# Marion County Reportable Disease and Condition Summary, 2015





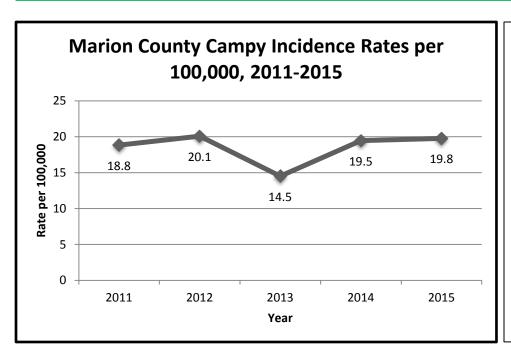
## Reportable Diseases and Conditions in Marion County, 2015

Disease/Condition	# of cases
Chlamydia	1711
Animal Bites	663
Hepatitis C (chronic)	471
Gonorrhea	251
Campylobacteriosis	68
Latent Tuberculosis	68
Syphilis	66
Pertussis	64
Salmonellosis	52
E. Coli	32
HIV Infection	20
Hepatitis B (chronic)	18
Elevated Blood Lead Levels	17
Giardia	14
Pelvic Inflammatory Disease	13
Cryptosporidiosis	13
Cryptococcus	9
Carbapenem-resistant Enterobacteriaceae	8
Haemophilus Influenzae	8
Tuberculosis	(
Shigellosis	3
Hepatitis C (acute)	2
Listeriosis	2
Non-TB Mycobacteria	2
Rabies (animal)	2
Scombroid	2
Taeniasis/Cysticercosis	2
Coccidioidomycosis	1
Dengue	1
Hepatitis A	1
Hepatitis B (acute)	1
Hemolytic Uremic Syndrome	1
Legionellosis	1
Malaria	1
Meningococcal Disease	1
Tularemia	-
Vibriosis	-
Yersiniosis	1
Total	3,595

- •This table shows all reportable cases of disease, infection, microorganism, and conditions in Marion County in 2015.
- •The 3 most reported diseases/conditions in Marion County in 2015 were Chlamydia, Animal Bites, and Chronic Hepatitis C.
- •Health care providers report all cases or possible cases of diseases, infections, microorganisms and conditions within certain time frames as specified by the state health department, Oregon Health Authority.
- •A full list of Oregon reportable diseases and conditions are available here

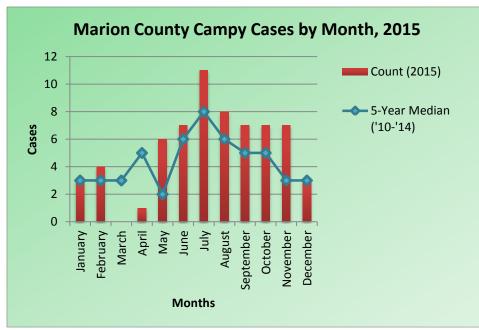
## Campylobacter (Campy)

- -Campylobacteriosis is an infectious illness caused by a bacteria.
- -Most ill people have diarrhea, cramping, stomach pain, and fever within 2-5 days after bacteria exposure. People are usually sick for about a week.
- -Most cases of campy are associated with eating raw or undercooked poultry, unpasteurized dairy products, or contaminated water.
- -To help prevent campy, cook all poultry products thoroughly, wash hands with soap before preparing food, and after handling raw meat. Use separate cutting boards for meat and other foods, and thoroughly clean all surfaces after contact with raw meat. Do not drink unpasteurized milk or untreated water. Wash hands with soap after using the bathroom and after cleaning up after pets.



The incidence rate for campy in Marion County has remained fairly stable over the past five years with an average of about 56 cases per year.

Marion County has a higher incidence rate of campy than the United States (14 per 100,000).

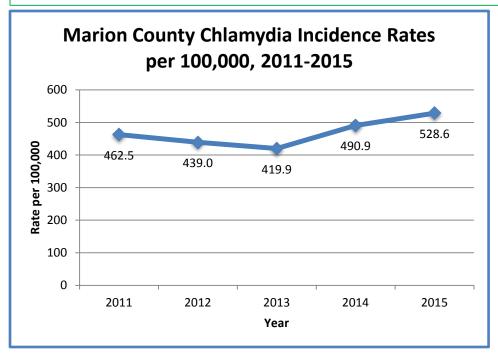


Campy is most commonly contracted in the summer months. This is shown by the larger case numbers between June and August.

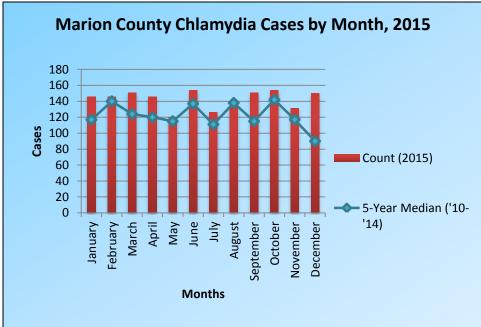
In 2015, Marion County saw more campy during July through November than was expected.

## Chlamydia

- -Chlamydia is a bacterial sexually transmitted infection.
- -Most people with Chlamydia do not have symptoms, but even without symptoms, Chlamydia can still damage the reproductive system.
- -Chlamydia is transmitted through all types of sexual contact (vaginal, anal and oral sex), as well as from a pregnant mother to her baby during childbirth.
- -To reduce risk of Chlamydia infection, reduce your number of sexual partners, know if sexual contacts have been tested and treated for Chlamydia, and use latex condoms the right way every time you have sex. The only way to avoid Chlamydia is to not have vaginal, anal, or oral sex or to be in a long-term monogamous relationship where both partners have been tested and have not been exposed to other sexual contacts.



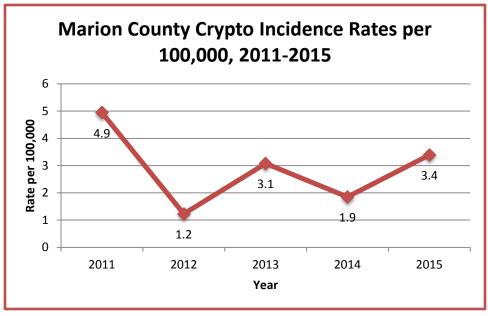
Marion County Chlamydia incidence rates have been increasing since 2013, averaging about 1,500 cases of Chlamydia each year.



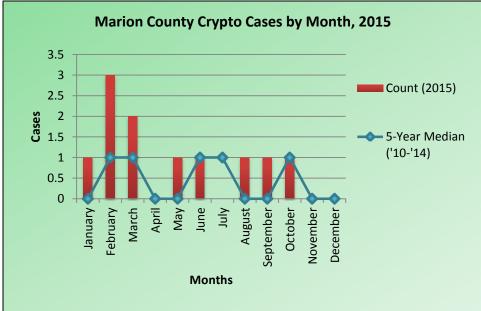
Due to an increase in incidence rates in Chlamydia, Marion County saw more Chlamydia cases than expected almost every month of 2015.

## Cryptosporidiosis (Crypto)

- -Cryptosporidium is a parasite that causes cryptosporidiosis (crypto)
- -Most people with crypto have watery diarrhea, and may also have stomach cramps, stomach pain, dehydration, nausea, vomiting, fever, and weight loss about 2-10 days after becoming infected with the parasite. Symptoms usually last about 1-2 weeks.
- -Most cases of crypto are associated with consuming something that has come into contact with stool contaminated with crypto, swallowing water or a beverage contaminated with infected stool, eating uncooked food contaminated with crypto or touching the mouth with hands that are contaminated with crypto from another source (contaminated surface, diaper changing, etc.).
- -To help prevent crypto wash hands before cooking and eating, after using the toilet, after changing diapers, before and after caring for someone who is ill with diarrhea, after handling an animal (particularly its stool), and after gardening. Keep children with diarrheal illness home from child care until diarrhea has stopped. Do not swim if ill with diarrhea. Do not swallow recreational water.



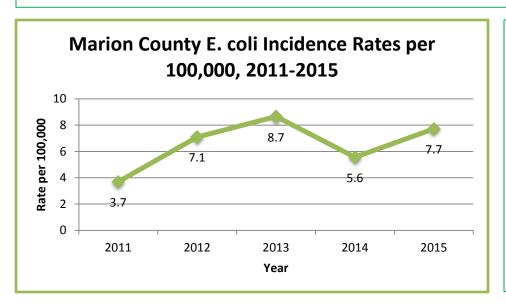
Overall Marion County crypto rates have remained fairly stable averaging about 12 cases per year. With so few cases, the incidence rates can vary from year to year.



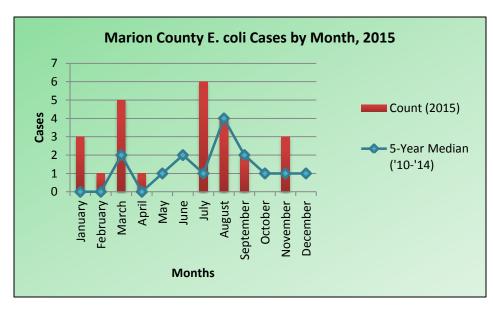
Marion County saw a couple more cases of crypto during February than expected but fewer cases in July than expected. The February cases were not linked to an outbreak.

#### E. coli

- -E. coli are bacteria that live in intestines of humans and animals. Most E. coli are an important part of a healthy intestinal tract, but some E. coli are pathogenic to humans, meaning they cause sickness. The most common type of pathogenic E. coli are Shiga toxin-producing (STEC) E. coli. These are the bacteria most commonly heard about in the news.
- -Most people with STEC E. coli have stomach cramps, and bloody diarrhea within 3-4 days of exposure to the bacteria. Symptoms usually last for 5-7 days.
- -Most STEC E. coli live in the intestines of livestock or game like cows, goats, sheep, deer and elk. Consuming raw or undercooked meat can cause an STEC E. coli infection. Additionally, eating foods contaminated with human or animal feces like unpasteurized milk, untreated water, unpasteurized apple cider, soft cheeses made with unpasteurized milk, and some leafy greens. Petting zoos and other interactive animal exhibits have also been linked to E. coli infection.
- -To help prevent E. coli infection wash your hands with soap and water after using the bathroom, changing diapers, before preparing food, before eating, and after contact with animals. Cook all meat thoroughly. Don't drink unpasteurized milk or juices. Prevent cross-contamination by washing counters, cutting boards and utensils that touch raw meat.



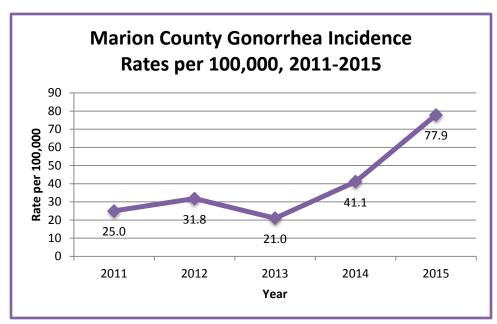
Overall Marion County E. coli incidence rates have remained fairly stable since 2012, averaging about 24 cases per year. With so few cases incidence rates can vary from year to year.



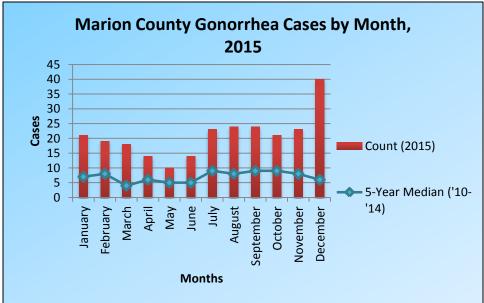
Marion County had more E. coli cases than expected in January, March and July. Even though there were 5 more cases in July than we normally see these cases did not have matching E. coli pathotypes and were not linked to an outbreak.

#### Gonorrhea

- -Gonorrhea is a bacterial sexually transmitted infection.
- -Most people with gonorrhea do not have symptoms. Those who do have symptoms may experience any of the following symptoms based on location of infection: a burning sensation when urinating, genital or anal discharge, bleeding between periods for women, swollen or painful testicles for men, rectal itching, soreness or bleeding or painful bowel movements.
- -Gonorrhea is spread through vaginal, anal or oral sex. A pregnant woman with gonorrhea can give the infection to her baby during childbirth.
- -To reduce risk of gonorrhea infection, reduce your number of sexual partners, know if sexual contacts have been tested and treated for gonorrhea, and use latex condoms the right way every time you have sex. The only way to avoid gonorrhea is to not have vaginal, anal, or oral sex or to be in a long-term monogamous relationship where both partners have been tested and have not been exposed to other sexual contacts.



Marion County gonorrhea incidence rates have been increasing dramatically since 2013. In 2013, saw about 63 gonorrhea cases a year. In 2015, we saw over 200 cases of gonorrhea.



Marion County had more cases of gonorrhea reported each month than expected. The most cases were reported in December.

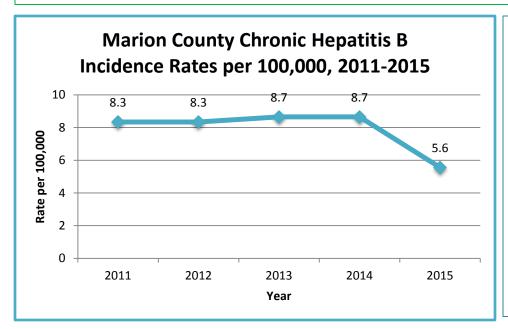
## Chronic Hepatitis B

-Hepatitis B is a virus that can cause short and long term illness. When the virus remains in the body it becomes a chronic illness that can result in long-term liver problems.

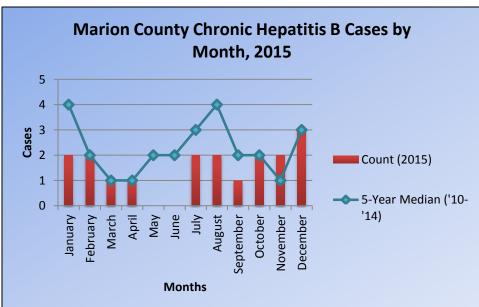
-Some people with chronic Hepatitis B have ongoing symptoms similar to acute Hepatitis B (fever, tiredness, loss of appetite, nausea, vomiting, stomach pain, dark urine, clay colored stool, joint pain and yellowing of the eyes or skin), but most people with chronic Hepatitis B don't have any symptoms for 20-30 years. About 1 in 4 people with chronic Hepatitis B develop cirrhosis or liver cancer.

-Hepatitis B is spread when a body fluid (blood, semen, etc.) that is infected with Hepatitis B enters the body of a person who is not infected. Some common activities that spread Hepatitis B are birth (from an infected mom to her baby), sex with an infected partner, sharing needles, syringes or other drug-injection equipment, sharing items like a toothbrush or razor with an infected person, direct contact with the blood or open sores of an infected person, or exposure to blood from a needle stick or other sharp instruments.

-The best way to prevent Hepatitis B infection is to complete the Hepatitis B vaccine series.



Marion County chronic hepatitis B incidence rates were steady between 2011-2014 and dropped in 2015. Before 2015, we were seeing about 26 cases per year. During 2015, we saw only about 18 cases.

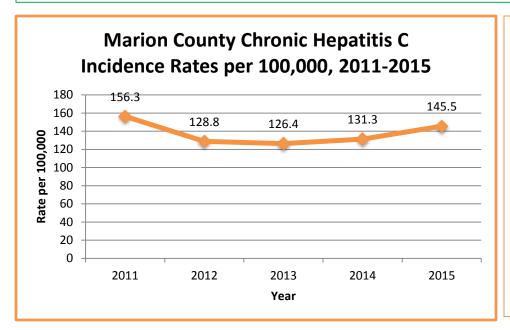


Marion County saw as many or fewer cases of chronic hepatitis B as expected each month during 2015.

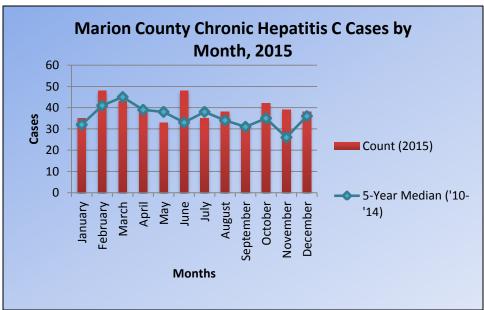
## Chronic Hepatitis C

-Hepatitis C is a virus that can cause short and long term illness. When the virus remains in the body it becomes a chronic illness that can result in long-term health problems and even death. Chronic illness occurs in 75%-85% of people infected with Hepatitis C.

- -Most people with chronic hepatitis C do not have symptoms. Over time chronic hepatitis C virus can cause liver damage, liver failure, liver cancer, and even death.
- -Hepatitis C is spread when blood from a person infected with Hepatitis C enters the body of someone who is not infected. Today, in the United States, most people become infected with Hepatitis C virus by sharing needles or other injection drug equipment. Other possible infection methods include accidental needle sticks, being born to a mother who has Hepatitis C, sharing personal items such as razors or toothbrushes, and having sexual contact with a person infected with the Hepatitis C virus.



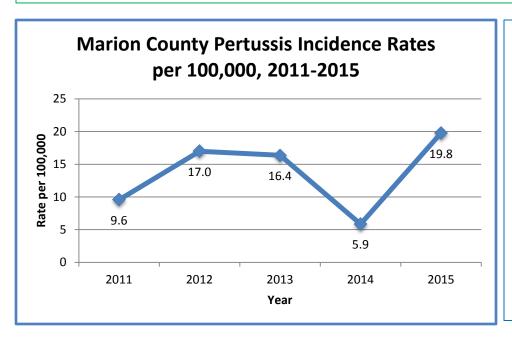
Marion County chronic hepatitis C incidence rates have remained fairly stable over the past five years, with about 438 cases reported per year.



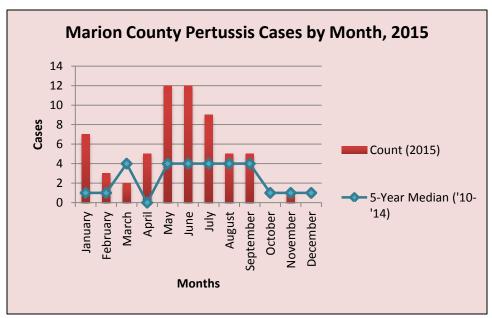
Marion County experienced about the expected number of chronic hepatitis C cases each month of 2015. June was the only month with many more cases than expected.

#### **Pertussis**

- -Pertussis (whooping cough) is a very contagious, bacterial, respiratory disease.
- -Most people with pertussis start with a runny nose, low-grade fever, and a mild cough which progresses into coughing fits followed by a high-pitched whoop, throwing up during or after coughing fits, and exhaustion after coughing fits.
- -Pertussis can be spread when a person with pertussis coughs, sneezes, or spends a lot of time near someone (close enough to share breathing space)
- -The best way to prevent pertussis is to get vaccinated. Additionally, it is recommended to keep babies away from infected people.



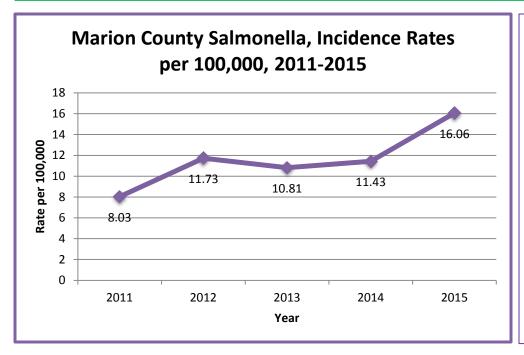
The Marion County pertussis incidence rate was higher in 2015 than it has been since before 2011. This is likely due to several pertussis outbreaks at schools that happened during the 2014-2015 school year.



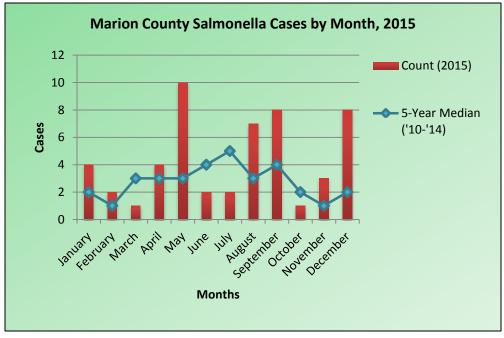
Marion County saw more pertussis throughout most of the year than expected and the Marion County communicable disease team worked four different pertussis outbreaks in March, April, June, and July of 2015.

#### Salmonella

- -Salmonella is a bacteria that makes people sick.
- -Most people with salmonella have diarrhea, fever, and stomach cramping.
- -Salmonella is most commonly associated with foods of animal origin like eggs, poultry and other meats. It has also been found in unpasteurized dairy products and other produce. It can be spread through cross-contamination of hands, cutting boards, counters, and knives. Salmonella cases have also been associated with having contact with animal feces, handling reptiles, handling chicks and ducklings and other livestock.
- -The best way to prevent salmonella infection is to thoroughly cook poultry, ground beef, and eggs. Do not eat food or drink beverages that contain raw eggs or raw milk. Wash hands, kitchen work surfaces and utensils thoroughly after they have been in contact with raw meat or poultry. Avoid direct contact between reptiles and infants.



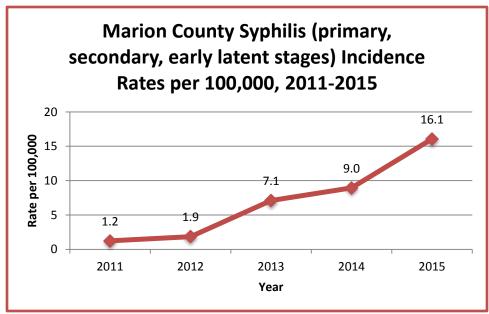
Rates of salmonella have been increasing in Marion County. 52 cases occurred in 2015 this is likely due to several outbreaks of salmonella in 2015 affecting 13 individuals.



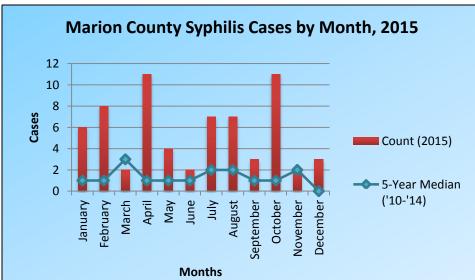
Marion County saw more salmonella cases than expected in May, August, September and December. Marion County communicable disease team investigated salmonella related outbreaks in September and December of 2015. There was concern about the possibility of an outbreak in May but there were no matching serotypes, so it was determined there was no outbreak.

### **Syphilis**

- -Syphilis is a bacterial sexually transmitted infection. It can have very serious complications if left untreated, and is described in different stages of disease.
- -The main symptom during the first stage of syphilis is one or more painless sore(s) called chancres located where the bacteria entered the body. Symptoms during the secondary stage of syphilis include, skin rashes and/or sores in the mouth, vagina or anus, fever, swollen lymph nodes, sore throat, hair loss, headaches, weight loss, muscle aches, and feeling tired. People who are not treated during the first or second stage of syphilis continue into latent syphilis. Latent syphilis has no symptoms, but the bacteria is still alive in the body. Those who remain untreated and progress into late stage syphilis may have symptoms like difficulty coordinating muscle movements, paralysis, loss of feeling in body parts, blindness, and dementia. During late syphilis the infection damages internal organs and can lead to death.
- -Syphilis is spread through direct contact with a syphilis sore during vaginal, anal, or oral sex. Syphilis can also be spread from an infected pregnant woman to her unborn baby resulting in congenital syphilis. Congenital syphilis can cause miscarriage, stillbirth or infant death shortly after birth. Babies born with congenital syphilis can have deformed bones, anemia, enlarged liver and spleen, jaundice, blindness, deafness, meningitis and skin rash.
- To reduce risk of syphilis infection, reduce your number of sexual partners, know if sexual contacts have been tested and treated for syphilis, and use latex condoms the right way every time you have sex. The only way to avoid syphilis is to not have vaginal, anal, or oral sex or to be in a long-term monogamous relationship where both partners have been tested and have not been exposed to other sexual contacts.



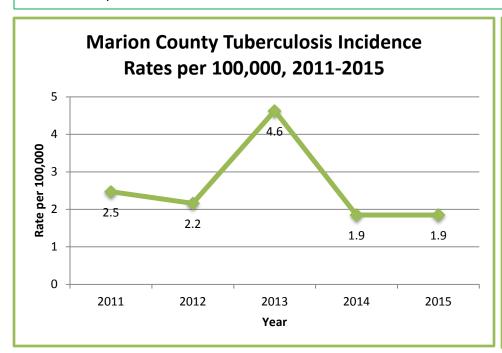
Marion County syphilis incidence rates have been increasing rapidly since 2012 going from an average of six cases per year to 66 cases in 2015. There are likely many reasons for this increase, including but limited to decreasing condom use due to increased long acting birth control access and more effective HIV management.



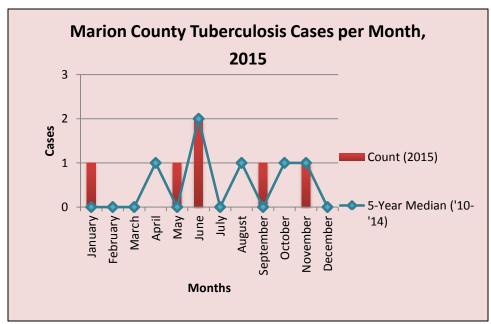
Marion County saw more syphilis than expected every month during 2015 except March. The most cases were reported during April and October (11 cases each).

#### **Tuberculosis**

- -Tuberculosis is a disease caused by a bacteria that usually attacks the lungs. If not treated properly, it can be deadly.
- -Most people with tuberculosis in their lungs will have a bad cough for three weeks or longer, chest pain, and will cough up blood or sputum. Other symptoms include weakness, weight loss, loss of appetite, chills, fever and night sweats.
- -Tuberculosis is spread when someone with tuberculosis in their lungs coughs, sneezes, sings or speaks near other people.
- -To help prevent tuberculosis infection people should avoid close contact or spending lots of time with known tuberculosis patients in enclosed environments.



Marion County tuberculosis incidence rates have been fairly steady not including the spike in 2013, which was related to a suspected tuberculosis cluster, or a group of tuberculosis cases with the same tuberculosis DNA fingerprint.



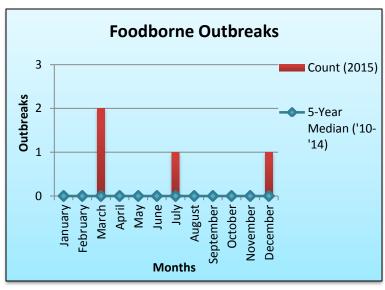
Marion County saw fewer tuberculosis cases during April, August and October than expected and more cases during January, May, and September than expected. Overall, this resulted in the same number of tuberculosis cases as expected for 2015.

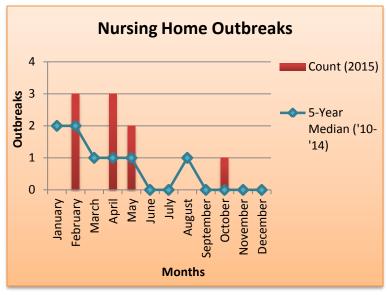
#### Outbreaks 2015

Month	Etiology Salmonella	Setting	# Affected
January	Braenderup	Other	5
	Influenza A	Other	Unknown
February	Unknown	Other	11
	Influenza A	Nursing Home	5
	Influenza A	Nursing Home	7
	Unknown	Other	16
	Norovirus GII	Nursing Home	13
March	Pertussis	Other	3
	Norovirus GII	Foodborne/Restaurant	19
	Norovirus GII	Foodborne/Restaurant	5
April	Rotavirus	Nursing Home	8
	Unknown	Nursing Home	22
	Pertussis	Other	13
	Norovirus GII	Nursing Home	21
May	Norovirus GII	Other	12
	Unknown	Nursing Home	29
	Norovirus GII	Nursing Home	16
	Unknown	Other	10
June	Pertussis	Other	3
July	Pertussis	Other	2
	Unknown	Foodborne/Restaurant	2
	Unknown	Other	16
September	Salmonella Poona	Other	1
October	Clostridium Difficile	Nursing Home	4
	Unknown Rash	Other	9
	Unknown	Other	19
December	Salmonella Enteritidis	Foodborne	7

Total Affected by Outbreaks:

Total Affected by Norovirus:





An outbreak is loosely defined as more cases of disease than expected in a population in a specific place within a given time period. The communicable disease team at Marion County Public Health Department investigates all outbreaks and works with Marion County Environmental Health and the Oregon Health Authority as necessary to address the outbreak. Typically, Marion County sees about 8 outbreaks a year at nursing homes or long term care facilities and between 1 and 5 outbreaks at restaurants. The most common outbreak cause is norovirus, a very contagious virus that causes stomachache, nausea, diarrhea and vomiting. Norovirus by itself is not a reportable disease but in 2015, 69.1% of outbreak cases were affected by norovirus. Like other disease causing agents, the best way to prevent transmission of norovirus is to practice good hand washing and remain home when ill with diarrhea and/or vomiting. Other etiologic agents involved in outbreaks during 2015

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were salmonella, influenza A, pertussis, rotavirus, and clostridium difficile.