ANNUAL REPORT

EPIDEMIOLOGY & PUBLIC HEALTH PREPAREDNESS MCLENNAN COUNTY, 2015

Waco-McLennan County Public Health District

2015 ANNUAL REPORT
FEBRUARY, 2015

Table 1: Select Notifiable Conditions, McLennan County, 2011-2015

Condition	2011	2012	2013	2014	2015
Amebiasis	0	0	1	0	0
Anaplasma phagocytophilum	0	0	0	1	1
Aseptic (viral) meningitis	34	9	0	0	0
Bacterial and other meningitis	1	3	0	0	0
Campylobacteriosis	38	28	36	29	35
Chagas, chronic indeterminate	0	0	1	0	0
Cryptosporidiosis	38	14	16	16	18
Cyclosporiasis	0	0	0	1	0
Dengue	0	1	0	0	0
Encephalitis, West Nile	0	28	0	1	0
Hemolytic uremic synd,postdiarrheal	1	0	0	0	0
Hepatitis A, acute	0	0	1	1	2
Hepatitis B Viral Infection, Perinatal	6	1	0	0	1
Hepatitis B virus infection, Chronic	0	1	0	0	0
Hepatitis B, acute	6	2	3	2	0
Influenza-associated pediatric mortality	0	0	0	0	1
Legionellosis	0	0	1	2	4
Listeriosis	0	0	0	0	3
Lyme disease	0	0	1	0	0
Malaria	1	1	0	1	0
Multidrug-resistant organisms (MDRO)	0	0	0	1	0
Pertussis	4	58	8	10	7
Q fever, Acute	2	0	0	0	0
Salmonellosis	69	74	73	105	119
Shiga toxin-producing Escherichia coli (STEC)	2	6	5	5	14
Shigellosis	20	10	27	139	30
Spotted Fever Rickettsiosis	0	0	0	1	1
Strep, other, invasive, beta-hem (non-A nonB)	0	1	0	0	0
Streptococcus pneumoniae, invasive disease (IPD)	3	2	2	5	25
Streptococcus, invasive Group A	2	0	1	3	7
Streptococcus, invasive Group B	3	0	2	2	19
Vancomycin-intermediate Staph aureus (VISA)	0	0	0	0	0
Varicella (Chickenpox)	23	48	27	19	12
Vibrio parahaemolyticus	0	0	1	0	0
West Nile Fever	0	15	0	0	0
Grand Total	253	302	206	344	299

In 2015, the Waco-McLennan County Public Health District (WMCPHD) received and investigated 299 notifiable condition reports (Table 1), compared to 344 in 2014. The higher number of reports in 2014 was mainly attributed to Salmonella and Shigella cases in the county. These disease numbers include all the reports that were received by various surveillance methods to the WMCPHD and were later defined as confirmed, probable, or not a case after completion of investigation.

Vaccine Preventable Diseases (VPD)

In 2015, 48 of the reported diseases were vaccine preventable (VPDs) compared to 38 in 2014. This increase was largely due to Invasive Streptococcus Pneumoniae (IPD) disease. There were no identified links to attribute this increase to.

Outbreaks

In 2015, there were two outbreaks investigated, one respiratory and one gastrointestinal illness related, and two gastrointestinal illness clusters.

WMCPHD works with local partners to track reportable diseases on 24/7/365 basis.
For more information, visit the Disease Reporting page at:
www.wacomclennanphd.org

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GASTROINTESTINAL DISEASE

The Health District investigated 216 gastrointestinal disease reports in 2015, which is 26% less than 2014. Salmonella has seen a steady increase from 2011 to 2015.

Figure 1

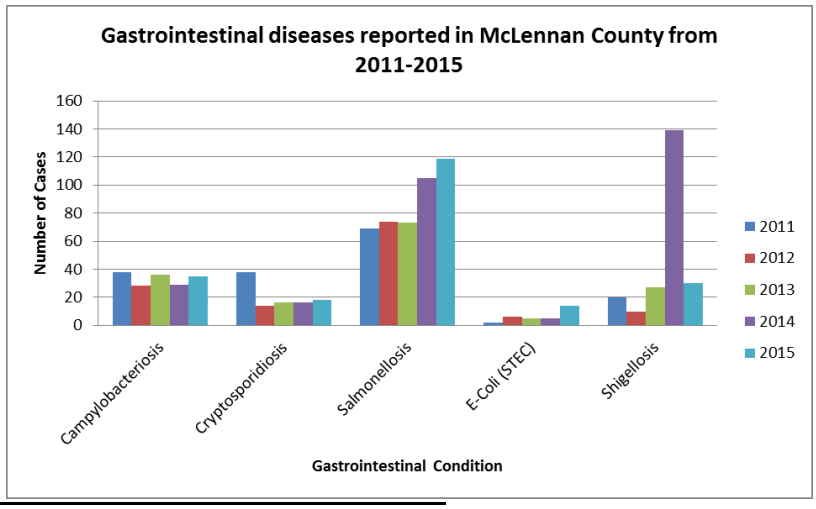


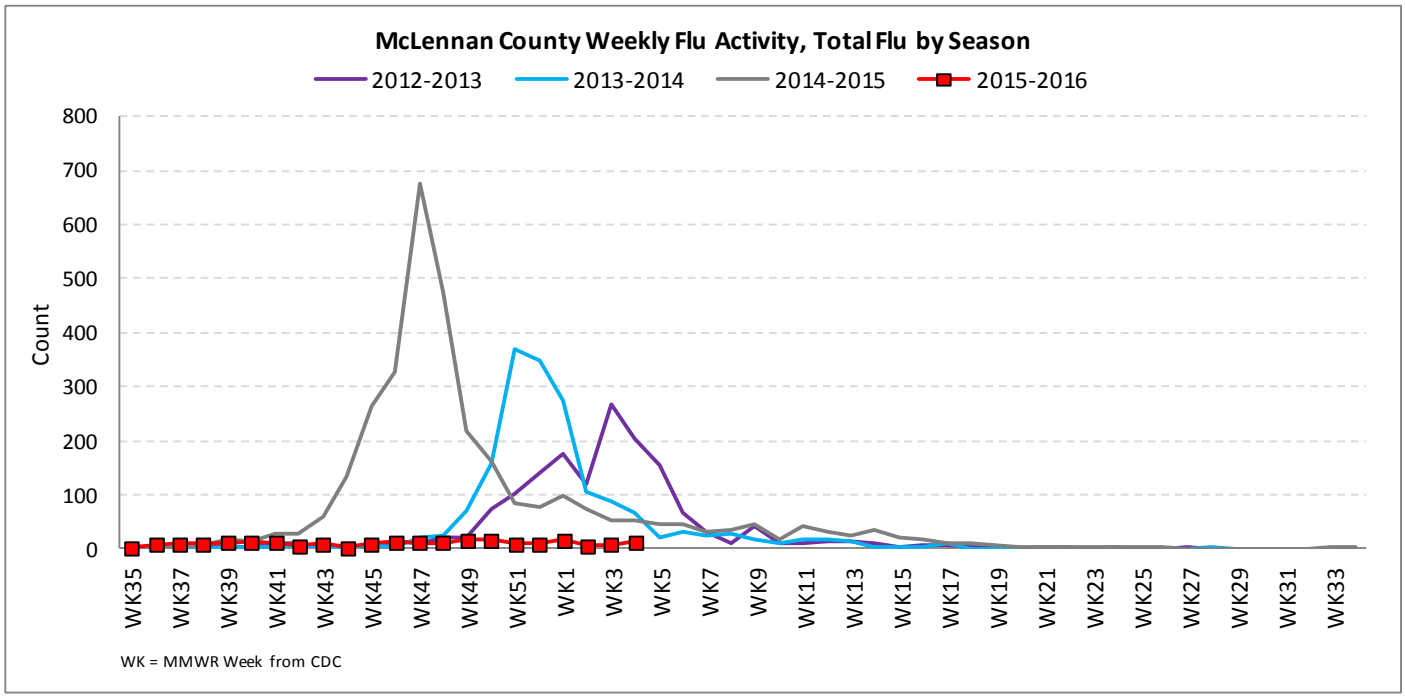
Table 2

Gastrointestinal Condition	2011	2012	2013	2014	2015
Campylobacteriosis	38	28	36	29	35
Cryptosporidiosis	38	14	16	16	18
Salmonellosis	69	74	73	105	119
Shiga toxin-producing Escherichia coli (STEC)	2	6	5	5	14
Shigellosis	20	10	27	139	30
Grand Total	**167**	**132**	**157**	**294**	**216**

INFLUENZA SEASON 2015-2016

McLennan County has seen little flu this season compared to previous seasons (Figure 2). This has been the case throughout Texas and the United States. For more detailed information, visit: **www.cdc.gov/flu or flutexas.org.** We also receive influenza like illness reports on a weekly basis—to see the most updated report, please visit **www.wacomclennanphd.org**.

Figure 2



ZIKA VIRUS

HISTORY

The Zika virus was first identified in Uganda, Africa in 1947. Since that time there has been few outbreaks. Most recently, local transmission has spread out of Africa to French Polynesia , South and Central America ,and the Caribbean. Because of recent and spread and increase in number of cases, there is has been limited research until now.

RISK

Anyone traveling to an area where the Zika virus is found is at risk. The most current list is on the CDC website. http://www.cdc.gov/zika/geo/index.html

TRANSMISSION

Zika virus is transmitted to people primarily through the bite of an infected *Aedes* species mosquito. These are the same mosquitoes that spread dengue and chikungunya viruses.

- These mosquitoes typically lay eggs in and near standing water in things like buckets, bowls, animal dishes, flower pots and vases.
- They prefer to bite people, and live indoors and outdoors near people.
- Mosquitoes that spread chikungunya, dengue, and Zika are aggressive daytime biters. They can also bite at night.
- Mosquitoes become infected when they feed on a person already infected with the virus. Infected mosquitoes can the spread the virus to other people through bites.
- A mother already infected with Zika virus near the time of delivery can pass on the virus to her newborn around the time of birth, but this is rare.
- It is possible that Zika virus could be passed from mother to fetus during pregnancy. This mode of transmission is being investigated.
- To date, there are no reports of infants getting Zika virus through breastfeeding. Because of the benefits of breastfeeding, mothers are encouraged to breastfeed even in areas where Zika virus is found.
- Spread of the virus through sexual contact has been reported. The CDC is working on guidance for this. We will distribute the information as soon as it is available.

PREVENTION

- No vaccine exists to prevent Zika virus disease.
- Prevent Zika by avoiding mosquito bites.
- During the first week of infection, Zika virus can be found in the blood and passed from an infected person to another mosquito through mosquito bites. An infected mosquito can then spread the virus to other people.
- To help prevent others from getting sick, avoid mosquito bites during the first week of illness.

CLINICAL SIGNS & SYMPTOMS

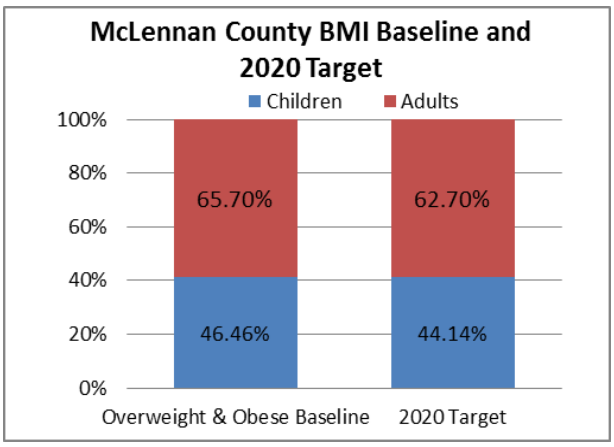
About 1 in 5 people infected with Zika virus become symptomatic. Characteristic clinical findings are acute onset of fever with maculopapular rash, arthralgia, or conjunctivitis. Other commonly reported symptoms include myalgia and headache. Clinical illness is usually mild with symptoms lasting for several days to a week. Severe disease requiring hospitalization is uncommon and case fatality is low. However, there have been cases of Guillain-Barre syndrome reported in patients following suspected Zika virus infection. **Due to concerns of microcephaly associated with maternal Zika virus infection, fetuses and infants of women infected with Zika virus during pregnancy should be evaluated for possible congenital infection and neurologic abnormalities.**

DIAGNOSIS & REPORTING

Based on the typical clinical features, the differential diagnosis for Zika virus infection is broad. In addition to dengue, other considerations include leptospirosis, malaria, rickettsia, group A streptococcus, rubella, measles, and parvovirus, enterovirus, adenovirus, and alphavirus infections (e.g., Chikungunya, Mayaro, Ross River, Barmah Forest, O'nyong-nyong, and Sindbis viruses). Preliminary diagnosis is based on the patient's clinical features, places and dates of travel, and activities. Laboratory diagnosis is generally accomplished by testing serum or plasma to detect virus, viral nucleic acid, or virus-specific immunoglobulin M and neutralizing antibodies.

CHRONIC DISEASE UPDATE

Obesity remains a threat to health and well-being of the nation with over one- third of American adults being considered obese. In 2014, Texas had an adult obesity rate of 31.6%. During the 2012-2013 school year, 46% of McLennan County students had a BMI characterized as overweight or obese. The 2013 Community Health Needs Assessment revealed that 66% of adults residing in McLennan County were considered to be overweight or obese. Working under the Prosper Waco collective impact model, the Waco- McLennan County Public Health District, as part of Live Well Waco, has set an objective to reduce the proportion of children and adults with BMIs considered to be overweight or obese by 5% by the year 2020. The group aims to reduce obesity rates by increasing the availability of healthy eating and active lifestyle opportunities with the intention of improving the health and quality of life of McLennan County residents.



Data Sources: CHNA 2013 and 2012-2013 FitnessGram. FitnessGram data is currently missing La Vega ISD and West ISD data

CHANGES IN NOTIFIABLE CONDITIONS

Each year, the Texas Department of State Health Services updates the list of Notifiable Conditions. Below are the highlighted changes for 2016.

The following conditions are now reportable **within 1 work day** while prior it was immediately:
- **Multidrug-resistant *Acinetobacter* (MDR-A)**
- **Carbapenem-resistant *Enterobacteriaceae* (CRE)**

Arboviral infections now include:
- **Dengue virus**
- **Zika virus**

The following conditions have been **added to the list for 2016**. These 6 conditions are known as **Neglected Tropical Diseases** and should be reported within 1 week:
- **Ascariasis**
- **Echinococcosis**
- **Fascioliasis**
- **Hookworm (ancylostomiasis)**
- **Paragonimiasis**
- **Trichuriasis**

24/7 DISEASE REPORTING

The Waco-McLennan County Public Health District performs activities on a daily basis geared toward protecting the health of the McLennan County community as a whole, and to assure the conditions necessary for people to live healthy, productive lives. On a daily basis, the Epidemiology Department reviews, investigates, and reports all cases of communicable disease recognized as Notifiable Diseases in Texas. This allows for monitoring of disease trends and detection of outbreaks.

Disease reporting allows us to conduct investigations that provide pertinent information for the prevention and control of disease spread. The Waco-McLennan County Public Health District has a 24/7 number that can be utilized to report any case of disease, cluster of diseases, or unusual presentation of disease. In the coming months, we hope to engage with our reporting partners to improve reporting and surveillance in McLennan County!

The 24/7 disease reporting number is (254) 750-5411.

Reports may also be faxed to (254) 750-5405.

PROMOTE • PREVENT • PROTECT
WACO-MCLENNAN COUNTY
Public Health District

Promote * Prevent * Protect

At the Waco-McLennan County Public Health District, protecting the community's health is our mission. The Health District serves a population of more than 230,000 in and around McLennan County. Examples of the services we provide include health education, diabetes education, nutrition counseling, immunizations, disease surveillance and control, WIC, STD & HIV, public health preparedness, birth and death records and environmental health inspections.

WACO-MCLENNAN COUNTY PUBLIC HEALTH DISTRICT

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