



## Pharmacy-Based Immunization Delivery 14th Edition

The University of South Carolina College of Pharmacy will be offering the APhA Pharmacy-Based Immunization Delivery, 14th Edition to **10 pharmacists only** on Sunday, August 26th, 2018 at 12:00 noon. Register now for one of these limited spots!

Local instructors:

- Patricia H. Fabel, PharmD, BCPS; Executive Director, Kennedy Pharmacy Innovation Center and Clinical Associate Professor
- Kathy Quarles Moore, BSPHarm, RPh, CDM; Lab Director, Community and Compounding Labs

This program is accredited by the American Pharmacists Association. Upon registration and receipt of payment, participants will receive a registration code and instructions to access all home study program materials to be completed prior to the live program. Following the live program, participants will claim their continuing education (CE) credit through APhA.

### Activity Preview

APhA's Pharmacy-Based Immunization Delivery certificate training program (14th Edition) is based on national educational standards for immunization training from the Centers for Disease Control and Prevention. This practice-based curriculum represents a fusion of science and clinical pharmacy. The program, which emphasizes a health care team approach, seeks to foster the implementation of interventions that will promote disease prevention and public health.

The purpose of this certificate training program is to prepare pharmacists with comprehensive knowledge, skills, and resources necessary to provide immunization services to patients across the life span

*Activity Type:* Practice-based

*Target Audience:* Pharmacists in all practice settings

*Learning Level:* Level 3

### Goals and Learning Objectives

Educate pharmacists about:

- The impact of vaccines on public health.
- Pharmacists' roles in immunization.
- Immunologic principles of vaccine development and immunizations.
- Vaccine-preventable diseases and the vaccines used to prevent them.
- Strategies for improving immunization rates.
- Requirements for pharmacists who provide immunization services.

Prepare pharmacists to:

- Read an immunization schedule and identify appropriate vaccines for individuals across the life span and with special needs.
- Educate patients about the benefits of vaccines and dispel myths about vaccines.
- Safely administer vaccines to patients via subcutaneous, intramuscular, intranasal, and intradermal routes.
- Operate an immunization service in compliance with legal and regulatory standards.
- Partner with immunization stakeholders to promote immunizations and the immunization neighborhood.

Direct pharmacists to resources necessary to:

- Promote public health through immunizations.
- Access regularly updated information about vaccines and their use.
- Effectively communicate with patients and other stakeholders about resources.
- Operate an immunization service in compliance with legal and regulatory standards.
- Click on the links below for more information

## **Self-Study Learning Objectives**

The self-study learning activity is designed to ensure that all participants have an understanding of vaccine-preventable diseases and the role of pharmacists as vaccine advocates and administrators. There are five learning modules that present in-depth information on immunology, practice implementation, and legal and regulatory issues as noted below, with appropriate references to the Centers for Disease Control and Prevention (CDC) resource publication, *Epidemiology and Prevention of Vaccine-Preventable Disease*. The self-study program includes a self-assessment test and real-life case studies that are designed to help reinforce and evaluate participants' understanding of key information and concepts.

### Module 1. Pharmacists, Vaccines, and Public Health

*At the completion of this activity, participants will be able to:*

- Describe the effects of immunizations on morbidity and mortality rates of vaccine-preventable diseases in the United States.
- Discuss Healthy People 2020 goals for vaccination rates in the United States.
- Explain the expansion of the role of pharmacists as vaccine providers and describe the status of pharmacists' authorization to administer vaccines throughout the United States.
- Describe strategies for pharmacists to advocate for pharmacy-based delivery of vaccines.
- Discuss the role of pharmacists as immunizers in emergency preparedness activities.
- Identify resources that are useful for immunization providers and educators.

### Module 2. Overview of Immunology and Vaccine Development

*At the completion of this activity, participants will be able to:*

- Identify the differences between active and passive immunity and describe key elements of each process.
- Explain how vaccines elicit an immune response and provide protection from disease.
- Describe the characteristics of and distinctions among live vaccines, inactivated vaccines, polysaccharide vaccines, and recombinant vaccines.
- Discuss the rationale for timing of vaccine administration and intervals between doses, including vaccine-vaccine spacing and vaccine-antibody spacing.
- Describe principles of herd immunity.

### Module 3. Vaccine-Preventable Diseases

*At the completion of this activity, participants will be able to:*

- Describe the epidemiology, clinical features, and potential complications of diseases that can be prevented with vaccines.
- Identify vaccines available in the U.S. market for each vaccine-preventable disease and describe their features.
- Identify the contraindications and precautions for the use of vaccines available in the United States.
- Use recommendations from the Advisory Committee on Immunization Practices to identify target groups for receipt of each vaccine.

### Module 4. Patient Care Considerations for Immunizing Pharmacists

*At the completion of this activity, participants will be able to:*

- Explain how to apply the pharmacists' patient care process to immunization services.
- Identify patients with immunization needs.

- Given a patient case, select appropriate vaccines using an immunization schedule from the Advisory Committee on Immunization Practices, and identify appropriate timing, doses, and routes of administration.
- Discuss the rationale for timing for vaccine administration and intervals between doses, including vaccine-vaccine spacing and vaccine-antibody spacing.
- Recall recommended patient screening questions for vaccination and identify valid contraindications for vaccinations.
- Educate patients about the benefits of vaccines and address common concerns about vaccines.
- Provide accurate information that addresses common myths about vaccines.
- Describe the roles of the Vaccine Adverse Event Reporting System in managing vaccine safety.
- Educate patients about potential adverse reactions following the receipt of a vaccine and how to manage them.
- Explain appropriate techniques for intramuscular, subcutaneous, intradermal, and intranasal administration of vaccines.
- Describe the signs and symptoms of adverse reactions to vaccines and procedures that pharmacists should follow to manage various adverse reactions.
- Describe appropriate documentation and follow-up after vaccine administration.

#### Module 5. Operating a Pharmacy-Based Immunization Program

*At the completion of this activity, participants will be able to:*

- Describe important considerations when deciding which vaccines to offer.
- Describe physical space requirements for a vaccine service.
- Discuss Occupational Safety and Health Administration regulations for the prevention of employee exposure to bloodborne pathogens and needlestick injury at worksites where immunizations are administered.
- Outline principles and procedures for vaccine storage and handling.
- Discuss workflow options for administering vaccines in pharmacy practice.
- Identify marketing strategies that can be used to promote a pharmacy-based immunization service.
- Explain potential options for obtaining reimbursement and compensation for vaccines and vaccine administration.
- Describe liability issues related to vaccine administration, including the Vaccine Injury Compensation Program.

#### **Live Seminar Learning Objectives**

The second component of the APhA's Pharmacy-Based Immunization Delivery certificate training program (14th Edition) is an active learning seminar focusing on pharmacy practice implementation. The live training seminar is based on the experience of practitioners involved in immunization advocacy and administration. The training seminar reinforces and expands on the self-study program and addresses areas such as immunization needs, legal and regulatory issues, and injection-technique training. Participants will be expected to practice giving intramuscular and subcutaneous injections.

*After participating in the Live Seminar, the participant will be able to:*

- Describe strategies for increasing immunization rates, including physician collaborations, community level activities, and immunization coalition activities
- Describe pharmacy operations and a process for administering vaccines in various pharmacy practice settings
- Evaluate patient histories and make patient-specific recommendations based on the appropriate immunization schedule
- Demonstrate effective strategies for communicating with patients who have concerns about vaccines
- Describe current evidence regarding vaccine safety
- Recognize the signs and symptoms of adverse reactions that can occur after vaccination

- Describe procedures for management of patients with adverse reactions to vaccination that constitute an emergency
- List the steps for administering currently available intranasal and intradermal vaccines
- Demonstrate appropriate intramuscular and subcutaneous injection techniques for adult immunization

All participants are strongly encouraged to obtain CPR or BCLS certification. However, certification is not a prerequisite of the program. A Certificate of Achievement is awarded to participants who successfully complete all program requirements. The Certificate of Achievement is invalid, however, without written proof of current CPR or BCLS certification.

### Seminar Agenda

- Check-in and Continental Breakfast
- Welcome, Introductions and Acknowledgements
- Clinical Review
- Managing a Pharmacy-Based Immunization Program
- Strategies for Increasing Immunization Rates
- Applying ACIP Immunization Schedules
- Communicating with Patients
- Vaccine Administration Technique
- Transitional/Summary Remarks
- Skills Assessment

### Accreditation Information



The American Pharmacists Association is accredited by the Accreditation Council for Pharmacy Education (ACPE) as a provider of continuing pharmacy education (CPE). The home-study portion of the APhA Pharmacy-Based Immunization Delivery certificate training program is approved for 12 contact hours (1.2 CEUs) of continuing pharmacy education credit (UAN 0202-0000-17-160-H06-P).

The live training seminar is approved for 8 contact hours (0.8 CEU) of continuing pharmacy education credit (UAN 0202-0000-17-161-L06-P).

To obtain credit for Pharmacy-Based Immunization Delivery complete home study activities, complete both home study and final assessments with a grade of 70% or better, attend the live seminar, successfully complete the injection technique assessment, complete the evaluation, and CLAIM credit. To obtain credit, the Learner must CLAIM credit once each component is completed. Once credit is claimed, Transcripts of CPE will be available online within 24 hours on the Learner's CPE Monitor profile at [www.nabp.net](http://www.nabp.net). The Certificate of Achievement will be available online upon successful completion of the necessary activity requirements on the participant's My Training page on [www.pharmacist.com](http://www.pharmacist.com).

APhA's continuing pharmacy education policy provides you with two opportunities to successfully complete the assessments. Please note that you will not be permitted to submit the assessment a third time. All assessment questions are randomized. The current policy of the APhA Education Department is not to release the correct answers to any of our CPE tests. This policy is intended to maintain the integrity of the CPE activity and the assessment.

*Initial Release Date:* July 15, 2017

*Expiration date:* July 15, 2020 - PLEASE NOTE: NO Home Study credit granted after this date; Live Credit can only be granted within 60 days from the day of the seminar attended.

### Development

APhA's Pharmacy-Based Immunization Delivery certificate training program (14th Edition), was developed by the American Pharmacists Association. Copyright © 2017 by the American Pharmacists Association

### Acknowledgements and Disclosures

### Advisory Board

- Chair: Stephan L. Foster, PharmD, FAPhA; CAPT (Ret) U.S.P.H.S.; Professor, University of Tennessee Health Sciences Center; Memphis, Tennessee
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- Adam C. Welch, PharmD, MBA, BCACP, FAPhA; Associate Dean for Academic Affairs and Assessment; Bill Gatton College of Pharmacy; East Tennessee State University; Johnson City, Tennessee

### APhA Staff Members

The following APhA staff members contributed to the development of this program:

- Mitchel C. Rothholz, RPh, MBA, Chief Strategy Officer
- Helen Ali-Sairany, PharmD, Associate Director, Content Development, Education
- Kelly French, Director, Advanced Training
- Misty Knack, Associate Director, Advanced Training
- Bronhed Shaw, Associate Director, Advanced Training.

The original publication was prepared by Judy Crespi Lofton, MS, of JCL Communications, on behalf of APhA.

### Disclosures

- Stephan Foster, PharmD, FAPhA, FNAP, has served as a speaker for Merck Vaccines, Pfizer and Seqirus. He has served on advisory boards for Pfizer and Seqirus.
- Jeffrey A. Goad, PharmD, MPH, FCPHA, FCSHP has served as a speaker for Merck Vaccines.
- Carrie Foust Koenigsfeld, PharmD, FAPhA, has served as a speaker for Merck Vaccines and Pfizer.
- Mitchel C. Rothholz, RPh, MBA, declares that his spouse is an employee of Merck and that he has served on advisory boards for Merck and Pfizer.
- All other individuals involved in the development of this material declare no conflicts of interest, real or apparent, and no financial interests in any company, product, or service mentioned in this program, including grants, employment, gifts, stock holdings, and honoraria. APhA's editorial staff declare no conflicts of interest or financial interests in any product or service mentioned in this activity, including grants, employment, gifts, stock holdings, and honoraria. For a complete list of APhA staff disclosures, please visit the APhA website at [www.pharmacist.com/apha-disclosures](http://www.pharmacist.com/apha-disclosures).
- Conflicts of interest have been resolved through content review by Helen Sairany, PharmD, BCACP, Associate Director of Content Development at the American Pharmacists Association.
- The material presented here does not necessarily reflect the views of the American Pharmacists Association. Every attempt has been made to ensure the accuracy of the information contained herein at the time of writing; however, owing to the nature of pharmacy practice, standards and recommendations change regularly. Pharmacists are advised to verify all information and data before treating patients or employing the practices described in this educational activity.

### **System Requirements**

Computer and Internet access is required to complete this activity. Please visit the APhA website to view the [Technology System Requirements](#) to have a positive learning experience.