September 2, 2015

This report provides a monthly update for the Board of Health, staff and the community. Our key activities are listed for the seven pillars that support our vision for improving the health of our community.

• Prevent the spread of disease
• Protect against health threats
• Promote healthy behaviors
• Reach out to vulnerable populations
• Mobilize community action through partnerships
• Prepare for and respond to public health emergencies
• Serve as a public health information resource

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Special items

Quality Improvement Plan

Our Quality Improvement Team is working with our Executive Team to finalize our agency-wide Quality Improvement Plan (QIP). We expect to have it completed by September 30. The QIP is an accreditation requirement and will be the foundation of how we will develop a culture of quality in the agency. It describes how staff will participate in quality improvement, how project ideas will be proposed and selected, and how we will communicate our results.

In addition, all staff is completing introductory QI training. The on-line training modules are competency-based and provide an overall understanding of quality improvement processes.

The QI Team’s next step will be to share the final plan with all staff and to hold information sessions to provide a plan overview and allow staff to ask questions. All employees have a role to play in quality improvement and we encourage everyone to review the final plan and attend the information sessions which will be held in October. We would like to begin projects later this year.

Prevent the spread of diseases

Local Investigations

There has been a significant decline in the number of cases of Legionella occurring in the area. During August, there were 3 cases reported; the individuals were 68, 56 and 46 years old. None had any links to each other or to previously reported cases. No Legionella-specific risk factors were reported for any of these individuals.
There were two recent scabies outbreaks reported from separate assisted living communities. The index case for the first outbreak was diagnosed June 19. Nine other residents were treated for scabies based on symptoms - none were confirmed by skin scraping. The last reported case was August 24. The index case for the second outbreak was diagnosed July 21. A total of 16 residents have been treated (8 confirmed cases). No reported cases since August 10. There were no known links between these outbreaks.

There were three individuals diagnosed with Cryptosporidium during early August. None were immunocompromised; each reported visiting the same water park recently. The water park had recently been inspected earlier in the summer and no problems noted. Documented chlorine levels were appropriate. The operators of the water park performed a “shock” treatment to ensure the system was clear of potential pathogens. No further cases have been reported.

**Protect against health threats**

**West Nile Virus Detected in Montgomery County Mosquitoes**

With the assistance from a Wright State University intern, Public Health has been trapping and testing mosquitoes throughout Montgomery County since mid-May. While the statewide WNV infection rate in mosquitoes remains low, relative to our last outbreak year in 2012 (see graph below), ODH is reporting a steady increase in WNV infections in mosquitoes in Ohio. This coincides with the recent reports of 3 WNV positive mosquito pools collected in Montgomery County in late July and early August.

With the rapidly increasing infection rates in mosquitoes, it is very important that we continue to educate the public about how to avoid mosquito bites and reduce mosquito breeding. Informational pamphlets on minimizing exposure to mosquitoes and West Nile Virus were distributed by Public Health staff in the neighborhood near the location of the WNV positive mosquito pools.

It is also important to continue with control efforts where possible. Through agreements with contracting jurisdictions, Public Health has conducted limited night-time applications of mosquito adulticides in the areas of the WNV mosquito pools.

![Graph showing West Nile Virus minimum infection rate](image)

*MIR = minimum infection rate = (# positive samples / # mosquitoes tested) per week X 1000.*
Upsurge in Calls about Rabies in Bats

The Office of Environmental Health and the Immunization Clinic have received an increase in the number of calls in recent weeks concerning the need for rabies testing or treatment after an encounter with bats. Bats are the most commonly encountered carriers of rabies in Montgomery County, and late summer is the time of year when young bats are leaving the roost. Public Health staff has fielded multiple calls from patients, medical personnel, and veterinarians about bat encounters.

These calls have dealt with actual bat bites and the more common, non-bite exposures. The typical non-bite exposure occurs when a bat has had access to a room where a person has been sleeping. Because bat bites (or scratches) are often small and hard to identify, an unconscious person may not be aware they have had contact with a bat. In this situation the bat should be captured, if possible, and submitted for testing.

Captured bats are picked up by Rabies Control Program staff and shipped by courier to the ODH Lab in Reynoldsburg. Rapid turn-around (usually within 48 hours) can prevent victims from starting post-exposure shots unnecessarily. Post-exposure treatment to prevent rabies is not an emergency, but should be started as soon as the need is known.

Between July 15 and August 20 a total of 10 bats were shipped for testing. Two of the ten were found positive for the rabies virus. Fortunately, in both of those instances, the encounters did not meet the definition of exposure (bat contained in the basement, or found outside and not handled without protection.) However, several victims of non-bite exposure who did not capture the bat were referred to the hospital ER’s to begin post-exposure shots.

September is National Food Safety Month

The month of September signals the end of cookouts and barbecues and it is National Food Safety Month. The theme for 2015 is “Let it Flow”, which focuses on the flow of food through a restaurant. Environmental Health offers these tips:

1. Food should be received in a sound condition from an approved source and at correct temperatures. Frozen foods should be frozen and refrigerated foods should be at least 41 °F.
2. Food should then be stored in a clean environment away from chemicals and other contaminants and rotated based on FIFO (First In, First Out). Refrigerators should not be overfilled since this restricts air flow. Thermometers should be used to monitor food temperatures regularly and can be purchased at major grocery chains or restaurant supply stores.
3. All foods being prepared that can support the growth of pathogens should be kept out of the “Danger Zone” (the temperature between 41 °F and 135 °F) by being thawed in the refrigerator, under cold running water, in a microwave if it is cooked immediately afterward, or as part of the cooking process. Then these foods should be held above 135 °F or below 41 °F. A food thermometer should be used to measure the internal temperature of foods.
4. During preparation of foods, foods should be kept separate from each other to prevent cross-contamination by using separate cutting boards and equipment. Ice used to keep food cold should not be reused as an ingredient. For those foods that require refrigeration, ensure that they are not left out on the counter for extended periods of time.

5. And finally, before serving foods, hold any utensil by the handle and not by the end that touches the food, avoid bare hand contact with food that is ready to eat and use ice scoops or tongs to serve ice.

Promote healthy behaviors

National Night Out Against Crime

Public Health’s Violence Prevention Program held its 16th Annual National Night Out Against Crime Celebration at Residence Park Playground on August 4. The celebration was a collaboration between the Residence Park Neighborhood Association, Premier Health’s Mahogany’s Child, Southwest Priority Board, Montgomery County Sheriff’s Office and Public Health. The celebration included visits from Mayor Nan Whaley, Commissioners Joey Williams and Jeffrey Mims, Police Chief Richard Biehl, and his command staff and other top city officials. Law enforcement also brought along the SWAT vehicle for young people to tour and inspect. It was a major attraction.

The evening activities included dignitaries emphasizing the importance of reducing violence and crime in the African American community, health screenings, health education, music, face and hand painting, dancing and food. Safety helmets, hula hoops and jump ropes were handed out to encourage safety and physical fitness. Dayton Young and Gifted, a local drill team, provided entertainment during the event. Over 325 participants attended the Violence Prevention neighborhood event. It should be noted that 75% of those attending were youth, a target population. This event was another example of how Public Health networks with the community to address the issues of crime and violence.

Promoting the Use of Stairs

Through a Communities Preventing Chronic Disease grant from the Ohio Department of Health, Public Health is supporting environmental and system approaches to prevent obesity, diabetes, and heart disease and stroke in Montgomery County. One of our grant initiatives is to promote physical activity / walking at worksites.

One focus of this initiative is to encourage employees to be active by decreasing their elevator use and using stairs. Currently, there are two different messages that have been placed within the County Administrative Building, County Courts, and the Reibold Building. One message informs individuals that the elevator is not the only option to get to another floor,

*ATTENTION: This isn’t the only way up...TAKE THE STAIRS*

and the other message lets people know that taking the stairs burns more calories than taking the elevator:

*ATTENTION: Walking up stairs burns almost 5 times more calories than riding an elevator.*

There are a total of 30 signs posted among the three buildings. Instead of waiting for the elevator, join your co-workers on the stairs!
GetUp Partners with Dayton Metro Library for Successful Summer Challenge

This summer GetUp partnered with the Dayton Metro Library to promote their summer reading challenge. The Library included the GetUp 5-2-1-Almost None message as part of the challenge.

• eat 5 servings of fruits and vegetables
• spend less than 2 hours of recreational screen time
• get at least 1 hour of physical activity
• drink Almost None of those sugary soda or juice-flavored drinks

Youth 2 to 18 years old who participated in the summer challenge were given a GetUp 5-2-1-Almost None Tracker to record their actions. Individuals returning the tracker along with the number of books read received prizes. Over 14,000 individuals participated in the 2015 Summer Challenge. The library has indicated that the 2016 summer reading challenge will have a health-related theme and will also include the 5-2-1-Almost None tracker.

Farmers’ Market Nutrition Program Celebrates A Successful Year

August 2-8 was declared National Farmers Market Week by the U.S. Department of Agriculture. This year marks the 16th annual celebration honoring the important role that Farmers’ Markets play in local economies. The WIC Program distributed Farmers’ Market coupon books worth $15 each to 787 participants during the last two weeks of July and the first two weeks of August at four participating Farmers’ Markets. The program, which is federally funded, seeks to increase the fruit and vegetable consumption of WIC participants each summer to promote better overall health.

Families that may not otherwise have an opportunity to experience the Farmers’ Markets and the ability to purchase locally grown produce expressed their delight over the program to several WIC staff members at the markets. Nutrition education was also provided to participants while shopping at the markets. Participating contracted farmers will be reimbursed at full value for each coupon sent in for processing. The program also benefits communities by supporting the Farmer’s Markets and helping to revitalize downtown areas. It is truly a win-win situation for all involved.

Breastfeeding Awareness Month

The WIC program celebrated Breastfeeding Awareness Month in August by “Working Together for Breastfeeding Success!” The theme focused attention on how communities can help mothers feel comfortable while out in public, including how mothers can continue to breastfeed even when returning to work or school. Ohio law protects a woman’s right to breastfeed anywhere she has a right to be.

Our WIC Breastfeeding Peer Helpers and Lactation Consultants held a celebration for pregnant and breastfeeding participants at the Sunrise WIC office on August 14. Attendees participated in discussions about pumping and storage of human milk, the reality of having a new baby, and paced bottle feeding. Lunch and healthy door prizes were provided as well.

The Breastfeeding Peer Helpers also completed several outreach opportunities by sharing WIC and breastfeeding support information throughout the community. They have shared information about human milk and the breastfed baby to some local daycare centers and are distributing a
“Breastfeeding Welcome Here” decal to local interested businesses. To receive a decal to share with a local business, please call Jenna Reynolds at 225-5502. Physician offices are also being given updated WIC brochures and breastfeeding information to share with their patients.

Mobilize community action through partnerships

Community Participation Makes “Dayton African American Cultural Festival” a Big Success

The Dayton African American Cultural Festival (www.daacf.org) was held on August 22 at Island Park in Dayton. The 2015 theme was “It’s A Family Affair: Culture Matters.” Public Health’s Dayton Council on Health Equity directed the Health Pavilion. Twenty-five agencies participated, providing information about health services and community resources, such as adult education, affordable health insurance, breastfeeding, fatherhood, housing, and social security.

A health survey and eight free screenings were offered, including blood pressure, confidential HIV, flu shots, eyes/glasses, behavioral health, alcohol-drug-gambling assessments, and carbon monoxide testing. The festival celebrates the richness of the African American experience and promotes black culture, art, education and health awareness. Each year, over 12,000 residents attend the festival to enjoy the Main Stage entertainment, African Village, African Wedding, Black Artists Pavilion, Youth Pavilion, Health Pavilion, food, and merchandise.

Prepare for and respond to PH emergencies

Ebola Virus Disease

The Ebola outbreak in West Africa continues at decreased levels of activity. The World Health Organization reports that there have been a cumulative total of 28,041 cases (suspect and confirmed) of Ebola virus disease with 11,302 deaths in the countries with widespread transmission, as of August 23, 2015. There had been 27,872 cases with 11,295 deaths, as of July 28, 2015. The countries with widespread transmission include:

Guinea – 3,792 cases (7 new cases in past month)
Sierra Leone – 13,541 cases (162 new cases in past month).

In Liberia, there were 10,666 cases through March 20; WHO had declared the end to the Ebola outbreak in Liberia on May 9, 2015. There have been 6 new cases reported in Liberia since June 28 (none since July 28). Nigeria (20 cases), Mali (8 cases), the United States (4 cases), Senegal (1 case), United Kingdom (1 case), Italy (1 case) and Spain (1 case) have been declared Ebola free.

Serve as a public health information resource

Annual PHDMC Research Report for 2014

There were 6 research projects approved by the Research Review Panel during 2014. Four of these research projects, which also completed during the year along with 2 studies originally approved in previous years; 4 studies remain open/ongoing at the end of 2014. Many of the projects which have been completed were done by Master of Public Health (MPH) students and have been formally
presented as part of the MPH graduation requirements. In addition, these papers are available online through the Wright State University Core Scholar Repository which can be found at http://corescholar.libraries.wright.edu/mph_comm/.

Annual PHDMC Research Report for 2014

Research Studies Approved

1. IRB #: 2014.03.17
   Title: Is PHDMC’s Level One Food Safety Certification Training Effective?
   Investigator: Matt Tyler, R.S. (WSU MPH Student)
   Approved: March 2014

2. IRB #: 2014.04.30
   Title: Factors and their Association, with Gestational Diabetes Mellitus and Gestational Hypertension in Ohio for 2012
   Investigator: Jared David Klein (WSU MD/MPH Student)
   Approved: May 2014

3. IRB #: 2014.05.08
   Title: Increasing Chlamydia Retesting Rates in STD Clinics
   Investigator: Michelle Bellando (WSU MPH Student)
   Approved: May 2014

4. IRB #: 2014.05.28
   Title: Community Assessment of Diagnosis in the Fetal Alcohol Spectrum
   Investigator: Susan Caperna (WSU Student)
   Approved: May 2014

5. IRB #: 2014.07.17
   Title: Assessing the Clinical Treatment Criteria for Chlamydia trachomatis at Public Health - Dayton and Montgomery County
   Investigator: John Porter (UD Undergraduate Student)
   Approved: July 2014

6. IRB #: 2014.09.29
   Title: Development of Population Protective Procedures for a Radiologic Event Study
   Investigator: Daniel Baker (WSU MPH Student)
   Approved: September 2014

Research Studies Closed

1. IRB#2012.08.1. GetUp Montgomery County Elementary School Sector Material Pilot
2. IRB#2013.03.1. Prevalence of Eosinophilia and Ova and Parasites Screening in an Immigrant Population in a Midwestern County
3. IRB #2014.03.17. Is PHDMC’s Level One Food Safety Certification Training Effective?
5. IRB #2014.05.08. Increasing Chlamydia Retesting Rates in STD Clinics
6. IRB #2014.07.17. Assessing the Clinical Treatment Criteria for Chlamydia trachomatis at Public Health - Dayton and Montgomery County
Research Studies Remaining Open at End of Year
1. IRB#2013.12.3. An Assessment of Knowledge and Attitudes on Latent Tuberculosis Infection Treatment Acceptance in a Southwest Ohio Public Health Clinic
2. IRB#2013.12.30. Assessment of Knowledge and Attitudes on Travel Vaccination
3. IRB #2014.05.28. Community Assessment of Diagnosis in the Fetal Alcohol Spectrum

Other Research/Requests Reviewed by Panel
Exploring the impact of inflammaging on immune function during M. tb infection. P01 grant application to National Institute of Health from Joanne Turner, PhD, Ohio State University.

Research Studies Which Have Led to Presentations/Publications
IRB#2013.03.1. - Presentation for Infectious Diseases Society of America Annual Meeting, Philadelphia, October 11, 2014
IRB #2014.03.17. - Presentation for completion of WSU MPH requirements
IRB #2014.04.30. - Presentation for completion of WSU MPH requirements
IRB #2014.05.08. - Presentation for completion of WSU MPH requirements

Research Studies Which Have Led to PHDMC Practice/Policy Changes
IRB #2014.07.17. Assessing the Clinical Treatment Criteria for Chlamydia trachomatis at Public Health - Dayton and Montgomery County – Criteria for diagnosis of NGU & MPC changed as a result of the findings from this study

Mass Media Interactions

During the past few weeks, we have had numerous contacts with TV, radio, and print.

The following are a few examples:
• News Release on cadas accepting walk-in clients
• News Release on Breastfeeding month
• Interview with WDAO on Infant Mortality Month
• In studio interview on Living Dayton at Chn 2 about West Nile Virus
• In studio interview on Living Dayton at Chn 2 about Super Lice
• In studio interview on Living Dayton at Chn 2 about immunizations
• Interviews with Chn 2, Chn 7, Chn 22/45 and DDN on school immunizations
• Interviews with Chn 2, Chn 7, Chn 22/45 and DDN on legionnaires disease
• Interview with DDN on Reibold renovation
• Interview with Chn 7 about cadas efforts during responsible gambling week
• Interviews with Chn 2 on school inspections
• Interview with Chn 2 on infant mortality rates
• Interview with Chn 2, Chn 7 and DDN about West Nile Virus
• Interview with Columbus Dispatch about ragweed

Jeff Cooper and Tom Herchline, M.D.