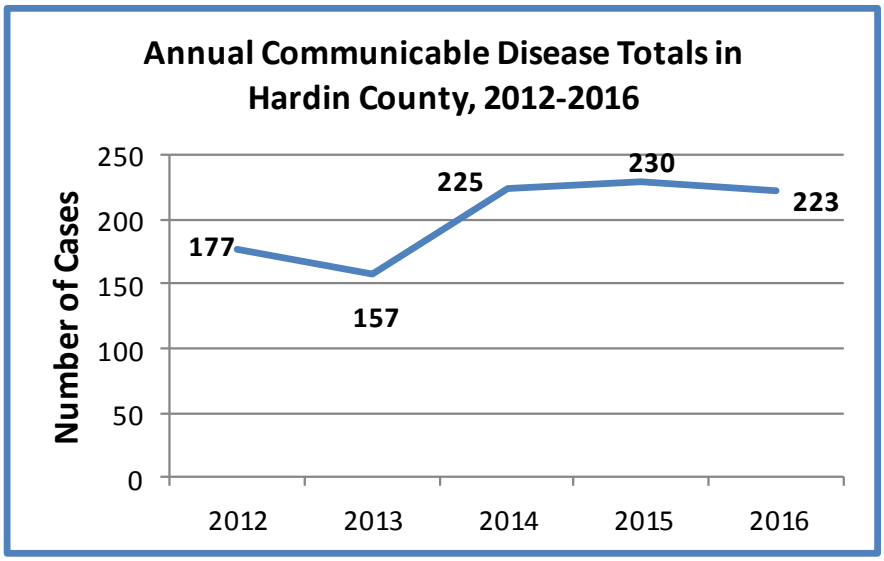
HARDIN COUNTY 2016 COMMUNICABLE DISEASE REPORT

February 2017

Hardin County saw a 3.04% decrease in communicable disease cases from 2015 to 2016 (230 cases and 223 cases respectively).



Numerous infectious diseases were reported during 2016; however, the most frequently reported illnesses were chlamydia (88 cases), Hepatitis C (69 cases), Hepatitis B (13 cases), influenza-associated hospitalizations (11 cases), and salmonella (9). Chlamydia, Hepatitis C, influenza-associated hospitalizations, and Hepatitis B were also in the top five diseases reported during 2014 and 2015. **Table 1.** on Page 2 illustrates all of the diseases reported in the community and the number of cases for each of these illnesses. The remainder of this document provides epidemiological data on each of these illnesses as well as brief demographic information on the cases and disease trends over the past five years.

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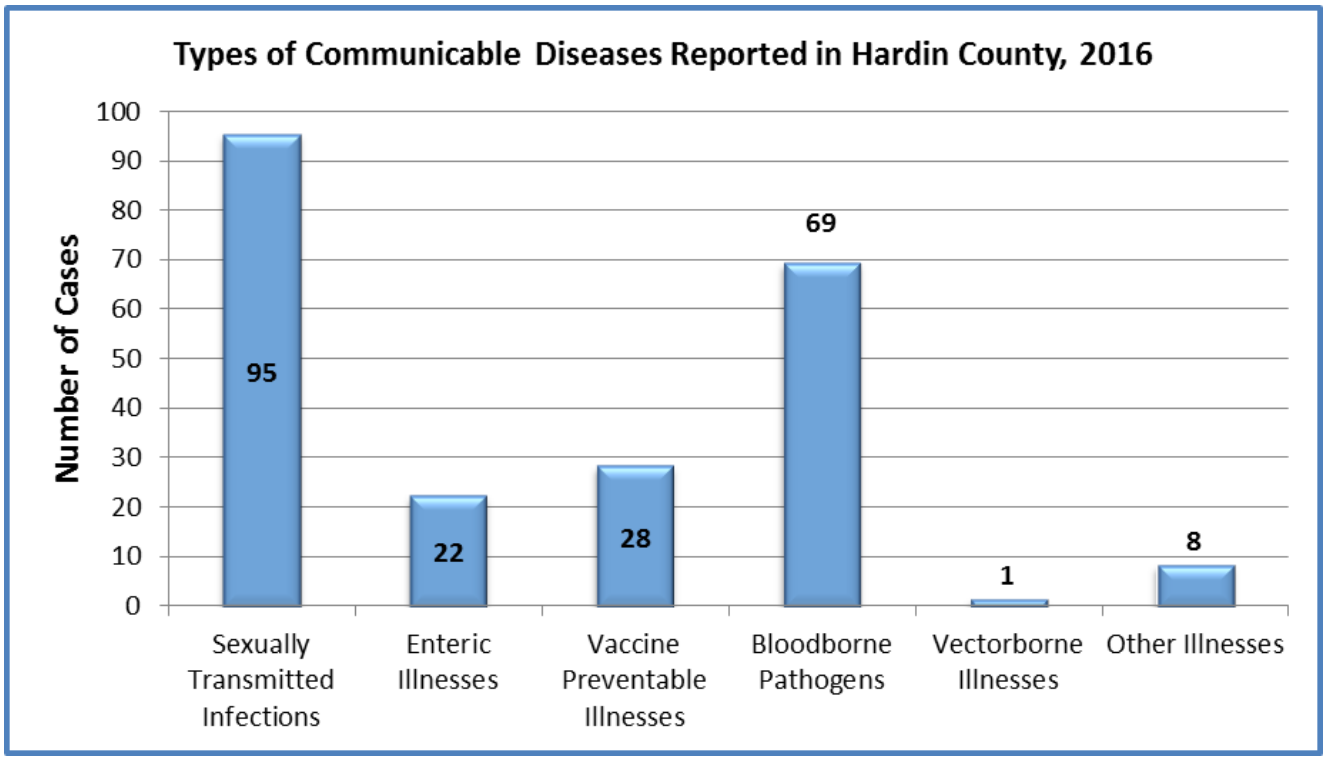
Table 1. Communicable Diseases Reported in Hardin County, 2016	
Class B	
Botulism - infant	1
Campylobacteriosis	5
Chlamydia	88
Cryptosporidiosis	4
Gonococcal infection	6
Haemophilus influenzae	1
Hepatitis B	13
Hepatitis C	69
Influenza-associated Hospitalization	11
Lyme Disease	1
Meningitis - aseptic	1
Mycobacterial disease	2
Pertussis (Whooping Cough)	1
Salmonellosis	9
Streptococcal Disease, Group A	4
Streptococcus pneumoniae	1
Syphilis	1
Varicella (Chicken Pox)	1
Yersiniosis	4
Total:	**223**



Notes:

Case counts include confirmed, probable, and suspect disease classifications

Sexually transmitted infections include chlamydia, gonorrhea, and syphilis

Enteric illnesses include campylobacteriosis, cryptosporidiosis, salmonella, and yersiniosis

Vaccine preventable illnesses include *Haemophilus influenzae*, Hepatitis B, influenza-associated hospitalizations, pertussis, *Streptococcus pneumoniae*, and varicella

Bloodborne pathogens include Hepatitis C

Vectorborne illnesses include Lyme disease

Other illnesses include infant botulism, aseptic meningitis, mycobacterial disease, and Streptococcal disease

Chlamydia

Number of Cases: 88

Average Age: 22.1 years

Median Age: 20 years

Age Range: 13-52 years

Female: 75.0%

Male: 25.0%

Decrease from 2015: 2.2

EPIDEMIOLOGY

Infectious Agent: *Chlamydia trachomatis* bacteria

Case Definition: Isolation of *Chlamydia trachomatis* from a clinical specimen

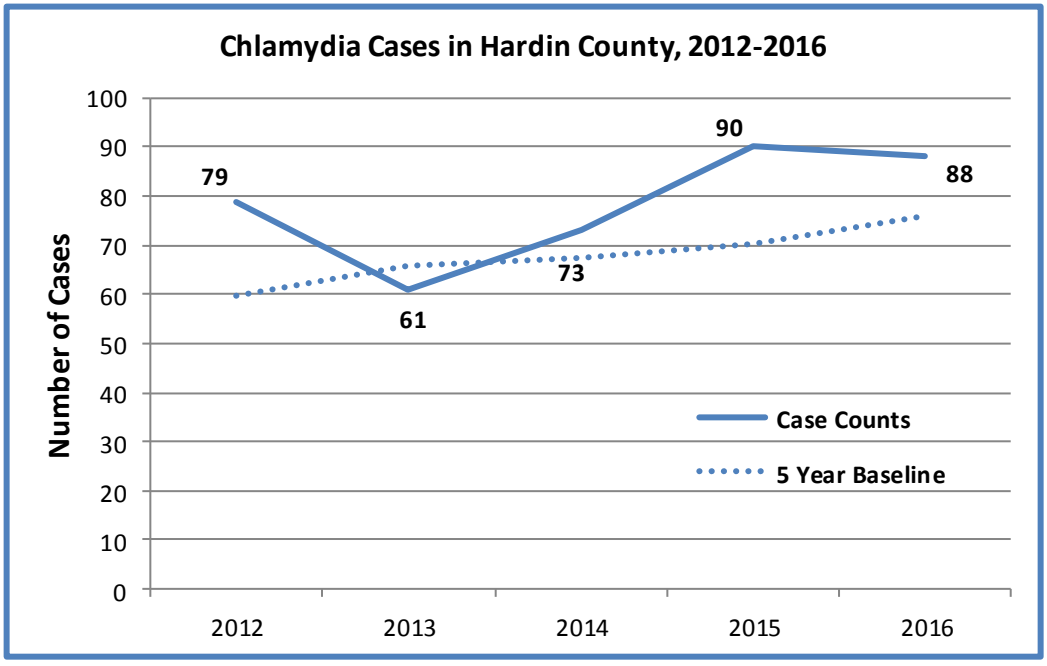
Symptoms: Men may suffer from painful urination, urinary frequency, and penile discharge; while women may experience vaginal discharge

Source: Humans

Mode of Transmission: Sexually transmitted

Incubation Period: 7-21 days

Prevention: Abstinence, condom use, and identification and treatment of sexual contacts of those proven to be or suspected of being infected with *Chlamydia trachomatis*



Hepatitis C

Number of Cases: 69

Average Age: 34.0 years

Median Age: 30.0 years

Age Range: 5-76 years

Female: 55.1%

Male: 44.9%

Increase from 2015: 3.0

EPIDEMIOLOGY

Infectious Agent: Hepatitis C virus

Case Definition: A positive test for Hepatitis C virus antibodies or detection of the Hepatitis C virus

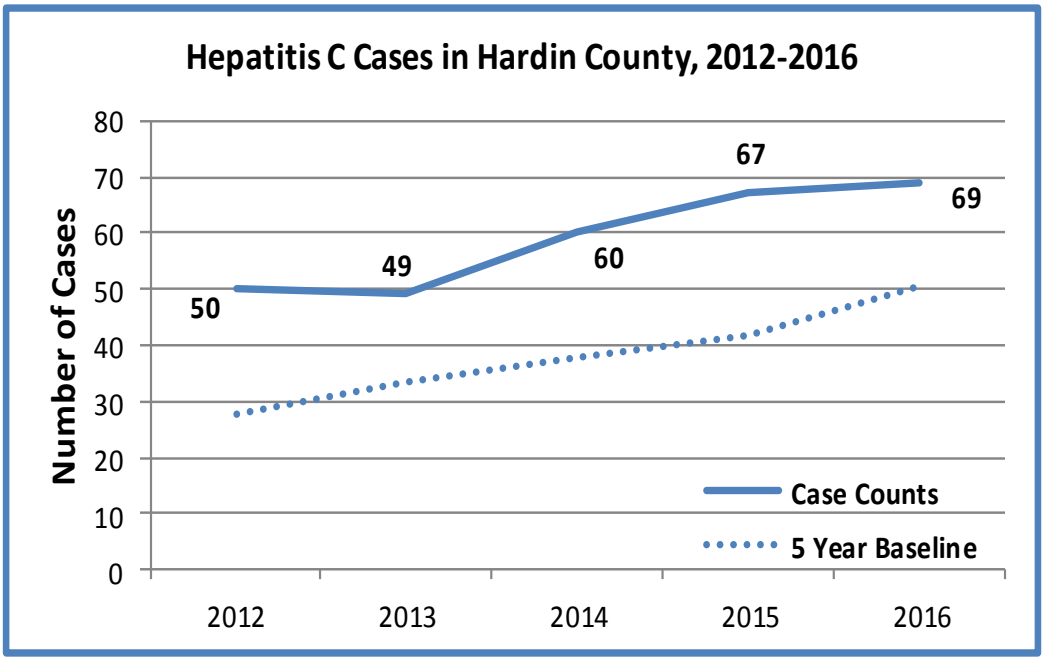
Symptoms: Those infected may be asymptomatic; however, some may experience nausea, vomiting, abdominal pain, loss of appetite, dark urine, and/or jaundice

Source: Human blood

Mode of Transmission: Injection drug use through the sharing of needles and other drug paraphernalia contaminated with infected blood; non-professional tattooing or in-home tattooing through shared needles or contaminated equipment; sexual transmission inefficiently spreads the virus (rare)

Incubation Period: 2 weeks – 6 months

Prevention: No vaccine is available



Hepatitis B

Number of Cases: 13

Average Age: 44.7 years

Median Age: 49 years

Age Range: 25-72 years

Female: 23.1%

Male: 76.9%

Percent Change from 2015: 0.0

EPIDEMIOLOGY

Infectious Agent: Hepatitis B virus

Case Definition: A positive test for Hepatitis B virus antibodies not associated with vaccination or detection of the Hepatitis B virus

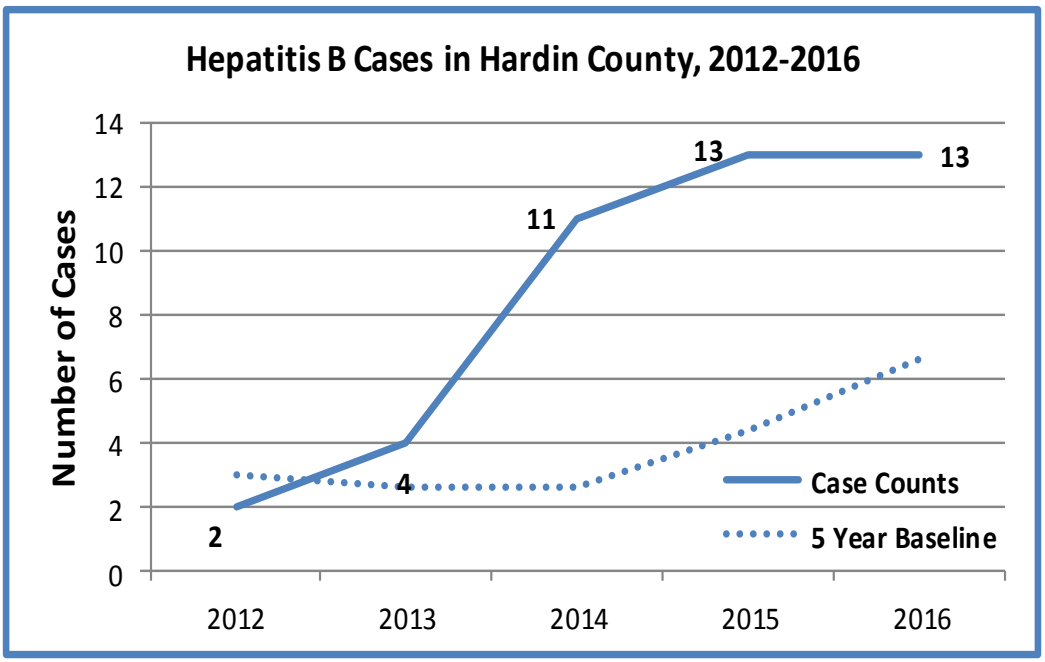
Symptoms: Those infected may be asymptomatic; however, some may experience nausea, vomiting, abdominal pain, loss of appetite, dark urine, and/or jaundice

Source: Blood and other body fluids (e.g., semen, vaginal secretions, and wound exudates)

Mode of Transmission: Injection drug use through the sharing of needles and other drug paraphernalia contaminated with infected blood; non-professional tattooing or in-home tattooing through shared needles or contaminated equipment; sexual contact; exposure through breaks in the skin; contamination of mucosal surfaces with body fluids other than saliva; perinatal transmission

Incubation Period: 6 weeks - 6 months

Prevention: The best prevention is vaccination



Influenza-Associated Hospitalizations

Number of Cases: 11

Average Age: 56.0 years

Median Age: 48.0 years

Age Range: 39-78 years

Female: 54.5%

Male: 45.5%

Decrease from 2015: 26.7

EPIDEMIOLOGY

Infectious Agent: Two main types of Influenza virus: Influenza A and Influenza B; both types include different strains that tend to change from year to year

Case Definition: An illness compatible with influenza virus infection that results in hospitalization

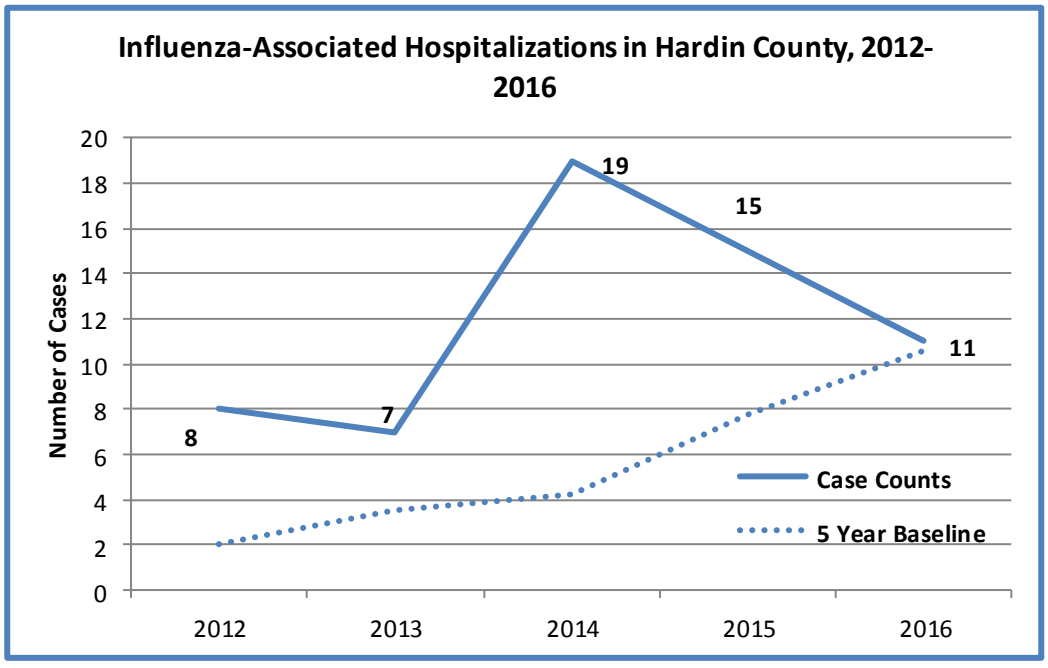
Symptoms: Fever, body aches, headache, malaise, nonproductive cough, sore throat, and runny nose

Source: Humans

Mode of Transmission: Direct person-to-person contact through droplet spread or via articles recently contaminated with nasopharyngeal secretions

Incubation Period: 1- 4 days

Prevention: The best prevention is annual vaccination; washing hands after sneezing, coughing, or using a tissue; cough into sleeve and not into hands



Salmonella

Number of Cases: 9

Average Age: 54.7 years

Median Age: 61 years

Age Range: 4-95 years

Female: 22.2%

Male: 77.8%

Decrease from 2015: 43.8

EPIDEMIOLOGY

Infectious Agent: *Salmonella* organism

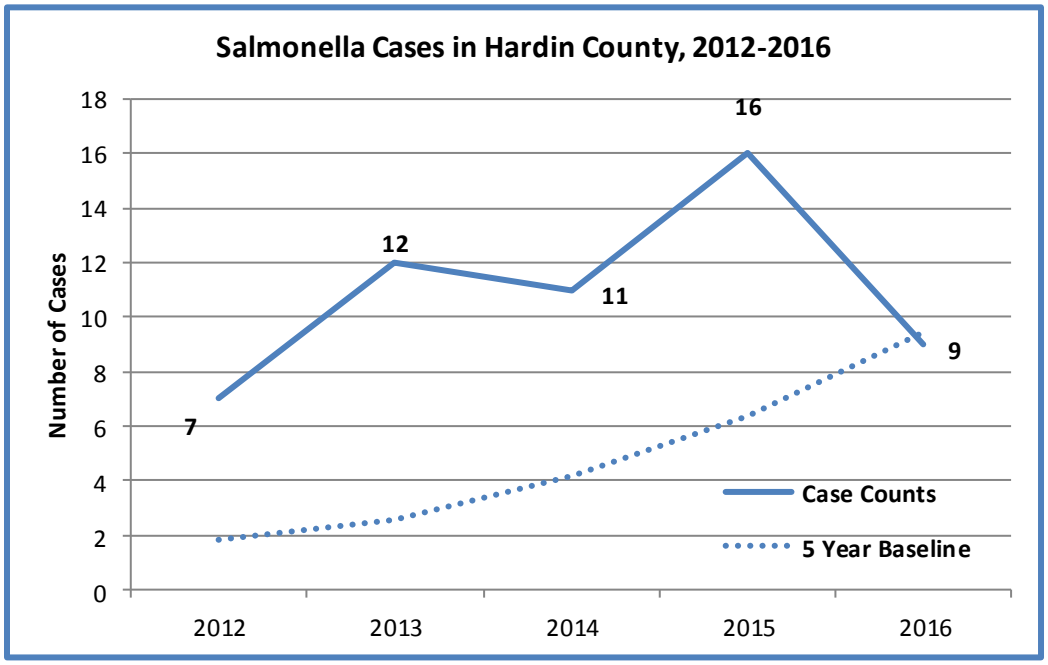
Case Definition: Isolation of Salmonella from a clinical specimen

Symptoms: Diarrhea, abdominal pain, nausea, and vomiting

Mode of Transmission: Humans may acquire Salmonella directly (via the fecal-oral route) from animals (e.g., pets, livestock, reptiles) or from ingestion of contaminated food or water; Direct person-to-person transmission may occur via the fecal-oral route but is uncommon

Incubation Period: 6-72 hours

Prevention: All meat and egg dishes should be thoroughly cooked; Avoid cross-contamination of food (especially raw fruits and vegetables) with raw meat juices; Wash hands after contact with animals and before preparing foods



Timeliness of Disease Reporting

Timely reporting of infectious diseases is important in identifying potential outbreaks and in reducing disease burden. Public health relies on health care providers and laboratories for identification and prompt reporting of these infectious diseases. Timeliness requirements for each reportable disease is dependent on the infectious nature and severity of the disease. Reporting lag is defined as the difference between the date the case was reported to the local health department and the date of diagnosis. For Class A diseases, median and mean lag time values should be less than 1 since these illnesses are required to be reported to the health department immediately, and for Class B and C diseases, mean and median lag time values should be less than 2 since these illnesses should be reported to the health department by the end of the next business day. Table 2. illustrates the lag time for select Class B reportable diseases reported in Hardin County during 2016.

Table 2.Reporting Lag Time for Select Reportable Diseases in Hardin County, 2016

Reportable Disease	Reporting Requirement	Cases (N)	Median (Days)	Mean (Days)
Campylobacteriosis	By end of next business day	5	3	3.4
Cryptosporidiosis	By end of next business day	4	1	2
E. coli O157:H7	By end of next business day	0	N/A	N/A
Giardia	By end of next business day	0	N/A	N/A
Influenza-Associated Hospitalization	By end of next business day	11	4	3.6
Legionnaires' Disease	By end of next business day	0	N/A	N/A
Pertussis	By end of next business day	1	3	3
Salmonella	By end of next business day	9	5	5
Shigella	By end of next business day	0	N/A	N/A

Note: Reporting lag time is the difference between the date the case was reported to the local health department and the case's date of diagnosis
Date of diagnosis defaulted to lab specimen collection date or illness onset date if blank

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