

# Hepatitis B Screening and Linkage to Care

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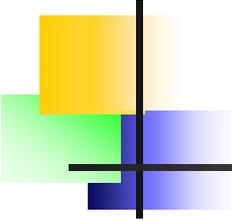
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**Multnomah County Health Dept.**



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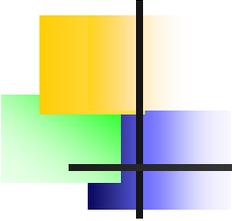


# Objectives

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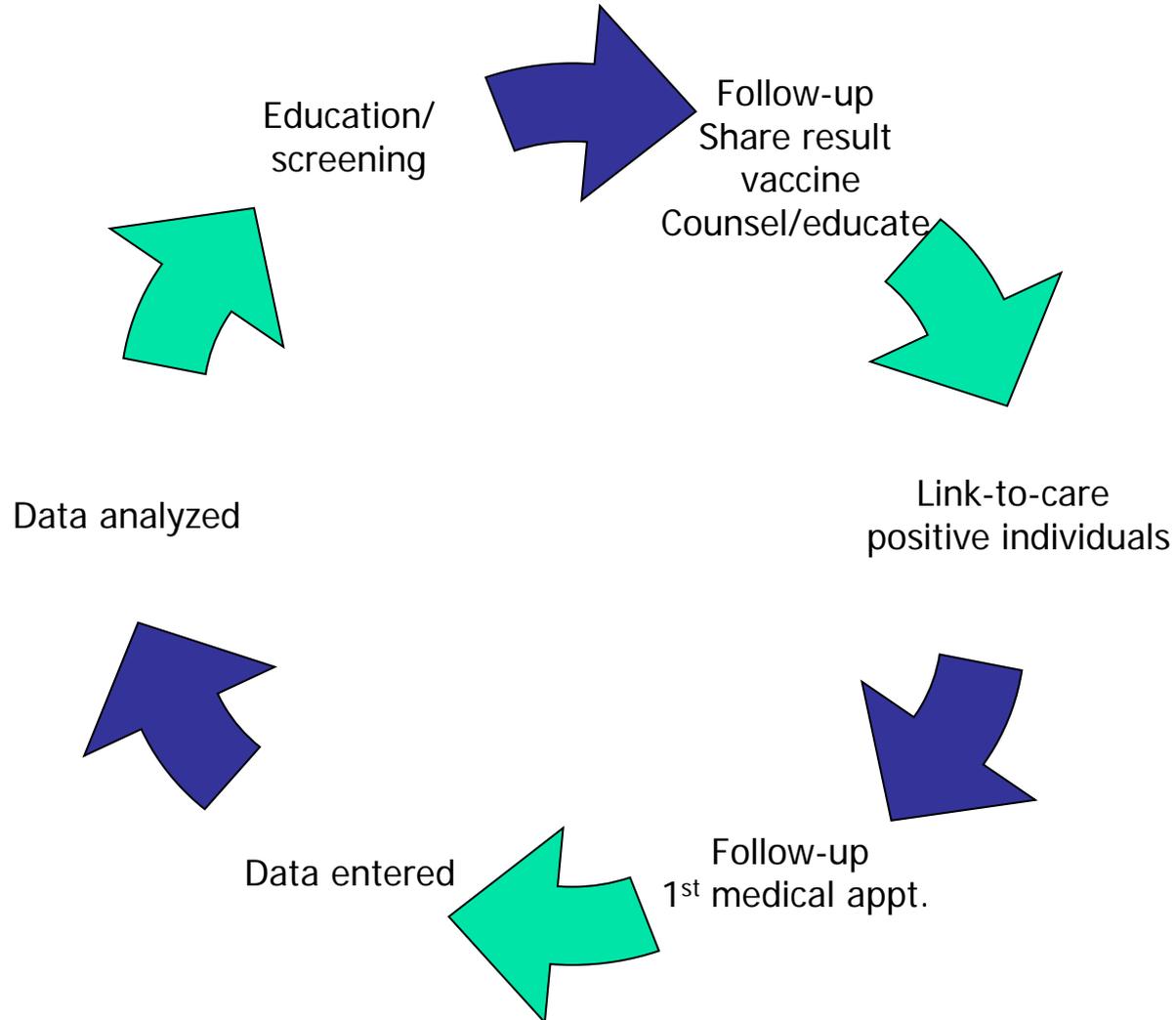
- **Understand the Hepatitis B Linkage-to-Care project**
- **Understand why foreign-born population are at a higher risk for Hepatitis B**
- **Discuss major findings in the first year**
- **Discuss lessons learned/important conclusions**





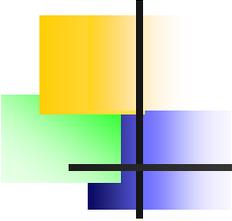
# Program details

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# Global prevalence HBV



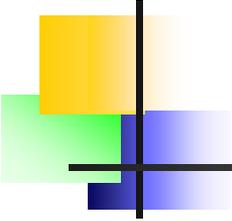


# Foreign born in Multnomah County

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- **Important risk factor for HBV infection**
- **~15% of Multnomah County residents are foreign-born (United States: 13%)\***





# Consequence of HBV

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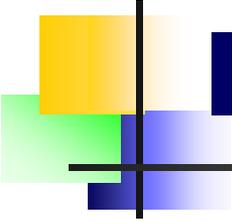
## Acute disease

- ❑ Spread through infected blood and body fluids
- ❑ Some people clear virus and are immune

## Chronic disease

- ❑ Younger age → more likely to develop chronic disease
- ❑ 15-25% with chronic HBV develop serious liver conditions





# Improving HBV Screening

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## Expanded refugee screening at Mid-County Health Center

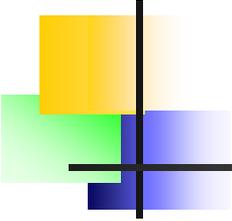
- ❑ Majority of Oregon's refugees are seen through MCHC
- ❑ Hepatitis B Core AB, Surface Antigen on all refugees

## Partnered with local organizations serving FB persons

- ❑ Community referrals to CDS Clinic
- ❑ On-site outreach clinics

Target: ~1,000 people screened





# Linkage-to-Care

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## Chronic HBV cases:

- ❑ Telephone/in-person counseling
- ❑ Linkage to primary care (insured) or other clinics/resources (uninsured)

## Non-immune (never exposed)

- ❑ Vaccination



# A note on terminology

## HBV Serology

- ❑ Surface antigen
- ❑ Core antibody

## Chronic HBV cases:

- ❑ Used CDC/OR case definition\*



Vouchers for free Screening at CDS Clinic location

Outreach Hepatitis B Screening clinics

Mid-County Refugee Screening

Positive

Negative

Positive

Negative

Positive

Negative

Electronic Laboratory Reporting (ELR)

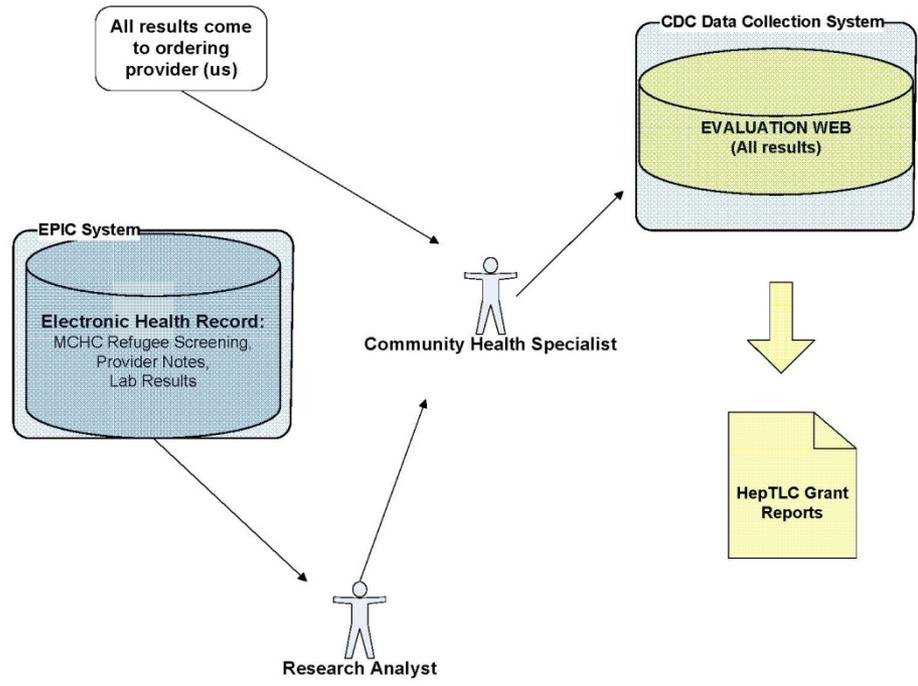
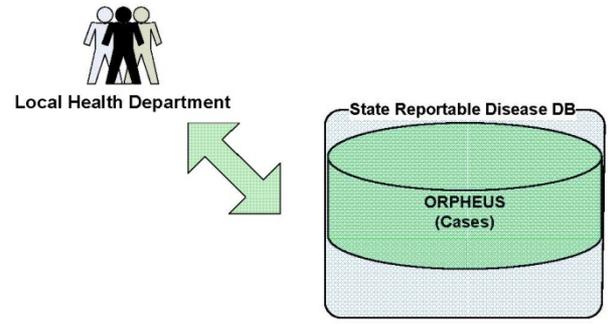
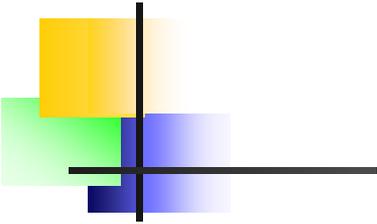


Local Health Department

Follow up Results Counseling Linkage to Care



Community Health Specialist



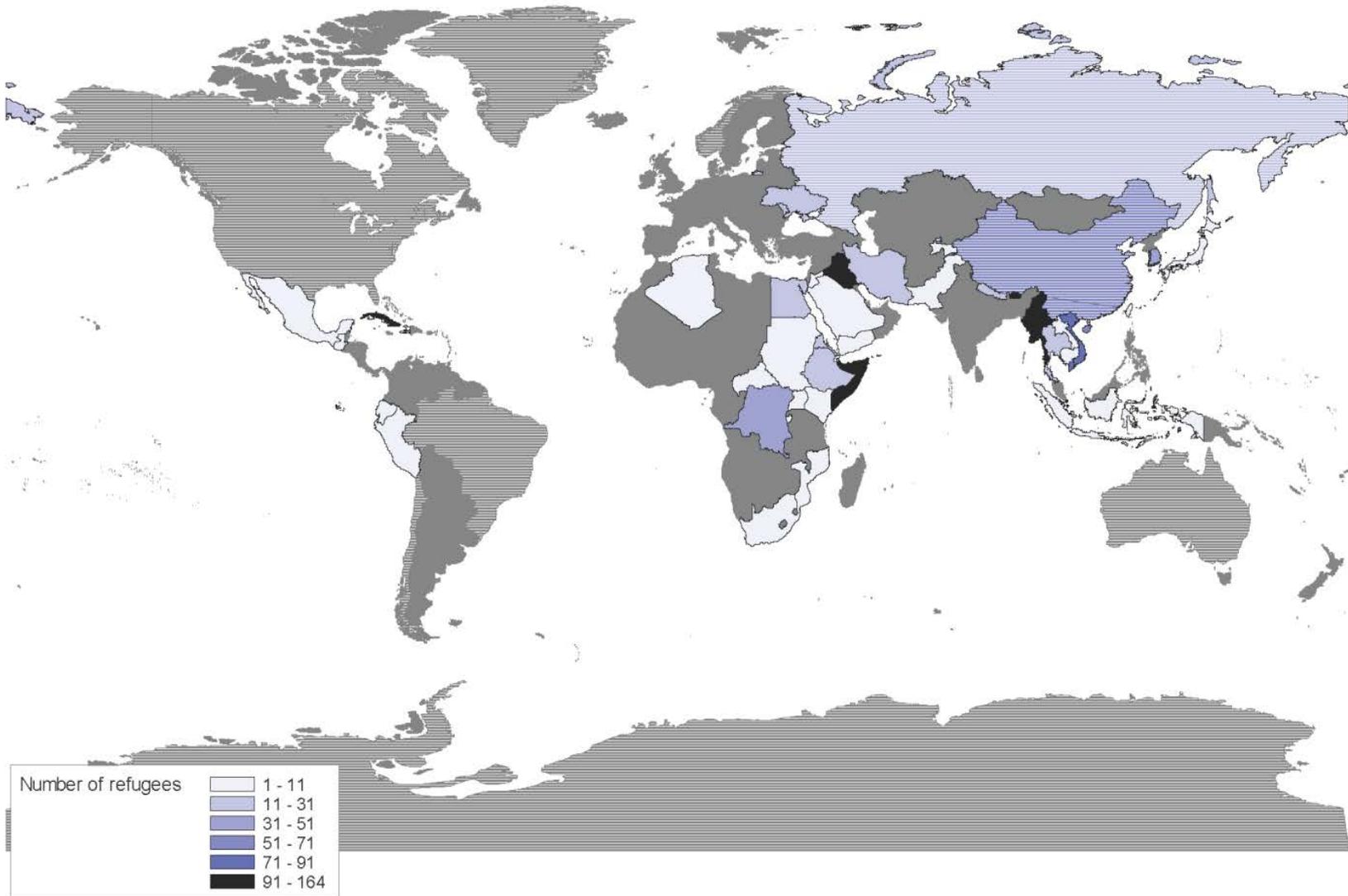
# Results to date

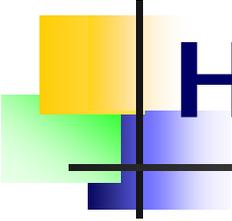
Demographic characteristic	N	%
<b>Sex</b>		
Male	553	51
Female	542	49
<b>Age (years)</b>		
<18	181	17
18-49	635	58
≥50	279	25
<b>Insurance status</b>		
Yes	911	83
No/Don't know	184	17
<b>TOTAL</b>	<b>1,095</b>	<b>100</b>



Country of Origin data for refugees and foreign born individuals  
MCHD Linkage to Care, testing from 11/18/12 to 9/13/13

N=1,095





# HBV Testing/Linkage-to Care

Outcome	Site			TOTAL (%)
	Mid-County	CDS	Outreach	
Number (%) screened	717 (66)	53 (5)	325 (30)	1,095 (100)
Number (%) ID cHBV	16 (2)	3 (6)	23 (7)	42 (4)
Number (%) linked to care	15 (94)	2 (67)	22 (96)	39 (93)
Reason for no linkage	1 refused	1 unable to be located	1 unable to be located	



# HBV Testing/Linkage-to-Care

How linked to care	Site			TOTAL (%)
	Mid-County	CDS	Outreach	
Made appointment with primary care physician	12	2	21	35 (90)
Referred to primary care	1	0	1	2 (5)
Set up appointment with specialist	2	0	0	2 (5)
<b>TOTAL</b>	<b>15</b>	<b>2</b>	<b>22</b>	<b>39 (100)</b>

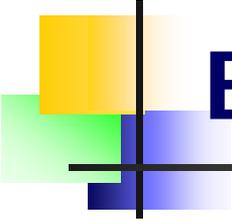


# HBV Risk Factors

Prevalence of Hepatitis B in Various Population Groups

Population Group		Prevalence of Serologic Markers of HBV Infection	
		HBsAg (%)	All Markers (%)
High-Risk	Immigrants/refugees from areas of high HBV endemicity.	13	70-85
	Clients in mental health institutions.	10-20	35-80
	Users of illicit parenteral drugs.	7	60-80
	Homosexually active men.	6	35-80
	Patients of hemodialysis units.	3-10	20-80
	Household contacts of HBV carriers.	3-6	30-60
Intermediate-Risk	Prisoners (male).	1-8	10-80
	Healthcare providers – frequent blood contact.	1-2	15-30
	Staff of mental health institutions.	1	10-25
	Heterosexuals with multiple partners.	0.5	5-20
Low-Risk	Healthcare providers – no or infrequent blood contact.	0.3	3-10
	Healthy adults (first-time volunteer blood donors).	0.3	3-5



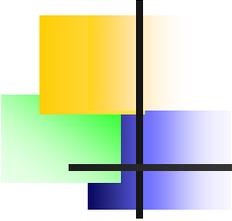


# Benefits of increased screening

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- ❑ **Identified from Mid-County refugee screening:**
  - ❑ **14 chronic HBV**
  - ❑ **79 immune**
  - ❑ **Previously around 30% of refugees were screened**
- ❑ **Previous studies have shown screening to be cost effective**



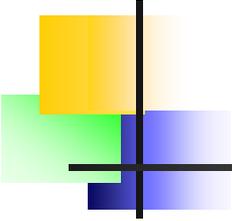


# Lessons Learned

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- ❑ **Cultural/linguistic outreach**
  - ❑ **Appropriate outreach materials**
  - ❑ **Cultural competency considerations**
  
- ❑ **Best practices**
  - ❑ **Relationship building**
    - ❑ Working with CBOs and other partners
    - ❑ On-site clinics
  - ❑ **Providing follow-up care/prevention**



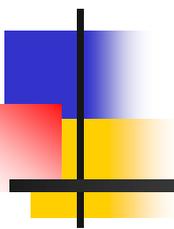


# Conclusions

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- ❑ Screening ↑ clients aware of Hep B status
- ❑ Over 90% of clients chronically infected were linked to care
- ❑ More chronic HBV identified through outreach than refugee screening
- ❑ Expansion of model





# Questions?

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This work supported by CDC grant 1U51PS003887-01

<b>HBsAg</b> <b>anti-HBc</b> <b>anti-HBs</b>	negative negative negative	Susceptible
<b>HBsAg</b> <b>anti-HBc</b> <b>anti-HBs</b>	negative positive positive	Immune due to natural infection
<b>HBsAg</b> <b>anti-HBc</b> <b>anti-HBs</b>	negative negative positive	Immune due to hepatitis B vaccination
<b>HBsAg</b> <b>anti-HBc</b> <b>IgM anti-HBc</b> <b>anti-HBs</b>	positive positive positive negative	Acutely infected
<b>HBsAg</b> <b>anti-HBc</b> <b>IgM anti-HBc</b> <b>anti-HBs</b>	positive positive negative negative	Chronically infected
<b>HBsAg</b> <b>anti-HBc</b> <b>anti-HBs</b>	negative positive negative	Interpretation unclear; four possibilities: 1. Resolved infection (most common) 2. False-positive anti-HBc, thus susceptible 3. “Low level” chronic infection 4. Resolving acute infection

Adapted from: A Comprehensive Immunization Strategy to Eliminate Transmission of Hepatitis B Virus Infection in the United States: Recommendations of the Advisory Committee on Immunization Practices. Part I: Immunization of Infants, Children, and Adolescents. MMWR 2005;54(No. RR-16).

