

Submission Type Breakout/Quick/Lightning/Poster
ID [7485](#)

Abstract Type Breakout

Abstract Title Abstract
A Cluster of Sexually Transmitted Hepatitis C Virus Among the MSM Population in Southeast Michigan

BACKGROUND: Hepatitis C Virus (HCV) is a blood-borne pathogen that is rarely transmitted sexually among monogamous heterosexual couples. However, risky behaviors among men who have sex with men (MSM) (e.g. fisting, use of sex toys, anal douching), particularly in the presence of HIV infection and/or ulcerative STDs, have been associated with increased risk of sexual transmission of HCV. We report on a cluster investigation of sexually transmitted HCV in the MSM population in Southeast Michigan; a rare occurrence in the United States.

METHODS: In February 2016, an astute clinician notified the Michigan Department of Health and Human Services (MDHHS) about an increase in HCV diagnoses in their HIV-infected MSM population. MDHHS began an investigation to determine the scope of the HCV infections. Additional cases were identified using retrospective data matching and prospective surveillance and laboratory monitoring. Demographic, clinical, and risk factor information were captured to inform the epidemiological investigation. Additionally, Hepatitis C testing was established at the Detroit STD Clinic for any individuals who identify as MSM in order to detect additional cases.

RESULTS: As of December 1, 2016 there were 24 cases in the cluster, with several dozen contacts still under investigation. All nineteen of the cases were male and 23 were African American with one Hispanic. All twenty-four were infected with HIV, 24 reported never injecting drugs and 24 reported having sex with men. A history of having an STD was common - syphilis (17), gonorrhea (14), chlamydia (14), and lymphogranuloma venereum (5). Many HCV infections were acute or new seroconversions suggesting recent infection and of 12 isolates that underwent genotyping, all were HCV genotype 1a.

CONCLUSIONS: We describe the recent transmission of HCV in the MSM population in southeastern Michigan. Epidemiological information ascertained from patient investigation suggests that these infections were transmitted sexually and not by intravenous drug use. Clusters of this magnitude have rarely been described in the U.S. Sexual transmission of HCV may be an underappreciated mode of acquisition in the MSM population. In addition, strong relationships between clinicians, laboratories, local and state public health departments, and hepatitis, STD, and HIV surveillance and prevention groups were necessary to detect and respond to such a cluster. Additional molecular characterization of the HCV specimens will help further determine HCV transmission patterns in this community.

Submission Complete? Yes

Committee Infectious Disease

Topic Hepatitis

Keywords Hepatitis; Sexually Transmitted Diseases; Surveillance

Consider for Different Presentation? Yes

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Submission Type Breakout/Quick/Lightning/Poster
ID [7960](#)

Abstract Type Breakout

Abstract Title Abstract An Analysis of California Perinatal Hepatitis B Prevention Program Completeness and Risk Factors for Underreporting

BACKGROUND: The California Perinatal Hepatitis B Prevention Program (PHBPP) identifies and provides case management of hepatitis B virus (HBV)-infected pregnant women and their infants. The goal is to enroll all pregnant, HBV-infected women into PHBPP to ensure that their infants receive timely administration of post-exposure prophylaxis. In California, prenatal HBsAg screening is mandatory, maximizing the probability that HBV-infected pregnant women are reported to PHBPP. However, barriers to care, testing and reporting may remain, thus compromising the program's effectiveness. We aimed to evaluate the completeness of PHBPP surveillance and examine risk factors associated with underreporting.

METHODS: A retrospective capture-recapture analysis was used to identify unreported PHBPP-eligible women. Eligible women were identified by a probabilistic matching algorithm using name, date of birth, and zip code of residence. Women with chronic hepatitis B reported to the California Chronic Hepatitis B Registry (CHBR) were matched to women with a live birth in 2013 or 2014 per California birth certificate data. Identified matches were compared to women reported to PHBPP in 2013 and 2014 using the same matching algorithm. A Lincoln-Petersen estimate was used to approximate the total number of HBV-infected pregnant women in California. Potential risk factors for underreporting were selected a priori, and Chi square analysis ($p \leq 0.2$) was used to determine the variables included in the final model. Multivariate logistic regression was used to assess the relationship between underreporting and predictors of interest.

RESULTS: 5,832 women were reported to PHBPP from 2013-2014. 5,442 PHBPP-eligible women were identified in the CHBR, of whom 1,269 (23%) were not reported to the program. Factors associated with underreporting include mother's age ≥ 45 years (vs. ≤ 20 years) ($P = 0.012$); living in a rural county with < 88.4 people per square mile (vs. a county with $\geq 2,000$ people per square mile) ($P < 0.0001$); and having been born in the U.S. ($P < 0.0001$). 712 women were estimated to be missing from both data sources, resulting in an overall estimate of 7,813 HBV-infected pregnant women in California from 2013-2014.

CONCLUSIONS: The California PHBPP currently enrolls approximately 75% of HBV-infected pregnant women, short of the goal of enrolling all eligible women. However, data were missing for pregnancies resulting in miscarriages and fetal deaths, as these pregnancies are not issued birth certificates. Therefore, additional program-eligible women might be missing from these analyses, suggesting that the underreporting rate may be an underestimate. Further research is needed to improve the detection and reporting of PHBPP-eligible women.

Submission Complete? Yes

Committee Infectious Disease

Topic Hepatitis

Keywords Infant Health; Hepatitis; Surveillance

Consider for Different Presentation? Yes

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Submission Type Breakout/Quick/Lightning/Poster
ID [8361](#)

Abstract Type Breakout

Abstract Title Completeness of Reporting for Hepatitis C By Traditional and Electronic Sources
Abstract

BACKGROUND: Historically, “traditional reporting” of hepatitis C consisted of acute and chronic HCV cases reported by labs and healthcare providers by phone/fax, combined with only first reports from a subset of labs reporting data to the Washington State Department of Health via electronic lab reporting (ELR). These reports were manually entered into Public Health – Seattle & King County’s (PHSKC) local surveillance database, which was modified as part of the CDC-funded Hepatitis C Test and Cure (HCV-TAC) program to upload all ELR reports to the local surveillance database automatically (“a-ELR”). Six HCV-TAC healthcare facility (HCF) sites also submit lab and clinical data for HCV cases electronically to PHSKC quarterly (“partner-based reporting”).

METHODS: We used deterministic and probabilistic algorithms to identify potential matches across data sources (a-ELR, HCF, and traditional reporting). We manually reviewed potential matches to derive a dataset of unique individuals reported from any of the three data sources during the period January 2013 - November 2016. We calculated completeness of traditional reporting by counting the number of cases of HCV identified, divided by the total number of unique individuals identified by any of the three data sources. We determined the frequency that information captured via a-ELR and partner-based reporting contributed to establishing case classification. Lastly, we examined the frequency that data elements (patient last/first name, sex, date of birth, address, phone, SSN, and race/ethnicity) were reported by data source.

RESULTS: Of 34,224 unique person records identified by any reporting source, 28,614 (83.6%) were captured by traditional reporting. Of the total number of confirmed and probable HCV cases (n=24,787), 1322 would not have been identified without a-ELR. Of 727 records that initially had a case classification other than confirmed, 264 (36.3%) were confirmed by reporting from HCF. Across all parameters examined, data elements submitted by HCF were more complete relative to data captured by a-ELR and traditional reporting, with not more than 4% of records missing any of the data elements examined. While cases captured exclusively by ELR had fewer records with missing SSN, date of birth, and city/zip, completeness for all other data elements was higher with traditional reporting.

CONCLUSIONS: Electronic data collection and corresponding modifications to our local surveillance database have identified additional cases and improved determination of case classification, while reducing reliance on resource-intensive manual data entry. Capturing more complete demographics in ELR could enhance the utility of reporting.

Submission Complete? Yes

Committee Infectious Disease

Topic Hepatitis

Keywords Hepatitis; Informatics; Surveillance

Consider for Different Presentation? Yes

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Submission Type Breakout/Quick/Lightning/Poster
ID [7794](#)

Abstract Type Breakout

Abstract Title Abstract
Enhanced Surveillance of Chronic Hepatitis C in Young Adults in Florida, 2012–2015

BACKGROUND: In Florida, the rate of reported chronic hepatitis C declined from 2008–2010 except in young adults (age 18–30), where the rate nearly doubled from 74 cases per 100,00 to 138 cases per 100,00. As a result, the Florida Department of Health (Department) began comprehensive interviews of young adults reported with hepatitis C infections. The aim of this investigation is to describe the burden of disease in this cohort and the risks identified through the comprehensive interviews.

METHODS: Case data were extracted from all reported chronic hepatitis C cases among young adults in 10 participating counties from November 1, 2012, through October 31, 2015. Frequency of self-reported risk factors from the comprehensive questionnaire were analyzed based on education, living situation, incarceration, drug use and rehabilitation. Method of drug use including information on needle, cooker or other works sharing was also requested during the interview.

RESULTS: A total of 6,287 cases of hepatitis C were reported among young adults and 1,562 (25%) completed the comprehensive interview. Among interviewed cases, injection drug use (71%), tattoo (66%), piercing (43%), diagnosed with a sexually transmitted disease (18%) and incarcerated over 24 hours (14%) were the most frequently identified risks. Among self-reported illicit drug users (n=1,249), marijuana (80%), powder cocaine (68%), heroin (60%) and tranquilizers or barbiturates (55%) were the top used drugs. Among those reporting injection drug use (n=1,110) nearly 61% (n=764) of those interviewed reported using a needle or syringe that was previously used by someone else; 69% (n=863) reported reusing their own needles; and 55% (n=684) admitted to lending someone else a needle or syringe that was previously used. Only 47% (n=582) admitted to using a cooker with or right after someone and 44% (n=546) admitted to sharing a filter or cotton with or after someone else. More than 61% (n=762) of interviewees acknowledged having ever been in a drug rehabilitation facility.

CONCLUSIONS: The highest risk factor for 18–30 year olds infected with chronic hepatitis C is drug use. Injection drug use has become a major concern not only for hepatitis C transmission but also for other blood-borne pathogens including HIV. The Department is continuing to examine the risks for hepatitis C among young adults and will be exploring means to break disease transmission among high-risk groups.

Submission Complete? Yes

Committee Infectious Disease

Topic Hepatitis

Keywords Hepatitis; Substance Abuse; Epidemiology

Consider for Different Presentation? Yes

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Submission Type Breakout/Quick/Lightning/Poster
ID [8341](#)

Abstract Type Breakout

Abstract Title Implementation and Evaluation of Strategies to Increase Birth Cohort Screening for Hepatitis C Virus
Abstract

BACKGROUND: One-time screening for hepatitis c virus (HCV) antibody (Ab) is now recommended for all persons in the high risk birth cohort (born from 1945-1965). The HCV Test and Cure project (HCV-TAC) at Public Health – Seattle & King County (PHSKC) has partnered with six local healthcare organizations (HCO) to increase screening among their birth cohort patient population. Each HCO implemented their own strategy to increase screening, and provided data on patients that screened HCV Ab positive, HCV Ab negative, and those who have not been screened for HCV Ab.

METHODS: Partner HCOs provided data on HCV lab tests and clinic visits from 9/30/2013-9/30/2016; the first year is the baseline period. Clinic visits within each study year were examined for each HCO to determine birth cohort screening progress. HCV screening is measured as the proportion of all birth cohort patients with at least one visit to a primary care clinic in the time period that has been tested for HCV Ab. The total number of HCV Ab tests performed on birth cohort patients was also analyzed for significant increases over the baseline period. Percentages of patients testing positive for HCV Ab are also reported. Statistical significance was determined using Chi-square and t-tests.

RESULTS: Partner HCOs implemented various strategies to increase birth cohort screening, including EMR prompt, training medical assistants to automatically order HCV Ab tests, sending annual reminder letters to patients, and educating primary care providers. During the baseline period, 18% (28,750/159,695) of birth cohort patients with visits to a primary care clinic had been screened for HCV. By the end of Year 2, 35% (59,515/171,821) had been screened for HCV, a significant increase over baseline ($p < 0.0001$). Volume of HCV Ab tests performed on birth cohort patients increased from an average of 2,430 Ab tests per quarter to 9,401 tests per quarter in Year 2 ($p < 0.0001$). As the volume of Ab tests increased, the percentage testing HCV Ab positive decreased from 7% in baseline to 2% in Year 2.

CONCLUSIONS: All HCV-TAC partner sites significantly increased the percentage of their birth cohort population that has been screened for HCV Ab and the total number of HCV Ab tests compared to the baseline period. As sites transition from risk-based screening to birth cohort-based screening, the proportion of HCV Ab positive results has decreased. The HCO that implemented an EMR prompt observed the greatest increase in birth cohort screening.

Submission Complete? Yes

Committee Infectious Disease

Topic Hepatitis

Keywords Hepatitis; Screening; Surveillance

Consider for Different Presentation? Yes

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Submission Type ID	Breakout/Quick/Lightning/Poster 8367
Abstract Type	Breakout
Abstract Title Abstract	Incorporating Surveillance Data into Hepatitis C Transmission Models to Estimate Injection Abstinence and Evaluate Interventions in Young Persons Who Inject Drugs — Michigan, 2000-2013 BACKGROUND: Chronic hepatitis C virus (HCV) infection can lead to cirrhosis and hepatocellular carcinoma if left untreated. Over half of all hepatocellular carcinoma cases in the U.S. are due to HCV. Increases in HCV incidence in U.S. young adults since the late 1990s have been attributed to rising intravenous use of heroin and prescription opioids. HCV is curable, but medications are often prioritized to persons with existing liver damage and are unavailable to persons who inject drugs (PWID). HCV is a nationally notifiable condition and surveillance data, adjusted for under-reporting, can be used in transmission models to estimate and improve precision of population-level parameters and evaluate potential interventions. METHODS: An ordinary differential equation HCV transmission model with preferential age mixing was fit to newly reported chronic HCV cases among Michigan residents aged 15-30 years reported to the Michigan Department of Health and Human Services during 2000-2013. Model fit to surveillance data was used to estimate the HCV transmission and relapse rates among PWID, adjusted for under-reporting. Latin hypercube sampling was used to evaluate if data were consistent with population-level parameters from the literature. The potential impact of primary (reducing injection initiation), secondary (reducing injection drug use relapse and increasing cessation), and tertiary (HCV treatment) interventions on incident and prevalent HCV cases was simulated. RESULTS: Estimates of the injection drug use relapse rate were dependent on the injection cessation rate. In the best fitting parameter set, PWID stopped injecting drugs after 1.4 years and relapsed after 4.4 years, on average, but results varied widely. Results supported a tendency towards higher than expected rates of under-reporting and lower prevalence of past-year drug injection compared to estimates identified in literature reviews. Interventions building on primary prevention initiatives (e.g. reducing injection initiation) predicted the largest reductions in HCV incidence and prevalence. Initiatives relying on tertiary interventions (treatment) predicted prevalence reductions but did not reduce incidence. Treatment of both current and former PWID in the absence of other interventions predicted reductions in new chronic HCV cases in only some scenarios. CONCLUSIONS: Public health surveillance data can inform transmission models to improve precision of parameters and evaluate interventions. On average, young drug users in Michigan quit injecting drugs after 1.4 years and relapsed after 4.4 years, but results were variable; measurement of one parameter could inform the value of the other. Primary interventions decreasing injection initiation could concurrently reduce prevalence and new cases.
Submission Complete?	Yes
Committee Topic Keywords	Infectious Disease Hepatitis Substance Abuse; Hepatitis; Surveillance
Consider for Different Presentation?	Yes
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Submission Type Breakout/Quick/Lightning/Poster
ID [8499](#)

Abstract Type Breakout

Abstract Title Investigation of Acute Hepatitis B Transmission in a Group Home—Pennsylvania, 2016
Abstract

BACKGROUND: Hepatitis B virus (HBV) is an infectious disease spread through blood or bodily fluids which can cause both acute and chronic infections. On October 24, 2016, we identified two cases of acute HBV in employees of a facility caring for individuals with intellectual disabilities. The facility consisted of four residential homes and a day program. We investigated to determine if the employees' infections were related, the extent of the outbreak and to implement control measures.

METHODS: Three onsite visits were conducted in November and December. We performed direct observations of infection control practices including hand hygiene and diabetic care. We also interviewed staff, and reviewed resident records and policies including the employee HBV vaccination program. We recommended bloodborne pathogen testing for 51 current and 19 former staff and 11 residents, followed by HBV vaccination. HBV-positive specimens were sent to CDC to quantify viral DNA and for whole genome sequencing (WGS). We initiated weekly conference calls in November to provide ongoing guidance.

RESULTS: We observed cross-contamination of clean and dirty body sites during routine hygiene, overfilled sharps containers, inadequate hand hygiene and gloving, and use of inappropriate cleaning products. Personnel records showed 68/72 (94%) employees declined HBV vaccination, most without record of previous vaccination. Records for bloodborne pathogen and diabetic care education showed that 50/51 (98%) and 15/51 (29%) of current staff completed trainings, respectively. Per facility records, no residents had a history of chronic HBV. However, our testing identified one diabetic resident as a chronic carrier with a high viral load (HBV DNA >170,000,000). Specimens from the 2 employees with acute infection and the HBV-positive resident were identical by WGS. All residents were vaccinated for HBV. Despite weekly calls with group home administrators, testing and vaccination recommendations for employees were inadequately addressed; only 6/51 (12%) of current employees had documented HBV vaccination. In response, we provided individual education to employees via telephone followed by an onsite HBV vaccination clinic on December 21.

CONCLUSIONS: Lack of training on diabetic care, low rates of employee HBV vaccination, and suboptimal infection control likely contributed to HBV transmission in a group home. Employee exposure to an unrecognized HBV chronic carrier with a high viral load highlights the importance of standard precautions during all resident care. In addition, determining the management's understanding of employee HBV vaccination and importance of infection control training was a priority in implementing control measures

Submission Complete? Yes

Committee Infectious Disease

Topic Hepatitis

Keywords Hepatitis; Occupational Health; Workplace Safety

Consider for Different Presentation? Yes

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Submission Type Breakout/Quick/Lightning/Poster
ID [8565](#)

Abstract Type Breakout

Abstract Title Abstract Millennials Vs. Baby Boomers: The Changing Face of Hepatitis C Infection in Kansas 2016

BACKGROUND: The burden of chronic hepatitis C virus (HCV) infection peaks among two age groups, baby boomers (born 1945-1965) and millennials (born 1982-2002). Kansas incidence rates for chronic HCV for baby boomer and millennials were 130 and 39 per 100,000, respectively in 2014. Studies have explored causes for the first peak of HCV among baby boomers, however, limited research exists exploring factors attributing to the second peak among millennials. Due to the burden of HCV in Kansas, demographic and risk factor investigation is only required for cases under 25 and over 55 years old. This study examined how demographic and behavioral risk factors differed between millennials under 25 and baby boomers over 55 with chronic HCV infection in Kansas.

METHODS: Persons aged 14–24 and 55–70 years with chronic HCV reported to Kansas Department of Health and Environment (KDHE) between 01/01/2016 and 12/02/2016 were included in this study. Demographic factors (race, ethnicity, gender, age at diagnosis and county of residence) and risk factors (contact with another HCV-positive individual, type of that contact, illicit drug use, injection drug use and sharing needles) were analyzed. Records were excluded from analysis if demographic or risk factor data was unavailable. Chi-square and logistic regression were performed using SAS® 9.3.

RESULTS: A total of 731 chronic HCV cases were reported to KDHE between 01/01/2016 and 12/02/2016; 102 were millennials and 629 baby boomers. Compared to baby boomers, millennial cases had higher odds of being female (OR 2.68) and live in moderately-populated counties (OR 2.34) versus rural counties. Of the 243 cases that had risk factor data, millennials had higher odds (adjusted OR 2.48) of injection drug use compared to baby boomers. No other factors were significantly associated with these two age groups.

CONCLUSIONS: Differences in demographic characteristics, gender and population density of county, as well as risk behavior, IVDU, were identified between baby boomers and millennials with chronic HCV-infection in Kansas. These differences highlight the changing face of chronic HCV infection and the need to adjust prevention efforts to target high risk millennial populations. Efforts to work with local health departments in moderately populated counties throughout the state, focus on reducing IVDU, and target prevention messages towards women may help to lower chronic HCV infection in the millennial age group.

Submission Complete? Yes

Committee Infectious Disease

Topic Hepatitis

Keywords Risk Factors; Chronic Disease; Hepatitis

Consider for Different Presentation? Yes

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Submission Type Breakout/Quick/Lightning/Poster
ID [7965](#)

Abstract Type Breakout

Abstract Title Abstract Viral Hepatitis B Infection in Delaware 2005-2015: Incidence Trend, Distribution, and Factors Associated with Its Infection

BACKGROUND: Viral hepatitis B (HBV) infection is a significant public health issue in the United States with approximately 2.2 million HBV-infected persons. An understanding of HBV epidemiology is necessary for targeted public health efforts. This study aimed to determine Delaware HBV incidence trends, identify its distribution and factors associated with HBV infection during the period from 2005-2015.

METHODS: We performed a retrospective study on persons suspected of having HBV reported to the Delaware Division of Public Health through Delaware Electronic Reporting and Surveillance System (DERSS) from 01/01/2005- 12/31/2015. The charts of 4,981 persons were reviewed and included in the analysis.

RESULTS: Of 4,981 persons, 2,119 [1,988 (39.9%) confirmed, 131 (2.6%) probable] were identified as either acute or chronic HBV infection. Between 2005 and 2015, acute HBV incidence declined 80.9%, from 4.2 cases to 0.8 per 100,000 population; chronic HBV declined 60%, from 36.0 to 14.4 per 100,000 population, for an overall reduction of 62.2%, from 40.2 to 15.2 per 100,000 population. During the period of 2005-2015, males had a higher yearly incidence rate than females. Rates declined 63.5% and 60.1% among males and females, respectively. Interestingly, there was an increase of 13.4% in the incidence in females during 2010-2015. A decline was seen in all racial groups during 2005-2015. Asian had higher HBV incidence than white and black with rates 25.1-fold and 5.9-fold higher in 2005, respectively, and 31.5-fold and 6.4-fold higher in 2015, respectively. Asian had an increase of 40.0% in the HBV incidence during 2010-2015. A decline in HBV infection was seen in all age groups from 2005-2015. However, during 2010-2015, an increase of 12.2% was seen amongst those 15-39 years. 66% of infected patients were identified in five cities: Wilmington, Newark, New Castle, Dover, and Bear. In a multivariable logistic model, significant predictors for HBV infection included being male [adjusted odds ratio (aOR): 1.6, 95%CI:1.4-1.8], age 15-39 years (aOR: 2.3, 95%CI: 1.4-3.7). Compared with white, Asian, black, and others had greater risk, with aOR of 5.3 (95%CI: 4.4-6.4), 1.6 (95%CI: 1.4-1.8), and 1.4 (95%CI: 1.1-1.9), respectively. Having received ≥ 1 dose of HBV vaccination had some protective effect, aOR: 0.4, 95%CI:0.2-0.5.

CONCLUSIONS: HBV infection is significant in Delaware and concentrated mainly in a few big cities. Despite overall decline, increases were seen in females, age group of 15-39 years, and Asian population during 2010-2015. Further studies should be conducted to identify factors contributing to these increases

Submission Complete? Yes

Committee Infectious Disease

Topic Hepatitis

Keywords Infectious Diseases; Surveillance; Hepatitis

Consider for Different Presentation? Yes

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Submission Type ID	Breakout/Quick/Lightning/Poster 7628
Abstract Type	Lightning
Abstract Title Abstract	Demographic Characteristics Associated with Treatment Initiation and Cure Among Persons Newly Reported with Hepatitis C in New York City, 2015 BACKGROUND: Without treatment, chronic hepatitis C virus (HCV) infection can lead to cirrhosis, liver failure, hepatocellular carcinoma, and death. Direct-acting antiviral medications with short treatment duration leads to >95% cure rates. However, cost, insurance restrictions, and other barriers to access may limit treatment and perpetuate inequalities. We assessed demographic factors associated with treatment initiation and cure in New York City (NYC). METHODS: For persons newly diagnosed with HCV in NYC in 2015, treatment and cure were assessed using laboratory-reported HCV positive and negative RNA test results from our surveillance registry as of November 21, 2016. Treatment initiation was defined as a positive RNA test result and a negative result for the most recent RNA test. Cure was defined relative to the date of the first negative, indeterminate, or low-positive RNA test result: one positive RNA result must have been before this date and two negative RNAs and no positive RNA after this date. Multivariable logistic regression was used to identify adjusted odds ratios (aORs) for factors associated with treatment initiation and cure, adjusting for sex, age at HCV diagnosis, incarceration at diagnosis, and ZIP code-based poverty. RESULTS: Of 7,224 persons newly reported with HCV in 2015, 80% received an RNA confirmatory test. Of those, 76% had a positive RNA result, 30% of whom initiated treatment. Of those initiating treatment, 47% had evidence of cure. Among those with a positive RNA result: men (aOR 0.78, 95% CI 0.68–0.90); persons 20-29 (aOR 0.67, 95% CI 0.52–0.87) or ≥80 years-old (aOR 0.30, 95% CI 0.17–0.53) versus 60-69 year-olds; persons living in high (aOR 0.74, 95% CI 0.59–0.93) or very high poverty (aOR 0.64, 95% CI 0.51–0.82) versus low poverty neighborhoods; and incarcerated persons (aOR 0.13, 95% CI 0.09–0.18) had lower odds of initiating treatment. Among those initiating treatment, incarcerated persons (aOR 0.10, 95% CI 0.05–0.23) and persons 20-29 (aOR 0.46, 95% CI 0.31–0.67) or ≥80 years-old (aOR 0.38, 95% CI 0.18–0.78) had lower odds of cure. CONCLUSIONS: Surveillance data can be used to identify disparities in HCV treatment and cure, which are attributable to disparities in access to care. Incarcerated persons had lower odds of initiating treatment and achieving cure, although surveillance data may not capture treatment history for persons transferred out of jurisdiction. Increased efforts to treat persons <30 years-old, presumably recently infected, are needed to prevent further transmission through ongoing risk practices.
Submission Complete?	Yes
Committee Topic Keywords	Infectious Disease Hepatitis Hepatitis; Surveillance
Consider for Different Presentation?	Yes
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Submission Type Breakout/Quick/Lightning/Poster
ID [8586](#)

Abstract Type Lightning

Abstract Title Investigation of Hepatitis C Cases with Limited Resources in Allegheny County, PA
Abstract

BACKGROUND: According to the Centers for Disease Control and Prevention, approximately 3 million individuals in the United States have chronic hepatitis C. Between 2005-2014, an average of 1,700 persons per year with positive hepatitis C tests were reported to the Allegheny County Health Department (ACHD). Given that most cases were reported from laboratories via the state's electronic disease surveillance system (PA-NEDSS), no clinical or risk factor information was available, and ACHD lacked staff to investigate. In 2015, the volume of reports increased and an AmeriCorps member assigned to ACHD conducted targeted follow-up on reported cases. The objective of this initiative was to identify possible sources of transmission and assess linkage to care for all reported hepatitis C cases in 2015.

METHODS: For persons with positive tests in 2015 who were not previously reported, one-page forms were faxed to providers listed on electronic laboratory reports for the purpose of collecting demographic, clinical, and risk factor information. In addition, phone interviews were conducted for persons <35 years of age and any suspected acute cases to assess risk factors, care and treatment.

RESULTS: ACHD received positive hepatitis C test results for 2,632 persons in 2015. ACHD staff faxed 2,632 provider questionnaires and received 1,337 (51%) back. Of the 2,632 reports received, 647 (25%) met patient interview criteria. Interviews were completed for 187 (29%) persons. According to information we obtained from provider questionnaires and patient interviews, 486 persons were noted to have a history of intravenous drug use (IVDU), 194 were reportedly in care and 65 had received treatment. Of the 23 acute cases identified in 2015, 12 (60%) reported a history of IVDU.

CONCLUSIONS: Investigation of hepatitis C cases is resource intensive due to 1) large volume of reports, 2) incomplete electronic lab reports making contacting providers difficult AND 3) transient nature of patient population. We plan to continue our efforts to investigate cases using AmeriCorps members and student interns because of the serious nature of infections and the need to identify sources of ongoing transmission in the community.

Submission Complete? Yes

Committee Infectious Disease

Topic Hepatitis

Keywords Hepatitis; Infectious Diseases; Surveillance

Consider for Different Presentation? Yes

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Submission Type Breakout/Quick/Lightning/Poster
ID [7443](#)

Abstract Type Poster

Abstract Title Abstract
Epidemiologic Profile of Chronic Hepatitis C Virus Infection in Salt Lake County, Utah

BACKGROUND: The burden of chronic hepatitis C virus (HCV) infection was previously unknown in Salt Lake County (SLCo), Utah, due to limited surveillance capacity. To address this gap, we reclassified cases according to the 2016 CSTE/CDC chronic hepatitis C case definition and explored the data to build an epidemiologic profile of chronic HCV infection in Salt Lake County.

METHODS: Chronic HCV cases reported during 1990-2015 were reviewed and re-assigned a case status according to the 2016 case definition. Descriptive and spatial analyses were performed on confirmed and probable cases and rates were calculated per 100,000. To assess co-morbidities, chronic HCV cases were matched to hepatitis C and drug poisoning deaths (2007-2014) and to liver transplant recipients (1992-2014). To assess co-infections, chronic HCV cases were matched to surveillance data including chlamydia, gonorrhea, syphilis, invasive group A streptococcal disease (2009-2015), HIV/AIDS and hepatitis B (1988-2015). Matched results were manually reviewed to determine true matches.

RESULTS: Reclassification identified an additional 11,760 cases of chronic HCV infection, totaling 19,897 cases, reported during 1990-2015. The 2015 age-adjusted incidence rate was 116.1 (109.5-122.7) and the 2010-2014 age-adjusted mortality rate was 0.813 (0.554-1.072). Incidence was two times higher among males than females, particularly among males aged 55 years and older. Co-morbidities included hepatitis B (2%), chlamydia (1%), drug poisoning deaths (1%) and HIV/AIDS (1%); less than 0.5% of chronic HCV cases received a liver transplant post-HCV diagnosis. Eighty percent of hepatitis C deaths matched to chronic HCV cases. At least 7% of cases cleared infection. Spatial analysis revealed one neighborhood with increasingly high case counts over time.

CONCLUSIONS: Use of the 2016 case definition resulted in a higher rate of chronic HCV infection; previous case definitions relied heavily on interpretation of antibody results, leading to many cases with an unknown case status. Our 2015 incidence rate was higher than the 2014 incidence rate in most CDC Enhanced Viral Hepatitis Surveillance Sites. Approximately one-fifth of hepatitis C-related deaths may have been due to undiagnosed chronic HCV infection. The unexpectedly low percentages of co-morbidities may also be due to a large proportion of undiagnosed HCV-infected individuals. Robust surveillance and data quality improvements are needed to better characterize affected populations.

Submission Complete? Yes

Committee Infectious Disease

Topic Hepatitis

Keywords Hepatitis; Surveillance; Local Epidemiology

Consider for Different Presentation? Yes

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Submission Type Breakout/Quick/Lightning/Poster
ID [7459](#)

Abstract Type Poster

Abstract Title Perinatal Hepatitis B Prevention in Kentucky: 2010 - 2014
Abstract

BACKGROUND: Hepatitis infection is on the rise in Kentucky. Between January 1, 2010 and December 31, 2014, the Kentucky Department for Public Health (KDPH) conducted surveillance for perinatal hepatitis B prevention, and case management for infants born to women infected with hepatitis B virus (HBV).

METHODS: During this period, the Kentucky Immunization Program received 424 reports of pregnant women who were HBV-infected. Following delivery, their infants received post-exposure prophylaxis with hepatitis B Immune Globulin (HBIG) and hepatitis B vaccine (HepB) and were enrolled for follow-up by the Perinatal Hepatitis B Prevention Program at KDPH. HBIG and the first dose of HepB were administered within 24 hours after birth followed with the second dose of HepB at one month, the third dose of HepB at six months, and post-vaccination serological testing (PVST) at one year. PVST included hepatitis B surface antigen (HBsAg) and antibody to hepatitis B surface antigen (anti-HBs).

RESULTS: During this surveillance period, 408 (99.0%) infants, of the 412 live births, received the recommended HBIG and the first dose of HepB, 380 infants (92.2%) received 2 doses of HepB, and 364 (88.3%) infants received all three doses of HepB. PVST results were reported on more than 60% of the infants. Of the infants that had PVST results reported, only one of 294 infants was HBsAg-positive while 2 of 292 infants were anti-HBs-negative. During this surveillance period, the rate of HBV infection in pregnant women remained stable (1.5 - 2.3 per 100,000 persons).

CONCLUSIONS: While the rates of HepB vaccination is high in Kentucky, more work needs to be done to increase PVST compliance. Further investigation is necessary to address the possible underlying risk factors for HBV infections in pregnant women to inform targeted intervention.

Submission Complete? Yes

Committee Infectious Disease

Topic Hepatitis

Keywords Prevention; Epidemiology; Hepatitis

Consider for Different Presentation? Yes

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Submission Type ID	Breakout/Quick/Lightning/Poster 8233
Abstract Type	Poster
Abstract Title Abstract	Utilization of Surveillance Data to Inform Field Follow-up of Individuals with a Report of Hepatitis C Virus Who Are Currently Infected and out of Care in Baltimore City BACKGROUND: Hepatitis C (HCV) infection results in significant morbidity and mortality. In 2015, 2,860 cases of HCV were reported in Baltimore City. Until recently, treatment for HCV was largely ineffective and associated with debilitating side effects. Many individuals with HCV infection have not received treatment and have fallen out of regular care. METHODS: A linkage-to-care (LTC) program was developed to identify persons with chronic HCV infection not receiving HCV care, resolve barriers to care, and link them to HCV providers. Maryland's National Electronic Disease Surveillance System (NEDSS) was used to identify reported cases of HCV in Baltimore City between July 1, 2014 and November 30, 2015. Ordering information for HCV diagnostic tests was used to follow up with providers and determine if individuals were receiving HCV care. Examples of out-of-care determination included: no clinical follow-up after initial diagnosis, not seen in the last 6 months, prescribed treatment but never followed up, and treated but never returned for post-treatment labs. Providers in Baltimore City were also encouraged to contact the Baltimore City Health Department regarding individuals in need of re-engagement assistance. Field follow-up was undertaken for all individuals believed to be out-of-care. Once confirmed out-of-care, LTC staff provided assistance with scheduling appointments, transportation, and incentives for attending appointments. While support was provided for two appointments, attending one appointment was considered successful linkage to care. RESULTS: 7,774 individuals with HCV reports were identified through NEDSS between July 1, 2014 and November 30, 2015. From November 11, 2015 until September 30, 2016, the providers of 4,298 individuals were contacted to determine HCV care status. Of those, 485 were potentially out-of-care and in need of field follow-up. Additionally, HCV providers independently initiated investigations for 87 individuals in need of re-engagement assistance. Of the 551 investigations completed to date, 213 (38.7%) have been successfully linked to care, 146 (26.5%) could not be located, 114 (20.7%) were found to already be in care, 51 (9.3%) refused assistance, 16 (2.9%) were deceased, and 11 (2.1%) no longer live in Baltimore City. CONCLUSIONS: This pilot program illustrates successful use of HCV surveillance data for public health action and has resulted in a significant number of HCV-infected Baltimore City residents being connected to essential HCV care and treatment. This surveillance-initiated outreach will be critical as the public health community moves toward HCV elimination and emphasizes the importance of public-private partnerships to enhance reporting and utilization of HCV surveillance data.
Submission Complete?	Yes
Committee Topic Keywords	Infectious Disease Hepatitis Hepatitis; NEDSS / PHIN
Consider for Different Presentation?	Yes
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Submission Type Breakout/Quick/Lightning/Poster
ID [8594](#)

Abstract Type Quick

Abstract Title Abstract
A 2016 Update to Philadelphia's Hepatitis C Continuum of Care (CoC)

BACKGROUND: In 2013, the Philadelphia Department of Public Health (PDPH) published an assessment of the hepatitis C virus (HCV) continuum of care (CoC) using 2010 – 2013 city-level data. Since then, PDPH's Viral Hepatitis Program has worked with providers, reference laboratories, and community partners to improve HCV testing, reporting, and linkage to care services throughout Philadelphia. With improved surveillance, increased use of direct acting antivirals (DAAs), and revised insurance restrictions, more patients are being treated and cured of HCV than ever before. The purpose of this analysis is to provide an updated version of Philadelphia's HCV CoC to assess improvements and gaps at each stage.

METHODS: This study used HCV surveillance data from 2010 to 2016. HCV CoC stages were defined as: Stage One - HCV Antibody (Ab) screening, Stage Two - HCV Ab screening and RNA testing, Stage Three - RNA testing with evidence of medical care, and Stage Four - RNA testing with evidence of medical care and treatment initiation. Differences between 2010 – 2013 (1st CoC) and 2014 – 2016 (2nd CoC) were assessed. Chi-square analysis was used to compare differences in the demographic and risk factor profiles of HCV RNA-positive individuals who have and have not received treatment.

RESULTS: During 2010 - 2016, it was estimated that 3% (N = 53,000) of Philadelphia residents were living with HCV, and ~40,000 individuals should have received an HCV test. In the 1st CoC, 34% (13,596) were Ab screened (Stage One) and 16% were RNA tested (Stage Two), while in the 2nd CoC, 47% (N=18,801) were Ab screened (Stage One) and 38% were RNA tested (Stage Two). Few of the individuals in both CoC were in care (4% and 6% for the 1st and 2nd CoC, respectively) and fewer still had received treatment (2% and 4% for the 1st and 2nd CoC, respectively). Individuals with treatment history (Stage Four) were significantly more likely to be ≥31 years of age, have no history of incarceration or injection drug use, and have private insurance coverage.

CONCLUSIONS: Our study highlights improvements along the HCV CoC, most significantly at Stages One and Two, Ab screening and RNA confirmation. However, challenges remain in mobilizing HCV RNA confirmed patients into care and treatment. Moreover, our findings show evidence that treatment barriers disproportionately exist for the most at-risk populations. More work is needed to develop best practices for engaging HCV positive individuals through the entire HCV CoC.

Submission Complete? Yes

Committee Infectious Disease
Topic Hepatitis
Keywords Surveillance; Hepatitis

Consider for Different Presentation? Yes

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Submission Type Breakout/Quick/Lightning/Poster
ID [8003](#)

Abstract Type Quick

Abstract Title Assessment of Vulnerability for HCV Infections in Persons Who Inject Drugs in Illinois Counties
Abstract

BACKGROUND: Rising rates of injection drug use (IDU) have led to a co-epidemic of opioid overdose and hepatitis C virus (HCV) infection in the United States, with increases in incidence of both conditions over the last decade. In 2014 IDU was associated with an outbreak of HIV and HCV in rural Indiana, resulting in 212 new HIV infections as of December 2016. In response, the CDC developed a nationwide vulnerability index to determine which counties are at risk for similar IDU-associated disease outbreaks. To obtain a state-specific perspective we recreated the analysis using national census data enhanced with Illinois data sources which provided additional indicators, more recent data, and a different proxy for unsterile IDU.

METHODS: We used multilevel Poisson regression models to select indicators associated with emergency department (ED) visits for heroin use in Illinois from July 15 to December 14, 2016 as a proxy outcome for IDU. This outcome measure was captured by the state syndromic surveillance system, which receives and processes free-text chief complaint data from EDs. Potential indicators were selected from several topic areas including sociodemographic characteristics, access to care, drug-related criminal activity, and IDU-associated disease. Descriptive statistics were calculated for fifteen indicators chosen based on the availability of recent county-level data. Heroin use ED visits were modeled against each indicator and in a multilevel Poisson regression model with counties as random effects and total ED visits as the offset. Backwards stepwise regression was used to select a parsimonious set of indicators significantly associated with the proxy outcome for IDU.

RESULTS: The final multivariable model included four indicators positively associated with heroin use ED visits: controlled substances arrests, per capita income, insurance coverage, and heroin seizures. The selected indicators and magnitude of effects are different from the national model developed by the CDC.

CONCLUSIONS: We created a model to identify indicators associated with ED visits related to heroin use in Illinois. Two of the four final indicators were from criminal justice datasets, which are only available at the state level. This, in addition to other differences from the national model, indicates that locally generated models may reveal additional information about IDU and outbreak vulnerability. Future steps include assessing linearity and collinearity of the indicators, creating standardized regression coefficients, and developing a vulnerability index. This information will allow public health authorities to more effectively allocate resources to prevent disease outbreaks and other adverse outcomes associated with IDU.

Submission Complete? Yes

Committee Infectious Disease

Topic Hepatitis

Keywords Hepatitis; Indicators; Substance Abuse

Consider for Different Presentation? Yes

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Submission Type Breakout/Quick/Lightning/Poster
ID [8596](#)

Abstract Type Quick

Abstract Title Abstract
Changes in the Epidemiology of Hepatitis C Virus Infection in St. Louis County, MO, 2011 to 2015

BACKGROUND: Between 2011 and 2015, there were 3,267 cases of chronic hepatitis C (HCV) infection reported in St. Louis County, but no cases of acute HCV infection. HCV case reports generally lack the clinical data needed to distinguish between acute and chronic infection. The St. Louis County Department of Public Health (DPH) has historically lacked the capacity to investigate HCV cases. Accordingly, DPH also lacks data about cases' histories with respect to injection drug use (IDU) – the leading risk factor for acute HCV infection. However, DPH has data about deaths due to heroin overdose in St. Louis County, which can be used as a proxy variable for IDU. This study sought to determine what proportion of chronic HCV cases might represent new infections, and how this proportion has changed over time.

METHODS: This analysis included all non-institutionalized St. Louis County residents with HCV infections reported between 2011 and 2015. According to death certificate data, males, people aged 25 to 44 years, and people living in the South and Inner North regions of St. Louis County had the highest rates of death from heroin overdose between 2010 and 2014. Using data from Missouri's reportable diseases database, the proportion of HCV infections represented by each of these high-risk groups was calculated.

RESULTS: Chronic HCV cases increased by 57.4% between 2011 (n=578) and 2015 (n=910). Males accounted for 62.8% (n=363) of cases in 2011 and 62.0% (n=564) of cases in 2015. People aged 25 to 44 years accounted for 18.3% (n=106) of cases in 2011 and 32.3% (n=294) of cases in 2015. People living in Inner North or South St. Louis County accounted for 36.5% (n=211) of cases in 2011 and 52.0% (n=473) of cases in 2015. People with any two of these risk factors accounted for 29.2% of cases in 2011 and 38.6% of cases in 2015. People with all three risk factors accounted for 2.8% of cases in 2011 and 10.8% of cases in 2015.

CONCLUSIONS: The groups at greatest risk of dying from a heroin overdose in St. Louis County represented a greater proportion of HCV infections in 2015 than in 2011. This suggests a possible increase in HCV transmission among a population at high risk for acute HCV infection. This analysis is limited by the use of a proxy variable for IDU, but these results could be useful in targeting scarce resources for case investigation and prevention efforts.

Submission Complete? Yes

Committee Infectious Disease

Topic Hepatitis

Keywords Substance Abuse; Hepatitis; Infectious Diseases

Consider for Different Presentation? Yes

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Submission Type ID	Breakout/Quick/Lightning/Poster 8374
Abstract Type	Quick
Abstract Title Abstract	Hepatitis C Virus Infection Prevalence and Risk Factors Among Health Department Patient Populations in Eastern Tennessee, 2016
BACKGROUND: Approximately 2.5–4.7 million persons are living with chronic hepatitis C virus (HCV) in the United States. Surveillance data from Appalachian states during 2006–2012 revealed a 364% increase in acute HCV infections among persons aged ≤30 years. We sought to more fully understand HCV infection prevalence and risk factors in Eastern Tennessee. METHODS: During June–October 2016, routine, opt-out HCV testing was offered to patients in sexually transmitted diseases and family planning clinics in 2 health departments in Eastern Tennessee (Knox and Hamilton Counties), and targeted testing was offered in Sullivan County. Standard HCV testing procedures (antibody testing with reflex qualitative polymerase chain reaction [PCR]) were followed. Demographic and risk factor information was collected. We performed multivariate logistic regression to estimate odds ratios (ORs) for associations between risk factors and past or present HCV infection. RESULTS: A total of 4,753 persons were tested for HCV. Of these, 397 (8.4%) were HCV-antibody positive (Ab+) and, of those, 294 (74.1%) were PCR positive. The median age of Ab+ persons was 34 years (range: 14–71 years). Significantly more Ab+ persons were male (204/397 [51.4%]) than were Ab- persons (1,688/4,356 [38.8%]; <i>P</i> <0.001); and compared to all other race/ethnicities, more Ab+ persons were non-Hispanic white (339/397 [85.4%]) than were Ab- persons (1,952/4,356 [44.8%]; <i>P</i> <0.001). Among Ab+ persons, 43.1% (171/397) were females of reproductive age (11–50 years), and of those, 5 were pregnant (2.9%). The following exposures were significantly associated with past or present HCV infection: history of both intranasal and injection drug use (IDU) versus no drug use (OR: 35.4, CI: 24.1–51.9); history of IDU alone versus no drug use (OR: 52.7; CI: 25.2–109.9); history of intranasal drug use alone versus no drug use (OR: 2.6, CI: 1.7–3.9); and history of incarceration versus no incarceration (OR: 2.7; CI: 1.9–3.8). CONCLUSIONS: Testing demonstrated a past or present HCV infection prevalence of 8.4% among select clinic populations in Eastern Tennessee. A greater proportion of Ab+ persons were male and non-Hispanic white than antibody-negative persons. Forty-three percent of Ab+ persons identified were females of reproductive age. A history of intranasal drug use, IDU, and incarceration were the predominant risk factors identified. This analysis is the first to quantify HCV burden in Eastern Tennessee among health department patients, and highlights the need for targeted interventions among high-risk groups (IDU) and vulnerable populations (e.g., females of reproductive age).	
Submission Complete?	Yes
Committee Topic Keywords	Infectious Disease Hepatitis Risk Factors; Special/Vulnerable Populations; Hepatitis
Consider for Different Presentation?	Yes
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Submission Type Breakout/Quick/Lightning/Poster
ID [7757](#)

Abstract Type Quick

Abstract Title Increased Incidence of Acute Hepatitis B in a Rural County — Alabama, 2012–2015
Abstract

BACKGROUND: Alabama acute hepatitis B virus (HBV) infection rates have fluctuated between 1.4 and 2.8 cases/100,000 persons since 1996, despite implementation of national elimination strategies. Through routine surveillance, a rural Alabama county (County X) was identified with a higher rate of acute HBV infection compared with other counties. We conducted an investigation to characterize exposures among County X cases.

METHODS: Using data reported to Alabama’s National Electronic Disease Surveillance System (NEDSS) from 2012–2015 and population census data, we compared the average 4-year hepatitis B incidence rate in County X with the overall state rate and a demographically similar control county in Alabama. We estimated the prevalence of risk factors, including sexual activity, illicit drug use, exposure to blood, and drug-related arrests among reported cases, from NEDSS and other data sources.

RESULTS: From 2012–2015, the average 4-year incidence rate in County X of 58.2 cases/100,000 persons was significantly higher than Alabama’s rate of 8.0 cases/100,000 persons (risk ratio [RR]: 7.3; 95% confidence interval [CI]: 5.2–10.1), and the control county’s rate of 24.4 cases/100,000 persons (RR: 2.4; CI: 1.4–4.1). Most frequently reported risk factors in County X included any illicit drug use (26.3%), injection drug use (21.1%), and receiving a tattoo (21.1%). The drug-related arrest rate was significantly higher in County X compared with the state (RR: 1.4; CI 1.2–1.6) and control county (RR: 2.9; CI: 2.2–3.9).

CONCLUSIONS: Although incidence rates of HBV infection in County X were significantly higher than the state as a whole, a well-defined cause was not evident. Based on risk factors reported, illicit drug use presents an area of concern; further efforts to understand these behaviors in County X are warranted.

Submission Complete? Yes

Committee Infectious Disease

Topic Hepatitis

Keywords Risk Factors; Hepatitis; Vaccine-Preventable Diseases

Consider for Different Presentation? Yes

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Submission Type ID	Breakout/Quick/Lightning/Poster 7653
Abstract Type	Quick
Abstract Title Abstract	Using Chart Review to Validate Surveillance-Based Algorithms for Estimating Hepatitis C Treatment and Cure Rates in New York City, 2016 BACKGROUND: Approximately 2.4% of adults in New York City (NYC) are infected with chronic hepatitis C virus (HCV). The NYC Department of Health and Mental Hygiene (DOHMH) developed algorithms that use the pattern of reported HCV RNA test results to estimate HCV treatment and cure rates among NYC residents; both positive and negative RNA results are reportable. Previous algorithm validation used data from DOHMH direct-service programs, which involve intensive care coordination services and frequent patient follow-up. To validate the algorithms in the general population, where the frequency of provider visits and RNA testing may be less ideal, treatment and cure status was determined through chart review of HCV-infected patients in care across NYC. METHODS: We randomly selected 250 HCV-infected patients from 15 healthcare facilities with high HCV treatment rates. Facilities were grouped as large hospitals (≥500 beds), small hospitals (<500 beds), and private practice/clinics; five facilities of each type were selected. Individuals were considered patients of a given facility if they had an HCV test at that facility during January–August 2015 and their most recent RNA test as of February 29, 2016 came from the same facility. Twenty-five patients were selected per large hospital, 15 per small hospital, and 10 per private practice. We compared treatment and cure status from chart review to algorithm results, and used testing patterns and outcomes observed in the chart, such as accounting for previous treatment failures, to inform further algorithm refinement. RESULTS: Chart reviews were completed for 235/250 (94.0%) selected participants. Evidence of treatment in 2014 or later was found for 160 patients (68.1%), with 126 (78.8%) of those completing treatment. Ninety-six patients had evidence of cure, as documented in the chart (25.0%) and/or from a negative RNA test >12 weeks after treatment completion. Using the newly revised definitions, the algorithm identified treatment status with a sensitivity, specificity, positive predictive value (PPV), and negative predictive value (NPV) of 93.1%, 82.7%, 92.0% and 84.9%, respectively. The revised algorithm identified cure with a sensitivity, specificity, PPV, and NPV of 93.8%, 88.6%, 88.2%, and 93.7%, respectively. CONCLUSIONS: Chart review indicated that the algorithms accurately estimate treatment and cure using surveillance data and that accuracy can be improved using documented treatment outcomes. Practical applications of the algorithms include developing HCV care cascades and creating clinic/provider dashboards. Estimating treatment and cure will allow for enhanced monitoring, resource allocation, and program planning by DOHMH to address the ongoing HCV epidemic.
Submission Complete?	Yes
Committee Topic Keywords	Infectious Disease Hepatitis Surveillance; Hepatitis
Consider for Different Presentation?	Yes
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Submission Type Roundtable
ID [8165](#)

Abstract Type Roundtable

Abstract Title Abstract Hepatitis C Subcommittee Roundtable: Defining Core Surveillance for HCV

Key Objectives:

Among partner organizations and national, state, and local stakeholders: • Discuss the current and projected needs, resources, and barriers for conducting HCV surveillance.

- Discuss what should be encompassed in a comprehensive definition for baseline HCV core surveillance.
- Discuss potential ways to address identified gaps and improve collaboration and communication among stakeholders, resulting in specific action items that facilitate achieving these goals.

Brief Summary:

In recent years, CSTE has focused more attention on improving surveillance for viral hepatitis in state and local health departments. Through subsequent discussions, it has become evident that comprehensive core surveillance for viral hepatitis is critical to our complete understanding of HCV trends, emerging risk groups, and disease outcomes on both a jurisdictional and national level. The purpose of this special session is to facilitate a conversation among national, state, and local stakeholders in efforts of initiating the development of a standardized and comprehensive definition for core HCV surveillance.

Submission Complete? Yes

Committee Infectious Disease

Topic Hepatitis

Keywords Surveillance; Hepatitis; Infectious Diseases

Consider for Different Presentation? No

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