

New Jersey Perinatal Hepatitis B Transmission:

Opportunities for prevention & Increasing Birth Dose Rates

**Ruth P. Brogden, MPH
Grants Manager, Center for Asian Health
HepB United Summit
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**Saint Barnabas
Medical Center** | **RWJBarnabas
HEALTH**

Disclosure Statement

- I have nothing to disclose relevant to this presentation.



Elimination of Perinatal Hepatitis B: Providing the First Vaccine Dose Within 24 Hours of Birth

COMMITTEE ON INFECTIOUS DISEASES, COMMITTEE ON FETUS AND NEWBORN

The AAP statement recommends that all medically stable newborns with a minimum birth weight of 2000 grams (about 4 lbs., 6 oz.) receive the vaccine within 24 hours of birth. This AAP statement follows the practice now recommended by the Advisory Committee on Immunization Practices (ACIP), part of the Centers for Disease Control and Prevention.

The previous policy statement included an option to delay the first dose of Hepatitis B vaccine until the first newborn pediatric checkup. In the updated statement, the AAP recommends the first dose be given within the first 24 hours because this timing maximizes the effectiveness of the vaccine in preventing newborn infection.

Gaps in HBV vaccine administration

- **1000 infants/year infected in US**
- **Failure of healthcare system**
 - **Mother not screened during pregnancy**
 - **Mother not identified as HBV+ at delivery**
 - Labs unavailable (pt. delivers early, transcription error, pt. delivers at different hospital)
 - **Infants don't receive proper vaccination**
 - **Infant doesn't receive post-vaccination serology test**

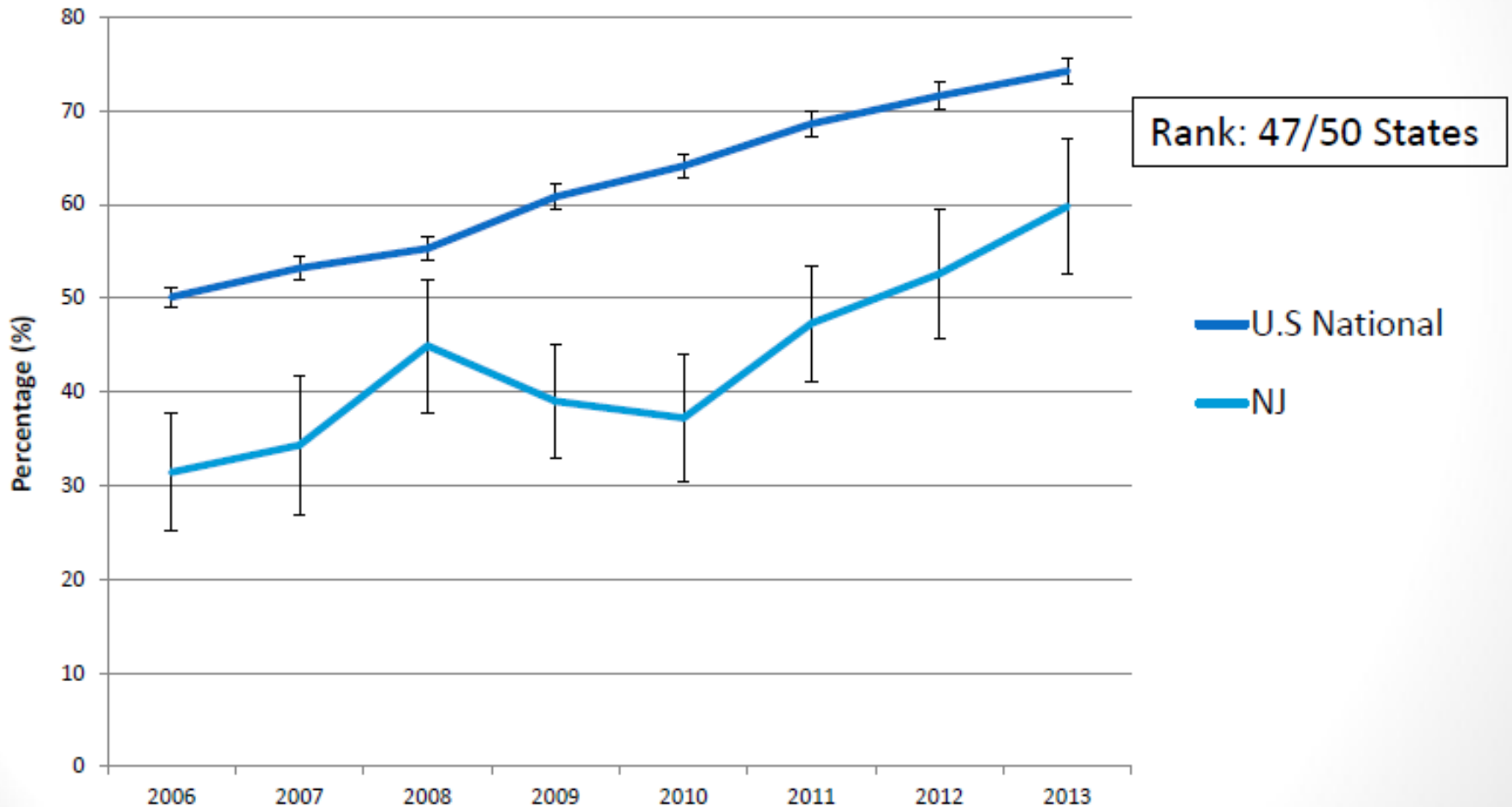
Why should we give hepatitis B vaccine to all newborns?

- **>24,000 infants/yr** are born to HBV+ mothers and not all of their infants receive post-exposure prophylaxis
- **Prevents mother-to-infant transmission:** Prevents 70-95% of infection among infants of HBsAg + women
- **Prevents horizontal transmission:** From infected family members (not just mothers), caregivers (babysitters, grandparents, au pairs) visitors from other countries, other children (bites, open wounds)
- **Prevents iatrogenic transmission:** Transfusion, needle stick, healthcare related infection (HBV more infectious than HIV)
- **Protects when medical errors occur:** Provides a safety net to prevent perinatal HBV infection when medical errors occur

New Jersey Birth Dose Coverage

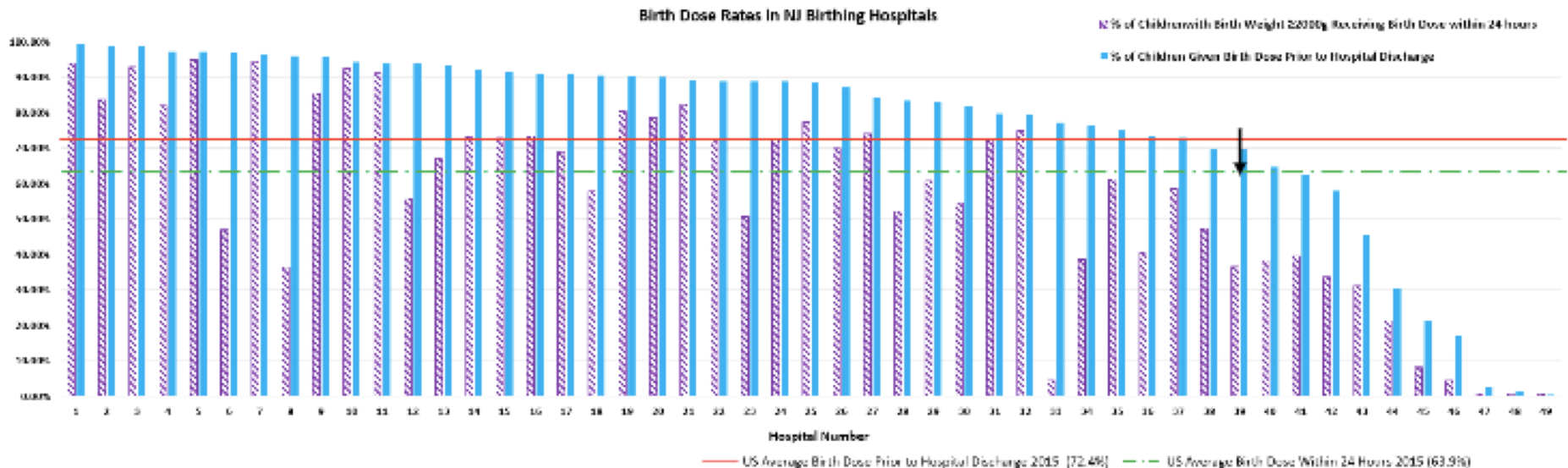
Data Source: National Immunization Survey, CDC

Estimated Vaccination Coverage with Hepatitis B Birth Dose Among Children 19-35 Months of Age



- In 2017 NJ Department of Health sent letters to the CEOs of every birthing hospital
 - Included the hospital's HBV birth dose rates-within 24 hours and before discharge
 - Compared anonymously to other NJ hospitals
 - Informed hospital that this data would become public in 2 years

*Information as reported to the Vital Information Platform (VIP)



**Developed project in conjunction with
NJ Academy of Pediatrics & funded by NJ Dept of Health**

- **Multi-prong intervention**

- Develop Perinatal HBV Webinar providers
- Grand Rounds at pilot area location providers
- Patient education sheets patients
- Signage patients
providers

Pilot program (evaluate, launch at other locations)

Provider Education

Perinatal HBV Webinar

- Interviewed Saint Barnabas Med Ctr Staff
- Rutgers University Web design team
- Hosted on Rutgers University website
- Dissemination
 - **Saint Barnabas & Monmouth Medical Center Grand Rounds**
 - Postcard mailing
 - NJHepB Coalition
 - New Jersey Hospital Association
 - NJ American Academy of Pediatrics quarterly newsletter
 - New Jersey Immunization Network
 - MCH Consortia

Provider Education

Dear Health Care Provider,

Every year, almost 1000 infants in the US are infected with **Hepatitis B virus (HBV)**, yet our national goal is to completely eliminate perinatal HBV transmission.

A birth dose of the Hepatitis B vaccine for all infants is critical to achieving this, and AAP and ACIP recently changed the timeframe to be within 24 hours of birth.

However, **New Jersey ranks low nationally (48th out of 51) in HBV birth dose administration** - a great concern given the ethnic diversity of our state.

You are an integral part to increasing NJ's HepB birth dose rate and eliminating perinatal HepB transmission!

Yet many pediatricians delay the birth dose, putting the infant at risk of chronic lifelong HBV infection and liver cancer- is it worth it?

Please join and widely distribute this online webinar that features:

- What is Hep B and why is it an issue in New Jersey?
- What are the issues with perinatal transmission? Besides the mother, how else can an infant acquire HBV?
- How are pregnant women with HBV identified and what prenatal care is recommended?
- Best practices at delivery centers to achieve universal HBV birth dose administration
- Importance of HBV testing in infants born to HBV positive mothers

Please visit

<http://bit.ly/perinatalhepB>

CME and CNE credits are available.

This program has been made available by:



RUTGERS

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN®
New Jersey Chapter



Saint Barnabas Medical Center

Center for Asian Health
華人醫療服務中心

RWJ Barnabas HEALTH

<http://bit.ly/perinatalhepB>

Mailed statewide

Pediatricians

OB/GYNs

Family Practitioners

Course went live

September 15th

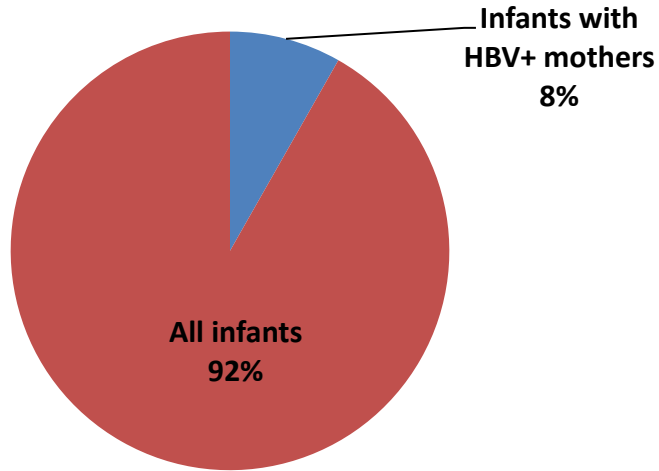
187 completed

Webinar participants

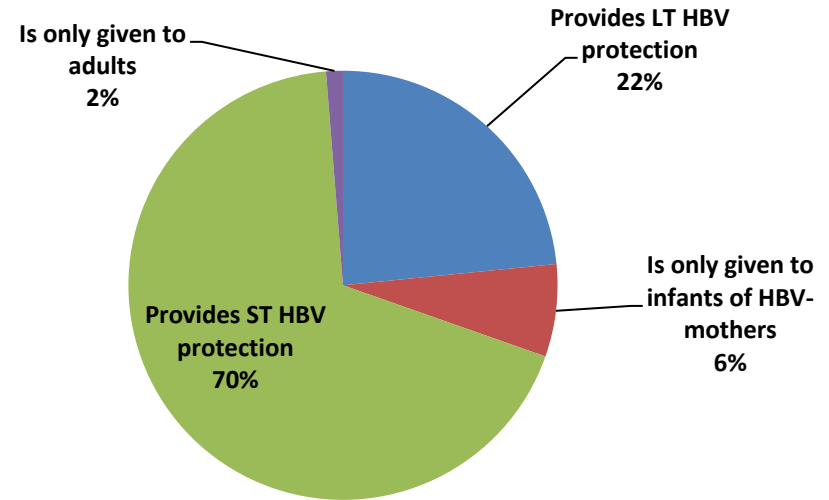
- Family Practice
- Pediatric Practice
- Obstetric Practice
- Labor & Delivery Centers
- Mother/Baby & Pediatric Nurses
- Settings (hospitals, local & state health departments, public schools, physician offices)

Baseline questionnaire

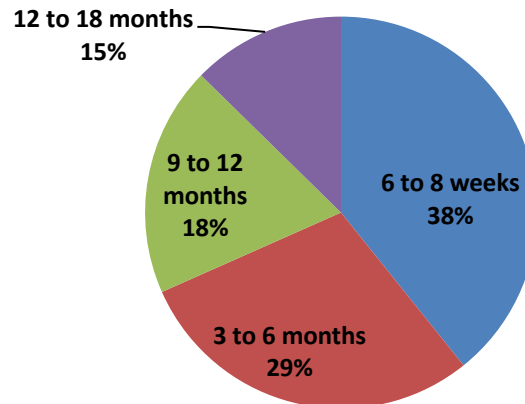
Hepatitis B birth dose
(given within 24 hrs.) should be
administered to



Hepatitis B Immunoglobulin

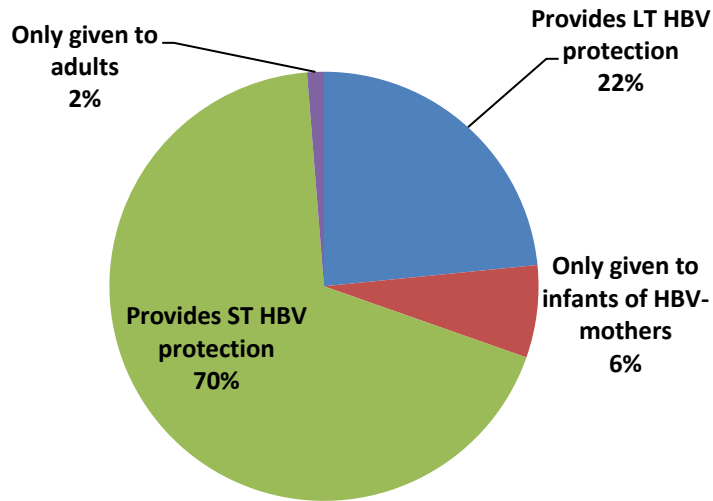


Infants of HBV+ mothers should be
screened after birth at



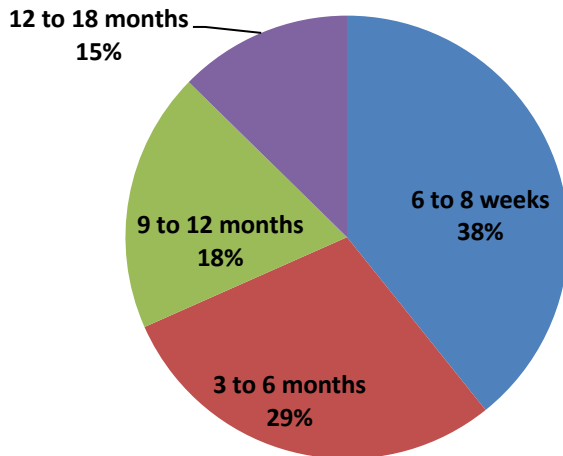
Post Webinar

HBIG



85% responded correctly
HBIG provides ST
HBV protection

Infants of HBV+ mothers screened



67% responded correctly
Infants of HBV+ mothers
screened for HBsAg and
anti-HBs

HBV Perinatal Web Learning:

Let's increase NJ's birth dose rate!

Secure | https://trainingcourses.rutgers.edu/online/hepb/story_html5.html

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Preventing Perinatal Hepatitis B Transmission

Menu

Glossary | Resources



**Saint Barnabas
Medical Center**

Center for Asian Health
華人醫療服務中心

**RWJBarnabas
HEALTH**

Let's End Hepatitis B - Preventing Perinatal Hepatitis B Transmission

This online course is brought to you by the New Jersey Immunization Network, the New Jersey Chapter of the American Academy of Pediatrics, and the Center for Asian Health at Saint Barnabas Medical Center.

Administering the hepatitis B vaccination birth dose is the most important step in preventing perinatal transmission of this dangerous infectious disease that affects millions of people around the world. Unfortunately, New Jersey has the fourth-lowest birth dose vaccination rate in the United States, putting infants in our state at risk of developing chronic hepatitis B.

In this course, you'll learn to more effectively prevent perinatal transmission of hepatitis B through improved screening and administration of the hepatitis B birth dose. As a healthcare provider, you have the power to improve New Jersey's vaccination rate and help eradicate hepatitis B!

To access an [accessible, text-only version of this course, click here.](#)

Click "**Next**" to continue.



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Section 1: The Basics of Hepatitis B



Quiz: Infants and CHB

Development of Hepatitis B in Infants

In the United States, around 1,000 infants per year are infected with hepatitis B as a result of vertical transmission (mother-to-child) in the hours and days after birth.

Worldwide, up to 50% of all hepatitis B transmission results from perinatal transmission from mother to child.

Since 90% of infants who are infected with HBV develop a chronic infection, perinatal transmission poses a greater health risk than other routes of transmission. In addition to HBV posing an immediate risk to the health of the infant, these chronic infections significantly impact the long-term health outcomes of infected individuals.

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Interactive Web Module

<http://bit.ly/PerinatalHepB>



Assumption: If my patient has hepatitis B, she'll know it, have symptoms, or her infection will be evident to me during a physical examination.

Reality: Most people with chronic hepatitis B infections are asymptomatic – the patient won't report any problems, and you won't notice anything during a routine physical examination.

The **only** way to assess a pregnant woman's hepatitis B status is to test for HBsAg in the woman's blood – this test should be run for **every** pregnancy, during the first trimester of the pregnancy or as soon as possible thereafter.

Continue



Hepatitis B is more common among members of certain demographic groups in the United States.

What's the prevalence of chronic HBV infection in the Asian population?

1 in 7

1 in 12

1 in 50

1 in 75

Submit

Interactive Web Module

<http://bit.ly/PerinatalHepB>



You conduct the hepatitis B surface antigen (HBsAg) screening in the first trimester of the pregnancy, or as soon thereafter as possible.

The lab results tell you that...

The mother is negative for HBsAg

The mother is positive for HBsAg

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Dr. Jay Lovenheim Owner, Lovenheim Pediatrics

[Patient Education](#)



Dr. Richard Miller Chairman of Obstetrics and Gynecology
Saint Barnabas Medical Center

[Importance of Universal Screening](#)



Dr. Su Wang Medical Director, Center for Asian Health
Saint Barnabas Medical Center

[History of Hepatitis B](#)

<https://www.youtube.com/watch?v=7tWyDMWQPhY>



Kaitlin Hulbert, BSN, RN

Maternal Newborn Certified Nurse
Saint Barnabas Medical Center

Target audience:
OB, L/D staff,
Postpartum team,
Peds

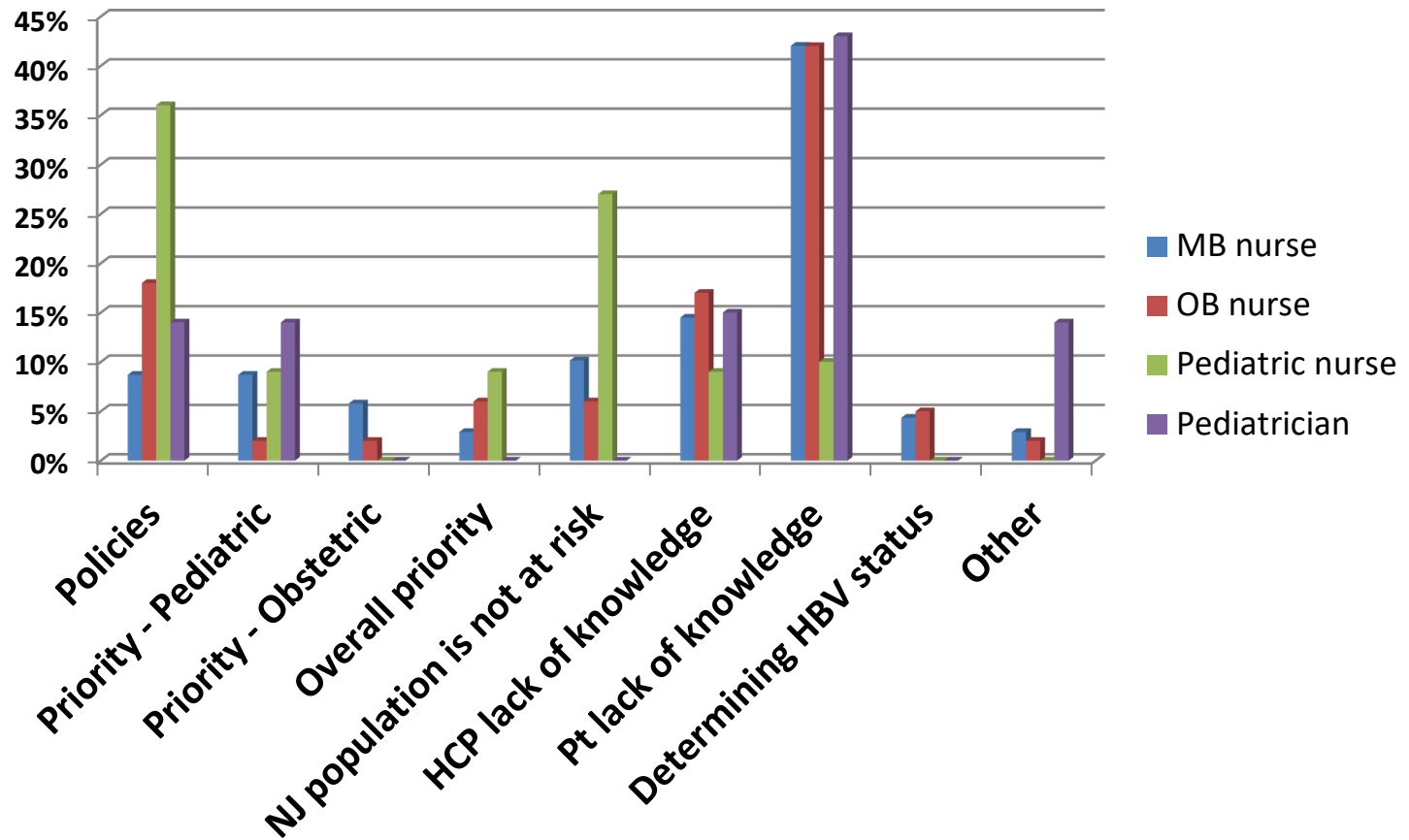
<http://bit.ly/PerinatalHepB>



Kim Rosales, MSN

Mother-Baby Unit Nurse Manager
Saint Barnabas Medical Center

NJ low birth dose rate - factors



Worked with CDC to develop education for HBV and Vaccine for New Parents

(OB offices, L/D & Postpartum Units)

VACCINATE YOUR BABY AGAINST HEPATITIS B

IT COULD SAVE YOUR BABY'S LIFE.

WHAT IS HEPATITIS B?

HEPATITIS B is a serious liver disease caused by the HEPATITIS B VIRUS.

HEPATITIS B OFTEN DOESN'T CAUSE SYMPTOMS. Many people can live with hepatitis B for years without feeling sick.

1 IN 4 people living with hepatitis B can develop serious liver problems, INCLUDING LIVER CANCER.

DID YOU KNOW?

All pregnant women are routinely tested for hepatitis B.

People who find out they have hepatitis B can take steps to keep their baby and family protected.

The HEPATITIS B VACCINE is the 1st cancer prevention vaccine.

HOW IS HEPATITIS B SPREAD?

Hepatitis B is spread through contact with blood. An infected family member or caregiver can pass the virus to an infant.

A pregnant woman who has hepatitis B can pass the virus to her infant at birth, but the vaccine can help prevent the baby from getting infected.

Most people living with hepatitis B got infected as infants or young children when their immune systems were not fully developed.

WHY SHOULD MY BABY BE VACCINATED AGAINST HEPATITIS B?

- The hepatitis B vaccine can prevent a baby from getting infected. CDC recommends all babies get the first hepatitis B vaccine shot at birth and follow the vaccine schedule to get the remaining shots.
- The hepatitis B vaccine is safe and effective.
- Delaying the first dose of the hepatitis B vaccine can put your baby at risk for hepatitis B.
- The hepatitis B vaccine has helped prevent millions of infants from getting hepatitis B, which can be a deadly disease.

Patient Education

- Dissemination
 - Targeted RWJBarnabas birthing facilities
 - Include HBV education flyers in pre-birth packets
 - Signage in L/D, waiting rooms, postpartum
 - Collaborate with MCH Consortia
 - Other interventions to complement

Publicity

Spring 2018

Wash Your Hands

Get more information at <http://nj.gov/health/cd/ha/ndwashing.shtm>.

The NJDOH Communicable Disease Service includes:

- Notifiable and Zoonotic Disease Programs (NDP): 888-326-5864
- Regional Epidemiology Programs (REP): 888-423-5864
- Vaccine Preventable Disease Programs (VPP): 888-423-4508

We're on the Web! www.nj.gov/health/cd

Past issues of the New Jersey Communi-CABLE are available online at: <http://www.nj.gov/health/cd/cable/>

NJ Health

NJ Communi-CABLE Page 2

Free Perinatal Hepatitis B Educational Opportunities

The New Jersey Immunization Network, in partnership with the New Jersey Department of Health, Saint Barnabas Medical Center, the New Jersey Hepatitis B Coalition, Rutgers University, and the New Jersey Chapter of the American Academy of Pediatrics encourages health care providers to view a new, on-demand educational module on administration of the birth dose of hepatitis B vaccine. Topics featured in this free module include:

- What is hepatitis B and why is it an issue in New Jersey?
- What are the issues with perinatal transmission?
- Can an infant acquire hepatitis B virus (HBV) even if the mother is not infected?
- How are pregnant women with HBV identified and what prenatal care is recommended?
- What are the best practices at delivery centers to achieve universal HBV birth dose administration?
- How important is HBV testing in infants born to HBV positive mothers?

Health care providers can access the webinar at <http://bit.ly/perinatalhepb>.

VACCINATE YOUR BABY AGAINST HEPATITIS B IT COULD SAVE YOUR BABY'S LIFE.

WHO IS HEPATITIS B?

- HEPATITIS B IS A CONTAGIOUS BLOOD-BORNE VIRUS THAT CAN BE TRANSMITTED FROM ONE PERSON TO ANOTHER.
- HEPATITIS B IS A SERIOUS DISEASE THAT CAN CAUSE LIVER DAMAGE AND CAN BE LIFE-THREATENING.
- HEPATITIS B CAN BE TRANSMITTED THROUGH BLOOD AND BLOOD PRODUCTS, SHARPS, AND SEXUAL CONTACT.
- HEPATITIS B CAN BE TRANSMITTED FROM A PREGNANT WOMAN TO HER INFANT AT BIRTH.

HOW IS HEPATITIS B SPREAD?

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The New Jersey Hepatitis B Coalition also developed patient educational materials to raise awareness about perinatal hepatitis B among pregnant women. For electronic copies of the document above, please contact Ruth Brogden at ruth.brogden@rwjbmc.org.

New Jersey Pediatrics

Winter 2017

American Academy of Pediatrics
MEMBER OF THE SOCIETY OF ALL CHILDREN
New Jersey Chapter

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HOW IS HEPATITIS B SPREAD?

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Access the webinar here: <http://bit.ly/perinatalhepb>

This educational opportunity has been made possible through a grant from the NJ Department of Health

CDC **American Academy of Pediatrics** **HEPATITIS B** **Saint Barnabas Medical Center** **RUTGERS** **NJIN** **NJ Health** **HEP B U**

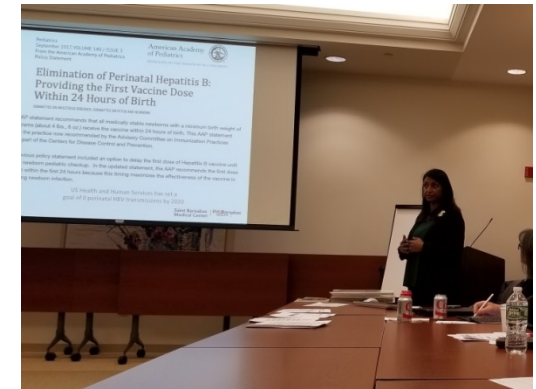
Next Steps

- Evaluate
 - Pre/Post BD rates

Hospital	2016	2017	2018 (thru April)
A	69.5%	73.5%	86.0%
B	21.4%	37.1%	63.0%

- Facilities – what specific interventions worked?
- Train the Trainer for Grand Rounds
- Patient Materials
- Statewide launch

Thank you!



Let's give #NOHep to
the next generation!

