Recommendations for Non-HIV-Specialized Providers Caring for Displaced HIV-Infected Residents from the Hurricane Disasters

Essential Information for Managing HIV-Infected Patients Receiving Antiretroviral Therapy

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Presented by:
The Panel on Clinical Practices for Treatment of HIV Infection (Adult and Adolescent HIV Treatment Guidelines Panel)
The Perinatal HIV Guidelines Working Group
The Working Group on Antiretroviral Therapy and Medical Management of HIV-Infected Children
USPHS/IDSA Prevention and Treatment of Opportunistic Infections Working Groups
Recommendations for Non-HIV-Specialized Providers Caring for Displaced HIV-Infected Residents from the Hurricane Disasters

Essential Information for Managing HIV-Infected Patients Receiving Antiretroviral Therapy

Some HIV-infected patients may have interrupted their antiretroviral therapy and other medications due to the recent hurricane disasters. The following information provides some guidance to the general practitioners attending to the medical needs of displaced HIV-infected adult or pediatric patients who have not yet secured HIV care in the local area.

Management of antiretroviral therapy is complex and should best be done with the assistance of specialized clinicians. Medical consultation may also be available at specific local or regional HIV clinics or via the National HIV Telephone Consultation Service: at 1-800-933-3413 (8am – 8pm Eastern Time, Monday-Friday)

After the initial assessment of each patient’s immediate medical needs, if at all possible, the patient should be referred to the care of an HIV clinician in the area.

Initial Assessment

1. Assess the patient’s general health and need for immediate medical intervention. Acute illnesses should be diagnosed and attended to promptly.

2. To the best one can, obtain the following information from the patient:
   a. Name, location, phone number, and e-mail address of the primary HIV provider/clinic.
   b. Pertinent past medical history [including history of opportunistic infections (OI) or malignancies, other medical conditions such as hypertension, diabetes mellitus, etc]
   c. Latest known CD4 cell count and viral load, and approximate date in which they were obtained
   d. Medication history including:
      i. antiretroviral drugs*
      ii. treatment or prophylaxis for OIs
      iii. other concomitant medications
   * Note: using pamphlets or booklets with images of antiretroviral drugs may help patients to recall or identify their medications. The images of FDA-approved antiretroviral medications can be found at: http://matthewsgroup.com/pact/3156poster.pdf or http://www.aidsmeds.com/lessons/drugchart.htm.
   e. History of drug allergy or serious adverse drug reactions – especially ask if there is any history of serious reactions to antiretroviral medications.
   f. History of intolerance to antiretroviral medications
   g. Vaccination history
General Pharmacologic Management Strategies

Patients who had their antiretroviral therapy and/or OI prophylaxis or treatment interrupted should have these medications resumed as soon as possible.

1. **Antiretroviral Therapy Management:**
   a. All antiretroviral drugs should be restarted at the same time.
   b. All patients who have had their antiretroviral treatment interrupted should be on a combination of at least three antiretroviral agents.
   c. Some antiretroviral drugs are in fixed dose formulation combining two or more drugs (e.g. **Combivir®** = zidovudine + lamivudine, **Ezpicom®** = abacavir + lamivudine, **Trizivir®** = abacavir + lamivudine + zidovudine, and **Truvada®** = emtricitabine + tenofovir)
   d. If a patient cannot recall drug dosages or cannot recall their regimens, consult a local HIV specialist or consultation service for recommendations.
   e. Patients with history of serious reactions to the following agents should not be re-challenged with the same drugs:
      i. Symptomatic hepatitis or Stevens-Johnson Syndrome from nevirapine
      ii. Hypersensitivity reaction from abacavir
      iii. Pancreatitis from didanosine
   f. Antiretroviral medications may interact with each other and with many other drugs. Please consult package labeling or an HIV specialist when concerned about drug-drug interactions. In general, it is safe to use antiretroviral drugs and antibiotics together. Tables with common antiretroviral drug interactions can also be found in Tables 19-21b of the adult antiretroviral guidelines at [http://aidsinfo.nih.gov/guidelines](http://aidsinfo.nih.gov/guidelines).
   g. Some HIV-infected patients may not have been receiving antiretroviral medications prior to the hurricane due to good immune function, lack of access to care, or other reasons. There is no need to start antiretroviral therapy in these patients immediately until a more thorough assessment can be made. These patients should be referred to a local HIV specialist for further medical care.

2. **Caring for the HIV-Infected Pregnant Women**
   a. All HIV-infected pregnant women should be entered into standard prenatal care as soon as possible.
   b. HIV infected pregnant women who discontinued antiretroviral therapy during displacement should have therapy restarted as soon as possible.
   c. Pregnant women in the first trimester should not receive efavirenz due to potential teratogenicity.
   d. All HIV-infected pregnant women who are in second or third trimester should be receiving antiretroviral therapy for prevention of mother to child transmission even if they don't need it for their own health. In general, three antiretroviral drugs are used for prevention of mother to child transmission.
   e. Pregnant women with CD4 cell count > 250 cells/mm³ should not be placed on nevirapine therapy as part of the new regimen because of the risk of serious liver toxicities.
   f. A perinatal hotline service provides clinicians with 24-hour consultations with HIV experts on treating HIV-infected pregnant women: 888-448-8765.
   g. Opportunistic infection prophylaxis should also be restarted as per guidelines for non-pregnant adults.

For more comprehensive information regarding antiretroviral therapy, please go to [http://aidsinfo.nih.gov/guidelines/](http://aidsinfo.nih.gov/guidelines/).
3. **Prophylaxis for Opportunistic Infections**

OI prophylaxis that had been interrupted should be continued as soon as possible.

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<thead>
<tr>
<th>Condition</th>
<th>Prophylaxis</th>
<th>Therapy</th>
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<tbody>
<tr>
<td>Adults and adolescents and children over age 6 years: Latest known CD4+ T cell counts &lt; 200 cells/mm³ or CD4+ &lt; 15%</td>
<td>Prophylaxis against <em>Pneumocystis jiroveci</em> (formerly <em>carinii</em>) pneumonia (PCP)</td>
<td>1st Line: trimethoprim-sulfamethoxazole Alternatives: dapsone or atovaquone or inhaled pentamidine (monthly)</td>
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<td>Children aged 1-5 years: Latest known CD4 T cell count &lt; 500 cells/mm³ or CD4 &lt; 15%</td>
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<tr>
<td>Children aged &lt;12 months: All HIV-infected children and children born to HIV-infected mothers in whom infection status is not known</td>
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<tr>
<td>Adults, adolescents and children over age 6 years: Latest known CD4+ T cell count &lt; 50 cells/mm³</td>
<td>Prophylaxis against disseminated <em>Mycobacterium avium</em> complex infection</td>
<td>Azithromycin</td>
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<tr>
<td>Children aged 2-6 years: Latest known CD4+ T cell count &lt; 75 cells/mm³</td>
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<tr>
<td>Children aged 1-2 years: Latest known CD4+ T cell count &lt; 500 cells/mm³</td>
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<tr>
<td>Children aged &lt;1 year: Latest known CD4+ T cell count &lt; 750 cells/mm³</td>
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4. **Vaccinations**

**General Recommendations:**

a. Practitioners should refer to the CDC website ([http://www.bt.cdc.gov/disasters/hurricanes/immunizations.asp](http://www.bt.cdc.gov/disasters/hurricanes/immunizations.asp)) for updated general recommendations for individuals displaced by the hurricanes.

b. **Influenza vaccine as intramuscular injection is recommended for all HIV-infected adult or pediatric patients, including pregnant women who are not allergic to any component of the vaccine (including eggs or egg products).** This is especially important if the residents continue to reside in large crowded areas during the influenza season.

c. **Intranasal influenza virus vaccine (live) is not recommended in HIV-infected patients.**

d. All patients who received immunization at temporary medical care facilities should be given written documentation of the date and types of such immunization as records for their primary HIV care providers.

**Specific Recommendations for Adult HIV Patients:**

a. **Adult formulation of Tetanus/diphtheria toxoids (Td) should be given to adult and adolescent HIV patients if it has been at least 10 years since last vaccination or vaccination date unknown.**

b. **The 23-polyvalent pneumococcal polysaccharide vaccine (PPV) is recommended for HIV-infected patients without a history of immunization in the past 5-6 years.**

c. **Hepatitis A and B vaccine series are recommended in HIV-infected patients unless documentation of prior immunity or history of immunization.**

d. All of the above vaccines can be given to pregnant HIV-infected women.
Specific Recommendations for Pediatric HIV Patients:
Immunization for HIV-infected children should adhere to routine childhood immunization schedule (http://www.cdc.gov/nip/recs/child-schedule.htm) except:

a. **Pneumococcal vaccination**: Conjugate pneumococcal vaccine – routine schedule. In addition, PPV should be given at 24 months and a 2\textsuperscript{nd} dose at 3-5 years after the first.

b. **Measles-Mumps-Rubella (MMR) Vaccine** – routine schedule at 12 months – 2\textsuperscript{nd} dose should be given as early as one month after the first instead of waiting till school entry. Contact with others who received MMR is OK. EXCEPTION: children in CDC immunologic category 3 (severely immunocompromised patients, CD4\% < 15\%) should not receive MMR as this is a live vaccine.

c. **Live Varicella Vaccine** is only recommended in children with CDC Immunologic Category 1 (not immunosuppressed, CD4\% >25\%). Contact with others who received this vaccine is OK.

More information regarding antiretroviral management in adult, pediatric and pregnant patients, as well as recommendations for prophylaxis and treatment of specific opportunistic infections can be found at http://aidsinfo.nih.gov/guidelines/.

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