Issue 1
2019

WISCONSIN EPI EXPRESS

IN THIS ISSUE

PROGRAM UPDATES

STAFF UPDATES:

BCD welcomes the following staff to their new positions:

Elizabeth Schroeder, HIV Data to Care Coordinator, elizabeth.schroeder1@dhs.wisconsin.gov
Amy Wick, HIV Care Services Supervisor, amyr.wick@dhs.wisconsin.gov

Retirements:

Michael McFadden, HIV Care Services Supervisor, retired on January 11, 2019.

WISCONSIN TUBERCULOSIS (TB) TREATMENT ASSISTANCE PROGRAM (WTBTAP)

The WTBTAP is designed to encourage and support TB clients through the completion of TB treatment by providing funding to purchase treatment assistance aids. WTBTAP is used primarily for clients with active TB disease but can also be used for those with latent TB infection (LTBI). Some examples of treatment assistance include bus tokens, gas vouchers, food, or hobby supplies. For more information, call the Wisconsin TB Program at 608-261-6319.

NEW INFLUENZA WEBPAGES:

BCD recently revamped the influenza webpages so that they are easier to navigate and utilize plain language. You can find the new pages at dhs.wi.gov/flu.

ONGOING OUTBREAK INVESTIGATIONS:

Check out the Department of Health Services new Outbreaks and Investigations webpage for up-to-date information on outbreaks and investigations with wide impact in Wisconsin. For a list of past outbreaks, please see the Past Outbreaks and Investigations webpage.

NEW EDUCATIONAL MATERIALS:

There is a new educational fact sheet on the topic of Risk of Toxoplasmosis from Game Meat.

Acute Flaccid Myelitis (AFM) in Wisconsin

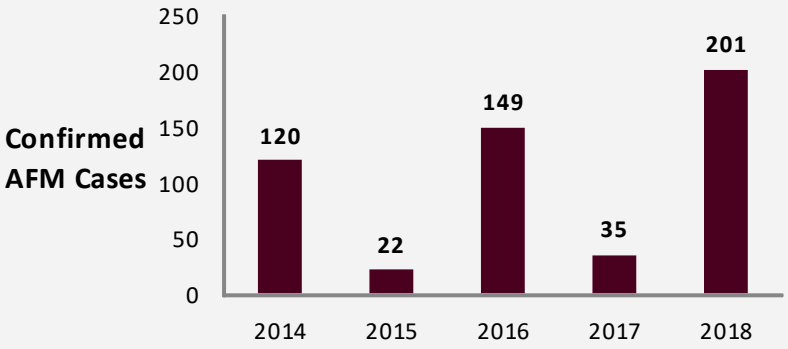
By: Susann Ahrabi-Fard, Communicable Diseases Epidemiologist

Since May 2018, the Centers for Disease Control and Prevention (CDC) has received an increased number of reported cases of acute flaccid myelitis (AFM) nationwide. AFM is a rare, but serious condition that causes inflammation of the nervous system. Most people with AFM experience sudden weakness in the arms or legs, loss of muscle tone and reflexes. Some people may also have facial or eyelid drooping/ weakness, difficulty moving the eyes, and may have difficulty swallowing or speaking. Respiratory failure can also occur, requiring ventilators to support breathing.

HISTORY OF AFM

AFM was first noted in 2014 when a large number of cases reported were identified in Colorado. Nationwide surveillance was enhanced and between August and December 2014 a total of 120 similar cases were identified. An increase in AFM cases has occurred every two years since 2014, with the onset of most cases occurring during August through October. At this same time of year, many viruses commonly circulate, including enteroviruses and mosquito-borne viruses, that are being investigated as associated with AFM. Coxsackie A16, as well as enterovirus D-68 and A71, have been found in the cerebrospinal fluid of a few cases of AFM.

FIGURE 1. U.S. cases of AFM have been increasing over the past five years



Data Source: Centers for Disease Control and Prevention

Most AFM cases (over 90%) have occurred in children under 18 and most of the patients had a mild respiratory illness or fever before they developed AFM.

AFM IN THE U.S. AND WISCONSIN

In 2018, 134 cases of AFM were confirmed in 33 states by CDC. The Wisconsin Department of Health Services, Division of Public Health (DPH), identified nine confirmed and three probable cases of AFM in Wisconsin residents during 2018. There was one death as a result of these cases. Eight of the nine cases were in children and the cases resided in the Southern, Southeastern, and Northeastern regions of the state. DPH is actively investigating other possible cases.

CAUSES OF AFM

AFM or similar neurologic conditions can be caused by viruses such as poliovirus and non-polio enteroviruses, West Nile virus (WNV), and viruses in the same family as WNV, specifically Japanese encephalitis virus and Saint Louis encephalitis virus, and adenoviruses. Often, despite extensive laboratory tests, the cause of a patient's AFM is never determined.

DIAGNOSIS OF AFM

AFM is often challenging to diagnose because it shares many of the same symptoms as other neurologic diseases, like transverse myelitis and Guillain-Barre syndrome. Therefore, it is important to conduct the proper testing and examinations necessary to differentiate between AFM and other neurologic conditions. Due to the complexity of diagnosing AFM, case confirmation is completed by experts at CDC. Although fewer cases are expected in coming months, CDC and partners continue to carefully study AFM to gain new understanding of the condition so that we can better diagnose, treat, and prevent it in the future.

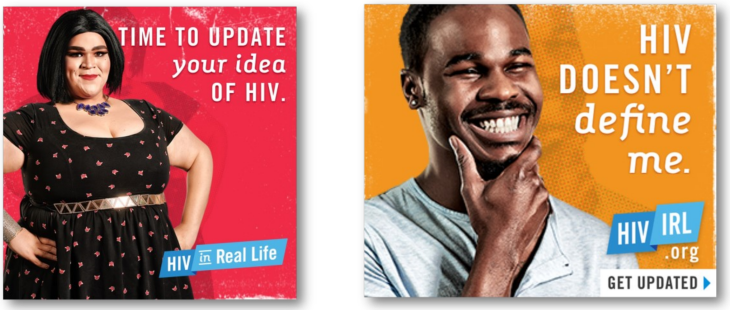
Developing a Community-Focused Media Campaign to Reduce HIV Stigma

By: Sara DeLong, HIV and HCV Testing Coordinator

The "HIV In Real Life" media campaign aims to reduce HIV stigma, a barrier to HIV testing and treatment. This community-focused campaign intends to minimize upstream barriers to individual behavior change in Milwaukee, Wisconsin. The central message of the campaign, "HIV has changed," was identified through community meetings, focus groups, and input from the community advisory board for the campaign. Participants felt that this message is important and needed in the Milwaukee community. The campaign launched June 27, 2018.

WHO WERE THE TARGET AUDIENCES?

- People most impacted by HIV in the Milwaukee community.
- The support systems—friends, family, and partners—of people living with HIV.



Online ads featured in the HIV in Real Life Media Campaign

HOW WAS THE CAMPAIGN DEVELOPED?

2016:

- The Wisconsin HIV Program completed The Wisconsin HIV Prevention and Care Integrated Plan 2017-2021, a state plan to end the HIV epidemic.
- State staff attended statewide and local community meetings to ask community members about ways to make the content of the 130-page plan more accessible.

2017:

- State staff hired a marketing firm to create the media campaign.
- Based on community feedback, state staff convened the HIV Media Campaign Community Advisory Board to provide input and feedback throughout the development of the campaign.
- The marketing firm conducted two rounds of focus groups with a total of 48 participants.
- The HIV Media Campaign Community Advisory Board recruited people from Milwaukee to participate in a photoshoot and video interviews for the campaign.

2018:

- The marketing firm finalized the new campaign website, videos, and print and online ads.
- The campaign launched on June 27, 2018: National HIV Testing Day.

WHAT TYPES OF MEDIA WERE CREATED?

The campaign featured print and online ads and ads featured on dating apps. The campaign website hivinreallife.wisconsin.gov includes videos from many of the people featured in the print ads, and more information on local resources for HIV prevention, testing, and treatment.

CAMPAIGN REACH (at midpoint of campaign)

Outdoor Media: 53,699,375 (on pace to double anticipated number of impressions)

Video Views: 125,000 estimated

Total Website Visits: 6,802

NEXT STEPS

The campaign launched on National HIV Testing Day, June 27, 2018, in Milwaukee and is planned to run until June 2019. The campaign may be expanded statewide in the future.

Wisconsin Refugee and Immigrant Resettlement

By: Wisconsin Tuberculosis Program and Refugee Health Program Staff

WHAT IS A REFUGEE?

A refugee is a person who has been forced from their home country due to violence or persecution. This persecution can be based on race, religion, nationality, social group, or political opinion. Upon arrival to the U.S., each refugee is paired with a resettlement agency, which is responsible for aiding them with the transition. This includes helping refugees find a place to live, helping with employment, and setting up necessary medical appointments. Refugees are eligible for Medicaid during their first eight months in the U.S.

WHAT IS AN IMMIGRANT?

An immigrant is an individual who voluntarily chooses to leave their home to pursue a new path in life. They must navigate the transition independently or with the help of their sponsor, and are not eligible for Medicaid upon arrival.

WISCONSIN REFUGEE HEALTH CONCERNS

In 2015, several focus groups were conducted with recent refugee arrivals in Wisconsin to determine their top health priorities. Navigating the U.S. health care system and insurance market were among their priorities. Their highest priorities were gaining education on nutritional practices and having reliable access to interpretation services. Participants in the focus group desired to gain independence in their health care. They believed that consistent access to language services would allow them to be more independent in their health management.

Through an analysis of refugee health screenings completed in the last few years, a list of the top medical concerns for refugees was developed. Among these are oral and vision care, hepatitis B, and hypertension. However, the top medical concern for refugees is latent tuberculosis infection (LTBI).

LTBI is caused by infection with the *Mycobacterium tuberculosis (M. tb)* bacteria. Unlike active tuberculosis (TB) disease, with LTBI the body has temporarily contained the infection. This containment can be compromised over time for many reasons, including a weakened immune system, leading to active TB disease. As a result, treatment of LTBI is imperative for eliminating active TB disease. For more detailed information on LTBI and reporting requirements, please view the Wisconsin TB Program's website, which includes recent webinars.

IMMIGRANT AND REFUGEE SCREENING PROCESS

Before an immigrant or refugee is permitted to depart for the U.S., they are required to undergo a medical screening, which includes a TB screening. Children age 2–14 must have an interferon gamma release assay (IGRA) blood test performed. If this test is positive, a chest x-ray is performed to look for abnormalities that are consistent with active TB disease. Typically, individuals older than 14 only have a chest x-ray taken to look for signs of active disease. If the chest x-ray is abnormal, three sputum samples are collected and cultured. All three cultures must be negative for *M.tb*, meaning the individual is not infectious, before they are allowed to travel. In culture-positive cases, the individual must complete TB treatment before they are cleared for departure. In cases where an individual has a positive IGRA, an abnormal chest x-ray, or the individual is HIV positive, they are documented as a "TB Class B" arrival.

WHAT IS A TB CLASS B ARRIVAL?

A TB Class B arrival is a refugee or immigrant who has been identified overseas as having a risk for infection with *M.tb*. There are four B classifications. The CDC recently released new technical instructions for overseas panel physicians. The main changes include:

- **Class B0 will now be used for individuals who completed adequate anti-tuberculosis therapy with direct observation before departure to the U.S.**
- **IGRAs will now be used in place of the tuberculin skin test in overseas screenings for children ages 2–14 years old.**

For detailed information on TB Class B statuses and follow-up, please refer to the handout created by the Wisconsin TB Program.

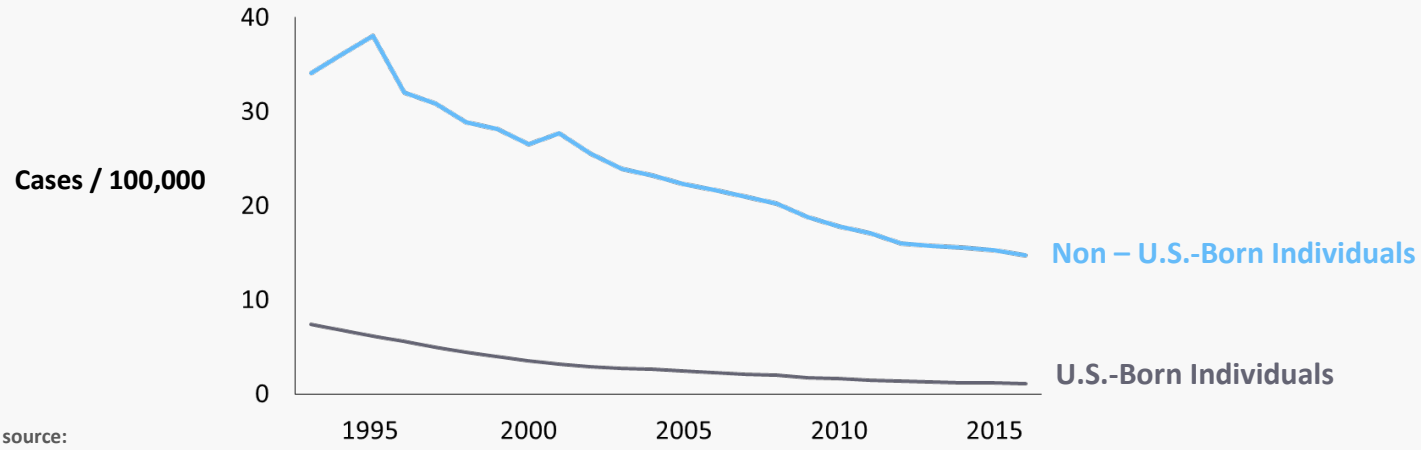
TB CLASS B FOLLOW-UP

In the U.S., non-U.S.-born individuals have a ten-fold higher rate of active TB disease than U.S.-born individuals (Figure 1). This is largely due to the increased risk of exposure in their countries of birth.

To reduce this disparity, it is critical that individuals from high-burden countries participate in TB screening and testing when possible.

Follow-up for TB Class B arrivals is especially important. These individuals have either a positive test for TB infection or a chest x-ray that may be consistent with TB. This means they may have, or could develop, active TB disease. Follow-up on arrival includes additional confirmatory testing for LTBI and TB disease. Those identified with LTBI can be offered treatment so their infection does not progress to active TB disease.

FIGURE 1. TB rates in non-U.S.-born individuals are at least ten times higher than in U.S.-born individuals.



Data source:
Wisconsin Department of Health Services

Figure 1: This graph compares the number of U.S. cases of active TB disease per 100,000 people in the population in U.S.-born versus non-U.S.-born individuals. U.S-born individuals have a significantly lower rate of TB than their non-U.S.-born counterparts. However, there has been a decrease in the non-U.S-born rate in the last 10 years. To work toward the goal of TB elimination, this disparity will need to decrease to zero in coming years.

Wisconsin Refugee and Immigrant Resettlement

By: Wisconsin Tuberculosis Program and Refugee Health Program Staff

Effective TB follow-up depends on the classification of the individual. For all immigrants and refugees the first step is to compile their TB-related medical history (previous test results and treatment). If the individual has a TB Class B Status, but no testing or treatment overseas, an IGRA should be performed. If the IGRA is positive, a chest x-ray should be performed to rule out active disease. If the chest x-ray is normal, then LTBI treatment should be recommended.

LTBI FOLLOW-UP AND TREATMENT COMPLETION IN WISCONSIN

In 2017, Wisconsin received 133 TB Class B arrivals and 83% of these individuals completed TB follow-up testing to determine their LTBI status. This is an impressive statistic; however, knowing their status is not enough.

To assure that these individuals do not progress to active TB disease, LTBI treatment should be offered and completed. At least 29 of the 111 who completed follow-up testing were diagnosed with LTBI and recommended to begin treatment. Only 31% successfully completed treatment. Incomplete treatment increases the risk of active TB disease in Wisconsin. Until 100% of individuals with LTBI in Wisconsin complete therapy, there is need for improvement.

INCREASING TB FOLLOW-UP AND TREATMENT COMPLETION

Increasing TB follow-up and treatment completion requires an understanding of each individual. Around the world and in our communities there is a stigma associated with having TB and lack of knowledge regarding TB. Helping your community and those you serve navigate these barriers can help increase successful TB follow-up and treatment completion.

Each community and individual have their barriers to obtaining TB care and treatment. Some of the most common barriers include communication challenges (language barriers), incongruences between an individual's traditional medical beliefs and western medicine practices, and difficulties accessing the U.S. health care system. Taking the time to work with those you serve to understand follow-up and treatment barriers is the start to a solution. All individuals with risk for TB should know their risk, be aware of their LTBI status, and get tested.

Taking the time to work with those you serve to understand follow-up and treatment barriers is the start to a solution.

RESOURCES

- **Wisconsin TB Program**: www.dhs.wi.gov/tb/index.htm
- **Recommendations for LHDs—Class B TB follow-up:** www.dhs.wisconsin.gov/publications/p0/p00619.pdf
- **Class B1/B2 TB Notification:** www.dhs.wisconsin.gov/library/p-01709.htm
- **TB Risk Assessment Questionnaire Screening:** www.dhs.wisconsin.gov/forms/f02314.pdf

Communicable Disease Case Counts

This report contains a selection of reportable conditions with inclusion based on public health significance and frequency of occurrence. The case counts reflect confirmed and probable cases, for all process statuses. These numbers are not final and are subject to change as confirmatory testing and case follow-up are completed.

***Quarterly case counts should not be considered final and are subject to change.**

Disease	2017 Case Counts	2018 Case Counts				
	Total	Q1	Q2	Q3	Q4	2018 YTD
Enteric/Gastrointestinal (also includes suspect cases)						
Campylobacteriosis	1,728	301	451	584	358	1694
Cryptosporidiosis	725	110	180	460	113	863
Cyclosporiasis	23	1	248	70	0	319
E. coli, Shiga toxin-producing (STEC)	253	83	155	237	89	564
Giardiasis	693	121	110	309	142	682
Hemolytic uremic syndrome	13	1	1	3	1	6
Listeriosis	11	4	4	5	7	20
Salmonellosis	1,040	156	297	409	176	1038
Shigellosis	272	32	40	39	19	130
Typhoid fever	3	3	2	0	0	5
Vibriosis (non-cholera)	31	2	14	13	2	31
Yersiniosis	51	26	25	21	11	83
Invasive Bacteria						
Group A Streptococcal disease	289	93	66	50	56	265
Group B Streptococcal disease	533	121	163	169	170	623
Mycotic						
Blastomycosis	119	21	14	15	0	50
Coccidioidomycosis	15	1	8	2	4	15
Histoplasmosis	22	6	3	5	0	14
Respiratory						
Please refer to the weekly respiratory virus surveillance report: https://www.dhs.wisconsin.gov/library/p-02346-2018-19.htm						
Influenza-associated hospitalizations	4,886	5,429	685	10	118	6,242
Influenza, novel	287	0	0	0	0	0
Legionellosis	176	24	71	160	77	332
Tuberculosis	49	15	5	11	18	49
Sexually Transmitted						
Chlamydia trachomatis	27,971	7,019	6,724	7,378	7,085	28,206
Gonorrhea	7,739	1,861	1,820	2,139	2102	7,922
HIV	245	54	45	57	59	215
Syphilis (all stages)	648	141	106	129	99	475
Vaccine Preventable						
Diphtheria	0	0	0	0	0	0
Haemophilus influenzae invasive disease	126	37	16	33	31	117
Hepatitis B, acute (confirmed cases only)	13	3	3	8	1	15
Hepatitis B, perinatal	0	0	0	0	0	0

Communicable Disease Case Counts (cont.)

Disease	2017 Case Counts	2018 Case Counts				
	Total	Q1	Q2	Q3	Q4	2018 YTD
Vaccine Preventable (continued)						
Measles (rubeola)	0	0	0	0	0	0
Meningococcal disease	4	3	2	2	3	10
Mumps	49	6	5	9	6	26
Pertussis (whooping cough)	756	157	150	170	225	702
Poliomyelitis	0	0	0	0	0	0
Rubella	0	0	0	0	0	0
Streptococcus pneumoniae invasive disease	497	176	146	56	140	518
Tetanus	1	0	0	1	1	2
Varicella (chickenpox)	285	67	71	57	95	290
Vectorborne						
Babesiosis	87	1	9	49	3	62
Ehrlichiosis/Anaplasmosis	840	18	267	194	38	517
Jamestown Canyon virus infection	44	0	5	14	2	21
La Crosse virus infection	2	0	0	0	0	0
Lyme disease	2,820	120	687	869	185	1,861
Malaria[1]	10	2	5	6	2	15
Powassan virus infection	2	1	0	1	1	3
Rocky Mountain spotted fever	22	2	10	13	3	28
West Nile virus infection	51	0	0	31	1	32
Yellow fever[1]	0	0	0	0	0	0
Zika virus infection[1,2]	9	0	0	0	0	0
Zoonotic						
Brucellosis	2	1	0	0	2	3
Hantavirus infection	1	0	0	0	0	0
Leptospirosis	2	0	0	8	0	8
Psittacosis	0	0	0	0	0	0
Q Fever (acute)	6	2	3	0	1	6
Rabies (human)	0	0	0	0	0	0
Toxoplasmosis	15	3	0	0	11	14
Tularemia	0	0	1	0	0	1
Other						
Hepatitis A	16	7	3	4	2	16
Hepatitis C, acute	95	22	42	20	20	104
Hepatitis E, acute	1	0	0	1	1	2
Kawasaki disease	18	6	8	2	7	23
Lymphocytic choriomeningitis virus infection	0	0	0	0	0	0
Transmissible spongiform encephalopathy (human)	17	1	0	1	0	2

[1] Denotes diseases where all cases in Wisconsin residents are travel-associated. No local transmission occurs.
[2] Due to enhanced surveillance, asymptomatic confirmed cases are included.