



West Virginia EPI-LOG

Chickenpox outbreak underscores importance of childhood immunization

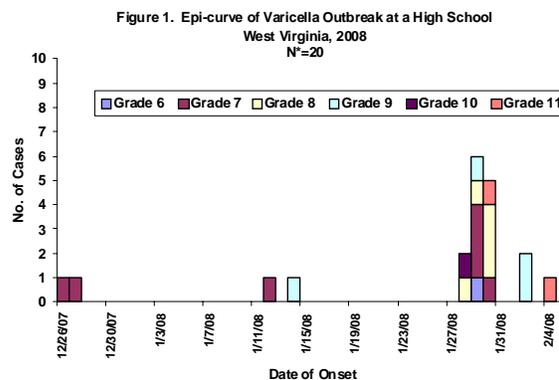
On February 4, 2008, the Infectious Disease Epidemiology Program (IDEP) of the WVDHHR Bureau for Public Health, Disease Surveillance and Disease Control was informed by the local county health department of an outbreak of varicella (“chickenpox”) occurring at a local private high school.

Investigation revealed that the initial case became ill on December 26, 2007. Two weeks later, 2 cases were reported, followed by a cluster of cases a month after the initial case (see figure 1). The last case became ill on February 4, 2008.

All of the cases were previously healthy students from the local private high school. There were no reports of family members or school staff becoming ill. There were no reports of varicella outbreaks from other schools within the county.

The private school reported varicella occurring among grades 6 to grade 11 students. The cases range in age from 11 years old to 17 years old.

(See *Varicella*, page 2)



*Two cases from Grade 7 who have no Date of Onset are not included. Total cases = 22

Statewide Disease Facts & Comparisons

A quarterly publication
of the West Virginia
Division of Surveillance
and Disease Control

IN THIS ISSUE:

- Outbreak of varicella at private high school
- One in four American girls has an STD
- Female chlamydia and gonorrhea in WV
- “Bugs and Bites” conference May 15

Division of Surveillance & Disease Control

AIDS Surveillance	(304) 558-2987
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STD Program	(304) 558-2950
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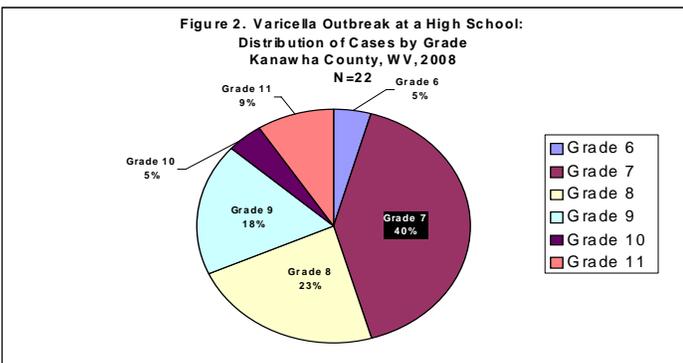
Joe Manchin III, Governor
Martha Walker, Secretary (DHHR)

(*Varicella*, continued from page 1)

The table below shows the distribution of cases and the attack rate among the affected grades (and agegroup); the highest attack rate was observed among grade 7 students (12.33%). All the cases were clinically diagnosed, none was confirmed by a laboratory test.

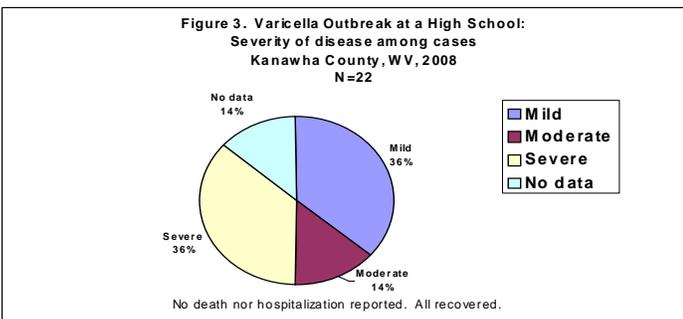
Grade	Age group	Number of cases	Number enrolled	Attack Rate (%)
Grade 6	11-12 years	1	66	1.52
Grade 7	12- 13 years	9	73	12.33
Grade 8	13-14 years	5	75	6.67
Grade 9	14-15 years	4	69	5.80
Grade 10	15-16 years	1	61	1.64
Grade 11	16-17 years	2	69	2.90
Total		22	413	

Figure 2 illustrates the distribution of cases among the different grades, with close to half of the cases coming from grade 7:



All of the cases recovered. There were no hospitalizations or death. Figure 3 illustrates the distribution of disease severity among cases. About a third of cases reported severe varicella. Severity of disease is described as:

- Mild – few scattered lesions on the body
- Moderate– number of lesions between mild and severe
- Severe – lesions numerous enough to almost touch; normal skin difficult to see between lesions



Among cases, 55% had received 1 dose of varicella vaccine, while less than half have had not received it before. None of the cases received 2 doses of varicella vaccine (see figure 4).

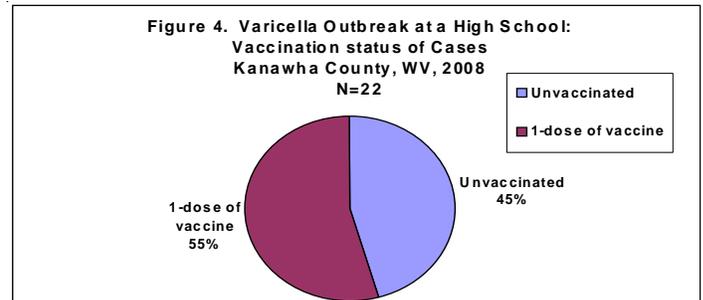
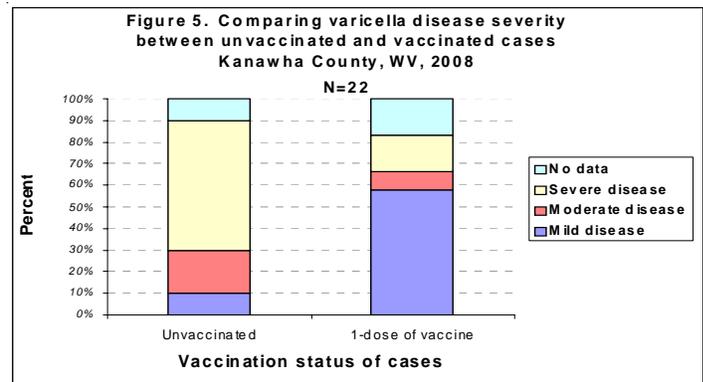


Figure 5 compares the percent distribution of varicella disease severity between the vaccinated and the unvaccinated group. Among the unvaccinated group, 60% reported severe disease while the most of the cases (58%) in the vaccinated group experienced mild varicella disease.

Among the vaccinated group (n=12), 10 (83%) received varicella vaccine between 10 and 13 years ago, while 2 (17%) cases did not provide date of last varicella vaccine.



The local health department in collaboration with the county school district and private school staff developed and initiated measures to control the outbreak. Letters were sent to parents to inform about the disease; cases were advised to stay home until non-infectious (i.e. all lesions scabbed); varicella vaccine was offered and provided to the school's students, staff and staff family members.

Active surveillance continued until late February 2008. No new cases related to the outbreak have been reported since the last case became ill on February 4, 2008. ☒

CDC study finds one in every four girls has an STD

A CDC study released on March 11 estimates that one in four (26 percent) young women between the ages of 14 and 19 in the United States – or 3.2 million teenage girls – is infected with at least one of the most common sexually transmitted diseases (human papillomavirus (HPV), chlamydia, herpes simplex virus, and trichomoniasis). The study, presented at the 2008 National STD Prevention Conference in Chicago, is the first to examine the combined national prevalence of common STDs among adolescent women in the United States, and provides the clearest picture to date of the overall STD burden in adolescent women.

Led by CDC's Sara Forhan, M.D., M.P.H., the study also finds that African-American teenage girls were most severely affected. Nearly half of the young African-American women (48 percent) were infected with an STD, compared to 20 percent of young white women.

The two most common STDs overall were human papillomavirus, or HPV (18 percent), and chlamydia (4 percent). Data were based on an analysis of the 2003-2004 National Health and Nutrition Examination Survey.

"Today's data demonstrate the significant health risk STDs pose to millions of young women in this country every year," said Kevin Fenton, M.D., director of CDC's National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention. "Given that the health effects of STDs for women – from infertility to cervical cancer – are particularly severe, STD screening, vaccination and other prevention strategies for sexually active women are among our highest public health priorities."

"High STD infection rates among young women, particularly young African-American women,

are clear signs that we must continue developing ways to reach those most at risk," said John M. Douglas, Jr., M.D., director of CDC's Division of STD Prevention. "STD screening and early treatment can prevent some of the most devastating effects of untreated STDs."

CDC recommends annual chlamydia screening for sexually active women under the age of 25. CDC also recommends that girls and women between the ages of 11 and 26 who have not been vaccinated or who have not completed the full series of shots be fully vaccinated against HPV.

The study of STDs among teenage girls is one of several presented today at the 2008 National STD Prevention Conference that highlights the significant burden of STDs among girls and women, and identifies creative prevention strategies for reducing the toll of STDs in the United States.

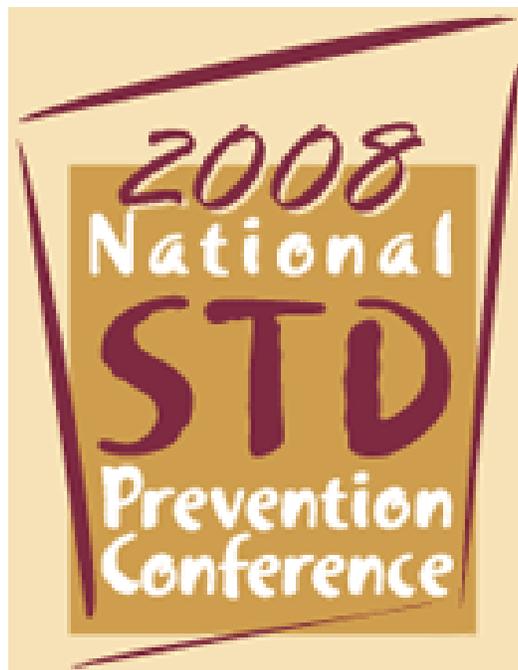
Two other studies featured at the conference point to missed opportunities for STD testing, and underscore that it is critical for STD screening to be included in comprehensive reproductive health services for young women.

A study by CDC's Sherry L. Farr and colleagues found that while the majority of sexually active 15- to-24 year-old young women (82 percent) receive contraceptive or STD/HIV services, few receive both (39 percent). In addition, only 38 percent of a subset of young

women who reported receiving contraceptive services associated with unprotected sex (e.g., pregnancy testing) also received STD/HIV counseling, testing or treatment, which indicates that many women at high risk are not receiving necessary prevention services.

A separate study, by CDC's Shoshanna Handel and the New York City Department of Health and Mental Hygiene, examined STD screening rates among young women seeking emergency contraception, which would suggest recent unprotected sex. The study found that just 27 percent were screened for chlamydia or

(See *STDs*, page 6)



"Bugs and Bites" conference slated for May 15th

Spring has sprung! The arrival of warmer weather in West Virginia brings with it seasonal public health concerns. Public health professionals, prepare for the season by attending the Infectious Disease Epidemiology Program's Second Quarter Training Conference: "Bugs and Bites".

"Bugs and Bites" is slated for May 15th at the Holiday Inn & Suites in Beckley, WV. The training will

address arboviral diseases, issues related to animal bites and foodborne illnesses. The conference is appropriate for all of our public health partners. Continuing education credits will be offered for registered sanitarians and registered nurses.

To register for the training conference, or for more information, please visit WVTRAIN at <https://wv.train.org>. The WVTRAIN Course ID # is 1012665. Christina Lynch, IDEP Training Coordinator, is also available to answer questions. She can be reached at 304.558.8312 or christinalynch@wvdhhr.org. ☒

Bugs & Bites

IDEP Second Quarter Training
Holiday Inn & Suites
Beckley, WV 25801

May 15, 2008

Agenda



8:30 am—9:00 am	REGISTRATION
9:00 am—9:10 am	Welcome/Opening Remarks <i>Christina Lynch, BSW, IDEP Training Coordinator</i>
9:10 am—9:20 am	2007 Arboviral Year in Review <i>Susan Stowers, AAS, BA, IDEP HHR Specialist</i>
9:20am—10:00 am	2007 Mosquito Surveillance Summary/Mosquito and Bird Plans for 2008 <i>Greg Chrislip, MS, Public Health Entomologist</i>
10:00 am—10:15 am	BREAK
10:15 am—10:45 am	Lab 2008 <i>Wendy Channell, BS, Microbiologist, WVDHHR Office of Laboratory Service</i>
10:45 am—11:15 am	2008 Case Investigation/Enhanced Passive Surveillance <i>Robert Posey, MS, Regional Epidemiologist</i> <i>Dee Bixler, MD, MPH, IDEP Director</i>
11:15 am—11:45 am	2008 Southern WV Clean-Ups <i>Brian Bell, MS, Regional Epidemiologist</i>
11:45 am—12:45 pm	LUNCH
12:45 pm—1:15 (GUESTIMATE)	Neato Mosquito <i>Greg Chrislip, MS, Public Health Entomologist</i>
1:15 pm—1:30 pm	Why Chikungunya May Be the Next Big Thing (6 Legs) <i>Greg Chrislip, MS, Public Health Entomologist</i>
1:30 pm—1:45 pm	Why Chikungunya May Be the Next Big Thing (2 Legs) <i>Dee Bixler, MD, MPH, IDEP Director</i>
1:45 pm—2:05 pm	Animal Bite Surveillance Evaluation Update <i>Aron Hall, DVM, MSPH, Epidemic Service Intelligence Officer</i>
2:05 pm—2:20 pm	BREAK
2:20 pm—3:10 pm	Rabies Surveillance Management and Control Guide: Process, Progress and Outstanding Issues <i>David Henzler, DVM, PHD, IDEP Epidemiologist III</i>
3:10 pm—3:40 pm	How to Ensure Rapid Rabies Results <i>Jennifer Bradley</i>
3:40 pm—3:50 pm	Foodborne Outbreak Disease Manual Process and Progress, Next Steps <i>Suzanne Wilson, MPH, IDEP Food and Waterborne Disease Epidemiologist</i>
3:50 pm—4:00 pm	Wrap Up/Evaluations <i>Christina Lynch, BSW, IDEP Training Coordinator</i>

(STDs, continued from page 3)

gonorrhea. A significant proportion of those women (12 percent) had a positive test result, highlighting the need for routine chlamydia and gonorrhea screening at emergency contraception visits.

Other research from the conference highlighted creative programs that are effectively screening and treating people with STDs, and identifying those most at risk.

A CDC-funded confidential chlamydia screening program in high school-based health clinics in California resulted in high rates of screening among

those seeking contraceptive or STD services (range: 85-94 percent). It also revealed significantly higher infection rates among African-American women than white women (9.6 percent versus 1.7 percent).

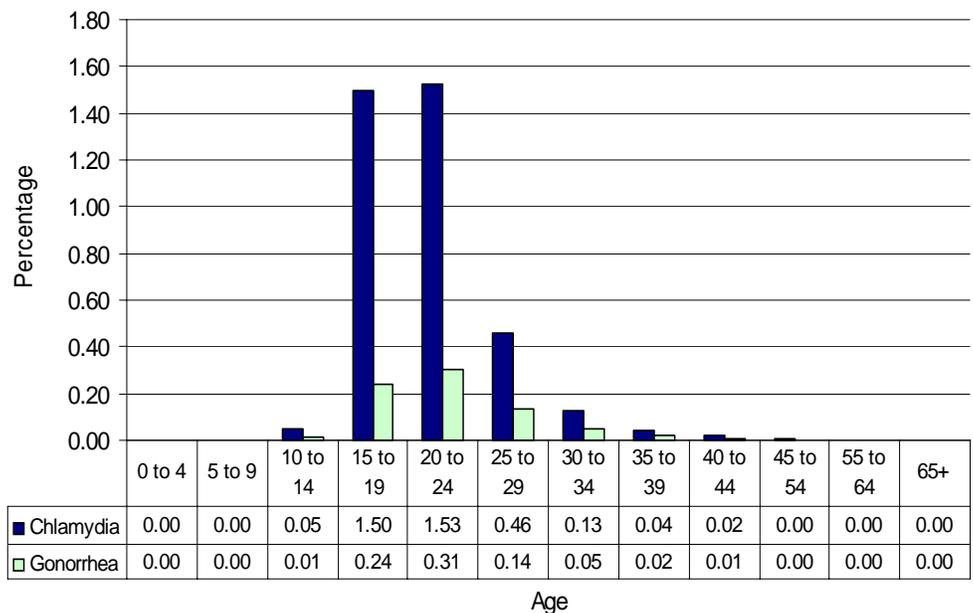
A study by New York City health officials assessed the effectiveness of an express visit option, allowing patients at city clinics to be tested for STDs without a doctor's exam. Comparing data before and after express visits were routinely offered, researchers found that the express visit option made it possible for an additional 4,588 tests to be performed, and increased STD diagnoses by 17 percent (2,617 versus 2,231). ❖

Chlamydia and Gonorrhea in West Virginia Females, 2003 to 2006

This graph shows the percentage of West Virginia females diagnosed with chlamydia and the percentage diagnosed with gonorrhea by age group for 2003 through 2006, inclusive. While these percentages are considerably below those reported in the CDC research summarized elsewhere in this edition of the *West Virginia EPI-LOG*, it CANNOT be concluded that West Virginia females have lower disease occurrence. Specifically, the CDC study methods were a sample survey in which females were asked to provide vaginal swabs for testing. Females who choose to provide vaginal swabs may differ in potentially important ways from those who refuse. The West Virginia data are population data and represent persons who seek health care and are screened for sexually transmitted diseases as a part of that

care. Since both chlamydia and gonorrhea are often asymptomatic in women, there may be under-diagnosis in the population as a whole. ❖

Percentage of West Virginia Females Diagnosed with Specified Disease by Age, 2003 to 2006



The **West Virginia EPI-LOG** is published quarterly by the West Virginia Department of Health and Human Resources, Bureau for Public Health, Office of Epidemiology & Health Promotion, Division of Surveillance and Disease Control. Graphic layout by Chuck Anziulewicz. Please call the Division of Surveillance & Disease Control at (304) 558-5358 if you need additional information regarding any article or information in this issue, or if you have suggested ideas you would like to contribute for a future issue.