

# Overview of Hepatitis B Vaccination Pilot Project in New York City

National Adult Immunization Coordinators Partnership  
July 10, 2018

Edward Wake  
New York City Department of Health and Mental Hygiene  
Bureau of Immunization

# Outline

- ❑ Pilot Project Objective
- ❑ New York City (NYC) Demographics
- ❑ Interventions
- ❑ Results
- ❑ Challenges
- ❑ Lessons Learned
- ❑ Next Steps

# Pilot Project Objective

- Work with stakeholders in the NYC Department of Health and Mental Hygiene (DOHMH) and outside organizations to provide education and vaccinate at-risk populations against the hepatitis B virus (HBV)

# Targeted Populations

- ❑ NYC neighborhoods with acute HBV infection rates 1.2/100,000 residents or greater
- ❑ Populations with higher infection risk:
  - Chinese, Korean, African and Caribbean immigrants
  - Injection drug users
- ❑ DOHMH provides services where at-risk individuals are seen, including sexually transmitted infections clinics, correctional health facilities and tuberculosis clinics

# NYC Demographics

- ~8.2 million people

- ~37% foreign-born

- Comprised of 5 boroughs

- Brooklyn, Manhattan, Queens, Bronx, Staten Island

- Racial/Ethnic Population

- White 44%
- Latino 29%
- Black 26%
- Asian 13%

# Bureau of Immunization (BOI) Pilot Project Partners

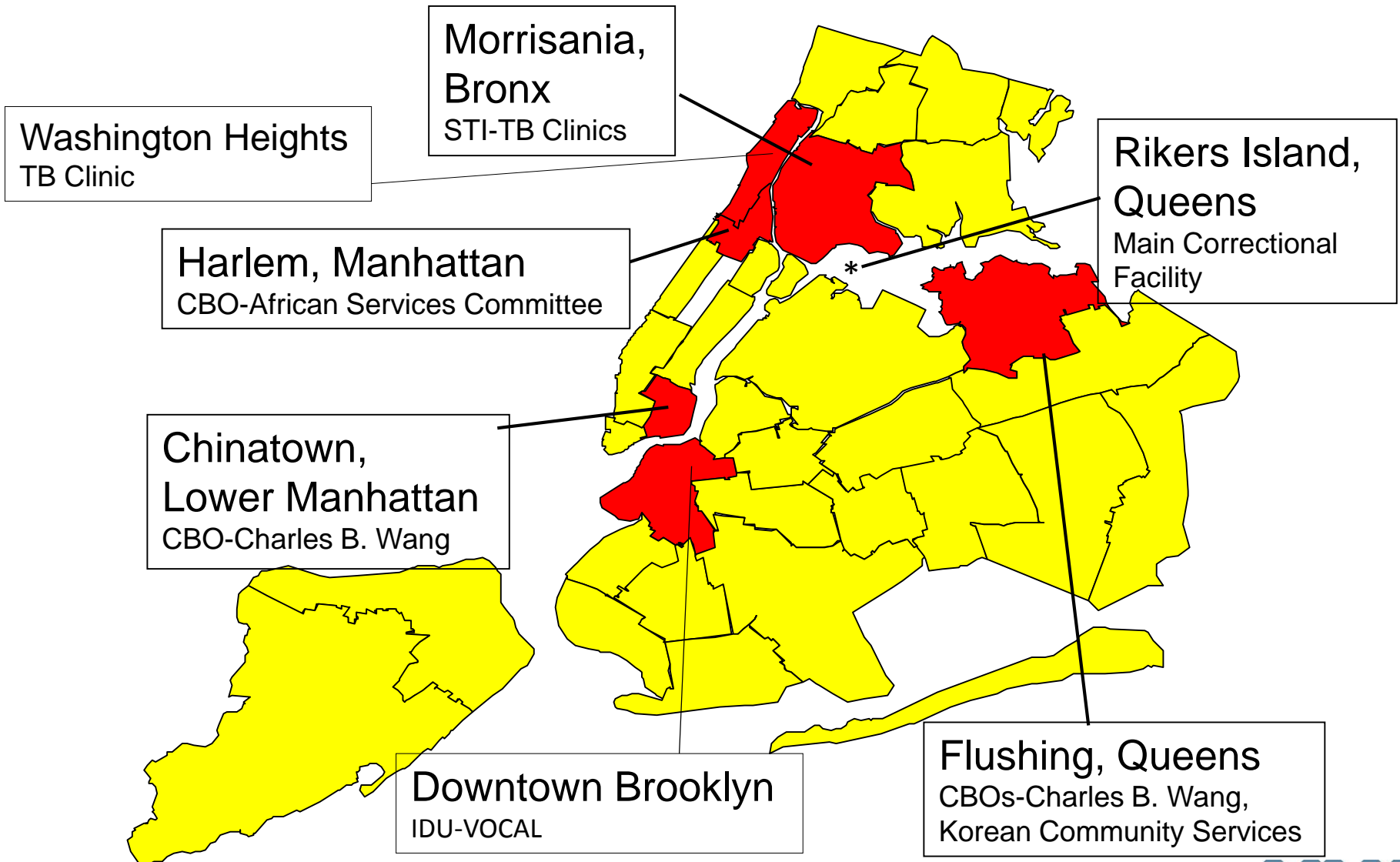
## □ Internal Partners

- Bureau of Sexually Transmitted Infections (BSTI)
- Bureau of Correctional Health Services (CHS)
- Bureau of Tuberculosis (TB) Control (BTBC)
- DOHMH HBV Workgroup

## □ External Partners

- Community-Based Organizations (CBOs)
  - Charles B. Wang Community Health Center, African Services Committee, Korean Health Services
- Intravenous Drug Use/Harm Reduction Clinic (IDU)
  - VOCAL: Voices Of Community Activists & Leaders
- NYC Hepatitis B Coalition

# Targeted Areas for HBV Interventions



# Interventions - High Level

- ❑ Distribute HBV vaccine and educational materials
  - NYC received 12,400 doses of HBV vaccine
- ❑ Conduct focus groups with adults to assess knowledge of HBV
- ❑ Provide education and referral for TB clinic patients
- ❑ Encourage reporting to Citywide Immunization Registry (CIR), the NYC immunization information system
- ❑ Enhance CIR functionality to include reminder/recall email and text messaging capabilities
  - To increase 2<sup>nd</sup> dose and 3<sup>rd</sup> dose completion rates



# Interventions with BSTI

- Hire Registered Nurse (RN) to address issues identified during an earlier evaluation of HBV vaccination and service delivery
  - Inadequate time and materials for educating patients
  - Need for more dedicated staff to administer vaccines
  - STI Electronic Health Record (EHR) did not identify patients who were due for HBV vaccine
  - HBV vaccine not always recommended during non-treatment-related patient visits
  - Higher rates of vaccine refusal in certain demographic groups
- Hold focus groups to develop a messaging strategy that increases patient vaccination

# Interventions with CHS

- Increase HBV vaccination and improve service delivery in NYC correctional facilities
  - Train staff to offer and provide HBV vaccines to all admissions
  - Incorporate HBV vaccination screening protocol
  - Identify the highest and lowest volume vaccinating facilities
  - Provide HBV health education for patients and staff
  - Document HBV and other vaccines in their EHR
  - Encourage patient consent to CIR
  - Target of 125 doses administered per month

# Interventions with BTBC

- Provide HBV education to patients attending the Morrisania and Washington Heights TB clinics
- Develop referral form for patients seeking vaccination
  - Target of 500 BTBC patients accepting a referral that leads to vaccination over the course of the pilot project

# Interventions with CBOs

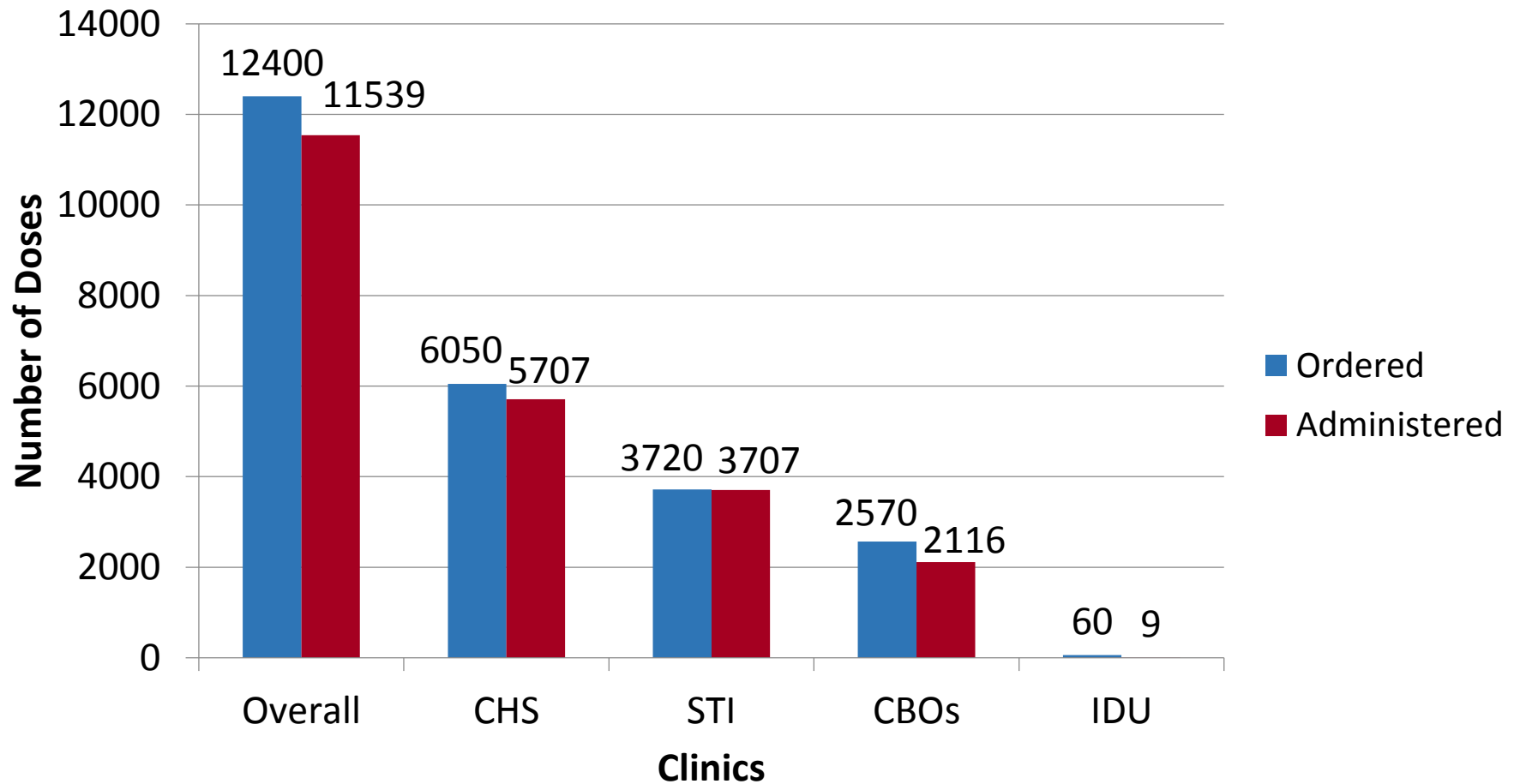
- ❑ Recruit sites that treat adults at risk for HBV infection to provide vaccination and education
  - All five sites originally agreeing to participate withdrew before start of pilot project due to grant risk-assessment screening and reporting requirements
  - Required rapid action to replace CBOs with new sites
  - Recruited CBOs serving Asian, African and Caribbean immigrants, intravenous drug users
  
- ❑ Sites agree to operate as a referral location for vaccination

# Enhance the CIR

- Add text and email reminder/recall functionality for use by providers who access the CIR

# Results

# HBV Vaccine Doses Ordered/Administered, All NYC Clinics



HBV vaccine doses distributed and administered November 2012 through September 2015  
As of March 31, 2016, 12,343 doses had been used

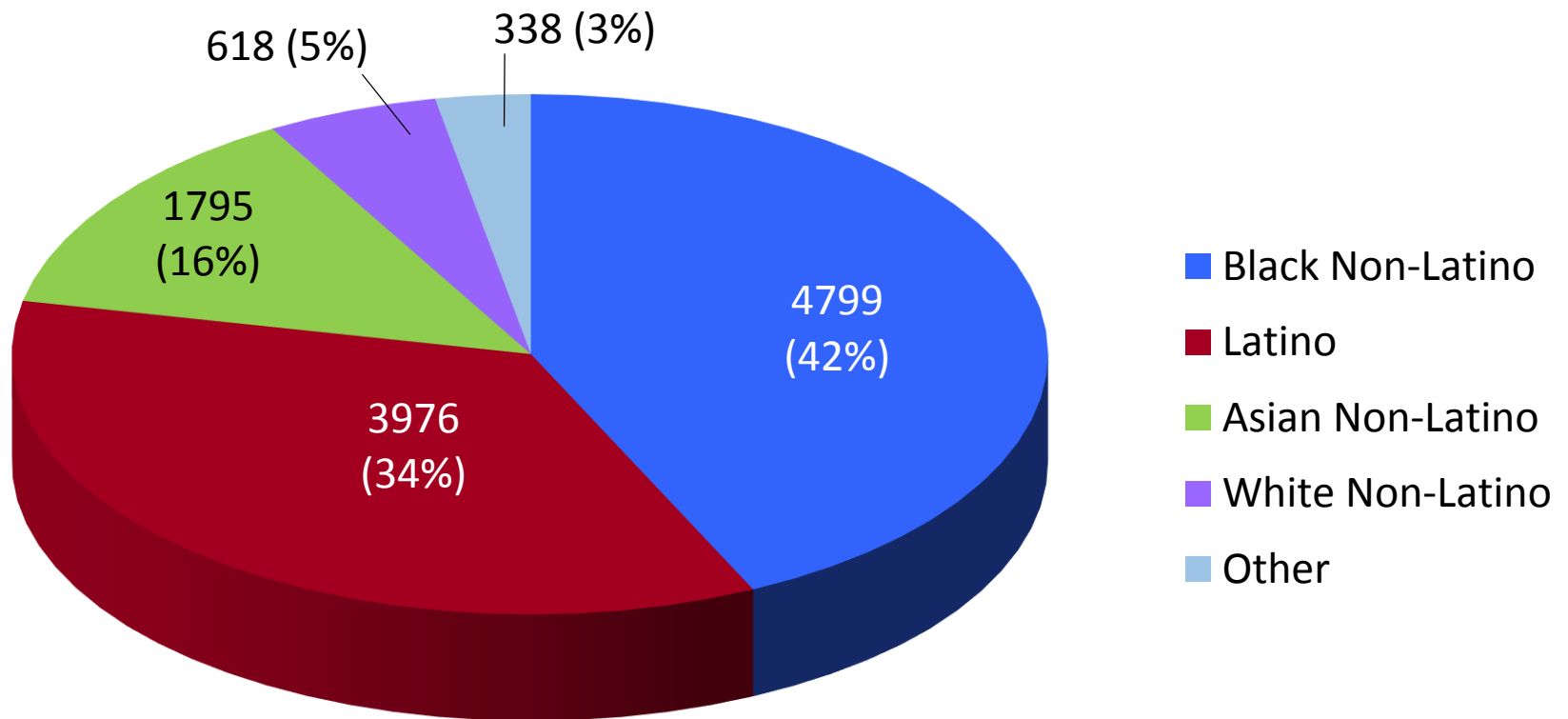
# Encounters: Doses Administered

Clinic Type	1 <sup>st</sup> Dose Administered	2 <sup>nd</sup> Dose Administered	3 <sup>rd</sup> Dose Administered	Total Doses administered
STI Clinic	1828 (49%)	1155 (32%)	724 (19%)	3707
Correctional Health	3615 (63%)	1510 (26%)	582 (10%)	5707
Community-Based Orgs	829 (39%)	683 (32%)	604 (29%)	2116
IDU/Harm Reduction	6 (67%)	3 (33%)	0	9
Total	6278 (54%)	3351 (29%)	1910 (17%)	11,539



# HBV Vaccine Doses Administered by Race/Ethnicity, All Clinics

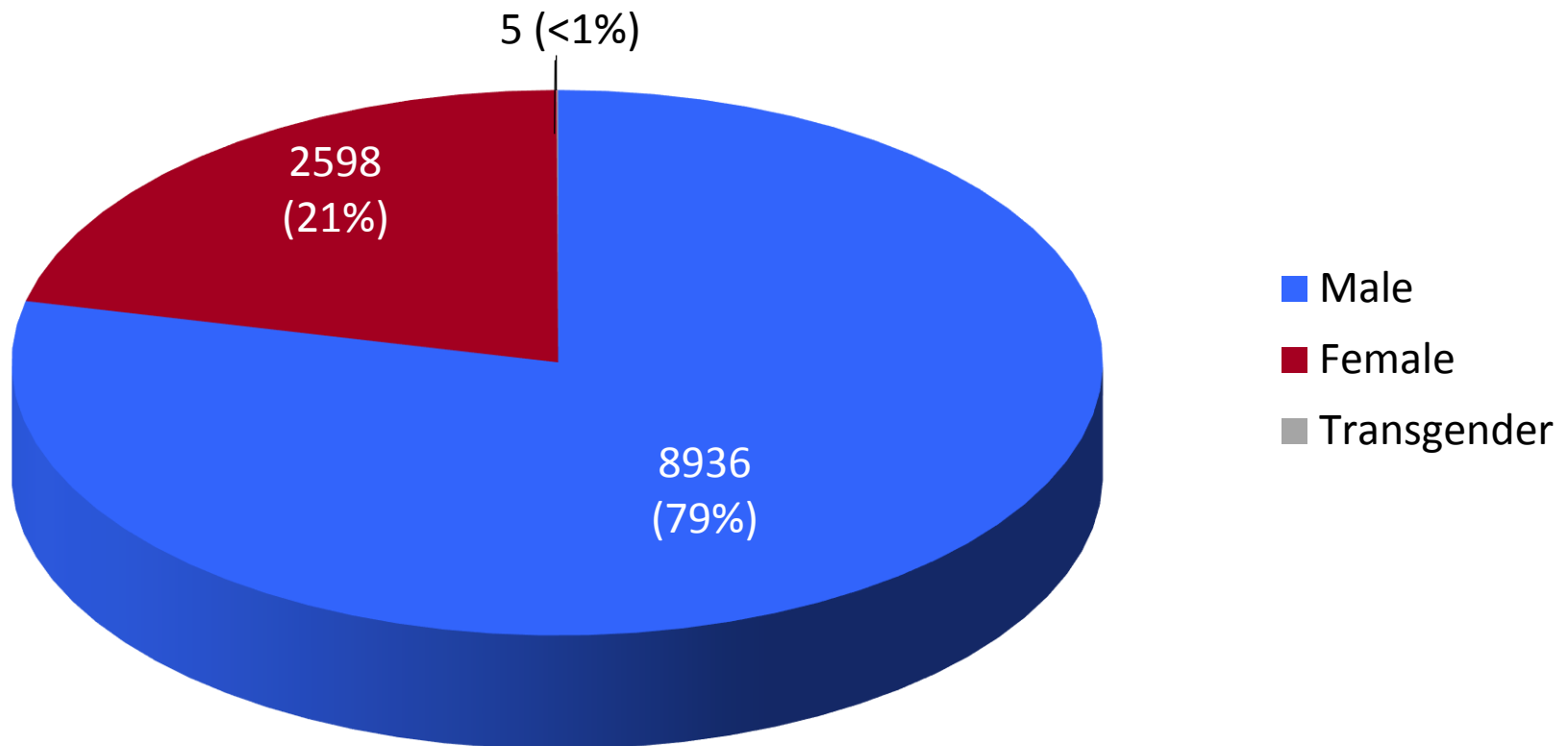
Number and percentage of HBV vaccine doses given



HBV vaccine doses administered November 2012 through September 2015

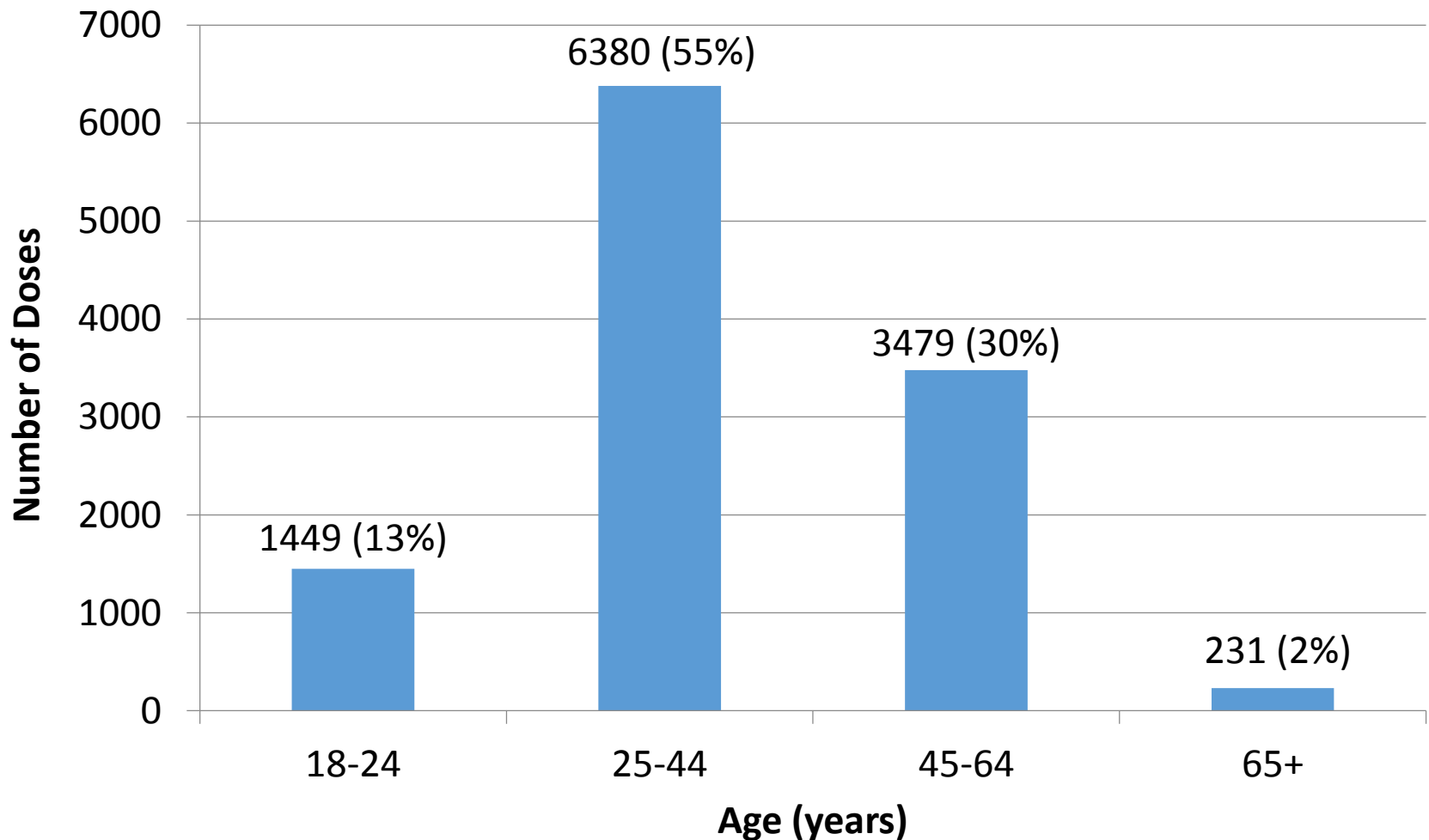
# HBV Vaccine Doses Administered by Gender, All Clinics

Number and percentage of HBV vaccine doses given



HBV vaccine doses administered November 2012 through September 2015

# HBV Vaccine Doses Administered by Age, All Facilities




HBV vaccine doses administered November 2012 through September 2015

# BSTI Clinic

- Hiring an RN was important in addressing clinical needs
  - Implemented reminder/recall process-reminder letters and recall phone calls using tickler file
  - Participated with the HBV Workgroup to develop an updated HBV vaccination palm card for patients
  - Provided HBV counseling to patients
  - Ensured vaccination data entered into CIR
- EHR improved to capture HBV doses administered


**HEPATITIS B**  
can cause serious  
liver damage



Hepatitis B (Hep B) is a virus that infects the liver. It is passed between people through blood contact and sex, and from mother to child during childbirth. Many people who have Hep B do not feel or look sick.


Over time, Hep B can lead to serious health problems.

- Liver damage
- Cirrhosis
- Liver failure
- Liver cancer




Hep B can even cause death.


Get vaccinated!




Protect yourself against Hep B.  
Get vaccinated!

The vaccine is safe, and it's the best protection against Hep B. You must get all three shots to be fully protected.

Dose Date 1  /  /  

Dose Date 2  /  /  

Dose Date 3  /  /  

For more information,  
text LIVER to 877-877 or visit  
[nyc.gov/health/hepatitis](http://nyc.gov/health/hepatitis).

# CHS

- ❑ Implemented a consistent intake process which offered all patients vaccine upon admission
- ❑ Developed a HBV vaccination screening questionnaire for use in all admissions
- ❑ Encouraged co-vaccination when flu vaccine was offered
- ❑ Tracked patient vaccination in the CHS EHR
- ❑ Provided patients with health education materials
- ❑ Provided ongoing training and education to healthcare staff
  - Providers are reminded of monthly target goals if vaccination administration numbers are low or drop in their facilities
- ❑ Met their monthly target 80% of the time (28 of 35 months)

# BTBC Clinics

- ❑ Developed educational referral form
- ❑ Goal of 1,500 referrals to be provided/500 vaccinated
- ❑ 1,890 patients were approached but most patients refused the referral form

## Are you at risk for hepatitis B?

### What is hepatitis B?

Hepatitis B is a liver disease caused by the hepatitis B virus. The virus spreads easily through contact with blood or other body fluids. Hepatitis B can lead to serious health problems including liver damage, liver cancer and death.

### How can I protect myself against hepatitis?

- To be fully protected against hepatitis B, you need 3 separate doses of hepatitis B vaccine
- The vaccine is safe and effective

### You may need hepatitis B vaccine if you:

- Have had sex with more than one person during the last 6 months
- Live with someone infected with hepatitis B
- Are seeking testing or treatment for a sexually transmitted disease

## ¿Está usted a riesgo de contraer la hepatitis B?

### ¿Qué es la hepatitis B?

Hepatitis B es una enfermedad del hígado causada por el virus de hepatitis B. El virus se propaga por contacto con sangre u otros fluidos corporales. Hepatitis B puede causar problemas graves de salud, incluyendo daño al hígado, cáncer del hígado, y la muerte.

### ¿Cómo puedo protegerme contra la hepatitis B?

- Para protegerse completamente de hepatitis B, usted necesita 3 dosis separadas de la vacuna contra hepatitis B.
- La vacuna es segura y eficaz.

### Es posible que usted necesite la vacuna contra la hepatitis B si:

- Tiene o ha tenido múltiples relaciones sexuales durante los últimos 6 meses
- Vive con alguien que está infectado con el virus
- Necesita una prueba o recibir tratamiento para una enfermedad de transmisión sexual
- Tiene enfermedad hepática crónica
- Tiene diabetes
- Es VIH positivo (s)
- Es un hombre que tiene relaciones sexuales con hombres
- Usa o recientemente ha usado drogas inyectables

### ¿Adónde puedo recibir la vacuna contra la hepatitis B?

**Lleve este papel a la Clínica de Morrisania localizada en la 1309 Fulton Avenue (calle 169 este con la tercera avenida)**

**Bronx, NY 10456**

**lunes a viernes 8:30am-3pm**

También puede visitar cualquiera de estas clínicas:

Área	Dirección	Horario
Central Harlem	2238 178th Ave. (con la calle 1375, NY, NY)	lunes a viernes: 8:30am-3pm, sábado 8:30am-12pm
Covent Garden	1210 Prospect Place (con Troy Ave.), segundo piso, Brooklyn, NY 11213	lunes a viernes: 8:30am-3pm
Fort Greene	235 Flatbush Ave. Extension, segundo y/o quinto piso, Brooklyn, NY	lunes a viernes: 8:30am-3pm, sábado 8:30am-12pm
Midtownville	21 126th St (en la esquina con la calle 126), NY, NY 10027	lunes a viernes: 8:30am-3pm
Thermostat	1305 Arthur Ave., (entre Cross Bronx y Convent Ave.), primer piso, Bronx, NY 10457	martes y jueves 8:30am-3pm

Lláme a 311 para confirmar el horario de las clínicas.

### vacine at little or no cost?

**[A Clinic located at the corner of 169th St and 3rd Avenue](#)  
**6  
m-3pm****

Hours
Monday 8:30am-3pm, Tuesday 8:30am-12pm, Friday 8:30am-3pm



# CBOs

- ❑ BOI shared health education materials, held educational meetings/training with key staff
- ❑ Charles B. Wang sites have dedicated staff to provide vaccination, maintains relatively stable vaccination levels
- ❑ African Services Committee maintained vaccination levels until losing key medical staff
- ❑ VOCAL had poor staffing throughout, few doses given before leaving the program
- ❑ Korean Community Services joined the pilot project in May 2015

# HBV Focus Groups

- ❑ Worked with BSTI and a vendor to develop questions for focus groups
- ❑ Recruited participants from the Bronx, Brooklyn and Queens
- ❑ Three focus groups formed: Spanish-speaking, foreign born and US born adults, age 28-60 years
- ❑ Key findings
  - Focus group participants were familiar with hepatitis in general, HBV symptoms and some of the ways the disease is spread
  - While foreign-born and U.S.-born believe sexual contact is the most common way to transmit the virus, the Spanish-speaking group did not mention it
  - Most foreign and U.S.-born adults were open to receiving an HBV vaccination from a trusted medical provider
  - Focus group participants were uncertain about whether they received the HBV vaccine



# HBV Focus Groups, Continued

- Tested prototype versions of the TB referral sheet and the DOHMH-produced palm card
  - Participants liked the inclusion of information about HBV's risks and symptoms, and information that emphasizes HBV's prevalence and contagiousness
  - Participants felt inclusion of the Health Department logo added credibility
  - Eye-catching colors and images were important

# HBV Public Service Announcement

- ❑ Worked with media vendor to produce a PSA in three languages: English, Chinese and Spanish
- ❑ Completed in March 2015
- ❑ Shared PSA with pilot project participants, NYC Hepatitis B Coalition and other stakeholders
- ❑ An unbranded English version was shared with other grantees nationally
- ❑ Looked to integrate PSAs into medical facilities
- ❑ Posted on [YouTube](#)

# Other Results

- ❑ CIR recall text message functionality is available to providers
- ❑ 90% of patients at all sites consented to have vaccine data entered into CIR
  - 100% in correctional settings but data entry an issue
  - Patient consent at CBOs serving Chinese populations ~60%.
- ❑ Stronger relationships with participating Bureaus within DOHMH and outside partner organizations

# Challenges

- ❑ Grant risk-assessment screening and reporting requirements created a barrier for participation for some providers
- ❑ Legal (HIPAA) and technical issues concerning recall text delayed implementation
- ❑ CIR data entry is a problem at some facilities

# Lessons Learned

- ❑ Solid infrastructure for vaccination within the facility is essential; having staff dedicated to providing vaccine is especially important
- ❑ Keep reporting requirements minimal to recruit and retain vaccinating sites
- ❑ Most adults are comfortable giving consent to have vaccination data in the CIR
- ❑ Patient referral for vaccination was not successful
- ❑ PSAs are not practical in every setting

# Next Steps: A Pearl of Wisdom- Sustainability

- ❑ Closeout interviews suggest pilot project not sustainable in some sites without a supply of no-cost vaccine
- ❑ Consistent funding for vaccine is essential for DOHMH if it is to be the source
- ❑ BOI to identify CBOs that can meet reporting requirements and have infrastructure to vaccinate under- and uninsured patients, as part of the Standards for Adult Immunization cooperative agreement

# Acknowledgements

## NYC

Amina Khawja  
Farah Parvez  
Claude Liston  
Anne Lifflander  
Nicole Bannister  
Aaron Vanderhoff  
Evelyn Milan  
Errol Garner  
Jina Kim  
Sonia Singh  
Janice Lyu  
Nirah Johnson  
Monica Sull  
Anita Geevarughese  
Jane Zucker

## CDC

Erin Kennedy  
Tureka Watson  
Nosipho Beaufort  
Carolyn Bridges

## Fellow HBV Pilot Project Grantees

Alabama  
Chicago  
Florida  
Kentucky  
Louisiana  
Maryland  
Michigan  
Nevada  
Oregon  
San Antonio  
Tennessee  
Virginia  
West Virginia

Thank you

Questions?

Edward Wake

[ewake@health.nyc.gov](mailto:ewake@health.nyc.gov)