



**CITY OF PHILADELPHIA
DEPARTMENT OF PUBLIC HEALTH
DIVISION OF DISEASE CONTROL
IMMUNIZATION PROGRAM**

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The Newsletter of the West Philadelphia Varicella Active Surveillance Project (VASP)

Number 19

January 2006



Remember to report all cases of chickenpox and shingles to VASP. To report a case, call Mia Renwick, MPH at (215)685-6833 or Katie Beyer at (215)685-6869. Reports also can be faxed to VASP at (215)685-6806.

Welcome to Mia Renwick, MPH, the new VASP Clinical Researcher!

Mia has replaced Donovan Robinson, MPH as the VASP contact person for surveillance sites. She can be reached by phone at (215)685-6833 or email at mia.renwick@phila.gov.

Your support and participation in VASP activities are greatly appreciated!

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Preventing Shingles in Adults with VZV Vaccine

Herpes zoster (HZ), more commonly known as "shingles", is caused by reactivation of latent varicella zoster virus (VZV) remaining in the body after primary varicella (chickenpox) infection. The triggers for reactivation of VZV are poorly understood, and protection may involve external boosting, internal boosting, or other mechanisms. Risk factors associated with HZ include increasing age and impaired cell-mediated immunity. The lifetime risk for HZ has been estimated to range from 10% to 20% in the general population. More than two-thirds of all HZ cases occur in people who are 50 years of age and older according to epidemiologic studies conducted in the United States (US). Moreover, it is estimated that nearly one-half of individuals reaching 85 years of age will have an episode of HZ.

A Food and Drug Administration (FDA) advisory panel has recommended the agency approve Zostavax® (Merck), a shingles

vaccine for use in persons aged 60 to 80 years. Official FDA approval licensing the shingles vaccine for use in the US is still pending and is expected in early 2006. Like the varicella vaccine, the shingles vaccine is a live attenuated vaccine providing protection against VZV. While varicella vaccine works to prevent primary VZV infections (chickenpox), the shingles vaccine acts to boost an individual's cell-mediated immunity to VZV in order to prevent reactivation of latent VZV resulting in HZ. Findings from clinical trials show the shingles vaccine to provide 51% protection against HZ and 67% against Post Herpetic Neuralgia (PHN) among healthy person 60 years of age and older.



What is Post Herpetic Neuralgia?

Post herpetic neuralgia (PHN), the most frequent debilitating complication of HZ is persistent pain at location of the VZV reactivation after the HZ rash has resolved.

New VASP Activities for the New Year

VASP has implemented some exciting new initiatives related to herpes zoster (HZ) in adults including the expansion of our existing surveillance system in West Philadelphia to better conduct adult HZ surveillance. The objectives for expanded adult herpes zoster surveillance are:

- 1) To document the incidence of HZ and Post Herpetic Neuralgia (PHN) among older adults in West Philadelphia before and after licensure of the shingles vaccine.
- 2) To broaden our ongoing evaluation of the varicella vaccination program's impact on both varicella and HZ occurrence and address concerns regarding potential increases in adult HZ associated with the varicella vaccination program.

- 3) To monitor the amount of varicella morbidity contributed by varicella zoster virus (VZV) transmission from HZ cases, given the new goal of varicella disease elimination for the varicella vaccination program in the United States.

We have enrolled new reporting sites located in West Philadelphia into our surveillance system to meet the new objectives by helping us better capture adult HZ cases occurring in this area. The new sites include long-term care facilities, dermatologists, pain management clinics, family practices, and internists. **We would like to welcome the new reporting sites to the project and look forward to conducting active disease surveillance for both varicella and HZ with all VASP sites during the new year.**

ATTENTION HEALTHCARE PROVIDERS

VASP needs your help identifying unvaccinated varicella cases in a timely manner for a study evaluating Varicella Zoster Virus (VZV) laboratory diagnostic methods in the post-vaccine-licensure era. Reports from healthcare providers like you who see patients early in the course of illness are central to this study, as only unvaccinated varicella cases reported to VASP within 72 hours of rash onset are invited to participate in the study.

Call (215)685-6833 or (215)685-6869 to report any suspected varicella or herpes zoster case.

New Combined Measles, Mumps, Rubella, and Varicella Vaccine Licensed

In September 2005, the Food and Drug Administration (FDA) approved a new combination vaccine providing protection against measles, mumps, rubella, and varicella (ProQuad®, Merck). During the MMRV vaccine clinical trials, the new combined vaccine was found to be as safe and immunogenic as MMR and varicella vaccines given at the same time. MMRV vaccine is recommended for persons 12 months to 12 years who are indicated to receive vaccination against measles, mumps, rubella, and varicella. As with other combined vaccines, MMRV vaccine is preferred over concomitant vaccination with MMR and varicella vaccines, since

it reduces the number of injections the child receives during a healthcare provider visit.



The Philadelphia Department of Public Health's Vaccine for Children (VFC) Program anticipates MMRV vaccine will be distributed to participating healthcare providers in 2006 as supplies become available. For more information on MMRV vaccine indications and usage, view the *Morbidity Mortality Weekly Report (MMWR)*, notice to readers regarding MMRV vaccine licensure online at: <http://www.cdc.gov/mmwr/PDF/wk/mms5447.pdf>

Notes from the Advisory Committee on Immunization Practices (ACIP)

Changes to Recommendations for the Use of Varicella Vaccine on the Way...

Guidelines for the use of varicella vaccine are expected to change in the near future. In June 2005, the Advisory Committee on Immunization Practices (ACIP) voted to expand current recommendations for use of varicella vaccine and revised the criteria for varicella zoster virus (VZV) immunity. These draft amendments are under review by the Centers for Disease Control and Prevention (CDC) and the Department of Health and Human Services (DHHS) and are pending official approval.

Of note, ACIP voted to recommend the use of a second dose of varicella vaccine for vaccinated 1 to 12 year olds during varicella outbreaks as a control measure when resources permit. The Philadelphia Department of Public Health (PDPH) has incorporated this strategy into our Guidelines for Varicella Outbreak Prevention and Control in School or Childcare Settings for the 2005-2006 school year. When a varicella outbreak (5 or more cases within a 3-week period) occurs at a school or childcare facility, PDPH recommends administrators send a letter to parents explaining that a second dose of varicella vaccine can be given to prevent disease in previously vaccinated children. Call Karl Heath, RN at (215)685-6841 for copies of the policy including the second dose letter for use during outbreaks.

ACIP also voted in favor of wider use of the varicella vaccine for susceptible asymptomatic or mildly symptomatic HIV-infected children ≥ 12 months by lowering the CD4+ T-lymphocyte count cut point for vaccination from $\geq 25\%$ to $\geq 15\%$. Other provisional ACIP recommendations to expand use of varicella vaccine among adolescents and adults included: middle school, high school, and college entry requirements for VZV immunity; antenatal VZV immunity screening programs with postpartum

vaccination; and a statement recommending varicella vaccination for any healthy susceptible person aged ≥ 13 years. Lastly, the revised criteria for VZV immunity proposed by ACIP were as follows:

- Written documentation of age-appropriate varicella vaccination
- Born in the United States (US) before 1966
- A history of varicella disease for non-US born persons born before 1966 and US born persons born between 1966 and 1997. (**PDPH will distribute further guidance on recall vaccination programs for children born during or after 1998 with histories of disease when the recommendations are made official.**)
- History of herpes zoster
- Laboratory evidence of VZV immunity or laboratory confirmation of disease

ACIP Addresses Limited VZIG Supply...

The only producer of varicella zoster immune globulin (VZIG) in the US has discontinued production. VZIG is recommended for post-exposure prophylaxis of persons susceptible to VZV at high risk for severe varicella. When given within 4 days of a VZV exposure, VZIG can prevent or modify varicella disease. At their October 2005 meeting, ACIP developed provisional recommendations for the use of intravenous immune globulin (IGIV) when VZIG is not available. For further guidance when managing a high risk patient who is susceptible to VZV in a post exposure situation, please contact Barbara Watson, MBChB, Medical Specialist, Immunization Program, PDPH at (215)685-6842.

The new ACIP recommendations are not official until approved by both DHHS and CDC and published in the *Morbidity and Mortality Weekly Report (MMWR)*. View provisional ACIP recommendations online at: http://www.cdc.gov/nip/recs/provisional_rec



View VASP findings and other project-related information on the Web. Visit the new CDC-VASP Website at:
<http://www.cdc.gov/nip/diseases/surv/vasp/default.htm>

Missed the 2005 National Immunization Conference (NIC)? NIC presentations are available online at:
http://cdc.confex.com/cdc/nic2005/techprogram/meeting_nic2005.htm

View VASP presentations at the following links:

Validity of Reported Varicella History As A Marker for Varicella Zoster Virus (VZV) Immunity Among Different Age Groups:
http://cdc.confex.com/cdc/nic2005/techprogram/paper_8060.htm

Varicella Outbreak Control and Prevention for Philadelphia Schools and Daycares During the 2003-2004 School Year:
http://cdc.confex.com/cdc/nic2005/techprogram/paper_8158.htm

Philadelphia Immunization Coalition (PIC)

"Working Together in Philadelphia to Achieve Immunizations Across the Lifespan"

PIC is a network of representatives from public, private, community, and charitable agencies who are working together to improve the immunization status of Philadelphia residents.

Join the Philadelphia Immunization Coalition (PIC) Today!

Email your name, organization, address, telephone number, fax number, and email address to picimmunize@aim.com

Questions about PIC? Call Karl Heath, RN at (215)685-6841