New Herpes Zoster Vaccine Approved

Julie Rose, MN, RN

Older adults are at increased risk for shingles and post herpetic neuralgia because their immune response begins to decrease at about age 50. A shingles vaccine, Zostavax, has been available and recommended for several years. The FDA and ACIP have approved a new recombinant herpes zoster vaccine (Shingrix, GlaxoSmithKline) that may provide better protection against shingles in older adults. More information on this new vaccine is expected to be published in MMRW shortly.

Shingrix is approved by the FDA for adults 50 and over, but the ACIP recommends it for adults 60 and over. ACIP recommends the new vaccine over the older, live attenuated virus version (Zostavax, Merck), albeit with a narrow margin. Some panel members were hesitant to recommend the newer vaccine because of caution about a new vaccine, the novel adjuvant it contains, and possible supply issues.

Efficacy Estimates for Shingrix and Zostavax

<table>
<thead>
<tr>
<th></th>
<th>Ages 60-69 Years</th>
<th>Ages 70-79 Years</th>
<th>Older Than 80 Years</th>
</tr>
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<tbody>
<tr>
<td>Shingrix</td>
<td>97%</td>
<td>91%</td>
<td>91%</td>
</tr>
<tr>
<td>Zostavax</td>
<td>64%</td>
<td>41%</td>
<td>18%</td>
</tr>
</tbody>
</table>

Source: CDC

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Shingrex efficacy appears to wane at a slower rate than that of Zostavax during the first four years of use. Possible drawbacks with Shingrex include the need for two doses, instead of one, greater chance of injection site soreness, and possible fever.

References: Medscape, aafp.org, cdc.org

Antibiotic Stewardship
Greg Stern MD, Health Officer

With influenza, RSV, rhinovirus, and other viral respiratory infections in high gear, clinicians are often asked by patients for antibiotics, or prescribe to prevent secondary bacterial infections, or to insure that they don’t miss a bacterial infection. These are understandable motives for prescribing antibiotics, but they are not good practice. Unnecessary antibiotic use can drive antibiotic-resistance, increase cost, and result in avoidable adverse reactions, including C. difficile infections.

Since 2014, the CDC has been working on a national effort to address increasing antibiotic resistance, focusing on appropriate prescribing and reduction of antibiotic use in food production. Washington State Department of Health has developed The EQuIP program (Education, Quality and Infection Prevention) to address antibiotic stewardship in outpatient, inpatient, and extended care facilities. The program website has links to practice guidance for the treatment of uncomplicated ear and respiratory tract infections, and a toolkit for establishing an antibiotic stewardship program in your clinic. Antibiotic stewardship is a commitment to optimize antibiotic use to improve your patients’ health outcomes, and is a key component of patient safety and quality of care.

“Antibiotic use is the key driver of antibiotic resistance. About 80% of antibiotics prescribed, and 60% of antibiotic costs, are for outpatients and 30-50% of antibiotics prescribed are either unnecessary or inappropriate. Therefore, focusing stewardship efforts in ambulatory settings can have a big impact on minimizing inappropriate antibiotic use and reducing antibiotic-associated adverse events such as antibiotic resistance, Clostridium difficile infections, and allergic reactions.” (from JumpStart Stewardship - Implementing Antibiotic Stewardship in Ambulatory Settings)

References:
EQuIP for Ambulatory Care Clinics (DOH) https://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/HealthcareAssociatedInfections/EQuIP/AmbulatoryCare
Antibiotic Prescribing and Use (Adult and Pediatric Treatment Recommendations) (CDC) https://www.cdc.gov/antibiotic-use/community/hcp/outpatient-hcp/index.html
The Core Elements of Outpatient Antibiotic Stewardship (CDC) https://www.cdc.gov/antibiotic-use/community/pdfs/16_268900-A_CoreElementsOutpatient_508.pdf

CDC HEALTH ADVISORY: Seasonal Influenza A(H3N2) Activity and Antiviral Treatment of Patients With Influenza
Norovirus Season
Josh Leinbach, RS

It’s the time of year again when the terms “stomach flu” and “food poisoning” become heard more often and people increasingly report symptoms of abdominal pain, vomiting and diarrhea lasting 1-3 days.

What those terms, “stomach flu” and “food poisoning” often—but certainly not always—refer to is an infection with norovirus. Norovirus is neither a flu virus nor is it always contracted via food, so both common terms “stomach flu” and “food poisoning” are misleading.

Norovirus is highly contagious and may be transmitted by an infected person, contaminated food or water, or by touching contaminated surfaces and then your mouth. Noroviruses survive quite well outside the body, and may survive on countertops, door knobs and hand rails for weeks. An infected person can shed billions of viral particles, and it can take as few as 10-18 viral particles to infect someone.

Norovirus infections occur year round, but over 80% occur between November and April, according to the CDC. Each year norovirus causes 19 – 21 million acute illnesses, with 56,000 – 71,000 hospitalizations and 570 – 800 deaths, primarily among young children and the elderly.

Norovirus can spread quickly among staff and patrons of care facilities and over half of the outbreaks in the US have been in health care facilities including hospitals and nursing homes. Proper hygiene, sanitation and use of personal protective equipment (PPE) are very important in any setting where norovirus is suspected.

Persons infected with norovirus can be contagious 24 hours before having symptoms. They are most contagious while symptomatic and into the first few days after symptoms resolve. It is important to understand a person infected with norovirus is still contagious for up to two weeks after illness, and especially so in the first 48 hours after symptoms resolve. People that work in health care that become infected with norovirus should not return to work until at least 48 hours after symptoms resolve.

It is important to educate everyone about proper hygiene, including good hand washing practice, not just using hand gels. Hand gels must have an alcohol content of greater than 60% to be effective, and even then are not a substitute for hand washing.

Even if a hand sanitizer “kills 99.99% of germs” a viral load on contaminated hands of an ill person may be 1 million to 1 billion particles. Even if 99.99% are eliminated, 100 to 100,000 viral particles may still remain. An infectious dose of norovirus is approximately 18 viral particles, and on contaminated hands that used only hand gel there may still be 5.5 to 5,500 infectious doses.

Fortunately, most healthy persons infected with norovirus recover without treatment. Special care may be needed if illness persists, is complicated by other underlying factors, or the patient is immunocompromised, young, or elderly.

For more information:
http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/Norovirus
https://www.whatcomcounty.us/2760/Norovirus
CONFIRMED & PROBABLE CASES OF SELECTED NOTIFIBLE CONDITIONS, WHATCOM COUNTY

<table>
<thead>
<tr>
<th>Condition</th>
<th>2017</th>
<th>2016</th>
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<tbody>
<tr>
<td>Campylobacteriosis</td>
<td>90</td>
<td>55</td>
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<tr>
<td>Chlamydia</td>
<td>706</td>
<td>692</td>
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<tr>
<td>Cryptosporidiosis</td>
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<tr>
<td>Giardiasis</td>
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<tr>
<td>Gonorrhea</td>
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<td>Hepatitis B, acute</td>
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<td>0</td>
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<td>Hepatitis B, chronic</td>
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<td>Hepatitis C, acute</td>
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<tr>
<td>Hepatitis C, chronic</td>
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<td>Hepatitis A</td>
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<td>HBsAg + pregnancy</td>
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<tr>
<td>Listeriosis</td>
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</table>

<table>
<thead>
<tr>
<th>Condition</th>
<th>2017</th>
<th>2016</th>
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<tbody>
<tr>
<td>Measles</td>
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<td>0</td>
</tr>
<tr>
<td>Meningococcal Disease</td>
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<tr>
<td>Mumps</td>
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<tr>
<td>Pertussis</td>
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<td>Salmonellosis</td>
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<tr>
<td>Shiga toxin-producing E.coli</td>
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<td>16</td>
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<tr>
<td>Shigellosis</td>
<td>6</td>
<td>5</td>
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<td>Suspected Rabies Exposure</td>
<td>11</td>
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<tr>
<td>Syphilis</td>
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<td>13</td>
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<td>Tuberculosis, Class 3</td>
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<tr>
<td>Vibriosis (non-cholera)</td>
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<tr>
<td>Yersiniosis</td>
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Cases listed are preliminary and represent only those reported to the local health department. Cases are counted at the time of report, not by date of onset.

Print out an updated Notifiable Conditions poster for your office:

- Health Care Provider
- Health Care Facility
- Laboratory

Communicable Disease Team Staff Bio:

Darlene Saarheim, Clerk III

Darlene has worked for Whatcom County for 35 years. Darlene graduated from Bellingham Technical College in 1972 and started working for the Treasurer’s Office as a Revenue Deputy from 1973 until 1986 when she decided to stay home to raise her two boys. In 1991 she decided that the county was where she wanted to once again work so she applied for a part time position with the Health Department working 11 hours a week testing food handlers. She did this for four years until eventually becoming full time, working as a clerk in the Tuberculosis Program. When an opening was available in the Children with Special Healthcare Needs Program she applied to work that program until the program was discontinued. She now is the Communicable Disease Clerk.

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