July 6, 2016

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

Special items

Lead in Drinking Water at Local Hospital

Public Health received notice on June 18 regarding elevated lead levels in the water supply within Miami Valley Hospital Campus, specifically in the Southeast Tower, Berry Building and the Weber Building. To address the issue, Public Health has been working in collaboration with Miami Valley Hospital, Ohio Environmental Protection Agency (OEPA), Ohio Department of Health (ODH) and the City of Dayton. Public Health has supported efforts by offering consultation, organizing communication efforts and assuring information sharing between all agencies involved. A joint media release was completed on June 20 and ongoing lead testing results have been provided to the media since the release.

Miami Valley Hospital has implemented emergency protocols and precautions which include:

- switching to bottled water in all the affected buildings including the Mini University Daycare and Five Rivers Health Center on campus
- suspending use of all tap water and ice machines in the affected buildings
- offering lead testing to employees and current patients
- switching food preparation to the main building
- suspending all water labors and births
- conducting leadership rounds in all buildings
- completing ongoing independent lead testing throughout the campus

OEPA and the City of Dayton are also completing ongoing lead testing inside and around the campus. The City of Dayton has also flushed the water pipes on two separate occasions to clear any sediment. Although efforts have been underway to alleviate the problem, ongoing test results still indicate elevated levels within the affected buildings. The cause for the elevated levels has not yet
been determined. Miami Valley Hospital will continue precautionary measures until the lead levels are below the EPA action level of 15 parts per billion.

Although elevated lead levels were not detected at the Mini University Daycare located on the hospital campus, Public Health will be working with the daycare to offer a lead testing clinic on-site as a precautionary measure due to the long-term effects of lead in children. In addition to the daycare center, Public Health will continue to work with all the partners to evaluate the need to test additional individuals or groups.

Lead interferes with the development and functioning of almost all body organs, with the most significant effects on the kidneys, red blood cells and brain. Acute toxicity (single / high dose exposure) is rare and most problems involve chronic / long-term exposures. The greatest risk of lead exposure is to young children (< 6 years) and pregnant women. Lead poisoning in children can result in serious health effects such as:

- brain, liver and kidney damage
- slowed development
- learning or behavior problems
- lowered intellect (or IQ)
- hearing loss

Some symptoms of lead poisoning include headache, stomachache, nausea, tiredness and irritability. No safe blood level of lead exists for children, and CDC recommends taking action if a child’s blood lead level is > 5 micrograms/dL. In adults, levels > 25 micrograms/dL are concerning.

**Improving Birth Outcomes**

Montgomery County has received funding from the Ohio Department of Medicaid (ODM) to combat infant mortality. ODH has allocated $26.8 million dollars statewide over two years to support community-driven proposals. Nine projects were funded in Montgomery County for a total allocation of $1,715,138.00. Public Health will work closely with Medicaid and with CareSource in the coming weeks around how the funding allocations will be structured and a plan for implementation.

Through Think for Two, Ohio Medicaid awarded funding to support the following proposals:

- Home visiting will be increased for pregnant women in targeted communities through partnerships with Five Rivers Health Centers, Help Me Grow Brighter Futures, Southview, and the Wesley Community Center.
  *Funding Amount: $654,928*

- The services provided by LifeStages, Samaritan Centers for Women’s CenteringPregnancy program, will be enhanced to include no-cost childcare during appointments, and no cost on demand transportation to and from the program appointments.
  *Funding Amount: $40,000*

- The Five Rivers Health Centers Healthy Start Program will be extended to all patients of the Five Rivers Center for Women’s Health and focus on the most high-risk communities.
  *Funding Amount: $501,340*
- Screening, Brief Interventions, and Referral to Treatment (SBIRT) trainings will be provided at no charge for area health care providers, community health workers, home visiting nurses, social workers, and others in contact with pregnant women in high-risk communities.
  
  Funding Amount: $20,000

- The Catholic Social Services of Miami Valley will expand Nurturing Parenting Program services to high-risk communities.
  
  Funding Amount: $145,274

- Participating physician offices and social services agencies will refer prenatal patients to housing counselors based on housing need assessments. The counselors will work with local housing agencies to support and advocate for pregnant patients in order to meet their housing needs.
  
  Funding Amount: $216,400

- Five Rivers Health Centers will work with the Montgomery County Department of Job and Family Services fatherhood initiative, the Public Health Fatherhood Initiative and Urban Light Ministries to create a fatherhood program and provide fatherhood education for dads-to-be in high-risk communities.
  
  Funding Amount: $18,196

Through the West Dayton Health Promotion Partnership, Ohio Medicaid awarded funding to support the following proposals:

- A support group will be created for the boyfriends and husbands of pregnant women, specifically younger men, in high-risk communities. The support group will meet bi-monthly and, additionally, a manhood boot camp will be available quarterly.
  
  Funding Amount: $80,000

- The faith-based community will train ministry leadership to identify at-risk women and men and promote the programs and services of the West Dayton Health Promotion Partnership in order to reduce stressors and promote mental health and overall wellbeing.
  
  Funding Amount: $39,000

### Prevent the spread of diseases

#### Local Investigations

Gastrointestinal illness continues, as often happens in the warmer months. There were seven cases of Campylobacter reported in June (through June 24th), 18 cases of Shigella, three cases of Salmonella, and one case of Cryptosporidium. The majority of cases were in children; the age ranges were 2 months to 66 years among the reported Campylobacter cases, and 18 months to 73 years among the Shigella cases. There was a cluster of Shigella cases involving a daycare center which included ten children who attended the daycare and one older sibling. One of the adults works as a nurse and was excluded from work until she had two negative stool cultures; none worked in daycares or as food handlers.

There were eight cases of Pertussis during the month. Ages ranged from 8 months to 73 years old. Family members were treated with prophylaxis. One individual was working as a camp counselor;
families were notified and instructed to be sure that children were up to date on Tdap vaccine. No secondary cases were identified.

Sexually Transmitted Disease Testing Offered at Dayton Gay Pride Festival

Nurses from the Sexually Transmitted Disease (STD) Clinic participated in the Dayton Gay Pride Festival held at Courthouse Square in downtown Dayton June 4. For the first time they were able to offer Gonorrhea and Chlamydia testing, along with performing Syphilis testing. A total of 20 individuals were tested, an increase over previous years. Out of the 20 individuals who received testing, one individual tested positive for Syphilis and another tested positive for Chlamydia. STD testing at this event is very important as many of those who attend are at high risk of contracting potentially life-threatening STDs. This is an annual event which is free and open to the public.

Protect against health threats

Keep Food Out of the Danger Zone

Environmental Health encourages the community to keep their picnics safe by keeping food out of the Danger Zone. The Danger Zone is the temperature range between 40 °F and 140 °F in which foodborne bacteria can grow rapidly to dangerous levels that can cause illness. Leaving perishables out too long in the Danger Zone is one of the most common mistakes people make, especially during warmer months. Below are their recommendations on how to steer clear of the Danger Zone this summer:

- Without refrigeration or a heat source, perishables should not be left out more than two hours if the temperature is below 90 °F, and only one hour if the temperature is at or above 90 °F. Since the weather will likely be hot in July, food should be returned to the cooler within an hour. If you are not sure how long food has been sitting out, throw it out immediately.

- Always keep cold food COLD, at or below 40 °F, in coolers or in containers with a cold source such as ice or frozen gel packs. Keep hot food HOT, at or above 140 °F, on the grill or in insulated containers, heated chafing dishes, warming trays and/or slow cookers. If food needs to be reheated, reheat it to 165 °F.

- Pack an appliance thermometer in your cooler to ensure food stays at or below 40 °F. Divide large amounts of food into shallow containers for fast chilling and easier use.

- Packing drinks in a separate cooler is strongly recommended, so the food cooler isn’t opened frequently. Keep the cooler in the shade, and try to cover it with a blanket or tarp to keep it cool. Replenish the ice if it melts.

- Use a food thermometer to check the internal temperature of meat, poultry and seafood.

Large Camp Event

This June, the 28th Annual Great Ohio Bicycle Adventure (GOBA) was held. This is a bicycle camping tour in which approximately 2,900 people travel roughly 50 miles per day through three Southwestern Ohio counties with overnight stops in multiple cities. This year, GOBA stopped and camped overnight in Brookville and Miamisburg. Environmental Health staff attended
organizational meetings with GOBA, local fire departments, city officials, and non-profit food vendors prior to the bicycle tour.

In order to operate a camp, a temporary park-camp license had to be obtained for each camp and organizers had to provide detailed plans that met the requirements of the park-camp rules. Of primary concern was making sure that the camp was sized and spaced accordingly for the amount of people staying in the camp. Sufficient facilities for restrooms and showers, as well as waste collection and removal were provided as required. GOBA also organized with the cities for local non-profit organizations to set up temporary food booths at the camps. There were thirteen temporary food vendors and one mobile food truck that were licensed and inspected between the two camp sites.

Mobilize community action through partnerships

GetUp Summer Challenge Providing Healthy Fun for Kids

This summer, GetUp Montgomery County is partnering with the Junior League of Dayton and Dayton Metro Library for the Summer Challenge. GetUp is offering free physical activity opportunities for children of all ages at the Northwest Library Branch following their summer lunch program, every Tuesday at 1 pm, June 7 through July 26. GetUp has partnered with Wright State University and Soccer Shots Miami Valley Region to offer a variety of activities: soccer, yoga, team building, obstacle courses, relay races and lots more.

Prepare for and respond to PH emergencies

Zika Activity

In May 2015, the World Health Organization reported the first local transmission of Zika virus in the Western Hemisphere (in Brazil). In November, a possible association between Zika and microcephaly was reported. On January 15, 2016 the CDC began requesting providers report suspected Zika virus disease. Through June 29, there have been 934 travel-associated cases reported in the U.S. (16 in Ohio); of this total, 13 were sexually acquired and no locally acquired vector-borne cases reported. Through the U.S. Zika Pregnancy Registry, there have been 287 pregnant women with laboratory evidence of possible Zika virus infection. Data from this registry is being used to update the guidelines for clinical care and improve prevention of Zika virus infection during pregnancy.

Serve as a public health information resource

National HIV Testing Day

National HIV Testing Day, June 27, highlights the importance of testing in detecting, treating, and preventing human immunodeficiency virus (HIV) infection. Awareness of HIV infection through HIV testing is the first step to prevention, health care and social services that improve quality of life and length of survival. CDC’s National HIV Behavioral Surveillance (NHBS) monitors behaviors among populations at risk for acquiring or transmitting HIV infection. NHBS data indicated that 9% of persons who inject drugs tested positive for HIV, and among those persons, 36% were unaware of their infection before testing. Among heterosexuals who tested positive for HIV, 44% were unaware
of their infection before testing. Among men who have sex with men who tested positive for HIV, 25% were unaware of their infection before testing. National HIV Testing Day has been shown to be associated with an increase in HIV testing and in new HIV diagnoses.

**Mass Media Interactions**

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

The following are a few examples:
- Multiple interviews with DDN about Zika virus and funding
- Interview with Channel 2 about Superbug
- Interview with Channel 22/45 about ozone
- Interview with Channel 2 about pool inspections
- Interview with Channel 2 about Zika virus
- Interview with Channel 2 about online pool reports
- Interview with DDN about Hepatitis C
- Interviews with DDN and Channel 2 about Stony Hollow landfill
- Interview with Channel 7 about grocery inspection reports
- Interview with Living Dayton about Men’s Health Month
- Interview with DDN about dump site cleanup in West Carrollton
- Interview with Channel 7 and DDN about insect repellents
- Interview with DDN about Layer Park in Miamisburg
- Interviews with DDN, Channels 7, 2, 22/45, and WYSO about lead in water at Miami Valley Hospital
- News Release about lead in water at Miami Valley Hospital
- Interview with DDN about infant mortality funding
- News Release about National HIV Testing Day
- Interview with Dayton City Paper about sex education in schools
- Interview with Channel 7 about food safety during grilling

Jeff Cooper and Tom Herchline, M.D.

Attached is the 2015 PHDMC Research Review Panel Annual Report
Research Studies Approved

1. IRB #: 2015.05.20  
   Title: Building Capacity for Obesity Prevention  
   Investigator: Darcy Freedman, MPH, PhD (Statewide project)  
   Approved: May 2015

Research Studies Closed

1. IRB#2013.12.30. Assessment of Knowledge and Attitudes on Travel Vaccination  
2. IRB #2014.05.28. Community Assessment of Diagnosis in the Fetal Alcohol Spectrum  

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#2015.05.20. Building Capacity for Obesity Prevention

Other Research/Requests Reviewed by Panel

Identification of Air Particulate Matter Sources in the Miami Valley, A. McGowin and S. Patel (WSU student research project).

Research Studies Which Have Led to Presentations/Publications

IRB #2013.12.3 - Presentation for completion of WSU MPH requirements  
IRB#2014.09.29 - Presentation for completion of WSU MPH requirements

Research Studies Which Have Led to PHDMC Practice/Policy Changes

None
Development of Population Protective Procedures for a Radiological Event

Daniel A. Baker, Wright State University - Main Campus

Document Type
Master's Culminating Experience

Publication Date
2015

Abstract

Objective: The purpose of this investigation was to evaluate the execution of emergency preparedness procedures of the west central Ohio region during a radiological event. Preparedness plans were generated by the Dayton Metropolitan Medical Response System and Public Health - Dayton and Montgomery County, which would later be disseminated to eight counties in West Central Ohio.

Methods: Two live scenarios, a region-wide functional exercise and a Medical Reserve Corps training exercise, were used to test different procedures and protocols for a radiological event relevant to various first response agencies (public health, law enforcement, emergency medical systems, hospitals, etc.). Exercise evaluation guidelines were used as metrics to determine exercise effectiveness for public health, emergency management agencies, and hospitals.

Results: Establishment of partnerships and resources among first responders was established and recognized as major strengths. Areas for improvement from each exercise include providing assistance and emergency information to populations with special needs and updating of guideline materials. Establishment of a community reception center response was also recognized for population monitoring purposes.

Conclusions: Overall, both exercise opportunities yielded strengths and areas for improvement to better prepare for a radiological event. Further review of other local, state, and federal best-practice guidelines will improve overall preparedness planning for future scenarios. Improving communication, knowledge of resources and establishing connections among sister agencies and other first response agencies will be needed in the future to ensure a meaningful understanding of the regional radiological response preparedness plan.

Repository Citation