Dear Colleagues:

Activities to improve population health can broadly be defined as public health practice. This issue of our newsletter highlights two public health practice topics of great importance to Veterans and to the health care providers who serve them: seasonal influenza and early diagnosis of HIV infection.

Seasonal influenza is a serious illness, especially among older Veterans and those with underlying medical conditions that put them at higher risk for complications. While the novel H1N1 influenza virus (“swine flu”) has been the focus of recent media attention, it is important that we not forget the risks posed by seasonal influenza virus. Let’s spread the word, to patients and providers alike, that vaccination is the best way to prevent seasonal flu. The article in this issue, developed by two of our VHA flu experts, contains useful information that you can share with colleagues and patients to help make them aware of the individual and community benefits of seasonal flu vaccination.

As with many other illnesses, early diagnosis of HIV infection is key to improved clinical outcomes. This is especially true given the natural history of untreated HIV infection. Namely, persons can be “silently” infected with HIV for years while the virus seriously damages their immune systems. Because of recent changes in VHA policies, that now permit verbal consent for HIV testing and promote routine HIV testing of all Veterans, we hope that voluntary HIV testing will become a standard component of routine medical practice. The “best practices” article in this issue provides several useful tips about bringing HIV testing “closer to patients.”

Like medical practice, public health practice evolves based on advances in knowledge and changes in need. We hope that the information in this newsletter will help you strengthen your public health practice so that you can provide the best possible care to our Veterans.

Wishing you Good Health,

Ronald O. Valdiserri, M.D., M.P.H.
Chief Consultant, Public Health SHG
Influenza – The Burden of Disease

Seasonal influenza is a big deal. Each year 5% to 20% of the U.S. population becomes ill with influenza. That means 15 to 60 million people in this country come down with an illness that is often much worse than a common cold—every year. Typical symptoms of influenza include fever, headache, sore throat, dry cough, and muscle aches. Influenza can last 5 to 10 days (or longer) and is associated with days spent in bed, missed work, and just plain misery. While persons in all age groups are susceptible to influenza, those in certain high-risk groups are particularly vulnerable to the serious complications of influenza such as secondary bacterial pneumonia or a worsening of underlying medical conditions that can result in hospitalization or death. These high-risk groups include young children, the elderly, residents of nursing homes, pregnant women, and others with underlying chronic medical conditions. When considering all of the manifestations of influenza and its downstream consequences, the total yearly impact in the U.S. is huge: tens of millions of illnesses and days of work loss, hundreds of thousands of excess hospitalizations and tens of thousands of excess deaths (table 1). The economic burden has been estimated at $87 billion.

Vaccine and Vaccination Recommendations

Annual vaccination is the best option for preventing and controlling influenza. Current seasonal influenza vaccines contain antigens for three different types of influenza viruses that are likely to circulate during the coming influenza season (H1N1, H3N2, and B virus antigens), and they are safe and effective. Among younger adults, vaccination is about 70% to 90% efficacious for preventing influenza illness. Vaccination also reduces work absenteeism. In the elderly, vaccination has been shown not only to prevent influenza illness but also hospitalization and death. For both groups, vaccination has also been shown to be highly cost-effective and even cost saving. High priority groups targeted for annual vaccination are listed in table 2. The Veterans Health Administration (VHA) regards seasonal influenza as a serious illness. Annual vaccination for high-risk patients and employees who work in health care settings is included among the VHA performance measures and monitors, and for 2009 – 2010, target vaccination rates are 75% for targeted patient groups, and 70% for employees.

In 2008, VHA’s vaccination rates for patients age 65 and older, patients between the ages of 50 to 64, and healthcare workers exceeded non-VHA benchmarks (figure 1). Nevertheless, there is still room for improvement. Many patients and healthcare workers remain unprotected against influenza.

Table 1.

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Cases Each Year in US</th>
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<tbody>
<tr>
<td>Influenza Illnesses</td>
<td>24.7 million cases</td>
</tr>
<tr>
<td>Outpatient visits</td>
<td>31.4 million visits</td>
</tr>
<tr>
<td>Hospitalizations</td>
<td>334,000 hospitalizations</td>
</tr>
<tr>
<td>Deaths</td>
<td>41,000 deaths</td>
</tr>
<tr>
<td>Days of hospitalization</td>
<td>3.1 million days</td>
</tr>
<tr>
<td>Days of work loss due to illness</td>
<td>44 million days</td>
</tr>
</tbody>
</table>

*Adapted from Vaccine 2007; 25:5086-96.

Table 2.

HIGH PRIORITY GROUPS TARGETED FOR ANNUAL VACCINATION WITH SEASONAL INFLUENZA VACCINES. *

- Children 6 months through 18 years of age
- Adults 50 years of age or older
- Residents of long term care facilities
- Persons with high-risk conditions
- Women who will be pregnant during flu season.
- Healthcare workers and others who may have close contact with persons in high-risk groups such as household members or employees of nursing homes

1 Including chronic underlying medical conditions such as chronic heart or lung disease, diabetes, cancer, renal dysfunction, immune compromise (including HIV), conditions that compromise respiratory function or the handling of respiratory secretions and that increase the risk for aspiration. Also included in this group are children and adolescents on long-term aspirin therapy who might therefore be at risk for developing Reye’s syndrome after influenza illness.

*Adapted from MMWR 2009; 58 (RR-8): 1-52.
Improving Vaccination Rates For Patients

The medical literature provides insights into factors that are associated with higher vaccine uptake rates. For patients, one of the most important predictors of vaccination is a healthcare provider’s recommendation. In one study among elderly and high-risk Veterans, influenza vaccination rates were more than 80% for patients with either positive or negative attitudes toward vaccination as long as the provider recommended it (figure 2). Similar findings have been observed in other studies as well. What the provider says makes a difference, and providers should take advantage of every opportunity to address the importance of vaccination with their patients.

It is important for patients to be aware of their personal risk for disease and the benefits of vaccination. In addition, concerns about vaccine safety are also identified as reasons for patients not being vaccinated. Patients are sometimes worried about “getting the flu from the flu shot.” Inactivated influenza virus vaccines (i.e., flu shots) are made from dead virus particles, so patients cannot develop influenza from flu shots. Furthermore, placebo controlled trials in healthy working adults and elderly Veterans have shown that the rates of systemic symptoms following influenza vaccinations are no different than following placebo injections (table 3). Healthcare providers can help patients to understand that influenza is a threat to their health, and that influenza vaccines are proven good and safe vaccines. Educational materials and provider conversations with patients should be clear on these points.

Other important factors to consider for enhancing patient vaccination rates are convenient access to vaccination such as walk-in clinics, patient reminders such as letters or postcards, and provider reminders and feedback. Among the most successful types of systems-based interventions are ones that incorporate standing orders that allow nurses, pharmacists, and other qualified providers to vaccinate patients without requiring a physician’s order for each individual patient. These kinds of organizational strategies can be highly successful and sustainable in a variety of settings including clinics, emergency departments, and inpatient wards.

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Table 3.

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<thead>
<tr>
<th>Side Effects Following Vaccination with Trivalent Inactivated Seasonal Influenza Virus Vaccine Compared to Placebo Injections.</th>
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</thead>
<tbody>
<tr>
<td><strong>Symptom</strong></td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Fever</td>
</tr>
<tr>
<td>Muscle aches</td>
</tr>
<tr>
<td>Fatigue</td>
</tr>
<tr>
<td>Headaches</td>
</tr>
<tr>
<td>Arm soreness at the injection site</td>
</tr>
</tbody>
</table>

Vaccination and Healthcare Workers

In addition to vaccinating their patients, healthcare workers should also make sure that they are vaccinated against seasonal influenza each year. The benefits of vaccinating healthcare workers include personal protection and avoidance of work absenteeism. However, the primary reason for including healthcare workers among the high priority groups targeted for annual seasonal influenza vaccination is patient safety. Adults — including healthcare workers — who become infected with influenza viruses may shed virus and be contagious for 24 hours or so before they develop symptoms and for up to 5 days or even longer after the onset of symptoms1. Infected healthcare workers can therefore expose their high-risk and vulnerable patients to influenza, sometimes with dire consequences for those patients. Annual vaccination can help us as healthcare workers make sure that we “first do no harm.”

One reason given by healthcare workers for not being vaccinated is concern about side effects9. As with our patients, it is important that healthcare workers are educated about the safety of influenza vaccines. Healthcare provider education should also address the seriousness of seasonal influenza and its complications for high risk patients and the reasons for targeting healthcare workers for vaccination. Successful vaccination programs for healthcare workers typically include the involvement of leadership and the provision of vaccine without cost and at convenient times and locations10. A strategy used in some medical centers is the use of mobile carts to “bring the vaccine to the healthcare workers” anytime, anyplace11.

Special Challenges for 2009-2010

For the 2009-2010 vaccination season, we will be facing special challenges. The novel H1N1 influenza virus (formerly called “swine flu”) will not be prevented by seasonal flu vaccine and will require a separate immunization. With the novel H1N1 influenza virus pandemic, it is even more important than ever for patients and healthcare workers to receive their seasonal influenza vaccine. In addition, when vaccine for H1N1 becomes available, it will also be important to follow vaccine recommendations. Receipt of both vaccines will provide the best protection against influenza this season. Education and communication between patients and providers and the use of systems-based strategies to develop organized programs will be critical for success.

Conclusion

Influenza is a common and sometimes deadly disease; it is also preventable. The VHA recommends annual vaccination for high-risk patients, for all healthcare workers, and anyone else who wishes to protect themselves from seasonal influenza. While VHA has vaccination rates that exceed non-VA benchmarks, we can still do more to keep the VHA community safe by encouraging patients and healthcare workers to get vaccinated against seasonal influenza. For additional information on VHAs influenza vaccination program and tools to facilitate successful programs, please visit VHA Web sites at http://www.publichealth.va.gov/flu.

REFERENCES

HIV testing should no longer be thought of as limited to high-risk patients or to settings where high risk patients are encountered, such as sexually transmitted disease (STD) clinics, chemical dependency recovery centers, or homeless shelters. Centers for Disease Control and Prevention (CDC) guidelines released in 2006 recommend that all persons between the ages of 13 and 64 seen in any health care setting should be routinely tested for HIV—rather than limiting testing to only those patients who have a history of risk.

Of the over 1.1 million people in the US infected with HIV, it is estimated that approximately 21% (231,000) do not know their status. Additionally, a substantial proportion of Americans who are first diagnosed with HIV are diagnosed late in the course of their infection. A recent CDC analysis shows that over one third (38%) of persons with a new HIV diagnosis developed AIDS within one year, suggesting that they had been infected for many years before they were diagnosed. These rates may be even higher among our VHA patients. An analysis of over forty-three hundred Veterans newly diagnosed with HIV showed that more than half first presented to care already having a diagnosis of AIDS.

CDC data suggest that those unaware of their HIV positive status are 3.5 times more likely to infect others than those who are aware that they are living with the virus. A major, recent analysis published in the medical literature, concludes that early initiation of antiviral therapy for HIV infection may significantly improve survival — yet another reason to promote early diagnosis of HIV infection.

Considering the lengthy asymptomatic nature of HIV, it may not occur to patients, who look and feel fine, to request an HIV test, thereby making it very important for health care providers to routinely raise this subject with their patients.

**Pretest Discussion**
Discussing HIV testing with patients need not be time consuming nor does it require special training. In a 2008 study, VA researchers worked with nurses to administer streamlined pre- and post-test HIV counseling which reduced these discussions from 20 minutes to 3-5 minutes with no loss in patient comprehension. The research showed that streamlined counseling with rapid HIV testing significantly increased testing and receipt of results over baseline levels.

As with all testing in VHA it is necessary to obtain consent prior to performing the test; patients should not be tested for HIV without their knowledge and consent. However, recent changes in VHA policy—effective as of August 17, 2009, no longer require signature consent for HIV testing. Now, patients are asked to give verbal consent for HIV testing which their providers document in the medical record. Effective as of August 17, 2009, scripted HIV pre-test counseling is no longer required. Instead patients must be provided with appropriate educational materials (see box above) and given the opportunity to have any questions answered before giving verbal consent for HIV testing (www1.va.gov/vhapublications/ViewPublication.asp?pub_ID-2055).
Testing Process

Administering a traditional HIV blood test can be the source of additional anxiety for the approximately 10 percent of patients (children and adults) who are “needle phobic.” Because of their fear of needles—and venipuncture—these patients are often adverse to seeking medical care, fearing contact with needles, thereby placing them at risk for failure to detect a treatable condition, such as HIV infection, in a timely fashion.

After consultation with the clinical laboratory, clinics may consider adopting non-invasive oral or urine based HIV testing methods for needle-phobic patients. Rapid HIV testing has other potential benefits for providers and patients. These providers may benefit from some providers when it comes to routinely providing HIV testing to their patients. These providers may benefit from using stress management skills along with increased peer support and professional guidelines detailing skills for delivering positive HIV test results, which typically involves becoming familiar with some selected phrases, preparing to disclose the news, disclosing the news, and responding to the patient’s reaction.

Research indicates that HIV positive patients whose treatment regimes include mental health care tend to have stronger compliance to medication adherence, thereby better controlling their viral loads—a clear medical benefit which may also translate into a prevention benefit (i.e., lower viral concentrations in blood and genital secretions may make the virus “more difficult” to transmit to a partner). Having mental health care referrals on hand prior to HIV testing, may help to reduce provider anxiety stemming from concerns of patient safety, thereby increasing the testing process and providing patients with access to essential supplemental care. A brief consult with staff members of the infectious disease staff or with the HIV Coordinator will help to develop an appropriate set of referrals.

Conclusion

Patients will ultimately decide for themselves if they wish to have an HIV test or not. But routinely offering HIV testing to all Veterans—not just those with a known risk factor for HIV infection—and making sure that patients understand the individual benefits of early diagnosis and treatment of HIV infection will help to ensure that we provide the best possible care to our Veterans. Providers can best serve their patients by informing them of the benefits of early HIV diagnosis, routinely offering HIV testing to all the Veterans they serve, ensuring the confidentiality of test results, and providing essential information, including necessary referrals. Providers can facilitate their comfort in HIV testing by partnering with local HIV experts who are willing to provide case consultation, accessing social (peer) support systems, and having appropriate referrals on hand for those who test positive.

REFERENCES

Citations in Public Health

Promising New Drug for HCV
This phase 2b, double-blind, placebo-controlled trial randomized 263 patients with chronic HCV genotype 1 infection to one of three telaprevir groups or to a control group. Treatment with telaprevir-based regimens significantly improved sustained virologic response rates although there were higher rates of discontinuation because of adverse events. Rash was the most common reason for discontinuation. Addition of telaprevir to peg-interferon alfa-2a and ribavirin in patients infected with hepatitis C genotype 1 who had not been treated previously significantly increased the rate of sustained virologic response. Phase 3 clinical trials of telaprevir are currently underway.


Pregnancy and Novel H1N1 Flu
This study summarizes the clinical experience with 34 confirmed or probable cases of pandemic H1N1 influenza in pregnant women reported to CDC from 13 states between April 15, 2009 to May 18, 2009. On the basis of this investigation, pregnant women seem to be at increased risk for complications from pandemic H1N1 influenza virus infection. These findings lend support to current recommendations to promptly treat pregnant women with pandemic H1N1 influenza infection with anti-influenza drugs.


Promoting HIV Testing
This analysis used national survey data from the 2004 Behavioral Risk Factor Surveillance System to look for associations between self-reported HIV testing rates and written informed consent requirements for the state of residence. Other state and individual-level differences were controlled for in the analysis. Overall, respondents living in a state with a statute requiring written informed consent for HIV testing were less likely to report testing in the previous year compared to respondents living in states with no such statute. This study’s findings suggest that the removal of written informed-consent requirements might promote the uptake of non-risk-based routine HIV testing which is currently recommended by public health experts.


HIV Prevention for Positives
This article provides a concise, state-of-the-science review of the literature pertaining to secondary prevention of HIV infection among persons living with HIV/AIDS, also known as “prevention for positives.” The studies reviewed include both American and international efforts. Although a number of interventions have been rigorously evaluated, more work needs to be done in designing and evaluating effective prevention programs for persons living with HIV/AIDS. Special areas of concern relate to a better understanding of the dynamics that influence risk behaviors as well as efforts to better implement HIV prevention services into the ongoing medical care of persons living with HIV/AIDS.


Tobacco and Public Health
This commentary reviews the progress made over the past 50 years to address the leading public health killer in the United States, tobacco use. The authors recognize that adult smoking rates in the U.S. have fallen from a rate of about 42% a half-century ago to less than 20% today. They believe that these decreases were the result of the enactment of newer and stronger policies and interventions and highlight additional steps that could be taken to accelerate decreases in rates of tobacco use. These include national media campaigns, an expanded array of drugs to treat nicotine addiction, greater access to tobacco use cessation treatments, and the enactment of comprehensive, clean indoor air laws.

PHSHG WELCOMES LORI ANN BOSSARD AS MANAGEMENT ANALYST

Ms. Lori Ann Bossard joined the PHSHG this summer as our Management Analyst. Ms. Bossard comes to our office from her former position at VA Central Office as a Program Specialist with the National Cemetery Administration, Management Support Division, Administrative Services Unit. Lori Ann brings 19+ years of administrative knowledge and skills to our group.

VA Public Health Portal Links:

  www1.va.gov/vhapublications/ViewPublication.asp?pub_ID=2056

- New Handbook on “Informed Consent for Clinical Treatments and Procedures” (VHA Handbook 1004.01)
  www1.va.gov/vhapublications/ViewPublication.asp?pub_ID=2055

Featured Public Health Products:

- VA Influenza Manual, 2009/2010

- Primary Care of Veterans with HIV Manual
  www.hiv.va.gov/pdf/va01-pr/prin-pub/pcm.pdf

- Management of hepatocellular carcinoma: Clinician’s guide from the Hepatitis C Resource Centers
  www.hepatitis.va.gov/pdf/va01-pr/prtop-08/HCCfinal.pdf

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Contact/Comments

If you have any comments or suggestions, we welcome your feedback. We will read and consider all comments and suggestions but, due to the large volume of correspondence received, may not be able to reply to each individual directly. Comments about this newsletter can be addressed to: publichealth@va.gov.

Dr. Lawrence “Bopper” Deyton, has accepted a new position as the first Director of the Food and Drug Administration’s Center for Tobacco Products, which will oversee implementation of the Family Smoking Prevention and Tobacco Control Act signed by President Obama in June 2009. This new legislation gives FDA regulatory authority to develop and implement effective public health strategies to reduce illness and death caused by tobacco products.

Dr. Deyton joined VA in 1998 after an 11 year career in the National Institutes of Health. In 2002, he established the Public Health Strategic Health Care Group, and served as Chief Consultant for the public health programs of the Office of Public Health and Environmental Hazards (OPHEH). In January 2006, he was appointed VA’s Chief Public Health and Environmental Hazards Officer within the OPHEH, and served in that capacity for the balance of his tenure at VA.

Bopper’s FDA appointment is a well-deserved honor, and will benefit the entire public health community. Nevertheless, we will certainly miss his passion, commitment, and expertise, which brought a high level of clarity and excellence to the broad mission of the OPHEH. We wish him well in this new phase of his career.