



COUNTY OF LOS ANGELES  
**Public Health**

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# **Los Angeles County Viral Hepatitis Action Plan**

*Local Efforts to Advance a Global Initiative*

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# Outline

- Why is viral hepatitis a public health concern?
- Brief history of global and national viral hepatitis elimination efforts
- LA County Public Health viral hepatitis strategy and approach

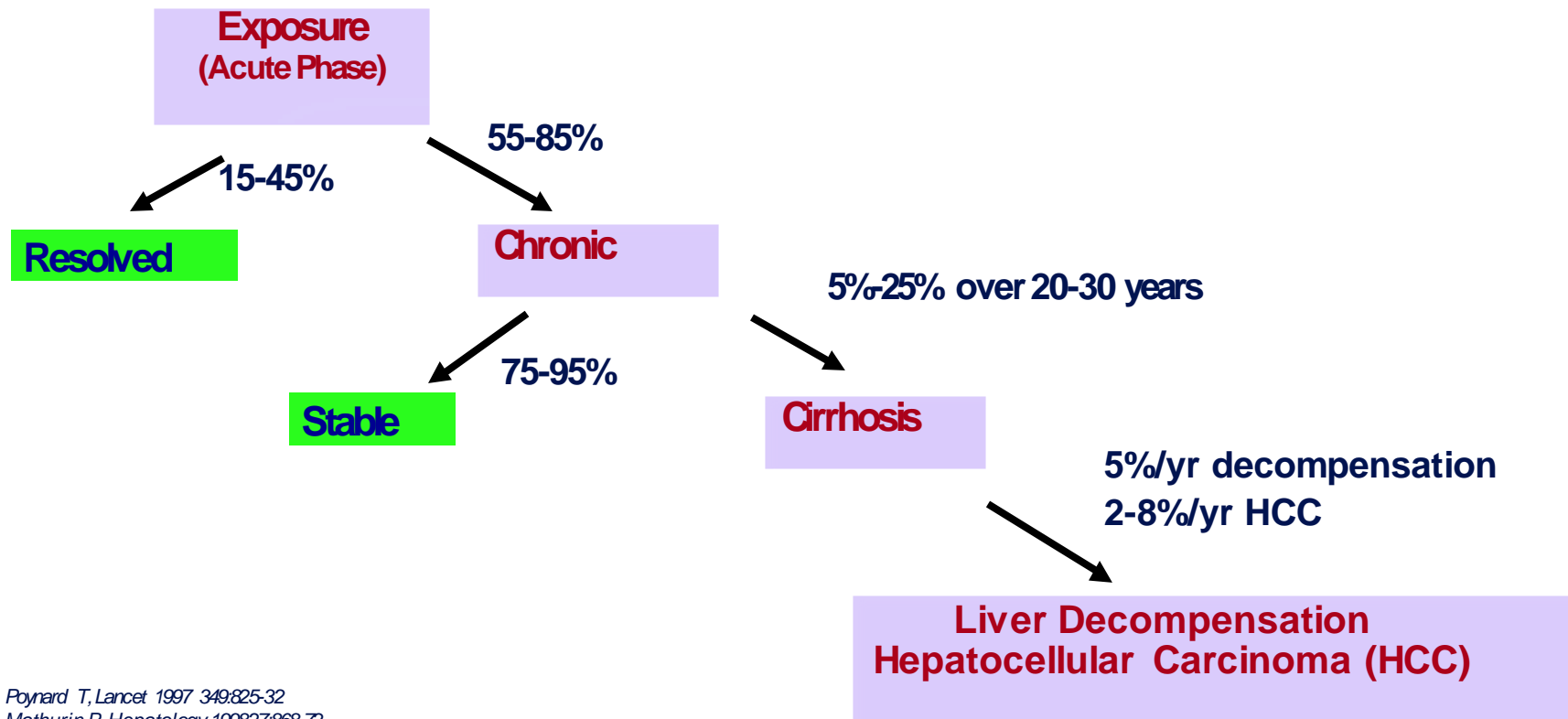


# What is hepatitis C virus (HCV)?

- Identified 1989 and awarded Nobel Prize 2020
- An RNA virus that infects the liver
- Transmitted primarily through percutaneous exposures to infectious blood or body fluids that contain blood
  - Injection drug use (most common)
  - Perinatal
- Uncommon modes of transmission
  - Infection control breaches and blood products
  - Sexual



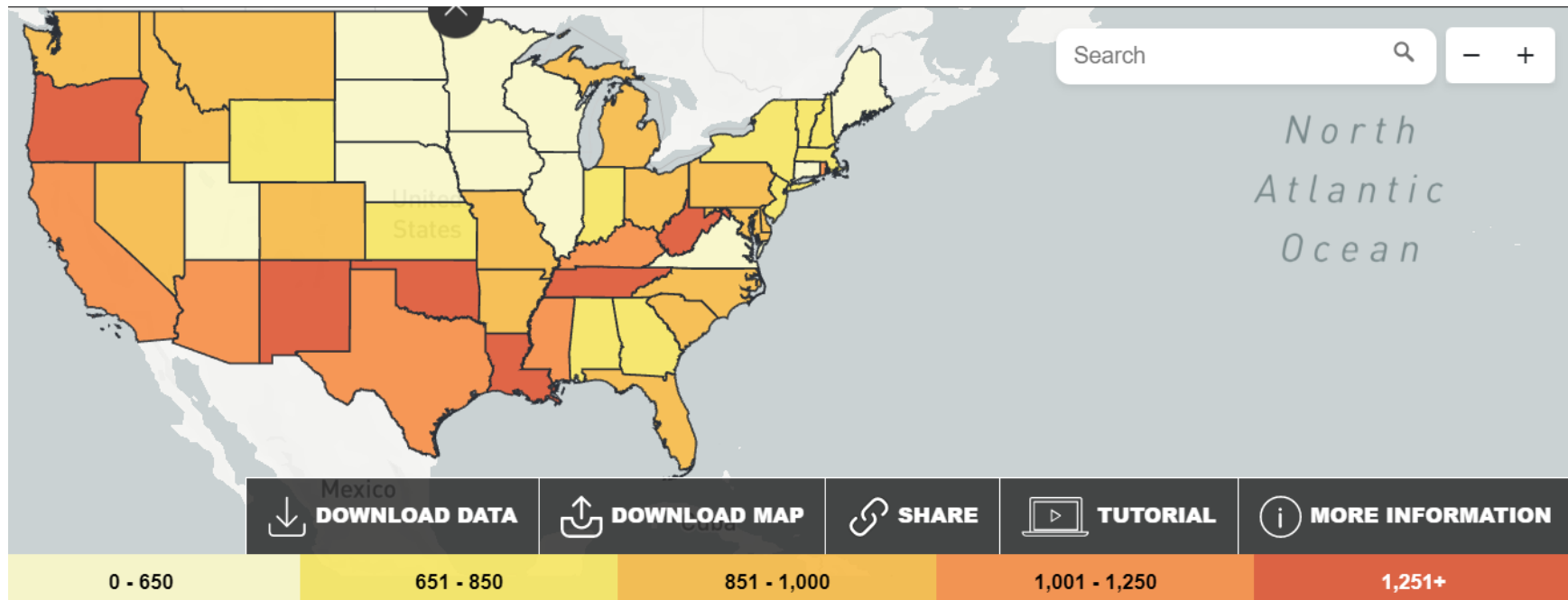
# Natural History of Chronic HCV Infection



Poynard T, *Lancet* 1997;349:825-32  
Mathurin P, *Hepatology* 1998;27:868-72  
Benhamou J, *Hepatology* 1999;30:1054  
Freeman, *Hepatology* 2001  
Ryder SD, *JHepatol.* 2007;47(1):4-6.



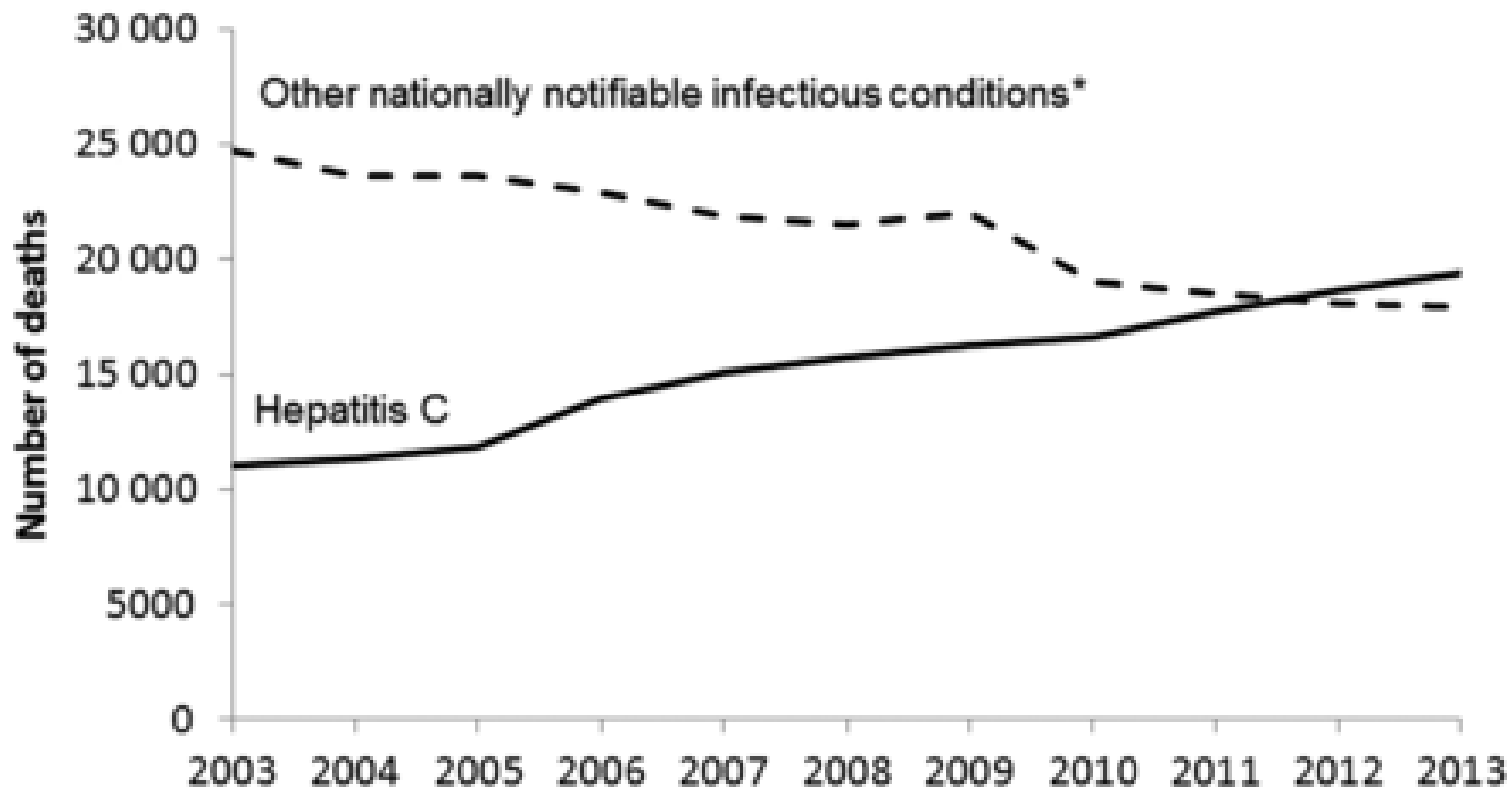
# Estimated Rate of People Living with Hepatitis C, 2013-2016



- ~2.7 million people in US
- 318,900 people in CA → ~100,000 LA County residents



# Hepatitis C is a Leading Infectious Disease Cause of Death — United States, 2003–2013



*Clin Infect Dis*, Volume 62, Issue 10, 15 May 2016, Pages 1287–1288, <https://doi.org/10.1093/cid/ciw111>

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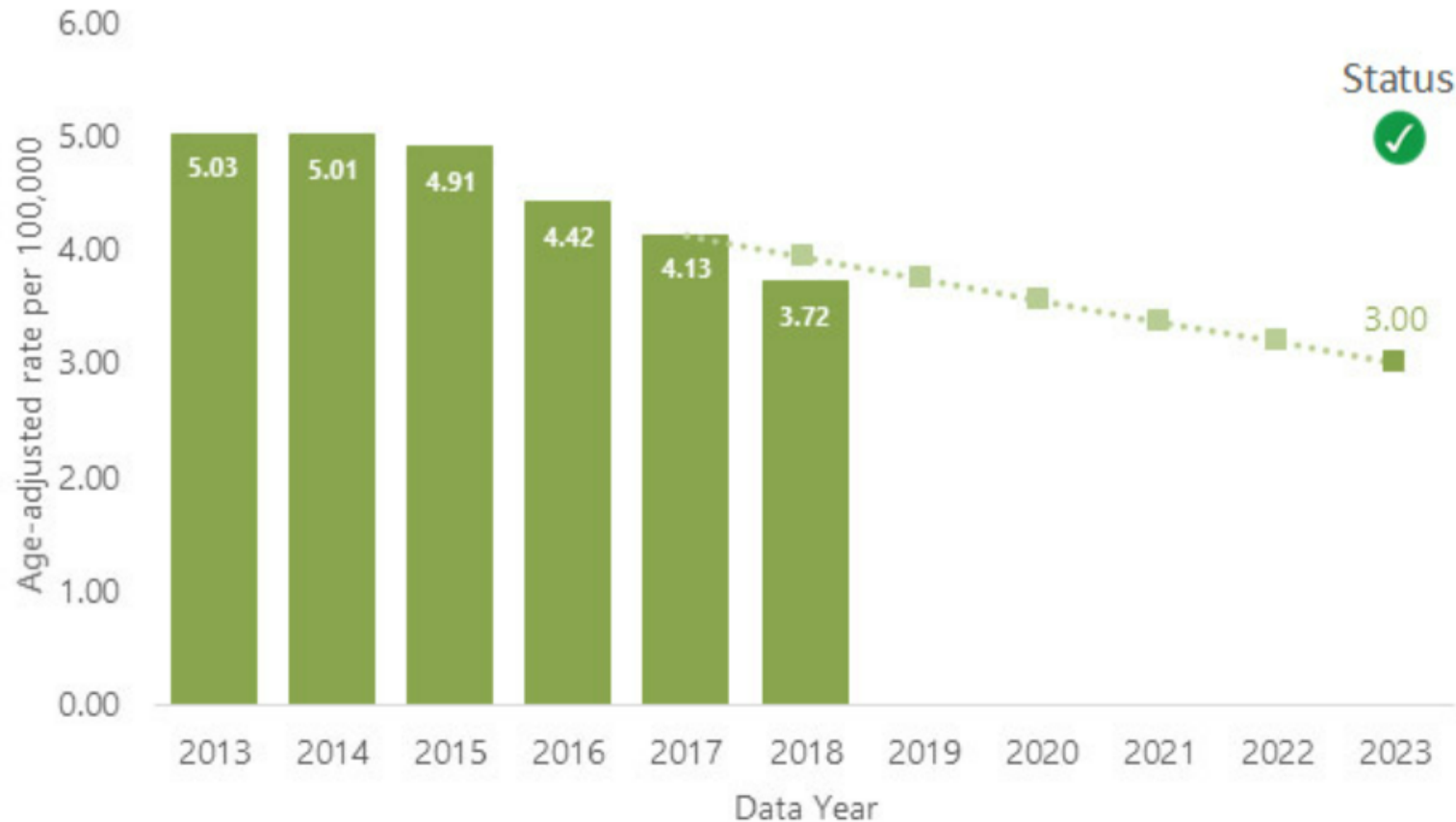


# Evolution of HCV Therapies

- HCV treatable with directly-acting antiviral agents (DAAs)
- First generation DAAs approved 2011 – not effective, costly, many side effects
- Second generation DAAs approved 2014 – effective with minimal side effects, but costly and required specialist evaluation
- Simplified DAA regimens approved 2016 – no longer required specialist evaluation for most patients
- 2016–Present: Declining drug costs and removal of payor restrictions



# Age-adjusted rate of hepatitis C-related deaths — United States, 2013–2018



**Source:** CDC, National Vital Statistics System





# **GLOBAL AND NATIONAL VIRAL HEPATITIS ELIMINATION EFFORTS**

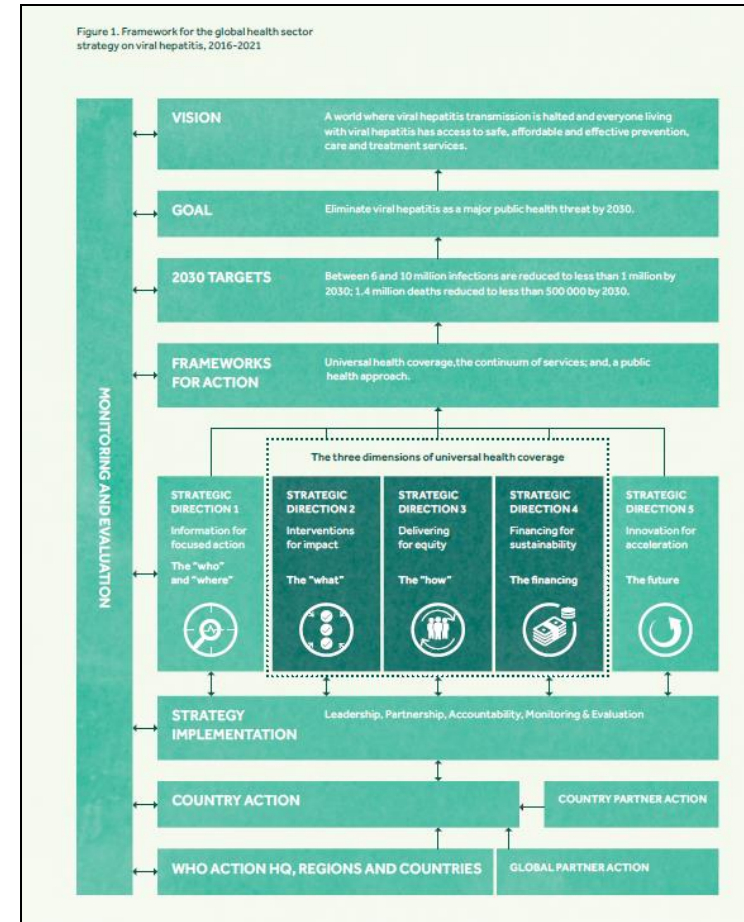
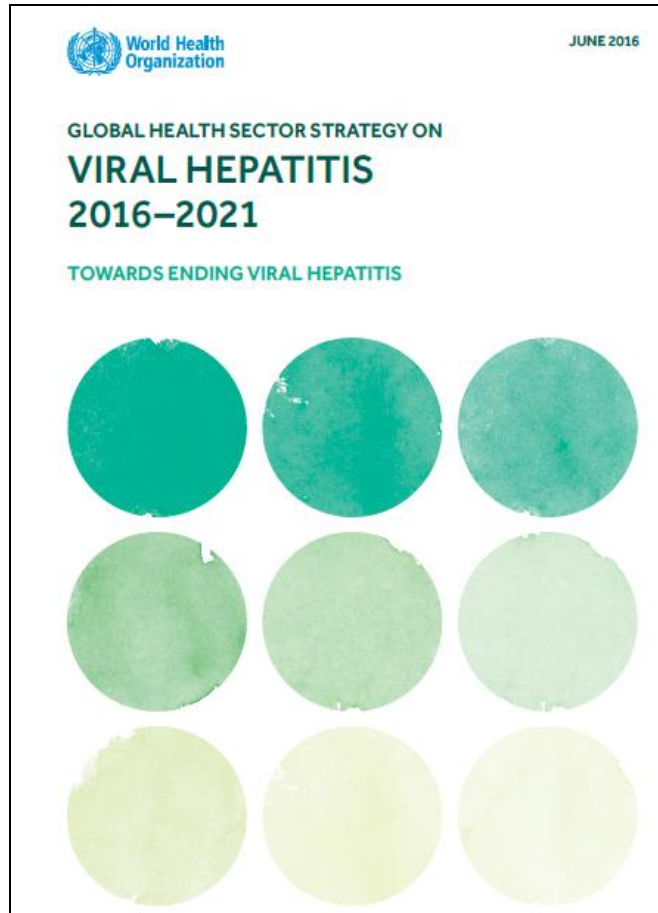
# UN Sustainable Development Goals

Adopted by the United Nations in 2015 as a **universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity.**

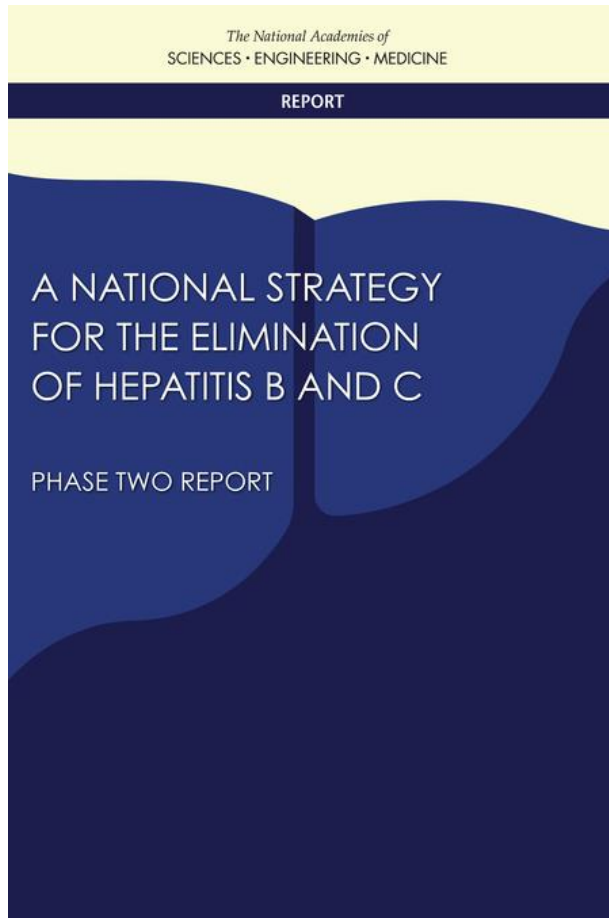


Goal 3.3 reads: *By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and **combat hepatitis**, water-borne diseases and other communicable diseases.*

# World Health Organization Roadmap for Viral Hepatitis Elimination



# National Academies of Science, Engineering and Medicine Viral Hepatitis Strategy



Part 1 – Is national elimination of hepatitis B and C a feasible goal?

- Ending transmission is not a sufficient priority in U.S. and not feasible
- Disease control to reduce the morbidity and mortality more feasible in short-term

Part 2 – Provide a strategy and recommended actions to eliminate public health problem of hepatitis B and C



# HCV Elimination in Georgia (Country)

- Among countries with highest HCV prevalence
  - 5.4% prevalence of chronic HCV in 2015 nationwide serosurvey (~150,000 persons)
- Partnered with CDC to launch world's first national HCV elimination program in 2015
- Provided free testing and treatment to all citizens
- As of October 2019:
  - 53% of estimated 150,000 persons with HCV had been identified
  - 78% of those identified had initiated treatment



# HCV Elimination in Egypt

- Highest global prevalence of HCV
  - 7% prevalence of chronic HCV in nationwide serosurvey in 2015 (~5.5 million persons)
- Egyptian government initiated national test and treat program in 2018
  - DAA costs declined from \$1650 in 2015 to \$85 in 2018 for local generics
- Between October 2018 and April 2019
  - 49 million people (79%) screened
  - 1.3 million previously treated with DAAs (2014-2018)
  - 1.1 million identified with chronic HCV infection
    - 92% initiated DAA therapy

# Alaska Native Tribal Health Model – Proof of Concept for Hepatitis B Virus (HBV) Elimination

- HBV prevalence 6% among AN people and up to 20% in some parts of Alaska
- 1982 – first plasma derived hepatitis B vaccine approved
- 1982 – implemented perinatal HBV program to screen for HBV and offer HBIG and vaccine
- 1984-1987
  - Initiated mass screening/vaccination campaign
  - Screened 75% of the population
  - 40,000 susceptible persons vaccinated
- HBV ceased to be a public health concern by 2008

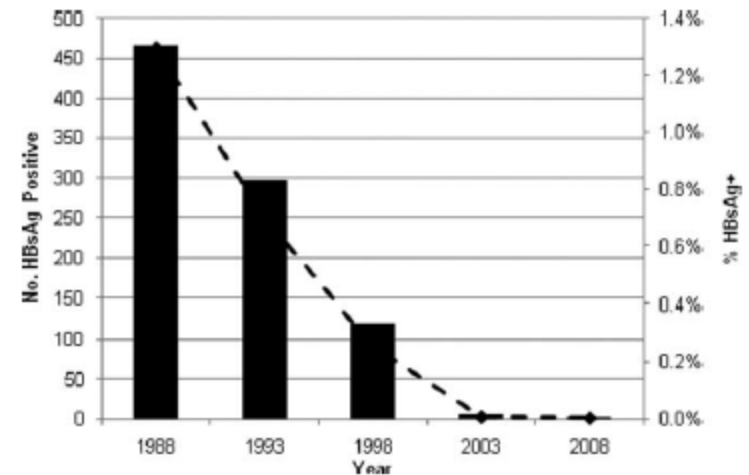


Fig. 2. Prevalence of HBsAg in children <20 years of age: 1988 to 2008.

HBsAg-positive persons aged <20 years  
 1988: 465 (34.3%) of 1,356  
 2008: 2 of 1013

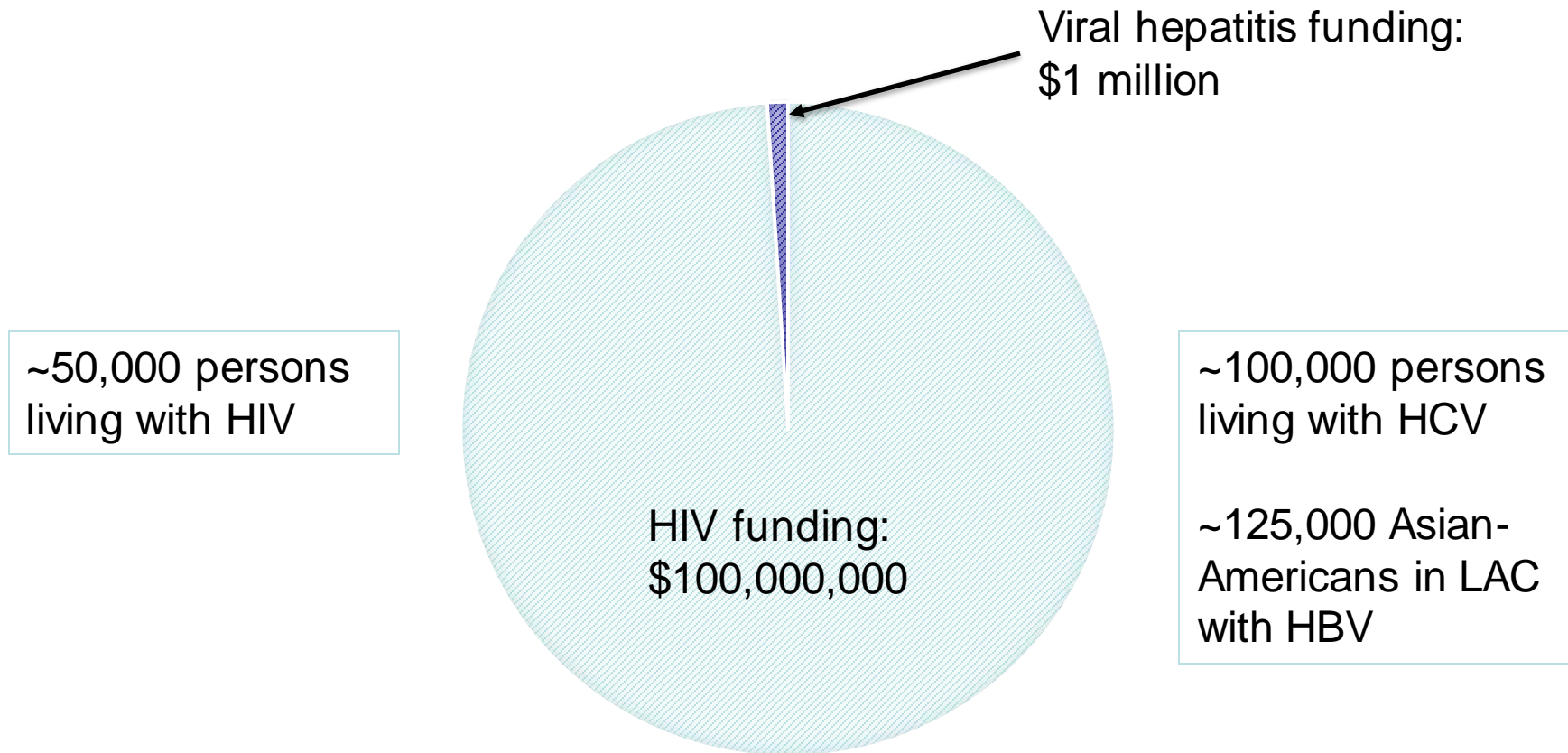


# **LA COUNTY STRATEGY FOR VIRAL HEPATITIS ELIMINATION**





# Annual LA County Public Health Funding



# How can Public Health be most effective with limited resources?

- Microelimination approach
  - Focus on high prevalence settings
  - Unaddressed burden
  - Disconnected from health system
- Viral hepatitis is cross-cutting
  - Risk factors intersect with substance use disorder, syndemic diseases, diseases common in foreign born
- Rely on voluntary contributions from stakeholders
  - Limited public health funding to support direct implementation

# National Strategic Plan

## A Roadmap to Elimination

for the United States | 2021–2025



### A. Vision

The United States will be a place where new viral hepatitis infections are prevented, every person knows their status, and every person with viral hepatitis has high-quality health care and treatment and lives free from stigma and discrimination.

This vision includes all people, regardless of age, sex, gender identity, sexual orientation, race, ethnicity, religion, disability, geographical location, or socioeconomic circumstance.

### B. Goals

In pursuit of this vision, the Hepatitis Plan establishes five goals:



**1. Prevent new viral hepatitis infections**



**2. Improve viral hepatitis–related health outcomes of people with viral hepatitis**



**3. Reduce viral hepatitis–related disparities and health inequities**



**4. Improve viral hepatitis surveillance and data usage**



**5. Achieve integrated, coordinated efforts that address the viral hepatitis epidemics among all partners and stakeholders**



## Examples of Public Health Coordination

- Partner with syringe service programs (SSPs)
  - Standalone SSP develops capacity for HCV screening
  - LA County Public Health provides funding for test kits
  - SSP partners with CBO with CHWs for patient navigation
  - FQHC offers to receive clients for HCV care
- Advocate for health systems implementation of new policies and recommendations
  - State law requires screening for HBV and HCV in primary care settings
  - ACIP recommends hepatitis B vaccine for all adults



# LOS ANGELES COUNTY VIRAL HEPATITIS ACTION PLAN

December 2022