



West Virginia

EPI-LOG

Most kids in West Virginia not vaccinated against HPV

Human Papillomavirus (HPV) vaccination rates remain low compared with the tetanus, diphtheria and pertussis (Tdap) and meningococcal conjugate vaccines (MCV), according to data on U.S. teenagers reported by the Centers for Disease Control and Prevention (CDC). These three vaccines were licensed and recommended for routine use in 11-12 year old children in late 2005 and early 2006.

HPV vaccines can prevent cervical, head and neck, anal and genital cancers and also protect against vaginal, vulvar and anal warts. Cervical cancer alone kills more than 10,000 women each year in the U.S. HPV is the only known cause of cervical cancer. In 2009, the CDC recommended HPV vaccine for males as well as females.

The latest CDC National Immunization Survey found that 53% of girls 13- 17 years of age began the HPV vaccine compared with 50.6% of West Virginia girls in this age range. Overall and more importantly, only 35% of teen girls nationally have completed the 3 dose HPV vaccine series compared with 29% in West Virginia. Tdap and MCV vaccination rates are considerably higher at 78% and 71% respectively nationally and 60% and 55% respectively in West Virginia.

(See *Vaccines*, page 6)



Statewide Disease Facts & Comparisons

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Office of Epidemiology
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- HPV vaccination rates disappointing in W.Va and U.S.
- 2012 year-end HIV/AIDS surveillance data
- 2012-2013 flu season update

Office of Epidemiology & Prevention Services

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Earl Ray Tomblin, Governor
Rocco Fucillo, Secretary (DHHR)

**West Virginia AIDS and HIV Infection Cases Diagnosed by
Age Group, Gender, Race and Exposure Category
Cumulative through December 31, 2012**

Characteristic	HIV/AIDS †		HIV-NA †		AIDS †	
	No.	%	No.	%	No.	%
Age at Diagnosis §						
< 13 years	24	1	12	1	11	1
13 - 24 years	378	14	206	23	115	6
25 - 44 years	1,730	65	560	62	1,194	67
45 - 64 years	506	19	117	13	420	24
65 + years	35	1	7	1	31	2
Gender						
Males	2,166	81	681	75	1,485	84
Females	508	19	222	25	286	16
Race/Ethnicity						
White	1,963	73	588	65	1,375	78
Black	615	23	271	30	344	19
Other/Unknown*	96	4	44	5	52	3
Exposure Category						
Male-to-male sex (MSM)	1,409	53	440	49	969	55
Injection drug use (IDU)	396	15	137	15	259	15
MSM/IDU	120	4	27	3	93	5
Heterosexual contact	407	15	172	19	235	13
Perinatal	25	1	13	1	12	1
Other/Unknown**	317	12	114	13	203	11
Total	2,674	100	903	100	1,771	100

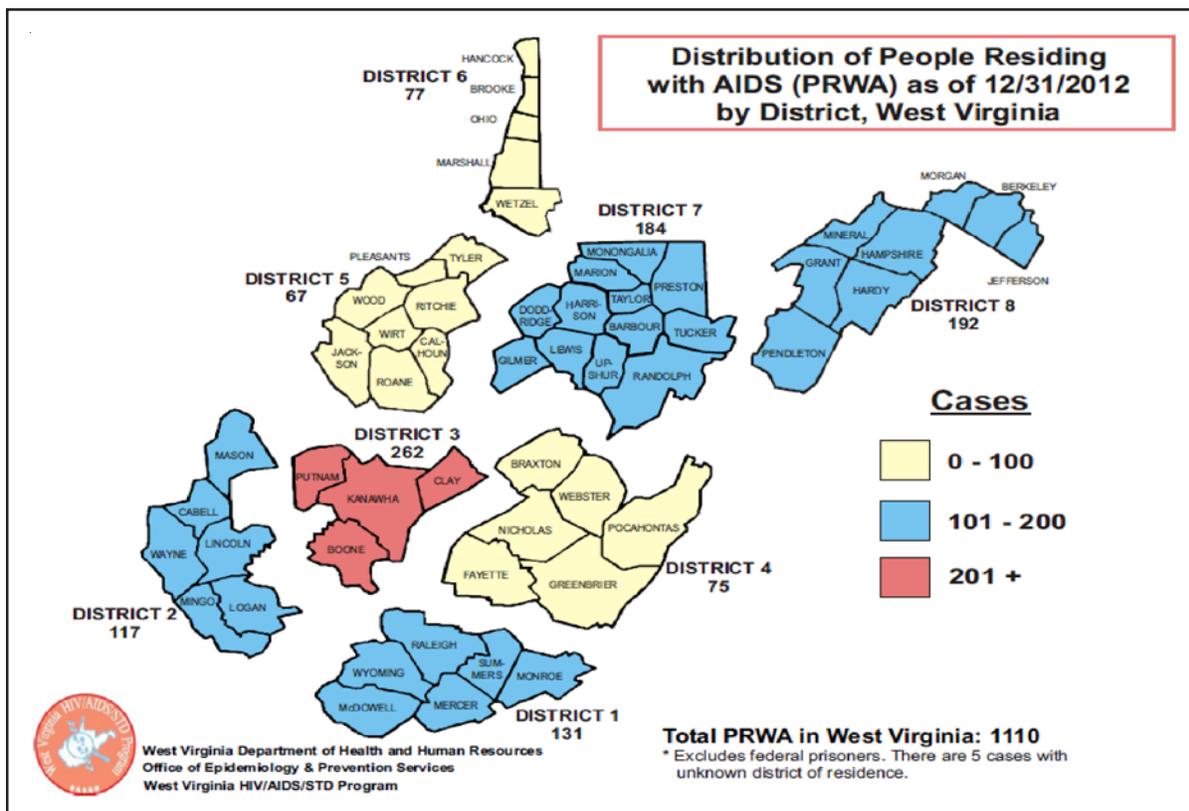
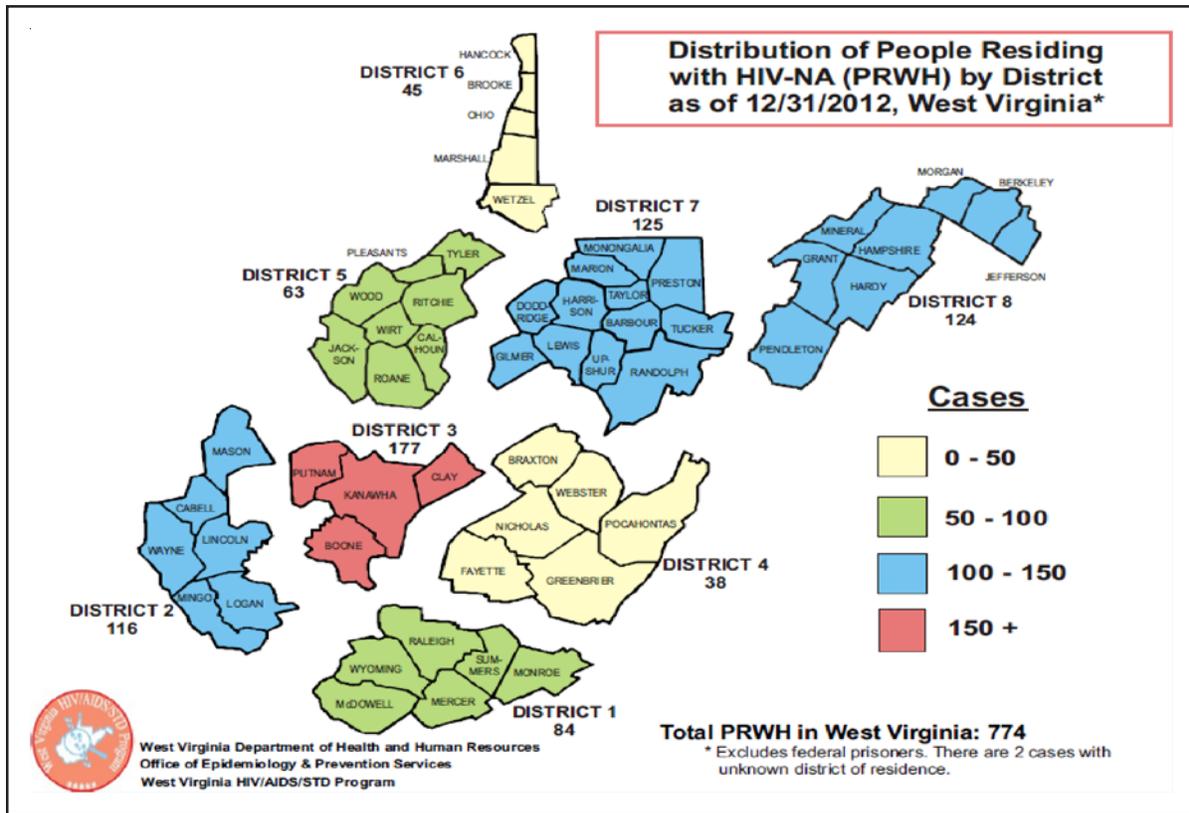
Notes. These are actual numbers of cases of HIV/AIDS that were reported to the West Virginia Health Department as of December 31, 2012. No adjustments were made for reporting delays. AIDS data includes reports from April 1984 through December 31, 2012; HIV data includes reports from January 1989 through December 31, 2012. Current federal prisoners are excluded. Percentages may not add to 100% due to rounding.

† HIV/AIDS provides information on the person's earliest diagnosis of HIV or AIDS in WV. HIV-NA provides information on individuals diagnosed with HIV but not AIDS in WV. These individuals may have been diagnosed with AIDS in another state. Individuals with AIDS may or may not have been diagnosed with HIV in WV.

*"Other" race categories include Hispanic, Asian, Native Hawaiian, Pacific Islander, American Indian, Alaskan Native, Multiple Races, and Unknown race.

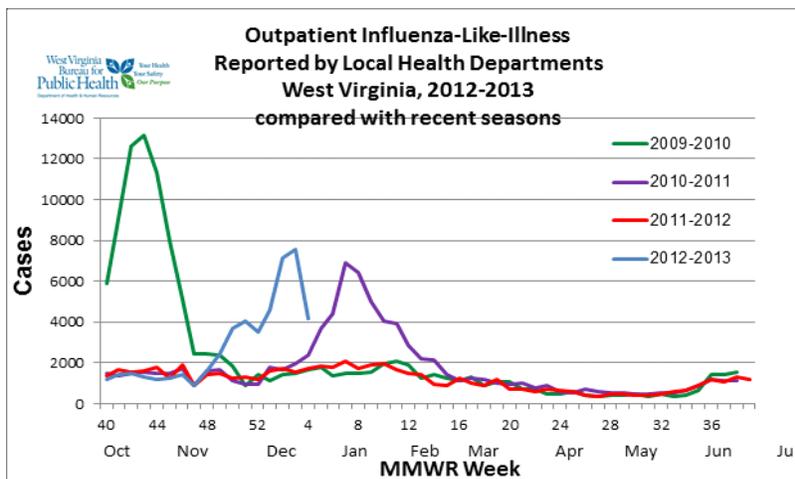
**"Other" risk categories include hemophilia, blood transfusion, and risk not reported or not identified.

§ Excludes one person with invalid diagnosis dates.

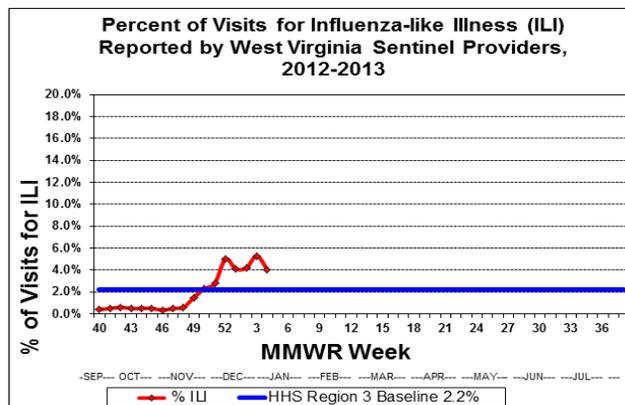


Influenza Surveillance in West Virginia: The 2012-2013 Flu Season

In West Virginia, influenza is monitored by clinical and laboratory data. The figure below shows the number of influenza-like illness (ILI) cases reported during the 2009-10, 2010-11, 2011-2012 and 2012-2013 influenza seasons. ILI is defined as fever ≥ 100 degrees AND cough and/ or sore throat without another identified cause. ILI can be caused by a variety of respiratory viruses, so data should always be interpreted in the context of laboratory data. ILI cases are reported by physicians to local health departments. Some local health departments also receive reports from schools. Local health departments report the data weekly to the state. The data are compiled and reported by “MMWR week.” Usually, there are 52 MMWR weeks per year. Some years, there are 53 MMWR weeks. Known limitations of this source of data include: inconsistent use of case definitions by reporting sources and smaller counties are overrepresented in the surveillance data, since larger counties receive reports from a smaller proportion of providers.



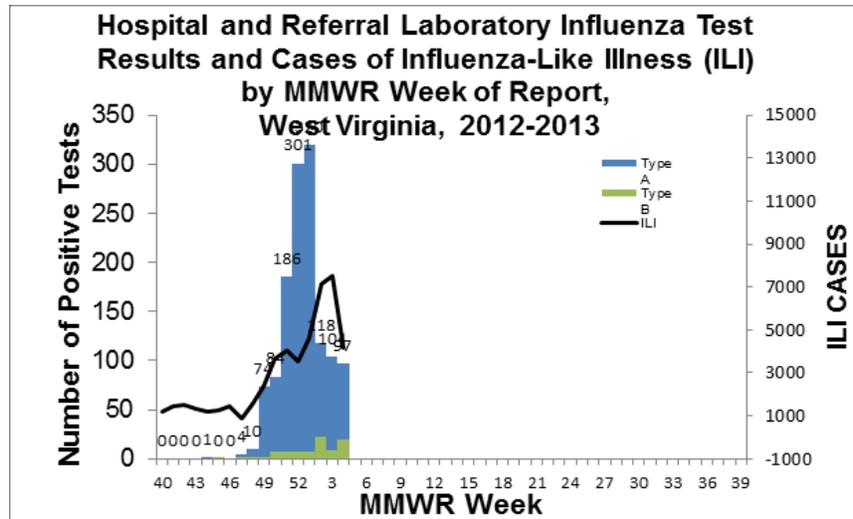
The figure below shows the percent of visits for influenza-like illness (ILI) reported by West Virginia sentinel providers during the 2012-13 influenza season. Sentinel providers are volunteer physicians who report cases of ILI as a proportion of total patients seen. If the resulting percentage of visits due to ILI is higher than 2.2%, high rates of influenza transmission are likely. These reports of ILI should also be viewed within the context of laboratory data and other indicators of influenza activity. A known limitation of sentinel provider surveillance is lack of sensitivity. Laboratory data – not ILI data – are usually the first signal that influenza viruses are circulating in the community.



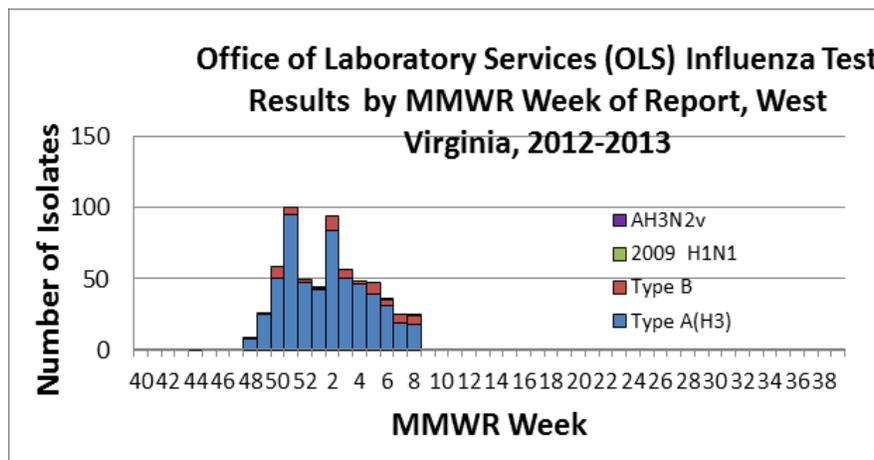
(See *Influenza*, page 5)

(*Influenza*, continued from page 4)

The next graph shows the number of positive tests for influenza by type (A or B) as reported by hospital and referral laboratories that test by any of the following methods: polymerase chain reaction (PCR), immunofluorescence (IFA or DFA), or culture. Rapid test results are not included in the totals because of the low positive predictive value during times of low influenza activity. This graph is useful for assessing changes in influenza activity and type of circulating viruses. This information, together with information on influenza A subtype can be useful in guiding empiric therapy for influenza-like illness. This graph is also useful for pinpointing the first identification of influenza in the state of West Virginia. During a typical influenza season, positive identifications by laboratories usually precede the seasonal increase in influenza-like illness by many weeks. The left-hand Y-axis gives the total positive tests for influenza reported by these laboratories; and the right-hand Y axis gives the reported cases of influenza-like illness.



The Office of Laboratory Services (OLS) accepts influenza surveillance specimens from the following sources: 8-10 specimens per influenza outbreak; 5 influenza A isolates per week from hospitals; and 2 specimens per week from sentinel providers. OLS can type and subtype influenza isolates; thus this data is useful for identifying which influenza strains are currently circulating in West Virginia. This data can also be used by physicians to guide empiric antiviral therapy. OLS can also identify novel influenza strains. Laboratory data from both hospital laboratories and OLS greatly underestimate the true number of influenza cases since most persons with influenza are not tested by providers.



(See *Influenza*, page 6)

Vaccination Rates in West Virginia and the U.S.

	<u>HPV</u>	<u>Tdap</u>	<u>MCV</u>
U.S.	35%	78%	71%
W.V.	29%	60%	55%

(HPV Vaccine, continued from page 1)

Despite the fact that HPV vaccine is a legitimate cancer preventative, it is expected that Tdap and MCV vaccination rates will continue to outpace HPV vaccination rates among teens in West Virginia for a number of reasons. Beginning in the 2012-13 school year, 7th and 12th grade enterers are required to have a dose of Tdap and MCV vaccines. HPV vaccine is not required for middle or high school entry. However, the greatest challenge in getting pre-teens and teens fully vaccinated against HPV is that it takes doses spread over 6 months to fully immunize against HPV.

Unfortunately, many health care providers and researchers have pointed to a particularly bothersome reason for the lack of uptake of HPV vaccine: parental refusals. Some parents have reported that having their

children vaccinated with HPV vaccine is like giving their child consent to have sex.

Dr. Melinda Wharton, Deputy Director of the CDC's National Center for Immunization and Respiratory Diseases who spoke at the 2012 West Virginia Symposium on Infectious Diseases, says that the vaccine "won't work unless it is given prior to the onset of sexual activity and that's why it is recommended at a young age." Wharton added "If a provider makes a strong recommendation for this vaccine...it may be that parents won't have many questions about it."

The recently published *Annual Report to the Nation on the Status of Cancer* points out that HPV-associated cancer of the mouth, throat, anus and vulva increased between 2000 and 2009. Cervical cancer, though it declined in this same period, still accounts more than half of the HPV-associated cancers in women. ☒

(Influenza, continued from page 5)

In addition to routine monitoring, investigation of influenza outbreaks is a very important part of situational awareness for influenza. West Virginia's local health departments reported 28 outbreaks of laboratory-confirmed influenza and six outbreaks of influenza-like illness (i.e., no testing was done) during January, 2013. 28 (87%) of these 32 outbreaks occurred in long term care facilities. This is consistent with circulation of subtype AH3 as the predominant subtype of influenza A, as documented by testing at the Office of Laboratory Services. West Virginia maintains influenza surveillance year-round and updates data weekly to www.dide.wv.gov; click on 'influenza;' then 'influenza surveillance.'



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