



## West Virginia

# EPI-LOG

## FDA approves first medication to reduce HIV infection risk

People diagnosed with HIV—the human immunodeficiency virus that without treatment develops into AIDS—take antiviral medications to control the infection that attacks their immune system.

Now, for the first time, adults who do not have HIV but are at risk of becoming infected can take a medication to reduce the risk of sexual transmission of the virus.

The Food and Drug Administration (FDA) has approved the new use of Truvada—to be taken once daily and used in combination with safer sex practices—to reduce the risk of sexually acquired HIV-1 infection in adults who do not have HIV but are at high risk of becoming infected.



(HIV-1 is the most common form of HIV.)

In two large clinical trials, daily use of Truvada was shown to significantly reduce the risk of HIV infection:

- By 42 percent in a study sponsored by the National Institutes of Health (NIH) of about 2,500 HIV-negative gay and bisexual men and transgender women, and

- By 75 percent in a study sponsored by the University of Washington of about 4,800 heterosexual couples in which one partner was HIV positive and the other was not.

(See *Truvada*, page 2)

## Statewide Disease Facts & Comparisons

A quarterly publication  
of the West Virginia  
Office of Epidemiology  
& Prevention Services

### IN THIS ISSUE:

- Two new strategies against HIV/AIDS approved by FDA
- 2012 mid-year HIV/AIDS surveillance data
- Infectious disease outbreak report
- Infection control training classes scheduled

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

*(Truvada, continued from page 1)*

Debra Birnkrant, M.D., director of the Division of Antiviral Products at FDA, explains that Truvada works to prevent HIV from establishing itself and multiplying in the body. She notes that while this is a new approved use, Truvada is not a new product. It was approved by FDA in 2004 for use in combination with other medications to treat HIV-infected adults and children over 12 years old.

“In the 80s and early 90s, HIV was viewed as a life-threatening disease; in some parts of the world, it still is. Medical advances, along with the availability of close to 30 approved individual HIV drugs, have enabled us to treat it as a chronic disease most of the time,” Birnkrant says.

“But it is still better to prevent HIV than to treat a life-long infection of HIV,” she says.

Birnkrant stresses that Truvada is meant to be used as part of a comprehensive HIV prevention plan that includes consistent and correct condom use, risk reduction counseling, regular HIV testing, and treatment of any other sexually-transmitted infections. Truvada is not a substitute for safer sex practices, she says.

To help prescribers and other health care professionals advise uninfected people considering taking

Truvada, the medicine is being approved with a Risk Evaluation and Mitigation Strategy (REMS). The goals of the REMS are to inform prescribers and potential users of Truvada of the importance of taking the medication every day, the importance of regular HIV testing and the importance of using Truvada in combination with other measures known to reduce the risk of HIV infection. As part of the REMS, a voluntary training and education plan will be made available to potential prescribers. This program includes a medication guide and safety brochure for the prospective Truvada users that would detail the risks, recommended screening tests and key information to share with a health care professional.

About 1.2 million Americans have HIV. The body’s immune system is devastated by AIDS, leaving those who have it vulnerable to deadly infections. Each year, about 53,000 adults and adolescents in the U.S. are newly diagnosed with HIV.

The overall rate of HIV infection has remained stable at least since 2004. “The rates of new HIV infections have not significantly changed for a long time,” says Birnkrant. “From FDA’s standpoint, this is not acceptable for a serious disease.” ❖

## FDA approves over-the-counter sale of OraQuick rapid HIV test

In another strategy in the war on HIV/AIDS, the Food and Drug Administration (FDA) has approved the OraQuick In-Home HIV Test, a rapid home-use HIV test kit that does not require sending a sample to a laboratory for analysis. The kit provides a test result in 20-40 minutes, and you can test yourself in your own home. The kit, which tests a sample of fluid from your mouth, is approved for sale in stores and online to anyone age 17 and older.

FDA wants consumers to know that positive test results using the OraQuick test must be confirmed by follow-up laboratory-based testing. Also, the test can be falsely negative for reasons that include the occurrence of HIV infection within three months before testing. People who engage in behaviors that put them at increased risk of getting HIV—including having unprotected sex with new partners, or injecting illegal drugs—should be re-tested on a regular basis. They should not interpret a negative test to indicate that engaging in high risk behavior is safe.

According to the Centers for Disease Control and Prevention, approximately one-fifth of all Americans who are infected with HIV don’t know it because they have not been tested. ❖



**West Virginia AIDS and HIV Infection Cases Diagnosed by  
Age Group, Gender, Race and Exposure Category  
Cumulative through June 30, 2012**

Characteristic	HIV/AIDS †		HIV-NA †		AIDS †	
	No.	%	No.	%	No.	%
<b>Age at Diagnosis §</b>						
< 2 years	15	1	6	1	9	1
2 - 12 years	9	0	6	1	2	0
13 - 24 years	370	14	205	23	112	6
25 - 44 years	1,702	65	545	62	1,178	68
45 - 64 years	491	19	112	13	409	23
65 + years	35	1	7	1	31	2
<b>Gender</b>						
Males	2,127	81	666	76	1,461	84
Females	496	19	216	24	280	16
<b>Race/Ethnicity</b>						
White	1,936	74	577	65	1,359	78
Black	604	23	267	30	337	19
Other/Unknown*	83	3	38	4	45	3
<b>Exposure Category</b>						
Male-to-male sex (MSM)	1,394	53	436	49	958	55
Injection drug use (IDU)	392	15	136	15	256	15
MSM/IDU	117	4	26	3	91	5
Heterosexual contact	398	15	168	19	230	13
Perinatal	25	1	13	1	12	1
Other/Unknown**	297	11	103	12	194	11
<b>Total</b>	<b>2,623</b>	<b>100</b>	<b>882</b>	<b>100</b>	<b>1,741</b>	<b>100</b>

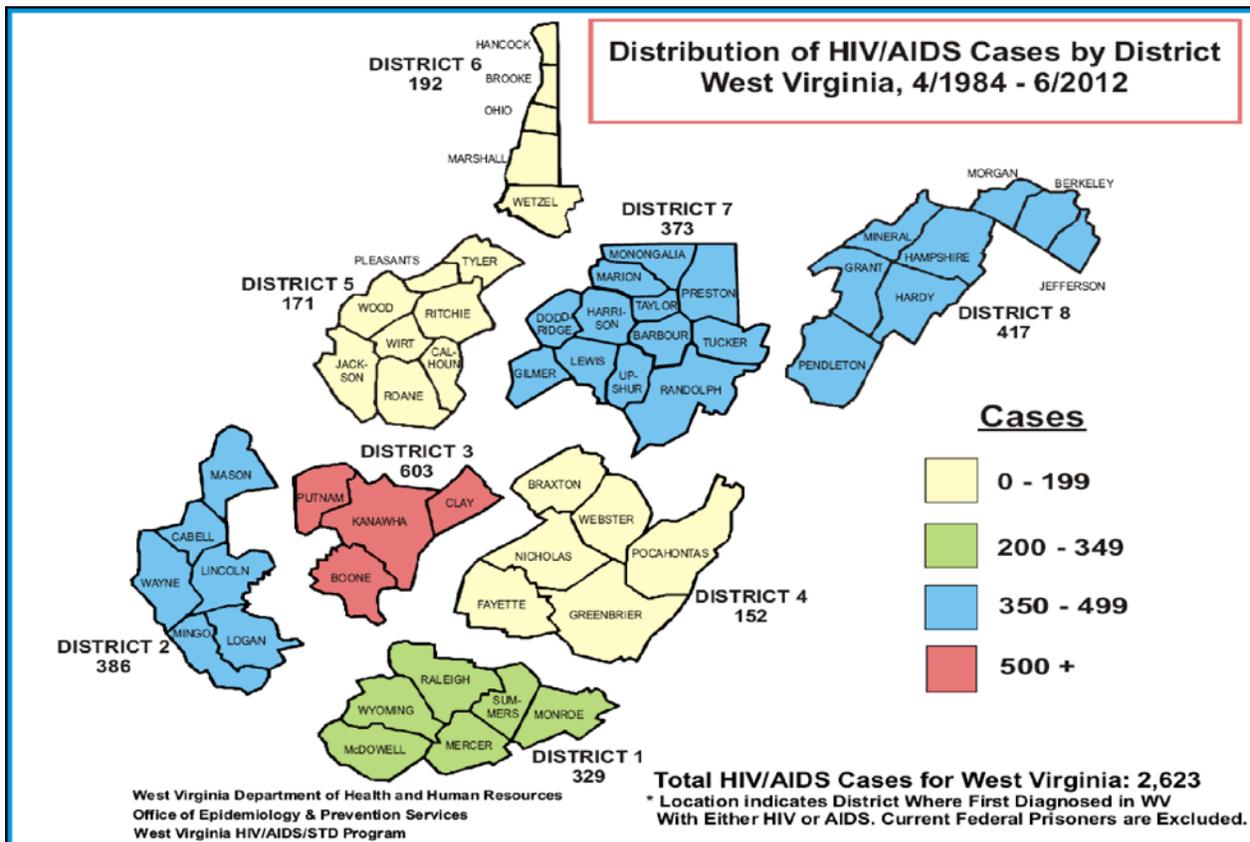
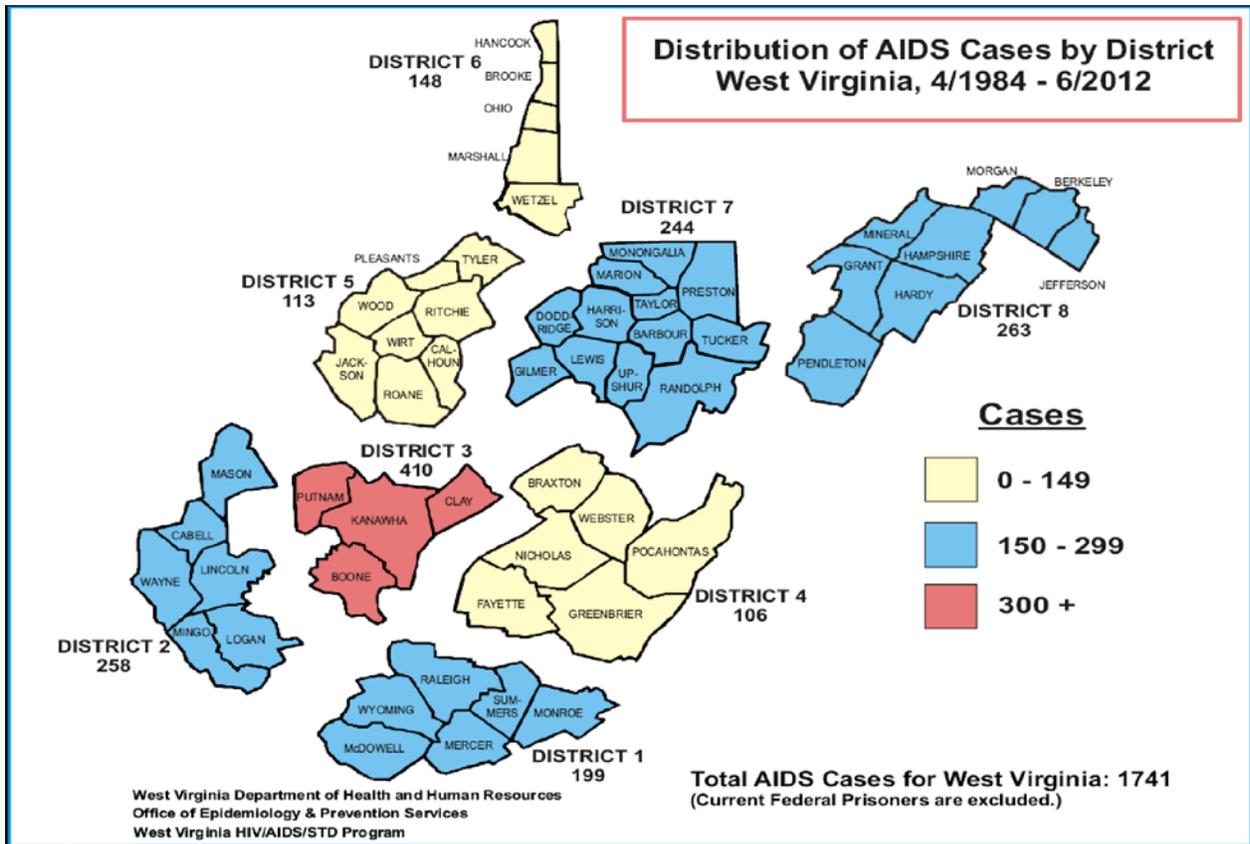
Notes. These are actual numbers of cases of HIV/AIDS that were reported to the West Virginia Health Department as of June 30, 2012. No adjustments were made for reporting delays. AIDS data includes reports from April 1984 through June 30, 2012; HIV data includes reports from January 1989 through June 30, 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.



# West Virginia 2011 Infectious Disease Outbreak Report

Outbreaks of infectious diseases are immediately reportable in West Virginia. Local health departments investigate and report outbreaks with assistance from their regional epidemiologist and the Bureau for Public Health, Division of Infectious Disease Epidemiology (DIDE). The total number of outbreaks reported in West Virginia continued to rise during 2011. In 2001, 7 confirmed outbreaks were reported. In 2011, 169 confirmed outbreaks were reported, representing a 24-fold increase (Figure 1):

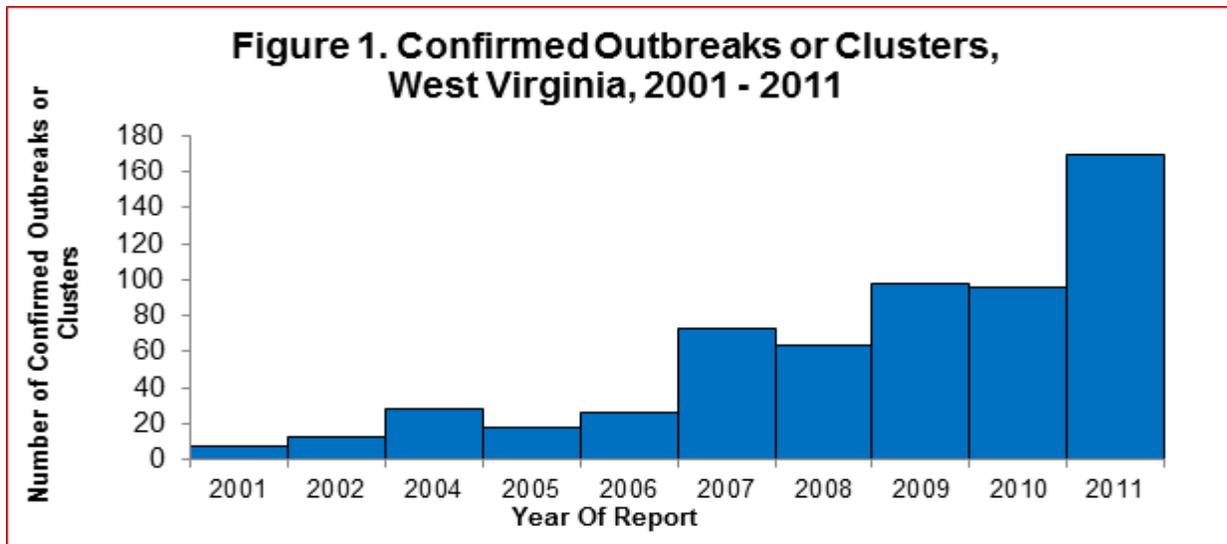
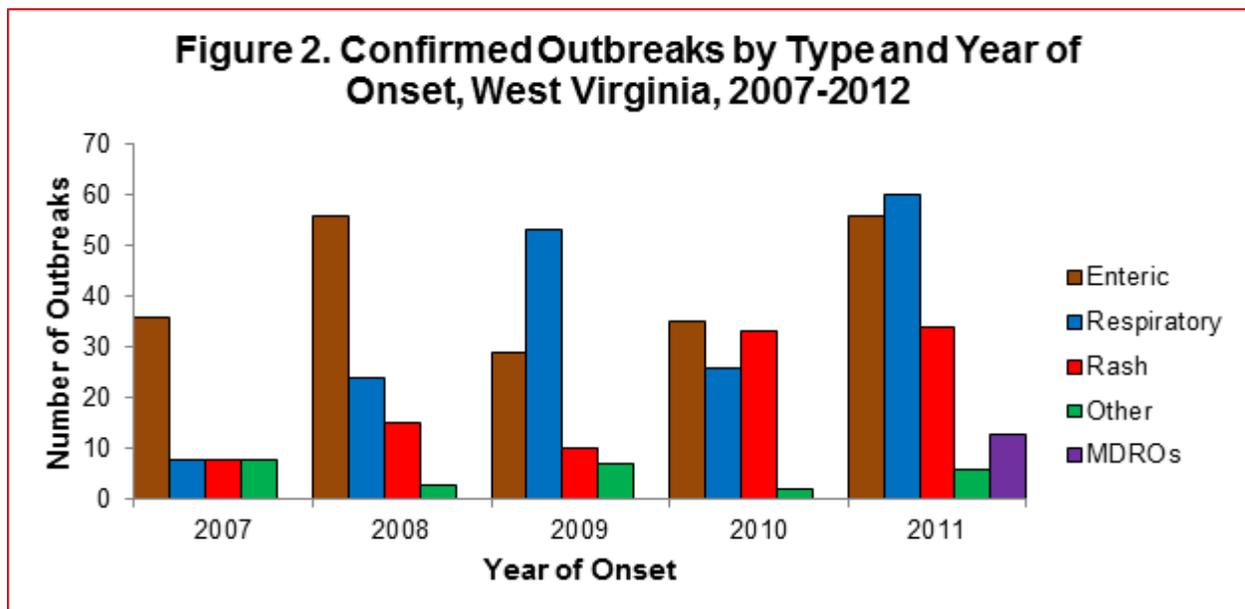


Figure 2 illustrates confirmed outbreaks reported in West Virginia by the type and year of onset between 2007 and 2012. This includes outbreaks of multidrug-resistant organisms (MRDOs):

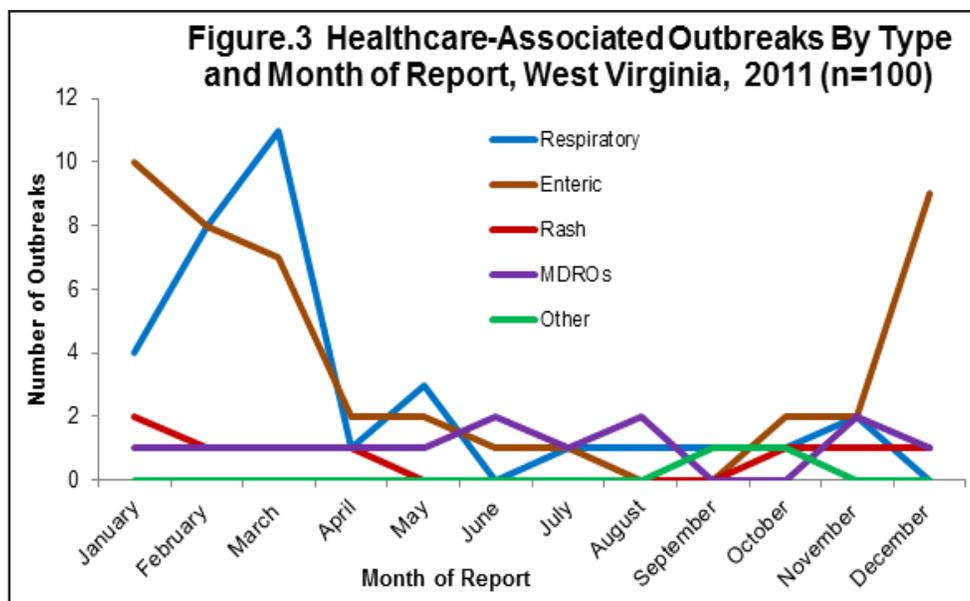


(See *Outbreaks*, page 6)

(*Outbreaks*, continued from page 5)

### **Healthcare-Associated Outbreaks, West Virginia, 2011**

The number of healthcare-associated outbreaks reported in West Virginia increased threefold since 2009. In 2011, there were 100 confirmed healthcare associated outbreaks (Figure 3):



#### **Division of Infectious Disease Recommendations**

There has been remarkable improvement in recognition and reporting of outbreaks in West Virginia over the last decade. This improvement can be attributable to strengthened public health infrastructure, increased awareness among healthcare providers and public health staff, and training and education. Despite this marked progress, there are still opportunities for improvements. The following summarizes our progress and highlights future recommendations:

- Outbreaks are immediately notifiable in West Virginia and should be reported to the Bureau for Public Health, DIDE within 60 minutes. Immediate reporting improves the outbreak response by facilitating laboratory testing for diagnosis, implementing control measures in a timely manner, preventing further illnesses or deaths and timely communication with CDC and other partners on critical health issues.

- The role of laboratory testing is crucial in outbreak management. West Virginia Office of Laboratory Services (OLS) continues to add advanced testing technology to assist in early detection and investigation of outbreaks. Timely collection of specimens facilitates diagnosis and institution of control measures.

- The use of standard outbreak protocols has tremendous impact on improving outbreak investigation and

control. DIDE has developed several outbreak toolkits for the most commonly encountered outbreaks, such as influenza, pneumonia, norovirus, and scabies. DIDE will continue to develop new toolkits and protocols to assist partners in outbreak investigation and to maintain its website with up-to-date information. DIDE's web site is [www.dide.wv.gov](http://www.dide.wv.gov).

- DIDE continues to improve feedback of information on outbreaks and outbreak investigation during 2011 and beyond. In addition to the yearly outbreak report, DIDE continues to disseminate a monthly report on outbreaks to provide timely details on reported outbreaks in the state to public health partners and healthcare providers. The monthly report is also posted on the website.

- DIDE completed an evaluation of foodborne outbreak response at both the state and regional level, using the tool and guidelines provided by the Council to Improve Foodborne Outbreak Response.

- Foodborne disease outbreaks are not uncommon and can cause serious illness. The timely response to foodborne illness reports is crucial to control outbreaks and identify potential sources. Obtaining laboratory samples is critical to guide the recommendations and allow confirmation of potential common transmission sources.

- DIDE will continue to participate in electronic reporting of all enteric outbreaks in the National Outbreak Reporting System (NORS).

(See *Outbreaks*, page 7)

(*Outbreaks, continued from page 6*)

- DIDE is committed to provide regular training on outbreak management to the state, regional and local public health personnel. A state-wide training in outbreak investigation is scheduled for mid-year in 2012.

#### **Observations about MDRO outbreaks:**

- Long-term care Facilities (LTCFs) continue to account for the majority of HAOs reported in the state. These outbreaks are occasionally severe and associated with high morbidity and mortality rates.

- LTCFs can be reservoirs for multidrug-resistant organisms (MDROs) and facilitate transmission of these infections across the spectrum of health care. Identification and management of outbreaks in LTCFs can be challenging for the facility staff, healthcare providers and public health.

- Some LTCFs contract either out-of-state or in-state laboratories that do not test or test and do not report MDROs status to these facilities. This represents a major challenge for these facilities to identify and manage MDROs outbreaks.

- MDRO outbreaks are challenging and represent a major burden for healthcare facilities, providers and public health and are associated with high morbidity and mortality rates due to the limited or no availability of treatment options.

- Since MDRO outbreaks affect all healthcare facilities in a geographical area or a region, regional approach is the most effective way to prevent the emergence and further spread of these infections.

#### **Strategies for controlling MDRO outbreaks:**

- Two trainings on identification and management of MDRO outbreaks were provided to public health staff during 2011.

- DIDE provided to all licensed LTCFs in the state the following APIC manuals: Infection control and prevention in LTCFs, Guidelines for Elimination of MRSA and Guidelines for Elimination of *C. diff* in Healthcare Settings.

- Two regional meetings were held to discuss collaborative approach to MDRO outbreaks. These two meetings were attended by staff of acute care and LTCFs, LHDs and DIDE.

- The ongoing investigation of an MDRO outbreak was published in MMWR in collaboration with CDC to increase awareness of these outbreaks at the state and national levels. [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6041a2.htm?s\\_cid=mm6041a2\\_x](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6041a2.htm?s_cid=mm6041a2_x)

- A long-term care working group in association with the HAI (healthcare-associated infection) multi-advisory

group was established to address the infection control issues in LTCFs.

- Toolkits for MDROs and *C. diff* outbreaks in LTCFs were developed and posted on the website.

#### **DIDE objectives for 2012 and beyond:**

In response to annual needs assessment, and evaluation of 2011 outbreaks, a training curriculum in MDROs was developed and designed to be provided in each surveillance region during 2012. This regional training will be provided to LTCFs, acute care and LHDs.

If funding is available:

- An MDRO needs assessment survey for acute care, LTCFs, and laboratories will be conducted in 2012. Results will be used to plan regional prevention collaboratives.

- WVBPH will require mandatory reporting of Carbapenem-Resistant *Klebsiella pneumoniae* (CRKP) and *Clostridium difficile* from laboratories and healthcare facilities including LTCFs to National Healthcare Safety Network (NHSN).

- DIDE will assist each region to develop and implement MDRO regional prevention collaboratives.

WVOLS is working to be able to provide antimicrobial susceptibility testing and molecular typing for MDROs during outbreak investigation.

Outbreaks in ambulatory surgical centers (ASCs) can be severe and challenging to identify and manage. DIDE sponsored the Association for Professionals in Infection Control (APIC) to provide a course in infection control to all ASCs in 2011; such training should be provided on a regular basis to these facilities.

The WV 2012 HAI plan aims to improve identification and management of HAOs through the following strategies:

- Present the findings and recommendations from this report to the HAI Advisory Group as well as WV APIC section as the basis for an annual needs assessment.

- Collaborate with representatives of the Office of Health Facility Licensure and Certification, the Board of Medicine, the Board of Osteopathy, the Board of Dental Examiners, Board of Pharmacy, and the Board of Examiners for Registered Professional Nurses in outbreak notification and investigation.

- Provide training for health department staff to investigate outbreaks, clusters or unusual cases of HAIs.

- Revise the reportable disease rule, during 2012, to include healthcare associated outbreaks in the list of reportable conditions to be effective July 1, 2013.

- Continue to work with partners including CSTE, CDC, state legislatures, and providers across the healthcare continuum to improve outbreak reporting to state health departments. ☒

# DIDE announces upcoming infection prevention and control classes

The West Virginia Division of Infectious Disease Epidemiology (DIDE), is sponsoring several one-day training classes in "Long Term Care Infection Prevention and Control," in conjunction with local county health departments. These interactive trainings will provide valuable information for local health department staff, infection preventionists, directors of nursing, administrators, microbiologists, medical directors, regional epidemiologists, and other disease control specialists. Topics include MDROs and C-difficile 101, Hand Hygiene, Surveillance, Contact Precautions and more. Nurses will receive 5.5 continuing education credit hours and sanitarians will receive 6.25 CE hours. The first training, held in May at Oglebay Resort, was a resounding success. Attendees provided much positive feedback about the relevancy of the topics, saying they would disseminate what they learned to coworkers and other facilities throughout their regions. Don't miss this **FREE** learning opportunity!

## LONG TERM CARE INFECTION PREVENTION AND CONTROL

### Upcoming Classes:

- |                                    |  |
|------------------------------------|--|
| <b>Thursday, July 26, 2012:</b>    | Region 7 (Central West Virginia)<br>LOCATION: Days Inn Hotel, Flatwoods ( <a href="http://www.flatwoods.com">http://www.flatwoods.com</a> )  |
| <b>Friday, August 3, 2012:</b>     | Region 6 (Mid-Ohio Valley)<br>LOCATION: Judge Black Annex, 313 Market Street, Parkersburg  |
| <b>Wednesday, August 8, 2012:</b>  | Region 8 (Kanawha County)<br>LOCATION: John XXIII Pastoral Center, Hodges Road, Charleston   |
| <b>Thursday, September 6, 2012</b> | Region 5 (Monogalia County)<br>LOCATION: Monogalia County Health Department, Morgantown  |
| <b>Thursday, October 4, 2012</b>   | Region 1 (Southern West Virginia)<br>LOCATION: Country Inn & Suites, Beckley ( <a href="http://countryinns.com">http://countryinns.com</a> ) |
| <b>Thursday, October 25, 2012</b>  | Region 2 (Cabell County)<br>LOCATION: Cabell-Huntington Health Department, Seventh Ave, Huntington   |

These classes are **FREE** to all participants. To register, please log on to <http://www.wvtrain.org>. First time users must create an account at this website. Once you have established an account, please log in with your user name and password. For EASY ACCESS, go to Upcoming Events at the bottom right hand side of the main page and search for your region's "Long Term Care" training event. Click on the region you wish to attend. From there you'll see a registration tab. Click the tab, enter your information and you'll be registered.

**PLEASE NOTE:** Class participants are responsible for arranging and paying for their own lodging if necessary. ☒

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