

Prevention & Treatment of HIV Infection in Persons 50 & Over:

Recommendations for New Jersey Clinicians & Public Health Practitioners

Robert Skeist, ACRN, MS; Eliahu Bishburg, MD; Sindy Paul, MD, MPH, FACPM; and Rose Marie Martin, MPH

LEARNING OBJECTIVES:

Upon completion of this activity, participants should be able to:

- Describe the characteristics of people age 50 and older, in New Jersey and nationally, with HIV/AIDS.
- Identify factors in the aging process which complicate the effects and treatment of HIV infection.
- Discuss age-specific recommendations for effective HIV screening and testing
- Outline common co-morbidities and appropriate diagnostic approaches for the HIV-positive patient 50 and older.

INTRODUCTION: THE AGING OF AIDS

In New Jersey and nationwide, public health officials have documented a dramatic increase in the number and proportion of adults 50 and over infected with the Human Immunodeficiency Virus (HIV), including those who have progressed to Acquired Immune Deficiency Syndrome (AIDS).^{1,2,3}

In just over a decade, the number of HIV-positive individuals 50 and over in New Jersey increased seven-fold, from 1,047 cases in 1992 to 7,440 cases in 2003. One third (31.4%) of this group represent new cases, those whom the prevention message did not reach and who contracted the virus after reaching the age of 50. The other two-thirds (68.6%) became infected at a younger age and have now joined a growing population aging with the virus in the era of highly active anti-retroviral therapy (HAART).¹ By June 2006, the New Jersey Department of Health and Senior Services, Division of HIV/AIDS Services (NJDHSS-DHAS) reported that the percentage of the HIV/AIDS-infected population who were 50 or older had risen to 30% of all cases of HIV/AIDS in New Jersey, a total of 10,082 people age 50 or older.³

This article is designed to enhance the role of New Jersey's clinicians in reducing the transmission of HIV among people 50 and older, identifying those who are HIV-positive but not yet in treatment, and enhancing care of the growing population of patients coping simultaneously with HIV infection and aging.



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Release Date: May 1, 2000

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Course Code: 09HC05 - DE01



Sponsored by the University of Medicine & Dentistry of New Jersey (UMDNJ), UMDNJ-Center for Continuing & Outreach Education. This activity is supported by an educational grant from NJDHSS Division of HIV/AIDS Services, with additional support from the New York/New Jersey AIDS Education and Training Center.



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Target Audience:

This activity is designed for physicians and nurses, and for other health care professionals in New Jersey who are involved in the care of persons with HIV/AIDS.

Statement of Need

In New Jersey and nationwide, public health officials have documented a dramatic increase in the number and proportion of adults 50 and over infected with the Human Immunodeficiency Virus (HIV), including those who have progressed to Acquired Immune Deficiency Syndrome (AIDS).^{1,2} By June 2006, the New Jersey Department of Health and Senior Services, Division of HIV/AIDS Services (NJDHSS-DHAS) reported that the percentage of the HIV/AIDS-infected population who were 50 or older had risen to 30% of all cases of HIV/AIDS in New Jersey, a total of 10,082 people age 50 or older.²

This article is designed to enhance the role of New Jersey's clinicians in reducing the transmission of HIV among people 50 and older, identifying those who are HIV-positive but not yet in treatment, and enhancing care of the growing population of patients coping simultaneously with HIV infection and aging.

1. Centers for Disease Control and Prevention (CDC), Division of HIV/AIDS Prevention. Number of adolescents and adults living with AIDS, by age as of December 331, 2000 and race/ethnicity – United States, 2000.

2. NJDHSS. New Jersey HIV/AIDS Report – June 30, 2006.
<http://www.state.nj.us/health/aids/qtr0606.pdf>

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Upon the completion of this activity, participants should be able to:

1. Describe the characteristics of people age 50 and older, in New Jersey and nationally, with HIV/AIDS.
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3. Discuss age-specific recommendations for effective HIV screening and testing.
4. Outline common co-morbidities and appropriate diagnostic approaches for the HIV-positive patient 50 and older.

Method of Instruction

Participants should read the learning objectives and review the activity in its entirety. After reviewing the material, complete the self-assessment test consisting of a series of multiple-choice and True/ False questions.

Upon completing this activity as designed and achieving a passing score of 70% or more on the self-assessment test, participants will receive a credit letter and the test answer key four (4) weeks after receipt of the self-assessment test, registration, and evaluation materials. Estimated time to complete this activity as designed is 1.0 hour.

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Review: The activity was prepared in accordance with the ACCME Essentials. This activity was reviewed for relevance, accuracy of content, balance of presentation, and time required for participation by Patricia Kloser, MD, MPH. This activity was reviewed for relevance, accuracy of content, balance of presentation, and time required for participation by Bonnie Abedini, MSN, RN; Mary C. Krug, MSN, RN, APN-C; and Debbie Y. Mohammed, MS, APRN-BC, ACRN.

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Faculty Disclosure Declarations

Patricia Kloser, MD, MPH (Field Tester and Activity Director) has the following financial relationships to disclose: Speaker's Bureau: GlaxoSmithKline, Abbott; Consultant: Gilead, Boehringer Ingelheim. The following have no financial relationships to disclose: Robert Skeist, ACRN, MS; Eliahu Bishburg, MD; Sindy Paul, MD, MPH; Rose Marie Martin, MPH and field testers: Bonnie Abedini, MSN, RN; Mary C. Krug, RN, MSN, APN-C; and Debbie Y. Mohammed, MS, APRN-BC, ACRN.

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Disclaimer

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CLINICAL INSIGHTS

Age, Immunity & HIV Infection

A number of studies have found that AIDS survival is inversely proportional to age at the time of AIDS diagnosis. Factors associated with advanced age, such as the natural decline of the immune function, and delayed diagnosis, contribute to shortened survival.⁴

Older patients with chronic HIV infection have a more pronounced depletion of CD4 cells than younger ones. In a recent European study, immune recovery for 1,956 patients was found to be inversely related to age, with older patients experiencing poorer recovery and a shorter life span.⁵ Although an age of over 55 was associated with decreased AIDS-free survival, it was not associated with decreased time from diagnosis of AIDS to death.⁶

The progression from HIV to AIDS to death is affected not only by age at time of diagnosis but also by co-morbidities commonly associated with aging such as cardiovascular disease, cerebrovascular disease, diabetes mellitus, and chronic lung disease, all of which are statistically significant predictors of shortened survival, independent of age over 55 years.^{7,8}

Further study found that patients over 50 years were more likely to meet criteria for AIDS at the time of diagnosis of HIV infection than younger patients.⁷ Due to delayed diagnosis, older patients are more likely to die within the same month as their AIDS diagnosis.⁷ In contrast, another study did not observe any difference between older and younger individuals in viral suppression, immune recovery, or clinical outcome, despite the greater presence of comorbid conditions in the older age group.⁹



Opportunistic Infections & Other Conditions

Elderly patients with AIDS present with similar opportunistic infections (OI) as younger patients, but they may be misdiagnosed as having other diseases that occur in their age group, such as Alzheimer's disease,¹⁰ bacterial or viral pneumonia,¹¹ malnutrition, and occult malignancy.¹² Among AIDS patients older than 50 years, as with younger patients, the most common opportunistic infections are pneumocystis jiroveci pneumonia (PCP), wasting syndrome, candida esophagitis, and Kaposi's Sarcoma. These conditions are treated similarly regardless of age.¹³

Confronted with the same opportunistic infections as younger AIDS patients, older patients have poorer outcomes, including higher morbidity due to PCP, higher rates of disseminated tuberculosis and more severe herpes zoster.¹⁴ Additional challenges for clinicians are reflected in several reports describing atypical presentation of diseases leading to delayed diagnoses. The introduction of highly active antiretroviral drugs (HAART), and the related recovery of immune systems in treated patients of all ages, have led to a dramatic drop in the frequency of most AIDS-related OI's, especially those related to very low CD4 count. This has produced a modified clinical picture with significantly reduced morbidity and mortality.¹⁵

Anti-Retroviral Therapy

Older age is associated with a reduction in renal and hepatic function, which may lead to higher drug levels, increased toxicity, and reduced tolerability of antiretroviral medications. Interaction with non-HIV related medications may further increase their toxicity and influence the tolerability of antiretroviral therapy. In one study, only 36% of older patients who were started on a protease inhibitor (PI) stayed on this class of drugs beyond 24 months, and adverse events were twice as common during receipt of the PI containing regimen in persons older than 60 years (64% in persons over 60 years, compared with 35% in the younger age group).¹⁶

Cardiac, metabolic, oncologic, and psychiatric comorbidities, conditions commonly associated with the elderly, impact the safety of and compliance with antiretroviral therapy. In a study of older patients on antiretroviral medications in New York, 89% had comorbid conditions, and 81% were taking non-HIV-related medications.¹⁷ For the patient coping with both HIV and comorbidities associated with aging, it is crucial for the clinical team to monitor the use of both HIV and non-HIV medications.

No specific antiretroviral guidelines have been developed yet for the treatment of the elderly with HIV. This is due, in part, to the frequent exclusion of older patients from studies because of their multiple medical problems or concomitant use of other medications. Therefore, current treatment of the elderly with HIV is based on the same recommendations made for the general adult population.

Most challenges clinicians face in the pharmacological management of HIV disease in the elderly overlap with considerations for the general adult population. Insufficient compliance with cumbersome regimens leads to treatment interruption or failure. Reduction in drug elimination due to decreased renal function may cause increased toxicity. Toxicity associated with ARV has been well described, including increased

hypercholesterolemia, hypertriglyceridemia, and abnormalities in glucose metabolism associated with insulin resistance. These toxicities may progress more rapidly and become more serious in elderly patients with underlying atherosclerosis. Treatment of elevated cholesterol with statins, specifically atorvastatin and pravastatin, are first choices because of expected reduced interaction with the metabolism of protease. Hypertriglyceridemia should be treated with a fibrate.

Fat redistribution syndrome – involving fat accumulation, peripheral fat atrophy, or both – is a familiar consequence of ARV. In older patients, its impact is magnified by the loss of lean body mass commonly associated with aging.

Internists caring for older patients taking multiple non-HIV related medications should consider the possibility of reduced bioavailability and increased drug-drug interactions. For example, caution is advised regarding protein pump inhibitors such as omeprazole, anti-tuberculous medications such as rifampin, antifungal agents such as itraconazole, and neuroleptics such as antidepressant benzodiazepines.

Cardiovascular Disease

With the introduction over the past decade of an array of medications used in combination and referred to as Highly Active Anti-Retroviral Therapy (HAART), patients of all ages living with HIV/AIDS have experienced a very significant increase in survival rates. Unfortunately,



HAART has also led to an increased incidence of dyslipidemia and insulin resistance, further increasing the potential for cardiovascular disease in the HIV infected elderly. In a recent study, longer exposure to combination ARV which included either a protease inhibitor (PI) or non-nucleoside reverse transcriptase inhibitor (NNRTI) was associated with a 26% increase in the rate of myocardial infarction per year of exposure; older age was consistently associated with an increased risk.¹⁸

Bone Disease

Both aging and HIV are associated with lowered bone density. Reduced bone mineral density in HIV-infected patients was initially attributed to their exposure to HAART, specifically to PIs. Further studies have shown, however, that bone mineral density was reduced in HIV-infected patients regardless of their exposure to ARV medications and is most likely related to HIV infection itself.^{19,20} Osteopenia and avascular necrosis can have more severe consequences in the older patients, who are already coping with decreased bone density and efficiency of blood flow. In addition, peripheral neuropathy, another adverse event of ARV, may make the elderly more prone to falls and trauma.

For the HIV-positive patient 50 and over, especially females, physicians are encouraged to order baseline and periodic DEXA bone density evaluations. Evaluation of nutritional status is advisable, and nutritional supplementation should be optimized. For overt osteoporosis hormone replacement, bisphosphonates, raloxifene or calcitonin should be considered. The risk of falls may be reduced by patients who engage in appropriate weight-bearing and balance-enhancing exercise.

Neurological Conditions

HIV disease in the patient 50 and over may imitate a broad spectrum of neurological disorders. HIV-associated dementia must be differentiated from Alzheimer's disease and dementia associated with atherosclerotic disease. Similar to other dementias, HIV-associated dementia presents with decreased attention and concentration,



apathy, withdrawal and psychomotor retardation. In contrast with Alzheimer's dementia, however, HIV-associated dementia progresses more rapidly (over months, not years) and does not include features of cortical dysfunction such as dysarthria. HIV dementia is also often associated with peripheral neuropathy and occasionally with myelopathy.

Cerebrospinal fluid (CSF) findings in HIV dementia may be associated with mild protein elevation and monocyte pleocytosis, as opposed to Alzheimer's disease which presents with normal CSF. HIV-associated dementia improves after initiation of HAART.^{10,21}

Additional precautions

Given the weakening of the immune system associated with either aging or HIV alone, care of the HIV patient age 50 and over should include close attention to testing for and treatment of syphilis and other sexually transmitted diseases, tuberculosis, and hepatitis C. Clinicians are encouraged to provide vaccinations to induce protection against influenza, pneumococcal infection, and hepatitis A and B.

It is advisable that clinicians including primary care physicians, nurse practitioners, infectious disease specialists, and geriatricians develop collaborative relationships as they care for a growing population of HIV-positive older adults in New Jersey and throughout the nation.

(Continued on next page)

THE PUBLIC HEALTH RESPONSE

The increase in HIV/AIDS among persons 50 and over emphasizes the need for new public health educational and intervention strategies targeted to this age group.²³

Behavioral surveys of older Americans have indicated the relative lack of use of precautions or participation in HIV testing among older persons with known risk factors.²³ Older persons tend to be less knowledgeable about HIV than younger persons.^{24,25} Social marketing campaigns should include images and issues related to persons 50 and over in their educational and prevention efforts.²⁴ The older age group needs targeted HIV prevention education to heighten their awareness of HIV/AIDS.²⁶ New venues for prevention programs such as senior centers and retirement communities should be considered.²⁷

Two new statewide initiatives of NJDHSS, DHAS involve making rapid HIV testing available in emergency departments and in mobile vans. The goal is to improve access to HIV counseling and testing for persons at risk, including those age 50 and over.

It is encouraging to note that testing rates of the 50 and over population in counseling and testing centers have increased during the past decade. Yet, in spite of this increase, people over the age of 50 in New Jersey get tested for HIV at only one-sixth the rate of the population under 50. When those over 50 are tested they return a higher rate of HIV-positive results.¹ Increased HIV testing of people age 50 and over should be encouraged throughout the state. Undiagnosed patients do not know that they are infected, are not

referred for treatment, or for prevention or social services, and pose a continuing risk for HIV transmission.

The Role of Clinicians

Physicians and other health care providers should integrate thorough sex and drug risk assessments as part of routine care for their patients 50 and older, with those at risk offered HIV counseling and testing. Clinicians can help prevent HIV transmission by communicating prevention messages, positively reinforcing changes to safer behavior, referring patients for services such as substance abuse treatment, facilitating partner notification, and identifying and treating other sexually transmitted diseases (STDs).²⁸ When prescribing medications for erectile dysfunction, clinicians should routinely provide condoms and information on safer sexual practices.

The Centers for Disease Control and Prevention (CDC) recommends that HIV counseling and testing should be integrated into clinical practice.²⁸ CDC recommends testing of all patients with a known sexual or needle-sharing exposure to the virus, of patients in settings serving populations at increased behavioral or clinical risk, and of all patients in areas in which the prevalence of HIV disease is 1% or greater. Patients with clinical signs or symptoms of HIV disease (e.g., fever, illness of unknown origin, oral thrush, unexplained lymphadenopathy with or without weight loss, or psoriasis) should be offered counseling and testing. In addition, patients with a diagnosis suggesting increased risk of HIV disease such as opportunistic infections, tuberculosis, cervical or anal cancer, Kaposi's sarcoma, lymphoma, recurrent pneumonia or bacteremia, hepatitis B, hepatitis C, or a sexually transmitted disease should

be offered HIV counseling and testing. A thorough sexual and social history is important to guide the need for testing in persons 50 and over.

Partners in Public Health

In recognition of this issue, The General Assembly of the State of New Jersey designated May 27, 2005 as "HIV Infection in Persons 50 Years of Age and Older Awareness Day" and encouraged the establishment of HIV/AIDS education programs that target older persons. The resolution called upon "public officials and citizens of this State to observe the day with appropriate activities and programs."²⁹

The New Jersey Association on HIV Over Fifty (NJAHOF), an affiliate of the National Association on HIV Over Fifty (NAHOF), contributes to enhanced public awareness on this topic and offers opportunities for mutual support and public advocacy on the part of HIV-positive individuals over 50.³⁰ NAHOF can be contacted at www.hivoverfifty.org.

Additional research is needed on how to increase the participation of the older population in the counseling and testing services available to them, along with further research into the epidemiology, prevention, and clinical course of HIV in persons 50 and over.³⁰ The CDC currently recommends HIV screening for all persons 13 to 64 years of age. For those at risk for HIV, annual screening is recommended.³¹

Working together, primary care clinicians, infectious disease specialists, geriatricians, public health agencies, public officials, community based advocacy organizations, and researchers can prepare to provide optimum health care for the growing population of people who are aging with HIV.

RESOURCES FOR FURTHER INFORMATION

- New Jersey Department of Health & Senior Services, Division of HIV/AIDS Services. (609) 984-5940. www.state.nj.us/health/aids
- New Jersey HIV/AIDS Hotline: 1-800-624-2377
- Family Treatment Center of Newark Beth Israel Medical Center. (973) 926-5212 or EBishburg@sbhcs.com

- New Jersey Association on HIV Over Fifty: RSkeist@sbhcs.com
- National Association on HIV Over Fifty: www.hivoverfifty.org. Includes extensive bibliography and list of national resources
- Research on Older Adults with HIV. AIDS Community Research Initiative of America, New York, NY. www.acria.org

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31. Centers for Disease Control and Prevention. Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health-Care Settings. *MMWR.* 2006 September 22: 55(RR14): 1-13



Self-Assessment Test – Page 1 of 2



Questions refer to the content of the article and the notes that follow.

To receive CME/CEU credit: complete exam, registration,

and evaluation forms on-line at <http://ccoe.umdj.edu/aids> or fill in the forms on the next two (2) pages, and mail or fax to UMDNJ-CCOE (see Registration Form).

- 1. As of June 2006, how many people age 50 and over living in New Jersey were HIV positive, accounting for what percentage of all cases of HIV/AIDS in the state?**
 - A. Approximately 20,000 people, 60% of all cases.
 - B. Approximately 10,000 people, 30% of all cases.
 - C. Approximately 5,000 people, 15% of all cases.
 - D. Approximately 1,000 people, 3% of all cases.

- 2. Which factor, aging or HIV, is associated with lower bone density?**
 - A. Both aging and HIV
 - B. Aging only
 - C. HIV only
 - D. Neither aging nor HIV

- 3. A 71-year-old man is bussed from his apartment in a senior residence to an appointment with his geriatrician. After discussing hypertension, mild congestive heart failure, osteoarthritis, and related prescriptions, the patient requests medication for erectile dysfunction.**

How should the physician respond?

 - A. In weighing the benefits and risks of prescribing medications for erectile dysfunction, the geriatrician should take into consideration the patient's other medical conditions and possible drug interactions.
 - B. This class of medications is contraindicated for elderly patients.
 - C. The medication should be provided without asking questions that might be embarrassing to the physician or the patient.
 - D. In addition to A, the physician should discuss safe sex and recommend HIV testing.

- 4. A 58-year-old woman was divorced three years ago and has gone through menopause. At her annual physical, she feels comfortable talking with her nurse practitioner and mentions that she has been asked out on a date by a man she finds very attractive.**

What topics should the NP discuss with this patient?

 - A. Condoms as contraception.
 - B. Condoms as precaution against acquiring HIV infection.
 - C. HIV testing, vaginal lubrication, and honest communication.
 - D. B and C.

- 5. A 57-year-old man, with no insurance or primary care physician, goes to an Emergency Department at an urban hospital. He complains of frequent colds, a worsening cough, weakness, fatigue, and swollen lymph nodes. The Resident assigned to this patient notices "track marks" on the man's arms and asks about them. The patient tells the resident he has been "clean" for 5 years.**

Should the resident consider testing this patient for HIV? For any other infections?

 - A. No. Since the patient has not used intravenous drugs for 5 years, he is not at risk for any IDU (Intravenous Drug Use)-related infection.
 - B. Yes, for HIV. The patient could have been exposed to HIV when sharing a "dirty needle" over five years ago. No other tests are needed.
 - C. Yes, HIV and Hepatitis C. A history of IDU has put the patient at risk for HIV and Hepatitis C, and the patient should be tested for both viruses.
 - D. No. Unfortunately, the man has no insurance. He should be treated symptomatically for his cough and cold and discharged.



Self-Assessment Test – Page 2 of 2

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- 6. A 66-year-old man confides to his registered nurse: “I’ve been cheating on my wife,” with recurrent episodes of unprotected sex with other men.**

What is the best advice for the RN to give?

- A. The patient, his wife, and his male partners should all be tested for HIV and receive safe sex education; the patient and his wife should be referred for couples counseling.
 - B. The patient and his male partners should be tested for HIV, and the patient should keep his behavior secret so as not to hurt his wife’s feelings.
 - C. The patient should speak honestly with his wife about his sexual behavior and she should take sole responsibility for using or not using a condom.
 - D. Sexuality is a private matter, so the nurse should not intervene
- 7. Toxicities frequently associated with antiretroviral therapies include:**
- A. Hypercholesterolemia and hypertriglyceridemia only.
 - B. Abnormalities in glucose metabolism and fat redistribution only.
 - C. Both A and B.
 - D. Neither A nor B.
- 8. How may HIV-associated dementia be differentiated from Alzheimer’s disease and dementia associated with atherosclerotic disease?**
- A. All dementias present with decreased attention and concentration, apathy, withdrawal and psychomotor retardation. These dementias are impossible to distinguish with current medical technology.
 - B. HIV-associated dementia progresses more rapidly – over months, not years - and does not include features of cortical dysfunction such as dysarthria.
 - C. CSF findings in HIV dementia may be associated with mild protein elevation and monocyte peocytosis, as opposed to Alzheimer’s disease, which presents with normal CSF.
 - D. Both B and C.

- 9. People over the age of 50 in New Jersey get tested for HIV at twice the rate of the population under 50. True or False?**

- A. False. There is no documentation of any difference in rates of HIV testing based on age.
- B. False. The over-50 population gets tested at only half the rate of the younger population.
- C. False. The over-50 population gets tested at only one-sixth the rate of the younger population.
- D. True.

- 10. A 62-year-old woman is diagnosed with lymphoma and admitted for chemotherapy. After treatment, she develops neutropenia and spikes a temperature of 102°F. Antibiotics fail to relieve her fever and cough. A bronchoscopy reveals the presence of pneumocystis jiroveci pneumonia (PCP).**

What test or treatment should the physician order next?

- A. No action is necessary. PCP is not associated with HIV/AIDS and it will resolve itself without treatment.
- B. The PCP should be treated symptomatically with antibiotics. PCP is not associated with HIV/AIDS and no further testing is called for.
- C. Since PCP is an AIDS-defining illness, in addition to treating the PCP, the physician should seek patient approval for HIV testing.
- D. Since PCP is an AIDS-defining illness, the patient should be started on anti-retroviral medications immediately.



**CONTINUING
EDUCATION
REGISTRATION**

**Prevention and Treatment of HIV Infection in
Persons 50 and Over: Recommendations for
New Jersey Clinicians & Public Health Practitioners**

Registration Form



CCOE
CENTER FOR CONTINUING
& OUTREACH EDUCATION

In order to obtain continuing education credit, participants are required to:

- (1) Read the learning objectives, and review the activity, and complete the self-assessment.
- (2) Complete this registration form and the activity evaluation form on the next page, and record your test answers below.
- (3) Send the registration and evaluation forms to: UMDNJ-Center for Continuing and Outreach Education
• VIA MAIL: PO Box 1709, Newark, NJ 07101-1709 • VIA FAX: (973) 972-7128
- (4) Retain a copy of your test answers. Your answer sheet will be graded and if you achieve a passing score of 70% or more, a credit letter awarding 1 *AMA/PRA category 1 credit*[™] or 1.0 continuing education units, and the test answer key will be mailed to you within four (4) weeks.

Individuals who fail to attain a passing score will be notified and offered the opportunity to complete the activity again. This activity will be posted online at <http://ccoe.umdj.edu/aids>.

Please note: CE credit letters and long-term credit retention information will only be issued upon receipt of completed evaluation form.

| | | | | | |
|---|------------|------------|------------|------------|-------------|
| SELF-ASSESSMENT TEST <i>Circle the best answer for each question.</i> | 1. A B C D | 3. A B C D | 5. A B C D | 7. A B C D | 9. A B C D |
| | 2. A B C D | 4. A B C D | 6. A B C D | 8. A B C D | 10. A B C D |

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First Name _____ M.I. _____ Last Name _____ Degree _____

Daytime Phone # _____ Evening Phone # _____

Fax # _____ E-mail _____

Preferred Mailing Address: Home Business _____

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City _____ State _____ Zip Code _____

Institution/Agency/Private Practice _____

Nurses: I attest that I have completed the activity as designed and am claiming [up to 1.0 hours] ___ continuing education contact hours for nurses from the NJSNA.

Physicians: I attest that I have completed the activity as designed and am claiming [up to 1.0 credit] ___ *AMA/PRA category 1 credit*[™]

General: I attest that I have completed the activity as designed and am claiming [up to 0.10 credit] ___ Continuing Education Units (CEUs).

Signature _____ Date _____

Release date: May 1, 2007

Expiration date: Credit for this activity will be provided through October 31, 2008.

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**CONTINUING
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Prevention and Treatment of HIV Infection in Persons 50 and Over: Recommendations for New Jersey Clinicians & Public Health Practitioners

Activity Evaluation Form



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The planning and execution of useful and educationally sound continuing education activities are guided in large part by input from participants. To assist us in evaluating the effectiveness of this activity and to make recommendations for future educational offerings, please take a few moments to complete this evaluation form. Your response will help ensure that future programs are informative and meet the educational needs of all participants.

Please note: CE credit letters and long-term credit retention information will only be issued upon receipt of completed evaluation form.

| PROGRAM OBJECTIVES: Having completed this activity, are you better able to: | Strongly Agree | | Strongly Disagree | | |
|---|-----------------------|---|--------------------------|---|---|
| <i>Objective 1:</i> Describe the characteristics of people age 50 and older, in New Jersey and nationally, with HIV/AIDS. | 5 | 4 | 3 | 2 | 1 |
| <i>Objective 2:</i> Identify factors in the aging process which complicate the effects and treatment of HIV infection. | 5 | 4 | 3 | 2 | 1 |
| <i>Objective 3:</i> Discuss age-specific recommendations for effective HIV screening and testing | 5 | 4 | 3 | 2 | 1 |
| <i>Objective 4:</i> Outline common co-morbidities and appropriate diagnostic approaches for the HIV-positive patient 50 and older | 5 | 4 | 3 | 2 | 1 |

| OVERALL EVALUATION: | Strongly Agree | | Strongly Disagree | | |
|---|-----------------------|---|--------------------------|---|---|
| The information presented increased my awareness/understanding of the subject | 5 | 4 | 3 | 2 | 1 |
| The information presented will influence how I practice. | 5 | 4 | 3 | 2 | 1 |
| The information presented will help me improve patient care. | 5 | 4 | 3 | 2 | 1 |
| The faculty demonstrated current knowledge of the subject. | 5 | 4 | 3 | 2 | 1 |
| The program was educationally sound and scientifically balanced. | 5 | 4 | 3 | 2 | 1 |
| The program avoided commercial bias or influence. | 5 | 4 | 3 | 2 | 1 |
| Overall, the program met my expectations. | 5 | 4 | 3 | 2 | 1 |
| I would recommend this program to my colleagues. | 5 | 4 | 3 | 2 | 1 |

If you anticipate changing one or more aspects of your practice as a result of your participation in this activity, please provide us with a brief description of how you plan to do so.

Please provide any additional comments pertaining to this activity (positives and negatives) and suggestions for improvement. Please list any topics that you would like to be addressed in future educational activities:

Please check all applicable demographic information, which will be used for program evaluation and improvement.

| | | | | | |
|--------------------------|--|--------------------------|--|--------------------------|-------------|
| <input type="checkbox"/> | Physician | <input type="checkbox"/> | Hispanic | <input type="checkbox"/> | Male |
| <input type="checkbox"/> | Nurse | <input type="checkbox"/> | Caucasian | <input type="checkbox"/> | Female |
| <input type="checkbox"/> | Nurse practitioner | <input type="checkbox"/> | African American/Black | <input type="checkbox"/> | Transgender |
| <input type="checkbox"/> | Physician's Assistant | <input type="checkbox"/> | Other: | | |
| <input type="checkbox"/> | I provide HIV patients with general primary care. | <input type="checkbox"/> | Number of HIV patients I saw this past month | | |
| <input type="checkbox"/> | I provide HIV patients with infectious disease care. | <input type="checkbox"/> | I do not see patients. | | |