A MESSAGE FROM DR. JOHN WARD

Dear CGHE Partners,

It is with great pleasure that I present the second annual report for the Coalition for Global Hepatitis Elimination (CGHE), outlining our work from August 2020 through August 2021. During an unprecedented pandemic, the Coalition stayed true to its mission. We launched webinars reaching 2,200 partners from 90 countries, enhanced access to our growing evidence-based resources across multiple channels and languages, and recruited the Nobel Laureate, Harvey Alter to our Executive Board to keep hepatitis elimination on the global health agenda.

Highlights of the Coalition’s expansion in services and partners include:

- Helping African countries **introduce and scale up** timely hepatitis B birth dose vaccination.
- Revealing the best options for **retreatment** of hepatitis C in low- and middle-income countries.
- Assisting countries to develop budget-based plans for testing and treatment with the Coalition’s **Hep C Elimination Tool**.
- Profiling the **status of hepatitis elimination** in six countries of the Pan American Health Organization region.
- **Assisting** WHO’s development of the new global strategy for viral hepatitis elimination.

This report provides the details of these and other accomplishments. As the only technical and capacity-building organization solely devoted to hepatitis B and hepatitis C elimination, the Coalition is successfully demonstrating how collaborations in technical assistance, advocacy, and research help global, regional, and national leaders reach goals for hepatitis elimination.

I believe this report will strengthen your commitment as a Coalition partner and encourage you to invite others to join us in the global campaign to eliminate hepatitis. We can free the world from hepatitis C and protect future generations from hepatitis B. Working together, we will eliminate hepatitis.

Sincerely,

John W. Ward, MD
Director
<table>
<thead>
<tr>
<th>Statistic</th>
<th>Number</th>
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<tbody>
<tr>
<td>Increase in website visits</td>
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<td>Registrants for webinars from 90 countries</td>
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<td>Country level dashboards</td>
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<tr>
<td>National action plans reviewed</td>
<td>100</td>
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<tr>
<td>National hepatitis elimination profiles developed</td>
<td>6</td>
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<tr>
<td>Hepatitis elimination champions honored</td>
<td>7</td>
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From August 2020 through August 2021, the Coalition created new opportunities for partners to share research findings and field experiences, helping colleagues worldwide develop effective hepatitis elimination programs. CGHE launched 21 virtual learning sessions focused on multiple topics, including hepatitis B vaccination, hepatitis testing with linkages to care, and health equity for populations at risk for hepatitis. The response to this new opportunity for peer-to-peer learning was remarkable. Worldwide, Coalition webinars brought together 2,200 registrants from 90 countries. Through four virtual programs, CGHE continues to provide global opportunities for this type of peer-to-peer learning.

90 countries
2,200+ registrants

CGHE HAS FOUR ACTIVE WEBINAR SERIES:

INCREASING ACCESS TO RELIABLE HEPATITIS TESTING WITH LINKAGE TO CARE
6 programs | 572 participants| 50 countries
Poor access to hepatitis testing is a major barrier to hepatitis elimination; less than one in four of the 326 million persons living with hepatitis B or hepatitis C are aware of their infection. A smaller proportion is receiving care to prevent premature mortality from hepatitis. In response, the Coalition has convened six programs for regional and country partners to share their experiences in implementing hepatitis testing. Topics include hepatitis B testing of pregnant women, comparing hepatitis C testing strategies across countries and settings, and zeroing in on the "how-to" of hepatitis testing. In a side event at the United Nations General Assembly, Coalition partners shared the impact of the COVID-19 response on hepatitis testing programs and the potential for directing new COVID-19 diagnostic capacity toward increasing access to hepatitis screening and diagnosis. The lessons shared by Coalition partners revealed successful and efficient testing programs, expanded the evidence base for improving access to testing, and identified future research needs.
SHARING NIH RESEARCH ADVANCING HEPATITIS ELIMINATION
4 programs | 850+ participants | 38 countries
Research is the lifeblood of hepatitis elimination. Innovations in technologies and strategies improve prevention, testing, care, and treatment. Convened in collaboration with colleagues in the National Cancer Institute and other NIH institutes and offices, the Coalition webinars bring together researchers with experts from the field to discuss how research findings can be translated into effective clinical and public health practices. Topic areas have included improving HCV prevention among injection-drug users in rural America, combating hepatitis-related health disparities, testing and treatment of hepatitis delta virus, and early detection of primary liver cancer.

ACHIEVING HEPATITIS-B FREE GENERATIONS IN AFRICA
4 meetings | 290 participants | 35+ countries
Globally, newborns in Africa have a more than two-fold increased risk of acquiring hepatitis B. Hepatitis B vaccination of newborns is the cornerstone for eliminating hepatitis B among African children; currently, less than 10% of African newborns receive HepB birth-dose vaccination. To improve vaccination rates among newborns in African countries, the Coalition formed a community to share updates on the status of HepB birth dose vaccination across countries and to identify needs for technical assistance. As part of this effort, the Coalition is preparing a toolkit to help African countries develop policies for HepB birth dose vaccination.

REVEALING INNOVATIONS IN HEPATITIS ELIMINATION
7 programs | 116 participants | 25 countries
Hepatitis elimination programs are in various stages of development around the world. The Coalition works with the journal Clinical Liver Disease to publish real-world experiences in hepatitis prevention, care, and treatment. Often revealing the innovative work of lesser-known programs, topics range from providing HCV testing and treatment for persons temporarily housed in response to COVID-19 in England to preventing hepatitis B among displaced persons in Nigeria.

EVALUATING PROGRAMS TO AMPLIFY TESTING AND TREATMENT

To improve hepatitis testing and treatment in high-burden countries, the Coalition helps countries match their disease burden with the testing capacity needed to reach elimination goals. Currently, the Coalition is working with partners in Ghana, Vietnam, and Moldova to convene local coalitions of stakeholders, determine the hepatitis disease burden, assess testing capacity and needs, and identify the strategies needed to scale up testing to eliminate hepatitis.

BUDGET-BASED PLANNING TO ELIMINATE HEPATITIS C: THE HCV ELIMINATION TOOL

CGHE recognizes that the cost of HCV testing, care, and treatment are significant concerns for a country committing to hepatitis C elimination. Budgeting for these costs is an essential part of hepatitis elimination planning. In July 2021, in partnership with Massachusetts General Hospital/Harvard Medical School, the Coalition launched the web-based Hep C Elimination Tool to support national programs in budget-based planning. The free tool helps countries estimate the hepatitis C testing and treatment volumes needed for HCV elimination and the associated costs of achieving these goals.
PROFILING THE STATUS OF HEPATITIS ELIMINATION PLANS, POLICIES, PROGRAMS, AND PROGRESS

The Coalition is developing National Hepatitis Elimination Profiles (N-HEPs) to reveal the status of progress toward hepatitis elimination for individual countries. The N-HEP initiative brings together local stakeholders to forge a shared understanding of their nation’s hepatitis burden, along with their unique strengths and challenges in preventing new hepatitis infections and life-threatening, liver-related diseases. N-HEPs help countries recognize their successes and highlight the feasible next steps to meet remaining challenges and advance progress toward elimination. These profiles build upon CGHE’s existing country dashboards, incorporate local data, and support data translation into advocacy tools. In collaboration with PAHO and local partners, CGHE developed six N-HEPs for countries in the Americas; 30 N-HEPS are planned over the coming year.

<table>
<thead>
<tr>
<th>Disease</th>
<th>Percentage change in new infections, 2015-2020</th>
<th>Percentage change in deaths, 2015-2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>HBV</td>
<td>-138%</td>
<td>-20%</td>
</tr>
<tr>
<td>HCV</td>
<td>-63%</td>
<td>-31%</td>
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EVALUATING NATIONAL PLANS FOR HEPATITIS ELIMINATION

Planning is the first step in the development of effective hepatitis elimination programs. To assess the status of national planning and identify model plans for assisting program development, CGHE conducted a systematic review to identify and evaluate national hepatitis elimination plans. To date, CGHE has evaluated more than 100 plans and is preparing presentations and publications of the findings of this review.

REVEALING THE OPTIONS FOR HCV SCREENING AND DIAGNOSIS

To help programs select appropriate HCV testing options, CGHE systematically reviewed over 160 reports of how laboratory-based testing, point-of-care assays, or a combination of the two are employed for HCV testing. This evidence base reveals differences in HCV testing methods by geographic area and the populations targeted for testing.
ASSESSING THE IMPACT OF COVID-19 ON HEPATITIS PREVENTION AND CARE
To proactively assess the impact of the COVID-19 pandemic on hepatitis prevention and care worldwide, CGHE surveyed clinicians from August through October 2020. A total of 103 respondents from 44 countries provided feedback, describing declines in screening and treatment immediately following the pandemic’s emergence. Providers also reported potential benefits including increased use of telemedicine, improved laboratory capacity, and improvements in care as a result of the response to COVID-19. The results were published in Clinical Liver Disease.

RESPONDING TO PROGRAM REQUESTS FOR ASSISTANCE- CGHE HELP DESK
Launched in late 2020, CGHE’s Help Desk allows users around the world to submit specific technical assistance requests. The Coalition has posted answers to 44 frequently asked questions.

STUDIES OF RETREATMENT OPTIONS OF HCV INFECTION IN LOW- AND MIDDLE-INCOME COUNTRIES
CGHE, in collaboration with CHAI and local partners, studied various options for re-treating HCV-infected persons living in low- and middle-income countries where the recommended second-line therapies with patented medicines remain unavailable. The study found that >90% of persons were successfully retreated using a number of affordable therapeutic options. The findings of the HCV retreatment study were published in Clinical Infectious Diseases in 2021. Preliminary results were presented at the Liver Meeting in 2020.

ASSESSING THE SAFETY AND EFFICACY OF ANTI-VIRAL TREATMENT FOR PREGNANT WOMEN LIVING WITH HEPATITIS C
Given the relatively recent widespread availability and use of DAAs to treat and cure people living with HCV, CGHE is working with partners to build a case registry to assess the safety of DAAs when taken during pregnancy. Ideally, this evidence base will improve rates of treatment uptake among pregnant women living with hepatitis C.

CGHE PUBLICATIONS 2020-2021
- The Nobel Prize for discovery of HCV is a call to end hepatitis. The Lancet.
- Retreatment of Chronic Hepatitis C Infection: Real-World Regimens and Outcomes from National Treatment Programs in Three Low- and Middle-Income Countries. Clinical Infectious Diseases.
- Elements on the Pathway to HCV Elimination: Lessons Learned From the AASLD HCV Special Interest Group 2020. Hepatology Communications.
MOBILIZING COMMITMENT

CGHE mobilizes commitment by building awareness and engaging stakeholders around the importance of hepatitis elimination.

"FOR THE FIRST TIME IN HISTORY, THE DISEASE CAN NOW BE CURED, RAISING HOPES OF ERADICATING HEPATITIS C VIRUS FROM THE WORLD POPULATION."

-2020 NOBEL PRIZE FOR MEDICINE COMMITTEE

ADVOCACY FOR HEPATITIS ELIMINATION: CGHE ACHIEVEMENTS

- Presented written and oral testimony to WHO Executive Board (January) and 74th World Health Assembly (May)
- Participated in World Economic Forum blog post highlighting World Hepatitis Day 2021
- Convened global roundtable discussion on WHO’s New Global Hepatitis Elimination Strategy
- Held a side event at the 2020 United Nations General Assembly to highlight impact of COVID-19 on hepatitis testing and treatment
- Advocated for the Global Fund for TB, AIDS, and Malaria to prioritize funding for hepatitis testing and treatment
- Supporting California Law AB 789 - Hepatitis for routine HBV and HCV screening in primary care
- Convened technical advisors to request WHO Western Pacific Office continue focus on reaching the un reached populations with hepatitis services
MEETINGS AND PARTNERSHIPS

IN SERVICE TO ITS MISSION, CGHE CONTINUALLY SEeks TO MARSHAL RESOURCES TO ELIMINATE HEPATITIS:

In September 2020, CGHE convened a Side Event at the United Nations General Assembly on the impact of COVID-19 on hepatitis testing and care.

CGHE advocated to the Global Fund for expanding support for HBV and HCV prevention, testing, and treatment.

CGHE supported WHO’s development of new global strategies for hepatitis elimination at the 74th World Health Assembly.

CGHE convened a global round table of hepatitis experts to recommend priorities for WHO’s global strategy.

CGHE formally partners with the Pan-American Health Organization to promote hepatitis elimination throughout the region.

CGHE co-organized the first North American Hepatitis Elimination Summit (May 2021, 621 registrants).

CGHE is co-convening the International Viral Hepatitis Elimination Meeting December 3-4, 2021 in Amsterdam.

CGHE participates in technical advisory committees including for WHO HQ, WHO WPRO, WHO PAHO, and the African Union.

NEW COALITION PARTNERS IN 2020-2021 INCLUDED:

- Africa CDC
- African Field Epidemiology Network (AFENET)
- Canadian Association for the Study of the Liver (CASL)
- European Liver Patients’ Association (ELPA)
- Latin American Association for the Study of the Liver (ALEH)
- Pan-American Health Organization (PAHO)
- Virology Education

Following the 2020 Nobel Prize for Medicine award for discovering the HCV virus, CGHE published a call for the philanthropic sector to mobilize the funding needed to reach hepatitis elimination goals. CGHE has partnered with the World Economic Forum’s initiative to further raise the profile of hepatitis elimination, particularly by strengthening financing models. In concert with this partnership to engage new stakeholders, CGHE will continue to seek new partners.

The Coalition and the Vietnam Viral Hepatitis Alliance are working to identify strategies for the scale-up of HBV and HCV testing and treatment in Vietnam.

Photo Source: Vietnam Viral Hepatitis Alliance
2021 ELIMINATION CHAMPIONS

In 2021, the Coalition honored seven Hepatitis Elimination Champions. Nominated by their peers and voted on by a panel of hepatitis experts, these dedicated individuals made remarkable contributions towards improving the lives of persons living with hepatitis and accelerating progress toward hepatitis elimination.

MOHAMMAD ALI, BANGLADESH
Dr. Ali founded the National Liver Foundation of Bangladesh (NLFB), a philanthropic organization providing hepatitis testing and treatment services to underserved communities in Bangladesh.

ARAFAT BWAMBALE, UGANDA
A witness to how a lack of awareness and stigma around hepatitis B can devastate families, Mr. Bwambale is a community leader dedicated to mobilizing and empowering patients to fight against hepatitis B and C in Uganda.

GAMAL SHIHA, EGYPT
Dr. Shiha developed a community-based outreach model of hepatitis care across villages in rural Egypt. From 2015 to April 2019, over 250,000 villagers were screened for HCV and HBV, and 16,500 infected patients received free treatment. Dr. Shiha is a leader in the national campaign to screen all Egyptians for hepatitis C and provide treatment at no cost to patients.

JOHN DILLON, SCOTLAND
In Tayside, Scotland, Dr. Dillon revolutionized models of care for HCV to reach persons where they are through needle exchanges, pharmacies, prisons, and community-based organizations.

ANGELA PARK & RACHEL GONZALEZ
UNITED STATES
Rachel Gonzalez and Dr. Angela Park guided the hepatitis C elimination program in the US Department of Veterans Affairs (VA). The VA has screened approximately 76% of all Veterans in care for HCV infection and treated 90% of those infected.

ALETHSE DE LA TORRE ROSAS
MEXICO
Dr. de la Torre launched and directs the national hepatitis C elimination program in Mexico. Despite COVID-19, Dr. de la Torre increased the number of clinics treating persons for HCV infection.
The Coalition pays tribute to John Martin. As the CEO of Gilead Sciences, John led discovery and production of highly effective therapies for HIV, HBV and a cure for HCV. John was a trailblazer for hepatitis elimination. John initiated public-private partnerships, jump-starting global initiatives to eliminate hepatitis C. In 2018, John retired from Gilead Sciences. Together with his life partner, Lily Lou, John created the John C. Martin Foundation. The Foundation sponsored the launch of the Coalition as the community of practice for hepatitis elimination. Lily continues to serve as a member of the Executive Board. John's fervent commitment to hepatitis elimination continues to inspire our work.

EXECUTIVE BOARD

Harvey Alter  
Gregg Alton  
Vera Bitcon  
Gavin Cloherty  
Samir Desai  
Matthew D’Uva  
Amr Fahmy  
Ben Hainsworth  
Sherine Helmy  
Bruce Kreter  
Lillian Lou  
Maciej Maniecki  
Paul Schaper  
Ray Schinazi  
Marcelo Silva  
Sam So  
Paul Sutton  
Su Wang  
Carolyn Wester  
Andy Wilson

We are pleased to announce Dr. Harvey Alter has joined the Executive Board as an honorary member. In 2020, Dr. Alter and two other colleagues received the Nobel Prize in Physiology or Medicine for their scientific contributions to discovering the hepatitis C virus. This seminal work paved the way for the elimination of HCV.

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### TECHNICAL ADVISORY BOARD

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Saeed Hamid</td>
<td>Aga Khan University, Karachi, Pakistan</td>
</tr>
<tr>
<td>Christian Ramers</td>
<td>Clinton Health Access Initiative, San Diego, USA</td>
</tr>
<tr>
<td>Graham Cooke</td>
<td>Imperial College, London, United Kingdom</td>
</tr>
<tr>
<td>Imam Waked</td>
<td>National Liver Institute, Shebeen El-Kom, Egypt</td>
</tr>
<tr>
<td>Jason Grebely</td>
<td>Kirby Institute, Faculty of Medicine at UNSW, Sydney, Australia</td>
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<tr>
<td>Jeffrey Lazarus</td>
<td>ISGlobal, University of Barcelona, Spain</td>
</tr>
<tr>
<td>Karine Lacombe</td>
<td>Saint-Antoine Hospital (AP-HP), Paris, France</td>
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<tr>
<td>Liudmyla Maistat</td>
<td>Medicines Patent Pool, Geneva, Switzerland</td>
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<tr>
<td>Maud Lemoine</td>
<td>Imperial College, London, United Kingdom</td>
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<tr>
<td>Olufunmilayo Lesi</td>
<td>World Health Organization, Geneva, Switzerland *Observer</td>
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<tr>
<td>Paige Armstrong</td>
<td>US Centers for Disease Control and Prevention, Atlanta, USA</td>
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<tr>
<td>Radha K. Dhiman</td>
<td>Postgraduate Institute of Medical Education &amp; Research, Chandigarh, India</td>
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<tr>
<td>Stacey Trooskin</td>
<td>Philadelphia FIGHT Community Health Centers, Philadelphia, USA</td>
</tr>
<tr>
<td>Yong Poovorawan</td>
<td>Chulalongkorn University, Bangkok, Thailand</td>
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### New Technical Advisory Board Members as of Fall 2021

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<thead>
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<th>Name</th>
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<tbody>
<tr>
<td>Alethse De la Torre Rosas</td>
<td>National Council for AIDS Prevention and Control, Mexico</td>
</tr>
<tr>
<td>Shiv Sarin</td>
<td>Institute of Liver and Biliary Sciences, New Delhi, India</td>
</tr>
<tr>
<td>Hailemichael Desalegn</td>
<td>St. Paul’s Hospital Millennium Medical College, Ethiopia</td>
</tr>
<tr>
<td>Xiaofeng Liang</td>
<td>Jinan University, Guangzhou, China</td>
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