug resistance. Antiretroviral therapy regimens and guidelines are continually evolving. Therapy is lifelong, making adherence difficult. Laboratory markers (CD<sub>4</sub><sup>+</sup> lymphocyte count, viral load) assist in monitoring both disease progression and response to therapy.

*Pneumocystis carinii* pneumonia (PCP) is the most common opportunistic infection of children infected with HIV. It occurs most frequently between 3 and 6 months old. All infants born to HIV-infected women should receive prophylaxis by 6 weeks old until HIV infection is reasonably excluded ([Siberry, 2014](#); [Simpkins, Siberry, and Hutton, 2009](#)). Trimethoprim/sulfamethoxazole (TMP-SMZ) is the agent of choice. If adverse effects are experienced with TMP-SMZ, dapsone or pentamidine can be used.

Prophylaxis is often employed for other opportunistic infections, such as disseminated *Mycobacterium avium-intracellulare* complex, candidiasis, or herpes simplex. Intravenous gamma globulin (IVGG) has been helpful in preventing recurrent or serious bacterial infections in some HIV-infected children.

Immunization against common childhood illnesses, including the pneumococcal and influenza vaccines, is recommended for all children exposed to and infected with HIV ([American Academy of Pediatrics Committee on Pediatric AIDS, 2000b](#); [Leggat, Iyer, Ohtola, et al, 2015](#); [Simpkins, Siberry, and Hutton, 2009](#)). Varicella (chickenpox) vaccine and measles, mumps, and rubella (MMR) vaccine can be administered if there is no evidence of severe immunocompromise. Because antibody production to vaccines may be poor or decrease over time, immediate prophylaxis after exposure to several vaccine-preventable diseases (e.g., measles, varicella) is warranted. It should be recognized that children receiving IVGG prophylaxis may not respond to the MMR vaccine if given in close proximity to the IVGG dose ([McLean, Fiebelkorn, Temte, et al, 2013](#)).

HIV infection often leads to marked failure to thrive and multiple nutritional deficiencies. Nutritional management may be difficult because of recurrent illness, diarrhea, and other physical problems. The nurse should implement intensive nutritional interventions if the child's growth begins to slow or weight begins to decrease.