The Number of Infants with Hepatitis B virus (HBV) added Each Day in India

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Hepatitis B virus (HBV) is one of the major global public health problems. HBV infection is the 10th leading cause of death. (1) In India, HBsAg prevalence, (an indicator of chronic HBV infection) among general population ranges from 2% to 8%. (2) HBV vaccination has been integrated in the Universal Immunization Program (UIP) for the last 10 years. All newborns are expected to receive HBV vaccination at 0 day and subsequently at 6, 10, and 14 weeks. Majority of women do not know they are HBV infected. Often they do not have any symptoms. When a pregnant woman has hepatitis B, it can spread to her baby at birth. This can happen during a vaginal delivery or a c-section. Babies and young children can also get hepatitis B from close contact with family members or others who might be infected. When babies become infected with hepatitis B, they have about a 90% chance of developing a lifelong, chronic infection.

We would like to communicate with readers of Indian Pediatrics the scientific evidence on number of HBV infants cases which may be presently being added per day in India.

We utilized the following methodology. First we calculated the total number of births occurring in India per day. From this data, we calculated the number of children born per day whose mothers may have HBV infection. Subsequently, we calculated, the number of new borns who are ‘at risk’ of HBV infection from their mothers due to Mother to Child Transmission (MTCT) process per day. Finally we calculated the total number of infants who may acquire HBV infection per day.

For prevention of HBV infection in Infants, it is vital that we undertake screening of all HBsAg-positive pregnant women and give them antiviral therapy. Also, there should be provision of immunoprophylaxis for infants born to infected mothers and hepatitis B immune globulin within 12 hours of birth.

References


### Tables

**Table 1: Total Number of Infants Who Are Acquiring HBV Infection Per Day**

<table>
<thead>
<tr>
<th>Numbers</th>
<th>Comments</th>
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<tbody>
<tr>
<td><strong>Total Births per day in India (3)</strong></td>
<td>76610</td>
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<tr>
<td><strong>Out of above, the number of children born per day whose mothers have HBV infection per day (4)</strong></td>
<td>3064 (=76610×0.04)</td>
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<td><strong>Number of new born who are ‘at risk’ of HBV infection from their mothers (MTCT) per day (5)</strong></td>
<td>1226 (=3064.4×0.40)</td>
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<td><strong>Total number of infants who will acquire HBV infection per day</strong></td>
<td>49 (=1225.6×0.04)</td>
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