

Hepatitis B Surveillance Overview - 2015

Ashley Simmons
Weekly Professional Development
April 27, 2016



- Overview of the Hepatitis B Virus
- Methods
- Results
- Discussion
- State Initiatives
- Limitations

Introduction - Hepatitis B

Hepatitis B virus (HBV)

- Acute HBV
- Chronic HBV

Hepatitis B in the US

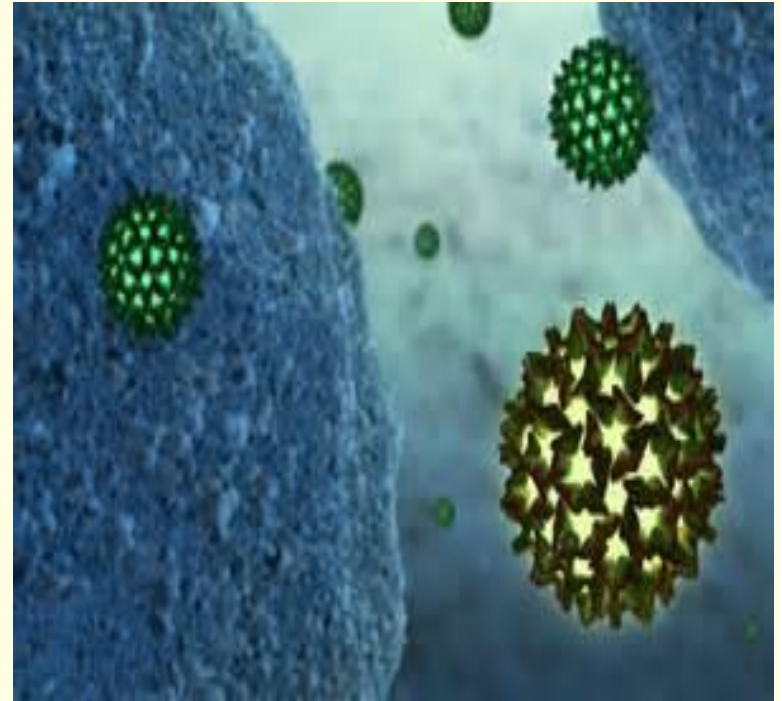
- 46k new infections each year
- 1.4 million with chronic HBV

Hepatitis B Worldwide

- 350 million infected
- >500k die each year of HBV complications

Hepatitis B's significance in West Virginia

- Highest rate of HBV per population in the U.S.

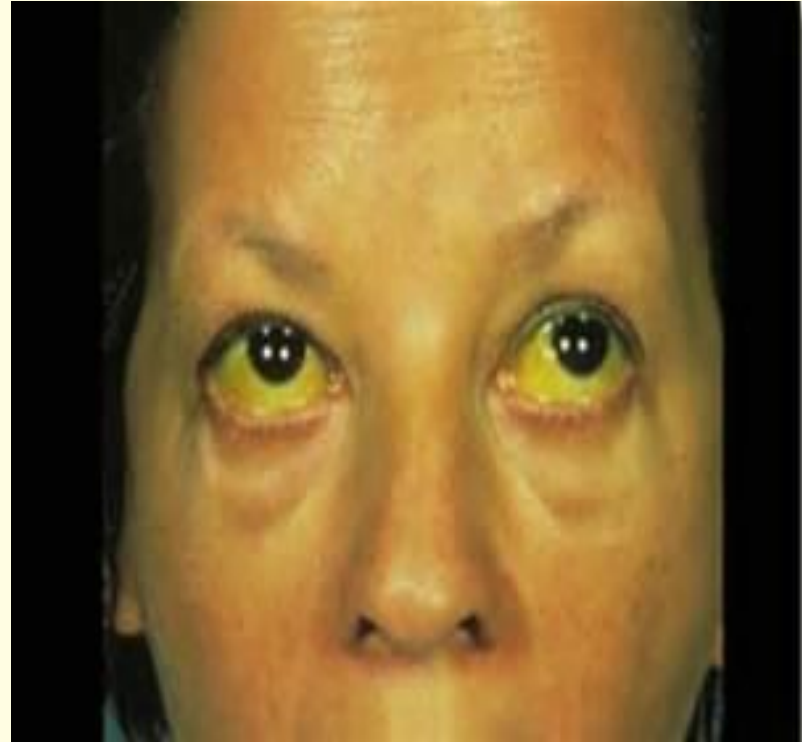


Introduction - Risk Factors

- Unprotected sex
- Sharing needles (IDU)
- MSM
- Live with a chronic HBV carrier
- Perinatal transmission
- Working with human blood
- Traveling to regions with high HBV rates



- **Jaundice**
- **Malaise**
- **Anorexia**
- **RUQ pain**
- **Nausea**
- **Vomiting**
- **Diarrhea**
- **Dark urine**
- **Clay colored stool**



Acute Confirmed

- HBsAg positive
- IgM anti-HBc-positive if done
- Discrete onset of symptoms

And either

- A) Jaundice OR
- B) Elevated ALT (>100 IU/L)

Chronic Confirmed

- IgM anti-HBc negative AND a positive result on one of the following tests: HBsAg, HBV DNA, HBeAg OR
- HBsAg, HBV DNA or HBeAg positive two times at least 6 months apart (any combination of these tests 6 months apart is acceptable)

WV Code 16-3-1; 64 CSR 7

- Within 1 day

Hepatitis B Registry

- December 2011

WVEDSS → CDC

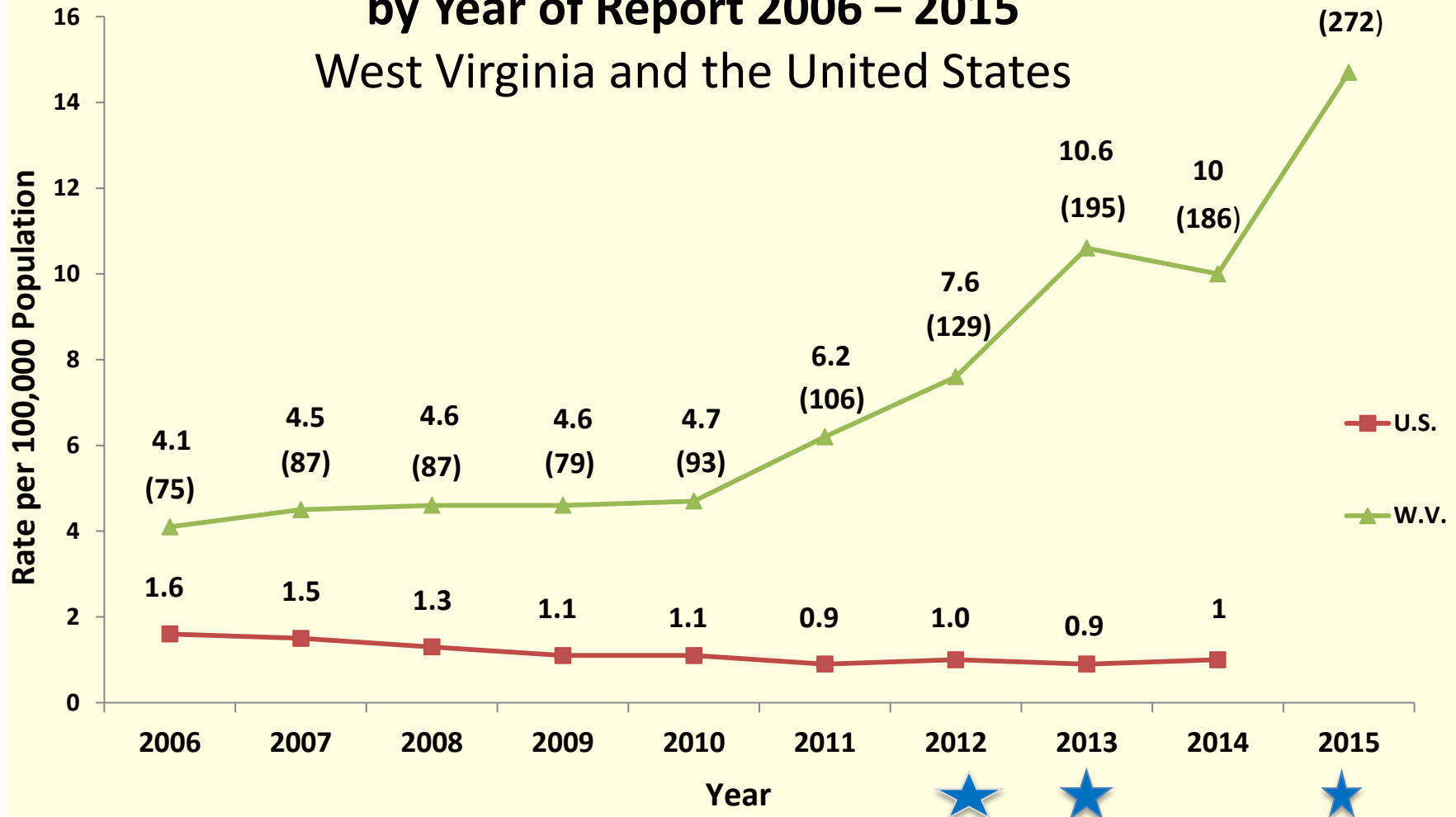
- Data extracted March 30, 2016
- Filtered by MMWR Week 1- 53
- Cleaned and checked for accuracy

Data Included Within Report

- Acute Confirmed
- Chronic Probable
- Chronic Confirmed

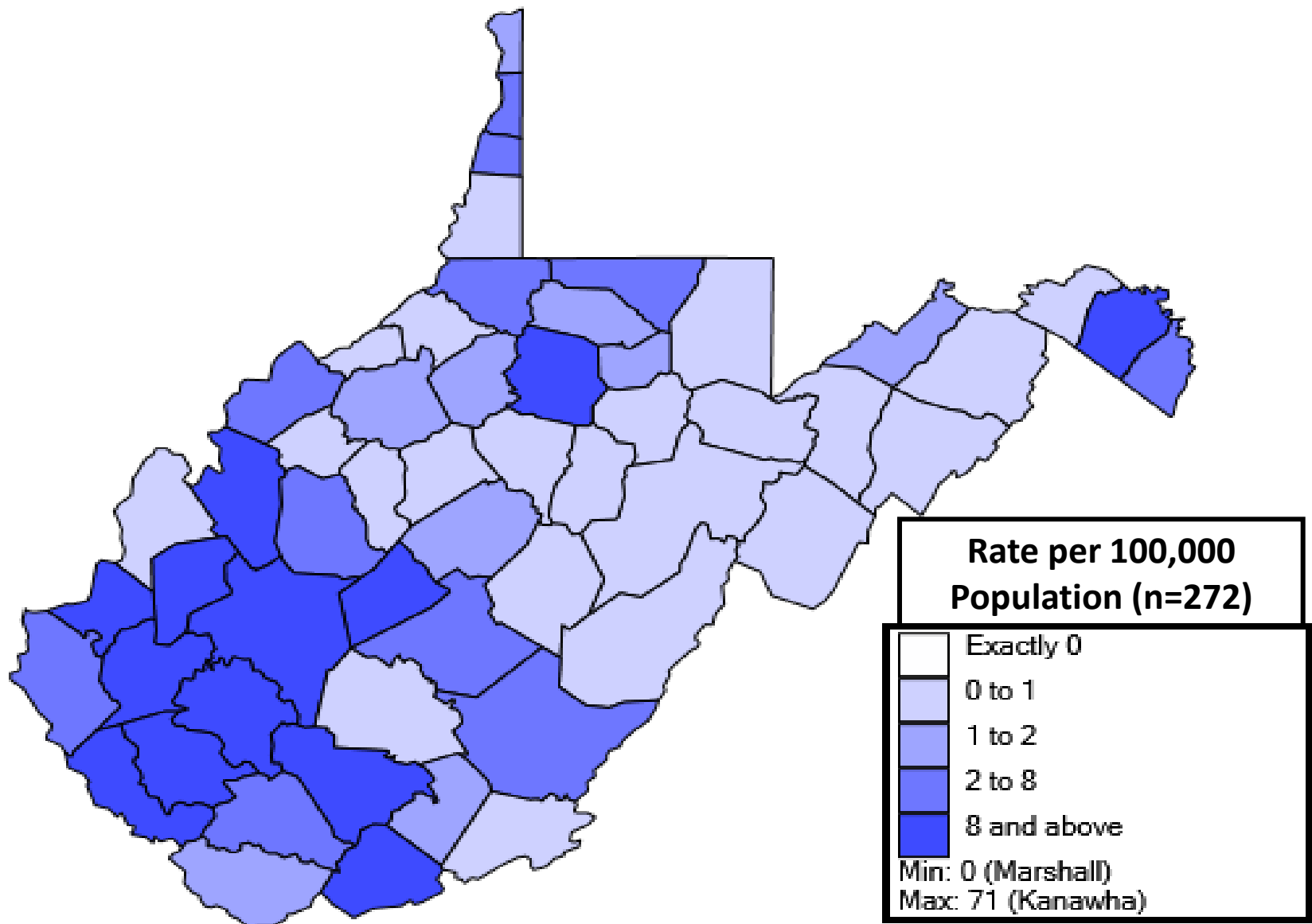
Results

Acute Hepatitis B – West Virginia by Year of Report 2006 – 2015 West Virginia and the United States

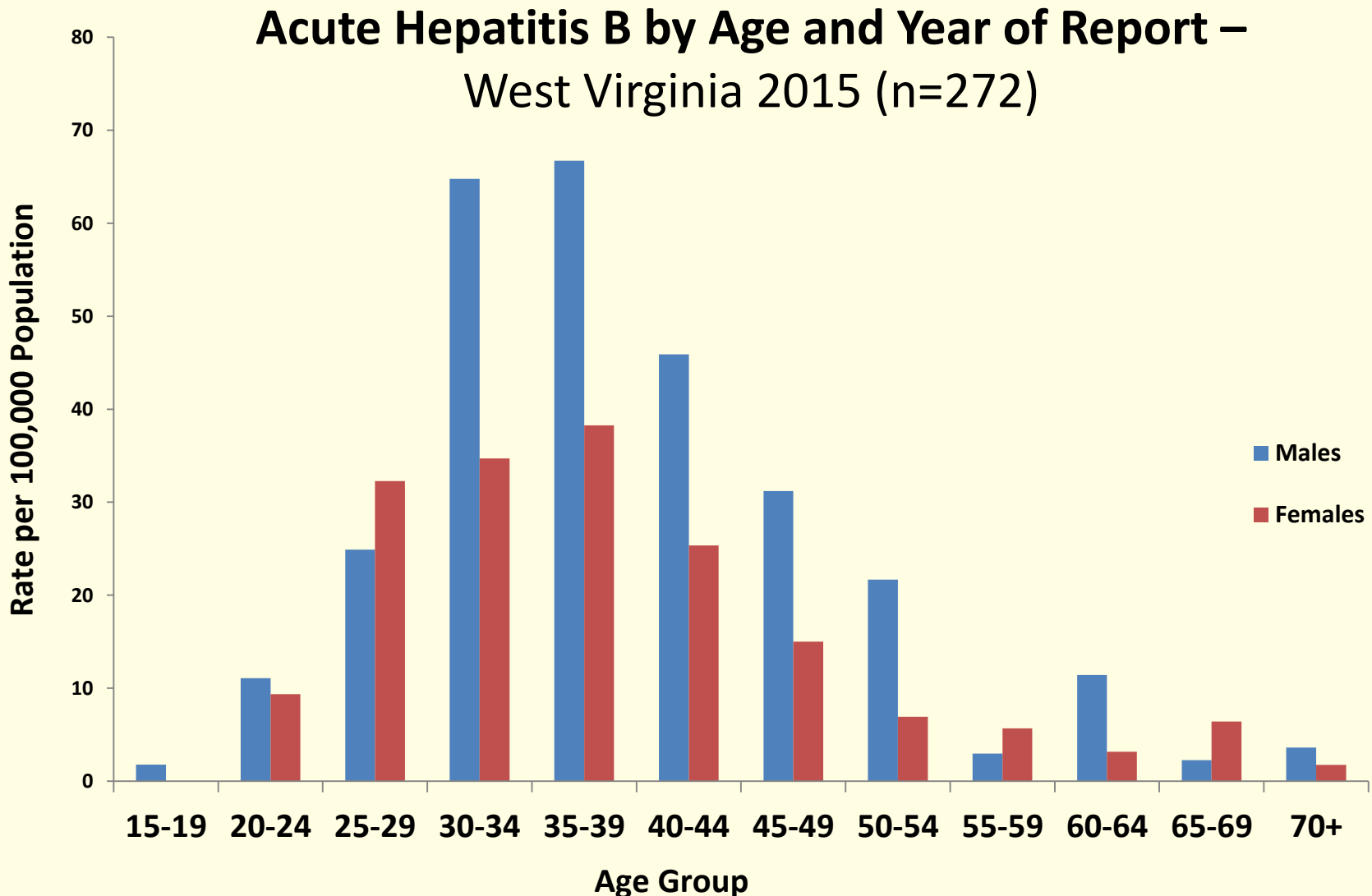


*2015 Acute Hepatitis B Data for West Virginia data is provisional as of 3/31/2016
West Virginia has ranked #1 in the incidence of Acute Hepatitis B in the US from 2007 to 2014

Results - Rate of Acute Hepatitis B by County of Residence and Year of Report 2015, WV



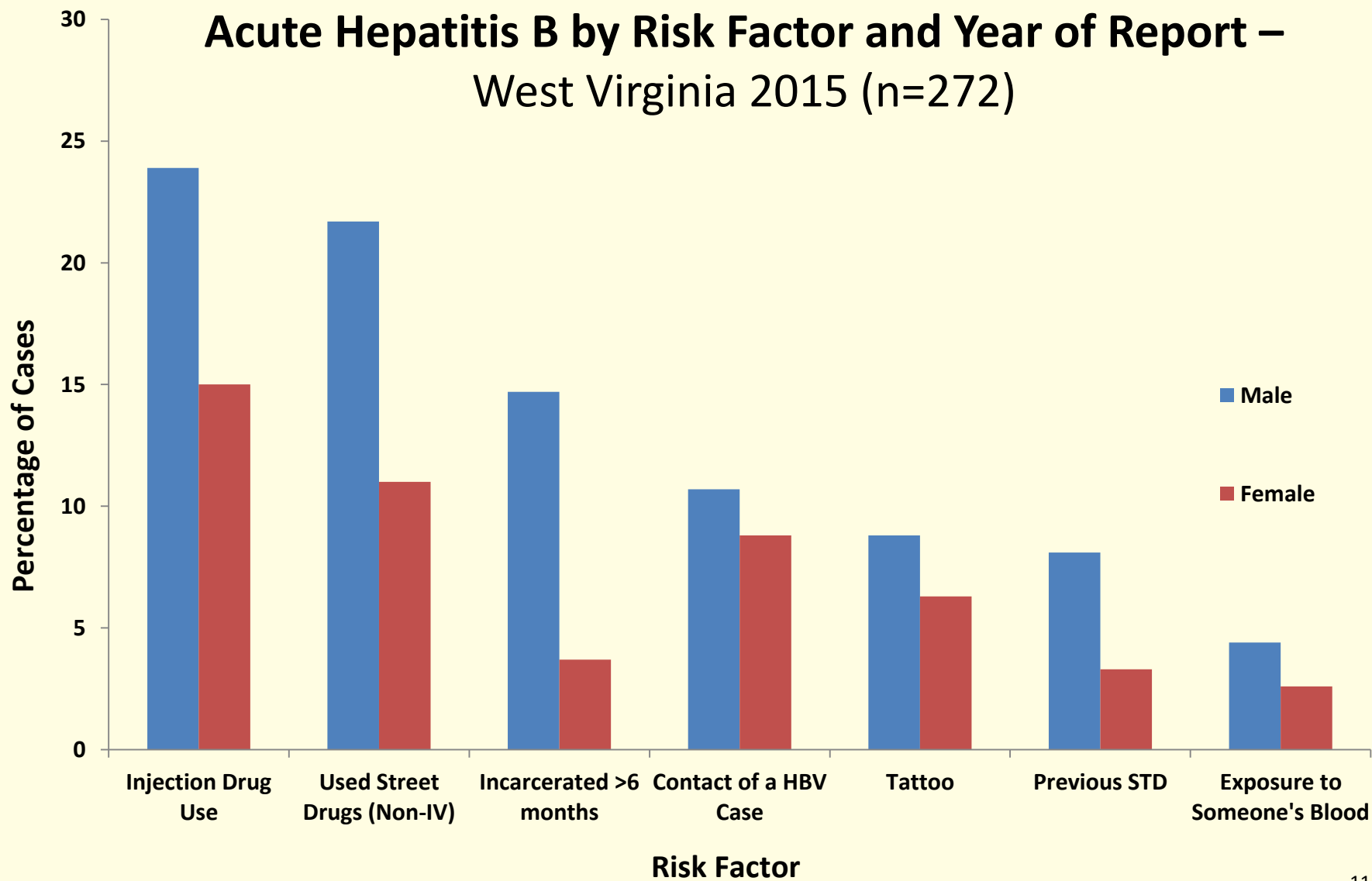
Results



*2015 Acute hepatitis B rate data is provisional as of 3/31/2016

Results

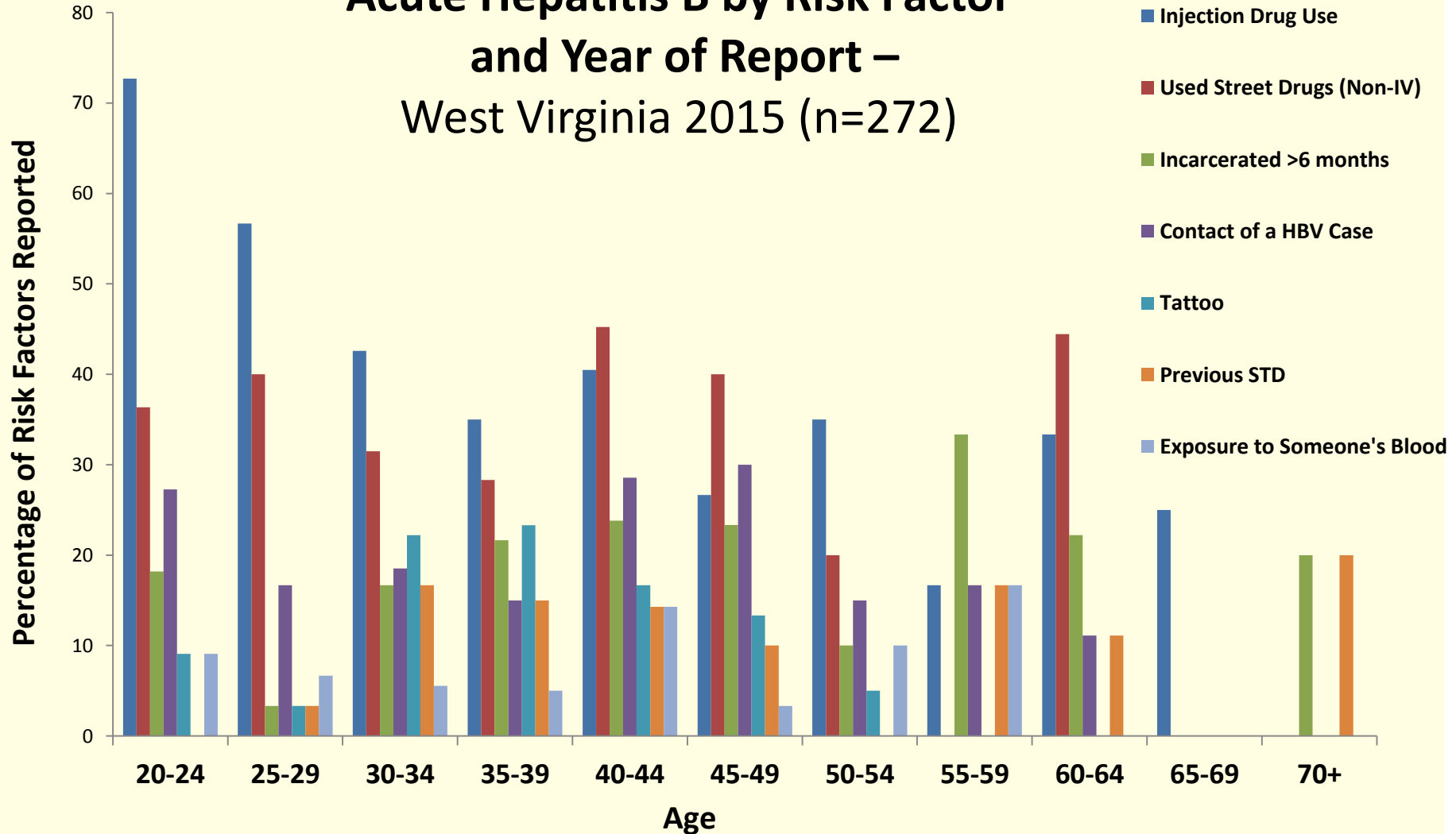
Acute Hepatitis B by Risk Factor and Year of Report – West Virginia 2015 (n=272)



*2015 Acute hepatitis B data is provisional as of 3/31/2016

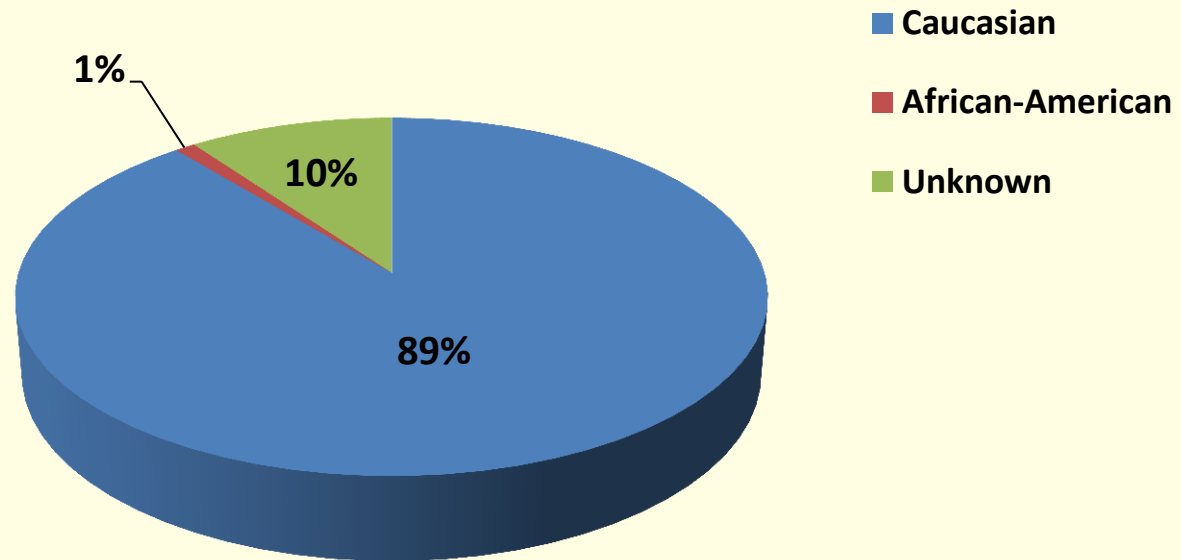
Results

Acute Hepatitis B by Risk Factor and Year of Report – West Virginia 2015 (n=272)

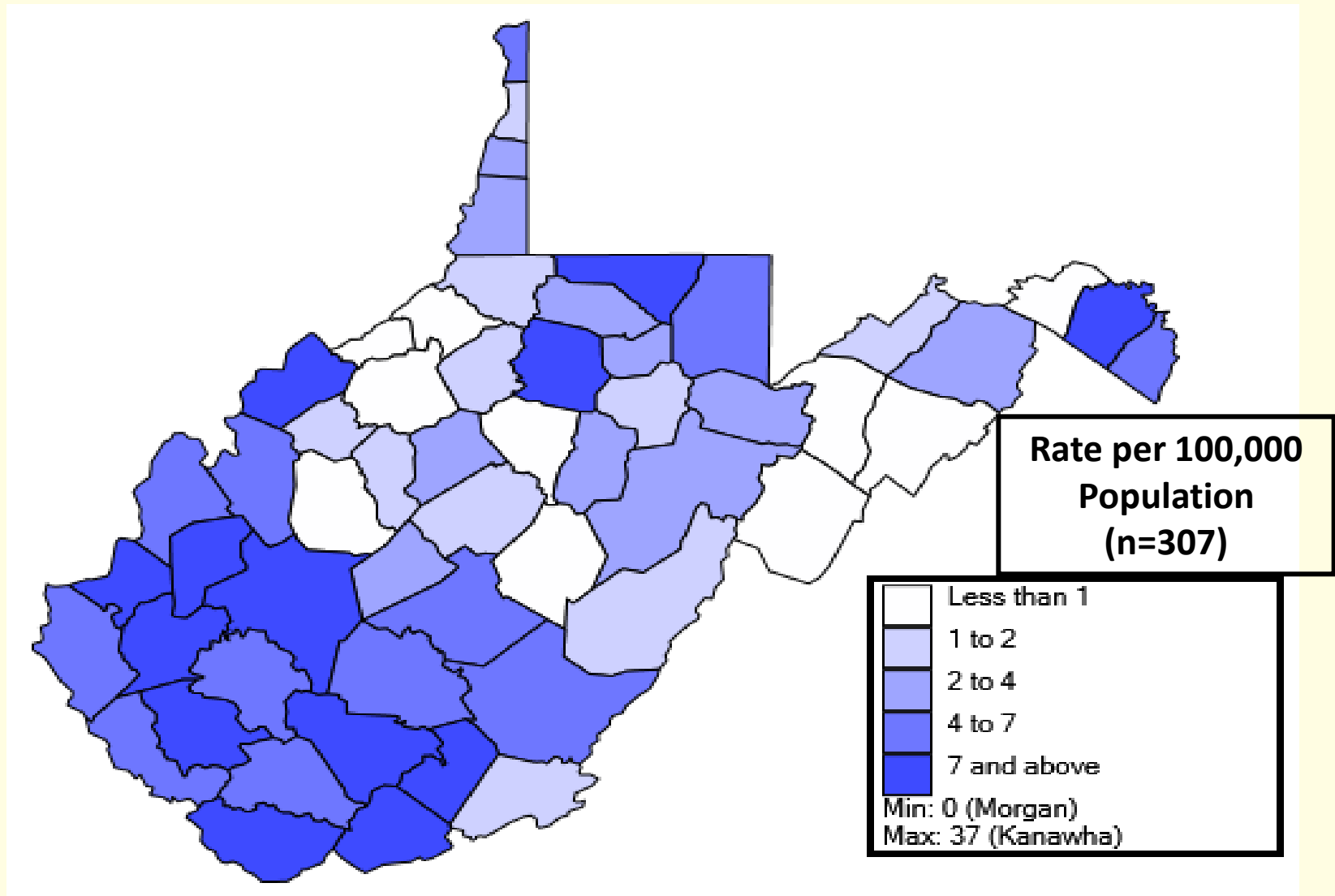


*2015 Acute hepatitis B data is provisional as of 3/31/2016

Acute Hepatitis B by Race and Year of Report – West Virginia 2015 (n=272)



Results - Rate of Chronic Hepatitis B by County of Residence and Year of Report 2015, WV



Increased drug abuse

- Prescription pain killers
- Heroin

Lack of available rehabilitation facilities

Highest numbers of overdose deaths in the U.S.

- 34 deaths/100k people
- *Twice* the national average

Hepatitis B rates rising with increased drug abuse



President of the United States, Barack Obama speaks about opioid addiction in West Virginia

- *Tighter restrictions on accessing prescription opioids led to increased abuse of illegal and more readily available intravenous drugs such as heroin, which pose a great risk for transmission of HBV. – (Harris et al., 2013)*

“The proportion of heroin admissions increased compared to the proportion of prescription opioid admissions.” (Zibell et al., 2015)

Viral Hepatitis Prevention Coordinator

- Education
- Prevention
- Linkage to care

Hepatitis B Pilot Project

- 17 counties
- High risk populations

Syringe Access

- Discourage the reuse of needles with IDU
- Cabell, Kanawha, and Ohio LHDs

Limitations

- Passive reporting of data
- Correctional facilities
- Counties with smaller populations
- Vigilance varies by county
- Failure to Report

Acknowledgements

- **Suzanne Wilson, MPH**
- **Leena Anil, PhD**
- **Clarissa Smallridge**
- **Stephanie McLemore, RN**
- **Maria Del Rosario, MD, MPH**
- **Steve Blankenship, MS**
- **Beau Armstrong**

Contact

Ashley Simmons, MS

Hepatitis B Epidemiologist

WVDHHR/BPH/OEPS/DIDE

350 Capitol Street, Room 125

Charleston, WV 25301

Phone: 304-558-5358 ext 1

Direct: 304-356-4086

Fax: 304-558-8736

Answering Service: 304-925-9946

ashley.n.simmons@wv.gov