



# Health Commissioner / Medical Director Report

## Public Health - Dayton & Montgomery County

**January 7, 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
- 

## Special items

### **Public Health Workforce Development**

As a key component of our national accreditation activities, Public Health staff recently completed a Training Needs Assessment Survey administered by the Ohio State University Center for Public Health Practice. The survey was designed to assess staff knowledge, skills and abilities in the following competency categories:

- informatics
- analytical and assessment
- policy development and program planning
- communication
- cultural competency
- community dimensions of practice
- public health sciences
- financial planning and management
- leadership and systems thinking

We have shared the written report of our survey results with all staff and are scheduling sessions to review the information and answer any questions. Our Workforce Development Team will use these results to establish our training plan for 2015-2016.

## Prevent the spread of diseases

### Local Investigations

A 54-year-old woman was hospitalized in December with malaria (*Plasmodium falciparum*). She had recently traveled to Nigeria to visit friends. She was initially treated in the ICU, and eventually discharged to home after completing treatment.

A 2-year-old boy and his 22-year-old mother were both diagnosed with Salmonella in December. No other contacts were identified with infection. An unrelated 2 month old was also diagnosed with Salmonella; other family members have had diarrhea, but have not been confirmed to have Salmonella. Through November, there have been 48 cases of Salmonella infection, as compared to 35 in 2013 for the same time period. No common sources have been identified.

## Protect against health threats

### RAPCA Contracts with Wright State University to Identify Wood Smoke Hazards

While air quality tends to improve during the winter months, there are occasions when winter conditions can exacerbate air quality problems. Atmospheric inversions, which act as a cap by trapping pollution close to the ground, are more likely to form in the winter months. Last winter, RAPCA theorized that atmospheric inversions and wood smoke from the use of woodstoves and fireplaces contributed to higher particulate matter levels on several days in the Village of Yellow Springs.

To test this theory RAPCA contracted with Wright State University researcher Dr. Audrey McGowin, whose area of specialty includes measuring very small amounts of combustion byproducts in particulate matter. These combustion byproducts are large organic carbon compounds that can be toxic and carcinogenic. Using particulate matter filter samples collected from RAPCA air monitors in Yellow Springs and Moraine, Dr. McGowin detected higher levels of a specific wood combustion byproduct in Yellow Springs as compared to Moraine. This corresponds to field observations and census data indicating a relatively high rate of residential wood burning in Yellow Springs as compared to other nearby communities.

Exposure to wood smoke can affect everyone, but young children, the elderly, and people with lung disease, including asthma and COPD or people with heart disease are most vulnerable. RAPCA encourages wood burners to use best burn practices to help reduce wood smoke, which include burning clean dry seasoned wood and never burning household garbage. RAPCA also recommends homeowners to use an EPA-certified stove or fireplace. For more information please visit U.S. EPA's Burn Wise Program <http://www.epa.gov/burnwise/>.

### Septic System Contractors Tested

Program staff in the Household Sewage Treatment Program proctored two testing sessions for septic system contractors. As specified in the new rules effective January 1, 2015, testing is required for all system installers, tank pumpers, and service providers wishing to work in the state of Ohio. The test is an open-book exam covering the new 120 page rule package. Test materials were provided by the Ohio Department of Health for proctoring by local health departments.

Two test dates were offered at Public Health. The December 10, 2014 test session followed a morning training session over the rules presented by an ODH representative. A second test session was offered on December 17, 2014 for those unable to attend the previous meeting.

Assuring that local contractors are properly credentialed is one of the numerous tasks generated by the transition to statewide rules. Program staffers are currently collaborating with colleagues in neighboring health departments to organize a regional training in the spring for system designers.

### **City of Dayton Source Water Protection Program Revision**

Well Field Program staff have been active participants in the on-going discussions regarding the proposed revisions to the City of Dayton's Source Water Protection Program. Since the revisions were first announced in May of 2014, the City of Dayton has met on numerous occasions in town hall and other meetings to gather input and comments on the proposed program revisions. These meetings with stakeholders, including Public Health, have resulted in changes to the original proposal.

A major change was retaining a hydro-geologically sensitive area within the protection area after consideration of more conservative assumptions in the computer modeling. While the newly proposed regulated protection area is still smaller than the current area, the city has delineated a much larger area for increased monitoring and targeting of risk.

The original proposal had originally prohibited variances within the protection area. After input from businesses stating a need for future expansion and growth, the city re-proposed a variance process to allow an increase in regulated substance inventories. This new proposal has raised concerns of the general public, the city's own Environmental Advisory Board, and Public Health. The city is drafting business process/use expansion criteria to address the concern of allowing increased risk in the protection area.

Other proposed revisions include expanding the definition of "Regulated Substances", increasing the prohibited uses within the protection area, and increasing the monetary fines for violations. When these proposed revisions are put into a final draft form for consideration at the City of Dayton Plan Board and City Commission, Public Health will provide formal written comment. Formal public hearings will likely occur in spring or early summer 2015.

## **Promote healthy behaviors**

### **Disease Prevention Staff Recognized**

Dominique Ayres, Consultation Education Specialist, was recently nominated for an award recognizing her service with Montgomery County Juvenile Court. Ms. Ayres provides HIV/AIDS and Sexually Transmitted Disease education in the community as well as the juvenile court setting. On October 27, Judge Nick Kuntz and Judge Anthony Capizzi presented the Special Recognition Award to Ms. Ayres. The agency recognized Ms. Ayres for her continued and dedicated service in the fostering of high ideals and standards for the youth involved in the Juvenile Court system.

## Prepare for and respond to PH emergencies

### **Ebola Virus Disease**

The Ebola outbreak in West Africa continues. The World Health Organization reports that there have been a cumulative total of 19,695 cases (suspect and confirmed) of Ebola virus disease (EVD) with 7693 deaths, as of December 24, 2014. The countries with widespread transmission include:

Guinea - 2630 cases

Sierra Leone - 9203 cases

Liberia - 7862 cases

The countries with recent cases include: Mali (8 cases), and the United States (4 cases). Nigeria (20 cases), Senegal (1 case), and Spain (1 case) have been declared Ebola free.

### **Influenza Activity**

The Centers for Disease Control and Prevention's (CDC) Influenza Division collects and analyzes surveillance data year-round and produces a weekly report on U.S. influenza activity from October through May. During December, overall influenza was increased within the United States. For week 51 (ending December 20, 2014), 36 states (including Ohio) reported widespread influenza activity, 10 states reported regional influenza activity, 2 states reported local spread of influenza, 2 states reported sporadic influenza activity, and no states reported no influenza activity.

Since the beginning of the flu season through December 27, there have been 2273 cases of influenza A and 37 cases of influenza B regionally (Auglaize, Champaign, Clark, Darke, Greene, Miami, Montgomery, Shelby, and Warren counties) and Montgomery County has had 175 influenza-related hospitalizations.

## Serve as a public health information resource

### **Serogroup B Meningococcal Vaccine Approved**

The FDA announced accelerated approval of Trumenba, a vaccine manufactured by Wyeth Pharmaceuticals, for prevention of *Neisseria meningitidis* serogroup B. Three randomized studies conducted in the United States and Europe demonstrated efficacy of Trumenba. The studies included approximately 2,800 adolescents. Following receipt of three doses of Trumenba, 82% of subjects had antibodies in their blood against *N. meningitidis* serogroup B. Prior to vaccination, only 1% had these antibodies. Safety of Trumenba was assessed among 4,500 individuals during various studies conducted in the United States, Europe and Australia. Most commonly reported side effects included pain and swelling at injection site, headache, diarrhea, muscle pain, joint pain, fatigue and chills. Trumenba is a 3-dose series administered at months 0, 2 and 6 among individuals aged 10 through 25 years. According to the CDC, approximately 500 cases of invasive meningococcal disease occurred in 2012, of which one-third were caused by serogroup B. In the past two years, there have been outbreaks of serogroup B meningococcal disease at Princeton University and UC Santa Barbara.

## **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 World AIDS Day
- News Release on new Community Health Assessment 2014
- News Release on Creating Healthy Communities Grant
- Interview with WYSO about Creating Healthy Communities Grant
- News Release on \$1.6 million Chronic Disease Prevention Grant
- News Release on Martin Luther King Day activities
- News Release on Healthy Child Care competition
- Multiple Interviews with DDN, Chn 2, Chn 7, and Chn 22/45 regarding flu cases in the region
- Interview with DDN on Ohio's position in America's Health Ranking
- Interview with DDN regarding norovirus infections in the area
- Interview with DDN about potable water issues at an area manufactured home park
- Interview with Chn 2, Chn 7 and DDN on problems with flu strain effectiveness in the current vaccine
- Interviews with DDN about Clean Water Ltd. air pollution issues

**Jeff Cooper and Tom Herchline, M.D.**