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Recommendation for Routine Prenatal Screening for Hepatitis C

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RECOMMENDATION FOR ROUTINE PRENATAL HEPATITIS C SCREENING

STOWE FAMILY PRACTICE

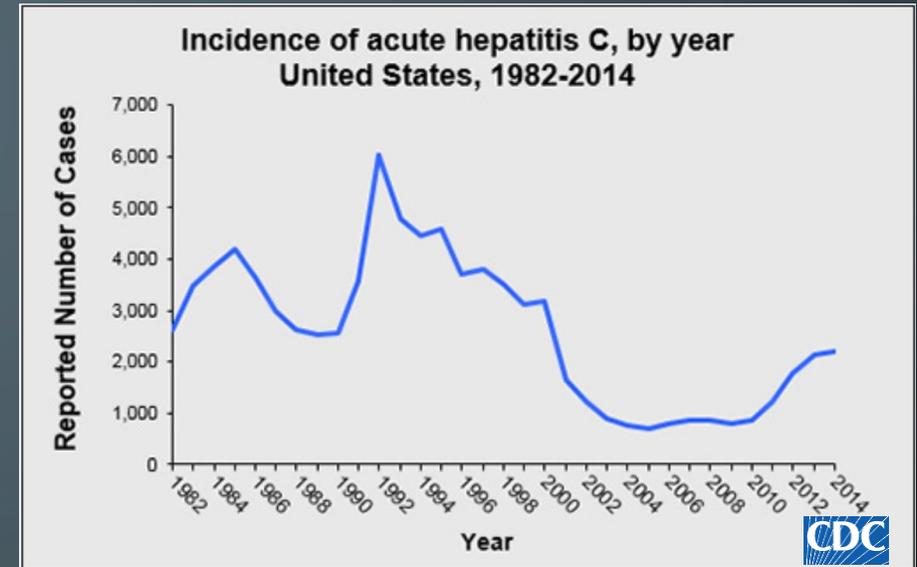
ALTHEA MORRISON, MS3

ROTATION 6, 12/2017-1/2018

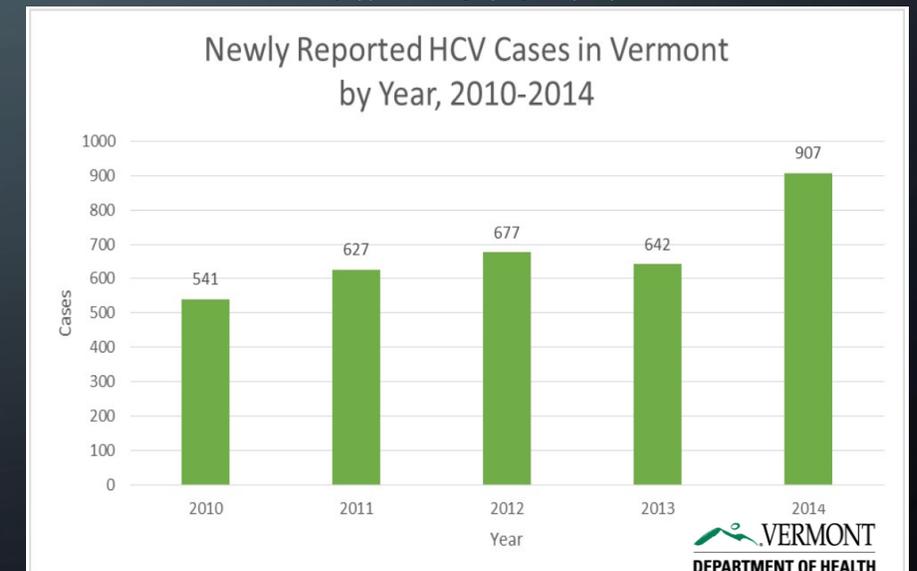
PRECEPTOR: DR. KATIE MARVIN

PROBLEM IDENTIFICATION AND NEED

- Incidence and prevalence of Hepatitis C (HCV), while once declining, has been steadily on the rise since 2010, both nationally and in Vermont
- The greatest increase in cases has been seen in the 20-29 year old age group
- Chronic HCV is the leading cause of cirrhosis and hepatocellular carcinoma, as well as the most common reason for liver transplantation
- Most people living with HCV are asymptomatic and disease progression is insidious, therefore many people do not know they are HCV+ unless they are screened, or until they develop symptoms of chronic liver disease
- It is hypothesized that there is a link between the increase in HCV and IV drug use (IVDU)
- Current guidelines recommend persons with increased risk of HCV exposure, such as those with a history of IVDU, or patients who received solid organ transplant or blood transfusions prior to July 1992, should be screened
- The risk of vertical transmission of HCV from mother to infant during birth is ~6% and increases to 10-20% with HIV coinfection
- Current guidelines recommend that only women who have a high risk of exposure be screened for HCV during pregnancy



Source: CDC Surveillance Data, <https://www.cdc.gov/hepatitis/hcv/statistics/hcv.htm>



Source: VT Department of Health Surveillance Data,
<http://www.healthvermont.gov/immunizations-infectious-disease/hepatitis-c/surveillance>

PUBLIC HEALTH COST

- The National Economic Burden of HCV and associated liver disease is estimated to be more than \$6.5 billion
- While the cost of new direct acting antivirals (DAA) is high, it is more cost-effective than treating the long term sequelae of chronic HCV infection
- Improved insurance coverage of DAAs by insurance companies has increased access to care
- As of January 2018 Vermont Medicaid is no longer limiting its coverage of HCV treatment based on extent of liver disease
- The cost of HCV screening, specifically the HCV antibody test w/reflex to PCR for HCV RNA, is just under \$75 at both UVMHC and Copley Hospitals (note: this is the total amount billed to the patient *prior* to any insurance coverage)

COMMUNITY PERSPECTIVE: MEDICAL PROFESSIONALS

Dr. Steven Lidofsky, MD, PhD, Director of Hepatology at UVMMMC

- Hepatitis C is indeed on the rise in Vermont
- Vast majority of patients receiving treatment are referred by their PCP after a positive screening test
- Small number of patients are women who were screened during pregnancy, the majority of whom were referred from the UVM Maternal Fetal Medicine Clinic
- While HCV screening is becoming more common, it has still not permeated the medical culture. Dr. Lidofsky would estimate that roughly 50% of patients who meet screening guidelines are actually screened
- If determined to be cost-effective, universal screening for HCV during pregnancy would be beneficial

COMMUNITY PERSPECTIVE: LIVING WITH HCV

JP, a mother of three, who was recently diagnosed with Hepatitis C

○ Exposure Risk Factors

- Both of JP's parents were HCV+
- The father of JP's three children is HCV+
- JP has a history of past IVDU

○ JP was screened for and diagnosed with HCV in the fall of 2017

○ She was not offered HCV testing during any of her three pregnancies, though she reports that her OB knew of her risk factors

○ JP believes that HCV screening should be a part every woman's prenatal care

○ “[Receiving my diagnosis] was completely devastating. If I had known [I was HCV+] I would have done things differently. I would have gotten treatment before getting pregnant, or worked on being healthier while I was pregnant. I am worried about my kids. It feels terrible to know I might have made them sick. They have not been tested yet.”

INTERVENTION AND METHODOLOGY

- Collect and review current information including
 - National and Vermont HCV surveillance data
 - Current National and Vermont HCV screening recommendations
 - Cost of screening
 - Treatment options, their accessibility and their cost
- Assess the feasibility and benefits of implementing routine universal prenatal HCV screening
- Summarize findings and make a recommendation

RESULTS/RECOMMENDATION: ALL PREGNANT WOMEN SHOULD BE SCREENED FOR HCV

FOR UNIVERSAL SCREENING IN PREGNANCY

- Pregnancy opens a window for care
- Infectious disease screening is already a part of routine OB care (Hep B, HIV, STIs etc)
- Early detection of HCV prior to advanced liver disease greatly increases the likelihood of a positive outcome/cure
- Early detection and monitoring/treatment of HCV is more cost-effective than treating advanced liver disease
- Vertical transmission is the leading cause of HCV infection in infants and children
- Multiple studies have shown that maternal HCV infection is linked to poor maternal and fetal outcomes
- As of this year (2018) Vermont Medicaid is no longer restricting access to HCV antivirals based on stage of liver disease
- Cost of screening is low
- Current guidelines are only effective if a patient discloses their risk factors and/or if a provider asks about them

AGAINST UNIVERSAL SCREENING IN PREGNANCY

- The risk of vertical transmission of HCV is viewed as relatively low at ~6%
- Direct acting antivirals are not recommended during pregnancy due to known teratogenicity and insufficient data
- There is currently no post-exposure prophylactic treatment available and therefore there are limited means by which to prevent vertical transmission

EVALUATION OF EFFECTIVENESS AND LIMITATIONS

- A way to evaluate the effectiveness of this project would be to determine if providers are more likely to screen women during pregnancy after reviewing this information. This could be done through a survey, or by review of electronic medical records to see if there is an increase in the number of Hepatitis C screening tests ordered.
- Limitations include the possibility that HCV screening might not be covered by health insurance if coverage is based on the national screening guidelines.

RECOMMENDATIONS FOR FUTURE INTERVENTIONS AND PROJECTS

- Expand the distribution of summary and recommendations
- Monitor rates of prenatal HCV screening

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INTERVIEW CONSENT FORM

Thank you for agreeing to be interviewed. This project is a requirement for the Family Medicine clerkship. It will be stored on the Dana Library ScholarWorks website. Your name will be attached to your interview and you may be cited directly or indirectly in subsequent unpublished or published work.

The interviewer affirms that he/she has explained the nature and purpose of this project.

The interviewee affirms that he/she has consented to this interview.

Yes

Name: Dr. Steven Lidofsky

Thank you for agreeing to be interviewed. This project is a requirement for the Family Medicine clerkship. It will be stored on the Dana Library ScholarWorks website. Your *initials only* will be attached to your interview and you may be cited directly or indirectly in subsequent unpublished or published work.

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Yes

Initials: JP