ACQUIRED IMMUNE DEFICIENCY SYNDROME (AIDS)

What is acquired immunodeficiency syndrome (AIDS)?
AIDS stands for acquired immunodeficiency syndrome, an advanced stage of infection with the human immunodeficiency virus (HIV). People are said to have AIDS when they have certain signs or symptoms specified in guidelines formulated by the U.S. Centers for Disease Control and Prevention (CDC).

What causes AIDS?
AIDS is caused by HIV. By killing or damaging cells of the body's immune system, HIV progressively destroys the body's ability to fight infections and certain cancers.

What are the symptoms of AIDS?
Symptoms of opportunistic infections common in people with AIDS include: coughing and shortness of breath, seizures, and lack of coordination, difficult or painful swallowing, mental symptoms such as confusion and forgetfulness, and severe and persistent diarrhea. Other symptoms are fever, vision loss, nausea, abdominal cramps, vomiting, weight loss and extreme fatigue, severe headaches, and coma.

How is AIDS diagnosed?
A diagnosis of AIDS is made by a physician using laboratory test results and clinical criteria such as AIDS indicator illnesses.

What is the treatment for AIDS?
Drugs approved for the treatment of HIV/AIDS fall into four classes, which are:

1. Nucleoside or nucleotide reverse transcriptase inhibitors (NRTIs). NRTIs work by blocking the enzyme reverse transcriptase, which helps the virus make DNA from its RNA.
2. Non-nucleoside reverse transcriptase inhibitors (NNRTIs). NNRTIs work like the ones listed above.
3. Protease inhibitors (PIs). PIs work completely differently from those listed above. HIV produces an enzyme called protease (pronounced PRO-tee-ace) in the late stages of its reproduction. The job of protease is to cut a large viral protein into usable units as HIV moves out of the cells. When this protein is blocked, the virus cannot be assembled properly. Protease inhibitors work by blocking the action of protease, so that new viruses are incomplete and cannot reproduce.
4. Fusion inhibitors. Fusion inhibitors block the entry of the virus into human cells.

Resources
Additional information from the CDC at 1-800-232-4636, TTY: 1-888-232-6348 in English and Spanish.