# **Hepatitis B Poster Abstract**

Title: Hepatitis B and injection drug use in Maine: Efforts to stem a sharp increase in cases Author/Speaker: Jeff Caulfield, MPH Position: Epidemiologist/Viral Hepatitis Prevention Coordinator, Maine Center for Disease Control and Prevention Contact Information: 207-287-3817, jeff.caulfield@maine.gov

## Abstract:

# Background

Hepatitis B is a virus that can be transmitted person-to-person by blood, semen or other bodily fluids. Hepatitis B is 100 times more infectious than HIV and <50% of people with hepatitis B have symptoms. Despite the existence of a vaccine, hepatitis B is still a leading cause of liver disease, cancer and transplants in the United States. When undiagnosed and untreated, 1 in 4 persons who are chronically infected with hepatitis B will develop liver failure or cancer.

## Methods

Healthcare providers and laboratories are required by law to report hepatitis B laboratory results to Maine Center for Disease Control and Prevention (Maine CDC). Field epidemiologists investigate all cases of hepatitis B, including interviews with medical providers and patients. Data collected includes demographics and risk behaviors. This data is stored in the state's National Electronic Disease Surveillance System (NEDSS). For this study, data for the years 2015 through 2017 was analyzed.

#### Results

Maine has seen a 729% increase in cases of acute hepatitis B between 2015 to 2017. An analysis of risk behavior data collected for hepatitis B cases showed injection drug use and incarceration as leading risk factors of acute hepatitis B at 53.2% and 32.5% respectively. The data also showed being foreign born and being born between 1945-1965 as leading risk factors of chronic hepatitis B at 22.9% and 21.8% respectively. An analysis of the demographics of cases with acute hepatitis B in Maine showed a slight overrepresentation of people identifying as white (98% vs. 96.5%), while cases with chronic hepatitis B showed a substantial overrepresentation of people identifying as African Americans and Asian/Pacific Islanders (29.1% and 17.3% vs. 1.5% and 1.2% respectively).

# Conclusions

Maine CDC initiated and directed several prevention projects in light of the results of the hepatitis B data analysis. These projects target the state's two highest burden counties; Penobscot and Cumberland. Within these high burden areas, the projects target facilities that work with the highest risk individuals; people who inject drugs or are incarcerated, to increase testing and linkage to care. Projects designed to increase testing and linkage to care include provider education sessions, hepatitis B vaccination outreach, point-of-care testing in county jails and

educational sessions for incarcerated persons and jail medical staff. Initial results of the hepatitis B vaccination outreach project show that greater than 64% of cases received one hepatitis B vaccination shot after three calls to their provider.