

# Hepatitis C Infections and Drug Arrests:

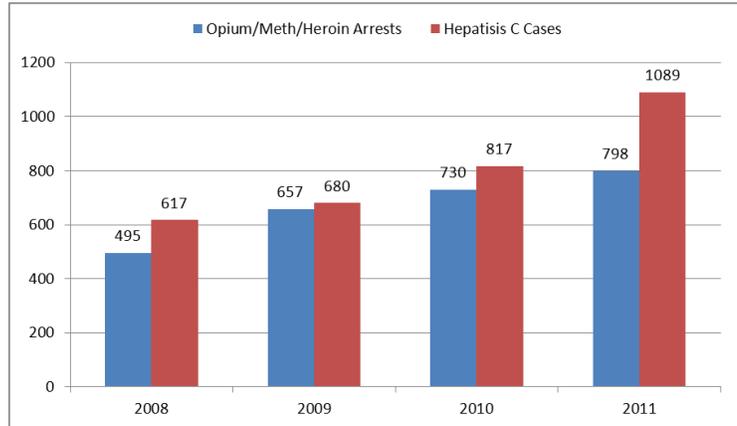
## SUPPLEMENTAL FACT SHEET TO THE MICHIGAN DEPARTMENT OF COMMUNITY HEALTH (MDCH) AND MICHIGAN STATE POLICE (MSP) COLLABORATION

Bureau of Disease Control, Prevention and Epidemiology  
 HIV/STD/VH/TB Epidemiology Section, Viral Hepatitis Unit, February 2013

### Overview of Collaborative Project

- Hepatitis C Virus (HCV) is a communicable disease that spreads person-to-person through contaminated blood.
- Intravenous (IV) drug use is a risk factor for the transmission of HCV.
- The rate of Hepatitis C infection in young adults has increased in Michigan in recent years.
- MDCH looked to determine if the rise in young adult HCV infections could be explained by an increase in IV drug use.
- MSP drug arrests (e.g. selling, producing, distributing, possession) were used as a surrogate marker for drug use.
- Drug arrests were classified by age, location, drug-type, and year.
- MDCH pulled hepatitis C surveillance data from the Michigan Disease Surveillance System (MDSS) to compare to trends in MSP drug arrests from 2008 to 2011.

Figure 1: Comparison of Hepatitis C cases and drug arrest trends for individuals aged 20-29.



### Overall Trends

Figure 1 shows that, between 2008 and 2011, there was a year-over-year increase in both the number of opium, methamphetamine, and heroin drug arrests and the number of HCV infections in individuals aged 20-29.

The correlation suggests that increases in drug arrests, and by relation, drug use, were associated with increases in hepatitis C infections in individuals aged 20-29.

Figure 2: Percent change in heroin arrests among 20-29 year olds by region, 2008 -2011

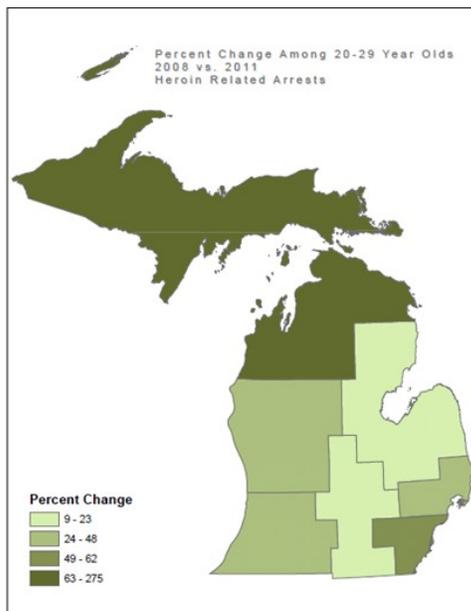
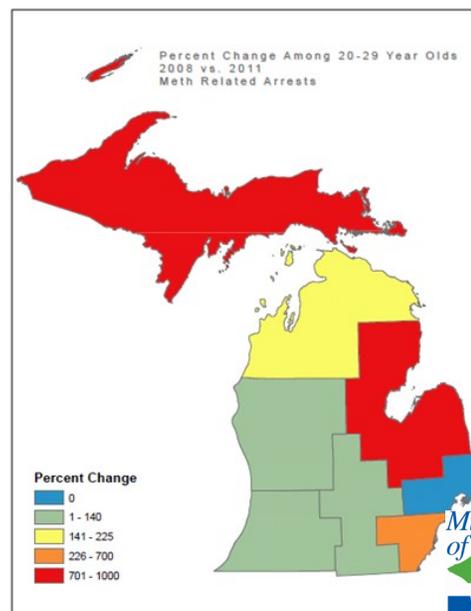


Figure 3: Percent change in methamphetamine arrests among 20 -29 year olds by region, 2008 -2011



Michigan Department of Community Health



Rick Snyder, Governor  
 James K. Haveman, Director

### Percent change in MSP Drug Arrests

- Methamphetamine and heroin had the largest percent increase in arrests between 2008 to 2011.
- The areas with darker green (in figure 2) and red (in figure 3) are the areas of most interest because they represent regions where arrests have increased by the greatest rate.
- Region 8 (Upper Peninsula) and region 7 (northern portion of the Lower Peninsula) had the highest percent increase in heroin arrests.
- Region 8 and region 3 (thumb area) had the highest percent increase in Methamphetamine arrests.

Figure 4: Methamphetamine arrest by age group.

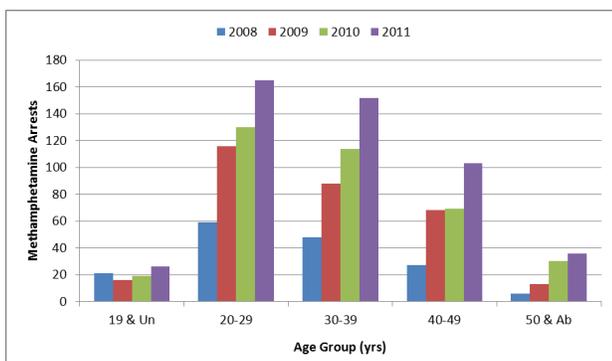


Figure 5: Heroin arrests by age group.

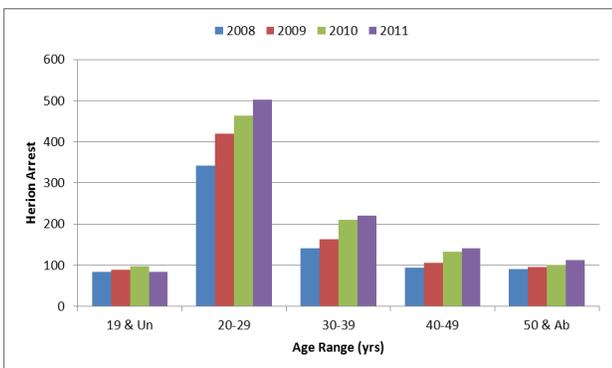
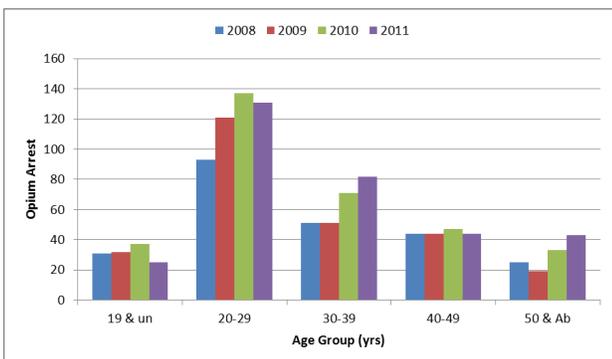


Figure 6: Opium arrests by age group.



### MSP Arrest Trends by Drug-Type

#### Methamphetamine (Figure 4)

- Methamphetamine arrests increased year-over-year from 2008 to 2011 for all age groups except the 19 and under group.
- In 2011, **34%** of the methamphetamine arrests were of individuals aged 20 to 29, while **32%** were of individuals aged 30 to 39.

#### Heroin (Figure 5)

- There was an **57%** increase in heroin arrests between 2008 and 2011 among 30 to 39 year olds and a **46%** increase among the 20 to 29 year olds.
- About half of all heroin related arrests between 2008 and 2011 were in the 20 to 29 year old age group.
- The second largest percentage of heroin related arrests were among 30 to 39 year olds with **19%** in 2008 and **21%** in 2011.

#### Opium (Figure 6)

- The 20-29 year old age group accounted for **38%** and **40%** of all opium-related arrests in 2008 and 2011 respectively.
- There was a **40%** increase in opium arrest in the 20 to 29 year old group in 2011 compared to 2008.

### Limitations and Conclusions

MSP arrests are used as a marker for drug-use in this study. Increases in drug arrests made by the MSP may not necessarily represent an increase in drug-use in the population. Furthermore, local and city police arrests are not captured in the MSP data. Since HCV infections often go unrecognized and undiagnosed, MDSS data may not capture all instances of HCV infection.

MSP data show that drug-related arrests are most common in the 20-29 year old population compared to other age groups. Drug-related arrests have increased since 2008, with some regions of the state witnessing more drug-arrests than others. Amongst 20-29 year olds, increases in drug arrests are correlated with an increase in the number of HCV infections reported to the MDSS. Preventing young adult IV drug-use should be a crucial component of young adult hepatitis prevention initiatives in Michigan.