

Human Immunodeficiency Virus Infection

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REFERENCES

- https://www.hiv.gov/federal-response/pepfar-global-aids/global-hiv-aids-overview. (HIV.gov: Global AIDS overview.) Accessed September 18, 2018.
- http://www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2013/gr2013/unaids_global_report_2013_en.pdf. (UNAIDS Global Report 2013.) Accessed September 5, 2018.
- http://www.unaids.org/sites/default/files/media_asset/UNAIDS_FactSheet_en.pdf. (UNAIDS: Fact sheet – July 2018.) Accessed September 17, 2018.
- https://www.cdc.gov/hiv/library/slidesets/index.html. (Centers for Disease Control and Prevention: Risk by racial/ethnic groups.) Accessed September 17, 2018.
- https://www.kff.org/hiv/aids/fact-sheet/black-americans-and-hiv/aids-the-basics/(Kaiser Family Foundation: Black Americans and HIV/AIDS: The BASICS.) Accessed September 5, 2018.
- Mohareb AM, Rothman RE, Hsieh YH: Emergency department (ED) utilization by HIV-infected ED patients in the United States in 2009 and 2010: a national estimation. *HIV Med* 14: 605, 2013. [PMID: 23773723]
- Richey LE, Halperin J: Acute human immunodeficiency virus infection. *Am J Med Sci* 345: 136, 2013. [PMID: 23095473]
- Bartlett J, Gallant J: *Medical Management of HIV Infection*. Baltimore, MD: Johns Hopkins Medicine, Health Publishing Business Group; 2007.
- https://stacks.cdc.gov/view/cdc/6918. (World Health Organization: Guidelines for assuring the accuracy and reliability of rapid HIV testing.) Accessed September 18, 2018.
- https://www.cdc.gov/hiv/testing/laboratorytests.html. (Centers for Disease Control and Prevention: Laboratory testing.) Accessed September 17, 2018.
- Geren KI, Lovecchio F, Knight J, et al: Identification of acute HIV infection using fourth-generation testing in an opt-out emergency department screening program. *Ann Emerg Med* 64: 537, 2014. [PMID: 24970245]
- Lin X, Dietz PM, Rodriguez V, et al: Routine HIV screening in two health-care settings: New York City and New Orleans, 2011–2013. *MMWR Morb Mortal Wkly Rep* 63: 537, 2014. [PMID: 24964879]
- Napoli AM, Fischer CM, Pines JM, Soe-lin H, Goyal M, Milzman D: Absolute lymphocyte count in the emergency department predicts a low CD4 count in admitted HIV-positive patients. *Acad Emerg Med* 18: 385, 2011. [PMID: 21496141]
- Branson BM, Handsfield HH, Lampe MA, et al: Revised recommendations for HIV testing of adults, adolescents, and pregnant women in health-care settings. *MMWR Recomm Rep* 55(RR-14): 1, 2006. [PMID: 16988643]
- Kelen GD, Hsieh YH, Rothman RE, et al: Improvements in the continuum of HIV care in an inner-city emergency department. *AIDS* 30: 113, 2016. [PMID: 26731757]
- Farhadian S, Patel P, Spudich S: Neurological complications of HIV infection. *Curr Infect Dis Rep* 19: 50, 2017. [PMID: 29164407]
- Singer EJ, Thames AD: Neurobehavioral manifestations of human immunodeficiency virus: diagnosis and treatment. *Neurol Clin* 34: 33, 2016. [PMID: 26613994]
- Tan IL, Smith BR, von Geldern G, Mateen FJ, McArthur JC: HIV-associated opportunistic infections of the CNS. *Lancet Neurol* 11: 605, 2012. [PMID: 22710754]
- http://aidsinfo.nih.gov/contentfiles/lvguidelines/adult_oi.pdf. (Panel on Opportunistic Infections in HIV-Infected Adults and Adolescents: Guidelines for the prevention and treatment of opportunistic infections in HIV-infected adults and adolescents: recommendations from the Centers for Disease Control and Prevention, the National Institutes of Health, and the HIV Medicine Association of the Infectious Diseases Society of America.) Accessed August 26, 2018.
- Harrison TB, Smith B: Neuromuscular manifestations of HIV/AIDS. *J Clin Neuromuscul Dis* 13: 68, 2011. [PMID: 22361691]
- Arseniou S, Arvaniti A, Samakouri M: HIV infection and depression. *Psychiatry Clin Neurosci* 68: 96, 2014. [PMID: 24552630]
- Nanni MG, Caruso R, Mitchell AJ, Meggiolaro E, Grassi L: Depression in HIV infected patients: a review. *Curr Psychiatry Rep* 17: 530, 2015. [PMID: 25413636]
- Berger-Greenstein JA, Cuevas CA, Brady SM, et al: Major depression in patients with HIV/AIDS and substance abuse. *AIDS Patient Care STDS* 21: 942, 2007. [PMID: 18154491]
- Durvasula R, Miller TR: Substance abuse treatment in persons with HIV/AIDS: challenges in managing triple diagnosis. *Behav Med* 40: 43, 2014. [PMID: 24274175]
- Butler NJ, Thorne JE: Current status of HIV infection and ocular disease. *Curr Opin Ophthalmol* 23: 517, 2012. [PMID: 23047168]
- Benito N, Moreno A, Miro JM, Torres A: Pulmonary infections in HIV-infected patients: an update in the 21st century. *Eur Respir J* 39: 730, 2012. [PMID: 21885385]
- Davis JL, Fei M, Huang L: Respiratory infection complicating HIV infection. *Curr Opin Infect Dis* 21: 184, 2008. [PMID: 18317044]
- Lopez-Sanchez C, Falco V, Burgos J, et al: Epidemiology and long-term survival in HIV-infected patients with *Pneumocystis jirovecii* pneumonia in the HAART era experience in a university hospital and review of the literature. *Medicine* 94: e681, 2015. [PMID: 25816039]
- Calderon EJ, Gutierrez-Rivero S, Durand-Joly I, Dei-Cas E: *Pneumocystis* infection in humans: diagnosis and treatment. *Expert Rev Anti Infect Ther* 8: 683, 2010. [PMID: 20521896]
- http://aidsinfo.nih.gov/contentfiles/lvguidelines/adult_oi.pdf. (Panel on Opportunistic Infections in HIV-Infected Adults and Adolescents: Guidelines for the prevention and treatment of opportunistic infections in HIV-infected adults and adolescents: recommendations from the Centers for Disease Control and Prevention, the National Institutes of Health, and the HIV Medicine Association of the Infectious Diseases Society of America.) Accessed August 25, 2018.
- Siegel M, Masur H, Kovacs J: *Pneumocystis jirovecii* pneumonia in human immunodeficiency virus infection. *Semin Respir Crit Care Med* 37: 243, 2016. [PMID: 26974301]
- Huang YS, Yang JJ, Lee NY, et al: Treatment of *Pneumocystis jirovecii* pneumonia in HIV-infected patients: a review. *Expert Rev Anti Infect Ther* 15: 873, 2017. [PMID: 28782390]
- Ewald H, Raatz H, Boscacci R, Furrer H, Bucher HC, Briel M: Adjunctive corticosteroids for *Pneumocystis jirovecii* pneumonia in patients with HIV infection. *Cochrane Database Syst Rev* 4: CD006150, 2015. [PMID: 25835432]
- Leeds IL, Magee MJ, Kurbatova EV, et al: Site of extrapulmonary tuberculosis is associated with HIV infection. *Clin Infect Dis* 2012; 55:75. [PMID: 22423123]
- Naing C, Mak JW, Maung M, Wong SF, Kassim AI: Meta-analysis: the association between HIV infection and extrapulmonary tuberculosis. *Lung* 191: 27, 2013. [PMID 23180033]
- Kisembo HN, Boon SD, Davis JL, et al: Chest radiographic findings of pulmonary tuberculosis in severely immunocompromised patients with the human immunodeficiency virus. *Br J Radiol* 85: e130, 2012. [PMID: 21976629]
- World Health Organization, Stop TB Initiative: *Treatment of Tuberculosis: Guidelines*, 4th ed. Geneva, Switzerland: World Health Organization; 2010.
- Nahid P, Dorman SE, Alipanah N, et al: Official American Thoracic Society/Centers for Disease Control and Prevention/Infectious Diseases Society of America Clinical Practice Guidelines: treatment of drug-susceptible tuberculosis. *Clin Infect Dis* 63: e147, 2016. [PMID: 27516382]
- Blumberg HM, Leonard MK Jr, Jasmer RM: Update on the treatment of tuberculosis and latent tuberculosis infection. *JAMA* 293: 2776, 2005. [PMID: 15941808]
- http://apps.who.int/iris/bitstream/handle/10665/255052/9789241550000-eng.pdf;jsessionid=E78C557A36BF3D40F69597CF94FDE761?sequence=1. (World Health Organization: Guidelines for treatment of drug-susceptible tuberculosis and patient care, 2017 update.) Accessed August 28, 2018.
- Madeddu G, Porqueddu EM, Cambosu F, et al: Bacterial community acquired pneumonia in HIV-infected inpatients in the highly active antiretroviral therapy era. *Infection* 36: 231, 2008. [PMID: 18463787]
- Grau I, Pallares R, Tubau F, et al: Epidemiologic changes in bacteremic pneumococcal disease in patients with human immunodeficiency virus in the era of highly active antiretroviral therapy. *Arch Intern Med* 165: 1533, 2005. [PMID: 16009870]
- Scourfield AT, Doffman SR, Miller RF: Chronic obstructive pulmonary disease in patients with HIV: an emerging problem. *Br J Hosp Med (Lond)* 75: 678, 2014. [PMID: 25488530]
- Mena A, Meijide H, Marcos PJ: Lung cancer in HIV-infected patients. *AIDS Rev* 18: 138, 2016. [PMID: 27438573]
- Staitieh B, Guidot DM: Noninfectious pulmonary complications of human immunodeficiency virus infection. *Am J Med Sci* 348: 502, 2014. [PMID: 24992395]
- Triplette M, Crothers K, Attia EF: Non-infectious pulmonary diseases and HIV. *Curr HIV/AIDS Rep* 13: 140, 2016. [PMID: 27121734]
- Pinto DSM, da Silva MJLV: Cardiovascular disease in the setting of human immunodeficiency virus infection. *Curr Cardiol Rev* 14: 25, 2018. [PMID: 29189172]
- Triant VA, Grinspoon SK: Epidemiology of ischemic heart disease in HIV. *Curr Opin HIV AIDS* 12: 540, 2017. [PMID: 28799997]
- Hemkens LG, Bucher HC: HIV infection and cardiovascular disease. *Eur Heart J* 35: 1373, 2014. [PMID: 24408888]
- Lacson JC, Revery AP, Barnes P, Bahrami H: Coronary artery disease in HIV-infected patients: downside of living longer. *Curr Atheroscler Rep* 19: 18, 2017. [PMID: 28265887]
- Freiberg MS, Chang CH, Skanderson M, et al: Association between HIV infection and the risk of heart failure with reduced ejection fraction and preserved ejection fraction in the antiretroviral therapy era: results from the Veterans Aging Cohort Study. *JAMA Cardiol* 2: 536, 2017. [PMID: 28384660]
- Naicker S, Rahmanian S, Kopp JB: HIV and chronic kidney disease. *Clin Nephrol* 83(7 Suppl 1): 32, 2015. [PMID: 25752339]
- Rosenberg AZ, Naicker S, Winkler CA, Kopp JB: HIV-associated nephropathies: epidemiology, pathology, mechanisms and treatment. *Nat Rev Nephrol* 11: 150, 2015. [PMID: 25686569]
- Palau L, Menez S, Rodrigues-Sanchez J, et al: HIV-associated nephropathy: links, risks and management. *HIV/AIDS Res Palliat Care* 10: 73, 2018. [PMID: 29872351]
- AIDS Working Group (GESIDA) of the Spanish Society of Infectious Diseases and Clinical Microbiology (SEIMC), Spanish Society of Nephrology (S.E.N.), Spanish Society of Clinical Chemistry and Molecular Pathology (SEQC), et al: Consensus document on the management of renal disease in HIV-infected patients. *Nefrologia* 34(suppl 2): 1, 2014. [PMID: 25467377]
- Logan C, Beadsworth MB, Beeching NJ: HIV and diarrhea: what is new? *Curr Opin Infect Dis* 29: 486, 2016. [PMID: 2742290]
- Garman ME, Tyring SK: The cutaneous manifestations of HIV infection. *Dermatol Clin* 20: 193, 2002. [PMID: 12120434]
- Serling SL, Leslie K, Maurer T: Approach to pruritus in the adult HIV-positive patient. *Semin Cutan Med Surg* 30: 101, 2011. [PMID: 21767771]
- Rodgers S, Leslie KS: Skin infections in HIV-infected individuals in the era of HAART. *Curr Opin Infect Dis* 24: 124, 2011. [PMID: 21169832]

60. Cenizal MJ, Hardy RD, Anderson M, et al: Prevalence of and risk factors for methicillin-resistant *Staphylococcus aureus* (MRSA) nasal colonization in HIV-infected ambulatory patients. *J Acquir Immune Defic Syndr* 48: 567, 2008. [PMID: 18645516]
61. Gbabe OF, Okwundu CI, Dedicoat M, Freeman EE: Treatment of severe or progressive Kaposi's sarcoma in HIV-infected adults. *Cochrane Database Syst Rev* 13: CD003256, 2014. [PMID: 25221796]
62. Ivankovich MB, Fenton KA, Douglas JM Jr: Considerations for national public health leadership in advancing sexual health. *Public Health Rep* 128(suppl 1): 102, 2013. [PMID: 2345089]
63. <https://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-surveillance-report-2016-vol-28.pdf>. (Centers for Disease Control and Prevention: HIV surveillance report: diagnoses of HIV infection in the United States and dependent areas, 2016.) Accessed September 18, 2018.
64. Oster AM, Sternberg M, Nebenzahl S, et al: Prevalence of HIV, sexually transmitted infections, and viral hepatitis by urbanicity, among men who have sex with men, injection drug users, and heterosexuals in the United States. *Sex Transm Dis* 41: 272, 2014. [PMID: 24622641]
65. Tuddenham S, Ghanem KG: Emerging trends and persistent challenges in the management of adult syphilis. *BMC Infect Dis* 15: 351, 2015. [PMID: 26286439]
66. <https://www.cdc.gov/vaccines/schedules/downloads/adult/adult-combined-schedule.pdf>. (Centers for Disease Control and Prevention: Recommended adult immunization schedule for ages 19 years or older.) Accessed September 18, 2018.
67. <https://www.cdc.gov/vaccines/adults/rec-vac/health-conditions/hiv.html>. (Centers for Disease Control and Prevention: HIV infection and adult vaccination.) Accessed September 18, 2018.
68. <http://aidsinfo.nih.gov/ContentFiles/AdultandAdolescentGL.pdf>. (Department of Health and Human Services: Panel on antiretroviral guidelines for adults and adolescents. Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents.) Accessed May 26, 2014.
69. <http://www.cdc.gov/hiv/library/reports/surveillance/index.html>. (Centers for Disease Control and Prevention: HIV/AIDS surveillance report.) Accessed May 26, 2014.
70. Venkat A, Piontkowsky DM, Cooney RR, et al: Care of the HIV-positive patient in the emergency department in the era of highly active antiretroviral therapy. *Ann Emerg Med* 52: 274, 2008. [PMID: 18358567]
71. Stolbach A, Paziana K, Heverling H, Pham P: A Review of the toxicity of HIV medications II: Interactions with drugs and complementary and alternative medicine products. *J Med Toxicol* 11: 326, 2015. [PMID: 26036354]
72. Margolis AM, Heverling H, Pham PA, Stolbach A: A review of the toxicity of HIV medications. *J Med Toxicol* 10: 26, 2014. [PMID: 23963694]