

# ICP Consultant Connection

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## Efficacy of High Dose Influenza Vaccine in the Elderly

In the 1990s, influenza infection caused an average of 36,000 deaths and 226,000 hospitalizations annually. The majority of hospitalizations and deaths occurred in people aged 65 years or older. Clearly, the elderly are especially vulnerable to flu and flu-related complications, but their antibody response after immunization is less robust than that in younger adults. Since December 2009, a high-dose trivalent flu vaccine formulation has been FDA-approved. It contains four times more hemagglutinin per dose than a standard flu vaccine and should provoke a stronger antibody production. It has also been associated with more injection-site reactions and costs more than standard influenza vaccine.

In August, 2014 The New England Journal of Medicine published a head-to-head comparison of high-dose and standard-dose trivalent vaccine in seniors to determine if higher antibody levels protect against the flu better. This study enrolled roughly 32,000 adults 65 years and older from 126 research centers in the United States and Canada. They assessed protection from vaccination during two flu seasons:

- The 2011-2012 flu season, which had low influenza activity with moderate to good match between vaccine and circulating strains; and
- The 2012-2013 season, which had high influenza activity and a mismatch between vaccine and circulating strains.

The researchers randomized seniors to high-dose trivalent or standard-dose trivalent flu vaccine. They drew blood hemagglutinin inhibition titers one month after immunization. Seniors who received the high-dose vaccine had significantly higher antibody responses than those who received standard flu vaccine. Among seniors who received the high-dose vaccine, 228 individuals developed laboratory-confirmed influenza compared to 301 receiving standard-dose trivalent vaccine, suggesting that high dose vaccine was 24.2% more effective in preventing flu compared to standard dose vaccine (95% CI 9.7-36.5).

The researchers conclude that seniors who receive high-dose trivalent flu vaccine have more robust antibody responses and are better protected against the flu compared to those receiving standard trivalent vaccine. This study only involved trivalent preparations; no comparison was made to quadrivalent flu vaccination formulations.

Please note that the CDC's Advisory Committee on Immunization Practices has not reviewed this information nor have they adopted this finding as a recommendation at this time.

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The CDC has a web page devoted to high-dose influenza vaccine: [http://www.cdc.gov/flu/protect/vaccine/qa\\_fluzone.htm](http://www.cdc.gov/flu/protect/vaccine/qa_fluzone.htm)

Reference: DiazGranados CA, Dunning AJ, Kimmel M, et al. Efficacy of high-dose versus standard-dose influenza vaccine in older adults. *N Engl J Med.* 2014;371:635-45.

# An Overview of Ohio LPN IV Changes from March 2013, to the end of 2014:

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In March 2013, new LPN IV Therapy laws took effect that directly affect nursing practice under the Ohio Revised Code (Law), section 4723.18, <http://codes.ohio.gov/orc/4723.18>. Some of the highlights from house bill 303 included; Former section 4723.177, ORC, now renumbered as 4723.18, was amended to remove the prohibition of “aspirating any intravenous line to maintain patency.” Thus, LPNs who are IV therapy certified will no longer be prohibited from aspirating an intravenous line when such aspiration is indicated and performed in accordance within the LPN scope of practice and the applicable standards of safe nursing practice as contained in Chapter 4723-4 of the Ohio Administrative Code. IV-Certified LPN’s can now administer antibiotics through a central venous line, which include a Peripherally Inserted Central Catheter (PICC), Tunneled, Non-Tunneled, Implanted Port, all which terminate in a central vein.

The Ohio Administrative Code, following suit, was updated in February 1, 2014, OAC 4723-17 can easily be found at the Ohio Board of Nursing website: <http://nursing.ohio.gov>. The rules, OAC 4723-17-03 (IV Therapy Procedures), were amended in accordance with the law changes made by House Bill 303 and to further clarify information by separation of permissive and prohibited activities. In a nutshell, language was removed that limited secondary antibiotic administration to peripheral only, changing it to allowing IV administration through a central line. It also removed language prohibiting IV aspiration, allowing IV Certified LPNs to initiate Central Venous Access Devices (CVADs).

After attending a public meeting regarding LPN IV Therapy Practice at the Ohio Board of Nursing in September 2014, some of the key issues brought to the board were. Regulatory Language revision to make it easier to interpret, training; both new LPN students and IV certified LPNs, Mandatory Internship/Competencies for both RNs and LPNs pertaining to IV Skills, use of the same language pertaining to IV therapy, in accordance with the Infusion Nurses Society(INS) /Association of Vascular Access (AVA), and expansion of the IV-Certified LPN Role to include TPN/Blood infusion/transfusion. All comments and suggestions were welcomed and encouraged from the OBN. The paragraph below contains an excerpt from the September 18-19 2014 meeting minutes from the OBN Practice Committee.

Janet Arwood and Lisa Emrich reported on the Board Committee on Practice meeting held September 18, 2014. They reported that the Committee and stakeholders reviewed draft legislative language regarding the LPN IV therapy requirements and discussed potential changes. Stakeholder input and discussion was substantial. Board staff will review the comments and revise the legislative language to provide greater clarity. The Board agreed to re-convene the Committee on Practice at the January Board meeting for further review and discussion.

As you see, this is going to be a continued process, with additional meetings, involving the OBN and the public, so please make your voices heard and give input or ask questions, which is welcomed by the Ohio Board of Nursing. The ICP Nursing Department is following the progress of these changes and will continue to report any new information.

## What is the influenza vaccination rate among healthcare personnel (HCP)?

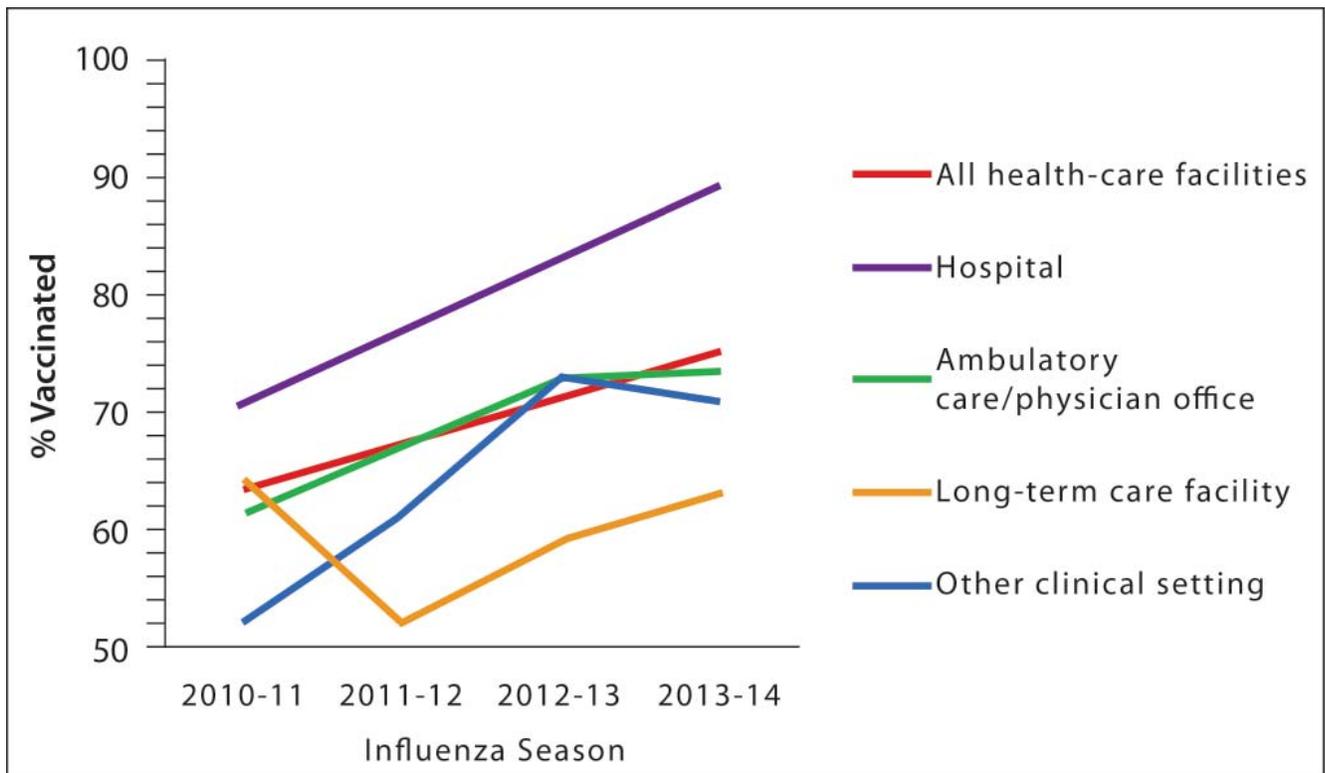
<http://www.cdc.gov/flu/toolkit/long-term-care/coverage.htm>

As reported in the September 19, 2014 Morbidity and Mortality Weekly Report (MMWR), overall, 75.2% of HCP reported having received an influenza vaccination for the 2013-2014 season. Increases in influenza vaccination rates between the 2010-2011 and 2013-2014 influenza seasons are notable within all occupational settings, except for in LTC settings (see Figure 1). Since the 2011-2012 influenza season, HCP in LTC settings continued to have the lowest reported influenza vaccination rates among all HCP. In comparison, the Healthy People 2020 annual target goal for immunization vaccination among HCP is 90% (see Healthy People 2020 objective IID-12.9).

The CDC has launched a new toolkit for long term care employers aimed at increasing the influenza vaccination rate among health care personnel in long term care settings.

<http://www.cdc.gov/flu/toolkit/long-term-care/>

**Figure 1.** Percentage of healthcare personnel (HCP) who received influenza vaccination, by occupational setting—Internet panel survey, United States, 2010-11, 2011-12, 2012-13, and 2013-2014 influenza seasons



## Coverage Update on Prevnar and Pneumovax Pneumococcal Vaccines

As indicated in the October 2014 Consultant Connection, both forms of pneumococcal vaccine, Prevnar and Pneumovax, should be routinely administered in series to all adults 65 years or older. This recommendation from the CDC's Advisory Committee on Immunization Practices is now also reflected in new payment guidelines from CMS. Medicare B now covers one dose of each vaccine, as long as the time interval between the two vaccinations is at least 11 months.

There are more than 90 strains (serotypes) of pneumococcal bacteria. Prevnar and Pneumovax cover 13 and 23 of these serotypes, respectively. Complete recommendations may be found at:

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6337a4.htm>



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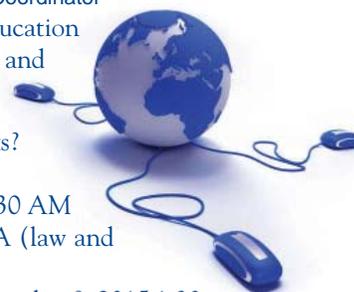
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our customers' and employees'  
expectations through quality  
health-care service, continuous  
education, and effective  
communication.*

## Continuing Education Webinars

By: Mary Burkart, RN, Nurse Coordinator

As nurses, we are always on the lookout for continuing education classes to maintain and improve our practice. ICP is pleased and proud to present the following webinars:

- CPR vs. DNR: How Well Do You Know Your Residents?  
- Wednesday, February 11, 2015 1:30 to 2:30 PM
- Ohio Nursing Law - Friday, June 19, 2015 10:30 to 11:30 AM  
(this program meets the required 1 hour of Category A (law and rules) requirement for RNs & LPNs)
- Understanding Coagulation Testing - Wednesday, September 9, 2015 1:30 to 2:30 PM
- Pain Management: A Nursing Perspective - Friday, November 20, 2015 10:30 to 11:30 AM



You can attend these webinars in the comfort & convenience of your facility. You may have as many participants at your location as can be accommodated on a speaker phone and computer screen, or computer with speakers, for one low fee of \$50.00 per link!

Following registration, a computer link will be sent to the email on file for the DON with instructions for joining the webinar. ICP recommends that you log on 10 to 15 minutes early to ensure proper connection to audio & visual feeds.

As a reminder, site registration forms will be distributed prior to each program.

For more information, call Mary Burkart, RN, Nurse Coordinator at 1-800-228-8278 ext. 132 or email [mburkart@icppharm.com](mailto:mburkart@icppharm.com).