

# STIF NHIVNA *Advanced Competency*

It is recommended that you complete at least 50% of the e-learning before undertaking the clinical assessments.

You should ask for some protected time to undertake this e-learning if you are to get the most benefit.

We do acknowledge that these modules were designed for use in the training of doctors but we still feel that they are relevant and useful for nurse training as well.

**Please remember to print out your e-learning activity report as you will be required to show it to your trainer and submit it with your Confirmation of Competency form on completion of your training.**

## E-learning for Healthcare (e-LfH)



You may already be registered for eHIV-STI. If not, and providing you have an 'nhs' e-mail address, registering to use the resources within e-HIV STI (part of the e-Learning for Health online training provided by Health Education England) should be free. This resource is currently available (and free) throughout the UK. For some NHS employers, you may find that you have to access this via your local Learning system if you use it at work. It is often easier to bypass this by registering from your personal computer at home; the choice is yours.

*Please note that eHIV-STI is not administered by BASHH or NHIVNA and we cannot assist with registration/access problems - if you still have problems after using the information and resources provided, please email: [support@e-lfh.org.uk](mailto:support@e-lfh.org.uk)*

### **e-HIV STI to be completed for STIF NHIVNA *Advanced Competency***

<p><b>11.02 Antenatal HIV testing</b></p>	<p>By the end of this session you will be able to:</p> <ul style="list-style-type: none"> <li>• Explain the rationale for routine HIV screening in pregnancy</li> <li>• Identify risk factors for HIV in pregnant women</li> <li>• Explain the topics that need to be discussed in a pre-test discussion with a pregnant woman who is reluctant or declining to undertake an HIV test</li> <li>• Explain the topics that need to be discussed and/or considered when giving a negative or positive HIV result to a pregnant woman</li> <li>• Recognise situations when a repeat HIV test may be useful, especially in women who initially test negative</li> </ul>
<p><b>11.06 PEPSE</b></p>	<p>By the end of this session you will be able to:</p> <ul style="list-style-type: none"> <li>• State the rationale for post-exposure prophylaxis after sexual exposure (PEPSE) for HIV</li> <li>• Describe how to assess a patient prior to PEPSE and how decisions are made regarding the starting of PEPSE</li> <li>• List the medications that should be given and state for how long they should be administered</li> <li>• Specify the follow-up procedures that should be arranged</li> </ul>

<b>09b.09 HIV in women</b>	<p>By the end of this session you will be able to:</p> <ul style="list-style-type: none"> <li>• Identify factors associated with increased risk of HIV acquisition in women</li> <li>• Recognise how vaginal flora has implications for HIV transmission</li> <li>• Recognise the outcome and toxicity of ARVs in women</li> <li>• Identify gender differences in pharmacokinetics</li> <li>• Recognise the social factors which affect the outcome of women with HIV</li> <li>• Identify how cervical screening affects women with HIV</li> <li>• Recognise how contraception has implications for women with HIV</li> </ul>
<b>09b.10 HIV and reproductive health and fertility</b>	<p>By the end of this session you will be able to:</p> <ul style="list-style-type: none"> <li>• Describe the prevalence, aetiology, screening investigations and treatment of subfertility in HIV patients</li> <li>• Describe the issues relevant to discordant couples planning a pregnancy, including spermwashing and Pre Exposure Prophylaxis (PrEP)</li> <li>• Explain how antiretroviral therapy has influenced the approach to conception in HIV concordant and discordant couples</li> </ul>
<b>09b.11 HIV in pregnancy</b>	<p>By the end of this session you will be able to:</p> <ul style="list-style-type: none"> <li>• Identify mother-to-child transmission (MTCT) rates with and without interventions</li> <li>• Recognise when to start, what to start and how to monitor maternal antiretroviral therapy</li> <li>• Define the infant testing schedule</li> <li>• Recognise the epidemiology of HIV positive pregnant women in the UK</li> </ul>
<b>09b.12 ARVs in pregnancy</b>	<p>By the end of this session you will be able to:</p> <ul style="list-style-type: none"> <li>• Identify which antiretroviral drugs to use in pregnancy and when to start</li> <li>• Recognise how to manage an HIV positive woman on treatment who is planning a pregnancy or who presents pregnant</li> <li>• Describe the use of antiretroviral drugs in a women presenting in labour or late in pregnancy</li> <li>• Demonstrate an understanding of the antiretroviral drugs an infant born to an HIV positive mother will require</li> </ul>
<b>12.09 ARV treatment failure</b>	<p>By the end of this session you will be able to:</p> <ul style="list-style-type: none"> <li>• Define treatment failure including virological, immunological and clinical treatment failure</li> <li>• Differentiate viral load 'blips' from early virological failure</li> <li>• Categorise the reasons for virological failure</li> <li>• Describe the assessment and management of virological failure</li> <li>• Discuss the principles of switching or sequencing regimens after first line and subsequent virological failure including utilisation of newer antiretroviral agents</li> </ul>

<b>12.10 ARV resistance testing</b>	<p>By the end of this session you will be able to:</p> <ul style="list-style-type: none"> <li>• State the basic principles around resistance testing including mechanisms of resistance, transmission of drug resistant virus and archiving of resistant virus</li> <li>• Compare the different assays available for resistance testing including genotyping, phenotyping and virtual phenotypes</li> <li>• List the clinical indications for resistance testing</li> <li>• Describe the limitations of resistance testing</li> <li>• State the methodology used to evaluate tropism and possible mechanisms of resistance to CCR5 antagonists</li> <li>• Explain the concept of resistance barrier and categorise ARV agents as having low, medium or high barrier to resistance</li> </ul>
<b>12.11 ARV drug interactions and therapeutic drug monitoring (TDM)</b>	<p>By the end of this session you will be able to:</p> <ul style="list-style-type: none"> <li>• Describe the basic pharmacokinetic principles of an orally available drug and describe the principles of drug-drug pharmacokinetic interactions</li> <li>• List antiretroviral agents which are prone to gastric absorption interactions</li> <li>• Categorise antiretroviral agents as hepatic enzyme inducers, inhibitors or substrates and describe how this categorisation may help predict drug-drug interactions</li> <li>• List important antiretroviral drug-drug interactions and categorise those which are favourable and those unfavourable</li> <li>• Specifically describe antiretroviral drug interactions with statins, TB drugs, gastric acid modifying agents and how these may be managed</li> <li>• Describe further interactions with antiretroviral therapies and complementary medicines</li> <li>• List the indication and practicalities of TDM</li> </ul>
<b>07.07 Hepatitis B &amp; C and HIV co-infection</b>	<p>By the end of this session you will be able to:</p> <ul style="list-style-type: none"> <li>• Define co-infection</li> <li>• Describe the natural history of HIV/HBV and HIV/HCV</li> <li>• List treatments used for treating HIV/HBV and HIV/HCV</li> <li>• List side effects of peginterferon and ribavirin</li> <li>• Explain the treatment strategies for HIV/HBV and HIV/HCV</li> <li>• Summarise prevention strategies for HBV and HCV</li> </ul>
<b>14.01 Haematology and HIV</b>	<p>By the end of this session you will be able to:</p> <ul style="list-style-type: none"> <li>• Describe the aetiology of HIV-related abnormalities in the peripheral blood</li> <li>• Categorise the major causes of anaemia, thrombocytopenia and leucopenias in HIV-infected patients</li> <li>• Identify the main causes of disorders of clotting in patients with HIV infection</li> <li>• Plan the investigation and treatment of patients with abnormalities of the peripheral blood</li> </ul>

<b>14.02 Neurology and HIV</b>	<p>By the end of this session you will be able to:</p> <ul style="list-style-type: none"> <li>• Explain the entry and pathophysiological mechanisms of HIV in the CNS</li> <li>• Describe the aetiology, clinical presentations and investigations of opportunistic neurological infections</li> <li>• Describe the aetiology, clinical presentations and investigations of diseases of the brain, spinal cord and peripheral nervous system in HIV patient</li> <li>• Describe the aetiology, clinical presentations and investigations of HIV-associated neurocognitive decline</li> </ul>
<b>14.03 Endocrine/metabolic disorders and HIV</b>	<p>By the end of this session you will be able to:</p> <ul style="list-style-type: none"> <li>• Describe the epidemiology of HIV-related endocrine and metabolic problems</li> <li>• Describe the presentation of patients with common endocrine disorders (hypo- and hyperadrenalism, thyroid disease, hypogonadism, diabetes mellitus and impaired glucose tolerance, metabolic syndrome) in patients with HIV infection</li> <li>• Plan the investigation and management of patients with HIV-related endocrine and metabolic diseases</li> </ul>
<b>14.04 Respiratory Disease and HIV</b>	<p>By the end of this session you will be able to:</p> <ul style="list-style-type: none"> <li>• Describe frequently occurring and relevant respiratory diseases in a patient infected with HIV</li> <li>• Recognise symptoms and signs typical of the respiratory diseases common in HIV infection</li> <li>• Confidently apply your knowledge on how to approach breathlessness and cough in an HIV infected patient</li> <li>• Form a differential diagnosis for an abnormal chest radiograph in an HIV-infected patient and summarise appropriate investigations to determine the cause</li> <li>• Recognise the appropriate management for common respiratory diseases in HIV infection</li> </ul>
<b>14.05 Cardiac Disease and HIV</b>	<p>By the end of this session you will be able to:</p> <ul style="list-style-type: none"> <li>• Describe clinical features, investigation and management of cardiac conditions associated with HIV including uncommon conditions such as cardiomyopathy and primary pulmonary hypertension</li> <li>• List causes of pericardial effusion in HIV infected individuals and plan appropriate investigation</li> <li>• Describe the association between HIV and non-AIDS defining conditions such as cardiovascular disease and lipid dysregulation</li> <li>• Evaluate pros and cons of antiretroviral agents in relation to a patient's risk of cardiovascular disease</li> <li>• Discuss management of traditional cardiovascular risk factors including pharmacotherapies and their use with ART</li> </ul>
<b>14.06 Gastrointestinal disease and HIV</b>	<p>By the end of this session you will be able to:</p> <ul style="list-style-type: none"> <li>• Describe the clinical presentation, investigation and management of the most common gastrointestinal disorders in HIV infected patients</li> <li>• Establish a plan of investigation and management of patients with diarrhoea</li> <li>• Identify and manage gastrointestinal problems associated with antiretroviral therapy</li> <li>• Identify anorectal symptoms associated with HIV positive patients</li> </ul>

<b>14.07 Renal disease and HIV</b>	<p>By the end of this session you will be able to:</p> <ul style="list-style-type: none"> <li>• Outline a framework for clinical review of HIV patients with acute kidney injury</li> <li>• List types of proteinuria and their association with interstitial and glomerular renal diseases</li> <li>• Investigate the causes of proteinuria in HIV patients</li> <li>• Recognise presentations of disorders of function of the proximal renal tubule</li> <li>• Describe renal toxicities associated with anti-retroviral drugs (ARV)</li> <li>• Recommend treatment options for HIV patients with end stage renal disease</li> </ul>
<b>14.08 Skin disease and HIV</b>	<p>By the end of this session you will be able to:</p> <ul style="list-style-type: none"> <li>• Describe the common skin diseases seen in HIV infected individuals</li> <li>• Construct a diagnostic approach to skin lesions in this setting</li> <li>• List medications used in HIV medicine which commonly cause skin disease</li> <li>• Evaluate severity of skin pathology and know when to refer patients</li> <li>• Discuss treatment options for common skin problems in patients with HIV</li> </ul>
<b>15.01 HIV related malignancy</b>	<p>By the end of this session you will be able to:</p> <ul style="list-style-type: none"> <li>• Describe the epidemiology and histology of AIDS defining and non-AIDS defining malignancies</li> <li>• State the clinical presentation of AIDS defining and non-AIDS defining malignancies</li> <li>• Explain the management of AIDS defining and non-AIDS defining malignancies</li> </ul>
<b>13.01 Pneumococcal infections in HIV</b>	<p>By the end of this session you will be able to:</p> <ul style="list-style-type: none"> <li>• List the risk factors for pneumococcal infections</li> <li>• Describe the various clinical presentations and features of pneumococcal infections in HIV (including pneumonia, meningitis and septicaemia)</li> <li>• Define the general and specific laboratory diagnostics of pneumococcal infections</li> <li>• Describe the therapies indicated for pneumococcal infections, and debate the use of corticosteroids in meningeal disease</li> <li>• Discuss the use of vaccination to prevent pneumococcal infection in HIV</li> </ul>

continued

<b>13.04 Tuberculosis</b>	<p>By the end of this session you will be able to:</p> <ul style="list-style-type: none"> <li>• State the modes of transmission, the differing clinical stages and the various clinical presentations and features of tuberculosis in individuals with HIV infection (including pulmonary, meningeal and other non-pulmonary disease)</li> <li>• Describe the general and specific laboratory diagnostics for tuberculosis</li> <li>• List standard first line treatment regimens for presumed or known drug sensitive tuberculosis, identify second and third-line anti-tuberculous drugs and the indications for corticosteroids, and appreciate the usual clinical response to anti-tuberculous regimens</li> <li>• Identify risk factors for drug resistance and how to prevent its development</li> <li>• Identify potential drug interactions of anti-tuberculous medications and antiretrovirals/other commonly utilised drugs</li> <li>• Describe the diagnosis of latent tuberculosis</li> </ul>
<b>13.08 Herpes infections</b>	<p>By the end of this session you will be able to:</p> <ul style="list-style-type: none"> <li>• Describe the various clinical presentations, clinical findings and complications of Herpes simplex virus (HSV) and Varicella-zoster virus (VZV) infections in the setting of HIV</li> <li>• Detail the specific laboratory diagnostics of HSV and VZV infections</li> <li>• List first and second line treatment regimens for HSV and VZV infections</li> <li>• Detail the indications for the use of secondary prophylaxis in HSV infection</li> <li>• Discuss the indications for hyperimmune globulin and vaccination in VZV infection</li> </ul>
<b>13.11 CMV</b>	<p>By the end of this session you will be able to:</p> <ul style="list-style-type: none"> <li>• List the risk factors for CMV acquisition and clinical disease</li> <li>• Identify the clinical features associated with CMV viraemia and end-organ disease (including retinitis, encephalitis and enteritis)</li> <li>• List the general and specific diagnostics available for CMV infection</li> <li>• Describe the specific therapies available for CMV and their main side-effects and contraindications</li> </ul>
<b>13.12 Cryptosporidiosis and Microsporidiosis</b>	<p>By the end of this session you will be able to:</p> <ul style="list-style-type: none"> <li>• Define the aetiological agents of cryptosporidiosis and microsporidiosis</li> <li>• List the common presentations and clinical features of cryptosporidiosis and microsporidiosis</li> <li>• Establish the diagnostics available for these infections</li> <li>• List the specific agents used to treat these infections and the prognosis of cryptosporidiosis and microsporidiosis</li> </ul>