



# CERTIFICATE OF COMPLETION

THE UNIVERSITY OF WASHINGTON AND HEPATITIS B ONLINE CERTIFY THAT

*Chizoba Blessing Umunna, Doctor of Pharmacy*

HAS COMPLETED THE FOLLOWING LESSONS IN THE

## HEPATITIS B ONLINE 2<sup>ND</sup> EDITION

HBV Epidemiology, Screening, Testing and Diagnosis, HBV Immunizations, Initial Evaluation, When to Treat, Choosing an Initial HBV Treatment Regimen, Preventing HBV Perinatal Transmission, Screening for Hepatocellular Carcinoma, Occupational PEP, and Hepatitis B Reactivation in the Setting of Immunosuppression

A handwritten signature in black ink, reading "David H. Spach, MD".

David H. Spach, MD

Editor-in-Chief, Hepatitis B Online

Professor of Medicine, University of Washington

The Infectious Diseases Education & Assessment (IDEA) Program created and manages this federally-funded curriculum.

This certificate shows the progress of **Chizoba Blessing Umunna, Doctor of Pharmacy**, a Pharmacist, identified by **chizobaumunna@gmail.com** as of May 27, 2025, 12:33 pm. You may validate this certificate or obtain a digital copy by visiting <https://www.hepatitisB.uw.edu/certificate/self-study/chizobaumunna@gmail.com/2>

**The following Lessons were completed along with their quizzes with a quiz score of 80% or higher:**

Lessons	Learning Objectives
<b>HBV Epidemiology</b> Completed September 6, 2023	<ul style="list-style-type: none"> <li>• Differentiate between hepatitis B virus (HBV) incidence rate and HBV prevalence rate</li> <li>• Summarize regional global trends in HBV prevalence, as defined by the World Health Organization</li> <li>• List the most common risk factors and populations at risk for HBV acquisition</li> <li>• Cite clinical and laboratory criteria for HBV case definitions</li> <li>• Discuss the impact of HBV disease globally and in the United States</li> </ul>
<b>HBV Screening, Testing, and Diagnosis (Screening, Testing and Diagnosis)</b> Completed September 6, 2023	<ul style="list-style-type: none"> <li>• Summarize CDC-based recommendations for universal HBV screening</li> <li>• Provide rationale for universal HBV screening</li> <li>• Describe the 3-test panel used to screen for HBV infection</li> <li>• Explain how serologic markers for HBV diagnostic tests evolve over time after initial HBV infection and vaccination</li> <li>• Interpret HBV diagnostic test results for the three major serologic tests used for hepatitis B screening</li> </ul>
<b>HBV Immunizations</b> Completed September 6, 2023	<ul style="list-style-type: none"> <li>• Discuss hepatitis B virus (HBV) vaccination as a core intervention to prevent and eliminate HBV infection</li> <li>• Identify populations that should receive HBV vaccination</li> <li>• Explain rationale for HBV pre- and postvaccination serologic testing</li> <li>• Describe dosing, scheduling, and administration of single-antigen or combination vaccines in children and adults</li> <li>• Summarize strategies to manage HBV vaccine nonresponders</li> </ul>
<b>Initial Evaluation of Persons with Chronic Hepatitis B (Initial Evaluation)</b> Completed September 6, 2023	<ul style="list-style-type: none"> <li>• Summarize key aspects of the medical history and physical examination in persons with hepatitis B who are presenting for an initial evaluation</li> <li>• Describe the initial laboratory workup for persons with chronic hepatitis B</li> <li>• List key immunizations that should be administered to persons with chronic hepatitis B infection</li> <li>• Summarize noninfectious causes of liver disease that may coexist with hepatitis B</li> </ul>
<b>When to Initiate HBV Treatment (When to Treat)</b> Completed September 7, 2023	<ul style="list-style-type: none"> <li>• Describe primary goals of therapy for the treatment of chronic HBV infection</li> <li>• Name three key factors to consider when initiating treatment for chronic HBV infection</li> <li>• List the four phases of immune responses that characterize HBV infection</li> <li>• Summarize key recommendations in major guidance documents regarding when to initiate HBV treatment</li> <li>• Discuss the clinical circumstances that warrant antiviral therapy in persons with chronic HBV infection for whom therapy may not be indicated</li> </ul>
<b>Choosing an Initial HBV Treatment Regimen</b> Completed September 8, 2023	<ul style="list-style-type: none"> <li>• Provide rationale for choosing an oral antiviral or interferon-based therapy to treat chronic HBV infection</li> <li>• Name the three preferred oral antivirals for initial treatment of chronic HBV infection</li> <li>• Discuss potential adverse effects with medications used to treat chronic HBV infection</li> <li>• List situations when interferon-based therapy is contraindicated for treatment of chronic HBV</li> <li>• Recognize special circumstances that warrant modification of standard treatment options for chronic HBV infection</li> </ul>

Lessons	Learning Objectives
<b>Preventing HBV Perinatal Transmission</b>  Completed September 8, 2023	<ul style="list-style-type: none"> <li>• Provide rationale for universal screening for hepatitis B virus (HBV) infection during pregnancy</li> <li>• Summarize risks for HBV perinatal transmission, including HBV status of mother, route and timing, vertical and horizontal transmission, and breastfeeding</li> <li>• Contrast treatment options for women with chronic versus acute HBV infection in pregnancy</li> <li>• Discuss preferred HBV antiviral therapy options and respective safety issues in pregnant women</li> <li>• Cite recommendations for neonatal immunoprophylaxis to prevent perinatal transmission of HBV</li> </ul>
<b>Screening for Hepatocellular Carcinoma</b>  Completed September 8, 2023	<ul style="list-style-type: none"> <li>• Examine epidemiological trends in hepatocellular carcinoma in the United States and globally</li> <li>• List the most common risk factors for acquisition of hepatocellular carcinoma</li> <li>• Summarize the rationale for hepatocellular screening and its importance especially in the presence of chronic hepatitis B</li> <li>• Compare and contrast hepatocellular carcinoma surveillance testing methods</li> <li>• Discuss guidelines for hepatocellular carcinoma screening in the United States</li> </ul>
<b>Occupational HBV Postexposure Prophylaxis (Occupational PEP)</b>  Completed September 8, 2023	<ul style="list-style-type: none"> <li>• Provide the rationale for routine hepatitis B vaccination for all health care personnel</li> <li>• Discuss the relative risks of acquiring HBV based on occupational exposure type and type of body fluid</li> <li>• Describe the major steps involved in the initial evaluation of health care personnel potentially exposed to HBV</li> <li>• Summarize interventions for HBV postexposure prophylaxis</li> <li>• Differentiate recommendations for postexposure management based on health care personnel's hepatitis B vaccination status</li> </ul>
<b>Hepatitis B Reactivation in the Setting of Immunosuppression</b>  Completed September 8, 2023	<ul style="list-style-type: none"> <li>• Define hepatitis B virus (HBV) reactivation, HBV flare, and HBV-associated liver failure</li> <li>• Identify risk factors for HBV reactivation</li> <li>• Describe HBV screening recommendations for patients at risk for HBV reactivation</li> <li>• Discuss recommendations for HBV antiviral prophylaxis in patients at risk for HBV reactivation</li> <li>• Summarize considerations for HBV reactivation in special populations (e.g., coinfection with HIV or HCV)</li> </ul>