Liver cancer incidence and mortality rates are increasing across the U.S and in New Jersey. Each year there are about 672 new cases of liver cancer diagnosed among New Jersey (NJ) residents and 430 deaths attributable to this disease.

**Purpose:** To describe trends in incidence and mortality in liver cancer in NJ residents.

**Data:** New Jersey State Cancer Registry

**Method:** Rates were calculated using SEER*Stat 8.3.5, and JoinPoint 4.4.0.0

### Results

The incidence of liver cancer increased significantly in NJ men and women, with a larger increase in men until 2004 (females, 1979-2014: APC=2.6%; males, 1979-2004: APC=4.6%, 2004-2014: APC=1.6%). Asian or Pacific Islander (API) males maintained the highest incidence from 1991-2009. After 2009, Black males had the highest incidence, which continued to increase (APC=3.3%). White females consistently had the lowest incidence of liver cancer. From 1990-2014, Hispanic males (APC=3.2%) and females (APC=0.5) had higher liver cancer incidence compared to Non-Hispanic males (APC=1.4%) and females. Liver cancer mortality rates from 1979-2014 were higher among males than females, but rates continued to rise for both. API males (APC=1.1%) and females (APC=1.2%) were the only groups that experienced a decrease in mortality from 1991-2014.

### Conclusions

Nationally, the incidence of liver cancer has more than tripled since 1980. Liver cancer is largely associated with modifiable risk factors such as hepatitis B or C infection, cirrhosis, obesity, type II diabetes, heavy alcohol use, and cigarette smoking. NJ has seen a rise in some of these risk factors, including hepatitis infection and obesity. From 2011-2015, the rate of hepatitis C infection in NJ increased by 150%. From 1995-2016, the adult obesity rate in NJ has more than doubled from 12.3% to 27.4%. Therefore, initiatives including HBV vaccination as well as HBV and HCV testing, clean needle exchanges, or programs that address high obesity rates could have the most impact on reducing liver cancer incidence. In order to be most effective, these initiatives should target populations with high incidence of liver cancer including API, Black, and/or Hispanic males.