

**State of Iowa  
Hepatitis C Virus  
End-of-Year 2016  
Surveillance Report**



# Hepatitis C Virus (HCV) End-of-Year Surveillance Report: 2016

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## Executive Summary

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Here are a few points drawn from our HCV data:

- **2,287 Iowans Diagnosed with HCV:** In 2016, Iowa experienced the largest number of people diagnosed with hepatitis C since reporting began, including the largest number and proportion of people 30 and under who were diagnosed with HCV. There are several things that may have contributed to the overall increase in diagnoses. These include increased testing among baby boomers (those born between 1945 and 1965) and an expanding number of people who inject drugs related to the opioid epidemic.
- **Sex:** Overall, nearly two-thirds (63%) of people diagnosed with HCV in 2016 were males. However, an analysis of people 30 and younger reported with HCV reveals that nearly half (48%) of them were female.
- **Birth Cohort:** Fifty-five (55) percent of people diagnosed with HCV in 2016 were baby boomers, or those born between 1945 and 1965, while 15% were people born after 1986 (30 years of age and younger). About 30% of people diagnosed in 2016 were born between 1966 and 1985 (between the ages of 31 years old and 50 years old). A significantly smaller percentage (2%) of people reported with HCV in 2016 were born before 1945.
- **Race and Ethnicity:** Unlike HIV and STDs, there are not significant racial and ethnic disparities in HCV diagnoses. In 2016, 89% of people diagnosed were non-Hispanic white, 4% of people were Hispanic, 5% were African American/Black, 1% were Asian, and less than 1% were other races.
- **People 30 and Under Diagnosed with HCV:** There were 347 people 30 years of age and under reported as diagnosed with HCV in 2016, accounting for 15% of all diagnoses. This increase continues a trend observed since reporting began. Among those 30 and younger, 35% were between the ages of 20 and 24, and 55% were between 25 and 30 years old. An analysis of surveillance data indicated that, of the 338 people 30 and under who were eligible for follow up, 68% of people reported injection drug use, while 29% reported no injection drug use.
- **Iowans Diagnosed with HCV Since 2000:** There have been 23,588 Iowans ever reported to IDPH with HCV. Of those people, 516 were reported before the year 2000, so data, including demographics, are quite limited. Of the 23,072 people reported to IDPH as diagnosed with HCV from 2000 through 2016, 63% were baby boomers (born between 1945 and 1965), 7% were born in 1986 or later, and 26% were born between 1966 and 1986. Males were about 62% of people diagnosed, while females were 36%. Non-Hispanic whites were most likely to be diagnosed (85%), followed by African American/blacks (9%), Hispanics (3%), and Asians (1%). It should be noted that race and ethnicity information were not reported for 58% of people diagnosed with HCV and reported to IDPH since 2000. Two-thirds (67%) of people diagnosed with HCV had evidence of chronic infection (i.e. PCR result), while 33% of people were reported with antibody results only.
- **HIV and HCV Co-infection:** An analysis of co-infection of HIV and HCV revealed that 361 people had been reported to IDPH as having both HIV and HCV. Of those people, 290 (80%) were alive at the end of 2016, while 71 were deceased, indicating that 11% of people living with HIV are co-infected with HCV. The majority of people who are co-infected, 79%, were males, and white, 65%.
- **Estimate of Total Number of Iowans with HCV:** As of December 31, 2016, there were 23,588 Iowans diagnosed with hepatitis C who were reported to IDPH. Based on this number of reports, there are likely 39,215 to 149,173 Iowans with hepatitis C infections, with 17,647 to 126,797 of these people undiagnosed.

## Organization of the Surveillance Report

This end-of-year report presents surveillance data on hepatitis C in Iowa. It describes hepatitis C for the state and of its population subgroups. There are four sections to the report: Section 1 describes **data sources**; Section 2 is a **narrative summary** with key highlights; Section 3 employs **charts, graphs, and tables** to illustrate trends; and Section 4 outlines the **reporting requirements** for hepatitis C in Iowa.

## Definitions

**Hepatitis C diagnoses** reflect all persons diagnosed with HCV for the first time, who were residents of Iowa at diagnosis. Age is the age at time of first diagnosis of HCV. This includes people reported with antibody positive results or confirmatory (RNA) results.

**Confirmed case of chronic HCV infection** means the person has HCV RNA circulating in his or her blood, confirmed by laboratory testing.

**HCV antibody positive case** means that there is a presence of antibodies to HCV within a person's blood. It indicates a person was exposed to HCV and became infected, but approximately 15 to 25% of people will spontaneously clear the virus without treatment. Therefore, 75 to 85% of people with positive antibody tests will be chronically infected.

## Section 1: SOURCES OF DATA

### Core HCV Surveillance Data

#### Iowa Disease Surveillance System (IDSS)

HCV data are collected in the Iowa Disease Surveillance System, which is a web-based system designed to facilitate reporting, investigation, and surveillance of communicable diseases in Iowa. HCV is a reportable disease as defined by Iowa Code Chapter 139A. Reports of HCV infection are submitted by local public health, private providers, laboratories, and others. IDSS is not a static database, as cases can be updated daily. Some records had incomplete data, which was a limitation of analysis. It is also unknown who has been cured of their HCV, or who has cleared the infection on their own.

Hepatitis C test results in IDSS were defined as screening or confirmatory by the following criteria:

Screening tests: *(usually reported as positive or negative)*

- HCV Antibody Signal/Cutoff by EIA antibody (See Interpretation & Numeric Result in lab report)
- Serology – HCV antibody (EIA) (positive, negative, equivocal, or not reactive)
- Serology – Anti-HCV antibody test (positive, negative, equivocal, or not reactive)
- Serology – HCV IgG antibody (EIA) (positive, negative, equivocal, not reactive, or See Interpretation & Numeric Result)
- Serology – HCV IgM antibody (EIA) (positive, negative, equivocal, not reactive, or See Interpretation & Numeric Result in lab report)

Confirmatory tests:

- Polymerase Chain Reaction (PCR) (detected, equivocal, indeterminate, not detected, not quantified, or not tested)
- Genotype (detected, not detected, or indeterminate)
- Serology – RNA Qualitative (QL) (positive, negative, equivocal, or not reactive)
- Serology – HCV RIBA (antibody test – does not indicate current infection) (negative or positive)
- Serology – HCV RNA (positive, negative, or not done)
- Serology – HCV DNA QL Log (positive, negative, equivocal, or indeterminate)

#### Diagnosis Date and Completeness of Surveillance Data

Only persons reported in Iowa and for whom last name, date of birth, sex, and date of diagnosis are known are included in this report. Evaluations of the surveillance system indicate that potentially significant numbers of Iowans with HCV may have never been reported to IDPH. In addition, these data do not include people who have contracted the virus, but who have not been diagnosed. Nationally, CDC estimates that 45 to 85% of people with HCV are undiagnosed.

### Co-infection with HIV and HCV

Co-infections were determined by a match between IDSS and the Iowa electronic HIV/AIDS Reporting System (eHARS), and were supplemented by data from three Ryan White-funded clinics. All HIV-infected persons who were first diagnosed while living in Iowa, or who have lived in Iowa at some point in time while infected with HIV, or who have accessed care at an Iowa facility and have been reported to IDPH, are included in eHARS. All reports of HCV infection as of 12/31/2016 were matched to HIV reports in eHARS as of 12/31/2016. Matches were based on date of birth, last name, and Soundex of first name. Persons with infection reported in both databases were considered to be co-infected.

### Population Data

The surveillance program has used the 2016 population estimates from the U.S. Census Bureau (<http://www.census.gov>) to calculate prevalence rates.

## Section 2: NARRATIVE SUMMARY

### **Iowans Diagnosed with Hepatitis C in 2016**

There were 2,287 Iowans diagnosed with hepatitis C (HCV) in 2016, up 52 (2%) from 2,235 in 2015, and 252 (12%) over the average of 2,035 for the previous five years (2000 through 2015). As seen in Figure 3.1, the annual number of people diagnosed with HCV has continued to increase steadily since 2000. The 2,287 people diagnosed with HCV in 2016 is the largest number ever recorded in a single year in Iowa since reporting began. Seventy percent of people diagnosed in 2016 had evidence of a confirmatory (PCR) test.

#### Sex

In 2016, 63% of Iowans diagnosed with HCV were males. However, an analysis of people 30 and younger reported with HCV reveals that the distribution is more even, with males being 52% of diagnosed people.

#### Birth Cohort

Fifty-five (55) percent of people diagnosed with HCV in 2016 were baby boomers, or those born between 1945 and 1965, while 15% were people born after 1986 (30 years of age and younger). About 30% of people diagnosed in 2016 were born between 1966 and 1985 (between the ages of 31 years old and 50 years old). A significantly smaller percentage (2%) of people reported with HCV in 2016 were born before 1945.

#### Ethnicity and Race

Unlike HIV and STDs, there are not significant racial and ethnic disparities in HCV diagnoses. In 2016, 89% of people diagnosed were non-Hispanic white, 4% of people were Hispanic, 5% were black/African American, 1% were Asian, and less than 1% were other races.

### **Iowans 30 Years of Age and Under Diagnosed with Hepatitis C in 2016**

There were 347 people 30 years of age and under reported as diagnosed with HCV in 2016, accounting for 15% of all diagnoses. This increase continues a trend observed since reporting began. Among those 30 and younger, 35% were between the ages of 20 and 24, and 55% were between 25 and 30 years old. An analysis of surveillance data indicated that, of the 338 people 30 and under who were eligible for follow up, 68% of people reported injection drug use, while 29% reported no injection drug use.

### **Iowans Ever Reported with HCV**

There have been 23,588 Iowans ever reported to IDPH with HCV. Of those people, 516 were reported before the year 2000, so data, including demographics, are quite limited. Of the 23,072 people reported to IDPH as diagnosed with HCV from 2000 through 2016, 63% were baby boomers (born between 1945 and 1965), 7% were born in 1986 or later, and 26% were born between 1966 and 1986. Males were about 62% of people diagnosed, while females were 36%. Regarding age at diagnosis, the percentages of persons diagnosed who were 30 and younger or between 31 and 40 years old have increased substantially since 2000. Non-Hispanic whites were most likely to be diagnosed (85%), followed by African American/blacks (9%), Hispanics (3%), and Asians (1%). It should be noted that race and ethnicity information were not reported for 58% of people ever diagnosed with HCV and reported

to IDPH since 2000. Two-thirds (67%) of people diagnosed with HCV had evidence of chronic infection (i.e. PCR result), while 33% of people were reported with antibody results only.

### **Deaths of Persons with Hepatitis C**

Since 2000, the number of Iowans dying from hepatitis C-related causes has increased. There were 1,113 Iowans who died from hepatitis C-related causes between 2000 and 2016, meaning that hepatitis C virus was listed on the death certificate. Mortality from hepatitis C is likely underestimated, as death certificates often underreport HCV infection, and many people with HCV are undiagnosed.

### **HIV and HCV Co-infection**

An analysis of co-infection of HIV and HCV revealed that 361 people had been reported to IDPH as having both HIV and HCV. Of those people, 290 (80%) were alive at the end of 2016, while 71 were deceased, indicating that 11% of people living with HIV are co-infected with HCV. The majority of people who are co-infected, 79%, were males, and white, 65%.

### **Estimation of Prevalence of HCV in Iowa**

As of December 31, 2016, there were 23,588 Iowans diagnosed with hepatitis C who were reported to IDPH. Of these people, 15,510 had evidence of chronic infection, while 8,078 had only antibody results reported. The Centers for Disease Control and Prevention estimates that 15 to 25% of people with HCV clear the infection spontaneously, so it's likely that 75 to 85% of the 8,078 people with antibody only results reported actually have chronic HCV infection. CDC also estimates that 45 to 85% of people with HCV have not been diagnosed. Based on these values, IDPH estimates that there are between **39,215 to 149,173 Iowans with hepatitis C infections, with 17,647 (45%) to 126,797 (85%), of these people undiagnosed.**

### **Expanded HCV Surveillance Follow up for 2017**

Since 2015, IDPH has conducted surveillance follow up with healthcare providers of Iowans diagnosed with HCV who were 30 years old or under to collect injection drug use behavior information. The cutoff age of 30 was chosen because other states were reporting increases in diagnoses in residents 30 and under. However, analyses of Iowa's hepatitis C surveillance data indicate that Iowans 30 to 39 are also experiencing increases in diagnoses, potentially associated with the expanding number of people who inject drugs related to the opioid epidemic. Therefore, the cutoff age for HCV surveillance follow up was increased to 39, effective January 1, 2017.

## Section 3: TABLES AND FIGURES

**Table 3.1 Iowans Diagnosed and Reported with Hepatitis C in 2016**

Characteristics	People reported with HCV Diagnosis	
	Number	(%)
<b>Sex at Birth</b>		
Male	1,437	(63)
Female	850	(37)
<b>Age at Diagnosis</b>		
Under 13	4	(<1)
13-30	337	(15)
31-44	469	(21)
45-64	1,255	(55)
65 or older	222	(10)
<b>Birth Cohort Year</b>		
30 and Under (Born 1986 or later)	347	(15)
Baby Boomers (1945-1965)	1,202	(53)
Born before 1945	50	(2)
All other ages (1966-1985)	688	(30)
<b>Ethnicity/Race</b>		
Hispanic/Latino, All Races	90	(4)
Not Hispanic, White	2,036	(89)
Not Hispanic, Black/African American	119	(5)
Not Hispanic, Asian	26	(1)
Not Hispanic, Native Hawaiian/Pacific Islander	1	(<1)
Not Hispanic, American Indian/Alaska Native	11	(<1)
Not Hispanic, Multi-race	5	(<1)
<b>Result Type</b>		
Antibody	688	(30)
Polymerase Chain Reaction (PCR)	809	(35)
HCV recombinant immunoblot assay (RIBA)	2	<1%
Genotype	788	(34)
<b>Case Status</b>		
Confirmed case	1,599	(70)
Screening (antibody) only	688	(30)
<b>Co-Infected with HCV</b>		
No	2,237	(98)
Yes, HIV and HCV Co-infected	50	(2)
<b>Totals</b>	<b>2,287</b>	<b>(100)</b>

**Table 3.2 Iowans 30 and Under Diagnosed with Hepatitis C in 2016**

Characteristics	People reported with HCV Diagnosis	
	Number	(%)
<b>Sex at Birth</b>		
Male	182	(52)
Female	165	(48)
<b>Age at Diagnosis</b>		
Under 13	9	(3)
13-19	25	(7)
20-24	121	(35)
25-30	192	(55)
<b>Reported Injection Drug Use</b>		
Yes	231	(67)
No	97	(28)
Unknown	10	(3)
Not Assessed (patient under age 13)	9	(3)
<b>Ethnicity/Race</b>		
Hispanic/Latino, All Races	18	(5)
Not Hispanic, White	304	(88)
Not Hispanic, Black/African American	17	(5)
Not Hispanic, Asian	6	(2)
Not Hispanic, Native Hawaiian/Pacific Islander	0	0
Not Hispanic, American Indian/Alaska Native	0	0
Not Hispanic, Multi-race	2	(<1)
<b>Case Status</b>		
Confirmed case	249	(72)
Antibody only	98	(28)
<b>TOTALS</b>	<b>347</b>	<b>(100)</b>

**Table 3.3 Iowans Diagnosed with HCV from 2000 through 2016**

Characteristics	People reported with HCV Diagnosis	
	Number	(%)
<b>Sex at Birth</b>		
Male	14,216	(62)
Female	8,421	(36)
Other	12	(<1)
Unknown	423	(2)
<b>Age at Diagnosis</b>		
Under 13	145	(<1)
13-30	2,132	(9)
31-44	4,349	(19)
45-64	14,393	(62)
65 or older	2,053	(9)
<b>Birth Cohort Year</b>		
30 and Under (Born 1986 or later)	1,548	(7)
Baby Boomers (1945-1965)	14,473	(63)
Born before 1945	1,047	(5)
All other ages (1966-1985)	6,004	(26)
<b>Ethnicity/ Race*</b>		
Hispanic/Latino, All Races	333	(3)
Not Hispanic, White	8,288	(85)
Not Hispanic, Black/African American	844	(9)
Not Hispanic, Asian	136	(1)
Not Hispanic, Native Hawaiian/Pacific Islander	7	(<1)
Not Hispanic, American Indian/Alaska Native	118	(1)
Not Hispanic, Multi-race	36	(<1)
<b>Result Type</b>		
Antibody	7,662	(33)
Polymerase Chain Reaction (PCR)	8,524	(37)
HCV recombinant immunoblot assay (RIBA)	1,025	(4)
Genotype	5,861	(25)
<b>Case Status</b>		
Confirmed case	15,410	(67)
Antibody only	7,662	(33)
<b>TOTALS</b>	<b>23,072</b>	<b>(100)</b>

\*Race and ethnicity data were missing for 58% (n=13,310) of case reports from 2000 through 2016. The percentages for racial and ethnic groups were calculated using a denominator of 9,762.

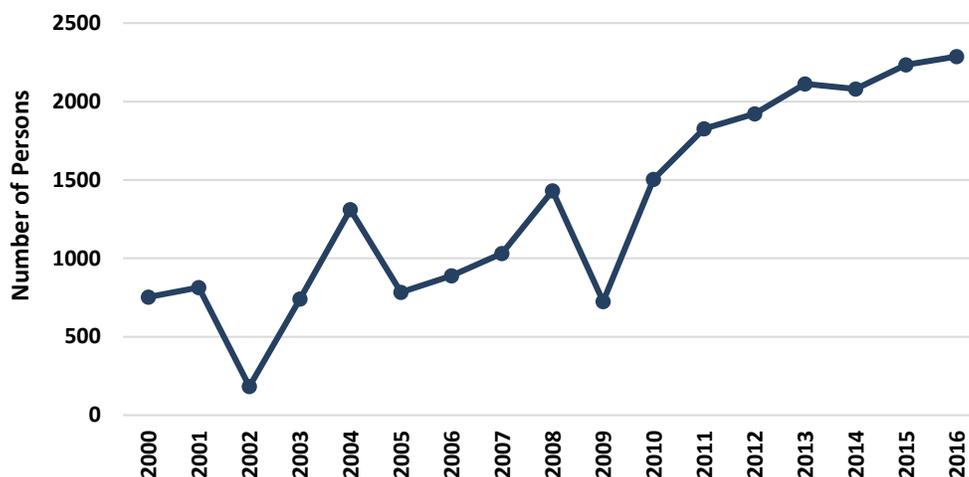
**Table 3.4 Iowans Co-infected with HIV and HCV**

Characteristics	People Co-Infected	
	Number	(%)
<b>Sex at Birth</b>		
Male	285	()
Female	76	()
Other	0	(na)
<b>Birth Cohort Year</b>		
30 and Under (Born 1986 or later)	11	()
Baby Boomers (1945-1965)	223	()
Born before 1945	7	()
All other ages (1966-1985)	120	()
<b>Ethnicity/ Race*</b>		
Hispanic/Latino, All Races	19	()
Not Hispanic, White	234	()
Not Hispanic, Black/African American	84	()
Not Hispanic, Asian	11	()
Not Hispanic, Native Hawaiian/Pacific Islander	0	(na)
Not Hispanic, American Indian/Alaska Native	0	(na)
Not Hispanic, Multi-race	13	()
<b>Vital Status (as of Dec. 31,2016)</b>		
Alive	290	()
Deceased	71	()
<b>TOTALS</b>	<b>361</b>	<b>(100)</b>

## Trends in Iowans Diagnosed with Hepatitis C

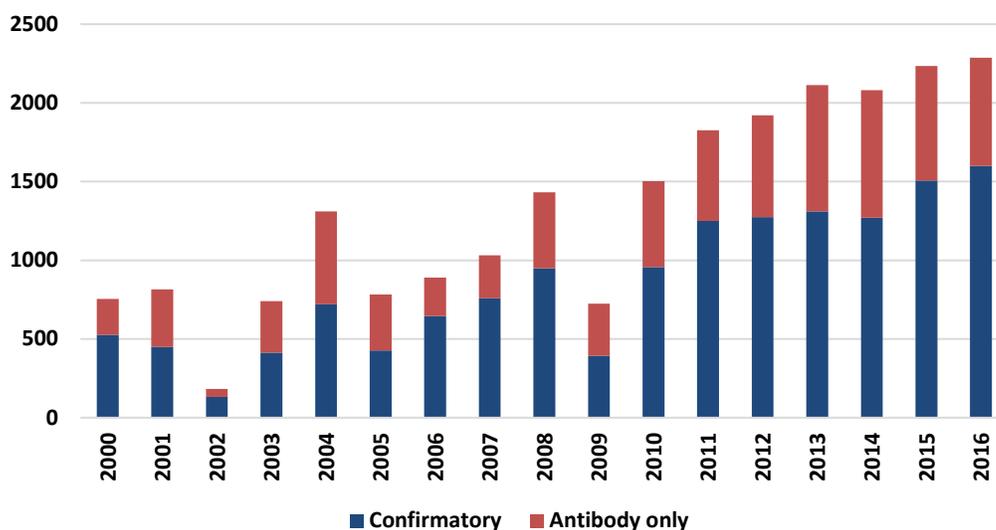
The number of people diagnosed with HCV in 2016, 2,287, is 11% more than the 5-year average of 2,035 (2011 through 2015), and a continuation of yearly increases in diagnoses seen since 2000. There were 516 diagnoses of HCV among Iowans reported before 2000.

Figure 3.1:  
Number of Iowans Diagnosed with HCV: 2000 through 2016



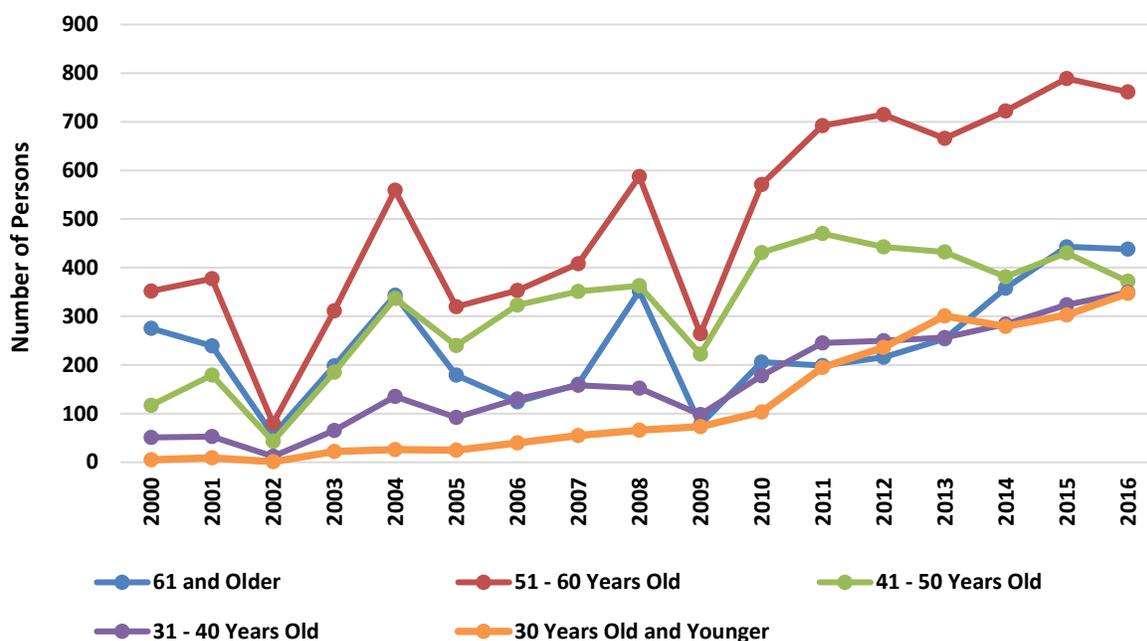
In order to determine whether a person has chronic HCV infection, a confirmatory (i.e., RNA PCR) test must be administered. In 2016, 70% of Iowans reported to IDPH with HCV had evidence of a positive confirmatory test, while 30% of Iowans had antibody-only results reported. The proportion of people who had evidence of a confirmatory test in 2016 was the highest on record, and in line with increases observed during the preceding few years.

Figure 3.2  
Number of Iowans Reported with Antibody-only or Confirmatory HCV Test Results



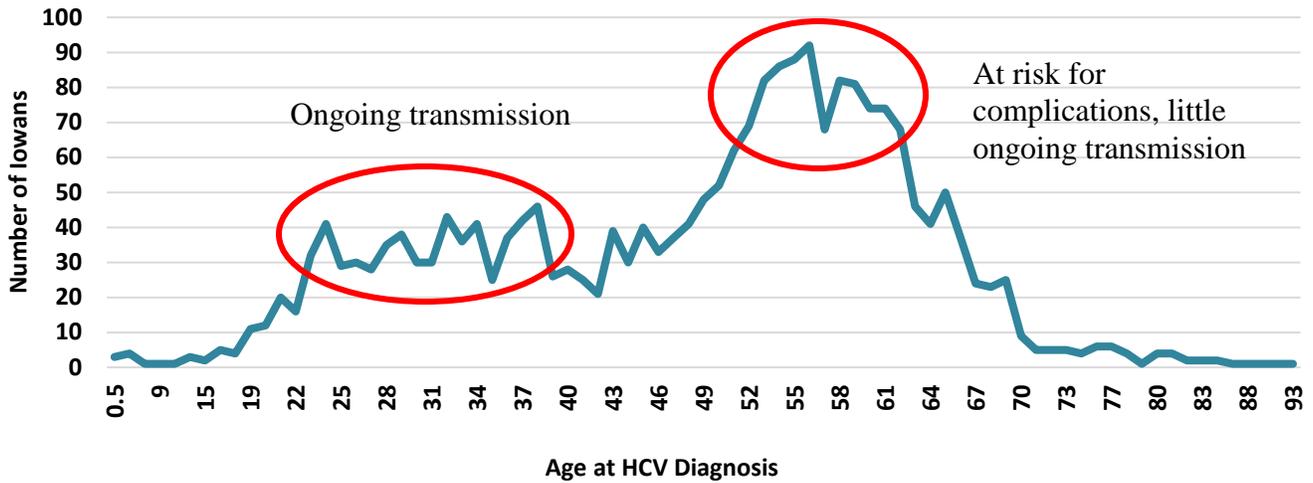
The numbers of lowans in all age groups diagnosed with HCV since 2000 have increased significantly, but rates of increase vary by age range. Overall, diagnoses among people 30 and under and people 61 years of age and older have increased most substantially, particularly within the past few years. The number of people 30 and under diagnosed in 2016, 347, is 24% more than the 5-year average of 263 (2011 through 2015). There were 349 lowans ages 31 to 40 diagnosed in 2016, which is 22% more than the 5-year average of 271. The 372 lowans ages 41 to 50 years old diagnosed in 2016 is 16% higher than the 5-year average of 431. The number of lowans ages 51 to 60 diagnosed in 2016, 761, is 6% more than the 5-year average of 717. There were 438 lowans 61 years of age or older diagnosed in 2016, which was 33% higher than the 5-year average of 294.

**Figure 3.3:**  
Age at Onset of HCV in lowans: 2000 through 2016



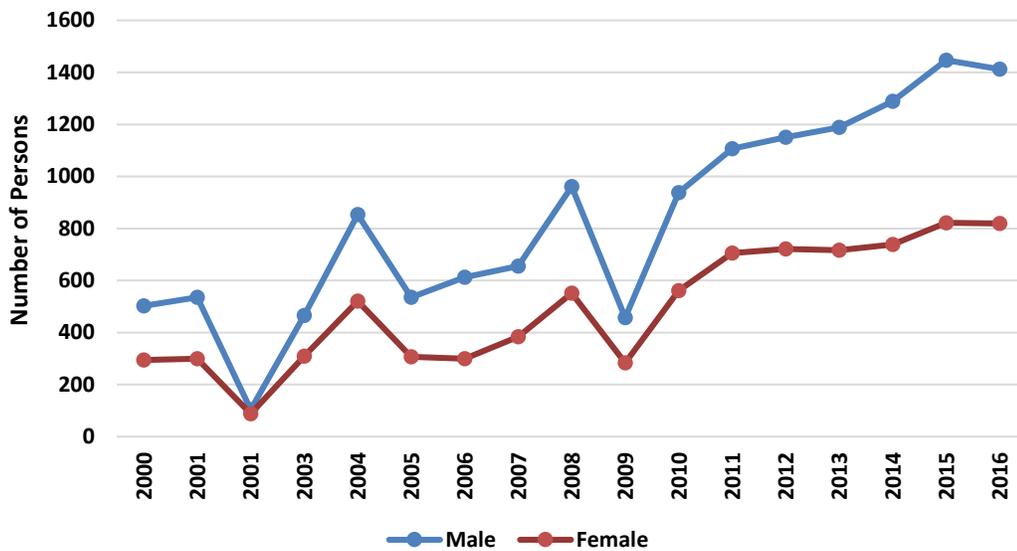
There were definite peaks in the ages of lowans diagnosed with hepatitis C in 2016. lowans under 40 diagnosed with HCV represent those who likely contracted the virus from current or recent injection drug use and may be transmitting the virus to others, although they are unlikely to have yet experienced health complications related to HCV. lowans older than 50 diagnosed with HCV are at risk for health complications, but likely acquired the virus decades ago and are unlikely to transmit.

Figure 3.4:  
Iowans Diagnosed with HCV in 2016, by Age



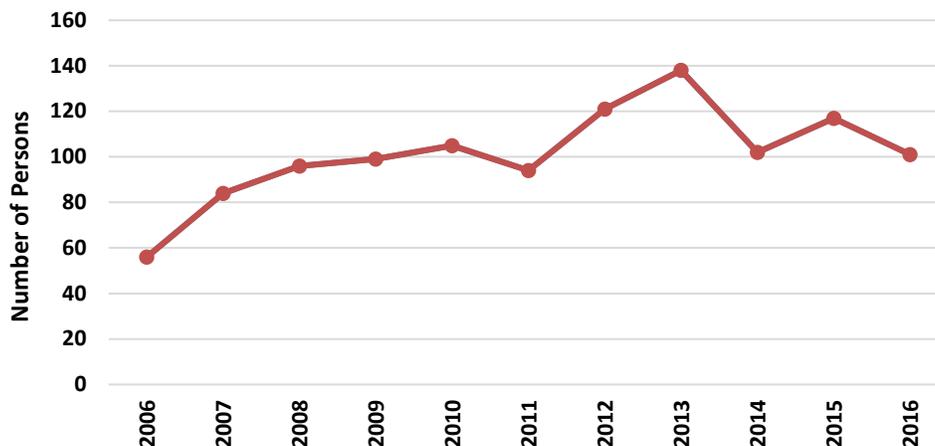
Hepatitis C virus disproportionately impacts males. From 2000 through 2016, there were about three males diagnosed for every two females diagnosed. It’s important to note that this varies by age. For people 30 and under diagnosed with HCV, males and females are almost equally likely to be diagnosed.

Figure 3.5  
Iowans Diagnosed with HCV by Sex: 2000 through 2016



The number of Iowans dying from hepatitis C-related causes has generally increased since 2000. Between 2000 and 2016, there were 1,113 Iowans who died from hepatitis C-related causes, meaning that hepatitis C was listed on the death certificate. Mortality from hepatitis C is likely underestimated, as death certificates often underreport HCV infection.

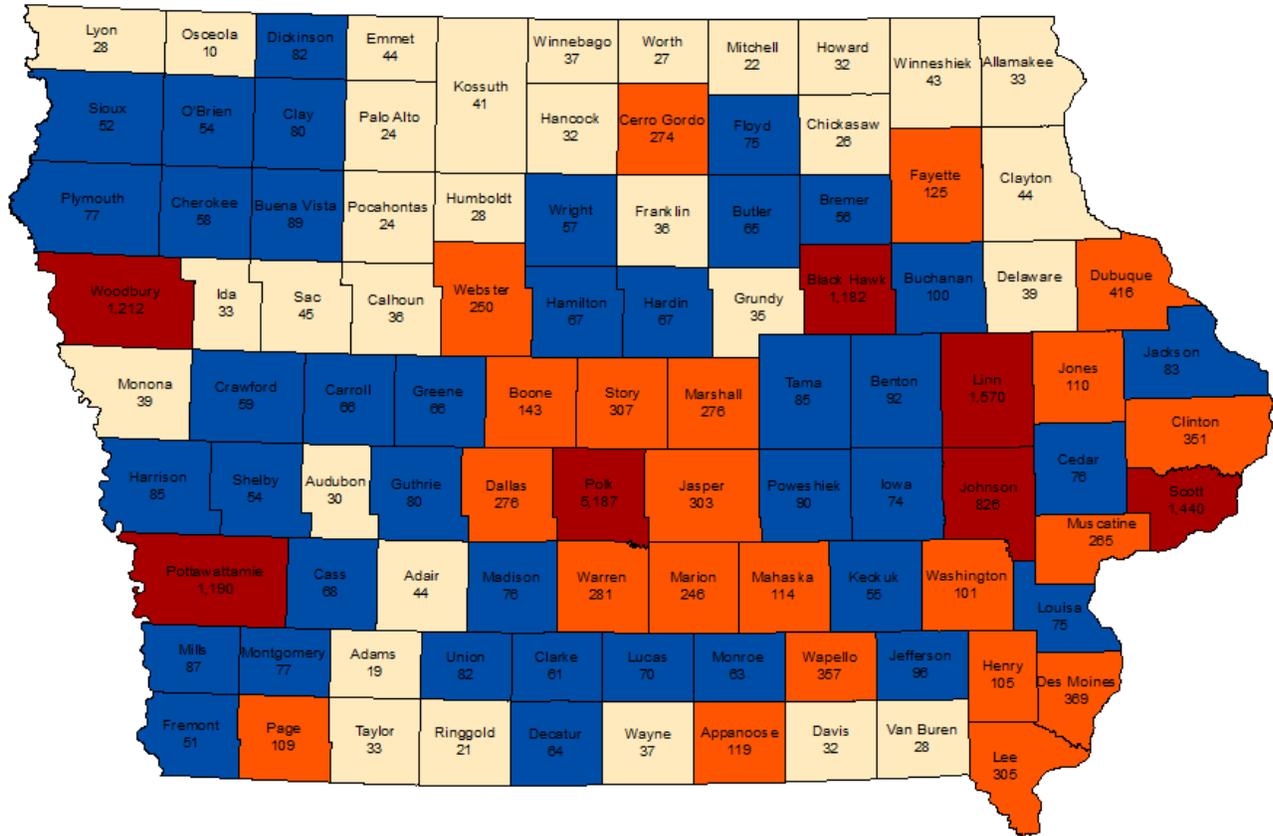
**Figure 3.6**  
**Hepatitis C-Related Deaths Among Iowans**



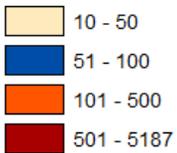
In the United States, it is estimated that 25% of persons with HIV are co-infected with hepatitis C<sup>1</sup>. Co-infection with HIV and HCV is particularly common among people who inject drugs. Iowa is a low prevalence state for HIV disease. At the end of 2016, there were 2,647 persons living with HIV in Iowa. People who inject drugs accounted for 8% of diagnoses in 2014 and 2015, and 3% in 2016. To ascertain co-infections of HIV and HCV among Iowans, HIV cases in the HIV surveillance system were matched with the HCV surveillance system through 2016. A total of 361 persons were ever reported to IDPH as having both HIV and HCV. Of those people, 290 were alive at the end of 2016 and living in Iowa, indicating that 11% of Iowans with HIV are co-infected with HCV. This is likely an underestimate, as previous analyses have indicated that up to half of people co-infected have not been reported to IDPH as being diagnosed with HCV. The majority of people who are co-infected, 79%, were males, and white, 65%.

<sup>1</sup> Centers for Disease Control and Prevention. (2015). *HIV/AIDS and Viral Hepatitis*. Retrieved from [www.cdc.gov](http://www.cdc.gov).  
 Iowa Department of Public Health – Bureau of HIV, STD, and Hepatitis – 2016 Hepatitis C End-of-Year Surveillance Report

**Figure 3.7**  
**Number of lowans Diagnosed with HCV from 2000 through 2016,**  
**by County of Residence at Diagnosis**



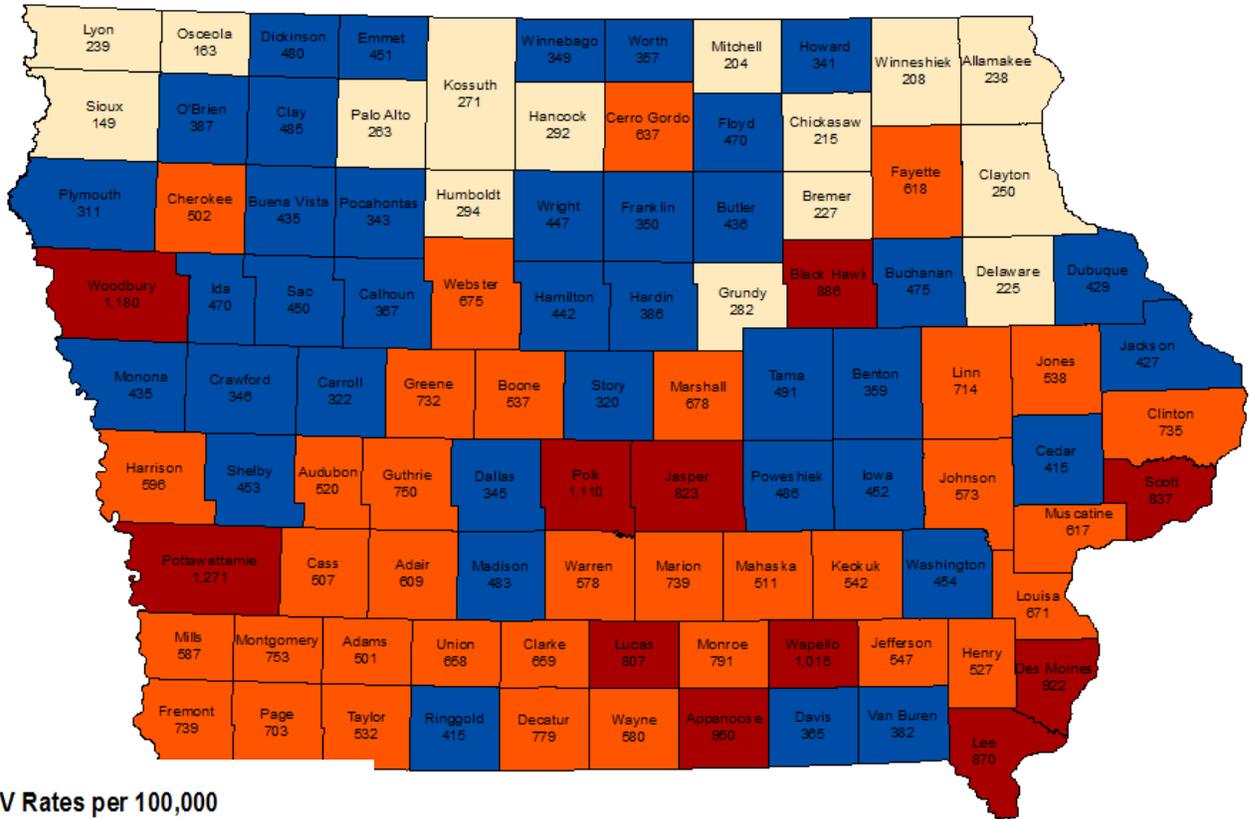
**Total HCV Cases**



This map shows the **23,072** persons reported with HCV from January 1, 2000, through December 31, 2016. It indicates counties where persons were living at the time of diagnosis.

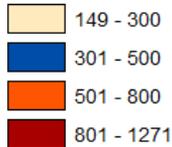
Ten most populous counties are home to 59% of lowans who have been reported with HCV.

**Figure 3.8**  
**Rates of HCV per 100,000 Population**  
**County of Residence at Diagnosis**



**HCV Rates per 100,000**

**Rate\_p100thd**

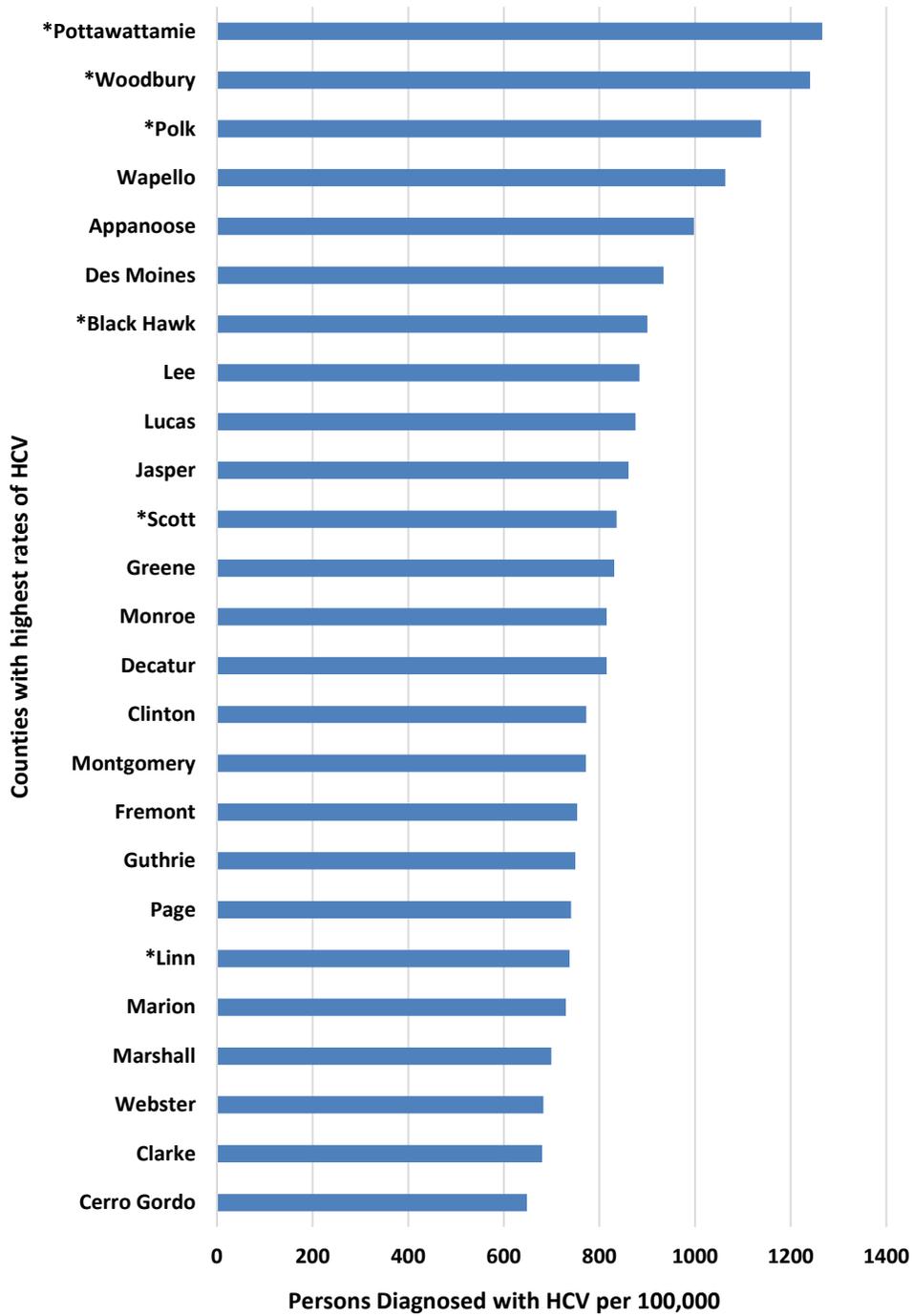


**State Average HCV Rate: 739 per 100,000 population**

This map shows the rates of HCV per county of people diagnosed from January 1, 2000, through December 31, 2016. It indicates counties where persons were living at the time of diagnosis.

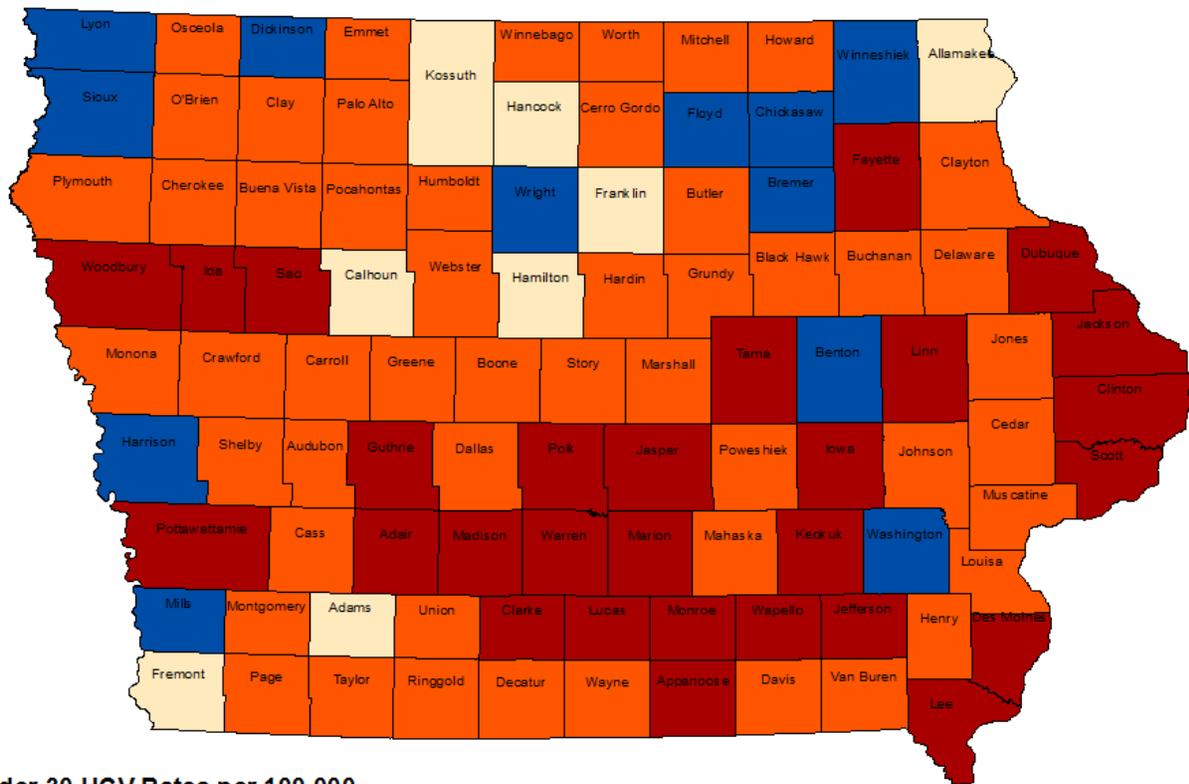
Ten most populous counties are home to 59% of Iowans who have been reported with HCV.

Figure 3.9  
 Prevalence of HCV by County of Residence at Diagnosis: Iowans  
 Diagnosed with HCV as of December 31, 2016

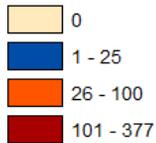


\* Indicates one of the 10 most populous Iowa counties  
 – County populations are based on the 2016 U.S. Census estimates

**Figure 3.10**  
**Rates of HCV in lowans Under 30 Years Old per 100,000 Population**  
**County of Residence at Diagnosis**



**Under 30 HCV Rates per 100,000**



This map shows the rates of HCV per county of lowans under 30 years old who were diagnosed from January 1, 2000, through December 31, 2016. It indicates counties where persons were living at the time of diagnosis.

## Section 4: REPORTING HCV IN IOWA

All identified forms of viral hepatitis are reportable to the Iowa Department of Public Health (IDPH), as mandated by [Iowa Code section 139A.3](#). Due to the infectious nature of each form of viral hepatitis, it is necessary that each case be reported so that prevention and control efforts may be initiated by IDPH.

### What laboratory results should be reported?

1. Screening tests:
  - a. Anti-HCV: Positive or reactive
2. Confirmatory Testing:
  - a. HCV RNA, NAT, or PCR: Positive or reactive test results
  - b. HCV RNA, NAT, or PCR: Negative or not detected test results
  - c. Genotyping: Detected or not detected results

Both medical providers who make these diagnoses and laboratories who find positive results for these infections are required to report. Many laboratories now have automated processes (e.g., Electronic Laboratory Reporting) to report their results. The technology for automated reporting from medical providers is not fully developed at this time.

The most common method of reporting by medical providers is by completing the form titled, “[Iowa Disease Reporting Card](#)” located at [this link](#). The form may be faxed in to the number located at the top of the form. For questions related to reporting of hepatitis C, please contact: **Shane Scharer, Hepatitis Data Coordinator at (515) 281-5027**.

See <http://idph.iowa.gov/hivstdhep/hep> for this report.

# IOWA DISEASE REPORTING CARD

FAX VERSION

Disease reporting is required by Iowa Administrative Code [641]-1 (139A)  
**Fax report to (515) 281-5698 or call (800) 362-2736**

## DISEASE AND LABORATORY INFORMATION

<b>DISEASE/EVENT:</b> _____ <b>Diagnosis date:</b> /    / <b>Onset date:</b> /    / <b>Outcome:</b> <input type="checkbox"/> Survived this illness <input type="checkbox"/> Died from this illness <input type="checkbox"/> Died unrelated to this illness <input type="checkbox"/> Unknown <b>Provider name:</b> _____ <b>Provider title:</b> <input type="checkbox"/> ARNP <input type="checkbox"/> DO <input type="checkbox"/> MD <input type="checkbox"/> NP <input type="checkbox"/> PA <b>Facility name:</b> _____ <b>Address:</b> _____ <b>Phone :</b> (    )    - <b>City/State/Zip:</b> _____ <b>Clinical sx:</b> <input type="checkbox"/> Abdominal pain <input type="checkbox"/> Cough <input type="checkbox"/> Gland swelling <input type="checkbox"/> Sore throat <input type="checkbox"/> Anorexia <input type="checkbox"/> Diarrhea <input type="checkbox"/> Jaundice <input type="checkbox"/> Stiff neck <input type="checkbox"/> Other: _____ <input type="checkbox"/> Bull's eye rash <input type="checkbox"/> Fever <input type="checkbox"/> Rash <input type="checkbox"/> Vomiting <input type="checkbox"/> <b>Specimen sent to UHL</b>	<b>Laboratory:</b> _____ <b>Lab city/state/zip:</b> _____ <b>Collection date:</b> /    / <b>Specimen source:</b> _____ <b>Lab test:</b> _____ <b>Result date:</b> /    / <b>Result:</b> <input type="checkbox"/> Positive/detected <input type="checkbox"/> Undetermined <input type="checkbox"/> Negative/undetected <input type="checkbox"/> Equivocal <input type="checkbox"/> Other: _____
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## PATIENT INFORMATION

<b>Name (last, first, middle):</b> _____			
<b>Address:</b> _____			
<b>City:</b> _____	<b>County:</b> _____	<b>Zip:</b> _____	
<b>Long-term care resident:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	<b>Facility name:</b> _____		
<b>DOB:</b> /    /	<b>Age:</b> _____	<input type="checkbox"/> Years <input type="checkbox"/> Months	<b>Gender:</b> <input type="checkbox"/> M <input type="checkbox"/> F <input type="checkbox"/> Unk
<b>Pregnant?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	<b>Due Date:</b> /    /		
<b>Race:</b> <input type="checkbox"/> White <input type="checkbox"/> Black or African American <input type="checkbox"/> American Indian or Alaska Native	<input type="checkbox"/> Hawaiian or Pacific Islander <input type="checkbox"/> Asian <input type="checkbox"/> Unknown <input type="checkbox"/> Other	<b>Marital status:</b> <input type="checkbox"/> Single <input type="checkbox"/> Unknown <input type="checkbox"/> Married <input type="checkbox"/> Divorced <input type="checkbox"/> Widowed	
<b>Ethnicity:</b> <input type="checkbox"/> Hispanic or Latino <input type="checkbox"/> Not Hispanic or Latino <input type="checkbox"/> Unknown			
<b>If minor, Parent name(s):</b> _____			
<b>Phone:</b> Home (    )    -	Work (    )    -	Other (    )    -	

## OCCUPATION INFORMATION

<b>Job title:</b> _____ <b>Worked after symptom onset:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown Handle food: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown Attend or provide child care: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown Attend school: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown Work in a lab setting: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown Work in a health care setting: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown Direct patient care duties in lab or health care setting: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown Health care worker type:	<b>Facility name:</b> _____ <b>Address:</b> _____ <b>Zip code:</b> _____ <b>City/State/County:</b> _____ <b>Phone:</b> (    )    -                      Type: _____
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## HOSPITALIZATION INFORMATION

<b>Was the case hospitalized?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	<b>Hospital:</b> _____
<b>Admission date:</b> /    /	<b>Discharge date:</b> /    / <input type="checkbox"/> Still hospitalized <b>Days hospitalized:</b> _____

## REPORTER INFORMATION

<b>Reporter name:</b> _____	<b>Reporter facility name:</b> _____
<b>Reporter phone:</b> _____	<b>Date reported to IDPH:</b> _____
<b>Comments:</b> _____	

January 1, 2016, through  
December 31, 2016



# Iowa Department of Public Health

For assistance or questions regarding the 2016 HCV Surveillance Report, please contact:

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Data Program Manager  
Phone: (515) 281-6974  
Email: [nicole.kolm-valdivia@idph.iowa.gov](mailto:nicole.kolm-valdivia@idph.iowa.gov)

**Shane Scharer, M.S.**  
Hepatitis Data Coordinator  
Phone: (515) 281-5027  
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