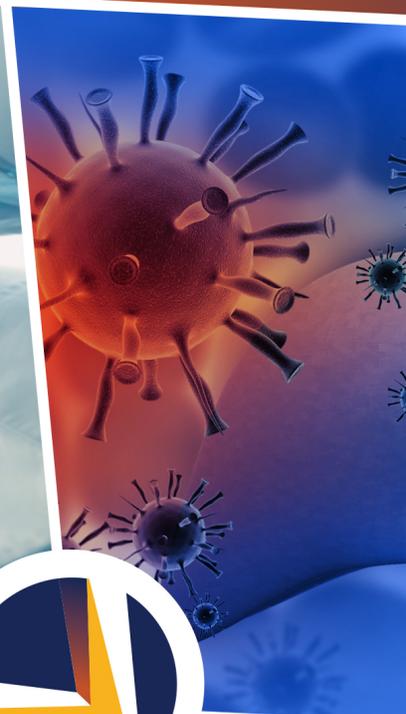




NATIONAL VIRAL HEPATITIS

ACTION PLAN

2018-2019 PROGRESS REPORT





The 2018-2019 Viral Hepatitis Progress Report was prepared under the direction of the Office of Infectious Disease and HIV/AIDS Policy (OIDP), Office of the Assistant Secretary for Health (OASH), U.S. Department of Health and Human Services (HHS). The National Viral Hepatitis Action Plan 2017–2020 (Action Plan) was developed collaboratively with input from representatives of agencies and offices from across HHS as well as from the U.S. Departments of Housing and Urban Development, Justice, and Veterans Affairs.



VISION

The United States will be a place where new viral hepatitis infections have been eliminated, where all people with chronic hepatitis B and hepatitis C know their status, and everyone with chronic hepatitis B and hepatitis C has access to high-quality health care and curative treatments, free from stigma and discrimination.

COMMITMENT

To help achieve our vision, agencies and offices from across the U.S. Department of Health and Human Services and partners from the U.S. Departments of Housing and Urban Development, Justice, and Veterans Affairs have joined together to improve viral hepatitis prevention and the care and treatment provided to people with hepatitis B and hepatitis C. To be successful in our efforts, we must continue to improve the efficiency, effectiveness, and impact of our work. We must remain flexible to adapt to changing needs and funding levels, and make the best use of scientific, clinical, and programmatic advances. The National Viral Hepatitis Action Plan 2017-2020 (Action Plan) provides a roadmap for this important work, and the federal government is committed to achieving the Action Plan's goals.

Although this is a federal progress report, we acknowledge the tremendous support and commitment of a broad mix of nonfederal stakeholders from various sectors, both public and private, whose work contributes substantially to the nation's progress. Many of the actions reported reflect the work of nonfederal stakeholders, including actions that are supported through grants, cooperative agreements, partnerships, and other collaborative efforts.

The Action Plan itself is a national plan. It emphasizes that all sectors of society have roles to play if we are to achieve our vision and national goals, prevent disease and death, and reduce costs to the health care system. As progress to address viral hepatitis faces new threats, most notably from the opioid crisis, and in 2020 from the COVID-19 pandemic, we must find new ways to work together with a broad variety of stakeholders to sustain our achievements and continue to advance toward the nation's viral hepatitis prevention and care goals. All sectors of society – both federal and nonfederal – are needed to achieve the Action Plan's goals and to realize a future where viral hepatitis in this nation has been eliminated.





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INTRODUCTION

This report provides an overview of progress toward achieving the goals of the National Viral Hepatitis Action Plan based on 2018 surveillance data (the most recent data currently available) and key federal actions that were taken during fiscal years (FY) 2018 – 2019.

OVERVIEW OF THE NATIONAL VIRAL HEPATITIS ACTION PLAN 2017-2020

The [National Viral Hepatitis Action Plan 2017–2020](#) (Action Plan) is the third iteration of a strategic roadmap to address viral hepatitis in the United States. Building on progress under the previous iterations, the Action Plan sets four goals and recommends more than 20 strategies to achieve the goals. These strategies, if implemented by the full range of stakeholders, are expected to improve the prevention, diagnosis, and treatment of viral hepatitis in the United States. Federal agencies engaged in implementing these strategies include the U.S. Departments of Health and Human Services (HHS), Housing and Urban Development (HUD), Justice (DOJ), and Veterans Affairs (VA). Nonfederal stakeholders include a wide range of state and local governments, nonprofit and advocacy organizations, academic institutions, health plans, healthcare providers, and professional organizations, as well as private sector groups and companies.

The Action Plan has guided the nation’s response to the viral hepatitis epidemic through its goals:

- Goal 1: Prevent new viral hepatitis infections
- Goal 2: Reduce deaths and improve the health of people living with viral hepatitis
- Goal 3: Reduce viral hepatitis health disparities
- Goal 4: Coordinate, monitor, and report on implementation of viral hepatitis activities

In order to help stakeholders with limited resources focus their efforts for the greatest impact, the Action Plan identifies the following disproportionately impacted populations, referred to as priority populations¹, which have higher rates and/or risk for transmission of viral hepatitis:

- Baby boomers (people born during 1945–1965)
- People who inject drugs
- American Indians and Alaska Natives (AI/AN)
- Asian Americans and Pacific Islanders (AAPI)
- African Americans
- People in correctional facilities
- Veterans, particularly those who served during the Vietnam War era
- Homeless individuals
- Men who have sex with men (MSM)

¹ The Action Plan refers to the priority populations utilizing this terminology, but it is recognized that language and preferred terminology change over time.



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- Pregnant women
- People living with HIV/AIDS

A key feature of the Action Plan is the 17 indicators used to measure progress toward the national goals. These are reported below.

In support of efforts across the federal government to implement the Action Plan, the Office of Infectious Disease and HIV/AIDS Policy (OIDP), within the Office of the Assistant Secretary for Health (OASH) in HHS, convenes the Viral Hepatitis Implementation Group (VHIG). The VHIG coordinates and monitors implementation of the Action Plan. Its members include representatives from across HHS agencies and other federal departments engaged in implementing the Action Plan. VHIG members meet regularly to share information about resources and initiatives, advance and collaborate on implementation of the Action Plan’s strategies, and address new opportunities and challenges. The members represent their respective agencies and offices on matters related to viral hepatitis.

IN THIS REPORT

This report includes:

- Table of overall progress on indicators based on 2018 data.
- Graphs and tables of each indicator and progress toward 2020 targets
- Description of data sources
- A description of each federal partner’s role
- Timeline of significant policy, program, and scientific actions by federal partners during FY2018 – FY2019.

Appendices:

- Appendix 1: A more detailed list of reported federal actions undertaken in FY2018 – FY2019
- Appendix 2: Publications, articles, and reports by federal partners in FY2018 – FY2019 that contribute to the growing body of evidence in the field of viral hepatitis
- Appendix 3: Abbreviations used in this report.



PROGRESS ON THE INDICATOR MEASURES

Indicators are important tools that help measure progress toward meeting the goals established in the Action Plan. The indicators were selected because they represent the best way to measure national progress on viral hepatitis prevention and care based on the available data and in alignment with other national plans. The baseline year for the indicators is 2014, the most recent year national surveillance data was available at the time the Action Plan was published. This report uses 2018 surveillance data, which are the most recent data available, to measure progress. Centers for Disease Control and Prevention (CDC) generally reports viral hepatitis surveillance data two years after the calendar year in which they occurred. The lag is due to the time needed to collect data from all jurisdictions, ensure completeness and accuracy, and conduct analyses.

Based on 2018 data, across the 17 indicators:

- Five are on track to meet 2020 targets;
- Three are moving in the right direction but require additional effort to meet the 2020 targets;
- Five are trending in the wrong direction; and
- Four do not have updated data available.

Below is a full-page chart that presents the 17 indicators and, based on 2018 data, summarizes progress toward the 2020 targets. Following that chart is a series of graphs – one for each indicator. The graphs illustrate the annual targets set forth in the Action Plan and the current trends based on CDC surveillance data. They include linear trend projections based on available data; these projections may change as new national data are published. The color of the lines in each graph correspond with progress in meeting the 2020 target, as indicated by the key. The data sources for the indicators are described following the series of graphs.



OVERALL PROGRESS ON ACTION PLAN INDICATOR MEASURES: BASED ON 2018 DATA

Indicator and Measure	Baseline (2014)	Progress as of 2018	2020 Goal	Data Source†
GOAL 1				
1. Decrease the number of new HBV infections by at least 60% # estimated and (reported) acute hepatitis B cases in the U.S.	18,090 (2,791)*	21,600	7,236 (1,116)*	NNDSS
2. Increase the rate of hepatitis B vaccine “birth dose” coverage to 85% % children who received the first dose of hepatitis B vaccine within three days of birth	71.8%	NO NEW DATA	85.0%	NIS-Child
3. Increase the rate of hepatitis B vaccination among health care personnel to 90% % health care personnel 19 years of age and older with direct patient care responsibilities reporting they have had at least three doses of hepatitis B vaccine	67.7%	NO NEW DATA	90.0%	NHIS
4. Decrease the number of new HCV infections by at least 60% # estimated and (reported) acute hepatitis C cases in the U.S.	30,500 (2,194)*	50,300	10,889 (783)*	NNDSS
GOAL 2				
5. Increase the percentage of persons aware of their HBV infection to 66% % respondents who indicate they were aware they had hepatitis B prior to laboratory testing	33.0%	NO NEW DATA	66.0%	NHANES
6. Reduce the number of HBV-related deaths by 20% # deaths in the U.S. for which hepatitis B is listed as the underlying or a contributing cause of death	1,843	1,649	1,474	NVSS
7. Increase the percentage of persons aware of their HCV infection to 66% % respondents who indicate they were aware they had hepatitis C prior to laboratory testing	54.0% (2013–2016)	NO NEW DATA	66.0%	NHANES
8. Reduce the number of HCV-related deaths by 25% # deaths in the U.S. for which hepatitis C is listed as the underlying or a contributing cause of death	19,659	15,713	14,744	NVSS
GOAL 3				
9. Decrease the number of new HBV infections among individuals 30–49 years of age by at least 60% # reported acute hepatitis B cases for adults 30–49 years of age living in the U.S.	1,706	1,920	682	NNDSS
10. Reduce the number of HBV-related deaths among AAPI by at least 20% # deaths among AAPI living in the U.S. for which hepatitis B is listed as the underlying or a contributing cause of death	478	439	382	NVSS
11. Reduce the number of HBV-related deaths among African Americans by at least 20% # deaths among African Americans living in the U.S. for which hepatitis B is listed as the underlying or a contributing cause of death	330	304	264	NVSS
12. Reduce the number of HBV-related deaths among individuals 45 years of age and older by at least 20% # deaths among persons ages 45 and older in the U.S. for which hepatitis B is listed as the underlying or a contributing cause of death	1,682	1,495	1,346	NVSS
13. Decrease the number of new HCV infections among individuals 20–39 years of age by at least 60% # acute hepatitis C cases reported for adults 20–39 years of age in the U.S.	1,561	2,380	624	NNDSS
14. Decrease the number of new HCV infections among AI/AN by at least 60% # reported acute hepatitis C cases for AI/AN living in the U.S.	29	83	12	NNDSS
15. Reduce the number of HCV-related deaths among individuals 55–74 years of age by at least 25% # deaths among persons ages 55–74 in the U.S. for which hepatitis C is listed as the underlying or a contributing cause of death	13,389	11,726	10,042	NVSS
16. Reduce the number of HCV-related deaths among AI/AN by at least 25% # deaths among AI/AN in the U.S. for which hepatitis C is listed as the underlying or a contributing cause of death	317	264	238	NVSS
17. Reduce the number of HCV-related deaths among African Americans by at least 25% # deaths among African Americans living in the U.S. for which hepatitis C is listed as the underlying or a contributing cause of death	3,540	2,978	2,655	NVSS

on track to achieve 2020 target
 trending in the right direction
 not on track to achieve 2020 target
 data not available

*In cells that contain two numbers, the initial number is estimated cases, the number in parentheses is reported cases.

† NHANES = [National Health and Nutrition Examination Survey](#); NHIS = [National Health Interview Survey](#); NIS-Child = [National Immunization Survey-Children](#); NNDSS = [National Notifiable Diseases Surveillance System](#); NVSS= [National Vital Statistics System](#)

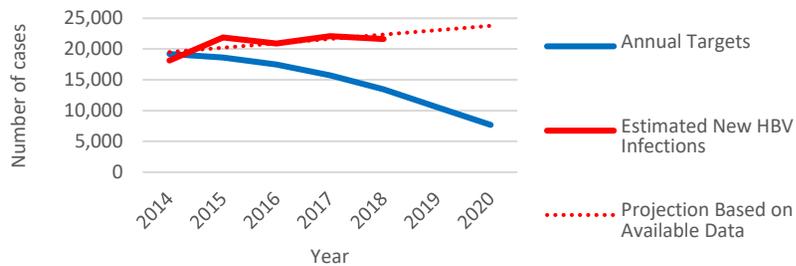


GRAPHS AND TABLES OF EACH INDICATOR AND PROGRESS TOWARD 2020 TARGETS

This section provides graphs of annual targets that are set forth in the Action Plan and the current trends based on available surveillance data. The linear trend projections are based on available data and may change when new national data are published. The color of the lines in each graph correspond with progress in meeting the 2020 target, as indicated by the key below. The methodology for measuring indicators from the NNDSS and NVSS is available in CDC’s [2018 Viral Hepatitis Surveillance Report](#). The methodology for measuring indicators from NHANES, NHIS, and NIS-Child is available from each of those data sources.



1. Decrease the number of new HBV infections by at least 60% # estimated acute hepatitis B cases in the U.S.

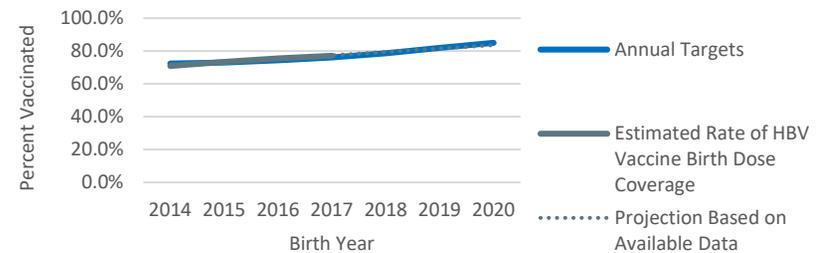


Source: National Notifiable Diseases Surveillance System

	2014	2015	2016	2017	2018	2019	2020
ANNUAL TARGETS*	19,200	18,624	17,472	15,744	13,440	10,560	7,680
EST. NEW INFECTIONS	18,142	21,905	20,917	22,100	21,600		

* Annual target numbers do not match those reported in the Action Plan because CDC published updated numbers after the Action Plan was published; the updated numbers and targets are presented here.

2. Increase the rate of hepatitis B vaccine "birth dose" coverage to 85% % children who received the first dose of hepatitis B vaccine within three days of birth



Source: National Immunization Surveys – Children

	2014	2015	2016	2017	2018	2019	2020
ANNUAL TARGETS*	72.4%	73.0%	74.3%	76.2%	78.7%	81.9%	85.0%
EST. RATE OF COVERAGE	70.9%	73.3%	75.6%	77.1%†	Data not available		

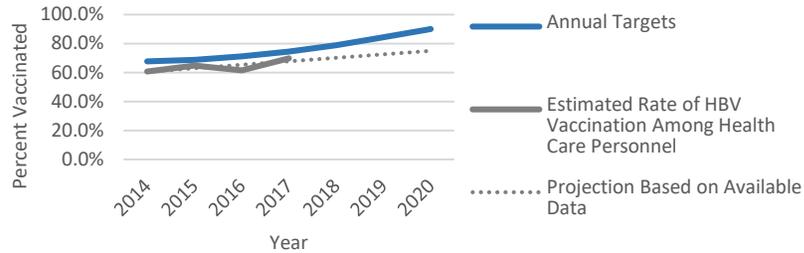
*Annual targets and estimated coverage for this indicator differs from data published in the Action Plan and 2017 Progress Report. CDC transitioned from reporting NIS-Child data by survey year to birth year and this data reflects the change.

†Estimates for children born in 2017 are considered preliminary and will be finalized after the data for survey year 2020 are available.



3. Increase the rate of hepatitis B vaccination among health care personnel to 90%

% health care personnel 19 years of age and older with direct patient care responsibilities reporting they have had at least three doses of hepatitis B vaccine

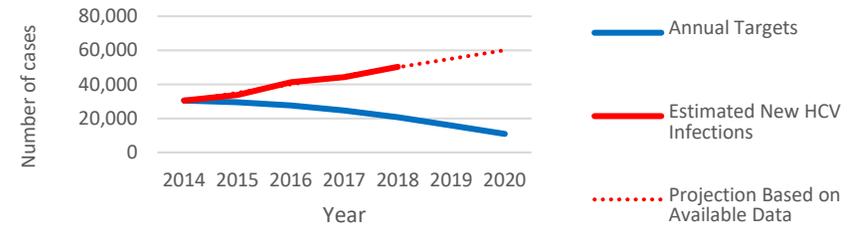


Source: National Health Interview Survey

	2014	2015	2016	2017	2018	2019	2020
ANNUAL TARGETS	67.7%	68.8%	71.1%	74.4%	78.9%	84.4%	90.0%
EST. RATE OF VACCINATION	67.7%	64.7%	61.4%	69.8%	Data not available		

4. Decrease the number of new HCV infections by at least 60%

estimated acute hepatitis C cases in the U.S.



Source: National Notifiable Diseases Surveillance System

	2014	2015	2016	2017	2018	2019	2020
ANNUAL TARGETS	30,500	29,519	27,558	24,617	20,694	15,791	10,889
EST. NEW INFECTIONS	30,497	33,860	41,241	44,300	50,300		

5. Increase the percentage of persons aware of their HBV infection by 66%

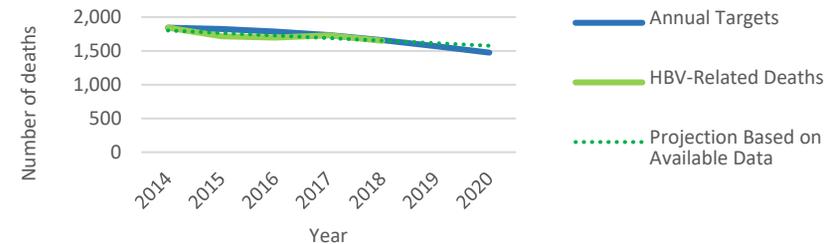
% respondents who indicate they were aware they had hepatitis B prior to laboratory testing

No new data is available for this indicator. Progress is reported on this indicator utilizing 4-year estimates from NHANES. The next 4-year estimate will be from 2017-2020 and is expected to be available in 2021.

Source: National Health and Nutrition Examination Survey

6. Reduce the number of HBV-related deaths by 20%

deaths in the U.S. for which hepatitis B is listed as the underlying or a contributing cause of death



Source: National Vital Statistics System

	2014	2015	2016	2017	2018	2019	2020
ANNUAL TARGETS	1,843	1,825	1,788	1,732	1,659	1,567	1,474
HBV-RELATED DEATHS	1,843	1,715	1,698	1,727	1,649		

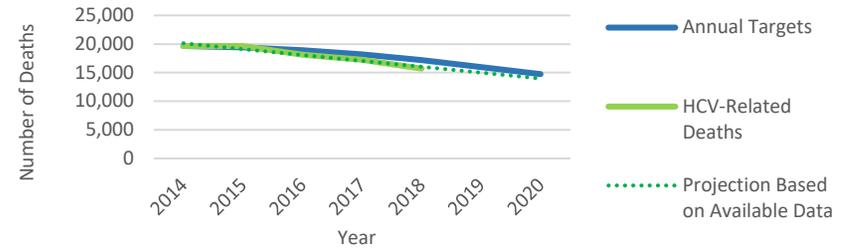


7. Increase the percent of persons aware of their HCV infection to 66%
% respondents who indicate they were aware they had hepatitis C prior to laboratory testing

No new data is available for this indicator. Progress is reported on this indicator utilizing 4-year estimates from NHANES. The next 4-year estimate will be from 2017-2020 and is expected to be available in 2021.

Source: National Health and Nutrition Examination Survey

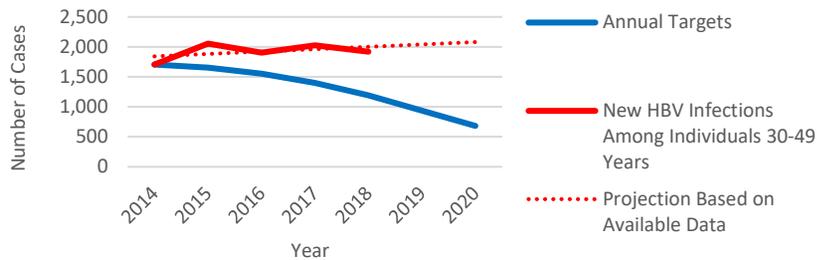
8. Reduce the number of HCV-related deaths by 25%
deaths in the U.S. for which hepatitis C is listed as the underlying or a contributing cause of death



Source: National Vital Statistics System

	2014	2015	2016	2017	2018	2019	2020
ANNUAL TARGETS	19,659	19,413	18,922	18,185	17,202	15,973	14,744
HCV-RELATED DEATHS	19,659	19,629	18,153	17,253	15,713		

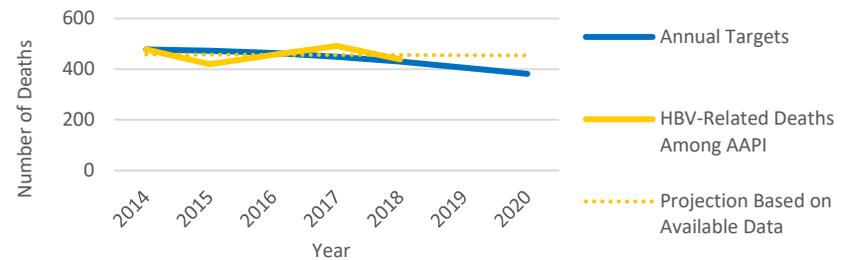
9. Decrease the number of new HBV infections among individuals 30-49 years of age by at least 60%
reported acute hepatitis B cases for adults 30-49 years of age living in the U.S.



Source: National Notifiable Diseases Surveillance System

	2014	2015	2016	2017	2018	2019	2020
ANNUAL TARGETS	1,706	1,655	1,552	1,399	1,194	938	682
NEW HBV INFECTIONS AMONG INDIVIDUALS 30-49 YEARS	1,706	2,055	1,906	2,024	1,920		

10. Reduce the number of HBV-related deaths among AAPI by at least 20%
deaths among AAPI living in the U.S. for which hepatitis B is listed as the underlying or a contributing cause of death



Source: National Vital Statistics System

	2014	2015	2016	2017	2018	2019	2020
ANNUAL TARGETS	478	473	464	449	430	406	382
HBV-RELATED DEATHS AMONG AAPI	478	420	457	492	439		

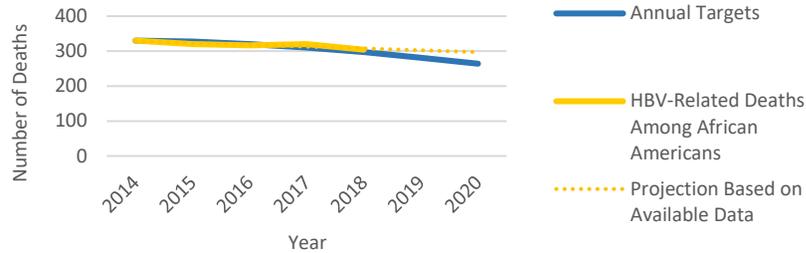


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11. Reduce the number of HBV-related deaths among African Americans by at least 20%

deaths among African Americans living in the U.S. for which hepatitis B listed as the underlying or a contributing cause of death

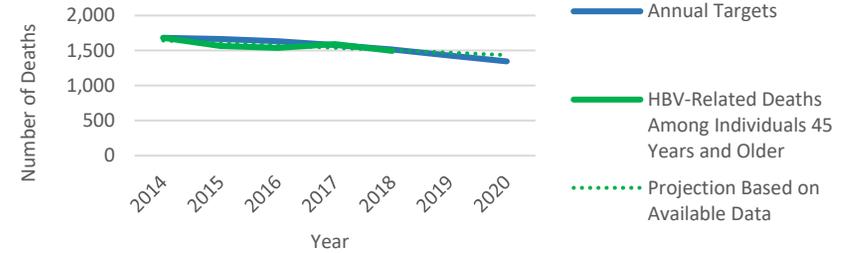


Source: National Vital Statistics System

	2014	2015	2016	2017	2018	2019	2020
ANNUAL TARGETS	330	327	320	310	297	281	264
HBV-RELATED DEATHS AMONG AFRICAN AMERICANS	330	320	316	320	304		

12. Reduce the number of HBV-related deaths among individuals 45 years of age and older by at least 20%

deaths among persons aged 45 and older in the U.S. for which hepatitis B is listed as the underlying or a contributing cause of death

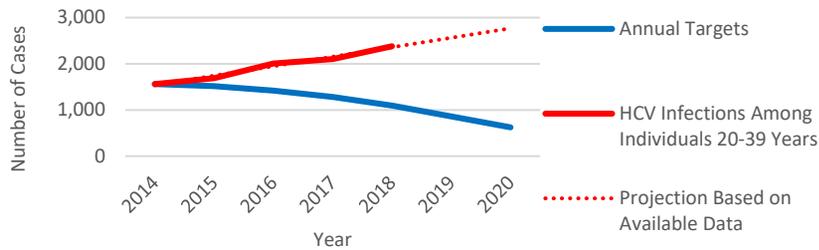


Source: National Vital Statistics System

	2014	2015	2016	2017	2018	2019	2020
ANNUAL TARGETS	1,682	1,665	1,632	1,581	1,514	1,430	1,346
HBV-RELATED DEATHS AMONG INDIVIDUALS 45 YEARS AND OLDER	1,682	1,563	1,540	1,591	1,495		

13. Decrease the number of new HCV infections among individuals 20-39 years of age by at least 60%

acute hepatitis C cases reported for adults 20-39 years of age in the U.S.

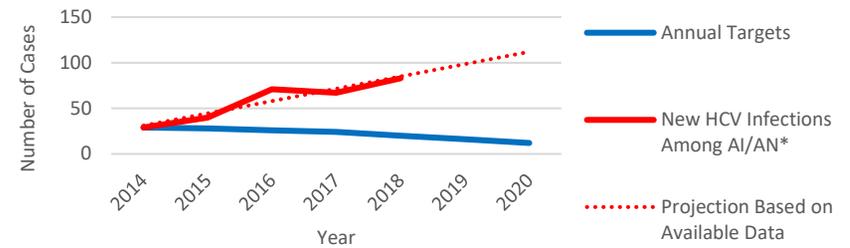


Source: National Notifiable Diseases Surveillance System

	2014	2015	2016	2017	2018	2019	2020
ANNUAL TARGETS	1,561	1,514	1,421	1,280	1,093	859	624
NEW HCV INFECTIONS AMONG INDIVIDUALS 20-39 YEARS	1,561	1,692	2,003	2,105	2,380		

14. Decrease the number of new HCV infections among AI/AN by at least 60%

reported acute hepatitis C cases for AI/AN living in the U.S.



Source: National Notifiable Diseases Surveillance System

	2014	2015	2016	2017	2018	2019	2020
ANNUAL TARGETS	29	28	26	24	20	16	12
NEW HCV INFECTIONS AMONG AI/AN	29	40	71	67	83		

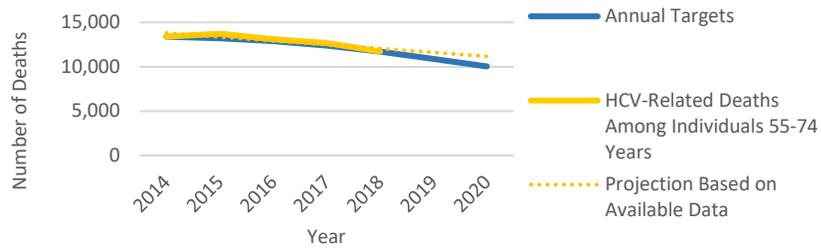


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15. Reduce the number of HCV-related deaths among individuals 55-74 years of age by at least 25%

deaths among persons aged 55-74 in the U.S. for which hepatitis C is listed as the underlying or a contributing cause of death

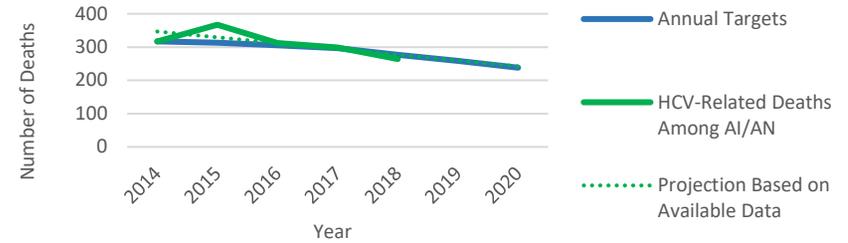


Source: National Vital Statistics System

	2014	2015	2016	2017	2018	2019	2020
ANNUAL TARGETS	13,389	13,222	12,887	12,385	11,715	10,879	10,042
HCV-RELATED DEATHS AMONG INDIVIDUALS 55-74 YEARS	13,389	13,725	13,118	12,672	11,726		

16. Reduce the number of HCV-related deaths among AI/AN by at least 25%

deaths among AI/AN in the U.S. for which hepatitis C is listed as the underlying or a contributing cause of death

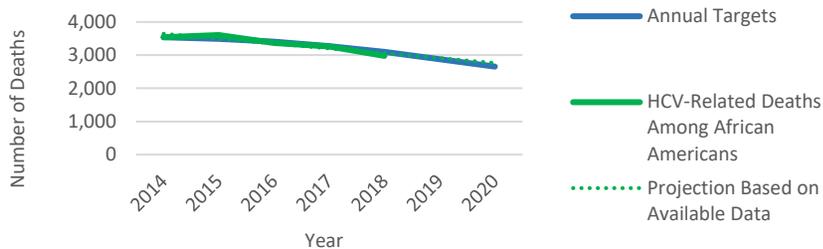


Source: National Vital Statistics System

	2014	2015	2016	2017	2018	2019	2020
ANNUAL TARGETS	317	313	305	297	277	258	238
HCV-RELATED DEATHS AMONG AI/AN	317	367	312	299	264		

17. Reduce the number of HCV-related deaths among African Americans by at least 25%

deaths among African Americans living in the U.S. for which hepatitis C is listed as the underlying or a contributing cause of death



Source: National Vital Statistics System

	2014	2015	2016	2017	2018	2019	2020
ANNUAL TARGETS	3,540	3,496	3,407	3,275	3,098	2,876	2,655
HCV-RELATED DEATHS AMONG AFRICAN AMERICANS	3,540	3,606	3,365	3,262	2,978		



DATA SOURCES

The [National Health and Nutrition Examination Survey](#) (NHANES) is a CDC program designed to assess the health and nutritional status of adults and children in the United States. A survey and physical examination of a nationally representative sample of 5,000 persons each year collects demographic, socioeconomic, dietary, and health-related data as well as medical, dental, and physiological measurements and results of laboratory tests administered by medical personnel.

The [National Health Interview Survey](#) (NHIS) is an annual, cross-sectional in-person household survey collected by CDC's National Center for Health Statistics and conducted by interviewers trained by the U.S. Census Bureau. Data are used to monitor self-reported trends in illness and disability among the U.S. civilian noninstitutionalized population. NHIS provides adult vaccination coverage estimates.

The [National Immunization Surveys](#) (NIS) are a group of telephone surveys sponsored and conducted by CDC's National Center for Immunization and Respiratory Diseases. [NIS-Child](#) targets children in the United States who are or will be 19–35 months old within a few weeks of the survey. Annually collected data are used to monitor vaccination coverage among 2-year-old children, including the hepatitis B birth dose, at the national, state, and selected local levels, and in some U.S. territories.

The [National Notifiable Diseases Surveillance System](#) (NNDSS) is a CDC program managed by its Division of Health Informatics and Surveillance that collects, analyzes, and publishes health data for approximately 120 diseases. These data, which CDC collects annually, help public health officials monitor, control, and prevent disease in the United States.

The [National Vital Statistics System](#) (NVSS) is the mechanism by which CDC's National Center of Health Statistics (NCHS) annually collects and disseminates the nation's official vital statistics. These data are provided through contracts between NCHS and vital registration systems operated in the various jurisdictions legally responsible for the registration of vital events – births, deaths, marriages, divorces, and fetal deaths.



FEDERAL ACTIVITIES TO ADVANCE THE UNITED STATES TOWARD NATIONAL HEPATITIS GOALS

The Action Plan was developed collaboratively by partners from federal agencies with input from nonfederal stakeholders from a variety of sectors. These federal partners have implemented a wide range of viral hepatitis activities, from prevention to care to researching new viral hepatitis therapies. The activities are described in detail in Appendix 2.

DEPARTMENTS, AGENCIES, AND OFFICES THAT IMPLEMENTED THE ACTION PLAN IN FY2018 – FY2019

Department of Health and Human Services (HHS)	
Agency for Healthcare Research and Quality (AHRQ)	AHRQ’s mission is to produce evidence to make health care safer, higher quality, more accessible, equitable, and affordable, and to work within the U.S. Department of Health and Human Services and with other partners to make sure that the evidence is understood and used.
Centers for Disease Control and Prevention (CDC)	
National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP)	NCCDPHP’s mission is to help people and communities prevent chronic diseases and promote health and wellness for all.
National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP)	NCHHSTP maximizes public health and safety nationally and internationally through the elimination, prevention, and control of disease, disability, and death caused by HIV/AIDS, non-HIV retroviruses, viral hepatitis, other sexually transmitted diseases, and tuberculosis.
Division of Viral Hepatitis (DVH)	DVH’s mission is to end the viral hepatitis epidemics through leadership in science and public health practices.
National Center for Immunization and Respiratory Diseases (NCIRD)	NCIRD’s mission is the prevention of disease, disability, and death through immunization and by control of respiratory and related diseases.
Centers for Medicare & Medicaid Services (CMS)	CMS provides health coverage to more than 100 million people through Medicare, Medicaid, the Children’s Health Insurance Program, and the private health insurance market including Health Insurance Exchanges. CMS seeks to strengthen and modernize the nation’s health care system, to provide access to high quality care and improved health at lower costs.
Food and Drug Administration (FDA), Center for Drug Evaluation and Research (CDER)	CDER’s mission is to protect and promote public health by helping to ensure that human drugs are safe and effective for their intended use, that they meet established quality standards, and that they are available to patients.



Department of Health and Human Services (HHS)	
Health Resources and Services Administration (HRSA), HIV/AIDS Bureau (HAB)	HRSA HAB’s mission is to provide leadership and resources to assure access to and retention in high quality, integrated care and treatment services for vulnerable people with HIV/AIDS and their families.
Indian Health Service (IHS)	IHS is responsible for providing federal health services to American Indians and Alaska Natives. The mission of IHS is to raise the physical, mental, social, and spiritual health of American Indians and Alaska Natives to the highest level.
National Institutes of Health (NIH)	
Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD)	NICHD’s mission is to lead research and training to understand human development, improve reproductive health, enhance the lives of children and adolescents, and optimize abilities for all.
National Cancer Institute (NCI)	NCI leads, conducts, and supports cancer research across the nation to advance scientific knowledge and help all people live longer, healthier lives.
National Institute of Allergy and Infectious Diseases (NIAID)	NIAID’s mission is to conduct and support basic and applied research to better understand, treat, and ultimately prevent infectious, immunologic, and allergic diseases.
National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)	The mission of NIDDK is to conduct and support medical research and research training and to disseminate science-based information on diabetes and other endocrine and metabolic diseases; digestive diseases, nutritional disorders, and obesity; and kidney, urologic, and hematologic diseases, to improve people’s health and quality of life.
National Institute on Drug Abuse (NIDA)	The mission of NIDA is to advance science on the causes and consequences of drug use and addiction and to apply that knowledge to improve individual and public health.
Office of Intergovernmental and External Affairs (OIEA)	OIEA strengthens relationships between state and local partners and external stakeholders with the Office of the Secretary. OIEA also serves as liaison for governmental and non-governmental partners in communicating with Departmental offices and the Bureaus.
Office of the Assistant Secretary for Health (OASH)	
Office of Disease Prevention and Health Promotion (ODPHP)	ODPHP provides leadership for disease prevention and health promotion efforts for all Americans. To promote the health of the country, ODPHP sets national health goals and supports programs, services, and educational activities. ODPHP leads Healthy People 2020/2030, Dietary Guidelines for Americans, Physical Activity Guidelines for Americans, National Clinical Care Commission, National Youth Sports Strategy, President's Council on Sports, Fitness and Nutrition, and healthfinder.gov.



Department of Health and Human Services (HHS)	
Office of Infectious Disease and HIV/AIDS Policy (OIDP)	OIDP provides strategic leadership and management to the Department, while encouraging collaboration, coordination, and innovation among federal agencies and stakeholders, to reduce the burden of infectious diseases. OIDP includes the previously separate Office of HIV/AIDS and Infectious Disease Policy (OHAIDP) and National Vaccine Program Office (NVPO), which were reorganized and combined as OIDP in June 2019.
Office of Population Affairs (OPA)	OPA promotes health across the reproductive lifespan through innovative, evidence-based adolescent health and family planning programs, services, strategic partnerships, evaluation, and research. OPA administers the Title X family planning program, Teen Pregnancy Prevention program, Pregnancy Assistance Fund program, and embryo adoption program. OPA advises the Secretary and the Assistant Secretary for Health on a wide range of topics, including adolescent health, family planning, sterilization, and other population issues.
Office of the Surgeon General (OSG)	As the nation’s doctor, the Surgeon General provides Americans with the best scientific information available on how to improve their health and reduce their risk of illness and injury. The Surgeon General brings this information to the public by issuing Surgeon General’s Advisories, Calls to Action, and Reports on critical issues and communicating directly with the public via a number of communication channels. As Vice Admiral of the U.S. Public Health Service Commissioned Corps, the Surgeon General oversees the operations of the U.S. Public Health Service Commissioned Corps (USPHS) , an elite group of over 6,000 uniformed officers whose mission is to protect, promote, and advance the health of our nation.
Office on Women’s Health (OWH)	OWH provides national leadership and coordination to improve the health of women and girls through policy, education, and innovative programs.
Regional Health Administrators (RHA)	As the senior federal public health official and scientist in the region, each Regional Health Administrator performs essential functions for HHS in three major areas: prevention, preparedness, and agency-wide coordination. These functions support the work of OASH and the Department. There are ten OASH regions nationwide and ten RHAs.
Office of Minority Health (OMH)	OMH is dedicated to improving the health of racial and ethnic minority populations through the development of health policies and programs to help eliminate health disparities.
Office of the National Coordinator for Health Information Technology (ONC)	ONC is the principal federal entity charged with coordination of nationwide efforts to implement and use the most advanced health information technology and the electronic exchange of health information.
Substance Abuse and Mental Health Services Administration (SAMHSA)	SAMHSA leads public health efforts to advance the behavioral health of the nation and to improve the lives of individuals living with mental and substance use disorders, and their families.



Department of Housing and Urban Development

**Agency for Healthcare
Research and Quality
(AHRQ)**

AHRQ’s mission is to produce evidence to make health care safer, higher quality, more accessible, equitable, and affordable, and to work within the U.S. Department of Health and Human Services and with other partners to make sure that the evidence is understood and used.

Department of Justice

**Federal Bureau of Prisons
(BOP)**

The mission of the BOP is to protect society by confining offenders in the controlled environments of prisons and community-based facilities that are safe, humane, cost-efficient, and appropriately secure, and that provide work and other self-improvement opportunities to assist offenders in becoming law-abiding citizens.

Civil Rights Division (CRT)

CRT works to uphold the civil and constitutional rights of all Americans, particularly some of the most vulnerable members of our society. The Division enforces federal statutes prohibiting discrimination on the basis of race, color, sex, disability, religion, familial status and national origin.

Department of Veteran Affairs

**Veterans Health
Administration’s (VHA)
Office of Patient Care
Services (PCS)**

PCS is dedicated to ensuring the full continuum of health care, comprised of health promotion, disease prevention, diagnostics, therapeutic and rehabilitative care, recovery and palliative care. PCS provides care through policy and program development that promotes dignity and respect, and is achieved by utilizing innovative approaches and technologies through interdisciplinary collaboration both within and outside of VHA.



TIMELINE: SELECTED HIGHLIGHTS (BASED ON FISCAL YEARS)





APPENDIX 1: FEDERAL PROGRESS ON ACTION PLAN

This appendix documents contributions made by federal partners during FY2018 and FY2019 on strategies detailed in the [National Viral Hepatitis Action Plan 2017–2020](#) (Action Plan). It does not provide a complete summary of all the actions federal agencies have taken that are related to Action Plan goals. For example, some agencies initiated new programs that were not anticipated at the time the Action Plan was updated and therefore do not correlate with a specific Action Plan strategy.

The following information is organized by Action Plan goal and strategy. The information presented here provides only a brief snapshot of the effort that went into these actions.

GOAL 1: PREVENT NEW VIRAL HEPATITIS INFECTIONS

Agency	Activity
Strategy 1.1: Increase community awareness of viral hepatitis and decrease stigma and discrimination	
CDC	The Cherokee Nation Comprehensive Cancer Control Program collaborated with the Cherokee Nation HCV Elimination Program within Cherokee Nation’s Health Services (CNHS) to increase knowledge and awareness of liver cancer prevention among the Cherokee Nation community by conducting presentations to 26 community coalition organizations.
DOJ	The Disability Rights Section of the Civil Rights Division continues to receive and review referrals of potential hepatitis-based discrimination through direct calls and online at http://www.ada.gov
SAMHSA	To reduce the impact of substance use, HIV, and viral hepatitis in high-risk communities, SAMHSA funds the HIV Capacity Building Initiative and the HIV Prevention Navigator grant programs to: <ul style="list-style-type: none"> • provide HIV and viral hepatitis testing services in non-traditional settings; • develop strategies that combine education and awareness programs; and • produce social marketing campaigns with substance abuse and HIV prevention programming for the population of focus.
Strategy 1.2: Build capacity and support innovation by the health care workforce to prevent viral hepatitis	
HRSA	HRSA HIV/AIDS Bureau (HAB) developed an online Hepatitis C Prescriber Toolkit which provides state-specific guidance, current prescribing restrictions, and resources for additional assistance to prescribers of Hepatitis C medications.
Strategy 1.3: Address critical data gaps and improve viral hepatitis surveillance	
CDC	Surveillance provides data for action to control the spread of disease. CDC and health departments use surveillance data to detect viral hepatitis outbreaks; quantify, characterize, and monitor trends in new infections, burden of disease, and transmission risk factors; and identify opportunities to link individuals to viral hepatitis preventive and treatment services—all of which are vital to develop and evaluate prevention and control strategies. Health departments must have systems in place to detect, classify, and notify CDC of viral hepatitis cases; however, due to varying infrastructure, not all health departments notify CDC of all cases of acute or newly reported chronic viral hepatitis. Through the Strengthening Surveillance in Jurisdictions with High Incidence of Hepatitis C Virus and Hepatitis B Virus Infections cooperative agreement (CDC-RFA-PS17-1703), CDC funded 14 states experiencing high rates of acute cases of hepatitis B and/or hepatitis C infections to improve active surveillance, data completeness, and case notification to CDC. In 2018, awardees achieved 48.5% and 30% increases in risk factor completeness for hepatitis B and hepatitis C case notifications submitted to CDC, respectively.
Strategy 1.4: Achieve universal hepatitis A and hepatitis B vaccination for children and vulnerable adults	
VA	In April 2019, VA issued system-wide a memo on hepatitis A and hepatitis B immunization in homeless Veterans. The memo outlined the CDC recommendations, provided clinical tools and resources, and advised facility viral hepatitis lead clinicians, homeless program providers, health promotion and disease prevention program managers and facility health behavior coordinators to coordinate efforts to improve vaccination rates.



Agency	Activity
Strategy 1.5: Eliminate mother-to-child transmission of hepatitis B and hepatitis C	
AHRQ	The U.S. Preventive Services Task Force (USPSTF) released Screening for Hepatitis B Virus Infection in Pregnant Women: US Preventive Services Task Force Reaffirmation Recommendation Statement in July 2019. https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/hepatitis-b-virus-infection-in-pregnant-women-screening?ds=1&s=hepatitis
FDA	FDA’s Center for Drug Evaluation and Research (CDER) approved supplemental application for VIREAD (tenofovir disoproxil fumarate) to update product labeling to include safety and pregnancy-related outcome information from three published controlled trials in pregnant women with chronic hepatitis B virus infection who were administered VIREAD during their third trimester.
Strategy 1.6: Ensure that people who inject drugs have access to viral hepatitis prevention services	
CDC	In FY 2019, CDC began a new three-year cooperative agreement -- National Harm Reduction Technical Assistance and Syringe Services Program (SSP) Monitoring and Evaluation Funding Opportunity. This program aims to strengthen the capacity and improve the performance of SSPs throughout the United States by supporting enhanced technical assistance to ensure the provision of high-quality, comprehensive harm reduction services; implementing a national SSP monitoring and evaluation program; and supporting the development and implementation of best practices for patient navigation from SSPs to community-based health and social services. Activities under this program also seek to increase the capacity to understand injection drug use and risk in the United States with an injection drug use surveillance demonstration project.
CDC	CDC funded nine jurisdictions to test and link people to care in high-impact settings, such as SSPs, substance use disorder treatment facilities, emergency departments, and correction facilities.
IHS	While there are many resources available to the public on harm reduction, they are scattered or not tribal-specific. To ensure that the tribes are not only aware of current and promising harm reduction practices and strategies for opioid response, both regionally and nationally, the Northwest Portland Area Indian Health Board Indian Country Opioid Response Monthly Newsletter and Community of Learning webinar series were developed. The goal of these two tools is to use them as a way to cultivate a community of practice and to disseminate the strategies and promising practices currently being implemented to address injection drug use and substance use disorder across Indian Country. More at https://www.indiancountryecho.org/substance-use-disorder/community-resources . As of September 2019, 350 are signed up for the Opioid Newsletter. In 2019, the project developed a number of campaigns for communities. This included electronic and print material for several new resources including “A Trickster Tale – Outsmarting Through Education and Action”, “Words Matter When Providers Talk About Addiction”, “Words Matter When Providers Talk About Addiction –For Patients”, and “Supporting Someone with Opioid Addiction”, among others. See https://www.indiancountryecho.org/substance-use-disorder/community-resources .
Strategy 1.8: Conduct research leading to new or improved viral hepatitis vaccines, diagnostic tests, and treatments, and the optimal use of existing tools to prevent, detect, and treat viral hepatitis	
NIH	NIAID has conducted a double-blind, randomized, Phase II trial on the safety, immunogenicity and efficacy of an innovative, experimental hepatitis C vaccine designed to stimulate T cell reactivity to the non-structural proteins of the hepatitis C virus (https://www.clinicaltrials.gov/ct2/show/NCT01436357). A total of 548 adults (18-45 years old) at high risk of HCV infection because of active injection drug use received the “prime-boost” regimen of hepatitis C vaccine or similar-appearing placebo injections. They were followed carefully for side effects, immune responses, and evidence of HCV infection. Chronic HCV infection developed in 7 percent of both groups, but the vaccine was safe, led to vigorous T cell responses to HCV, and was associated with lower levels of HCV RNA in infected persons. Thus, while this innovative vaccine did not provide protection against HCV, it was safe and yielded excellent T cell immune responses suggesting that combination with B cell vaccines or means of improving innate immunity might ultimately provide an effective vaccine against this important cause of liver disease.
NIH	The National Heart, Lung, and Blood Institute (NHLBI) has collaborated with FDA on the Transfusion-Transmissible Infections Monitoring System (TTIMS) to monitor the residual risk of HBV and HCV as well as HIV among blood donations and the safety of the blood supply in the U.S. No major trends were observed over 4 years covering the MSM policy change from indefinite to a 12-month deferral, but ongoing monitoring is indicated.



GOAL 2: REDUCE DEATHS AND IMPROVE THE HEALTH OF PEOPLE LIVING WITH VIRAL HEPATITIS

Agency	Activity
	Strategy 2.1: Build the capacity of the health care workforce to diagnose viral hepatitis and provide care and treatment to persons living with chronic viral hepatitis
CDC	<p><i>Training of Healthcare Providers</i></p> <p>As part of its efforts to build the capacity of the health care workforce to diagnose and treat viral hepatitis, CDC supports the development of up-to-date, comprehensive, web-based, hepatitis materials, resources, and trainings for health professionals. The University of Washington National Hepatitis Training Center, through CDC’s Viral Hepatitis Networking, Capacity Building, and Training cooperative agreement (CDC-RFA- PS16-1608), has developed Hepatitis C Online. Hepatitis C Online is a free, self-study, interactive course on hepatitis C virus infection for medical providers. The comprehensive training addresses the diagnosis, monitoring and management of hepatitis C and includes dedicated sections for HCV medications, clinical calculators (APRI, MELD, Glasgow Coma Scale, etc.), and master bibliography. Free CME credit and free CNE credit are offered to clinicians who complete the course. Between September 2018 and October 2019, Hepatitis C Online had 618,486 total users who initiated at least one session of the course.</p>
CDC	<p>The Cherokee Nation’s HCV Elimination Program was responsible for conducting didactic sessions for CNHS health care providers on HCC epidemiology, diagnosis, and surveillance through the Project Extension for Community Healthcare Outcomes (ECHO) platform (the Echo Model) and through conducting health care provider education workshops focused on liver cancer at 8 CNHS facilities.</p>
HRSA	<p>HRSA staff continues to monitor potential HIV/HCV outbreaks and provide technical assistance on a case by case basis to enhance coordination and the availability of federal, state, and community resources to provide linkage to HIV/hepatitis care and prevention services. Through the RWHAP AIDS Education and Training Centers, training on HIV and HCV testing, outreach, and case monitoring is provided.</p>
IHS	<p>To improve the capacity of treatment of HCV at the primary care level, IHS and tribal partners made extensive use of the ECHO (Extension for Community Health Outcomes) model of telehealth and teleconsultation University of California, San Francisco NCCC (National Clinical Consultation Center). The Northwest Portland Area Indian Health Board (NPAIHB) has provided recommendations via the Indian Country ECHO (www.indiancountryecho.org) for over 700 patients across the United States with the highest case presentations coming from Washington, Oregon, Montana, South Dakota, North Dakota and Minnesota.</p> <p>The Indian Country ECHO website launched July 11, 2019. In September of 2019, the Indian Country ECHO website received: Users = 182, Sessions = 312, Page views = 961, Pages/Session = 3.08, Average session duration = 4:43, Bounce Rate = 39.74%.</p> <p>IHS, tribal, and urban Indian health clinics from all 12 IHS Areas participated in the NPAIHB ECHO. Fifty-six unique clinics used the NCCC teleconsultation services.</p>



Agency	Activity
OMH	<p><i>Hepatitis B Demonstration Summary Document</i></p> <p>OMH in consultation with the ODP and CDC’s Division of Viral Hepatitis, funded development of model comprehensive hepatitis B programs that included strategic partnerships between: community-based organizations servicing communities at risk; departments of health, perinatal hepatitis B programs; safety net providers, research centers, and healthcare facilities that have capacity to deliver widespread vaccination; and scale-up testing, care and link/provide treatment services.</p> <p>These hepatitis B programs will advance progress toward the national hepatitis B elimination goals and strategic actions recommended by National Academies of Sciences, Engineering, and Medicine (NASEM): end transmission of hepatitis B virus (HBV) (perinatal, children and adults); and reduce morbidity and mortality attributable to ongoing HBV infection.</p> <p>The program is directly aligned with the goals of the National Viral Hepatitis Action Plan. Grantees were required to deliver widespread vaccination, scale-up testing, and provide care and treatment services.</p> <p>OMH will support model programs to implement all of the following strategic actions: prevent new HBV cases, reduce deaths, and improve the health of people living with viral hepatitis; provide the birth dose coverage (vaccination); provide maternal HBsAg testing followed by HBV DNA testing as appropriate; treat HBV-exposed newborns; provide community-based testing and linkage to care; provide people who are HBV-positive linkage to care, treatment, and contact tracing; vaccinate people who are HBV-negative; increase availability of testing kits and provide education to health care providers and patients; utilize care coordinators for linkage to care; and implement standing orders or utilization of Electronic Health Records (EHR) for testing and linkage to care.</p>
OMH	<p>OMH contracted with MayaTech in FY2018 to implement the Viral Hepatitis Program-Primary Care Physicians Capacity Building Initiative. The major objectives of this initiative were to support training for physicians, nurses, pharmacists, and other health workers, and enhance capacity building in primary care settings. Of particular interest was a focus on screening guidelines, hepatitis vaccinations guidelines, and guidelines for management and treatment of individuals infected with HBV and/or HCV. Additional objectives were to establish standard operating practices (e.g., implementation of provider prompts, data-driven chart reviews to identify patients tested/diagnosed but not currently in care, and screening and vaccination coverage assessments) and create hepatitis comprehensive care models that facilitate collaboration between primary care providers and hepatitis specialists. Three sites accepted the invitation for and participated in trainings: AIDS Care Group, Philadelphia, PA; Housing Works, New York, NY; and, Mattapan Community Health Center, Boston, MA.</p>
VA	<p>In 2018, the Hepatic Innovation Team (HIT) Collaboratives were transitioned to focus on addressing advanced liver disease (ALD). These teams picked up on the highly successful work accomplished by the Hepatitis Innovation Team Collaborative which focused on testing and treatment of HCV in VA. The HIT Collaboratives focus on education and communication to improve and support provider practice, Veterans’ health and engagement in care. They employ population-based approaches with a focus on quality improvement initiatives to address gaps in care and anticipate system-wide needs. The HIT Collaboratives consist of multi-disciplinary teams across each Veteran Integrated Service Network (VISN).</p>
<p>Strategy 2.2: Identify persons infected with viral hepatitis early in the course of their disease</p>	
BOP	<p>The BOP has adopted an “opt-out” policy for hepatitis C screening. In this model, when inmates are processed during intake, the policy is to obtain bloodwork to screen for hepatitis C as a routine part of the process unless the patient declines, or “opts out”. This is in contrast to prior policy where the inmate was offered hepatitis C screening as an option.</p>
AHRQ	<p>The USPSTF is currently updating its HBV recommendation statement. The USPSTF posted a draft research plan, <i>Hepatitis B Virus Infection in Nonpregnant Adolescents and Adults: Screening</i>, for public comment. The final research plan is found at https://www.uspreventiveservicestaskforce.org/Page/Document/final-research-plan/hepatitis-b-virus-infection-screening-nonpregnant.</p>



Agency	Activity
CDC	<p>Prevention - Testing for hepatitis C and hepatitis B, when linked to care and treatment, is cost-effective and improves health outcomes. However, only about half of the estimated 2.4 million people living with hepatitis C are aware of their infection and most have not received recommended care and treatment. Similarly, only about one-third of the estimated 862,000 people living with hepatitis B in the United States are aware of their infection. In FY2017, CDC awarded \$5.7M over a four-year project period (2017 –2020) to state and local health departments in 46 U.S. states, three cities, and the District of Columbia through the Improving Hepatitis B and C Care Cascades: Focus on Increased Testing and Diagnosis cooperative agreement (CDC-RFA-PS17-1702). These resources support activities to increase the number of persons living with HBV and/or HCV infection who are tested for these infections, made aware of their infection status, and promoted linkage to care and treatment services, if needed. In FY2018, 100% of funded jurisdictions completed a situational analysis, a foundational step to assist jurisdictions to achieve the greatest impact with this investment.</p>
SAMHSA	<p>SAMHSA has two Minority AIDS Initiative (MAI) programs with 5% of each grant must be used to address viral hepatitis:</p> <ol style="list-style-type: none"> 37 HIV Capacity Building Initiative – FY18 (N=37) 6 HIV Prevention Navigator – FY19 (N=6) <p>These have increased viral hepatitis testing with:</p> <ul style="list-style-type: none"> Total viral hepatitis test kits purchased with MAI funds (as of 1/23/2020): 110,177 Total tested for viral hepatitis with MAI funds (as of 1/23/2020): 34,558
VA	<p>VA birth cohort screening rates were 84.8% in 2018 and 84.9% in 2019.</p>
<p>Strategy 2.3: Improve access to and quality of care and treatment for persons infected with viral hepatitis</p>	
CMS	<p>CMS approved a Washington State Plan Amendment proposal that permits the state to negotiate supplemental rebate agreements involving value-based purchasing arrangements with drug manufacturers that links payment for prescription drugs to the value delivered. Washington’s proposal was specifically designed to allow the state to negotiate under a subscription model with manufacturers of prescription drugs that treat patients with the hepatitis C. Under this subscription model, the state would pay a fixed annual amount to a pharmaceutical manufacturer to purchase an unrestricted supply of hepatitis C drugs. This innovative proposal demands value from pharmaceutical companies and takes steps to eradicate hepatitis C in Washington state.</p>
FDA	<p>FDA’s CDER approved supplemental application for VIREAD (tenofovir disoproxil fumarate) to expand the treatment of chronic hepatitis B indication to include pediatric patients 2 years and older weighing at least 10 kg. This fulfilled post-marketing requirements under the Pediatric Research Equity Act (PREA).</p>
FDA	<p>FDA’s CDER approved supplemental application for VEMLIDY (tenofovir alafenamide) to update product labeling with data in adult patients with creatinine clearance below 15 mL per minute (end-stage renal disease) who are receiving chronic hemodialysis.</p>
FDA	<p>FDA’s CDER approved supplemental application for Mavyret (glecaprevir and pibrentasvir) to expand the indication to adolescents 12 years and older or weighing at least 45 kilograms (kg). This approval provides a shorter duration treatment option in adolescents for six major genotypes of HCV.</p>
VA	<p>As of October 1, 2018, there were approximately 9,000 Veterans with cirrhosis awaiting hepatitis C treatment in VA and approximately 6,800 remaining to be treated by September 30, 2019.</p>
VA	<p>As of October 1, 2018, there nearly 33,000 Veterans with hepatitis C waiting on treatment and approximately nearly 25,000 remaining to be treated by September 30, 2019.</p>
VA	<p>As of September 30, 2019, 71.2% of Veterans in care with chronic hepatitis B were on treatment.</p>
CMS	<p>CMS approved a Louisiana State Plan Amendment proposal for Supplemental Rebate Agreements using a modified subscription model for hepatitis C therapies in Medicaid. Louisiana’s proposal permits the state to negotiate supplemental drug rebates to assist the state in controlling expenditures for hepatitis C drugs while providing unlimited access to the therapies. This modified subscription model initially focuses on antiviral agents for hepatitis C and promotes eliminating the hepatitis C virus statewide. This supplemental rebate agreement will be used by the state for a modified subscription model, allowing Louisiana to cap gross expenditures at a fixed amount for hepatitis C drugs, while providing the state with unlimited access to clinically necessary doses of these therapies for Medicaid beneficiaries.</p>



Agency	Activity
FDA	FDA’s CDER approved supplemental applications for Sovaldi (sofosbuvir) and Harvoni (ledipasvir and sofosbuvir) to treat chronic HCV infection in children 3 years of age and older, weighing at least 17 kg. Harvoni and Sovaldi were previously approved to treat HCV in adults and children aged 12 to 17 years. These direct-acting antiviral treatments address an unmet need in younger children.
FDA	FDA’s Center for Drug Evaluation and Research approved supplemental application for Mavyret (glecaprevir and pibrentasvir) to support an 8-week dosing regimen for the treatment of genotypes 1, 2, 3, 4, 5, and 6, chronic HCV infection in treatment-naïve subjects with compensated cirrhosis. Mavyret is the first treatment of eight weeks duration approved for HCV genotypes 1-6 in adult patients without cirrhosis and with compensated cirrhosis who have not been previously treated. This approval provides a shorter treatment duration for many patients.
Strategy 2.4: Improve viral hepatitis treatment among persons with HIV	
BOP	While the goal of the BOP is to treat all hepatitis C-infected patients, the order of treatment is prioritized based on a number of factors. One of the criteria for prioritized treatment for hepatitis C is HIV coinfection.
FDA	FDA’s CDER approved supplemental application for Mavyret (glecaprevir and pibrentasvir) to include safety and efficacy data in adult patients with HCV/HIV-1 coinfection.
HRSA	HRSA-funded RWHAP AIDS Education and Training Centers (AETC) continued to provide clinical training and clinical consultation on the screening and treatment of HBV and HCV for coinfecting people living with HIV. As part of this effort, the AETC National Coordinating Resource Center developed and published a free, online e-Learning platform that offers healthcare providers and health profession educators training on HIV/HCV coinfection, including prevention, screening, diagnosis, and treatment recommendations. The curriculum also examines barriers and other factors that may impede optimal treatment outcomes for coinfecting people of color.
HRSA	HRSA’s Curing Hepatitis C among People of Color Living with HIV, funded through the 2017 Secretary’s Minority AIDS Initiative Fund, awarded two academic centers for a three-year project intending to improve care for people with HIV through the development of comprehensive jurisdiction-level HCV screening, care, and treatment systems and the enhancement of state and local health department surveillance systems to increase capacity to monitor acute and chronic coinfections of HIV and HCV. Additionally, this project focused on improving coordination with SAMHSA-funded Substance Use Disorder (SUD) treatment providers to deliver behavioral health and SUD treatment support to achieve treatment completion, prevent HCV infection, and re-infection.
VA	As of October 1, 2018, there were nearly 3,000 Veterans with HIV waiting on HCV treatment, and approximately 600 remaining to be treated by September 30, 2019.
Strategy 2.5: Ensure that people who inject drugs have access to viral hepatitis care and evidence-based treatment services	
FDA	FDA’s CDER initiated revisions to the Prescribing Information for HCV drugs to include a subsection on Medication-Assisted Treatment (MAT) for Opioid Use Disorder, to highlight drug interaction information.
SAMHSA	SAMHSA’s Substance Abuse Treatment Block Grant (SABG) program’s objective is to help plan, implement, and evaluate activities that prevent and treat substance abuse. The SABG program targets the following populations and service areas: Pregnant women and women with dependent children, intravenous drug users, early intervention services for HIV/AIDS and viral hepatitis, and primary prevention services. Injection drug use (IDU) risk reduction is best approached in a step-wise fashion; for example, abstinence from illicit drug use is the best way to address a person’s health and diminish the chance of becoming infected with HIV or viral hepatitis. For those with OUD the best way of stopping IDU is to provide MAT and psychosocial services in a SUD program. Syringe service programs (SSPs) represent an opportunity to try to engage people in treatment and short of that educating on reducing HIV risk through not sharing syringes and using only sterile syringes if they are going to inject. SAMHSA resources are used to support SSPs.
Strategy 2.6: Expand access to and delivery of hepatitis prevention, care, and treatment services in correctional settings	



Agency	Activity
BOP	<p>The Federal Bureau of Prisons offers HCV treatment to all sentenced inmates with sufficient time remaining to treat and no major obstacles to treatment such as continued high-risk behavior (decided on a case-by-case basis). Treatment numbers have substantially increased over time: almost triple from FY2016 (298 patients) to FY2017 (874 patients), >1.5 times from FY2017 to FY2018 (1,421 patients), and more than double from FY2018 to FY2019 (>3,000 inmates). These significant leaps in treatment numbers are due to multiple factors, including: 1) protocol where \$25-30 million is set aside per fiscal year to reimburse individual institutions for HCV treatment, thus removing financial burden as one of the biggest hurdles to treatment; 2) continued use of the Regional Hepatitis Clinical Pharmacist Consultant Program to approve non-formulary requests and serve as subject matter experts for the field; and 3) continued focus on hepatitis C care by BOP medical leadership leading to increased exposure and comfort level of institution providers.</p>
<p>Strategy 2.8: Advance research to enhance identification, care, treatment, and cure for persons infected with viral hepatitis</p>	
NIH	<p>The NIDDK’s Hepatitis B Research Network has completed two multicenter studies—one in adults and another in children—of the combination of interferon alfa (an immune cytokine) and entecavir (an oral antiviral agent) in immune tolerant chronic hepatitis B, a common, but resistant form of this infection (https://www.ncbi.nlm.nih.gov/pubmed/30549279; https://www.ncbi.nlm.nih.gov/pubmed/30318613). Therapy was given for one year. While the treatment was well-tolerated, response rates were low. No adult had a sustained response, but 5 percent of children had a dramatic response, becoming negative for hepatitis B antigen and developing antibody, suggesting a “functional cure.” These results indicate that treatment will likely require the combination of three or more agents against HBV, directed at different viral “targets,” but that full recovery from chronic hepatitis B may be possible even in the most difficult-to-treat instances.</p>
NIH	<p>An international trial of prevention of mother-to-child transmission of hepatitis B funded by <i>Eunice Kennedy Shriver</i> National Institute of Child Health and Human Development (NICHD) has been completed (https://www.nejm.org/doi/full/10.1056/NEJMoa1708131). A total of 331 pregnant women with high levels of serum HBV were randomly assigned to receive tenofovir (an oral antiviral agent) or placebo during the last trimester of pregnancy. All babies born to the mothers were given the usual regimen to prevent infection: hepatitis B vaccine and hepatitis B immune globulin. In follow up, none of the 147 newborns of mothers treated with tenofovir but 3 of the 147 infants born to mothers given placebo developed hepatitis B during the first year of life. The treatment was safe and did not cause significant side effects or worsening of the mother’s HBV infection. These results and those from similar trials indicate that use of antiviral therapy in mothers at high risk of transmitting HBV to their newborns can decrease or eliminate the risk of transmission. Guidelines supporting this approach have now been published by academic societies in the United States and elsewhere.</p>
NIH	<p>The NCI has established a multicenter U.S. Liver Cancer Consortium, which is charged with developing a large clinical network to conduct advanced translational research on the early detection, diagnosis, clinical management, prevention and treatment of liver cancer in patients with chronic liver disease who are at high risk for this highly fatal malignancy (https://grants.nih.gov/grants/guide/rfa-files/RFA-CA-17-025.html). The Consortium will bring together clinical and basic research expertise and apply state-of-the-art investigational techniques aimed at identifying biomarkers for early detection and diagnosis of liver cancer, as well as insights into personalized medical approach to its treatment.</p>

GOAL 3: REDUCE VIRAL HEPATITIS HEALTH DISPARITIES

Agency	Activity
<p>Strategy 3.1: Decrease health disparities by partnering with and educating priority populations and their communities about viral hepatitis and the benefits of available prevention, care, and treatment</p>	



Agency	Activity
CDC	<p><i>Communications Campaign and Outreach Activities for Hepatitis B Awareness</i></p> <p>CDC is committed to leveraging the successes and best practices of its partners to help improve hepatitis B screening in the highest-risk and most underserved Asian American and Pacific Islander communities in the United States. In 2013, CDC launched Know Hepatitis B, a national communications campaign promoting hepatitis B testing among Asian Americans. This multilingual campaign is delivered through a variety of multi-media channels. To further expand the reach of the Know Hepatitis B campaign, CDC’s Viral Hepatitis Networking, Capacity Building, and Training cooperative agreement (CDC-RFA- PS16-1608) funds a partner to provide capacity building, training, and technical assistance to over 30 hepatitis B coalition partners in 28 cities and 20 states, including the District of Columbia. Activities include coalition building, webinars, mini grants, peer mentoring, a national hepatitis B storytelling campaign, and in-person annual summits. Since its inception, the Know Hepatitis B campaign has achieved at least 474 million impressions worth \$3.8 million of paid media value.</p>
CDC	<p><i>CDC Response to Widespread Hepatitis A Outbreaks</i></p> <p>More than half of states across the country have reported outbreaks of hepatitis A. Since first identified in 2016, over 27,000 cases with approximately 60% hospitalizations and at least 275 deaths have been reported (as of November 2019). In these outbreaks, the virus is being spread person-to-person primarily among people who use drugs and people who are experiencing homelessness. Vaccinating people at risk can stop the spread. Since March 2017, CDC has been supporting state and local health departments by providing national situational awareness and ongoing remote and on-site technical assistance with outbreak response and prevention. CDC has deployed experts representing a mix of expertise from CDC’s viral hepatitis, vaccine, and preparedness programs, including epidemiologists, laboratorians, public health advisors, and disease intervention specialists, to eight states to support their outbreak responses. CDC’s laboratory has processed more than 5,000 hepatitis A virus specimens since the outbreaks began and continues to support vaccine supply and vaccine policy development. CDC shares its best practices through ongoing engagement and communication with impacted states and health departments nationwide. Furthermore, CDC has launched an outbreak-specific website to provide all stakeholders and the public with up-to-date information about the outbreaks, educational resources, and links to useful guidance documents.</p>
HUD	<p>HUD’s Office of Special Needs Assistance Programs outreached to and provided support for homeless assistance providers and Continuums of Care located in communities impacted by hepatitis A outbreaks. One key component of these engagements is facilitating partnerships between homeless assistance providers, public health departments and health care providers to improve access to and quality of care and treatment for persons experiencing homelessness who are infected with hepatitis A.</p>
IHS	<p>The Northwest Portland Area Indian Health Board has created a National HCV Social Marketing Campaign with the focus of relaying the message, “Hepatitis C is everybody’s responsibility.” The HCV Print & Video Campaign can be found at http://www.npaihb.org/hcv/#Community-Resources. Through FY2019, 10,000 items (posters, rack cards, pamphlets) have been printed and mailed out to IHS, tribal and urban Indian clinics. The video has received 944 video views on YouTube, and reached 5,515 on Facebook. Through FY2019, the project has sent 18,444 and received 1,976 messages from 432 text message subscribers. The project sent four marketing emails and had a reach of 1,754 through constant contact in the month of September. (Text HCV to 97779)</p>
SAMHSA	<p>The Assistant Secretary for Mental Health and Substance Abuse, Dr. Elinore McCance-Katz, released a Dear Colleague letter urging partnership with providers to increase testing and referrals for HIV and viral hepatitis within the priority populations of those with mental illness and substance use disorder. (https://www.samhsa.gov/sites/default/files/hivhepadvisory_letter-signed-508.pdf).</p>
VA	<p>In FY18-19, the HIV, Hepatitis, and Related Conditions Program (HHRC) increased awareness around viral hepatitis (hepatitis A, B, and C) in several ways. A primary source for awareness and information sharing is the website, www.hepatitis.va.gov. HHRC created and revised patient and provider education materials for the website throughout the fiscal year. This fiscal year HHRC had a major revision of the website which made it easier for users to find information on hepatitis A, hepatitis B, hepatitis C, and liver disease such as cirrhosis. For hepatitis testing day and hepatitis awareness month, HHRC conducted targeted outreach activities. This included emails and trainings for HHRC providers, features on the website and in facilities, and blog posts and social media posts. In addition to outreach and promotion of marking over 100,000 Veterans cured of hepatitis C, HHRC’s work this year also focused on increasing hepatitis A and hepatitis B vaccination.</p>

Strategy 3.2: Improve access to care and the delivery of culturally competent and linguistically appropriate viral hepatitis prevention and care services



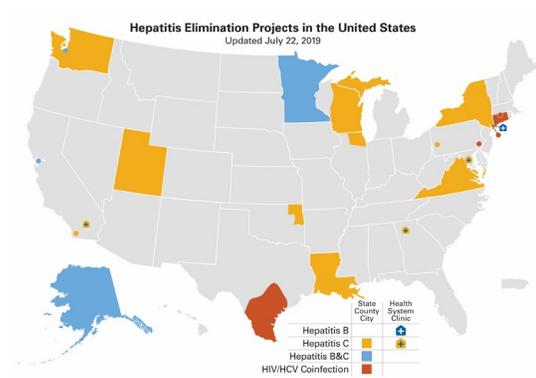
Agency	Activity
IHS	As part of IHS efforts to improve access to viral hepatitis treatment, two key policies were enacted in 2019. First, HCV DAAs were added to the IHS National Core Formulary. Second, based on cost-effectiveness modeling, IHS issued a Special General Memorandum to widen HCV screening to all persons 18 years and older. In addition to changes made at the IHS, our tribal partners have engaged with state Medicaid programs in Oregon, Arizona, South Dakota and Montana to help reduce restrictions on access to HCV medications.
Strategy 3.3: Monitor viral hepatitis-associated health disparities in transmission, disease, and deaths	
AHRQ	AHRQ published Characteristics of Inpatient Stays Involving Hepatitis C, 2005-2014. The statistical brief used Healthcare Cost and Utilization Project (HCUP) data to describe trends in the number and rate of hepatitis C-related inpatient hospital stays among adults over 18 years of age, both with and without the co-morbidities of HBV infection, HIV, and alcoholic liver disease.



GOAL 4: COORDINATE, MONITOR, AND REPORT ON IMPLEMENTATION OF VIRAL HEPATITIS ACTIVITIES

Agency	Activity
	<p>Strategy 4.1: Increase coordination of viral hepatitis programs across the federal government and among federal agencies; state, territorial, tribal, and local governments; as well as non-governmental stakeholders from all sectors of society</p>
CDC	<p>In July 2019, CDC, in partnership with the Association of State and Territorial Health Officials (ASTHO), hosted the National Viral Hepatitis Program Planning Meeting to provide an opportunity for a national dialogue on viral hepatitis program planning to move forward on the path to elimination. As the first formal national elimination planning conference in a decade, the two-day meeting featured presentations and discussions on innovative drug pricing models for hepatitis C treatment, improving prevention and surveillance, decreasing barriers to treatment, and engaging people affected by viral hepatitis in elimination planning. Over 300 attendees from 48 states, 5 local jurisdictions, multiple federal agencies, and partner organizations attended. Additionally, states that received funding from ASTHO to implement hepatitis elimination projects were invited to stay for an additional day to learn about elimination strategies used by other jurisdictions and to discuss their own state-specific issues with partners.</p>
FDA	<p>A multidisciplinary working group in CDER is developing a guidance document for the development of drugs to treat chronic hepatitis D.</p>
FDA	<p>CDER’s Division of Antiviral Products is engaged in discussions with various stakeholders through the HBV Forum (Forum for collaborative Research), and professional societies such as the American Association for the Study of Liver Diseases (AASLD) to enhance development of novel therapies for treatment of chronic hepatitis B.</p>
FDA	<p>CDER’s Division of Antiviral Products in collaborative partnership with Hepatitis C Therapeutic Registry and Research Network (HCV-TARGET) is engaged in using real-world evidence to assess the safety and effectiveness of direct acting antivirals approved for the treatment of chronic hepatitis C.</p>
FDA	<p>CDER issued a draft guidance document for the development of drugs to treat chronic hepatitis B.</p>
OIDP	<p>Updating the Viral Hepatitis National Strategic Plan 2021 – 2025</p> <p>OIDP led the process to update the National Viral Hepatitis Action Plan 2017 – 2020, for 2021-2025. The new, updated Viral Hepatitis National Strategic Plan 2021-2025 (Hepatitis Plan) will be grounded in the latest science to guide stakeholders at all levels and sectors in key strategies to achieve updated national viral hepatitis goals. The Hepatitis Plan has been developed in alignment with developing the next HIV/AIDS National Strategic Plan as well as the first-ever Sexually Transmitted Infections (STI) National Strategic Plan.</p> <p>OIDP convened and collaborated with leadership from many federal departments and agencies to compile the best available evidence and recommendations for the Hepatitis Plan. This federal steering committee was informed by subcommittees (Prevention and Care, Disparities and Coordination, and Indicators) staffed by subject matter experts from throughout the federal government. The development of the plan was also informed by input from a wide variety of stakeholders and the public. Eighteen listening sessions were held across the nation (September 2018 - March 2019), and a Request for Information in the Federal Register solicited written public comments.</p> <p>This public input, federal leadership and subject matter expertise will help ensure that the Hepatitis Plan responds to pressing challenges in viral hepatitis, focuses on the most effective and scalable actions, responds to the needs of disproportionately affected communities and populations, and is based on the latest scientific evidence regarding viral hepatitis prevention, care, and treatment.</p>



Agency	Activity
	<p>Examples of state activities include: calculating the HCV care cascade; enhancing provider knowledge of HCV testing and treatment; assessing and revising prior authorization processes for HCV medication; improving treatment for people who inject drugs; and linking people in correctional settings to screening and treatment.</p>
<p>OIDP</p>	<p>Mapping Viral Hepatitis Elimination in Action</p> <p>To share resources and encourage and support jurisdictions to launch or expand viral hepatitis elimination efforts, OIDP developed a resource map of viral hepatitis elimination projects. This micro-website helps jurisdictions and stakeholders learn from each other’s elimination efforts. OIDP and OMH also co-sponsored a webinar featuring elimination project examples, practical steps and key messages to help stakeholders develop and implement hepatitis elimination efforts.</p> <p>These projects implement the National Viral Hepatitis Action Plan’s call for more coordinated and collaborative elimination efforts including a wide range of stakeholders such as states, local jurisdictions, health systems, and non-governmental organizations.</p> 
<p>OIDP</p>	<p>Expanding Safe Organ Transplantation</p> <p>A Federal Workshop on Transplantation from Hepatitis C Infected Donors was hosted by OIDP and CDC to examine and develop a proactive coordinated approach to issues related to the increasing availability and potential use of organs from donors living with hepatitis C, especially as a result of the opioid crisis and increased overdose deaths. The workshop was held in part to address anticipated 2020 updates to the Public Health Service Guideline to Reduce the Risk of HIV/HBV/HCV Transmission via Organ Transplantation. Participants included CDC, CMS, HRSA, NIH, OASH, and transplant researchers and experts.</p>
<p>Strategy 4.2: Strengthen timely availability and use of data</p>	
<p>BOP</p>	<p>The BOP developed and continues to work on a patient clinical “dashboard” system that allows for tracking select clinical data. There is a dashboard that currently tracks the number of identified hepatitis C-positive patients, and the numbers for patients who have been previously treated, currently on treatment and who may be eligible for treatment.</p>
<p>OIDP</p>	<p>Release and promotion of the Partner Planning Guide to enhance stakeholder engagement in the National Viral Hepatitis Action Plan</p> <p>OIDP developed and released the Partner Planning Guide, a companion document to the National Viral Hepatitis Action Plan 2017-2020 to support partners in their efforts to build and strengthen viral hepatitis activities. Stakeholders in all levels and sectors have a role to play in viral hepatitis elimination but many are not sure where to start. The Guide is a tool designed for use by individuals, groups, and organizations that are conducting viral hepatitis strategic planning efforts, assessing existing activities, and planning new ones that align with the Action Plan that contribute toward reaching our national viral hepatitis goals.</p>
<p>Strategy 4.3: Encourage development of improved mechanisms to monitor and report on progress toward achieving national viral hepatitis goals</p>	
<p>VA</p>	<p>VA deployed several new/updated data tools in 2018 and created an internal website page as a central location to access them. These include clinical and data tools for HCV infection, HBV infection, and ALD which makes epidemiologic data for these patient populations more broadly accessible at the national, VISN, facility, and provider level. These tools also provide detailed patient-level data for local population health management and to improve clinical care in these areas.</p>
<p>Strategy 4.4: Regularly report on progress toward achieving the goals of the National Viral Hepatitis Action Plan</p>	
<p>FDA</p>	<p>CDER’s Division of Antiviral Products utilizes List Serve email notification to enhance communication and for timely dissemination of information regarding new drug approvals and labeling revisions for previously approved drug products.</p>



APPENDIX 2: 2018/2019 VIRAL HEPATITIS-RELATED PUBLICATIONS, ARTICLES, AND REPORTS BY FEDERAL PARTNERS

Federal partners make important contributions to addressing gaps in our understanding of the prevention, care, and treatment of viral hepatitis through peer-reviewed journal articles and other technical documents. These publications help advance efforts to develop and implement evidence-based programs, clinical services, and policies. There were a total of 282 articles or reports published in FY2018 and FY2019 with authors from CDC (51%), VA (44%), IHS (2%), FDA (2%), AHRQ (1%), and ODP (0.4%). The publications are organized by Action Plan goal area and type of hepatitis. The majority of publications fall within goal one (33%) and goal two (60%). Nine percent of publications focused on hepatitis A, 26% on hepatitis B, 66% on hepatitis C, and 5% on hepatitis E.

The publications contribute to the scientific literature and inform policy recommendations. For example:

- Hofmeister, et al.'s "Estimating prevalence of hepatitis C virus infection in the United States, 2013 – 2016" provides an estimate of the burden of hepatitis C in the United States without a robust surveillance system.
 - Jordain, et al.'s "Tenofovir versus placebo to prevent perinatal transmission of hepatitis B" provides evidence for the role of tenofivir for hepatitis B therapy during pregnancy.
- Backus, et al.'s "Impact of sustained virologic response with direct-acting antiviral treatment on mortality in patients with advanced liver disease" provides evidence for decreased risk of all-cause mortality and incident hepatocellular carcinoma with DAA treatment.

GOAL 1: PREVENT NEW VIRAL HEPATITIS INFECTIONS

Hepatitis A

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GOAL 3: REDUCE VIRAL HEPATITIS HEALTH DISPARITIES

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GOAL 4: COORDINATE, MONITOR, AND REPORT ON IMPLEMENTATION OF VIRAL HEPATITIS ACTIVITIES

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APPENDIX 3: ABBREVIATIONS

AAPI	Asian Americans and Pacific Islanders
AASLD	American Association for the Study of Liver Diseases
AETC	AIDS Education and Training Centers (HHS/HRSA)
AHRQ	Agency for Healthcare Research and Quality (HHS)
CDC	Centers for Disease Control and Prevention (HHS)
CDER	Center for Drug Evaluation and Research (HHS/FDA)
CMS	Centers for Medicare & Medicaid Services (HHS)
CNHS	Cherokee Nation Health Services
DAA	Direct-acting antiviral
DOJ	U.S. Department of Justice
DVH	Division of Viral Hepatitis (HHS/CDC)
ECHO	Extensions for Community Health Outcomes (HHS/HRSA)
EHR	Electronic health record
FBOP	Federal Bureau of Prisons (DOJ)
FDA	U.S. Food and Drug Administration (HHS)
FOA	Funding Opportunity Announcement
GHOST	Global Hepatitis Outbreak and Surveillance Technology
HAB	HIV/AIDS Bureau (HHS/HRSA)
HAV	Hepatitis A virus
HBeAG	Hepatitis B e antigen
HBsAg	Hepatitis B surface antigen
HBV	Hepatitis B virus
HCV	Hepatitis C virus
HDV	Hepatitis D virus
HEV	Hepatitis E virus
HHS	U.S. Department of Health and Human Services
HIT	Hepatic Innovation Team
HRSA	Health Resources and Services Administration (HHS)
HUD	U.S. Department of Housing and Urban Development
IDSA	Infectious Diseases Society of America
IDU	Injection drug use
IHS	Indian Health Service (HHS)
MAI	Minority AIDS Initiative (HHS/SAMHSA)
MAI-CoC	Minority AIDS Initiative Continuum of Care (HHS/SAMHSA)
MAT	Medication-assisted treatment



MMWR	Morbidity and Mortality Weekly Report
MSM	Men who have sex with men
NASEM	National Academies of Sciences, Engineering, and Medicine
NCI	National Cancer Institute (HHS/NIH)
NHANES	National Health and Nutrition Examination Survey
NHIS	National Health Interview Survey
NHLBI	National Heart, Lung, and Blood Institute (HHS/NIH)
NIAAA	National Institute on Alcohol Abuse and Alcoholism (HHS/NIH)
NIAID	National Institute of Allergy and Infectious Diseases (HHS/NIH)
NICHD	<i>Eunice Kennedy Shriver</i> National Institute of Child Health and Human Development (HHS/NIH)
NIDA	National Institute on Drug Abuse (HHS/NIH)
NIDDK	National Institute of Diabetes and Digestive and Kidney Diseases (HHS/NIH)
NIH	National Institutes of Health (HHS)
NIMHD	National Institute on Minority Health and Health Disparities (HHS/NIH)
NIS-Child	National Immunization Survey - Children
NNDSS	National Notifiable Disease Surveillance System
NVAC	National Vaccine Advisory Committee
NVPO	National Vaccine Program Office (HHS)
NVSS	National Vital Statistics System
OASH	Office of the Assistant Secretary for Health (HHS)
OIDP	Office of Infectious Disease and HIV/AIDS Policy (HHS/OASH)
OMH	Office of Minority Health (HHS)
ONC	Office of the National Coordinator for Health Information Technology (HHS)
OPA	Office of Population Affairs (HHS/OASH)
OSG	Office of the Surgeon General (HHS/OASH)
OWH	Office on Women’s Health (HHS/OASH)
PLWH	People living with HIV
PWH	People with HIV
RHA	Regional Health Administrator (HHS/OASH)
RWHAP	Ryan White HIV/AIDS Program (HHS/HRSA)
SAMHSA	Substance Abuse and Mental Health Services Administration (HHS)
SSP	Syringe services program
STI	Sexually transmitted infection
SUD	Substance use disorder
USPSTF	U.S. Preventive Services Task Force
VA	U.S. Department of Veterans Affairs
VHA	Veterans Health Administration (VA)
VHIG	Viral Hepatitis Implementation Group



VISN

Veterans Integrated Services Network (VA)