

Fall 2011

More Than Dispensing:

Pharmacists as Immunizers

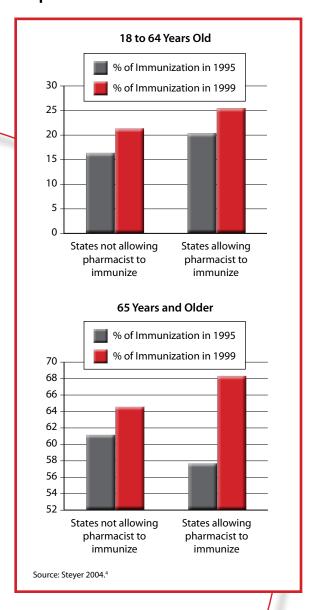
By: Boas Nahm,

PharmD Candidate 2012, Rutgers University and

Phananh Pham,

PharmD Candidate 2012.
University of
the Sciences

Figure 1
Comparison of Influenza Vaccination Rates



n average, 5% to 20% of the United States population develops influenza each year according to the US Centers for Disease Control and Prevention (CDC). This leads to more than 200,000 preventable, complication-related hospitalizations.¹ An affordable way to prevent diseases such as influenza, commonly known as the "flu," is to administer vaccinations. Currently, most patients receive their annual flu vaccine from their primary healthcare provider. During the peak months of the flu season, physicians have an added responsibility to administer influenza vaccines, which may become a challenge with conflicting patient and office schedules along with high demand for the vaccine. To close this gap in care is the community pharmacist—a more readily available healthcare provider for patients.

Pharmacists Increasing Vaccination Rates

A small number of pharmacists were first trained to vaccinate in Seattle, Washington in 1994. In 1996, the American Pharmacists Association (APhA), began its national training program for pharmacist immunization certification.² Now, all 50 states allow pharmacists to become certified immunizers by completing a training program sponsored by APhA.³ **Figure 1** shows the positive difference in influenza vaccination rates from 1995 and 1999, when more states began to allow pharmacists to vaccinate. **Figure 2** shows the percentage of the US population who were vaccinated in the 2010/2011 flu season, demonstrating that a large amount of the population is not getting vaccinated and, as a result, there is a need to increase vaccination rates.

Figure 2
Percentage of Population with Influenza Vaccine

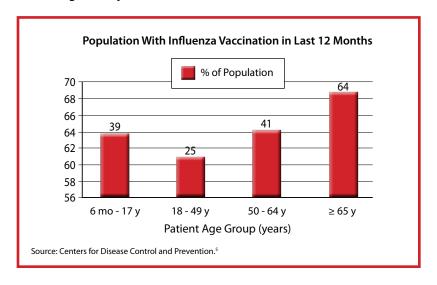
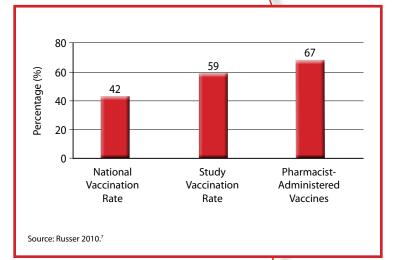


Figure 3
Pharmacist-Driven
Influenza Immunization
for Healthcare Workers



Pharmacists' Role as Immunizers

Pharmacists can play a role as advocates, partners, and providers of immunization to improve vaccination awareness. In this multifaceted role, pharmacists may help increase public knowledge of vaccines and dispel common myths about them; work with nurses and other healthcare providers to advocate immunizations; and also administer vaccines to help increase vaccination rates.⁶

One survey, conducted from 2008 to 2009, included 2167 healthcare workers (HCW) and evaluated the changes in vaccination rates when pharmacist-driven immunization programs were used. **Figure 3** shows how pharmacists who administered the vaccine helped increase vaccination rates when compared to the 2008 national vaccination rate for HCW.⁷

Why Choose a Pharmacist for Your Vaccine?

Pharmacists have consistently been voted one of the most trustworthy healthcare professionals, according to the Gallup Poll. From 1988 to 1998, pharmacists were voted the number one most trusted profession in the Gallup Honesty and Ethics Poll. Since then, pharmacists have consistently remained one of the most positively rated professions.⁸ In addition to being trusted professionals, pharmacists are also very accessible with their extended hours of operation and weekend availability that other healthcare providers do not commonly offer.² Lastly, pharmacists are able to provide vaccinations without the additional cost of a physician's office visit. Pharmacies accept many insurance and govern-

ment-funded plans, such as Medicare. Altogether, pharmacy-delivered vaccinations are not only reliable and accessible, but also affordable.

2011/2012 Influenza Vaccine

On July 18, 2011, the FDA approved the 2011/2012 influenza vaccine.¹ This year's flu vaccine is available as a nasal spray and three different injection formulations: regular, high-dose, and intradermal. Each preparation may be selected based on age restrictions, availability, and patient preference.¹⁰ **Table 1** lists available vaccine formulations and brand names.

Each year, the WHO Global Influenza Surveillance and Response System (GISRS) undergoes a vaccine virus selection process that determines the formulation for the annual influenza vaccine. This vaccine is designed to target three possible strains of virus that GISRS determines will be the most common throughout the upcoming flu season. This year's vaccine will protect against influenza A H1N1 and H3N2 virus and an influenza B virus. Although this year's strain is the same as the 2010/2011 season, the CDC stresses the importance of getting vaccinated yearly because immunity against the virus decreases over time.

Table 1
2011/2012 Influenza Vaccine Formulations

| Manufacturer | Route | Age Group |
|--|--|--|
| CSL Biotherapies (distributed by Merck) | IM | ≥9 years |
| GlaxoSmithKline | IM | ≥3 years |
| ID Biomedical Corporation of Quebec (distributed by GlaxoSmithKline) | IM | ≥18 years |
| MedImmune | IN | 2-49 years |
| Novartis Vaccines | IM | ≥4 years |
| Sanofi Pasteur | IM | ≥6 months |
| Sanofi Pasteur | IM | ≥65 years |
| Sanofi Pasteur | ID | 18-64 years |
| | CSL Biotherapies (distributed by Merck) GlaxoSmithKline ID Biomedical Corporation of Quebec (distributed by GlaxoSmithKline) MedImmune Novartis Vaccines Sanofi Pasteur Sanofi Pasteur | CSL Biotherapies (distributed by Merck) GlaxoSmithKline IM ID Biomedical Corporation of Quebec (distributed by GlaxoSmithKline) MedImmune IN Novartis Vaccines IM Sanofi Pasteur IM |

As of February 24, 2010, the CDC's Advisory Committee on Immunization Practices (ACIP) voted for "universal" influenza vaccination. The ACIP is recommending that all persons 6 months of age and older receive an annual influenza vaccination. **Table 2** includes a recommendation of those at particularly high risk for developing flu-related complications.¹⁰

Flu season starts in October and peaks around January to February. It is recommended that individuals receive the influenza vaccine in the fall or as soon as the vaccine is available. The vaccine is available throughout the flu season, which may last as late as May. 10

Table 2

Patients at High Risk for Developing Influenza-Related Complications

- 1. Pregnant women
- 2. Children <5 years, especially <2 years
- 3. Adults ≥50 years
- 4. Individuals with chronic medical conditions
- 5. Individuals living in a nursing home or long-term care facility
- 6. Individuals living with or caring for those at high risk for flu complications
 - Healthcare workers
 - · Household contacts of persons at high risk
 - Household contacts or out-of-home caregivers of children <6 months

Source: Centers for Disease Control and Prevention 2011.10

Altogether, pharmacydelivered vaccinations are not only reliable and accessible, but also affordable.

Conclusion

Pharmacists delivering immunizations may benefit from the efforts to raise vaccination awareness as they play an integral role in the community. Not only are patients able to easily obtain their influenza vaccine from their local pharmacists, but demand placed on physicians' offices to deliver the annual vaccine may be reduced. In preparing for this upcoming 2011/2012 flu season, patients should check with their local pharmacies on the availability of the influenza vaccine and take advantage of the useful resources their knowledgeable pharmacists have to offer.

References

- 1. Burgess S. FDA Approves Vaccines for the 2011-2012 Influenza Season [Internet]. FDA: U.S. Food and Drug Administration; 2011 Jul 18 [cited 2011 Aug 15]. http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm263319. Accessed August 26, 2011.
- Hogue MD, Grabenstein JD, Foster SL, Rothholz MC. Pharmacist involvement with immunizations: a decade of professional advancement. J Am Pharm Assoc. 2006; 6;46(2):168-182.
- 3. Egervary A. Maine legislature approves pharmacist immunization [Internet]. American Pharmacists Association (APhA); 2009 Jun 24 [cited 2011 Aug 15]. http://www.pharmacist.com/AM/Template.cfm?Section=Home2&CONTENTID=20068&TEMPLATE=/CM/HTMLDisplay.cfm. Accessed August 26, 2011.
- **4.** Steyer TE, Ragucci KR, Pearson WS, et al. The role of pharmacists in the delivery of influenza vaccinations. *Vaccine*. 2004;22:1001-1006.
- 5. Early release of selected estimates based on data from the 2010 National Health Interview Survey [Internet]. Centers for Disease Control and Prevention; 2011 Jun [cited 2011 Aug 15]. http://www.cdc.gov/nchs/nhis/released201106.htm#4. Accessed August 26, 2011.
- **6.** Madhavan SS, Rosenbluth SA, Amonkar M, et al. Pharmacists and immunizations: a National survey. *J Am Pharm Assoc.* 2001;3;41(1):32-45.
- 7. Russel E, Roberts D, Lee M. Pharmacist-driven seasonal influenza immunization program for health care workers. *Am J Health-Syst Pharm*; 2010; Dec 1;67.
- **8.** Jones JM. Nurses top honesty and ethics list for 11th year [Internet]. Princeton (NJ): Gallup; 2010 Dec 3 [cited 2011 Aug 15]. http://www.gallup.com/poll/145043/Nurses-Top-Honesty-Ethics-List-11-Year.aspx#2. Accessed August 26, 2011.
- Influenza vaccine viruses and reagents [Internet]. World Health Organization; 2011 [cited 2011 Aug 15]. http://www.who.int/influenza/vaccines/virus/en/. Accessed August 26, 2011.
- 10. Seasonal flu vaccine: questions and answers [Internet]. Centers for Disease Control and Prevention; 2011 Jul 1 [cited 2011 Aug 15]. http://www.cdc.gov/flu/about/qa/fluvaccine. htm. Accessed August 26, 2011.
- 11. Prevention and control of the influenza with vaccines: recommendations of the advisory committee on immunization practices (ACIP) [Internet]. Centers for Disease Control and Prevention; 2011 Aug 18 [cited 2011 Aug 26]. http://www.cdc.gov/mmwr/preview/mmwrhtml/mm60e0818a1.htm?s_cid=mm60e0818a1_e#tab. Accessed August 26, 2011.

The views and opinions expressed in this article are those of the authors and not necessarily those of Haymarket Media Inc.