

**VIRGINIA DEPARTMENT OF HEALTH**  
***Division of Immunization***  
***Perinatal Hepatitis B Prevention (VPHBP) Program***

***HOSPITAL POLICY SURVEY***  
***August 2014***

A statewide hospital survey to assess current hospital policies and procedures regarding prevention of perinatal hepatitis B virus transmission from mother to baby was mailed on July 28, 2014 to the **58** birthing hospitals in Virginia. A follow up letter and survey was mailed on September 22, 2014 to those hospitals not responding to the original survey. Forty-eight responses were received. Of these, one hospital reported it was no longer a delivery hospital. Therefore, the current number of birthing hospitals in Virginia is 57 (includes 2 military hospitals). Ten hospitals did not respond to the survey. The return rate is 82.4%.

There were 80,020 reported births in calendar year 2013 from the 47 hospitals that responded to the survey. Reported births to hepatitis B surface antigen (HBsAg)-positive mothers in calendar year 2013 was only 228 from all birthing hospitals. The Centers for Disease Control and Prevention (CDC) project that Virginia should be identifying between 588 and 825 infants born to HBsAg- positive mothers each year. It is apparent that births to HBsAg-positive mothers are under-reported.

The Advisory Committee on Immunization Practices (ACIP) recommends that delivery hospitals implement policies and procedures along with standing orders to improve identification and medical management of infants born to HBsAg-positive mothers and mothers with unknown status. Also, the ACIP recommends that standing orders be in place for vaccination with hepatitis B vaccine of all infants prior to hospital discharge.

The following tables summarize the responses to the survey questions:

**Does your hospital laboratory perform HBsAg testing?**

| <b>Response</b>           | <b>Number</b> | <b>Percent</b> |
|---------------------------|---------------|----------------|
| Yes                       | 39            | 82.9           |
| No                        | 1             | 2.1            |
| Labs sent out for testing | 7             | 14.8           |

For pregnant women who do not have an HBsAg lab report in their prenatal record, testing for HBsAg should be done as soon as possible and the lab instructed to call labor and delivery and the newborn nursery as soon as possible with the newly obtained HBsAg test result. Laboratories should report positive HBsAg test results to the local health department.

### **Admission to Labor and Delivery (L & D)**

- 1) Does your hospital have a written policy or standing orders to review prenatal HBsAg test results for all pregnant women when admitted to L & D?**

| <b>Policy or Standing Orders</b> | <b>Number</b> | <b>Percent</b> | <b>Comment</b>                             |
|----------------------------------|---------------|----------------|--------------------------------------------|
| Written Policy (Only)            | 8             | 17.0           |                                            |
| Standing Orders (Only)           | 9             | 19.5           |                                            |
| Both Written Policy & S.O.       | 18            | 38.2           |                                            |
| Unwritten Policy                 | 8             | 17.3           |                                            |
| Not Specified                    | 1             | 2.1            | Didn't specify if policy or standing order |
| Standard of Practice             | 1             | 2.1            | No policy but standard of practice         |
| No                               | 2             | 4.3            |                                            |

A copy of the original laboratory HBsAg test result for all pregnant women should be transferred from the prenatal care provider to the delivery hospital. HBsAg-positive women should be aware of their test result and advised to notify delivery staff of the positive result.

- 2) Does your hospital have a written policy or standing orders for HBsAg testing as soon as possible after admission to L & D on women with no documented HBsAg test result?**

| <b>Policy or Standing Orders</b> | <b>Number</b> | <b>Percent</b> | <b>Comment</b>                             |
|----------------------------------|---------------|----------------|--------------------------------------------|
| Written Policy (Only)            | 8             | 17.0           |                                            |
| Standing Orders (Only)           | 13            | 28.2           |                                            |
| Both Written Policy & S.O.       | 13            | 28.2           |                                            |
| Unwritten Policy                 | 5             | 10.8           |                                            |
| Not Specified                    | 3             | 6.5            | Didn't specify if policy or standing order |
| Don't Know                       | 1             | 2.1            |                                            |
| No                               | 4             | 8.6            |                                            |

The prevalence of HBsAg is higher in pregnant women with no prenatal care than in pregnant women who receive prenatal care. According to the Centers for Disease Control and Prevention (CDC), approximately 4% of pregnant women in Virginia receive late or no prenatal care.

**3) Does your hospital have a written policy for repeat testing of pregnant HBsAg-negative women who are at high-risk for HBV infection during pregnancy?**

| Policy or Standing Orders | Number | Percent | Comment |
|---------------------------|--------|---------|---------|
| Written Policy (Only)     | 10     | 21.7    |         |
| Standing Orders (Only)    | 1      | 2.1     |         |
| Don't Know                | 6      | 12.7    |         |
| No                        | 28     | 58.6    |         |
| Not answered              | 2      | 4.3     |         |

High-risk factors are >1 sex partner in past six months, evaluation or treatment for an STD, recent or current history of injection drug use, partner is HBsAg-positive. Women who had clinical hepatitis since previous testing should also have repeat testing.

**4) Does your hospital have a written policy for documentation of maternal HBsAg test results in the infant medical record?**

| Policy or Standing Orders | Number | Percent | Comment |
|---------------------------|--------|---------|---------|
| Written Policy (Only)     | 34     | 72.3    |         |
| Standard of Practice      | 1      | 2.1     |         |
| No                        | 12     | 25.5    |         |

Documentation of maternal HBsAg test results in the infant's record ensures identification of infants born to HBsAg-positive mothers and infant's receipt of appropriate post-exposure prophylaxis.

### **Management of Infants Born to HBsAg-Positive Mothers**

**1) Does your hospital have a written policy or standing orders to administer hepatitis B immune globulin (HBIG) within 12 hours of birth to all infants born to HBsAg-positive mothers?**

| Policy or Standing Orders  | Number | Percent | Comment                                    |
|----------------------------|--------|---------|--------------------------------------------|
| Written Policy (Only)      | 10     | 21.2    |                                            |
| Standing Orders (Only)     | 10     | 21.2    |                                            |
| Both Written Policy & S.O. | 19     | 40.4    |                                            |
| Unwritten Policy           | 3      | 6.3     |                                            |
| Not Specified              | 4      | 8.5     |                                            |
| No                         | 1      | 2.1     | Didn't specify if policy or standing order |

Infants born to mothers who are HBsAg-positive should be given HBIG within 12 hours of birth. Date and time of birth and date and time of administration of HBIG should be documented.

**2) Does your hospital have a written policy or standing orders to administer hepatitis B vaccine within 12 hours of birth to all infants born to HBsAg-positive mothers?**

| Policy or Standing Orders  | Number | Percent | Comment                                    |
|----------------------------|--------|---------|--------------------------------------------|
| Written Policy (Only)      | 11     | 23.4    |                                            |
| Standing Orders (Only)     | 9      | 19.1    |                                            |
| Both Written Policy & S.O. | 19     | 40.4    |                                            |
| Unwritten Policy           | 3      | 6.3     |                                            |
| Not Specified              | 4      | 8.5     | Didn't specify if policy or standing order |
| No                         | 1      | 2.1     |                                            |

Infants born to mothers who are HBsAg-positive should be given hepatitis B vaccine within 12 hours of birth. Date and time of birth and date and time of administration of hepatitis B vaccine should be documented.

**3) Does your hospital have a written policy or standing orders to administer hepatitis B vaccine within 12 hours of birth to all infants born to mothers with unknown HBsAg status?**

| Policy or Standing Orders  | Number | Percent | Comment                                    |
|----------------------------|--------|---------|--------------------------------------------|
| Written Policy (Only)      | 12     | 25.5    |                                            |
| Standing Orders (Only)     | 11     | 23.4    |                                            |
| Both Written Policy & S.O. | 16     | 34.0    |                                            |
| Unwritten Policy           | 3      | 6.3     |                                            |
| Not Specified              | 2      | 4.2     | Didn't specify if policy or standing order |
| No                         | 2      | 4.2     |                                            |
| Not answered               | 1      | 2.1     |                                            |

Infants born to mothers whose HBsAg status is unknown should be given hepatitis B vaccine (without HBIG) within 12 hours of birth. If the mother is determined to be HBsAg-positive, infant should be given HBIG as soon as possible but no later than age 7 days. Date and time of birth and date and time of administration of hepatitis B vaccine/HBIG should be documented.

## **Universal Birth Dose Administration of Hepatitis B Vaccine**

- 1) Does your hospital have a written policy or standing orders to routinely administer hepatitis B vaccine to all infants prior to hospital discharge?**

| <b>Policy or Standing Orders</b> | <b>Number</b> | <b>Percent</b> | <b>Comment</b>                             |
|----------------------------------|---------------|----------------|--------------------------------------------|
| Written Policy (Only)            | 11            | 23.4           |                                            |
| Standing Orders (Only)           | 15            | 31.9           |                                            |
| Both Written Policy & S.O.       | 18            | 38.2           |                                            |
| Unwritten Policy                 | 1             | 2.1            |                                            |
| Not Specified                    | 1             | 2.1            | Didn't specify if policy or standing order |
| No                               | 1             | 2.1            |                                            |

The 2013 (children born between Jan 2010 and May 2012) NIS birth dose (administered between birth and 3 days) rate for Virginia is 72.3%. The National birth dose rate is 74.2. Only one hospital indicated that there was no written policy or standing order; however, seven hospitals indicated that even with a policy or standing order, parents could refuse the birth dose vaccine. Only in rare instances should the first dose of hepatitis B vaccine be delayed until after hospital discharge for those babies born to HBsAg-negative mothers. If the birth dose is delayed until after hospital discharge, both a physician's order to withhold the birth dose and a copy of the mother's HBsAg-negative test result should be documented in the infant's medical record.

- 2) Does your hospital measure hepatitis B birth dose coverage?**

| <b>Response</b> | <b>Number</b> | <b>Percent</b> |
|-----------------|---------------|----------------|
| Yes             | 15            | 31.9           |
| No              | 18            | 38.2           |
| Don't Know      | 13            | 27.6           |
| Not Answered    | 1             | 2.1            |

Hepatitis B birth dose coverage rate has been adopted as a measure of hospital quality by the National Quality Forum (NQF).

- 3) If yes, does your hospital use the National Quality Forum birth dose measure?**

| <b>Response</b> | <b>Number</b> | <b>Percent</b> |
|-----------------|---------------|----------------|
| Yes             | 6             | 40.0           |
| No              | 5             | 33.3           |
| Don't Know      | 4             | 26.6           |

NQF Measure #0475 recommends that hospitals measure and report the "the percent of live newborn infants that receive hepatitis B vaccination before discharge at each single hospital/birthing facility during given time period (one year)," excluding infants whose parents refuse vaccination. By adopting this measure, hospitals will be taking an important step in ensuring that no baby born to an unidentified HBsAg-positive mother slips through the crack and becomes infected.

The Centers for Medicaid and Medicare Services (CMS) has programmed for electronic medical records the calculation of birth dose coverage according to measure specifications.

**4) Are you aware of the Immunization Action Coalition's (IAC) birth dose initiative/honor roll?**

| Response | Number | Percent |
|----------|--------|---------|
| Yes      | 17     | 36.1    |
| No       | 30     | 63.8    |

**"Give birth to the end of Hepatitis B"** is a new initiative of the Immunization Action Coalition with the goal being to eliminate hepatitis B virus infection in the United States through the prevention of perinatal transmission of the hepatitis B virus. A guidebook was developed by the IAC to help hospitals establish policies and standing orders in labor and delivery and newborn units. For information: [www.immunize.org/protect-newborns](http://www.immunize.org/protect-newborns).

The birth dose honor roll initiative recognizes hospitals and birthing centers that have attained a 90% or greater birth dose coverage rate. Two Virginia hospitals (**Riverside Regional Medical Center** in Newport News and **Riverside Shore Memorial Hospital** in Nassawadox) have achieved honor roll status. For information: [www.immunize.org/honor-roll/birthdose](http://www.immunize.org/honor-roll/birthdose).

## **Miscellaneous**

### **Virginia Perinatal Hepatitis Prevention (VPHBP) Program**

**1) Does your hospital report to the VPHBP Program all babies born to HBsAg-positive mothers?**

| Response   | Number | Percent |
|------------|--------|---------|
| Yes        | 41     | 87.2    |
| No         | 1      | 2.1     |
| Don't Know | 5      | 10.6    |

Reporting is not as it should be in Virginia. The Centers for Disease Control and Prevention projects that Virginia should be identifying between 588 and 825 infants born to HBsAg-positive mothers each year. However, in calendar year 2013, only 228 infants were reported from all Virginia hospitals. This is only 38.7% of the lower limit. The majority of these reports were a result of the VPHBP Program requesting information on the birth of the infant. **All infants born to HBsAg-positive mothers should be reported to the VPHBP Program.** The Program is not aware of pregnant women with no prenatal care or those with unknown status. In addition, many HBsAg-positive pregnant women who are receiving prenatal care are not reported to the VPHBP Program. For information: <http://www.vdh.virginia.gov/epidemiology/immunization/vphbp.htm>.

## **Virginia Vaccines for Children (VVFC) Program**

### **2) Is your hospital currently enrolled in the VVFC Program?**

| <b>Response</b> | <b>Number</b> | <b>Percent</b> |
|-----------------|---------------|----------------|
| Yes             | 23            | 48.9           |
| No              | 12            | 25.5           |
| Don't Know      | 12            | 25.5           |

All hospitals are encouraged to enroll in the Virginia Vaccines for Children (VVFC) Program to receive hepatitis B vaccine at no cost for all VFC-eligible children. To be eligible, children must be 18 years of age or younger and meet at least one of the following criteria: on Medicaid or Medicaid-eligible; American Indian or Alaska Native; Uninsured; Underinsured (have insurance but it does not cover the cost of vaccine) and services are received at a federally-qualified health center or rural health clinic. For information:

<http://www.vdh.virginia.gov/epidemiology/immunization/VFC/index.htm>.