

Viral Hepatitis Surveillance Activities at the Philadelphia Department of Public Health (PDPH)



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Hep B United Webinar
October 8th, 2015

Prevention at PDPH

○ Hepatitis Coordinator at PDPH since 2007

- Emphasis on **collaboration** to align local efforts with national Action Plan
 - **Internal:** PCSI, Division of Disease Control Workgroup
 - **External:** Hep B United, Hep C Allies of Philadelphia (HepCAP)
- Uniting local partners around a common goal:



*Operation Storm City Hall
Hepatitis Awareness Month, 2014*

Philadelphia can be a
National leader against viral
hepatitis

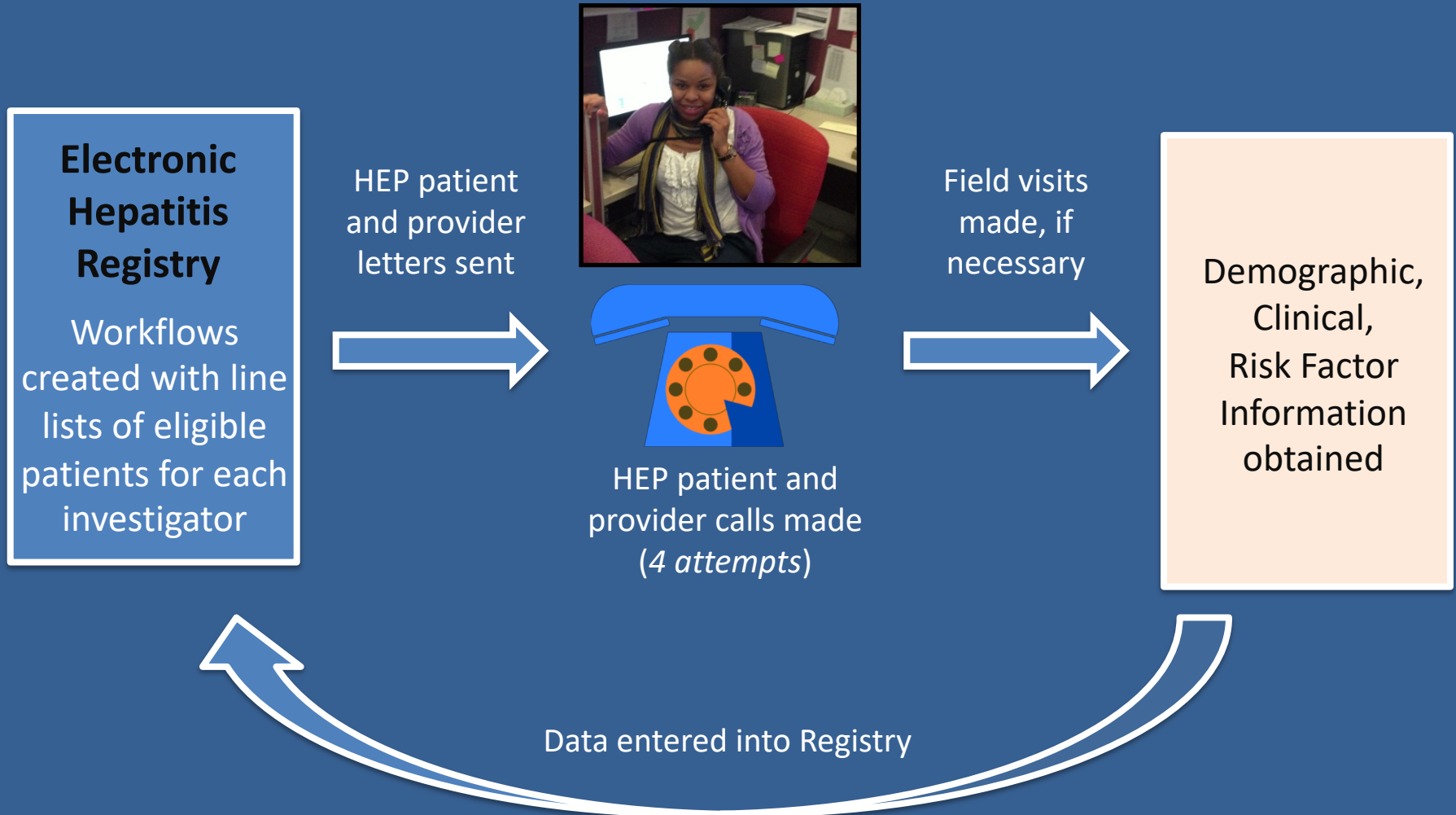
The Hepatitis Epidemiology Program (HEP)

- **Nov 2012** – PCSI/Epi awarded the surveillance grant
- **Jan 2013** - Developed HEP documents
 - Patient and provider letters
 - Investigation forms
 - Electronic workflows and reports
 - Protocols
 - Began patient and provider calls and site visits
- **Feb 2013** - Formed the HEP team
 - Created HEP coordinator and epi positions
 - Hired 3 HEP investigators (HEPIs)
 - Joined forces with the VPHC
- **March/April 2013** – Began surveillance
 - Sent a Health Alert about HEP to health care facilities in Philadelphia
 - Sent first batch of letters to eligible patients and providers
 - Began patient and provider calls and site visits



HEP surveillance

* **Eligible patients:** newly reported acute and chronic HBV and HCV (confirmed and probable)



HEP Surveillance Findings: 2013 - 2014

Newly Reported Viral Hepatitis Cases by Status: Philadelphia, 2013-2014

Disease	Status	New Reports	Investigated N (%)
HBV	Acute	12	12 (100%)
	Chronic	1,872	941 (50%)
HCV	Acute	42	42 (100%)
	Chronic	6,569	1,750 (27%)
TOTAL		8,495	2,745 (32%)

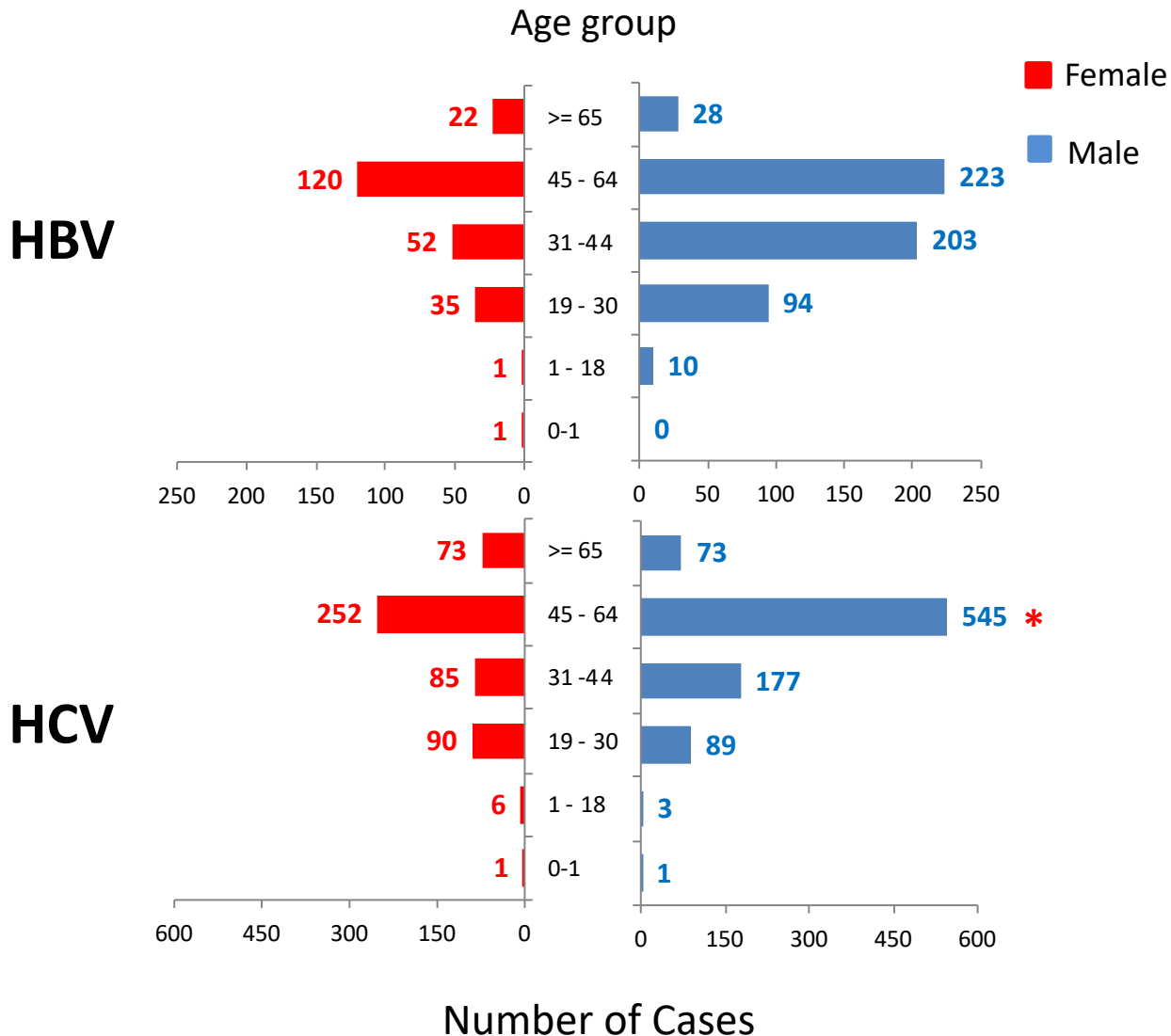
Completeness of chronic confirmed HBV and HCV Investigations

- Newly identified hepatitis-infected individuals reported to PDPH each year

Fields		Completeness of confirmed chronic hepatitis investigations	
		2012	2013 (investigated)
Demographics	gender	98%	99%
	age	99%	99%
	race/ethnic	8%	82%
Clinical	HIV	1%	87%
	diabetes	1%	84%
Risk Factor	IDU	8%	87%
	incarceration	8%	87%
	tattoo	7%	87%
	employed med/dent field	0	87%
	health insurance	0	80%

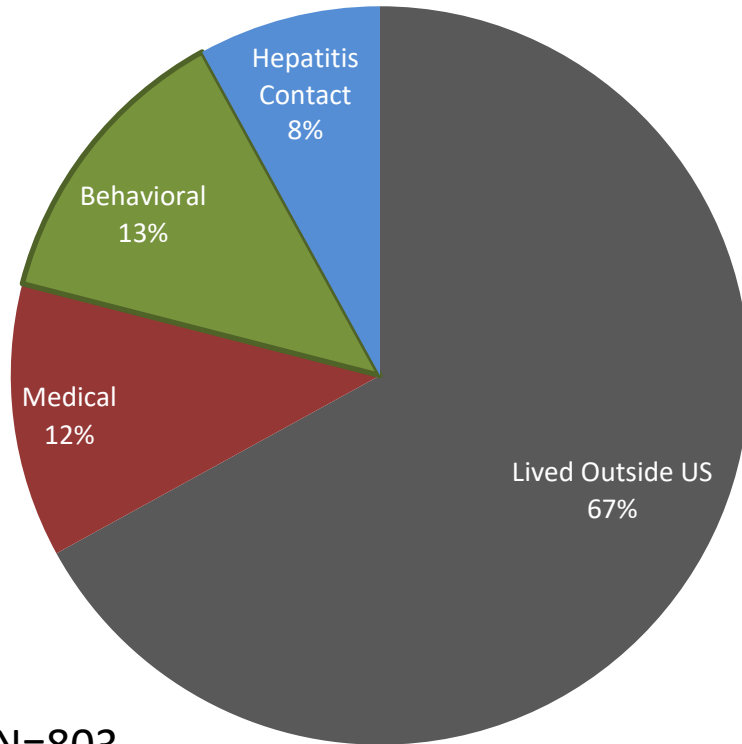
- Additional clinical and risk factor variables being investigated:** symptoms, pregnancy status, hospitalizations, treatment, gender/number of sex partners, needle-stick, hemodialysis, blood product/organ transplant, contact with HCV/HBV infected person, counseling for infection, etc.

Investigated hepatitis cases by gender and age group: Philadelphia, 2013-2014



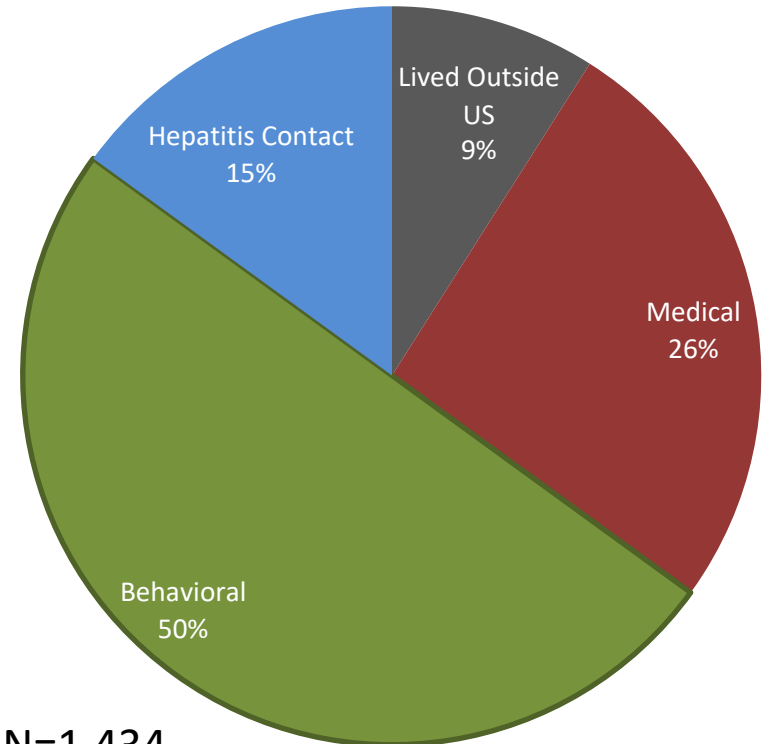
Investigated hepatitis cases by risk factor: Philadelphia, 2013-14

HBV



N=803

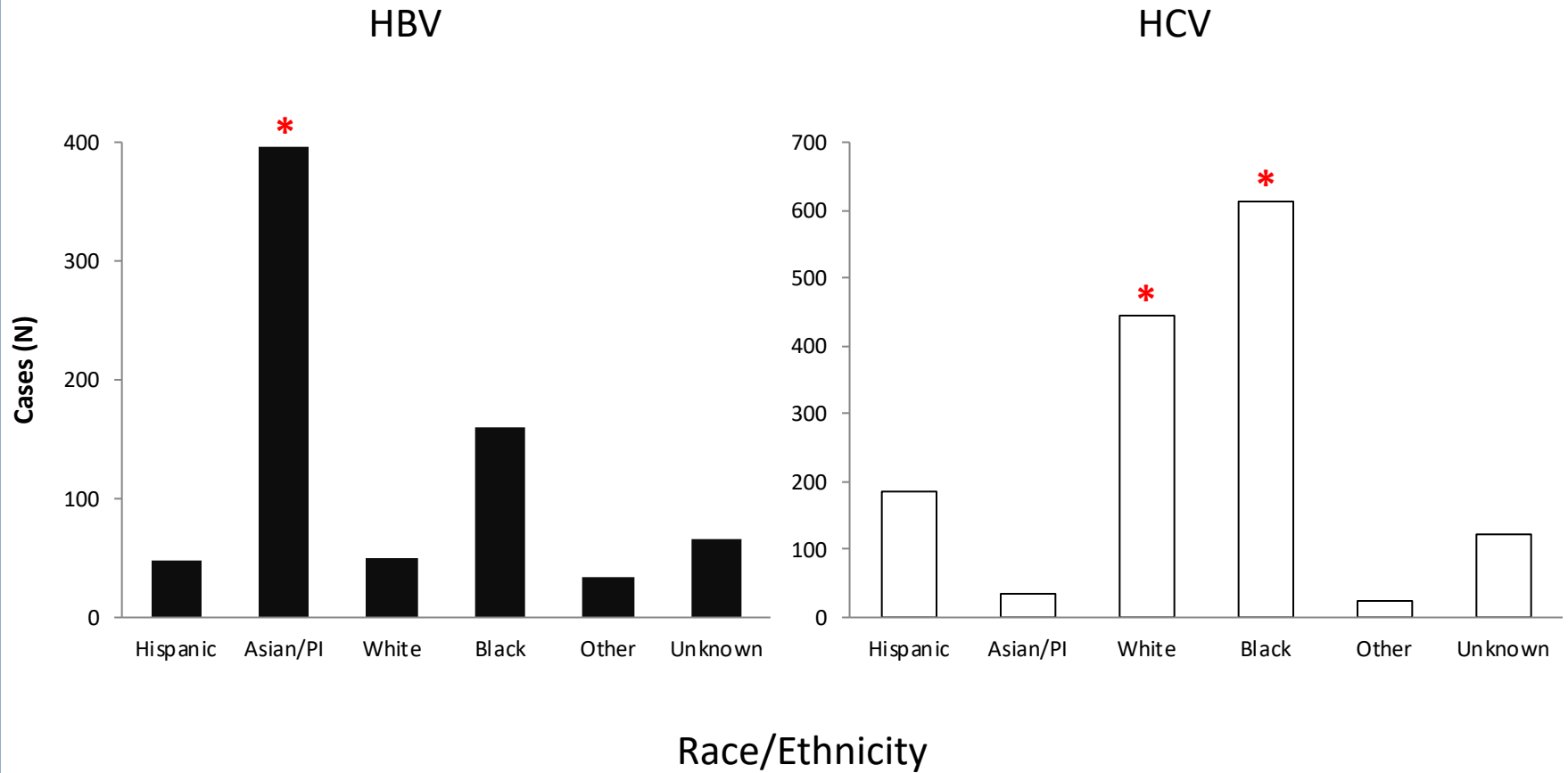
HCV



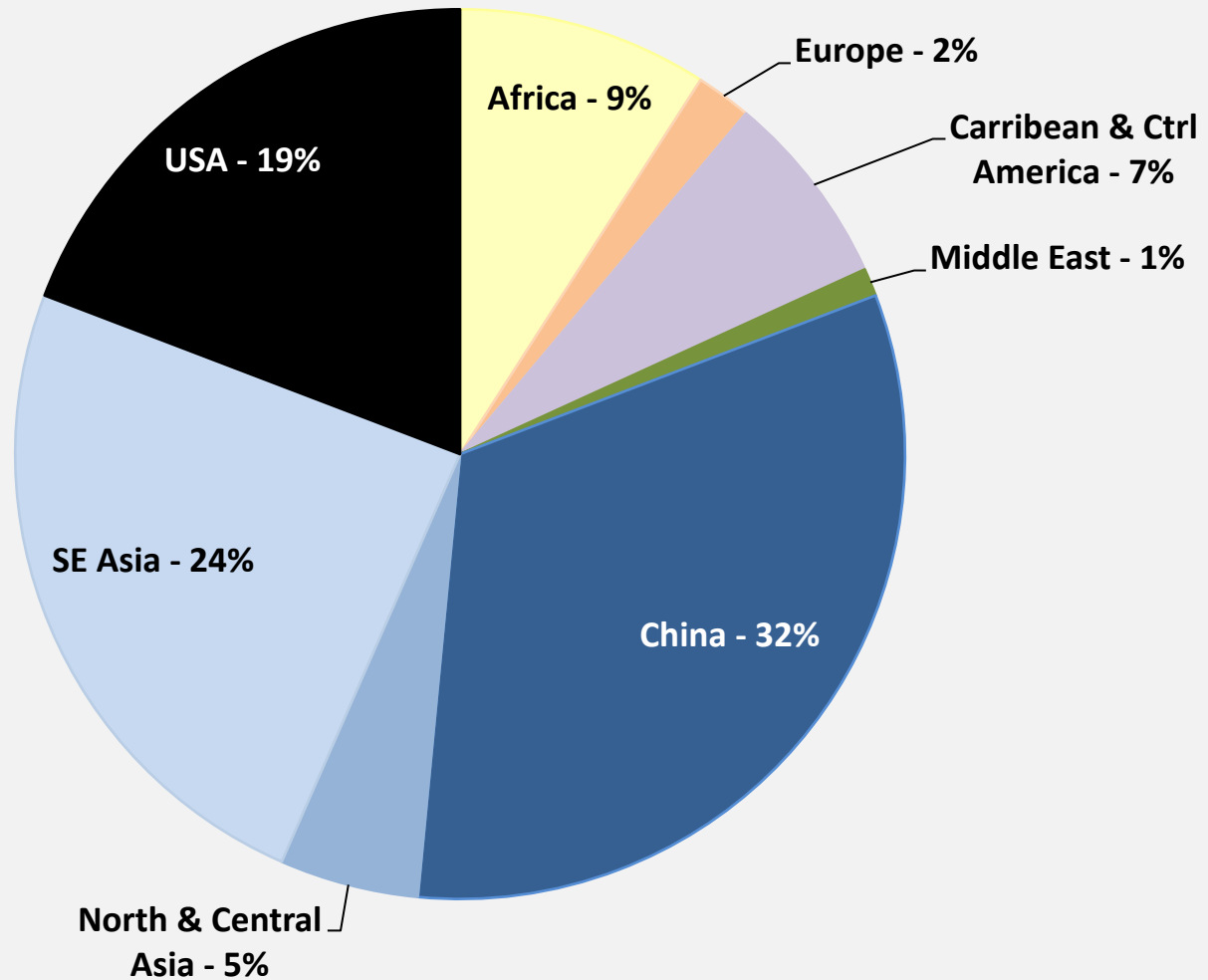
N=1,434

- Medical risk factors ~ blood/organ transplant, dialysis, needlestick, work in a medical/dental field
- Behavioral risk factors ~ injection drug use, history of incarceration, multiple sexual partners, unlicensed tattoos

Investigated hepatitis cases by race and ethnicity: Philadelphia, 2013-2014



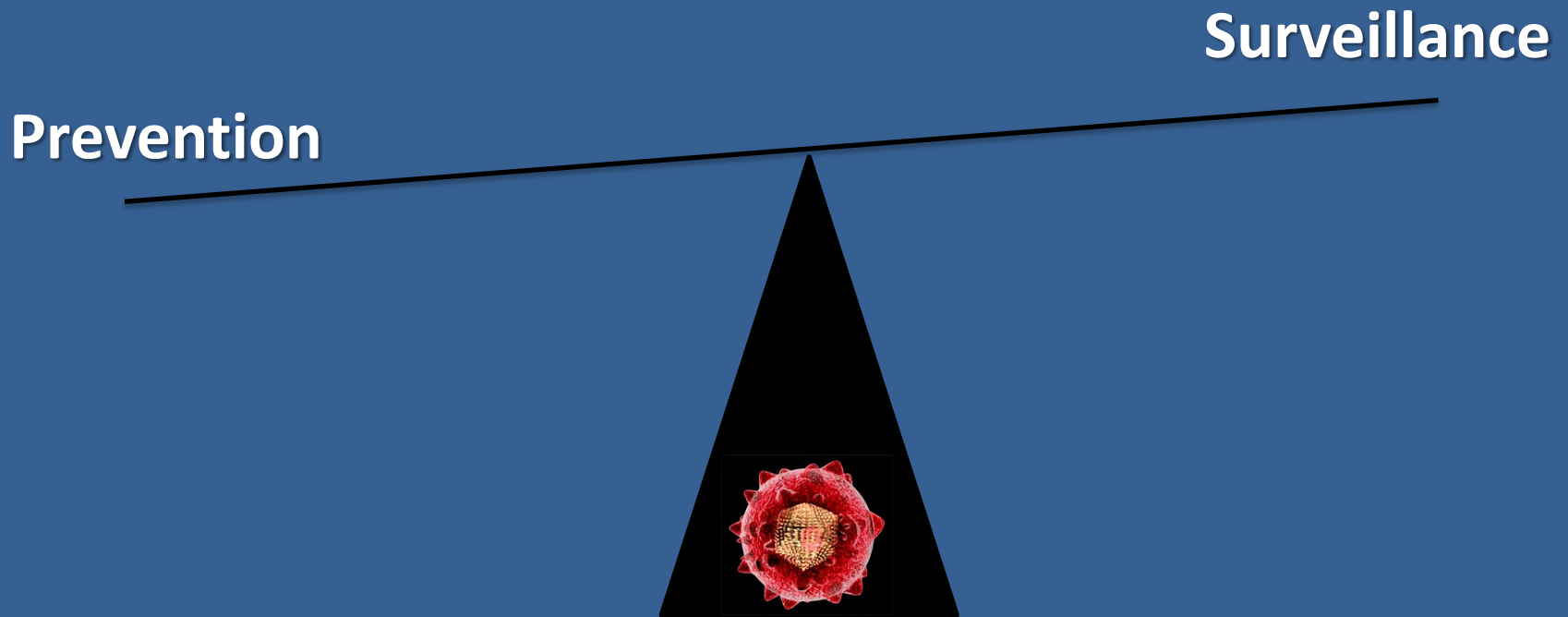
Investigated HBV cases by country of birth: Philadelphia, 2013-2015



Methods for 'reaching' immigrant populations for patient investigation

- **Sending patient letters in appropriate language**
 - **Eight languages are currently used (English, Cambodian, Vietnamese, Cantonese, Korean, Indonesian, Russian, and French)**
- **Ensuring that language is not a barrier during patient interviews**
 - **Using three-way communication from LanguageLine™ Solutions interpreters**
- **Adapting interviews for foreign-born patients**
 - **If patient is born in an HBV endemic country, interviews are shortened.**

How can hepatitis surveillance aid prevention?



By defining 'new' populations at-risk for HBV

- **Example:** U.S. born HBV cases for whom sexual contact with an HBV+ individual is the only known risk factor
 - 3% (N = 11) of HBV cases investigated during 2013 – 2014

		HBV
Total		11
Female		45%
MSM (% of Males)		1 (17%)
Race		
	White	9%
	African American	73%
	Other	18%
HIV+		0
Average Age(range)		46 (17-68)yrs
>10 Sexual Partners (lifetime)		64%

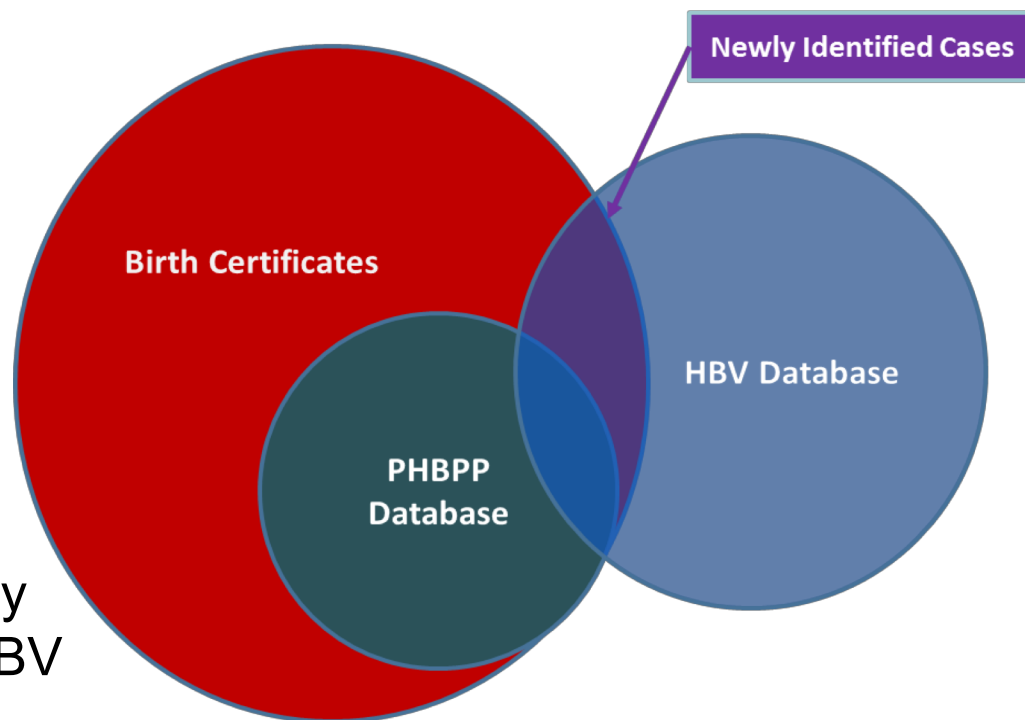
By using additional data sources to identify perinatal HBV cases

1. Births to Philadelphia Residents

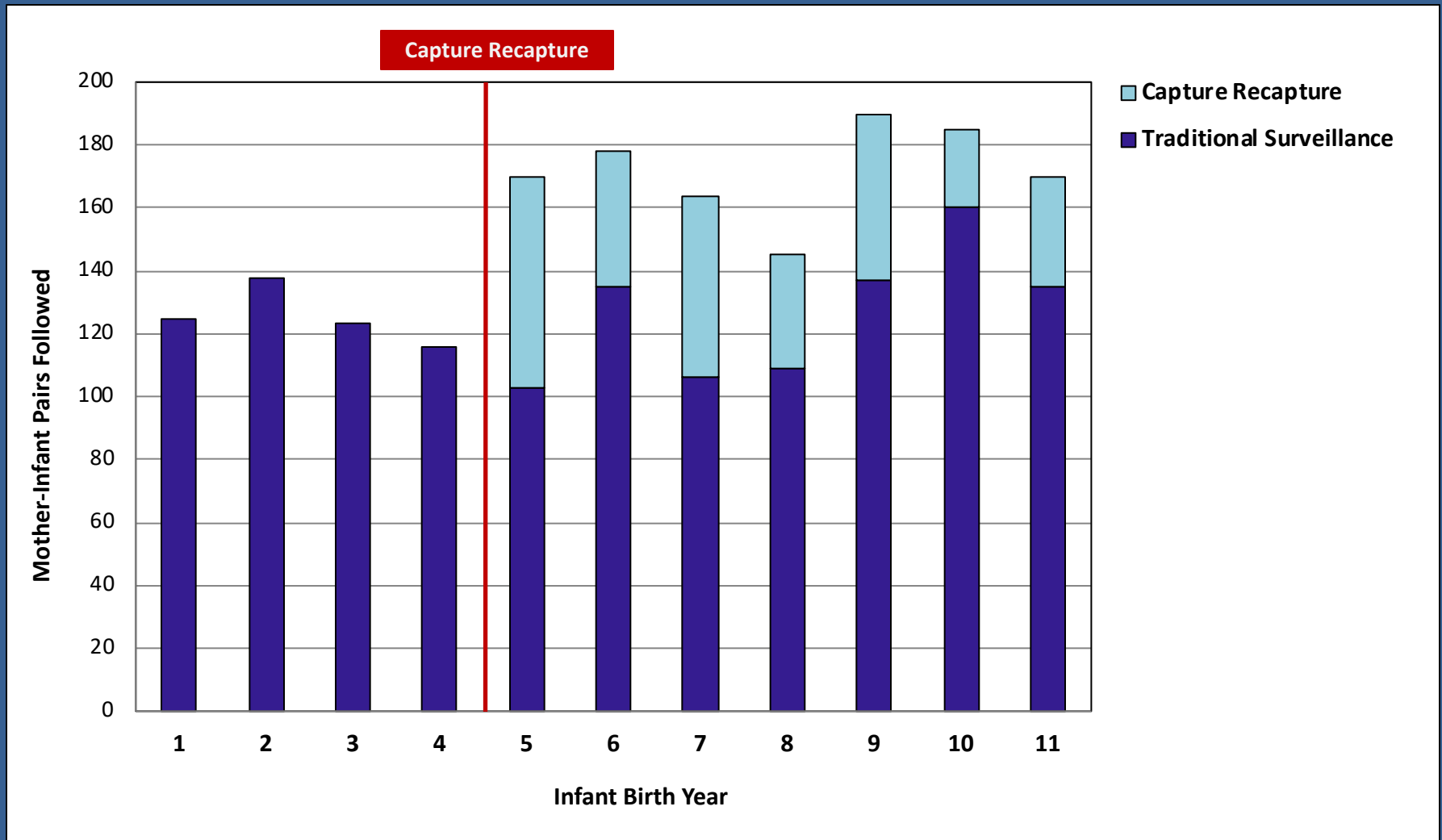
2. Hepatitis B Laboratory/Surveillance Data (HBV data)

3. PHBPP Data

- Identification of previously identified mothers and HBV cases



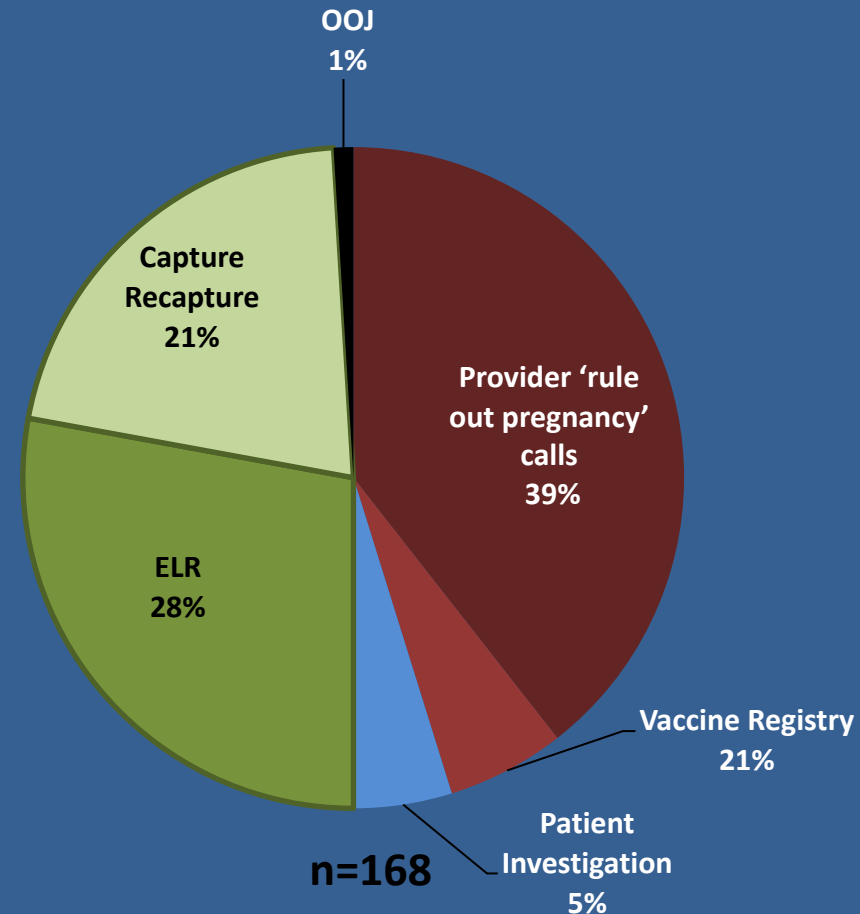
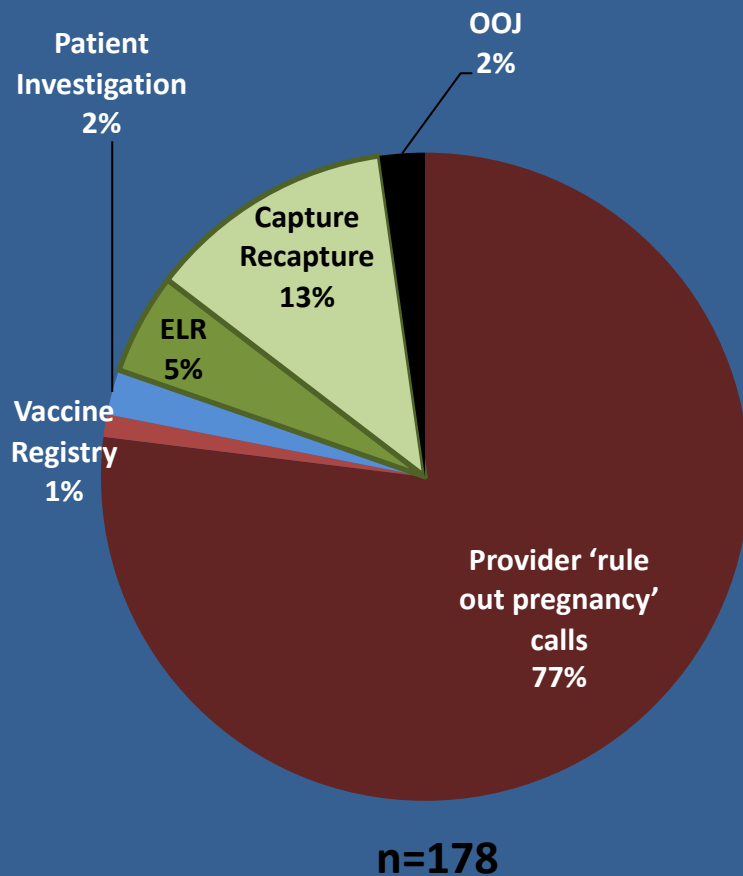
Perinatal HBV capture-recapture analysis has identified 20-40 additional mother-infant pairs/year



By using more automated methods to 'find' HBV-positive pregnant mothers

2013

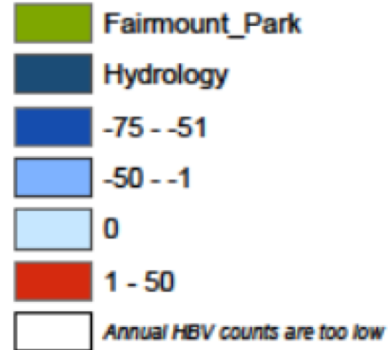
2014



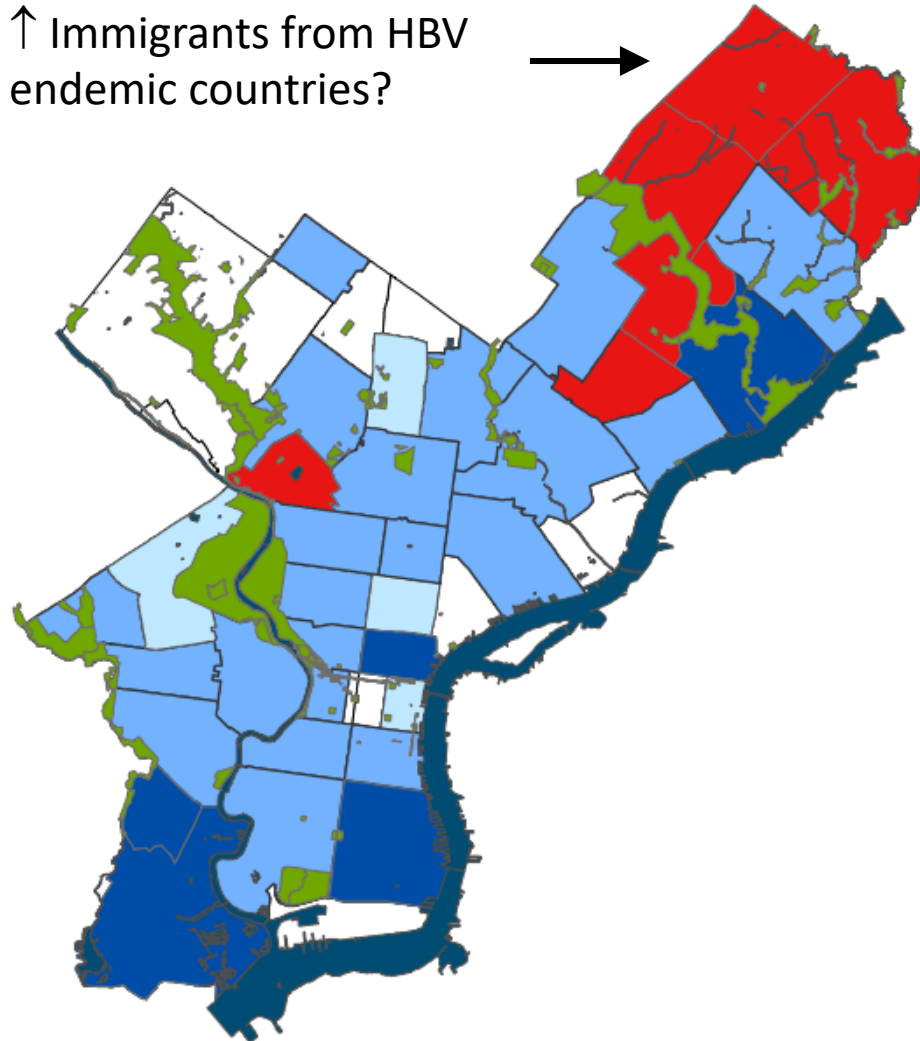
By highlighting zip codes/census tracts that show changes in the number of newly reported HBV cases

2013 to 2014

Rate Difference (x100,000)



↑ Immigrants from HBV endemic countries?



By identifying patients who are interested in receiving hepatitis education materials and local resources

Would you like additional information regarding **HBV?** YES NO UNK

If yes, method: mail email _____

Specify Information Type:
 Disease information Treatment Prevention
 Resources Support Group HBV Specialists NEP Locations
 Drug & Alcohol Centers

Do I have hepatitis B???

YOU MIGHT HAVE HEP B IF YOU

- Have had unprotected sex with multiple partners
- Were born to a mother who has hepatitis B
- Have shared needles, syringes, or any other items needed to inject drugs
- Have immigrated, or are the child of an immigrant, from a continent with a large hep B infected population such as Asia or Africa (Check out a map) [source]
- Have received a blood transfer or an organ transplant before 1992
- Were tattooed or body pierced at a tattoo party, or other unlicensed venues
- Have been exposed to blood at your place of work
- Have shared razors or toothbrushes with someone who may have hepatitis B

SYMPTOMS ARE A BIT TRICKY

Symptoms are most common during the acute phase of a hepatitis B infection and generally appear within 3 months after you have been infected. Once symptoms appear, they may last anywhere from a few weeks to about 6 months. If you have a chronic infection it is likely you will not notice any obvious symptoms unless your immune system is very weak, or if your liver is starting to fail.

SYMPTOMS INCLUDE:

CAN YOU GUESS HOW HEPATITIS B IS SPREAD?

SEX	CHILD BIRTH	DRUG EQUIPMENT
TOILETRIES	SEAFOOD	FRENCH KISSING
BREAST FEEDING	TATTOOS AND PIERCINGS	DRY KISSING
ORGAN TRANSPLANT	WORK RELATED EXPOSURE	BLOOD TRANSFUSION

HEP B INFECTIONS CAN BE EITHER ACUTE OR CHRONIC

ACUTE	CHRONIC
A mild illness that happens within the first 6 months after infection	A long term infection that remains in the body for a lifetime
Can develop into a chronic hepatitis b infection	Up to 1.4 million people in the U.S. might be infected with chronic hepatitis B
If you recover from an acute hep B infection, you are immune and cannot be infected again	Most people who have chronic hepatitis B are not aware they are infected
Babies who are exposed to the virus are likely to develop a chronic infection	10% of people exposed to hep B as adults will develop a chronic infection
90% of adults will be cured of the infection without medical help	Can result in long term health issues including cancer and death

QUICK FACTS

Hepatitis B and C kill more Philadelphians than HIV.

Viral hepatitis affects Philadelphians of every age, race, gender, and sexual orientation.

Hepatitis is called "The Silent Killer" because there are usually no symptoms and it might be years after a person has developed hepatitis before they feel sick.

To prevent death and serious illness caused by hepatitis, Philadelphians should get tested and treated.

By identifying hepatitis C patients who lack insurance and referring them to the Health Department for hepatitis B vaccination



- 76 individuals have been successfully contacted and received vaccination since August 2013.
- Has provided an opportunity to get additional resources to patients.

Ongoing HBV-Related Activities

○ **HBV Disease Outcomes**

- Matching HBV surveillance data to cancer and death registry data to assess 1) racial disparities in outcomes and 2) rates of non-liver cancer diagnoses

○ **Acute HBV Contact Tracing**

- Identifying and offering HBIG and/or HBV vaccine to contacts of acute HBV cases

○ **HBV Testing Rates**

- Analyzing negative HBV test results (HBsAg and DNA) to assess differences in HBV testing and positivity rates by patient demographics, patient address, and ordering facility type

○ **HBV Waning Immunity**

- Matching HBV surveillance data to Immunization record data to assess burden of disease among vaccinated individuals

Using Philadelphia's viral hepatitis surveillance data in your organization

■ How is it available?

- Online Reports
 - Health Information Portal
 - Biannual HEP Newsletter
- Data Requests
 - Demographic and risk factor breakdowns
 - Maps
 - Bullet points for policy briefs

■ How can it be used?

- To influence policy change (ie. city council, medical providers)
- To better understand hard to reach populations

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