News

• Vaccine effectiveness (VE) of trivalent influenza vaccine is better among older adults than previously thought, a study reports, but VE diminishes as frailty increases. Andrew et al. conducted the case–control study in 38 Canadian hospitals in six provinces during the 2011–12 influenza season, which showed that cases (320 older adults who tested positive for influenza following hospitalization for any of several respiratory infections) had higher baseline frailty than did 564 controls (who tested negative during hospitalization for respiratory infections). The study appears in the August 15 Journal of Infectious Diseases.

• In one of two editorials accompanying the above study, Neuzil and Chen advocate for influenza vaccination of those in contact with frail older adults as a means of using herd immunity to protect this group: “Influenza vaccine prevents hospitalization—a serious disease endpoint—in addition to ambulatory laboratory–confirmed influenza, the outcome measure for most clinical trials and case–control studies. Furthermore, frailty was more important than age as a predictor of vaccine performance. This could have implications in regard to how we develop and deploy newer, more immunogenic influenza vaccines. The results emphasize the importance of influenza vaccine for everyone who has contact with frail older persons, to reduce the chances of transmitting influenza viruses to them.”

• Following participation in a double-blind, placebo-controlled trial, women who had received the trivalent inactivated influenza vaccine during pregnancy gave birth to babies who had fewer hospitalizations for all-cause acute lower respiratory tract infections (ALRIs) during the first 3 months of life, a study shows. Writing in the October 1 issue of Clinical Infectious Diseases, investigators reported that of the total 2,049 infants in the study, there were 19 hospitalizations from ALRIs during the first 3 months among those born to 1,026 vaccine recipients, compared with 33 hospitalizations from ALRIs among those born to 1,023 women in the placebo group.
News (Continued)

- **Hepatitis A vaccinations** are being used to quell an outbreak of the virus in San Diego (California) County that has produced nearly 500 cases and 18 deaths, primarily among homeless people and those who use illicit drugs. The county’s Health & Human Services Agency declared a local public health emergency on September 1. Immunization efforts include administering vaccine to at-risk individuals in health care systems, clinics, and pharmacies as well as using mass vaccination events, mobile vans, and immunizers on foot. Cases have also been reported in other parts of California and in Arizona and Utah.

Resources

- New vaccine information resources for use during the current influenza season are available from the Alliance for Aging Research. They include a fact sheet about preventive services available through Medicare, a “truth teller” fact sheet about vaccines, a quick guide to recommended vaccines for adults, and a “pocket film” on vaccines in older adults that is available in English and Spanish.

COMMUNICATIONS

Management of chronic conditions can become the focus of any health encounter for patients with issues such as diabetes, heart disease, or lung disease. With so many acute and long-term problems that may present, immunizations tend to fall low on the priority checklist during an office visit. But don’t think of immunizations as one more thing to do. Increased risk of hepatitis in patients with diabetes, or complications of influenza or pneumococcal infections for people with heart and lung disease, make office visits a great opportunity to pair conversations about chronic disease with the need for immunization.

When talking to patients, focus on the effects of vaccine-preventable diseases in people with their chronic conditions. Discuss the importance of maintaining health in ways that can be controlled: diet, exercise, and vaccines. Pairing the conversation can be an important step in keeping patients with chronic conditions healthy.
Vaccines can be lifesavers for anyone, but they are especially important in people at highest risk of complications of infections. In addition to the well-known susceptibilities of older people, those with certain chronic conditions are well advised to keep their vaccinations up to date. Vaccines are the only available means of reducing specific risks that result from the pathophysiology of several chronic diseases.

Conditions that increase risk of infection include heart disease and stroke, lung disease and asthma, diabetes, asplenia, HIV infection, liver or renal disease, and weakened immune systems. For people with some of these conditions, specific vaccines are recommended in addition to the usual adult vaccines. For others, no additional vaccines are required, but the importance of receipt of the usual adult vaccines is heightened. Even in people whose conditions are well controlled by medications, vaccines are important components of risk-reduction strategies in chronic disease.

The reasons vaccines are important in adults with chronic diseases are many. Some conditions make people more susceptible to infections, while others create situations in which infections can more easily produce complications.

Asplenia is a condition that illustrates the importance of basic anatomy and physiology in development of human disease. Patients born without a functional spleen are at high risk of infection, particularly those caused by encapsulated bacteria (e.g., *Haemophilus influenzae* type b and *Pneumococcus*), because that organ is not filtering microbes from the blood as would a normal spleen. Vaccination provides critically important protection against pathogens in these patients.

The Advisory Committee on Immunization Practices (ACIP) of the Centers for Disease Control and Prevention (CDC) recommends these adult vaccines for patients with asplenia: influenza every year; tetanus–diphtheria–acellular pertussis (Tdap) or tetanus–diphtheria (Td); *H. influenzae* type b (Hib) if not previously vaccinated with this vaccine; pneumococcal; meningococcal ACWY and B; zoster if older than age 60 years; human papillomavirus (HPV) if the patient is a man up to age 21 years or woman up to age 26 years; measles–mumps–rubella (MMR) if born after 1956 and have not had this vaccine or otherwise have immunity to these diseases; and varicella if born after 1979 and have not had two doses of this vaccine or otherwise have immunity to chickenpox.

Similarly extensive lists of vaccines are recommended in patients with chronic liver or renal disease. These organs are involved in a broad range of physiologic processes that protect people from infections; their loss must be compensated for by using vaccines, antibiotics, and other interventions. Patients living with HIV also need these and sometimes other vaccines.
Primary care and specialty physicians often see adult patients with heart disease or stroke, diabetes type 1 or 2, lung disease or asthma, or immune systems weakened by disease, chemotherapy, or other drugs. ACIP emphasizes the importance of keeping up with the regular adult vaccinations in patients with any of these conditions. Those vaccines are as follows:

- Influenza vaccine to protect against seasonal influenza every year.
- At least one lifetime dose of Tdap with boosters at least every 10 years with Td (or Tdap, if Td is not available) vaccine.
- One or both pneumococcal vaccines to protect against serious pneumococcal diseases, depending on which chronic diseases are present.
- Zoster vaccine to protect against shingles at age 60 years or older.

In addition, patients with diabetes need protection against hepatitis B virus because of their increased risk of acquiring this pathogen during skin pricks for blood glucose assays and injections of insulin or other antidiabetic agents.

When it comes to health promotions, just getting people to realize that common, relatively “silent” conditions such as diabetes and hypertension are not an inevitable part of life can be difficult. Adding in a vaccine message creates more complexity in an already challenging situation.

Yet 60% of global deaths are caused by chronic diseases, the World Health Organization reports; half of the 35 million people who died from chronic diseases in 2005 were under age 70 years, and women are affected as often as men. As vaccine advocates or immunizers, GSA members can increase vaccination rates among older adults with chronic diseases by making them realize how important these preventive interventions are. Answer questions, address concerns, and debunk myths about vaccines in interactions with patients, family, and friends. The scientific evidence of vaccine effectiveness and safety is solid. Online postings and chatboards may or may not be accurate, and even the most genuine and heartfelt postings are just “N of 1” stories.
In the United States, the fragmented health care system and large number of people who lack health insurance create perhaps the greatest barriers to patients with chronic diseases staying current on adult vaccinations. For those with insurance, confusion about which vaccines are indicated for a particular patient could cause people not to get immunized, while others simply cannot afford the vaccines. People covered under Medicare encounter Part B versus Part D issues, and those who did not opt in to Part D will be insured only for products covered under the Part B provision.

In addition to working to eliminate policies that create barriers to immunizations, GSA members can help educate people about the vaccine coverage with no out-of-pocket costs under the Affordable Care Act (ACA). Employer-sponsored insurance that offers ACA-mandated essential benefits should provide vaccines at no costs to beneficiaries, and Part B vaccines are covered under Part B with no copayment or deductible. Part D vaccines can have out-of-pocket costs, depending on the plan.

**SOURCES AND RESOURCES**

- CDC Adults With Health Conditions resource page
- American Lung Association Missed Opportunities report
- American Association of Diabetes Educators fact sheet