

## Percentage of Acute Confirmed Hepatitis B Cases with Complete Information — WV, 2014 By Region

(Percent represents the proportion of cases with a complete (yes or no) answer)

| <u>Indicator</u>   | <b>West Virginia</b> | <b>Southern</b> | <b>Western</b> | <b>Eastern</b> | <b>Northeastern</b> | <b>Northwestern</b> | <b>Central</b> |
|--|----------------------|-----------------|----------------|----------------|---------------------|---------------------|----------------|
| <b>Total Cases</b>   | 186                  | 50              | 35             | 15             | 10                  | 15                  | 61             |
| <b><u>Demographic</u></b>  |                      |                 |                |                |                     |                     |                |
| County   | 100%                 | 100%            | 100%           | 100%           | 100%                | 100%                | 100%           |
| Age  | 100%                 | 100%            | 100%           | 100%           | 100%                | 100%                | 100%           |
| Gender   | 100%                 | 100%            | 100%           | 100%           | 100%                | 100%                | 100%           |
| Ethnicity  | 82%                  | 84%             | 91%            | 80%            | 50%                 | 73%                 | 82%            |
| Race   | 92%                  | 98%             | 94%            | 100%           | 60%                 | 87%                 | 90%            |
|  |                      |                 |                |                |                     |                     |                |
| <b><u>Clinical</u></b>   |                      |                 |                |                |                     |                     |                |
| Symptomatic (yes)  | 100%                 | 100%            | 100%           | 100%           | 100%                | 100%                | 100%           |
| Jaundice   | 100%                 | 100%            | 100%           | 100%           | 100%                | 100%                | 100%           |
|  |                      |                 |                |                |                     |                     |                |
| Was the patient a <b>contact</b> of a person with confirmed or suspected acute or chronic <b>HBV infection</b> ? | 94%                  | 100%            | 86%            | 87%            | 90%                 | 80%                 | 98%            |
| Was the patient <b>EVER treated for STD</b> ?  | 94%                  | 100%            | 86%            | 89%            | 90%                 | 80%                 | 98%            |
| Did the patient <b>inject drugs</b> not prescribed by a doctor?  | 94%                  | 96%             | 86%            | 87%            | 90%                 | 93%                 | 98%            |
| Did the patient <b>use street drugs</b> but not inject?  | 94%                  | 96%             | 86%            | 87%            | 90%                 | 93%                 | 98%            |

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|---|----------------------|-----------------|----------------|----------------|---------------------|---------------------|----------------|
| Did the patient <b>undergo hemodialysis</b> ?   | 94%                  | 100%            | 86%            | 87%            | 90%                 | 80%                 | 98%            |
| Did the patient have an <b>accidental stick or puncture</b> with a needle or other contaminated object? | 94%                  | 100%            | 86%            | 87%            | 90%                 | 80%                 | 98%            |
| Did the patient receive <b>blood or blood products (transfusion)</b> ?                                  | 94%                  | 100%            | 86%            | 87%            | 90%                 | 80%                 | 98%            |
| Did the patient receive any <b>IV infusion and/or injection in the outpatient setting</b> ?             | 94%                  | 100%            | 86%            | 87%            | 90%                 | 80%                 | 98%            |
| Did the patient have other <b>exposure to someone else's blood</b> ?                                    | 94%                  | 100%            | 86%            | 87%            | 90%                 | 80%                 | 98%            |
| Was the patient employed in a <b>medical or dental field</b> involving direct contact with human blood? | 93%                  | 98%             | 86%            | 87%            | 90%                 | 80%                 | 98%            |
| Was the patient employed as a <b>public safety worker</b> having direct contact with human blood?       | 94%                  | 100%            | 86%            | 87%            | 90%                 | 80%                 | 98%            |
| Did the patient receive a <b>tattoo</b> ?   | 94%                  | 100%            | 86%            | 87%            | 90%                 | 80%                 | 98%            |

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|--|----------------------|-----------------|----------------|----------------|---------------------|---------------------|----------------|
| Did the patient have any part of their <b>body pierced</b> (other than ear)?                 | 94%                  | 100%            | 86%            | 87%            | 90%                 | 80%                 | 98%            |
| Did the patient have <b>dental work or oral surgery</b> ?                                    | 94%                  | 100%            | 86%            | 87%            | 90%                 | 80%                 | 98%            |
| Did the patient have <b>surgery</b> ?  | 93%                  | 98%             | 86%            | 87%            | 90%                 | 80%                 | 98%            |
| Was the patient <b>hospitalized</b> ?  | 93%                  | 98%             | 86%            | 87%            | 90%                 | 80%                 | 98%            |
| Was the patient a <b>resident of long-term care facility</b> ?                               | 94%                  | 98%             | 86%            | 87%            | 90%                 | 93%                 | 98%            |
| Was the patient <b>incarcerated for longer than 24 hours</b> ?                               | 94%                  | 98%             | 86%            | 87%            | 90%                 | 87%                 | 98%            |
| During his/her lifetime, was the patient <b>EVER incarcerated for longer than 6 months</b> ? | 92%                  | 98%             | 86%            | 87%            | 80%                 | 80%                 | 98%            |
| Lost to follow up (y/n answer)?  | 99%                  | 100%            | 97%            | 100%           | 100%                | 100%                | 100%           |

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| Education provided?  | 92%                  | 98%             | 86%            | 87%            | 90%                 | 100%                | 98%            |
| <b>Percentage of Acute Hepatitis B who are lost to follow up</b> |                      |                 |                |                |                     |                     |                |
| <b>Lost to follow up...? (answered yes)</b>                      | 17%<br>32/186        | 10%<br>5/50     | 37%<br>13/35   | 33%<br>5/15    | 0%<br>0/10          | 27%<br>4/15         | 8%<br>5/61     |

### Strengths

- Implementation of documentation of education provided to patient within case investigation.
- Proportion of cases and reported risk factors corresponds to regions of WV that report higher levels of IVDU.

### Limitations

- West Virginia has transitioned from eight regions to six regions, therefore reassigning new counties to Regional Epidemiologists.
- Many patients can be difficult to locate due to changing contact information.
- Several patients do not trust interviewer to provide information such as illegal activity to Local Health Department.

### Recommendations

- A differentiation between incomplete responses, unknown, and those responses where the local health department is unable to communicate with the patient.
- More extensive documentation when a patient is lost to follow up and why.
- State resources available to assist Regions with case investigations include: Vital Statistics, Disease Investigation Specialists, Hepatitis B Epidemiologist, Perinatal Hepatitis B Program, and Local Hospital Electronic Medical Records Systems access.