



2016 Selected Communicable Disease Report City of Amarillo Department of Public Health Bi-City/County Health District

The City of Amarillo Department of Public Health Communicable Disease program (CD program) is responsible for the investigation and analysis of disease to protect citizens in Potter and Randall counties.

Table 1. 2015 – 2016 Selected Notifiable Conditions Reported to Potter/Randall Counties

	<i>Potter</i>		<i>Randall</i>		<i>Total</i>	<i>Total</i>
	2015	2016	2015	2016	2015	2016
<i>Vaccine Preventable</i>						
Pertussis (Whooping Cough)	0	1	0	3	0	4
Varicella (Chickenpox)	15	5	20	6	35	11
<i>Enteric</i>						
Campylobacteriosis	35	51	28	43	63	94
Cryptosporidiosis	7	6	1	4	8	10
<i>E. coli</i> , Shiga-toxin producing (STEC)	5	16	6	19	11	35
Salmonellosis	40	43	50	52	90	95
Shigellosis	16	107	16	74	32	181
<i>Viral Hepatitis</i>						
Hepatitis A	2	1	2	2	4	3
Hepatitis B, chronic	53	62	22	13	75	75
Hepatitis B, perinatal	30	33	12	9	42	42
Hepatitis C, chronic or resolved	80	134	33	25	113	160
<i>Invasive/Respiratory</i>						
Legionellosis	3	5	2	5	5	9
Multidrug-resistant Acinetobacter (MDRA)					15	2
Sporadic Creutzfeldt-Jakob Disease (sCJD)	0	0	1	0	1	0
<i>Streptococcus</i> , Group A, invasive (GAS)	5	8	5	2	10	10
<i>Streptococcus</i> , Group B, invasive (GBS)	10	13	4	7	14	20
<i>Streptococcus pneumoniae</i> , invasive	20	13	14	14	34	28
<i>Vector-Borne Zoonotic</i>						
Animal Bites	107	78	58	69	177	155
West Nile Virus, fever	2	0	1	1	3	1
West Nile Virus, neuroinvasive	4	0	8	0	12	0
<i>Tuberculosis (TB)</i>						
Active					7	5
Latent*					204	214
<i>Sexually Transmitted Diseases (STDs)</i>						
AIDS	8	10	1	2	9	12
Chlamydia	1005	947	310	227	1315	1174
Gonorrhea	501	459	115	75	616	534
HIV	26	13	14	5	40	18
Syphilis	35	82	13	17	48	99
<i>Influenza**</i>						
Influenza A – Rapid Test					464	2737
Influenza B – Rapid Test					604	1050
Influenza Like Illness					6686	9384

*Started on latent TB therapy from City of Amarillo Department of Public Health TB clinic.

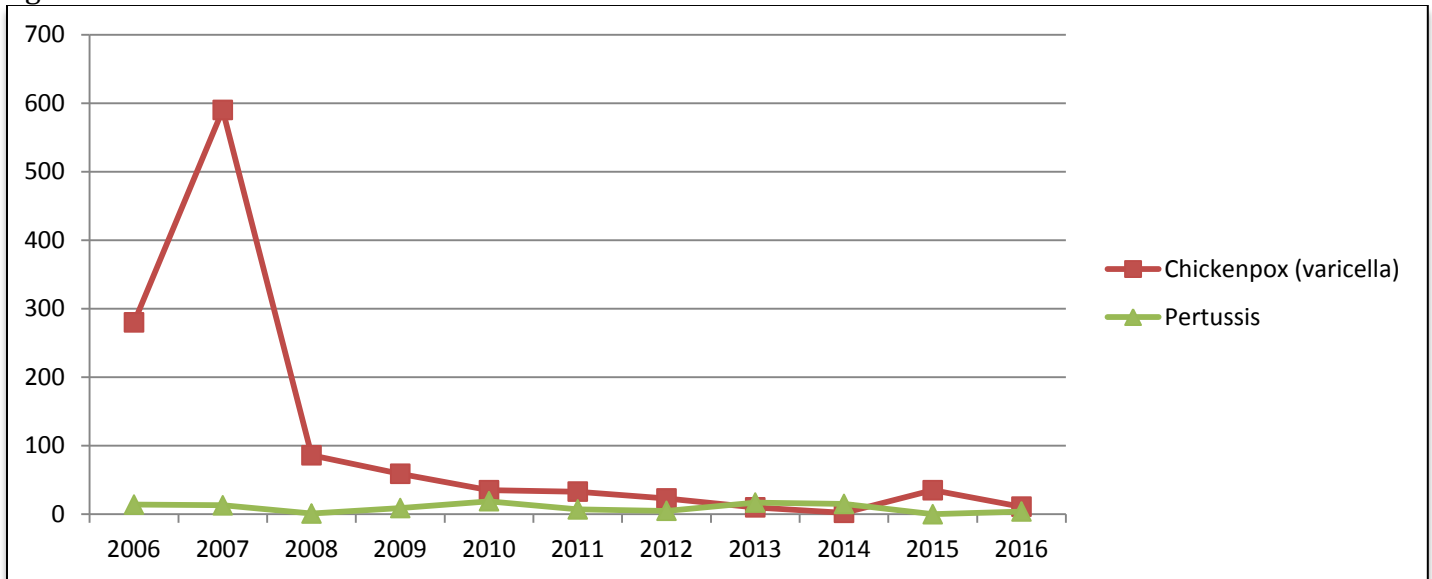
** Flu A and B are lab-confirmed only. Influenza report represents "season-to-date" cases rather than year-to-date.

Vaccine Preventable Diseases

Even though most infants and toddlers have received all recommended vaccines by age 2, many under-immunized children remain, leaving the potential for outbreaks of disease. Many adolescents and adults are under-immunized as well, missing opportunities to protect themselves against diseases such as Pertussis, influenza, and pneumococcal disease. (CDC)

The City of Amarillo Department of Public Health Immunization program offers low or no cost immunizations to children and adults, and frequently uses the Mobile unit to travel around Potter and Randall counties hosting immunization events.

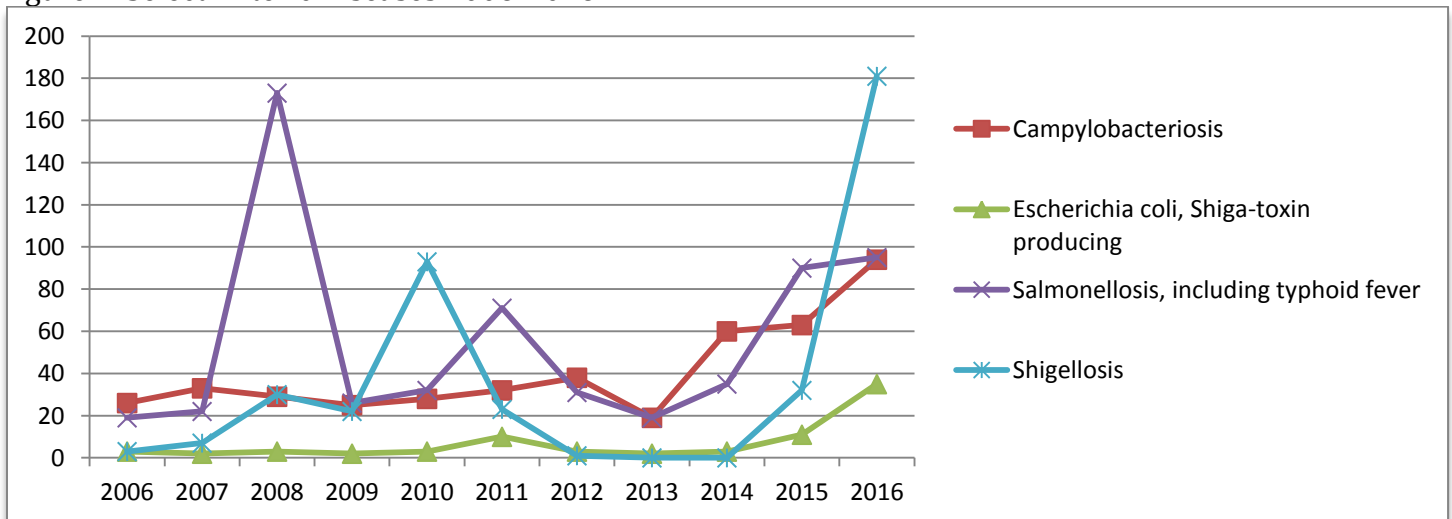
Figure 1. Select Vaccine Preventable Diseases 2006-2016



Enteric Diseases

Enteric diseases enter the body through the mouth and intestinal tract and are usually spread through contaminated food and water or by contact with vomit or feces. Good hand washing and proper food preparation is the best way to avoid these diseases. Common symptoms include: headache, stomach pain, diarrhea, nausea and sometimes vomiting. (CDC)

Figure 2. Select Enteric Diseases 2006-2016



Additional Communicable Disease Graphs

Figure 3. Case Count Comparison of Selected Conditions

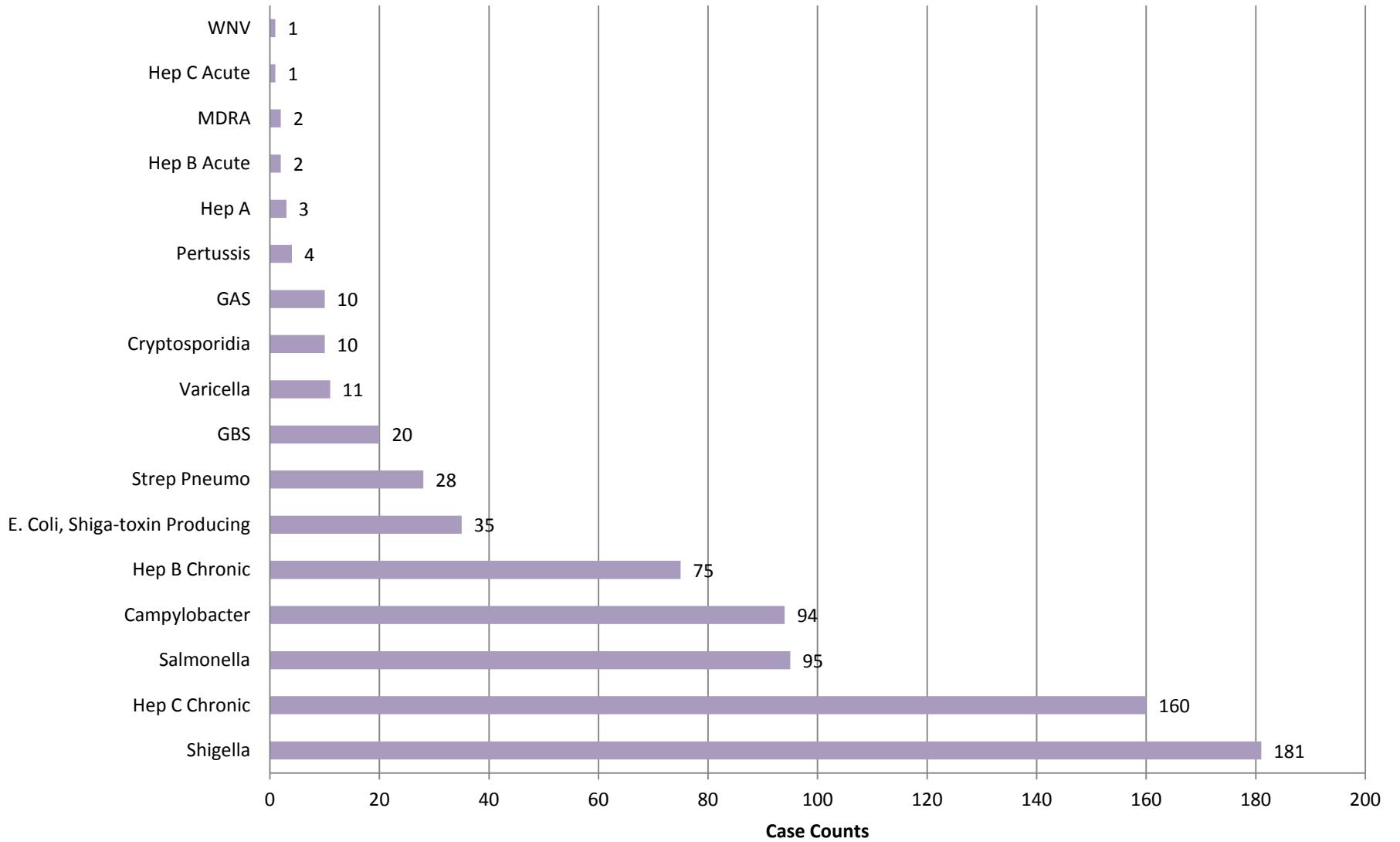


Figure 4. Selected Condition Comparison

The conditions represented are in alphabetical order as referenced in the legend on the right starting from the inside of the circle and going outward (i.e. campylobacter in on the inside and West Nile virus is on the outside.)

This visual is a good representation of how the amount of cases compare amongst all of the selected conditions, with shigella case counts representing the 100% marker.

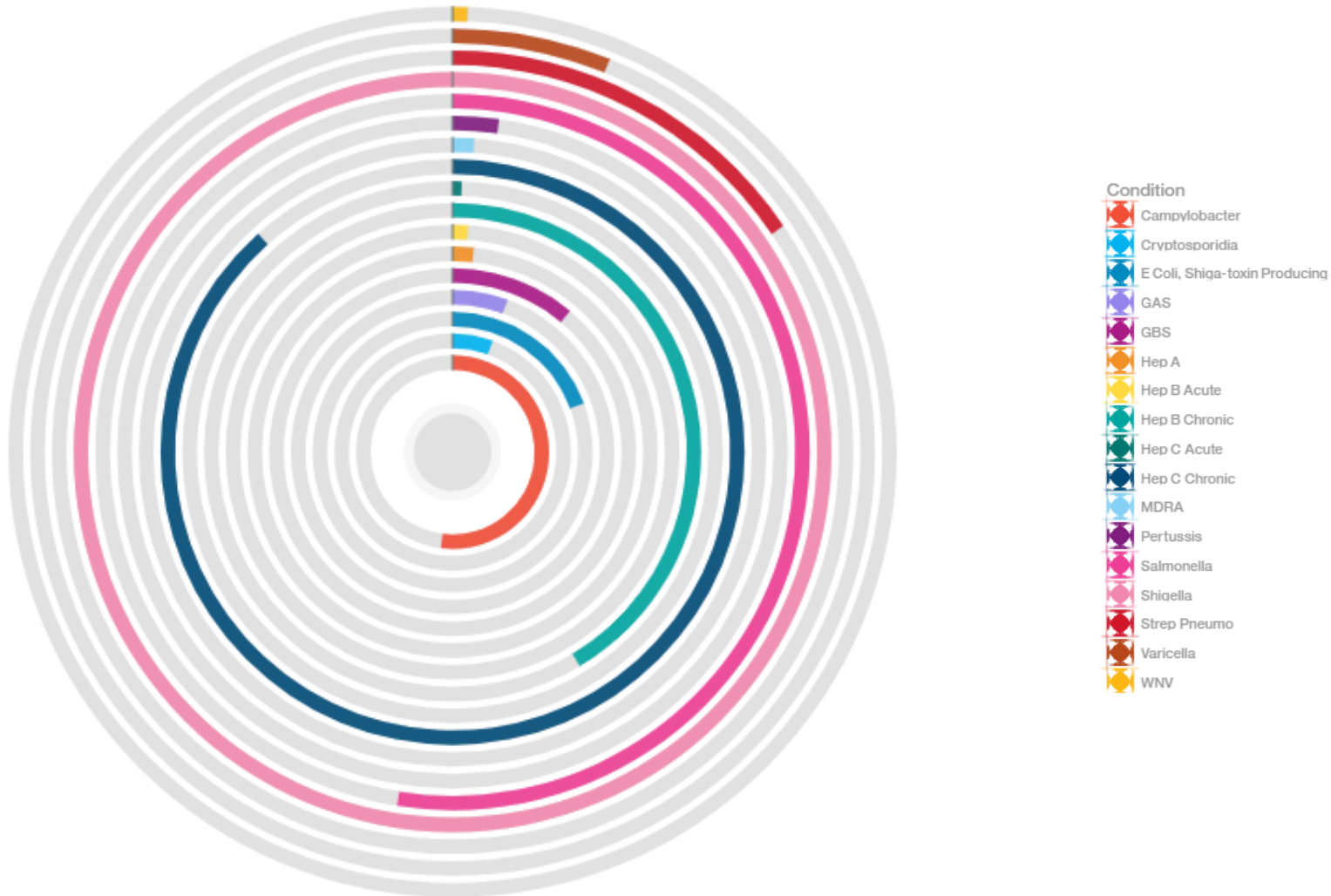
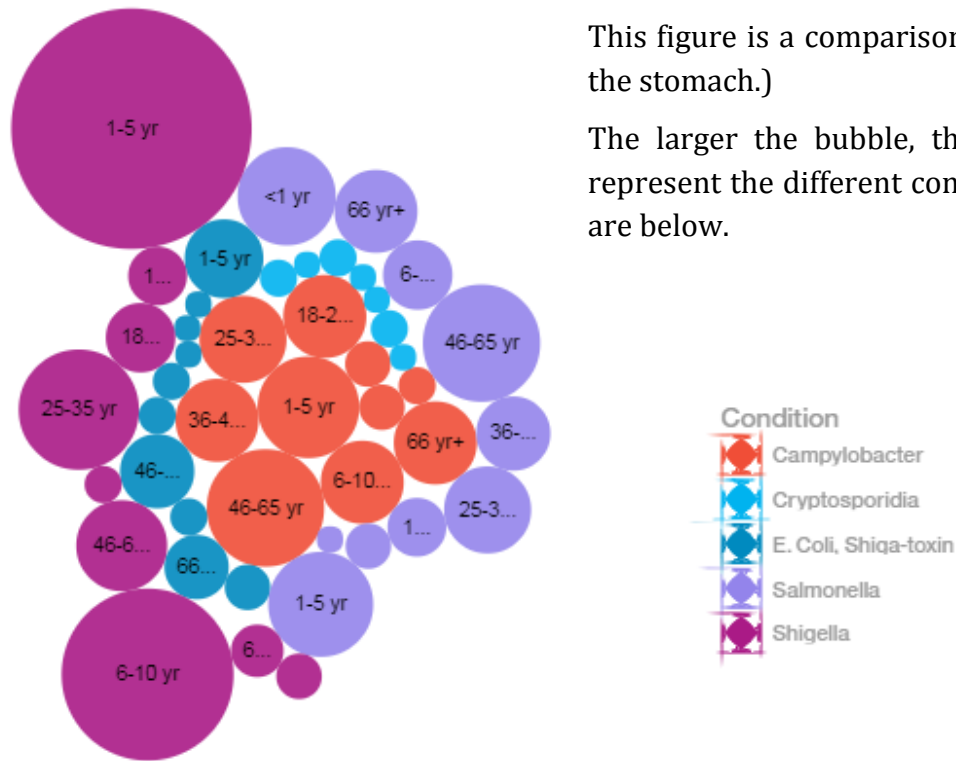


Figure 5. Comparison of Age Distribution of Enteric Cases

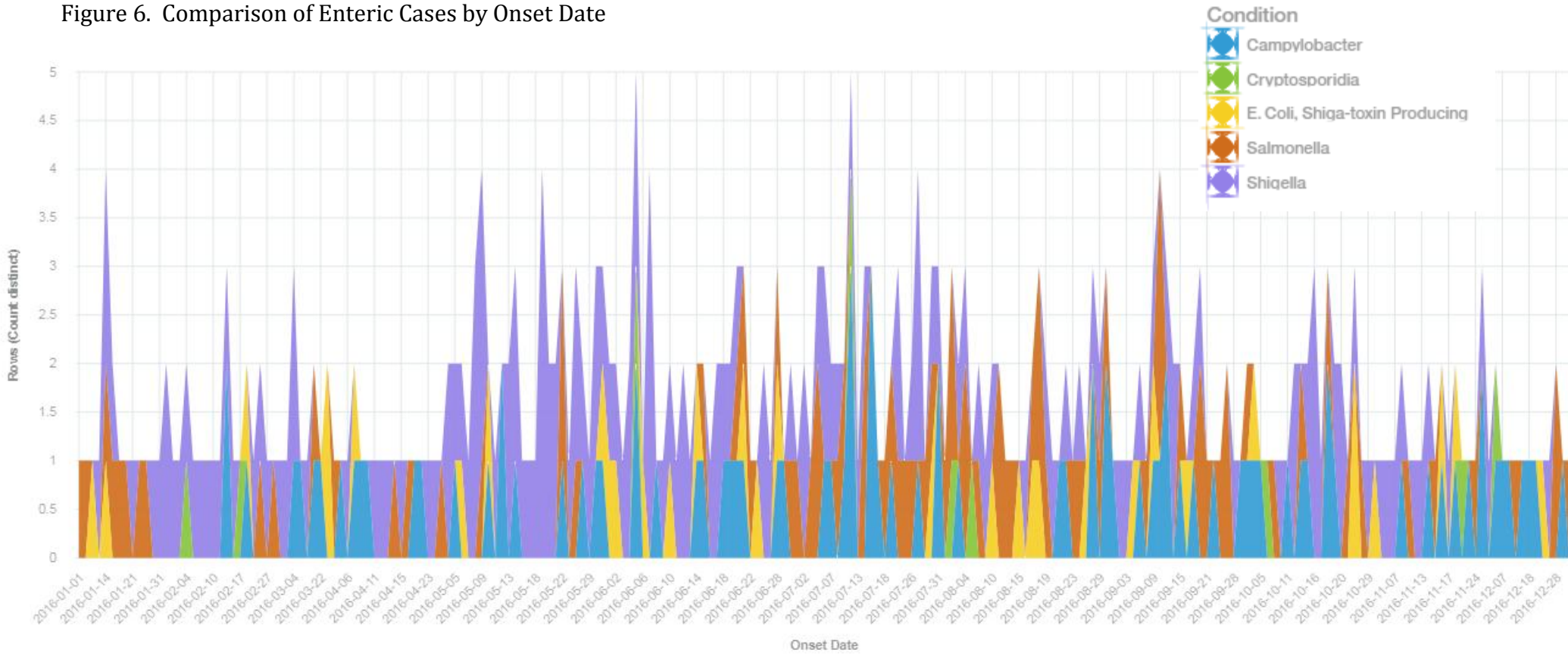
This figure is a comparison of age distribution of selected enteric illnesses (illnesses affecting the stomach.)

The larger the bubble, the more cases there are in that age group. The different colors represent the different conditions. A reference for the case counts by age group and condition are below.



	1-5 yr	11-13 yr	14-17 yr	18-24 yr	25-35 yr	36-45 yr	46-65 yr	6-10 yr	66 yr+	<1 yr
Campylobacter	15	3	3	10	11	10	20	10	10	2
Cryptosporidia			1	2	1	1	2	1	2	
E. Coli, Shiga-tox	9	1	1	1	2	2	8	2	6	3
Salmonella	16	1	3	5	11	8	20	7	10	14
Shigella	84	5		7	21	2	12	43	4	3

Figure 6. Comparison of Enteric Cases by Onset Date



This figure is a comparison of the onset dates between the different selected enteric illnesses.

The onset date is the day that a person reports the beginning of their illness, (they begin to feel symptoms such as diarrhea, abdominal cramps, nausea, vomiting, headache, loss of appetite, tiredness (fatigue), or generally feeling ill (malaise).

The different colors represent the different conditions.

The distribution of onset dates can allude to seasonal outbreaks – this includes both calendar seasons like summer and winter – or social seasons, like the end or beginning of school or travelling seasons seen with summer or holiday vacations. Additionally, we could determine whether or not there is an increase or decrease in cases compared to previous years, and the scope of intervention needed.

In 2016, no outbreaks were detected. The distribution was relatively even throughout the year.

Figure 7. Shigella Cases by Onset and Case Status

This figure is similar to the previous and is a look at cases of Shigella according to the onset date of the cases.

The colors represent a breakdown into suspect and confirmed cases.

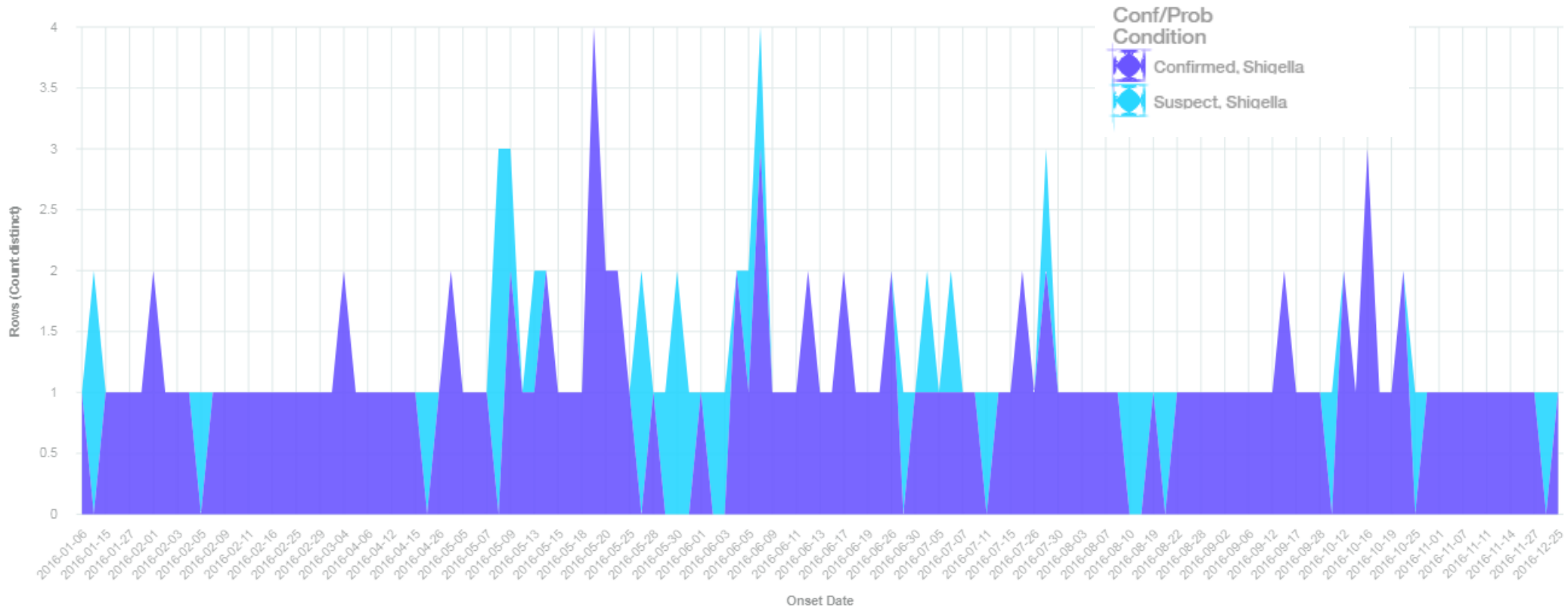
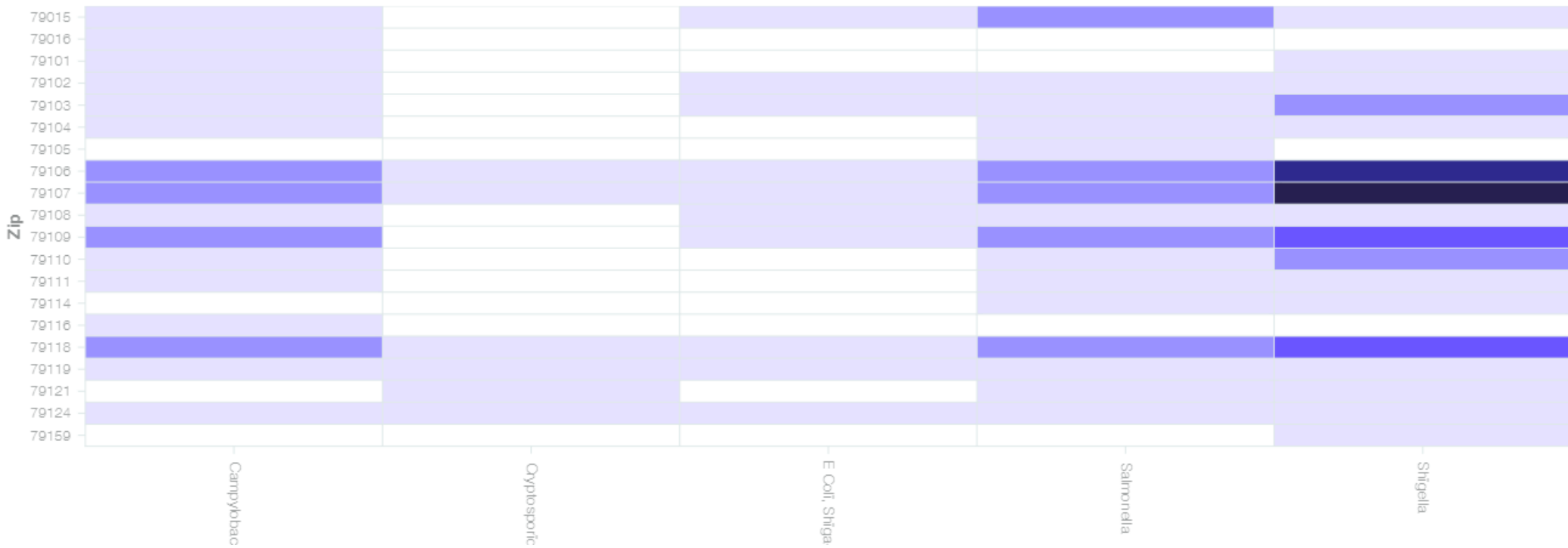


Figure 8. Enteric Illness Case Counts by Zip Code

This figure compares the distribution of enteric cases by zip code. The more cases there are in a specific zip code, the darker the color in that box.



Viral Hepatitis

Hepatitis means inflammation of the liver and also refers to a group of contagious viral infections that affect the liver. Hepatitis is the leading cause of liver cancer and the most common reason for liver transplantation. (CDC) The best way to prevent Hepatitis A and B is through vaccination.

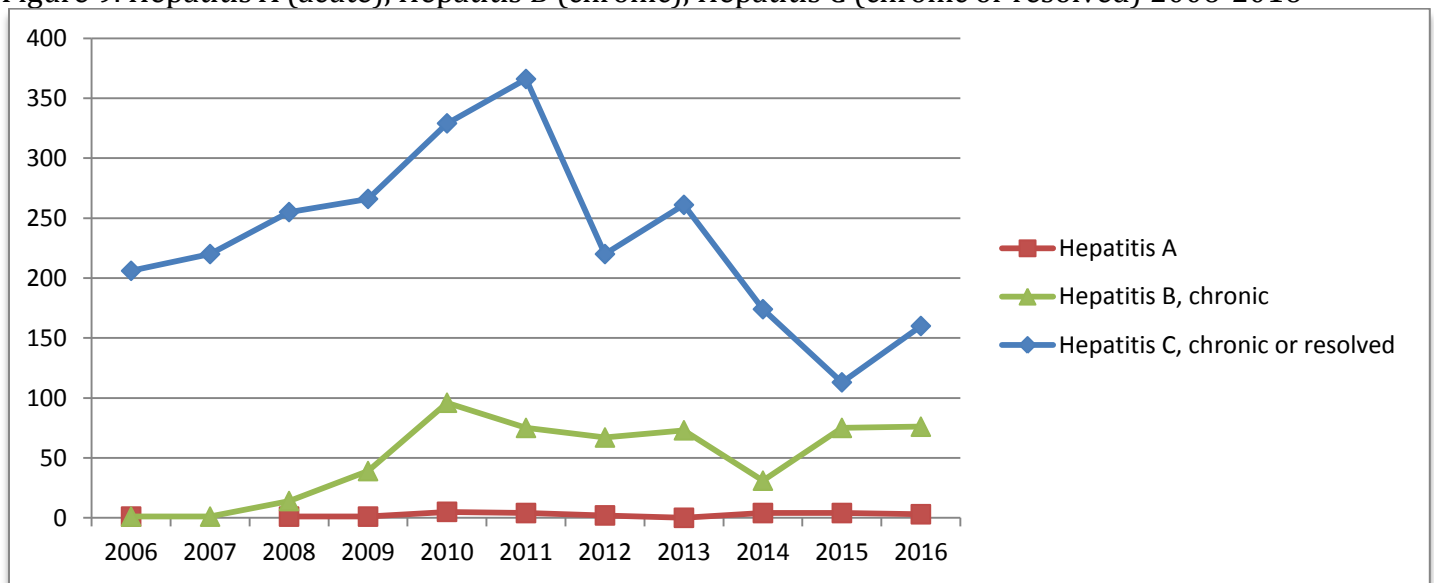
Hepatitis A can range in severity from a mild illness lasting a few weeks to a severe illness lasting several months. Hepatitis A is usually spread when a person ingests fecal matter from contact with objects, food, or drinks contaminated by the feces or stool of an infected person.

Hepatitis B is usually spread when blood, semen, or another body fluid from a person infected with the Hepatitis B virus enters the body of someone who is not infected.

Hepatitis C is usually spread when blood from a person infected with the Hepatitis C virus enters the body of someone who is not infected. Today, most people become infected with the Hepatitis C virus by sharing needles or other equipment to inject drugs.

There is effective treatment, but no vaccine for Hepatitis C. The best way to prevent Hepatitis C is by avoiding behaviors that can spread the disease, especially injection drug use. (CDC)

Figure 9. Hepatitis A (acute), Hepatitis B (chronic), Hepatitis C (chronic or resolved) 2006-2016

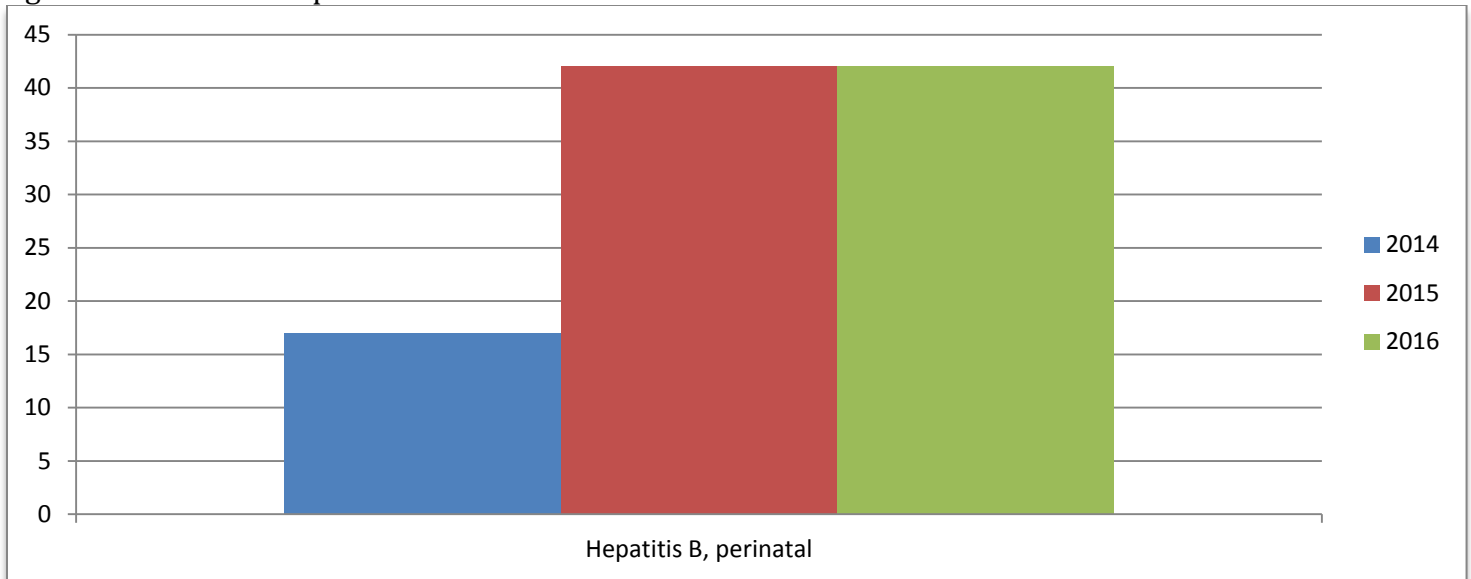


Perinatal Hepatitis B Prevention Program

Hepatitis B can be passed to a newborn during delivery. The Perinatal Hepatitis B Prevention program (PHBPP) case manages Hepatitis B surface antigen (HBsAg) positive pregnant women through delivery, and their newborns through the immunization process and post vaccine serology testing.

A main goal of the PHBPP is to aid in the prevention of a potentially devastating, but completely preventable illness from affecting any newborn child. Additionally, the PHBPP strives to increase awareness and reporting so that all newborns who will be potentially affected receive live saving vaccine in a timely manner.

Figure 10. Perinatal Hepatitis B Cases 2014-2016

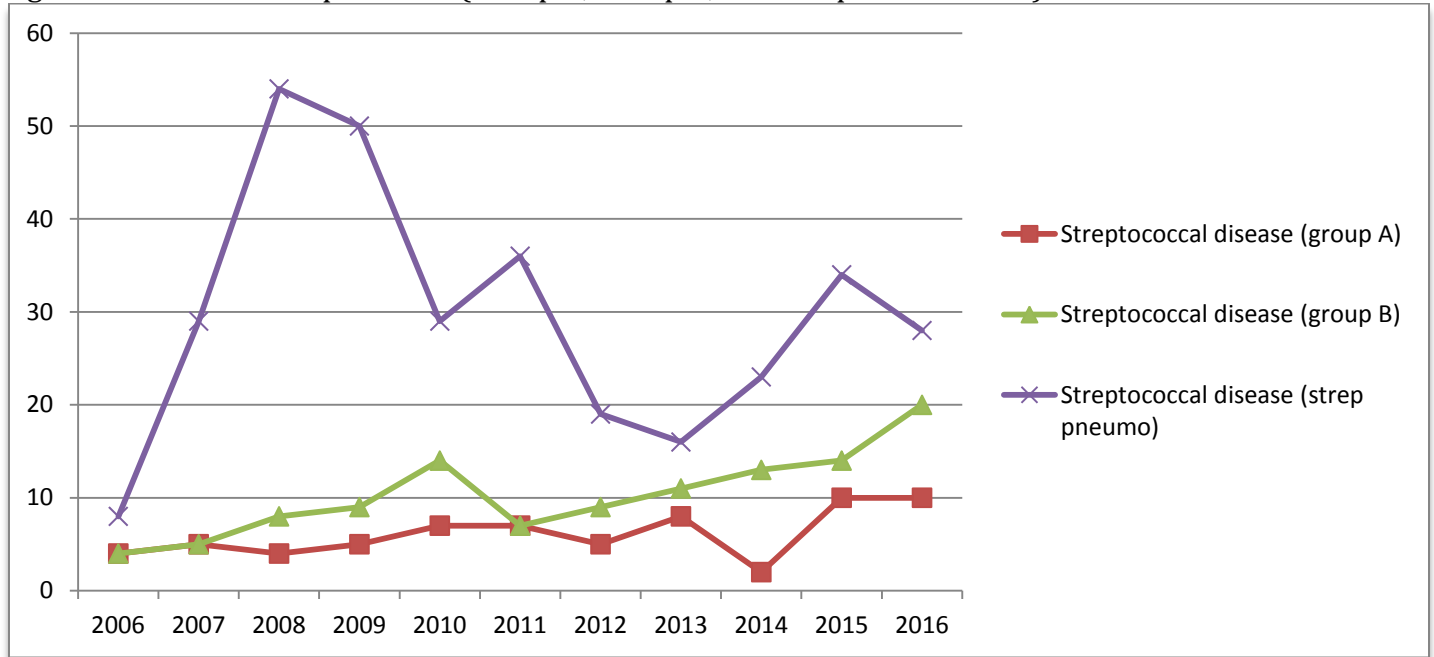


Invasive Streptococcal Disease

Streptococcal infections are reportable to the health department for three categories - Invasive group A streptococcus, Invasive group B streptococcus, and *Streptococcus Pneumoniae* disease. Severe, sometimes life-threatening disease may occur when these bacteria get into parts of the body where bacteria usually are not found, such as the blood, muscle, or the lungs.

These bacteria are spread through direct contact with mucus from the nose or throat of persons who are infected or through contact with infected wounds or sores on the skin. Ill persons, such as those who have strep throat or skin infections, are most likely to spread the infection. Persons who carry the bacteria but have no symptoms are much less contagious.

Figure 11. Invasive Streptococcal (Group A, Group B, and Strep Pneumoniae) Disease 2006-2016



Tuberculosis

Tuberculosis (TB) is caused by a bacterium called *Mycobacterium tuberculosis*. The bacteria usually attack the lungs, but TB bacteria can attack any part of the body such as the kidney, spine, and brain. If not treated properly, TB disease can be fatal.

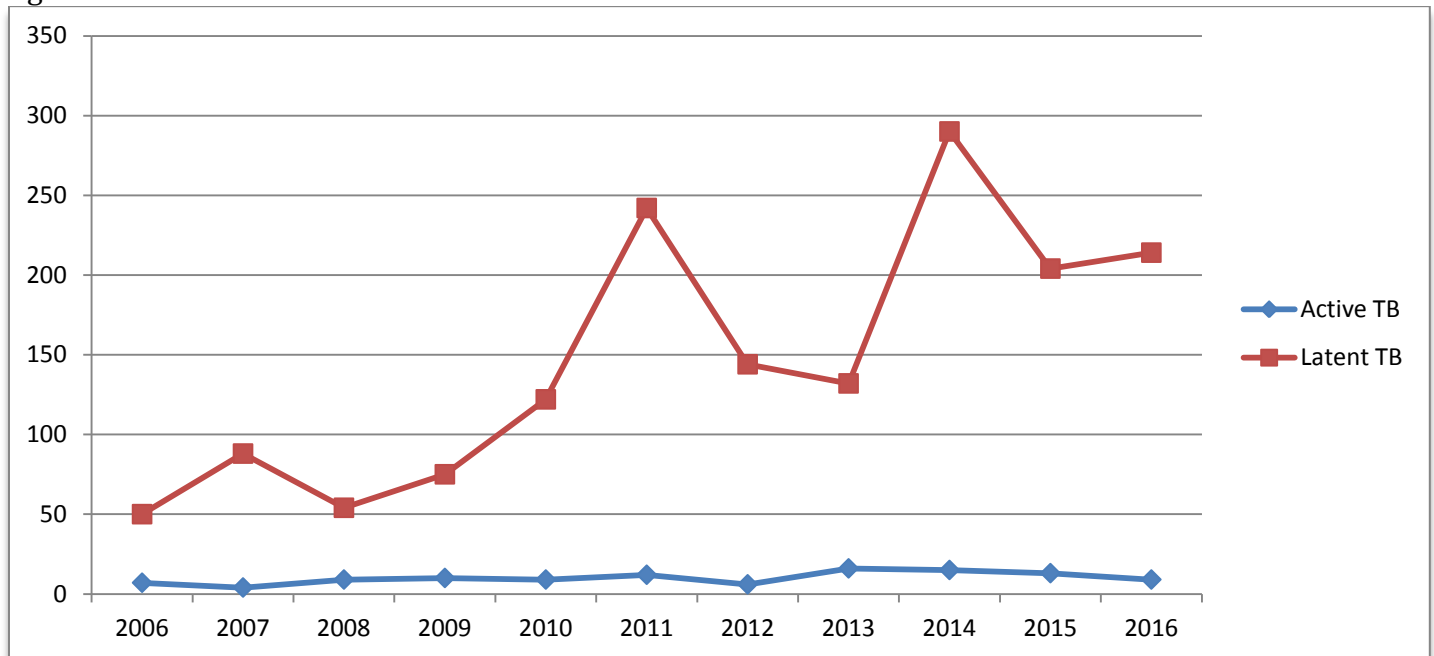
TB is spread through the air from one person to another. The TB bacteria are put into the air when a person with TB disease of the lungs or throat coughs, sneezes, speaks, or sings. People nearby may breathe in these bacteria and become infected.

TB is NOT spread by shaking someone's hand, sharing food or drink, touching, bed linens, toilet seats, sharing toothbrushes, or kissing.

TB bacteria can live in the body without making you sick. This is called latent TB infection. In most people who breathe in TB bacteria and become infected, the body is able to fight the bacteria to stop them from growing. People with latent TB infection do not feel sick and do not have any symptoms. People with latent TB infection are not infectious and cannot spread TB bacteria to others. However, TB bacteria become active if the immune system can't stop it from growing. If this happens, the person will go from having latent TB infection to being sick with TB disease.

The City of Amarillo Department of Public Health TB program diagnoses and manages latent TB. They provide case management and directly observed therapy for patients with active TB.

Figure 12. Active and Latent TB 2006-2016



Sexually Transmitted Diseases (STDs)

Chlamydia is caused by the bacterium, *Chlamydia trachomatis*, which can damage a woman's reproductive organs. It is the most frequently reported bacterial sexually transmitted disease in the United States. Under-reporting is substantial because most people with Chlamydia are not aware of their infections and do not seek testing. (CDC)

Chlamydia infections in women are usually mild or asymptomatic. Untreated infection can “silently” result in pelvic inflammatory disease (PID) which is a major cause of infertility, ectopic pregnancy, and chronic pelvic pain. As with other inflammatory STDs, Chlamydia infection might facilitate the transmission of human immunodeficiency virus (HIV) infection. Chlamydia also can cause discharge from the penis of an infected man.

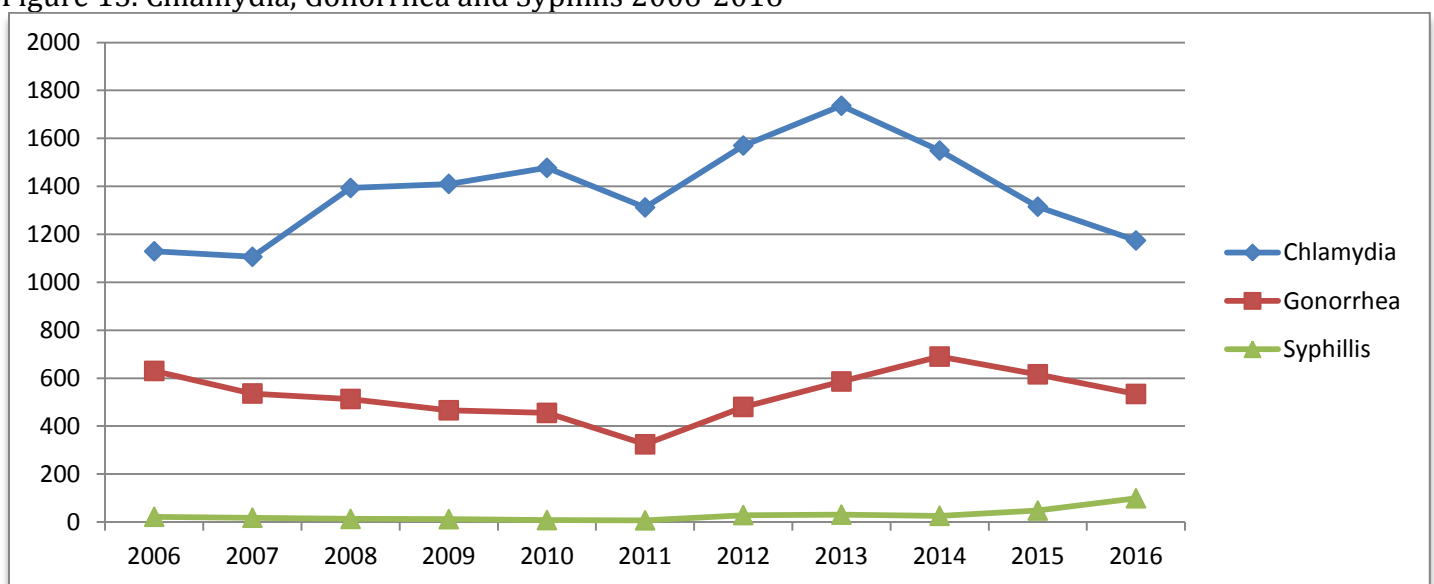
Gonorrhea is caused by *Neisseria gonorrhoeae*, a bacterium that can grow and multiply easily in the warm, moist areas of the reproductive tract, including the cervix (opening to the womb), uterus (womb), and fallopian tubes (egg canals) in women, and in the urethra (urine canal) in women and men. The bacterium can also grow in the mouth, throat, eyes, and anus.

Infections due to *Neisseria gonorrhoeae*, like those resulting from *Chlamydia trachomatis*, are a major cause of pelvic inflammatory disease (PID) in the United States.

Syphilis is caused by the bacterium *Treponema pallidum*. It has often been called "the great imitator" because so many of the signs and symptoms are indistinguishable from those of other diseases. Many people infected with syphilis do not have any symptoms for years, and remain at risk for late complications if they are not treated.

Syphilis is passed from person to person through direct contact with a syphilis sore. Sores occur mainly on the external genitals, vagina, anus, or in the rectum. Sores also can occur on the lips and in the mouth. Syphilis can NOT be spread through contact with toilet seats, doorknobs, swimming pools, hot tubs, bathtubs, shared clothing, or eating utensils. Pregnant women with the disease can pass it to the babies they are carrying.

Figure 13. Chlamydia, Gonorrhea and Syphilis 2006-2016



HIV & AIDS

HIV is the human immunodeficiency virus. It is the virus that can lead to acquired immune deficiency syndrome, or AIDS. HIV damages a person's body by destroying specific blood cells which are crucial to helping the body fight diseases.

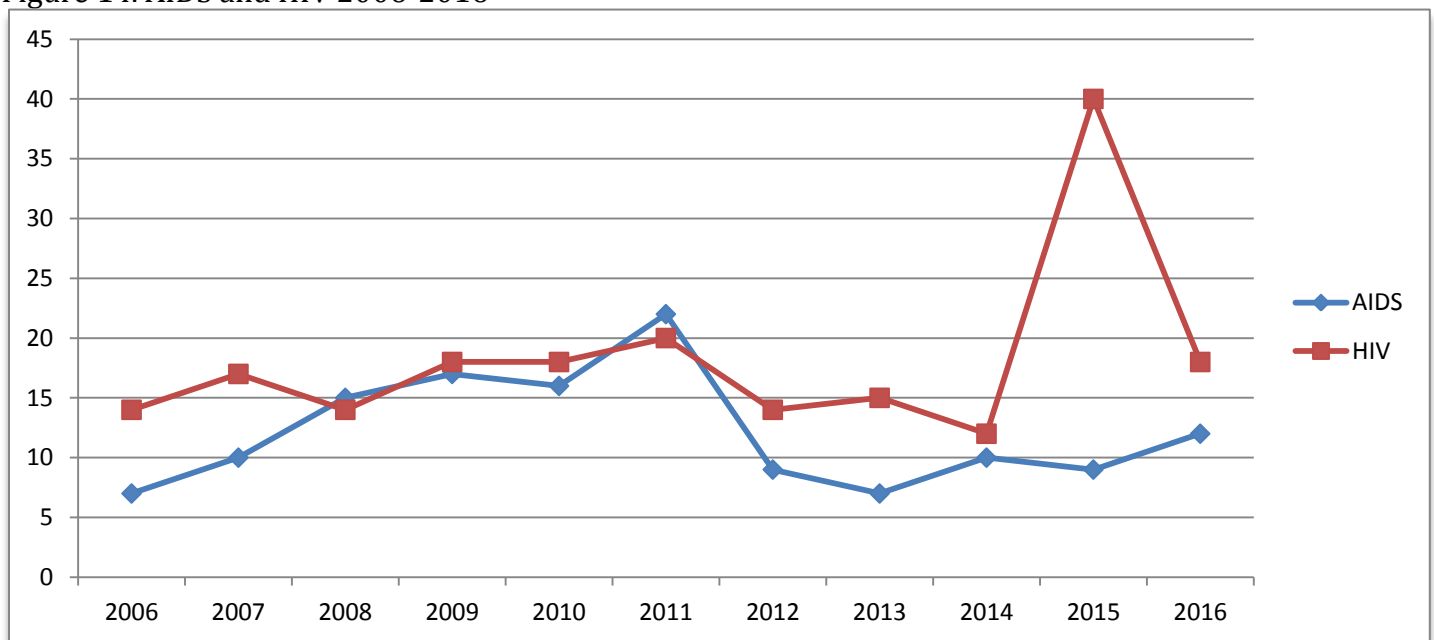
People living with HIV may appear and feel healthy for several years. However, even if they feel healthy, HIV is still affecting their bodies. All people with HIV should be seen on a regular basis by a health care provider experienced with treating HIV infection and possibly receive beneficial medications.

Support services are also available to many people with HIV. These services can help people cope with their diagnosis, reduce risk behavior, and find needed services.

AIDS is the late stage of HIV infection, when a person's immune system is severely damaged and has difficulty fighting diseases and certain cancers. Before the development of certain medications, people with HIV could progress to AIDS in just a few years. Currently, people can live much longer with HIV before they develop AIDS.

The City of Amarillo Public Health Department HIV/STD program conducts HIV prevention activities including screening and treatment, partner elicitation, HIV prevention outreach and linkage to support services.

Figure 14. AIDS and HIV 2006-2016



Influenza

*Flu A and B are lab-confirmed only. Influenza report represents "season-to-date" cases rather than year-to-date.

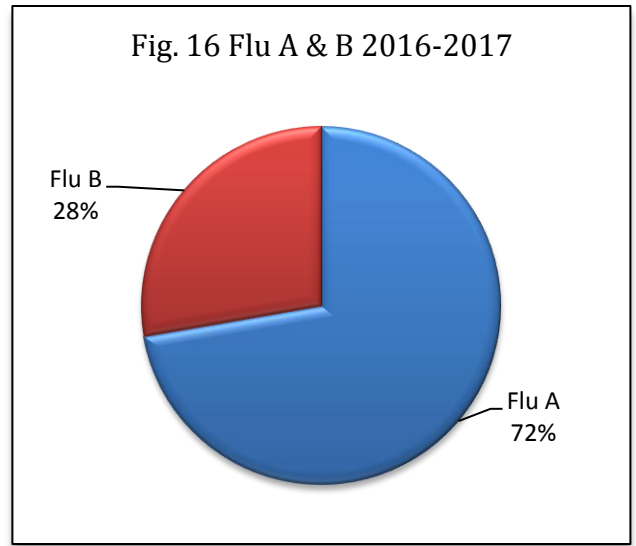
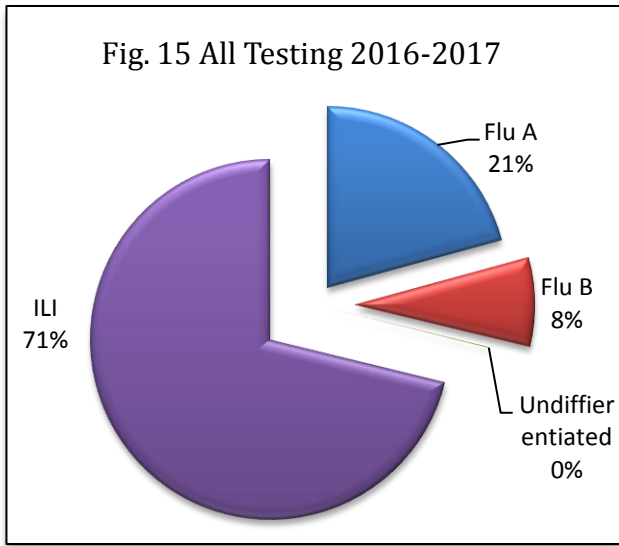
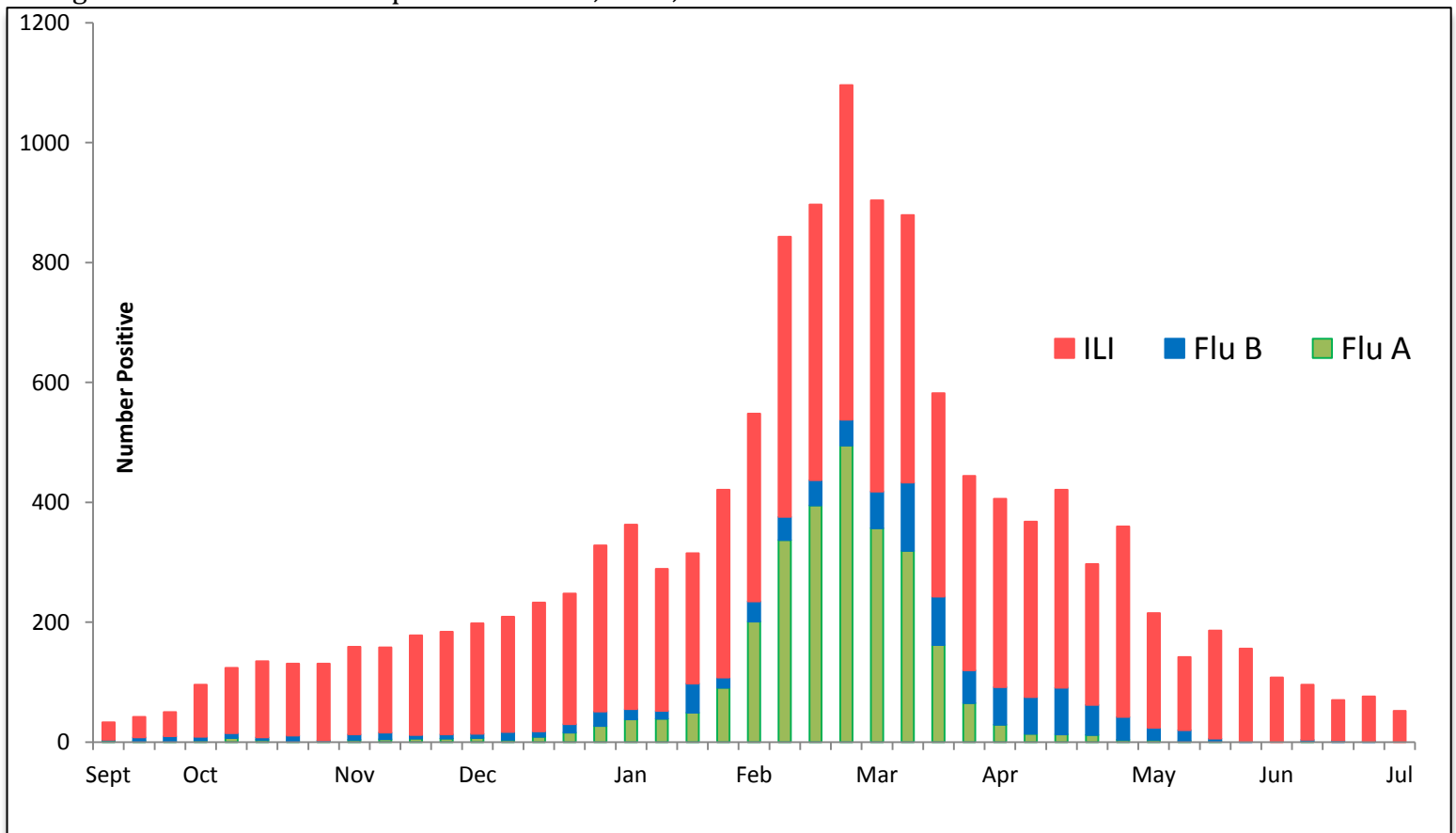


Figure 17. 2016-2017 Comparison of Flu A, Flu B, and ILI



City of Amarillo Department of Public Health Services

Immunization Program

Hours: Walk-in clinic is Monday through Friday 8 am-4 pm

- Late hours are 8am-6 pm on the first Tuesday of every month.

Services offered:

- Walk-in immunization clinic
- \$10 per shot for clients over the age of 18
- \$10 per shot, not to exceed \$30 for clients 18 years of age and younger
- Eligible children
 - Have Medicaid (No charge for children with Medicaid)
 - No insurance
 - Are underinsured (their insurance does not pay for vaccines)
 - Or are American Indian or Native Alaskan
- No one will be turned away due to inability to pay
- Mobile immunization unit for community outreach immunization clinics

STD Program

Hours: Monday through Friday 8am-5pm by appt – phone lines open at 7:45am for “same-day” appointments.

Services offered:

- Testing and treatment for STDs
 - STD Testing is \$20 (Gonorrhea, Chlamydia, Syphilis and HIV)
 - STD Treatment is \$5
- Education on transmission and prevention

HIV Prevention and Outreach

Hours: Monday through Friday 8am-5pm

- Late hours are 8am-8pm on the first Tuesday of every month.

Services offered:

- HIV risk reduction counseling
- Referrals to services
- Risk reduction supplies
- Testing and Treatment
 - Testing is \$20 (Gonorrhea, Chlamydia, Syphilis and HIV)
 - Treatment is \$5

Tuberculosis Program

Hours: Monday through Friday 8am-11:30am and 1pm-4pm

- TB skin tests are not placed on Thursdays

Services offered:

- TB skin testing for the public for \$15
- T-spot/IGRA (TB blood test) for \$61.88
- Treatment is provided at no cost to the patient
- Public Health Follow-up

Please visit www.amarillo.gov for more information on any of our programs or services.