



COMMITTEE WORK SESSION APRIL 7, 2014

Committee Members Present: Scott Pelot
 Dennis McGlone
 Danny Grether
 Dennis Pierson
 Paul Tousley
 Charlotte Whipkey
 Rick Rodgers

Also Present: Mayor Mike Zita
 Valerie Wax Carr
 Justin Markey
 Laura Starosta-Excused
 Karla Richards
 Ann Campbell

The Committee Work Session convened on Monday, April 7, 2014 at 7:02 PM, in the Council Chambers of the Safety Administration Building. The meeting was called to order by Rick Rodgers, President of Council. Following a salute to the flag and the Pledge of Allegiance, there was a moment of silent prayer.

General Topics of Discussion:

M.A.D. Presentation by Mr. Shilling-Operations Manager

Mr. Shilling gave a brief report on the MAD operations for this season and distributed the Annual Report for 2013 (see attached). Mr. Shilling noted that if everyone would just take care of their little things in their yards in the right way, most of these issues could be eliminated. Mr. Shilling stated he is constantly working with the supplies to ensure the most effective and safest products available. Mr. Shilling noted that the actual spraying is about 10% or less of our program and we are more focused on surveillance, larviciding, and education programs. Our program is different because we are pro-active and not reactive because of how we manage the program. Mr. Shilling discussed the numbers in trappings that prompt spraying and the methods involved. Mr. Shilling stated that many other entities in Ohio, Pennsylvania have commented on how impressed with our program they are. Two years ago we did not have a lot of mosquitoes, but last year had an enormous amount of mosquitoes as the eggs can lay dormant for as many as five (5) years and we had the flooding. Mr. Shilling noted this Annual Report is filed with the State of Ohio and Summit County.

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Mr. Pelot asked what Mr. Shilling felt the biggest hurdles for this year and what is he most excited about? Mr. Shilling noted that we have purchased some newer equipment, as in the barrier sprayer, to help us get out there and nip it in the bud. Communication with the communities has never been better. Mr. Shilling stated that improved response times have also helped. Mr. Shilling discussed the need for education on bees and how these sprayings can affect them. Mr. Shilling discussed the recent studies about the effects of drifting from the spraying the chemicals with some drifting up to two miles away. Mr. Shilling stated the spraying being done at the right time and monitoring wind conditions decreases the affects to bees. Mr. Tousley discussed the issues with bees and he knows of several people that raise bees and their contention is that it's not in the spraying; it's the water they drink that causes issues. Mr. Shilling stated the chemicals MAD uses dissipate quickly and has no residual effect; it does not lie on the leaf or on the water. The larvicide used in the water is environmentally friendly and does not harm fish. Mr. Shilling mentioned the importance of the spraying procedures again and added that GPS is used in each truck to monitor the spraying activity at all times. Mr. Tousley asked about the comparisons to others cities in his annual report and the difference of values. Mr. Shilling stated we are one of the few abatement districts where the costs come from the home owners and not the City per se. Several years ago the MAD sent out surveys and about the 90% of the residents felt this was a good program. Mr. Tousley asked more specifically if Norton residents are receiving a good service for the money and Mr. Shilling replied yes and he has been using several suppliers to make sure we get the best rates possible for our products and he believed the cost to homeowners was about \$12.00 per year on a \$100,000.00 home. Mr. Tousley inquired on the consistency of cost to tax payers. Mr. Shilling replied he was not sure if there had been any increases in the millage and added that to buy two (2) cans of OFF would be more expensive than service from what we provide. Ms. Whipkey stated she had previously spoken with Mr. Webb had indicated it's been four years since there has been any cost changes. Mr. Rodgers asked how long have we been in the MAD and Mr. Shilling noted since 2005. Mr. Rodgers asked about the differences in the services we used to receive from the County compared to MAD. Mr. Shilling noted that since under the MAD, there have been no deaths in Norton, however there were a couple reported in New Franklin although it is difficult to determine where the victim actually had contact with the infected insect due to people traveling. Mr. Shilling stated he wants to focus with the residents to help them get the low lying areas cleaned up and remove excess brush. Mr. Grether noted in the report it states there were reports that West Nile Virus was present in all four (4) wards, and Mr. Shilling concurred.

Mutual Aid-Equipment Sharing

Mr. Pierson stated that this covers all the equipment to be used by the outlying communities. Mr. Pierson moved to place this on Councils next agenda, seconded by Ms. Whipkey

Roll Call: Yeas: Pierson, Whipkey, Pelot, McGlone, Grether, Tousley, Rodgers
Nays: None

Motion passed 7-0.

Oriana House Annual Contract

Mr. Rodgers stated that this is a renewal for a contract with Oriana House. Mr. Rodgers moved to place this on Councils next agenda, seconded by Mr. Grether. Mr. Rodgers questioned if there is a cost to the City and Mayor Zita the individual that attends the program pays for the expenses. Mayor Zita noted that the fee is not increased from last year. Mrs. Carr noted that every community must have an alternate program to help people with rehab and we picked Oriana House. Mr. Rodgers again asked if the City pays these costs and Mrs. Carr replied yes there are some costs to the City, and Mr. Markey concurred adding that there is also some type of recovery of the fees through the costs associated with Mayors Court although he does not know the specifics. Mr. Pierson asked if we get any contribution from Oriana House for referring clients to them and Mrs. Carr noted she did not think. There was more discussion on what costs the City is responsible for and Mrs. Carr indicated that she would get this information in detail for next week.

Roll Call: Yeas: Rodgers, Grether, Pelot, McGlone, Pierson, Tousley, Whipkey
Nays: None

Motion passed 7-0.

Appointments to Boards & Commissions

(See discussion under Unfinished Business)

Textile Recycling Program

Mr. McGlone turned the discussion over to Mrs. Carr who indicated that Mr. Scott Shaffer of Great Lakes Recycling Company was present tonight for any questions. Mrs. Carr shared that ReWorks of Summit County had recommended having such a program started within the City to collect textiles. Mrs. Carr explained the details and that on the days of recycling for the City, those who want to participate in the program would place their item in the green bags provided and a second truck would follow behind our normal trucks. We are not trying to take away from any charitable organization. The good news is that this does not cost the City of Norton or the residents anything and if we divert just 10% we could receive about \$10,000.00 in revenue. Mrs. Carr indicted the group does all the PR work and information, and all we have to do is support it. Mr. Shaffer stated our goal is to make these types of products just as easy to dispose of just like other recycling by using the provided green bags. Mayor Zita stated this truck is the size of a box truck and Mr. Shaffer concurred. Mr. McGlone asked how these green bags are distributed and Mr. Shaffer noted this is done by mailer to the residents along with stickers for items that could not go into the bags. Mrs. Carr noted if they use the bag they are replaced, and Mr. Rodgers asked how and Mr. Shaffer stated we can leave empty bags at the mailbox or deliver to the door. We have also suggested we could leave bags here at City hall to pick up at their event. Mr. Shaffer noted if there is a large pick up like a life event move out all they need to do is call our customer service desk. Mrs. Carr noted there is no cost to the resident for this and we could also have a drop box located at the others. Mr. Tousley asked if the group was government subsidized and Mr. Shaffer responded they were not.

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Ms. Whipkey asked where they were located and Mr. Shaffer stated the corporate headquarters are in Solon and the distribution area, with the truck, is located in Warrensville Heights for now. Ms. Whipkey asked how do you not impact the charitable organizations, and Mr. Shaffer noted they can still do so if they wish, and Mrs. Carr stated these items being recycled are items like torn sheets and towels that you would not donate to charity. Ms. Whipkey discussed the wording on the contract that if we contract with you that we cannot contract with anyone else. Mr. Shaffer noted that is just for the City, you can still have AMVETS or someone else comes into the city. Ms. Whipkey discussed page 1 Section 2 first line where it states you may terminate or not terminate this agreement. Ms. Whipkey noted another area on the contract that needs cleaned up on same page. Ms. Whipkey asked about some elderly residents that can't get out for the curbside service and questioned if they can get assistance here. Mr. Shaffer stated we could address this on a case by case basis. Ms. Whipkey asked to have that added to this contract clearly stating they could have this service if needed. Mr. Tousley asked if you are government subsidized and Mr. Shaffer replied no. Ms. Whipkey asked where this company is located and Mr. Shaffer replied Solon and we have a distribution center in Warrensville Heights. Mr. Pierson asked Mrs. Carr if we receive any monetary reward for recycling from the Kimble Company and Mrs. Carr replied no. Mr. Rodgers asked about the company being able to contribute usable goods to other third world countries and impoverished areas and countries. Mr. Shaffer explained they are unique in the ability to recycle and process materials at several different levels such as selling in bulk to local business with a percentage going overseas. Mr. Shaffer explained where and how these donations get distributed. Mr. Grether questioned the potential conflict with Kimble and the rates our residents currently pay? Mrs. Carr stated she has already discussed this issue and Kimble reviewed this contract and they indicated there is no issue with this. Mrs. Carr noted ReWorks is really getting this promoted in all communities in the County and you will be seeing this type of recycling everywhere. Mr. Pierson stated he would like to see our people go this route and we need to promote to the residents there is no cost to them. Mrs. Carr stated she intends to do that once approved and possibly as a co-op in conjunction with the Norton Clean Up Day on April 24, 2014. Mr. Rodgers asked where would the mailing information come from and Mrs. Carr stated that list would come from Kimble and they are open to this. A question from the floor was asked if it was really for worn out items and Mr. Shaffer answered yes, but the items needed to be clean. Mr. Grether noted that the correct date for Norton Clean up Day is April 26, 2014 not April 24, 2014. Mr. McGlone moved to place this on Councils next agenda, waiving the second and third readings with emergency language, seconded by Mr. Pelot.

Roll Call: Yeas: McGlone, Pelot, Grether, Pierson, Tousley, Whipkey, Rodgers
Nays: None

Motion passed 7-0.

Cleveland-Massillon Road Widening-Transystems Contract

Mr. Pelot indicated that this is yet another companion piece of legislation required for the widening of Cleveland-Massillon Road.

Mr. Pelot stated that this is a contract between the City of Norton and Transystem Real Estate Company for the widening of the Cleveland Massillon Road widening and is required for this project. Mr. Pelot stated that Transystem is an ODOT approved company and this is broken down into two parts. Mr. Pelot noted in part 1 the cost is \$131,371.00 and Mrs. Carr noted that is their fee, and that does not include the cost for the right of ways involved. Mrs. Carr stated that ODOT only has a handful of people we can work with and they have selected GPD. They have a very tight fee schedule that has already been reviewed and approved by ODOT. Mrs. Carr stated we hope to move through these twenty-nine (29) parcels rather quickly and does not expect to have any issues. Ms. Whipkey stated we are talking about twenty-nine (29) parcels in the first phase and 43 in the second; does permanent taking mean that these people are actually going to lose their property? Mrs. Carr explained the difference between permanent, total taking, right of ways, and that there are no total takings as they would take so much property that would mean a total shut down for the business. Ms. Whipkey stated we are not just talking about businesses; there are several residential parcels involved and some are quite close to the roadway so could be seen put in a position of being a hazard due to location. Mrs. Carr stated studies are done to consider that and that there are no total takes related to residential, these are only temporary takes. Mr. Rodgers indicated there are probably a set number of required feet established by ODOT, and Mr. Markey stated that was correct. Mayor Zita noted with a temporary take once the project is complete the property is returned back to the owner and Mr. Rodgers indicated that they are also compensated. Mr. Pelot discussed the need to move quickly or not with this. Mrs. Carr noted that we do have time but if Council wanted to expedite it that would be fine. Mr. Jack Gainer questioned the large shopping center area and homes involved and asked if there are plans for sidewalks here. Mrs. Carr stated she would check on that and is all in favor of having sidewalks in this project. Mr. Gainer stated he just cannot imagine spending all of this kind of money and not doing that. Mr. Pelot stated he believed in the original designs there were no sidewalks and that it was discussed to have these done by obtaining grant money. Mr. Grether discussed the Safe Walks to School grant we have already obtained and the need for them in the center of town. Mr. Pelot moved to place this on Councils next agenda, waiving the second and third readings, with emergency language, seconded by Mr. Grether.

Roll Call: Yeas: Pelot, Grether, McGlone, Pierson, Tousley, Whipkey, Rodgers
Nays: None

Motion passed 7-0.

Unfinished Business:

Mr. Grether noted next week's agenda we had asked to have the Games of Skills on the footage for these changes before the second reading. Mr. Pelot stated his only concern was concerning the footage for alcohol establishments in there, and was not sure how the rest of Council feels. Mr. Tousley noted he checked and found Barberton and Wadsworth both have 1,000 feet of a liquor establishment. Mr. Rodgers commented about Chief Hete having his input here and Mr. Grether stated the Chief would have his input and we as Council should have our own.

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Mr. Grether stated he is opposed to opening this up as the State casinos have strict regulations to follow. If we are going to talk about safety we need to leave that in here. Ms. Whipkey stated she agreed with Mr. Pelot on the liquor establishments and they already have to have liquor license, and has no problem with giving them some leeway. Mr. Rodgers clarified that we are going to allow them to have liquor licenses and Ms. Whipkey stated no, what we are saying is that we feel they can be within 500 ft of those that do. Mr. Rodgers stated he has a problem with being in close proximity of being able to go drink and then come back into these establishments. Mr. Rodgers noted we might be doing a disservice to some people where alcohol can have a negative effect, adding that it's not a good idea to mix the two. Ms. Whipkey stated there is nothing now that stops someone from going for a drink and then going into one of these establishments. Mr. Grether stated we already have the amended version going for a second reading next week. Mr. Grether stated he would like to see more on the definition of what is a public playground is, adding that we also have a property on Barber Road where it is divided by a small river where one could be located and a school property. Mr. Grether noted that we also have an appeals process through the BZA. Mr. Grether stated at this point it's set for a second reading next week, he appreciated everyone's input, and we will just see where everything goes. Mr. Tousley discussed the comments made by Mr. Copen recently about the issue with the playground area crossing the parcel on Barber Road and reported on some older Planning Commission minutes from March of 2012. It stated that even if you took that issue of the playground away, there are four (4) other restrictions there that would still prohibit this type establishment. Mr. Pelot moved to amend the legislation to eliminate the 500 ft. restriction within alcohol establishments, seconded by Ms. Whipkey.

Roll Call: Yeas: Pelot, Whipkey, Pierson
Nays: McGlone, Grether, Tousley, Rodgers

Motion Failed 4-3.

Ms. Whipkey asked Mayor Zita to comment on the Administrative Watershed District meeting and Mayor stated that meeting was canceled and no new date has been rescheduled. Ms. Whipkey asked when was it that your Administrative people have started talking about this and Mayor Zita replied sometime after the flood last July. Ms. Whipkey noted that Barberton seems to already be getting ready for their part of the widening, to which the Mayor concurred, and asked if the businesses had been notified. Ms. Whipkey stressed she wants to be informative as possible to these businesses although it is not our project they were all affected last year and deserve a heads up. Ms. Whipkey noted that Sue Dayton's business, in particular, will be impacted once again and she may need to adjust her ordering of products for the season. Mrs. Carr indicated she could check with ODOT and see what has been done. Ms. Whipkey stated we had told them we would keep them aware and it is only common courtesy on our part. Mr. Rodgers asked Mr. Markey if we can get an update from the Court on the Televised Meetings lawsuit and Mr. Markey stated we are waiting for a decision and that he was not sure of what type of report he could get while waiting. Mr. Rodgers expressed his concerns about the costs to make upgrades and he does not want to waste funds if the Court would rule on another method.

Ms. Whipkey agreed with Mr. Rodgers on spending monies on projects without knowing what may be ruled on and stated the Court's website had had no movement on it since December. There was discussion on the service we are offering and the quality. Mr. Grether objected to the discussion overall since we are in pending litigation. Mr. Markey stated that he understands your concerns and the caution of wanting to invest money into the system, while there is a pending lawsuit. It is what it is and those are the issues you are faced with. Mr. Pierson asked isn't there a 90 day time limit for the court to decide and Mr. Markey replied, good luck with that. Mr. Rodgers expressed his concerns of another lawsuit coming from this due to the flack from residents not being able to view or hear the meetings. Mr. Markey advised to refrain from any further discussion at this point.

New Business:

Mr. Grether noted he received a call from a resident on Creekside Drive about a flooding issue and heavy sediment build up going on since about 1996 and 1997. This area was apparently dredged out and railroad ties were put in. There is a storm water pipe had ruptured and now there are holes in this gentlemen's yard. Mr. Grether stated he wants the Service Department to look into this. Mr. Grether noted he and Ms Whipkey both received calls about the landfill on Wadsworth Road possibly expanding and questioned the permitting and if we need to take proactive measures to keep flooding issues from getting worse there. Mrs. Carr noted that we heard a rumor and we have looked into that and have found no validity to that at this point. Ms. Whipkey discussed the maps of the flood areas that we have access to that she was aware of are small adding that they are so out of date there almost useless. Mrs. Carr noted this is being worked on and we could get something more up to date. Mr. Tousley discussed that we overlooked item D on the agenda for Appointments to the Boards and Commissions and Mr. Rodgers indicated he decided to pull this item because we need more information on the candidates for these positions. Ms. Whipkey asked if the Community Center if this is open during the day where anyone can just walk in? Mrs. Carr replied no, its supposed to be locked at all times and should be locked. Ms. Whipkey asked Mayor Zita for any updates about the clock in the Community Center from the Kiwanis? Mayor Zita replied that the existing plastic clock on the wall does not work, and there was no reference as to that one being dedicated. Ms. Whipkey asked Mayor Zita of how he interrupts Section 2.03 Acting Mayor of the Charter? The Mayor asked what Ms. Whipkey was getting at. Ms. Whipkey answered he had went out of town for a week and the Council President was not made Mayor Interim nor was anyone made aware of his absence until after the fact. Mayor Zita replied that he has already addressed this with Council President. Ms. Whipkey stated she had sent out an email which it seems every time she sends one out, it seems she doesn't even deserve a response from anyone. Ms. Whipkey stated she wants this documented, not hidden behind doors, the people have a right to know, and she does not expect this to happen again in the future. If the Mayor needs to go out of town for a week, procedure should be followed. To which the Mayor restated he had already cleared it up with the Council President and Ms. Whipkey stated she apparently had a bigger issue with it than the President did and the Mayor agreed she apparently did. Mr. Grether noted he received a call from a Huston Road resident relating to the road conditions and in that email he also included his comments for roads.

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Mr. Grether requested Houston Road from 261 to its end, Cynwood from Shellhart to Fair Oaks; Pleasant Drive from Long to Cleve-Mass. Road; cul-de-sac repairs on Silverdale and Kay Blvd. Mr. Tousley asked if we have any say so on what gets done, and Mrs. Carr noted since we are under the agreement with the County we are not accepting any requests. Mr. Grether said he was making a statement. Mr. Tousley noted that in Ward 4 there have been no roads in several years, to which Ms. Whipkey added many years. Mrs. Carr stated that as we discussed in the workshop and we need an engineer's evaluation and standards need to be developed. In the meantime we are able to do a band aid approach for now in the meantime. Mr. Tousley stated to be fair his residents pay taxes as well and deserve to have their roads addressed. Mr. Rodgers stated we need to play catch up and we are just doing the best we can and it's a reality of the state of the City. Ms. Whipkey asked if there is any documentation from the past that would give us any idea as to what roads were actually correctly done, at no point we've done nothing along those lines? Mrs. Carr stated she understood there was one program from 2006 but was never updated throughout the years and was based on Council's input. Ms. Whipkey if we had ever had a full time engineer and the Mayor stated Bob Taylor that was back in perhaps 2003. Ms. Whipkey questioned if perhaps he had done something that would aid in analysis of the road situation. Mr. Gainer noted we are only spending \$450,000.00 this year because that's all we have. Next year it's going to have to be some kind of a tax or an assessment to get the roads done. Mr. Gainer stated some source if income has to be started now so we are not still talking about this for the next 15 years just like we have been talking about for the last 15 years or more. Mr. Gainer stated he would personally pay another \$50.00 a year to get some decent roads.

Public Comment-Agenda and Non Agenda Items:

No one had signed in to speak.

Topics for the next Work Session:

None

Adjourn

There being no other business to come before the Committee Work Session, the meeting was adjourned at 8:35 PM.

Rick Rodgers, President of Council

NOTE: THESE MINUTES ARE NOT VERBATIM

****ORIGINAL SIGNED AND APPROVED MINUTES ARE ON FILE WITH THE CLERK OF COUNCIL.****

All Committee Meetings will be held at the Norton Safety Administration Building, unless otherwise noted.

Barberton
Norton
Mosquito
Abatement
District

2013

Annual Report



Protecting Your Health - Keeping a Safe Environment

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Barberton Norton Mosquito Abatement District

Operations Manager

Russ Shilling

Treasurer

Brian Griffith

Secretary

Jill Easterling

Board of Directors

Robert Webb, President – (Norton Representative)

Kimberly Trenary, VP – (Barberton Representative)

John Baker – (Barberton Representative)

Karen Lyn Miller – (Norton Representative)

Michael Safron – (Norton Representative)

District Advisory Council

Norton Representative

John Conklin

Barberton Representative

Carol Frey

Summit County Representative

Brian Nelson

Board of Appraisers

Harry Ciccolini

Dale Sungy

James Hrubik

Barberton – Norton Mosquito Abatement District's Mission

The Mosquito Abatement District was formed under section 6115.05 of the Ohio Revised Code that was established to reduce the population of biting arthropods and to abate their breeding places. Its official name, as declared by Judge Jane Bond, on 6-23-2005, is the "Barberton-Norton Mosquito Abatement District".

It is the purpose of the Barberton – Norton Mosquito Abatement District to protect the people of the District from mosquito – borne disease by adhering to the principles as outlined in detail in the document titled "Combating West Nile Virus (WNV) – The Plan for the State of Ohio". The District also provides relief from nuisance mosquitoes when necessary.

Your Mosquito Abatement District wants you to be safe from mosquito-borne viruses, and we want you to enjoy being outside with your family. Imagine fewer mosquitos in your yard. You can prepare a picnic, play cards by moonlight, and even sit on your front porch without the hassle of mosquitoes.

The goal is achieved through a comprehensive integrated pest management (IPM) system. This comprehensive program includes public education and awareness, surveillance activities to define the problem, source reduction, biological control and prudent chemical control to minimize the problem.

The District's motto has become - - -

Keeping a Safe Environment & Helping You Enjoy YOUR Outdoors!

Barberton – Norton Mosquito Abatement District
2013 Annual Report

I. Surveillance

Approximately 900 gravid traps and 216 light traps were set throughout Norton and Barberton between June 03 and September 27, 2013. The mosquitoes collected from the gravid traps were frozen, identified, counted and shipped to the Pennsylvania Department of Environmental Protection Laboratory in Harrisburg, PA. It was necessary to contract with this department as the State of Ohio Department of Health discontinued the testing of the various vectors that carry diseases due to budget constraints. The mosquitoes sent to PA – DEP were tested only for the West Nile Virus. A total of 47,505 mosquitoes were captured in the gravid traps. Of these, approximately 10,700 mosquitoes were divided into pools of 100 mosquitoes, or less, for a total of 107 pools and sent for West Nile Virus testing on a weekly basis. Of the 107 pools tested, 10 were found to contain mosquitoes testing positive for the West Nile Virus. This is 63 pools less than was found from the 2012 season. The mosquito pools that were reported positive were collected in the following areas:

Barberton: Ward 1 – Oakwood St.
Ward 2 – Tuscarawas Ave. Extension
Ward 4 - Barber Rd.
Ward 6 – Noble Ave.

Norton: Ward 1 - Inas Dr.
Ward 2 - Clarkmill Rd.
Ward 3 - Johnson Rd.
Ward 4 - Johnson Rd.

Following notification of pools containing the West Nile Virus, BNMAD notified residents in those areas, along with newspapers and local authorities, so all residents were reminded of the proper procedures to protect themselves and help eliminate the spread of the disease. BNMAD then aggressively targeted those areas with additional surveillance, larviciding (larviciding prevents the larvae from becoming adult mosquitoes) and adulticiding (spraying). Adulticiding is the only way to eliminate the *adult* mosquito that carries the West Nile Virus.

II. Surveillance, Light and Gravid Traps

Light and gravid traps were set throughout the BNMAD. Light trap counts are used to determine the night time activities of biting mosquitoes. If counts are extremely low, then that area will not need to be adulticided at that time. Issues that also determine whether an area should be adulticided are factors such as complaints from residents and whether the West Nile Virus has been found in that area. Gravid traps are set Monday through Thursday. They attract the mosquitoes from dusk to dawn. These are collected in the mornings Tuesday through Friday. As explained above, they are frozen, identified and sent for testing to determine the presence of the West Nile Virus. In the 2013 season BNMAD collected approximately 130 % more mosquitoes than during the 2012 season. Some factors can be attributed to the flooding that accrued in the area this summer. Also, better trapping technics were implemented to give us a more accurate count of mosquitoes in an area where traps are set. Numbers of mosquitoes trapped in Norton was 27,714 and 19,791 in Barberton for a total of 47,505.

A different type of light trap was purchased and these gave a much better count of the mosquitoes in the areas where they were set. In the City of Norton, 3 light traps were set per ward and in Barberton 2 light traps were set per ward. Using the new type of light trap we collected many more

mosquitoes than in past years. In Norton there were 4289 mosquitoes collected and Barberton had 1896 for the season.

III. Mosquito Species and Disease

The most common specie found in the BNMAD is the *Culex* mosquito. There are 64 species of mosquitoes in Ohio with only several that spreads diseases. Diseases that affect humans carried by the mosquito in Ohio are LaCrosse Encephalitis (LCE), St. Louis Encephalitis (SLC) and West Nile Virus (WNV). Diseases that affect animals are heartworm in dogs and cats, Eastern Equine Encephalitis Virus (EEEV) in horses. Unfortunately, the types of mosquitoes that are spreading diseases are changing and keeping educated and up to date on this topic is extremely important.

The BNMAD this year also took aggressive actions to locate areas where heartworm disease was found. We are doing a better job of following up on reports of heartworm, as our pets are so important and beneficial to the residents and we want to protect them as well.

IV. Communication

a. Education/Newspaper Articles/Website

The BNMAD program conducts an Integrated Mosquito Management Program (IMM). This includes 3 major components.

First, and most important, is EDUCATION. The BNMAD has many programs that we use to educate the public of how they can help control the mosquito population. Our website, www.mosquitodistrict.com, contains many articles how to accomplish this. Articles that tell what repellent to use, what attracts mosquitoes and how to reduce the amount, types of mosquitoes, disease symptoms and many more useful articles. It also includes all the results of the testing for the WNV and what areas are affected. The schedules for spaying and the Board of Director meetings are posted and updated regularly. Much of this information is also shared in the local newspapers. We also hosted an open house this year where residents were invited to visit and see how the BNMAD is operated. They were able to see the equipment, chemicals and every aspect of how we do our best to control the mosquito population and how they play a major part of this operation. We passed out literature they could take with them which enabled visitors to take their time to read and educate themselves at their leisure. We also participated in a parade where we were able to pass out much educational information and to bring attention to our program. Much of this information is shared with local newspapers, many times on a weekly basis, throughout the season. Also, we keep the local government entities informed. The BNMAD spoke at several city council, health board, chamber of commerce meetings and workshops where we presented our programs services and results and answered questions that anyone wished to present. In short, No Eggs – No Larvae – No Mosquitoes!

Also interviews were given to Fox8 news in Cleveland, WKSU radio, WAKR radio and several newspapers including The Barberton Herald, Akron Beacon Journal and The Post.

The second part of the program is SURVEILANCE. We use both CDC light traps and gravid traps to allow us to know of any problems with mosquitoes. The CDC light traps are hung from trees in the late evening. The top of the trap contains dry ice. Dry ice immolates our breath. Our breath is made of CO2 which is what the dry ice contains. There is also a small light in the traps. These two items attracts the mosquito and are caught in the net that hangs from the bottom of the trap. They are forced into the net with a small battery operated fan. We gather the traps the next morning and count the amount of mosquitoes. If the counts are above what we feel is acceptable, we then determine whether there is a need to spray that area. The mosquitoes trapped in the light traps are not sent for testing of diseases.

Gravid traps are set out four days a week. It consists of a basin of "stinky" water with a battery operated fan that forces the mosquitoes that are attracted to the water, into a net that is placed on top of the trap. Each morning we gather the nets, freeze, count, identify, put into vials and send to the lab for testing. We have them tested for West Nile Virus. If any are found to be positive for WNV we then notify the residents and target that area aggressively to reduce the mosquito population.

The third part of the IMM program is LARVICIDING. Larviciding involves treating any area where mosquitoes are breeding or have the potential to breed. Elimination of the larvae or pupae to develop into an adult mosquito is very important. The more we prevent the larvae/pupae from evolving into adults, the less chance of the mosquitoes becoming a nuisance or spreading disease. The products used for larviciding are environmentally friendly and are purchased from both the Univar and Clarke companies who are among the top companies in this field. The goal is to eliminate the larvae or pupae before they become adults.

When we do have adult mosquitoes we turn to ADULTICIDING. Adulticiding is what most residents notice, which is SPRAYING. Once mosquitoes reach the adult stage, spraying is the only way to reduce their population. It's the last defense and what we spend the least amount of our time conducting because our attention is focusing on preventing mosquitoes becoming adults, which helps lower the need for spraying.

b. Telephone Calls:

BNMAD received approximately 105 calls starting on May 15, and continued throughout the season. These calls came from local government entities, newspapers, television stations, businesses and most importantly, the residents.

Residents reported to us when there were excess mosquitoes in their area. This is very helpful in being able to find problem areas and reduce the mosquito population and lowering the chances of diseases spreading. We go and inspect the area for any standing water, tree holes or high vegetation where mosquitoes may be breeding. If something is found, we use the appropriate application to remedy the problem. Residents also call to schedule a special treatment if they are hosting an outdoor event such as graduation parties, weddings or any other occasion. Each property owner is entitled to one special treatment per year.

Businesses request special sprayings when the mosquitoes start affecting their finished products or have the potential to affect them, and most importantly, the safety of their employees. Businesses need to be addressed immediately as they employ many and the BNMAD concerns are not only to the physical health of employees, which is the most important, but to the financial health of the businesses and communities we service.

We also take great care of those who call to make sure the parks and sporting facilities are being treated so the participants and spectators may enjoy the event. The calls are usually not necessary as these areas are on our regular schedule for being treated, but we do welcome and respect their concerns as they keep us up to date on the conditions in our area.

C. Barberton – Norton Board of Health

The BNMAD has spoken at several meetings of the board of health to keep them posted of our status and any problems that may arise with the diseases spread by mosquitoes.

They were also notified that in the future we are taking a more active approach with helping to eliminate areas with water problems that contribute to the mosquito population.

Ohio Mosquito-borne Disease Stats as of November 1, 2013:

The state report is not as detailed as years past as many areas have not continued a mosquito program due to budget concerns and the paperwork required.

Also the state of Ohio has discontinued testing for the diseases spread by the mosquito. This has hurt many areas immensely. This issue still needs to be confronted as it hinders the efforts of various entities to control diseases spread by mosquitoes.

Richard E. Gary Jr., Ph.D. State Public Health Entomologist, Ohio Department of Health, Bureau of Infectious Diseases, Zoonotic Disease Program, has done a great job of informing the BNMAD of the information he has been receiving.

West Nile virus in Ohio:

Humans - **21** cases, including 3 fatalities; 11 males and 10 females from Butler (1), Cuyahoga (4), Franklin (2), Hancock (1), Knox (1), Lake (1), Lucas (5), Scioto (1), Trumbull (1), Union (1), Wayne (1), Wood (1) and Wyandot (1) counties.

Ages range from 38-82 (median 70).

Nineteen of the cases were hospitalized with encephalitis (11), meningitis (5), fever (2) or other clinical (1).

Two fever cases were not hospitalized.

The 3 fatalities were encephalitis (2) and meningitis (1) cases from Cuyahoga, Lucas and Scioto counties.

Veterinary – **3** horse cases in Guernsey, Knox and Wayne Counties.

Mosquitoes – Mosquito surveillance has concluded for the season. Available data shared by local health jurisdictions are in the table below:

Submitting Agency	Mosquitoes Collected	Mosquitoes Tested	Total (+)
<u>1</u> Barberton / Norton M.A.D.	<u>47,505</u>	<u>13,700</u>	<u>10</u>
<u>2</u> Cincinnati Health Department	<u>808</u>	<u>781</u>	<u>3</u>
<u>3</u> Columbus Public Health	<u>66,570</u>	<u>37,875</u>	<u>120</u>
<u>4</u> Delaware General Health District	<u>1,369</u>	<u>1,369</u>	<u>2</u>
<u>5</u> Franklin County Public Health	<u>55,637</u>	<u>30,232</u>	<u>38</u>
<u>6</u> P.H. Dayton & Montgomery County	<u>13,213</u>	<u>4,799</u>	<u>9</u>
<u>7</u> Summit County H.D.	<u>111,238</u>	<u>87,243</u>	<u>33</u>
<u>8</u> Toledo Area Sanitary District	<u>1,648</u>	<u>1,648</u>	<u>15</u>
Total	294,562	174,647	230

La Crosse encephalitis virus:

Humans – **11** cases; 7 males and 4 females, from Athens (1), Butler (1), Cuyahoga (1), Delaware (2), Holmes (1), Licking (1), Miami (1), Pike (1), Ross (1) and Tuscarawas (1) counties.

Ages range from 1 month to 14 years old (median age 8 years).

All 11 were hospitalized with encephalitis (8), meningitis (2) or fever (1).

Travel associated human mosquito-borne disease cases:

Dengue – **7** cases with travel history to Honduras, India, Puerto Rico and St. Vincent & Grenadines.

Malaria – **24** cases with travel history to African countries and Papua New Guinea.

The following data is from the CDC and ArboNet Reports
West Nile virus (WNV) activity in 2013 across the USA

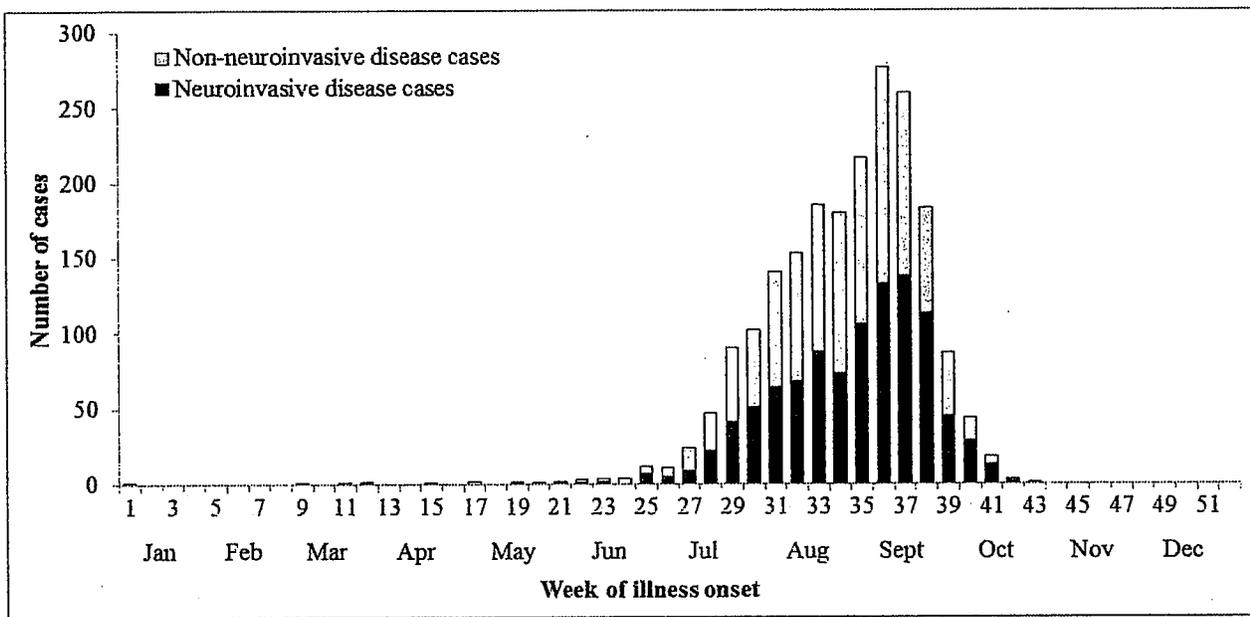
As of October 29th, 1,154 counties in 48 states and the District of Columbia have reported WNV activity (ArboNET for 2013, including 46 states with reported WNV human infections (i.e., disease cases or viremic blood donors) and two additional states with reported WNV activity in non-human species only (i.e., veterinary cases, mosquito pools, dead birds, or sentinel animals).

Reported WNV disease cases

To date, 2,059 human cases of WNV disease have been reported from 46 states. Of all WNV disease cases reported, 1,015 (49%) were classified as neuroinvasive disease (e.g., meningitis, encephalitis, acute flaccid paralysis) and 1,044 (51%) as non-neuroinvasive disease. Dates of illness onset for disease cases ranged from January–October

Presumptive viremic blood donors

To date, 371 WNV presumptive viremic blood donors have been reported from 29 states. Of these, 59 (16%) developed clinical illness and are also included as disease cases.



West Nile Virus in Humans as Reported to CDC, 2013

State	Neuroinvasive	Non Neuroinvasive	Total	Deaths	Presumptive Viremic Blood Donor
<u>Alabama</u>	<u>0</u>	<u>7</u>	<u>7</u>	<u>0</u>	<u>1</u>
<u>Arizona</u>	<u>20</u>	<u>5</u>	<u>25</u>	<u>2</u>	<u>1</u>
<u>Arkansas</u>	<u>14</u>	<u>1</u>	<u>15</u>	<u>1</u>	<u>5</u>
<u>California</u>	<u>200</u>	<u>119</u>	<u>319</u>	<u>11</u>	<u>55</u>
<u>Colorado</u>	<u>88</u>	<u>216</u>	<u>304</u>	<u>5</u>	<u>23</u>
<u>Connecticut</u>	<u>1</u>	<u>3</u>	<u>4</u>	<u>0</u>	<u>1</u>
<u>Delaware</u>	<u>3</u>	<u>0</u>	<u>3</u>	<u>0</u>	<u>0</u>
<u>Florida</u>	<u>3</u>	<u>1</u>	<u>4</u>	<u>0</u>	<u>0</u>
<u>Georgia</u>	<u>2</u>	<u>4</u>	<u>6</u>	<u>0</u>	<u>3</u>
<u>Idaho</u>	<u>14</u>	<u>25</u>	<u>39</u>	<u>1</u>	<u>12</u>
<u>Illinois</u>	<u>65</u>	<u>29</u>	<u>94</u>	<u>8</u>	<u>16</u>
<u>Indiana</u>	<u>16</u>	<u>4</u>	<u>20</u>	<u>1</u>	<u>3</u>
<u>Iowa</u>	<u>21</u>	<u>19</u>	<u>40</u>	<u>0</u>	<u>10</u>
<u>Kansas</u>	<u>18</u>	<u>30</u>	<u>48</u>	<u>4</u>	<u>8</u>
<u>Kentucky</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>0</u>
<u>Louisiana</u>	<u>34</u>	<u>17</u>	<u>51</u>	<u>4</u>	<u>5</u>
<u>Maryland</u>	<u>9</u>	<u>7</u>	<u>16</u>	<u>1</u>	<u>1</u>
<u>Massachusetts</u>	<u>7</u>	<u>1</u>	<u>8</u>	<u>0</u>	<u>1</u>
<u>Michigan</u>	<u>21</u>	<u>12</u>	<u>33</u>	<u>1</u>	<u>4</u>
<u>Minnesota</u>	<u>29</u>	<u>50</u>	<u>79</u>	<u>3</u>	<u>25</u>
<u>Mississippi</u>	<u>25</u>	<u>18</u>	<u>43</u>	<u>2</u>	<u>5</u>
<u>Missouri</u>	<u>15</u>	<u>5</u>	<u>20</u>	<u>0</u>	<u>8</u>
<u>Montana</u>	<u>10</u>	<u>28</u>	<u>38</u>	<u>2</u>	<u>5</u>
<u>Nebraska</u>	<u>45</u>	<u>142</u>	<u>187</u>	<u>2</u>	<u>38</u>
<u>Nevada</u>	<u>8</u>	<u>3</u>	<u>11</u>	<u>1</u>	<u>5</u>
<u>New Hampshire</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>
<u>New Jersey</u>	<u>9</u>	<u>2</u>	<u>11</u>	<u>2</u>	<u>3</u>
<u>New Mexico</u>	<u>19</u>	<u>12</u>	<u>31</u>	<u>3</u>	<u>2</u>
<u>New York</u>	<u>9</u>	<u>12</u>	<u>21</u>	<u>0</u>	<u>9</u>
<u>North Carolina</u>	<u>3</u>	<u>0</u>	<u>3</u>	<u>1</u>	<u>0</u>
<u>North Dakota</u>	<u>56</u>	<u>58</u>	<u>114</u>	<u>2</u>	<u>15</u>
<u>Ohio</u>	<u>17</u>	<u>4</u>	<u>21</u>	<u>3</u>	<u>6</u>
<u>Oklahoma</u>	<u>39</u>	<u>14</u>	<u>53</u>	<u>5</u>	<u>15</u>
<u>Oregon</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>0</u>
<u>Pennsylvania</u>	<u>6</u>	<u>5</u>	<u>11</u>	<u>1</u>	<u>0</u>
<u>Rhode Island</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>
<u>South Carolina</u>	<u>2</u>	<u>4</u>	<u>6</u>	<u>0</u>	<u>2</u>
<u>South Dakota</u>	<u>55</u>	<u>89</u>	<u>144</u>	<u>3</u>	<u>25</u>
<u>Tennessee</u>	<u>14</u>	<u>6</u>	<u>20</u>	<u>1</u>	<u>0</u>
<u>Texas</u>	<u>76</u>	<u>55</u>	<u>131</u>	<u>10</u>	<u>36</u>
<u>Utah</u>	<u>4</u>	<u>3</u>	<u>7</u>	<u>0</u>	<u>5</u>
<u>Vermont</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>0</u>	<u>0</u>
<u>Virginia</u>	<u>5</u>	<u>0</u>	<u>5</u>	<u>0</u>	<u>0</u>
<u>Washington</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>1</u>
<u>Wisconsin</u>	<u>13</u>	<u>4</u>	<u>17</u>	<u>1</u>	<u>10</u>
<u>Wyoming</u>	<u>16</u>	<u>25</u>	<u>41</u>	<u>1</u>	<u>5</u>
<u>Totals</u>	<u>1,015</u>	<u>1,044</u>	<u>2,059</u>	<u>83</u>	<u>369</u>

Eastern equine encephalitis virus (EEEV) activity in 2013

a total of 138 counties in 22 states have reported EEEV activity in 2013, including five states with human disease cases and 17 additional states with reported EEEV activity in non-human species only.

Eastern equine encephalitis virus human disease cases, United States, 2013*	<u>Neuroinvasive</u>	<u>Non-neuroinvasive</u>	<u>Total cases</u>	<u>Deaths</u>
State				
<u>Arkansas</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>1</u>
<u>Florida</u>	<u>2</u>	<u>0</u>	<u>2</u>	<u>1</u>
<u>Georgia</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>0</u>
<u>Massachusetts</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>1</u>
<u>North Carolina</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>0</u>
<u>Totals</u>	<u>6</u>	<u>0</u>	<u>6</u>	<u>3</u>

La Crosse encephalitis virus (LACV) activity in 2013

As of October 29th, a total of 50 counties in nine states have reported LACV activity in 2013; all nine states have reported human disease cases. Additional demographic and clinical characteristics of

La Crosse encephalitis virus human disease cases, United States, 2013*	<u>Neuroinvasive</u>	<u>Non-neuroinvasive</u>	<u>Total cases</u>	<u>Deaths</u>
State				
<u>Indiana</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>1</u>
<u>Minnesota</u>	<u>2</u>	<u>0</u>	<u>2</u>	<u>0</u>
<u>Mississippi</u>	<u>2</u>	<u>1</u>	<u>3</u>	<u>0</u>
<u>North Carolina</u>	<u>9</u>	<u>0</u>	<u>9</u>	<u>0</u>
<u>Ohio</u>	<u>10</u>	<u>1</u>	<u>11</u>	<u>0</u>
<u>Tennessee</u>	<u>19</u>	<u>0</u>	<u>19</u>	<u>0</u>
<u>Virginia</u>	<u>2</u>	<u>0</u>	<u>2</u>	<u>0</u>
<u>West Virginia</u>	<u>10</u>	<u>0</u>	<u>10</u>	<u>0</u>
<u>Wisconsin</u>	<u>3</u>	<u>3</u>	<u>6</u>	<u>1</u>
<u>Totals</u>	<u>58</u>	<u>5</u>	<u>63</u>	<u>2</u>

St. Louis encephalitis virus (SLEV) activity in 2013

A total of 14 counties in five states have reported SLEV activity in 2013; all five states have reported SLEV activity in non-human species only.

West Nile Virus Disease Cases* and Presumptive Viremic Blood Donors by State – United States, 2013

<u>State</u>	<u>Neuroinvasive Disease Cases†</u>	<u>Non-neuroinvasive Disease Cases</u>	<u>Total cases</u>	<u>Deaths</u>	<u>Presumptive viremic blood donors‡</u>
Totals	1,140	1,131	2,271	100	403
Alabama	0	7	7	0	1
Arizona	25	8	33	3	6
Arkansas	15	3	18	1	5
California	227	130	357	14	59
Colorado	89	226	315	6	23
Connecticut	1	3	4	0	1
Delaware	3	0	3	0	0
Florida	4	0	4	0	0
Georgia	2	4	6	0	3
Idaho	14	26	40	1	12
Illinois	76	30	106	9	18
Indiana	16	4	20	1	3
Iowa	24	18	42	0	12
Kansas	29	45	74	7	24
Kentucky	1	2	3	1	0
Louisiana	34	20	54	4	5
Maryland	11	5	16	1	1
Massachusetts	7	1	8	0	1
Michigan	23	12	35	1	4
Minnesota	30	49	79	3	26
Mississippi	27	18	45	5	5
Missouri	18	5	23	1	8
Montana	10	28	38	2	5
Nebraska	53	160	213	2	38
Nevada	8	3	11	1	5
New Hamp	1	0	1	0	0

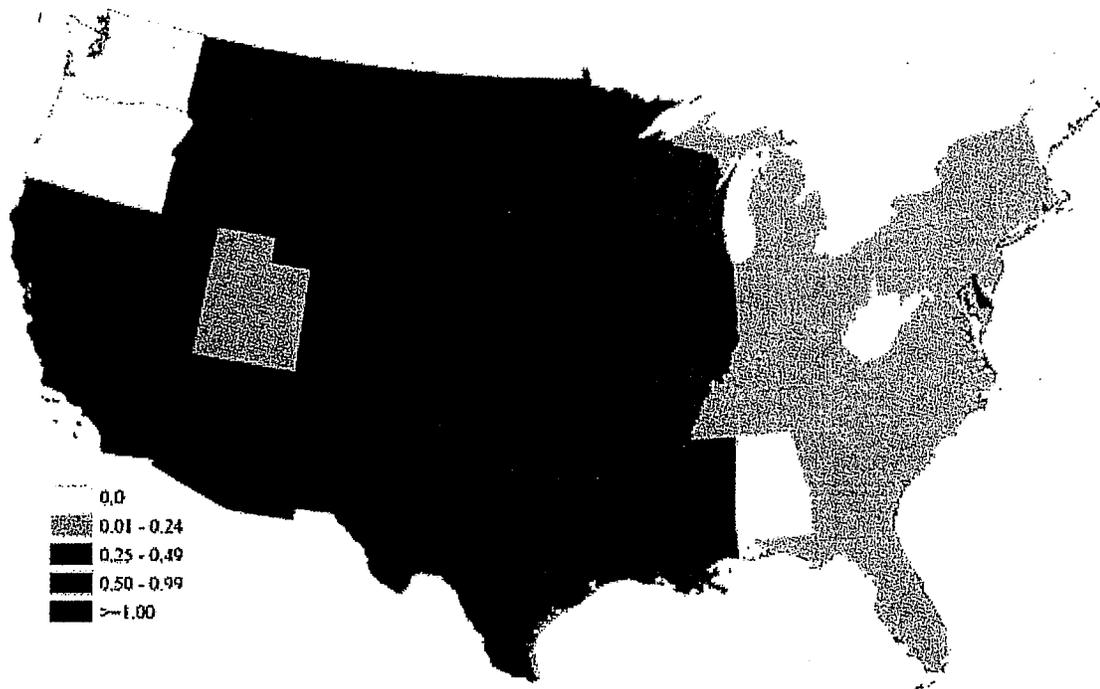
<u>State</u>	<u>Neuroinvasive Disease Cases†</u>	<u>Non-neuroinvasive Disease Cases</u>	<u>Total cases</u>	<u>Deaths</u>	<u>Presumptive viremic blood donors‡</u>
<u>New Jersey</u>	<u>9</u>	<u>2</u>	<u>11</u>	<u>2</u>	<u>3</u>
<u>New Mexico</u>	<u>24</u>	<u>14</u>	<u>38</u>	<u>3</u>	<u>2</u>
<u>New York</u>	<u>12</u>	<u>13</u>	<u>25</u>	<u>0</u>	<u>9</u>
<u>North Carolina</u>	<u>3</u>	<u>0</u>	<u>3</u>	<u>1</u>	<u>0</u>
<u>North Dakota</u>	<u>60</u>	<u>63</u>	<u>123</u>	<u>2</u>	<u>15</u>
<u>Ohio</u>	<u>20</u>	<u>4</u>	<u>24</u>	<u>3</u>	<u>6</u>
<u>Oklahoma</u>	<u>46</u>	<u>24</u>	<u>70</u>	<u>6</u>	<u>15</u>
<u>Oregon</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>0</u>
<u>Pennsylvania</u>	<u>6</u>	<u>5</u>	<u>11</u>	<u>1</u>	<u>0</u>
<u>Rhode Island</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>
<u>South Carolina</u>	<u>3</u>	<u>4</u>	<u>7</u>	<u>0</u>	<u>2</u>
<u>South Dakota</u>	<u>57</u>	<u>91</u>	<u>148</u>	<u>3</u>	<u>26</u>
<u>Tennessee</u>	<u>14</u>	<u>6</u>	<u>20</u>	<u>2</u>	<u>0</u>
<u>Texas</u>	<u>95</u>	<u>62</u>	<u>157</u>	<u>12</u>	<u>39</u>
<u>Utah</u>	<u>4</u>	<u>3</u>	<u>7</u>	<u>0</u>	<u>5</u>
<u>Vermont</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>0</u>	<u>0</u>
<u>Virginia</u>	<u>6</u>	<u>0</u>	<u>6</u>	<u>0</u>	<u>0</u>
<u>Washington</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>1</u>
<u>Wisconsin</u>	<u>15</u>	<u>5</u>	<u>20</u>	<u>1</u>	<u>10</u>
<u>Wyoming</u>	<u>16</u>	<u>25</u>	<u>41</u>	<u>1</u>	<u>5</u>

*Includes confirmed and probable cases

†Includes cases reported as meningitis, encephalitis, or acute flaccid paralysis.

‡Presumptive viremic blood donors (PVDs) are people who had no symptoms at the time of donating

West Nile Virus Neuroinvasive Disease Incidence by State – United States, 2013



This map shows the incidence of human West Nile virus neuroinvasive disease (e.g., meningitis, encephalitis, or acute flaccid paralysis) by state for 2013 with shading ranging from 0.01-0.24, 0.25-0.49, 0.50-0.99, and greater than 1.00 per 100,000 population.

Neuroinvasive disease cases have been reported to ArboNET from the following states for 2013: Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Wisconsin and Wyoming.

About ArboNET

ArboNET is a national arboviral surveillance system managed by CDC and state health departments. In addition to human disease, ArboNET maintains data on arboviral infections among presumptive viremic blood donors (PVDs), veterinary disease cases, mosquitoes, dead birds, and sentinel animals. As with other national surveillance data, ArboNET data has several limitations that should be considered in analysis, interpretation, and reporting.

The following should be considered in the analysis, interpretation, and reporting of ArboNET data:

1. ArboNET is a passive surveillance system. It is dependent on clinicians considering the diagnosis of an arboviral disease and obtaining the appropriate diagnostic test, and reporting of laboratory-confirmed cases to public health authorities. Diagnosis and reporting are incomplete, and the incidence of arboviral diseases is underestimated.
2. Reported neuroinvasive disease cases are considered the most accurate indicator of arboviral activity in humans because of the substantial associated morbidity. In contrast, reported cases of nonneuroinvasive arboviral disease are more likely to be affected by disease awareness and healthcare-seeking behavior in different communities and by the availability and specificity of laboratory tests performed. Surveillance data for nonneuroinvasive disease should be interpreted with caution and generally should not be used to make comparisons between geographic areas or over time.

Additional resources

For additional arboviral disease information and data, please visit the following websites:

- CDC's Division of Vector-Borne Diseases:
<http://www.cdc.gov/ncezid/dvbd/>
- National Notifiable Diseases Surveillance System:
<http://wwwn.cdc.gov/NNDSS/script/casedef.aspx?CondYrID=616&DatePub=1/1/2011%2012:00:00%20AM>
- U.S. Geological Survey (USGS):
<http://diseasemaps.usgs.gov/>
- AABB (American Association of Blood Banks)
www.aabb.org/programs/biovigilance/Pages/wnv.aspx